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Bangladesh Public Expenditure Review

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ACRONYMS AND ABBREVIATIONS

ABC	Assessment of Basic Competency	BTB	Bangladesh Tea Board
ADP	Annual Development Program	BTMC	Bangladesh Textile Mills Corporation
BADC	Bangladesh Agriculture Development Corporation	BTTB	Bangladesh Telephone and Telegraph Board
BANBEIS	Bangladesh Bureau of Educational Information and Statistics	BWDB	Bangladesh Water Development Board
BBC	Bangladesh Biman Corporation	CAAB	Civil Aviation Authority of Bangladesh
BBS	Bangladesh Bureau of Statistics	CAO	Chef Accounting Officer
BCIC	Bangladesh Chemical Industries Corporation	C&AG	Comptroller and Auditor General
BEPZA	Bangladesh Export Processing Zone	CDA	Chittagong Development Authority
BFDC	Bangladesh Film Development Corporation	CG	Central Government
BFFWT	Bangladesh Freedom Fighters' Welfare Trust	CFAA	Country Financial Accountability Assessment
BFDC	Bangladesh Fisheries Development Corporation	CNS	Child Nutrition Survey
BFIDC	Bangladesh Forest Industries Development Corporation	CPA	Chittagong Port Authority
BHB	Bangladesh Handloom Board	CPAR	Country Procurement Assessment Report
BHDS	Bangladesh Demographic and Health Survey	CPDMB	Chittagong Port Dock Management Board
BIA	Benefit Incidence Analysis	CPTU	Central Procurement Technical Unit
BINP	Bangladesh Integrated Nutrition program	CPuS	The Consolidated Public Sector
BIWTA	Bangladesh Inland Water Transport Authority	CWASA	Chittagong Water and Sewerage Authority
BIWTC	Bangladesh Inland Water Transport Corporation	DESA	Dhaka Electricity Supply Authority
BJC	Bangladesh Jute Corporation Water Resources	DFI	Direct Foreign Investment
BJMC	Bangladesh Jute Mills Corporation	DSL	Debt Service Liability
BOGMC	Bangladesh Oil, Gas and Mineral Corporation	DPE	Directorate of Primary Education
BPC	Bangladesh Petroleum Corporation	DWASA	Dhaka Water and Sewerage Authority Transport and Communication
BPDB	Bangladesh Power Development Board	ERD	External Relations Department
BRRI	Bangladesh Rice Research Institute	ESP	Essential Services Package
BRTC	Bangladesh Road Transport Corporation	FAMU	Fiscal Analysis and Monitoring Unit
BSB	Bangladesh Sericulture Board	FFE	Food For Education
BSC	Bangladesh Shipping Corporation	FFW	Food For Work
BSCIC	Bangladesh Small and Cottage Industries Corporation	EPIDC	East Pakistan Industrial Development Corporation
BSEC	Bangladesh Steel and Engineering Corporation	FRA	Feeder Road Type-A
BSFIC	Bangladesh Sugar and Food Industries Corporation	FRB	Feeder Road Type-B

FSS	Female Secondary Stipend	PBS	Palli Bidyut Samity
GPS	Government Primary Schools	PEC	Public Estimates Committee
GR	Gratuitous Relief	PETS	Public Expenditure Tracking Survey
HDM	Highway Development and Maintenance Model	PFI	Public Financial Institution
HEU	Health Economics Unit	PKSF	<i>Palli Karma Sahayak</i> Foundation
HIES	Household Income and Expenditure Survey	PMED	Primary and Mass Education Division
HIPC	Heavily Indebted Poor Countries	PRSP	Poverty Reduction Strategy Paper
HPSP	Health and Population Program	PSC	Production Sharing Contract
HSC	Higher Secondary Certificate	R1	Rural Road Class 1
ICAC	Independent Commission against Corruption	R2	Rural Road Class 2
IFPRI	International Food Policy Research Institute	R3	Rural Road Class 3
IMED	Implementation Monitoring and Evaluation Division	RAJUK	Rajdhani Unnayan Karttripakhya
IOC	International Oil Companies	RAO	Regional Accounting Office
IPP	Independent Power Provider	RDA	Rajshahi Development Authority
KDA	Khulna Development Authority	REB	Rural Electrification Board
LCG	Local Consultative Group	R&HD	Roads and Highways Department
LFS	Labor Force Survey	RIBEC	Reforms in Budgeting and Expenditure Control
LGED	Local Government Engineering Department	RNF	Rural Non-Farm
MDGs	Millennium Development Goals	RNGPS	Registered Non-Government Primary Schools
MFA	Multi-Fiber Arrangement	SD	Supplementary Duty
MP	Member of Parliament	SMC	School Management Committee
MoHFW	Ministry of Health and Family Welfare	SOE	State-Owned Enterprise
MPA	Mongla Port Authority	SSC	Secondary School Certificate
MPDMB	Mongla Port Dock Management Board Trading	SWAp	Sector-Wide Approach
NCB	National Commercial Bank	TB	Tuberculosis
NCTB	National Curriculum and Textbook Board	TCB	Trading Corporation of Bangladesh
NEC	National Economic Council	TR	Test Relief
NIPORT	National Institute of Population Research and Training	TTCs	Technical Training Center
NSD	National Saving Deposit	TVET	Technical and Vocational Education System
NU	National University	UP	Unapproved Project
PAC	Public Accounts Committee	VGD	Vulnerable Group Development
PAO	Principal Accounting Officer	VGF	Vulnerable Group Feeding
PARC	Public Administration Reform Commission	WFP	World Food Program
PARMOC	Public Administration Reform Monitoring Commission		

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PREFACE AND ACKNOWLEDGEMENTS

This Public Expenditure Review (PER), prepared simultaneously with a companion paper, the Poverty Assessment Report, has been carried out jointly between the ADB and the World Bank, with full participation of the Government of Bangladesh. Preparation of this PER started in the Fall 2000, when several discussions on the various sectoral issues and policies were held with government officials in Dhaka (namely the Power Development Board; the Ministry of Energy; the Ministry of Roads and Highways; the Bangladesh Bank and Ministry of Finance). Two critical studies, the poverty trends and the benefit incidence analysis, were carried out jointly with Bangladeshi counterparts. The preliminary findings of a number of background papers – on which this report draws heavily – have been discussed at a workshop in Dhaka in November 2001 attended by GOB staff, members of the I-PRSP preparation team, and academics and researchers. In addition, two seminars have taken place in May and June 2002 in Dhaka and Washington respectively to share the main findings of this report with the extended country teams working on Bangladesh with the view to improving the effectiveness of Bank operations. These conferences and discussions have served not only to strengthen the underlying analytical work but also to disseminate the options available for reforms in each sector. The report also draws extensively on the findings of numerous studies carried out in specific sectors, most prominently the recently produced Country Financial Accountability Assessment (CFAA) and Country Procurement Assessment (CPA) reports.

This report has been prepared by Eric Bell (Lead Economist), Elena Glinskaya (Economist), and Zahid Hussain (Senior Economist) in the Poverty Reduction and Economic Management (PREM) unit of the World Bank's South Asia Region, under the guidance of Sadiq Ahmed, Sector Director and Chief Economist. The team from the Asian Development Bank comprised Zahid Hossain, Rezaul Khan, and Omkar Shrestha.

Tercan Baysan launched the PER exercise in 2001 and prepared the concept paper. The report draws on background papers prepared by Raisuddin Ahmed (rural development), Zhang Jianfei, (roads and highways), James Knowles (education), David Newbery (energy), Klaus Schmidt-Hebbel (fiscal policy), as well as on contributions from Abdo S. Yazbeck and Birte Holm Sorensen (health), Salman Zaidi and Rinku Murgai (safety nets), Stein Lundebye and Piers Antony Vickers (transport), Marc L. Heitner (energy), Syed Nizamuddin (state enterprises and energy), Farouk Chowdhury and Ndiame Diop (agriculture), and Andrew Mason (gender issues). Somik V. Lall helped to prepare expenditure maps and Sayema Haque Bidisha provided research assistance.

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At various stages during the preparation of the report, Kapil Kapoor, Fred Temple, and Ijaz Nabi provided comments and advice. Mehar Akhter Khan, Thelma Rutledge and Oxana Bricha handled arrangements for the workshops and processing of the report. The peer reviewers for this report were Shanta Devarajan (HDNVP) and Wahid Mahmoud (University of Dhaka). The team also received useful comments from David Orsmond and Luis Valdivieso (IMF), Sundararajan Srinivasa Gopalan (SASHD), Guang Chen (SASEI), Emma Hooper (SASES), Michelle Riboud (SASHD), Gajanand Pathmanathan (SASRD), Hena Mukherjee (SASHD), Nilufar Ahmad (SASES), Vinaya Swaroop (DECRG), Suraiya Zannath (SARFM) and Zaidi Sattar, as well as from participants from various sector units that attended the PER review meeting.

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EXECUTIVE SUMMARY

1. Bangladesh's economy has done fairly well over the last few decades given the conditions at the time of its creation in 1971 and its well-known vulnerability to natural calamities. The most striking areas of success are in human development, family planning, grain sufficiency (elimination of famine), and disaster preparedness and flood relief (Table 1). These represent considerable advances toward the country's Millennium Development Goals. On the economic front too, Bangladesh has managed reasonably well over the years. It has weathered several international financial shocks. It has avoided

debt crises and hyperinflation (inflation is at about 3 percent currently), and it realized economic growth rates of about 4-5 percent a year in 1980-2000 (Table 2). The country has also seen the emergence of an impressive system of non-governmental organizations (NGOs) with considerable grassroots strength.¹

2. Despite these successes, Bangladesh's performance falls short of the income surges in such other developing countries as China, India, and Vietnam. Much needs to be done if the country is to meet the Millennium Development Goals by 2015 (Table 3). Poverty (50 percent) and extreme poverty (35 percent) remain very high.

3. Bangladesh is near the bottom of the list in governance matters, and the fiscal and foreign exchange situations are weak. Law and order have deteriorated, hurting poor people and firms. This was an overriding concern of voters in the October 2001 elections. The future presents more challenges. Bangladesh is far behind in the new digital world (telecommunications penetration is a mere 0.83 lines per hundred persons compared to an international low income group average of 4 lines per hundred persons). The elimination of the Multi-Fibre Arrangement (MFA) in 2004 could be a big setback for the country's main exports. And arsenic contamination of tubewells threatens advances in provision of safe water.

4. This Public Expenditure Review analyzes the state of public expenditures in Bangladesh, particularly their adequacy and appropriateness relative to the Government's broad economic and social goals. It aims to contribute to the Government's overall growth and poverty reduction efforts by offering suggestions about the efficient use of public resources and fiscally sustainable improvements in public services. The last review on Bangladesh was prepared in 1997.

Table 1: Bangladesh—selected social indicators

Indicator	1980	1990	2001
Fertility rate (children per woman)	5	4.3	2.9
Infant mortality rate (per 1,000 live births)	101.4	94	66.3
Crude birth rate (per 1,000 population)	33.4	32.8	19.9
Crude death rate (per 1,000)	10.2	11.3	4.8
Life expectancy (years)	56.9	56.0	60.6
Gross primary enrollment, both sexes (%)*	61	72	91
Gross secondary enrollment, both sexes (%)	18	19	51
Female gross primary enrollment (%)	46	66	93
Female gross secondary enrollment (%)	9	13	56
Adult illiteracy rate (%)	71.0	65.0	55.0
Female participation in market work (millions)	1.2	2.2	7.6

* Latest enrollment figures are based on the 2000 Household Income and Expenditure Survey

Table 2: Bangladesh—macroeconomic indicators, FY01

Indicator	Value
Economic growth (%)	5.2
Poverty rate at higher poverty line (%)*	49.8
Poverty rate at lower poverty line (%)*	33.7
Inflation (% change from previous year)	1.6
External current account deficit (% of GDP)	1.7
Total external debt (% of GDP)	34.3
Debt service (% of current receipts)	7.5
Foreign exchange reserves (months of imports)	1.7
Public debt (% of GDP)	50.7

* FY00

¹ These are achievements that many observers thought impossible three decades ago when Bangladesh was referred to by some as a "basket case."

Table 3: Bangladesh and the Millennium Development Goals

GOAL	BANGLADESH'S POSITION AND PUBLIC POLICIES
HALVE POVERTY BY 2015; ERADICATE EXTREME POVERTY AND HUNGER	<p>Poverty rates declined from 59% to 50% over the 1990s. To halve poverty by 2015, GDP growth of at least 6% is needed.</p> <p>Close to half the children are stunted or underweight, despite good progress in reducing child malnutrition by 20-25% over the 1990s. Preliminary estimates indicate a need to realize 8% growth in per capita income to eliminate child malnutrition without additional interventions. Otherwise, an integrated approach (including specific nutrition programs) across sectors is needed to maintain progress.</p>
ACHIEVE UNIVERSAL PRIMARY EDUCATION	<p>Good progress was made in the 1980s and 1990s, and the gross enrollment rate exceeds 90%. A doubling of public expenditures on education may be needed to ensure universal enrollments at primary and lower secondary levels.</p> <p>Literacy rates remain low (45% among those over age seven) despite considerable progress in recent years. Further progress depends on greater reliance on non-public delivery systems rather than higher allocations</p>
PROMOTE GENDER EQUALITY AND EMPOWER WOMEN	<p>The ratio of girls to boys in primary and secondary school is almost at parity. Further progress does not necessarily require additional resources but does call for better targeting of the Female Secondary Stipend and stronger administration to reduce leakage.</p> <p>There has been progress in increasing women's participation in public life and in the formal labor market. Most urgent is the need for specific interventions to reduce gender-specific barriers in access to justice (especially against violence).</p>
REDUCE CHILD MORTALITY	<p>The infant mortality rate came down from 87 per 1,000 live births in 1989-93 to 66 in 1995-99, the child mortality rate from 133 per 1,000 children under age five to 94. But considerable disparities persist across income groups. A comprehensive cross-sectoral strategy is needed to sustain progress.</p>
IMPROVE MATERNAL HEALTH	<p>At 392 per 100,000 live births, the maternal mortality ratio is among the highest outside Sub-Saharan Africa. A cross-sectoral approach is needed, including behavioral change and massive training of midwives, since 95% of deliveries occur at home. Within this framework there is scope for higher allocations.</p>
COMBAT HIV/AIDS, MALARIA, AND OTHER DISEASES	<p>HIV rates are relatively low, with good programs in place. Leprosy and polio have been eliminated. Progress has also been good in preventing smallpox, cholera, and malaria. Close surveillance needs to be maintained, and a more comprehensive health strategy is required to address broad issues of public-private partnership in health financing and provision.</p>
ENSURE ENVIRONMENTAL SUSTAINABILITY	<p>The almost universal spread of tubewells has led to remarkable progress in increasing access to improved water sources. But rapid urbanization poses new challenges. And arsenic contamination threatens gains achieved.</p> <p>The cost of environmental degradation (from brown and green issues) is high (more than 5% of GDP). Key issues relate to environmental health (poor access to clean water and sanitation, arsenic contamination, and indoor and urban air pollution) and resource degradation (soil, forests, and fisheries).</p>
GLOBAL PARTNERSHIP FOR DEVELOPMENT	<p>Official development assistance to Bangladesh declined from 4.8% of GDP in 1990 to 2.4% in 1998, partly because of the lack of reform efforts. The ongoing Poverty Reduction Strategy Paper (PRSP) process offers important opportunities to identify key obstacles to poverty reduction, prepare a plan to overcome them, strengthen partnerships with donors, and improve coordination.</p>

Source: Bangladesh Demographic and Health Surveys, Household Income and Expenditure Surveys, Education Watch Study, Bangladesh Human Development Report, and World Development Reports.

5. The main conclusions of this review are as follows:

- While the poverty reduction challenge remains daunting, the Government's financial capacity to address poverty declined considerably in 1999-2001 because of the deteriorating financial situation of the public sector, including state enterprises. The fiscal deficit—6 percent of GDP in 1999-2001—is unsustainable. There is also a strong case for greater revenue mobilization, especially for state-owned

enterprises (SOEs). The fiscal adjustment initiated in late 2001 and anticipated in the FY03 budget needs to be sustained.

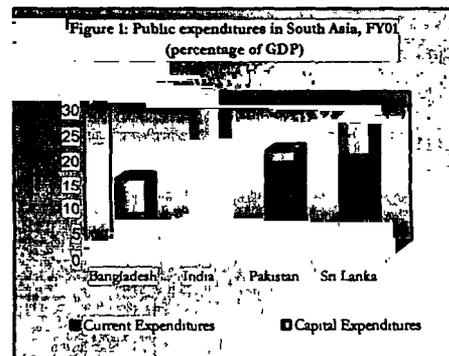
- Public expenditures and policies have important positive attributes, especially their impact on human development and poverty at Bangladesh's level of development. No major expenditure reallocations among sectors appear necessary at this stage.
- Weak governance in institutions, a challenge across the country, significantly reduces the efficacy of Annual Development Programs (ADPs), service delivery, and poverty reducing policies. There is an urgent need to strengthen project selection in the ADP, to introduce stronger mechanisms of accountability (especially in managing public spending), and to promote a better climate for mobilizing resources for development (especially in infrastructure and energy). Improving governance should be at the heart of the poverty reduction strategy.
- Raising the incomes and expenditures of the whole population, especially the poor, is necessary for attaining the Millennium Development Goals. But this needs to be accompanied by specific actions in child malnutrition, maternal mortality, and education quality.
- The Fiscal savings from tighter financial management of the ADP and SOEs (including possible privatization receipts) could easily exceed 2 percentage points of GDP, helping finance reforms in sectors that hold back growth and the attainment of Millennium Development Goals. In banking, ports, and energy there is an urgent need to revisit the policy framework for private participation and to redirect the role of government in providing public goods.

6. The findings and detailed recommendations of this report, summarized below, have been organized around six issues: (1) restoring fiscal sustainability; (2) reducing the role of SOEs and strengthening their governance framework; (3) strengthening ADP spending; (4) strengthening public expenditure management; (5) enhancing the pro-poor bias of public spending; and (6) expanding the involvement of the private sector and improving the role of government.

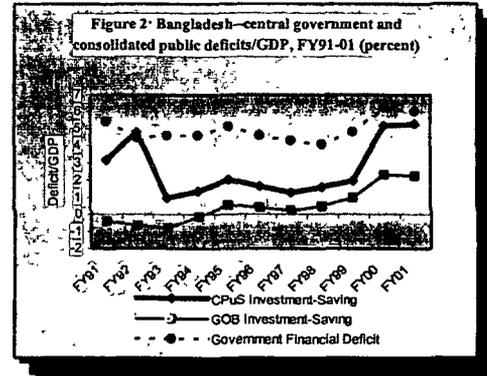
Restoring fiscal sustainability at the earliest

7. The level and structure of Bangladesh's public expenditures show some unusual strengths, which have undeniably helped preserve macroeconomic stability and realize the strong record in human development (Figure 1):

- At 15 percent of GDP, budgetary expenditures are among the lowest in the world. Current expenditures are below 8 percent of GDP, and Bangladesh is the only country in South Asia with a (budgetary) current account surplus. Low government expenditures together with good policies in the social sectors in particular have helped "crowd in" private sector expenditures.
- Defense spending (1.3 percent of GDP) and interest payments (1.5 percent of GDP) are well below the average for developing countries.
- Considerable public spending—almost 0.6 percent of GDP—goes to disaster management, while almost half of budgetary spending is for investment.
- Public spending on rural development has consistently been around 1.5 percent of GDP, appropriate in a country where 80 percent of the people live outside cities and where poverty and vulnerability have always been high. This rural focus has helped reduce poverty, increase agricultural productivity, and lessen vulnerability to calamities.
- About 30 percent of budgetary expenditures go to reasonably well-targeted social services.



8. But mainly as a result of the absence of a strong, medium-term fiscal strategy and good institutional mechanisms, the fiscal stance weakened considerably over 1999-2001, and the fiscal deficit widened to almost 6 percent of GDP (Figure 2). Simultaneously, with unresponsive pricing policies and weak revenue collection, the financial situation of SOEs deteriorated significantly, raising the consolidated deficit for the sector to 3 percent of GDP. SOEs have also taken on large foreign liabilities, threatening the exchequer's financial health. Public debt has been on the rise.



9. A fiscal sustainability analysis, based on the standard definition of stable government debt dynamics, shows that Bangladesh needs to reduce its fiscal deficit by several percentage points of GDP to avoid prejudicing growth and financial stability. The consolidated deficit of the public sector (around 9 percent of GDP in 2001) is unsustainable, eroding the balance of payments and foreign reserves, which fell to about one month of imports at the end of 2001. Domestic lending interest rates have fluctuated in the 9-11 percent range in real terms since late 2000. The weak financial situation runs counter to the considerable additional resources needed to meet future needs in health, education, infrastructure, and reforms of nationalized commercial banks and SOEs. To address this fiscal weakening, the newly elected Government introduced several short-term economic measures in late 2001, including expenditure cuts, regulatory duties and margin requirements on imports. While these measures have helped stop the financial hemorrhage, they do not serve the country's long-term needs. Additional fiscal measures to reverse the fiscal deterioration were introduced in early 2002. The FY03 budget objective of reducing the fiscal deficit below 4 percent of GDP as well as the establishment of two Public Expenditure and Tax Commissions are welcome moves.

Reducing the role of state enterprises and strengthening their governance framework

10. SOE savings declined substantially in 1999-2001 because of poor operational performance, in particular, unrealistic pricing policies (most prominently in gas, petroleum, power, and fertilizer). SOEs also rapidly expanded their investment programs, mostly in power, water, mineral resources, and transport. Hidden subsidies to SOEs have shot up, and the recovery of debt service liability (DSL) payments has fallen to only 10 percent of obligations. The return on SOE equity was estimated at 2 percent in 2001, against a capital cost of 13 percent. These subsidies are on top of other, more traditional implicit subsidies, such as concessional lending rates, capital refinancing, and bank recapitalization of classified loans owed by SOEs.

11. State-owned enterprises in Bangladesh operate in traditional utilities and infrastructure sectors as well as in various manufacturing and commercial activities. They account for more than 20 percent of public sector employment and, in addition to preempting public resources, they exert considerable influence on the economy through the supply of vital inputs and services and through pricing policies. The governance framework for these enterprises is weak, especially in energy, where pilferage and revenue losses are enormous. Divestiture started in the early 1980s, but slowed dramatically in the 1990s, in stark contrast to the considerable advances in other countries in the region. Privatization receipts in Bangladesh in the 1990s were \$60 million, less

Bangladesh	60
China	20,593
Egypt, Arab Rep.	2,905
India	8,983
Indonesia	6,135
Pakistan	1,992
Sri Lanka	805
Zambia	826

than a tenth of the \$805 million in Sri Lanka (Table 4). Urgently needed is a decisive stance on implementing the unfinished reform agenda in various areas of parastatal activity, tackling the backlog of sector underdevelopment and providing opportunities for private participation.

12. SOE reform in Bangladesh should be framed in two stages:

- First, the Government should focus on commercializing, restructuring, and privatizing commercial activities best left to the private sector (hotels, jute manufacturing, fertilizer, and petroleum marketing and trading) and on imposing hard budget constraints on the remaining ones. The recent closure of the Adamjee Jute Mills and the Government's announcement of its intention to privatize 48 enterprises are moves in the right direction.
- Second, the Government should develop outsourcing, divestiture, and public-private partnership strategies for utilities and services (gas, power, urban water supply, railways, airlines, shipping, and telecommunications). These complex issues need serious preparation, including a sound sector strategy and a strong legal and institutional framework. Immediate efforts should focus on activating revenue collection by utilities.

13. Several additional factors appear critical in restoring fiscal sustainability in Bangladesh. First is maintaining the momentum of growth by accelerating structural reforms. Second is increasing government revenues: the tax-to-GDP ratio is among the world's lowest, and administered prices are below their long-run marginal cost and import parity. Third is reversing the decline in concessional aid. Fourth is reducing real interest rates, particularly by reducing non-performing loans and the high administrative costs of state financial institutions.

Strengthening ADP spending

14. Bangladesh's public investment program, although large in relative terms, suffers from weaknesses that drastically reduce its effectiveness, and its impact on growth is well below potential. There is strong econometric evidence of crowding out of the private sector through the interest rate mechanism. Public investments in ports and manufacturing displace private investments. Many ADP projects are of doubtful quality because of weak scrutiny, and there are too many new projects. For example, three umbrella projects in the transport sector have about 800 sub-projects. Many other projects have been added intermittently to the ADP, delaying the completion of ongoing projects and their realized rates of return. An accepted practice in Bangladesh, undermining fiscal discipline, is to spend resources on initiatives considered to be of "national importance" even if these have not been included in the approved budget. The high capital spending over a multitude of projects squeezes out current spending, with non-wage operation and maintenance expenditures at a mere 1 percent of GDP.

15. There is considerable scope for improving the efficacy of capital spending in Bangladesh. The most appropriate measures are:

- Improving the classification of expenditures to ensure that current outlays of investment projects are properly integrated into the recurrent budget (this could involve 0.5 percent of GDP).
- Integrating hidden subsidies to SOEs more transparently in the budget.
- Defining a Core ADP to focus on essential projects whose financing is explicitly identified at the beginning of the fiscal year, followed by a full review of the public investment program in FY03.
- Strengthening project selection and improving criteria for the ADP. Wasteful spending through SOEs contrasts starkly with the health and education needs of the population.

16. The large volume of donor funding of development expenditures in Bangladesh, varying from 20 percent to 70 percent of sectoral ADPs, highlights the need to increase the effectiveness of public

investments and aid. Indeed, the decline in concessional aid, from nearly 5 percent of GDP in 1990 to about 2 percent of GDP in 2001, is only partly due to the worldwide decline in aid. The main reason is the lack of reforms and the reduced absorptive capacity stemming from weaknesses in project-related procurement. Bangladesh has already experimented with a sector-wide approach (SWAp) in health. This new approach has faced considerable implementation problems and should be reviewed closely before being extended to other sectors.

Strengthening public expenditure management

17. One important reason for the expansion of expenditures over recent years and their relatively low effectiveness is the absence of institutional safeguards in expenditure management. *Budget preparation* in Bangladesh is mechanical, and expenditure estimates are increments over previous years' allocations. So, there is no strategic medium-term framework, and there is little participation of line ministries in the planning process. The budget is normally presented early in June for the fiscal year starting the following month, well short of the OECD Fiscal Transparency Guidelines. Budget implementation is also weakened by the fact that line ministries do not have clear indicators of what is expected as outcomes. The organizational and procedural separation of sectoral programs into a revenue budget and a development budget leads to considerable loss of resource efficiency. Nor is there a reliable mechanism to ensure that project-related operating and maintenance costs are estimated and included in the revenue budget once development expenditures are completed.

18. Deficiencies in public sector *procurement practices* are the single most serious issue. There is no sound legal framework governing public sector procurement. Rules and procedures among various agencies are diverse and outdated. Procurement is delayed by inadequate capacity and lack of a critical mass of professionals to manage it. Contract administration is ineffective. Protracted bureaucratic procedures allow rent-seeking at many points. And there are no mechanisms for ensuring transparency and accountability in public procurement. Procurement reform is a priority area for improvement in public expenditure management and aid effectiveness. A Public Sector Reform program supported by IDA-financed technical assistance is expected to address most of these problems.

19. The system of *budget accounting* is cash-based and weak, with an excessive number of government funds not reflected in government accounts. Bangladesh Bank acts solely as a banker, and there is no check of aggregate payments against budgets. Shortcomings in cash management cause wide month-to-month fluctuations in government borrowing from Bangladesh Bank, which finances whatever deficits emerge each day. A welcome development in recent years is the implementation of a Reforms in Budgeting and Expenditure Control (RIBEC) project to upgrade the system of government accounts, with support from the U.K. Department for International Development.

20. *Budget oversight* is not effective, leading to weak fiscal discipline. The fiscal reporting system does not adequately monitor the fiscal deficit and its financing. There is no consolidation of central government accounts with local authority accounts or public enterprise accounts. Internal audits are conducted only in large agencies, and there is no central oversight of internal audit standards. Performance audits are virtually unknown. External audits are compromised because the separation of audit and accounts has yet to be implemented in the Comptroller and Accountant General's office. Audit reports are generally not available to the public. Evaluation of expenditures is minimal, focusing mostly on inputs.

21. All these institutional weaknesses dilute the impact of Bangladesh's relatively good expenditure allocations and place a heavy burden on the economy. It is critical for Bangladesh to move forcefully to establish safeguards for good budgeting, introduce a medium-term expenditure framework, and strengthen procurement and accountability, especially through enforcement of rules for speedy audit

settlement and its reporting to Parliament. The Government has already started to strengthen its procurement procedures. A Public Expenditure Review Commission with a mandate to provide recommendations for rationalizing public expenditures in Bangladesh has been constituted, and a formal review of ADP expenditures is under way.

22. Bangladesh has a reasonable system for *monitoring and evaluating outcomes in human development*. But several constraints impede the effective use of available data in the decision-making process. The large volume of data routinely collected by various government agencies is grossly underused. There is a need for a clearly articulated information and disclosure policy on the use of disaggregated data from surveys. And to enhance the integrity and credibility of the data collected, there is a need for greater autonomy of the Bangladesh Bureau of Statistics and other statistical units in government. The link between various data collection initiatives and critical evaluations of government programs is at best tenuous. Under the Interim Poverty Reduction Strategy Paper (PRSP), establishing an institutional focal point with strong interministerial links for effective poverty monitoring and tracking should be a high priority.

Enhancing the pro-poor bias of public spending

23. Education is the biggest recipient of public spending in Bangladesh (2.3 percent of GDP), while health and the social safety net each take up about 1 percent (Table 5). Spending in the social sectors meets the minimum standards of efficiency and equity and tends to be directed to poorer regions. The social safety net is fairly large and reasonably well targeted, providing income protection to the most deprived and achieving important development objectives, especially through its gender emphasis (boosting school attendance by the poor and girls, for example). Public spending on rural infrastructure (roads in particular) has been instrumental in increasing incomes of the poor. These are laudable achievements for a country at this level of development.

Table 5: Bangladesh—total expenditure by ministry or division, FY01 (percentage of GDP)

Ministry or division	Share
General Public Services/Interest	3.3
Public Order/Defense	2.0
Education	2.3
Health	1.0
Social Security and Welfare	0.7
Agriculture/Rural Development/Housing	2.8
Fuel and Energy	1.0
Transport and Communications	1.8
Total expenditure	15.3

Note Data do not sum to total because of a number of small items

Source: Ministry of Finance revised budget estimates.

24. Public spending in the social sectors has a redistributive effect in spreading the benefits of growth. A benefit incidence analysis of the 2000 Household Income and Expenditure Survey shows that overall public spending on education and health is more equally distributed than household income (Table 6). Intra-sectoral patterns of expenditures in the three main areas—education, health, and the social safety net—also have many attributes of pro-poor allocations:

- Basic education receives an overwhelming share of total education spending. Forty-five percent of spending on primary education and 27 percent of total education spending go to the poorest 40 percent of the population.
- Spending on programs to boost education among the poor and girls—the Female Secondary Stipend (FSS) and the Food for Education (FFE) program—at 0.3 percent of GDP, has a substantial impact on school attendance by the poor. The poorest 20 percent of households are nearly five times as likely to participate in the FFE program as the richest 20 percent.
- Spending on the Essential Services Package (ESP) accounts for 60 percent of the total health budget, with reproductive health representing 26 percent of total public health spending and child health 21 percent. Three-quarters of total health spending is directed to facilities at or below the district level. The poorest 20 percent of the population receives 16 percent of total health outlays as well as 23 percent of spending on child health.

- The two main relief programs—Gratuitous Relief and Vulnerable Group Feeding—played an important role in assisting flood-affected households during the massive flood in 1998. More than 75 percent of total grain outlays were distributed to recognized victims of the flood, and households from the three lowest expenditure quintiles received an estimated three-quarters of the food grains distributed.

Table 6: Bangladesh -distribution of public and private expenditures on education and health (percent)

	Expenditure Quintile					Poverty Status		Total
	1 (lowest)	2	3	4	5 (highest)	Poor	Non-poor	
Household's total per capita expenditure	8	12	16	22	42	26	74	100
	Education							
Private spending	3	7	12	25	52	15	86	100
Public spending	12	15	17	23	32	35	65	100
Primary education	22	23	22	19	14	56	44	100
Secondary	6	11	16	28	40	24	76	100
Tertiary	6	6	10	21	57	17	83	100
	Health							
Private spending (curative visits)	7	8	15	18	52	20	80	100
Public spending	16	19	21	18	26	45	55	100
Family planning and control of communicable diseases	18	18	19	19	24	46	54	100
Limited curative care	11	21	22	18	28	42	58	100
Maternal health	20	13	20	18	29	44	57	100
Child health	23	21	19	18	18	54	46	100

Source: Staff estimates from 2000 Household Income and Expenditure Survey.

- The country's two main development programs—Vulnerable Group Development and Food For Work—also target the poor. An analysis of the Vulnerable Group Development program shows that the poorest fifth of the population is more than three times as likely to participate in the program as the richest fifth.

25. However, while the *allocation* of expenditures in these three major sectors tends to have many pro-poor attributes, the benefits that the poor receive appear to fall short of the initial volume of resources intended. The main reason is shortcomings in the institutions of service delivery. The institutions through which these expenditures are implemented represent the “weak link.” For example, while the identified recipients of FFE benefits are mostly the poor, it has been estimated that the administrative leakage of resources may be high enough to negate their pro-poor incidence. Bangladesh's institutions of public expenditure and service delivery have not improved commensurate with the progress in expenditure re-allocations in the last decade. They are in urgent need of reform to enhance their accountability, transparency, and efficiency. In addition to improving the institutional framework for expenditure management and service delivery, several types of actions are recommended to enhance the pro-poor bias of public spending:

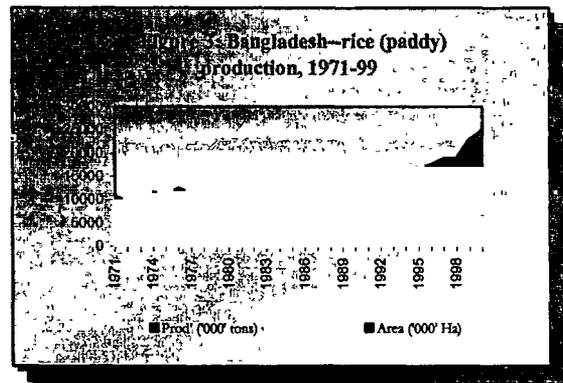
- Make wider use of area-based poverty indicators for allocating public funds to the social sectors.
- Continue the emphasis on primary education, especially on improving its quality and sustaining efforts to boost demand.
- Intensify efforts to deliver basic health services to hard-to-reach populations, especially urban slum dwellers.
- Increase the monitoring and evaluation of safety net programs (using client satisfaction surveys, participatory monitoring and evaluation, and Public Expenditure Tracking Surveys) to improve targeting and reduce leakage.
- Continue the monetization of grants under the various safety net programs.
- Expand access to electricity in rural areas, which experience in other countries has shown can have a huge impact on small-scale industries.

Expanding the involvement of the private sector and improving the role of government

26. Bangladesh's experience shows that good outcomes depend greatly on the involvement of private agents. This is particularly obvious in the social sectors, where the outcomes are due to both the improved policy framework and the strong support and involvement of stakeholders. The good policy framework and the mode of service delivery have helped "crowd in" private investments. Private households are the largest financier of education and health services (accounting for 50-70 percent of all spending), and almost all secondary schools are run by the private sector. There are sizable partnerships with NGOs in family planning, immunization, HIV/AIDs, education, disaster management, water and sanitation, resettlement, and microcredit. This mobilization of private resources and NGOs brings with it some accountability not existing in other areas of public service delivery. The synergy of private resources and good policies sparked innovations such as demand-side interventions in education, massive programs of girls' education, good targeting of food assistance, and BRAC education programs. That is why institutional weaknesses across the economy have not prevented success in the social sectors.

27. By contrast, the opportunity cost of generally low private sector involvement is amply illustrated in ports (estimated to cost \$1.1 billion a year) and electricity distribution, where system losses in the two main power utilities were estimated at 14 percent of sales in 2001, far above those for international comparators. Entrenched SOEs have stalled privatization initiatives, continuing to burden Bangladesh's economy with large hidden subsidies.

28. Outside the social sectors, public policies and spending have been less successful, ranging from mixed outcomes to outright failures. While there has been a considerable increase in the contribution of the private sector (independent power producers, fertilizer marketing, grain imports), the pace has been constrained by the Government's failure to provide public good-type services, hurting the volume and efficiency of private investment. But the Government has done fairly well in agricultural research, where, with appropriate budgetary support, numerous high-yield rice varieties have been introduced in the last decade, raising agricultural productivity and reducing poverty (Figure 3). To stimulate development, the Government needs to:



To stimulate development, the Government needs to:

- Improve law and order, which now has enormous adverse effects on the business climate and poverty reduction.
- Increase the provision (or enforcement) of regulatory services, such as road traffic control and security. There is an urgent need for the Government to establish and enforce strong regulations for rickshaws in mass transport, enforce standards for the bridge network and berthing facilities in inland waterways, and enforce the ban on non-motorized transport on national highways.
- Reduce pollution in big cities, because it constrains development and has high human costs.
- Modernize rural development institutions, such as water and seed distribution, and reduce government involvement in the fertilizer and sugar sectors.
- Establish an appropriate governance framework for SOEs, especially in energy. Pricing policies for utilities have been inadequate, and SOE financial losses have reached unacceptable levels. Performance should be benchmarked through the use of such indicators as minimum returns on equity.
- Open critical sectors such as gas and telecommunications to private participation. The Government did attract private participation in energy production through independent producers, but because of the undeveloped policy framework, this required excessive borrowing or guarantees.

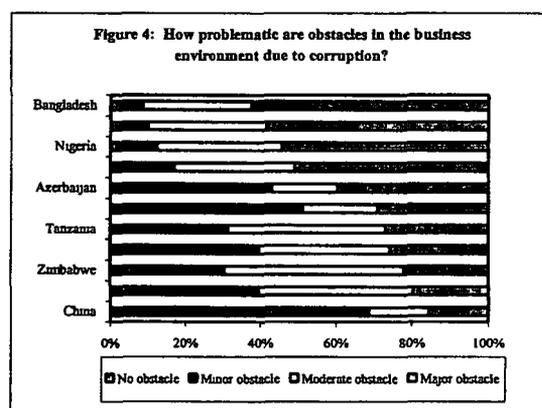
Improving public service delivery—key to improving the business climate and stimulating growth

29. The weak expenditure management framework combined with other institutional weaknesses reduces the efficacy of public expenditures and results in poor public services and a hostile investment climate, constraining progress toward poverty reduction. Studies show that citizens are largely dissatisfied with the services of the Government and that budgetary allocations often fail to translate into effective social services. The institutions for implementing public expenditures have not improved in line with resource re-allocations over the years.

30. The most glaring manifestations of poor public service delivery are deteriorating law and order, corruption, citizen dissatisfaction with services, and an inefficient bureaucracy. The institutions responsible for maintaining law and order have the lowest satisfaction ratings in Bangladesh. Although the Supreme Court continues to command respect, Bangladesh’s legal-judicial system, seriously constrained in its ability to respond, is not capable of administering the rule of law promptly and impartially. The bleak state of law and order is due to the lack of transparency and accountability—and of capacity in the police and civil justice system. Allocations to public order and safety were 0.7 percent of GDP in 2001. Bangladesh has fewer police officers per 1,000 citizens than any of its neighbors except Pakistan. It has the highest rates of armed robbery and reported rapes in South Asia.

31. Corruption and performance lapses take many forms, reducing the efficiency of expenditures. Meter-readers collude with unscrupulous consumers in appropriating revenues. Similar deficiencies are present in the social sectors where Bangladesh invests heavily every year. In addition to large leakages in the FFE program, recent surveys report high levels of frustration over delayed supplies of textbooks and the need to buy primary-level textbooks meant to be distributed free of charge. In health, both patients and doctors are very vocal about systemic corruption in procurement, registering clinics, providing medicine and supplies, and appointing, posting, and promoting medical professionals. Even after admission, extra payments are routine in government or private facilities. The financial sector is another area of widespread diversion and misuse of funds. The biggest problem relates to the nationalized commercial banks, which are exempt from Bangladesh Bank supervision and so do not comply fully with requirements for loan provisioning and capital adequacy. Between 30 and 40 percent of their loan portfolios are non-performing. Since poor governance in banking affects government finances, an urgent priority is to strengthen the legal framework in the banking sector to improve the management autonomy of the central bank and the non-commercial banks.

32. On measures of extent of corruption, the rule of law, and government effectiveness, Bangladesh ranks lower than China and India (Stern 2002; Figure 4). In the World Bank’s World Business Environment Survey, covering a modest number of firms in about 100 countries, Bangladesh stood out as one in which all firms surveyed reported that they made off-the-record payments to get things done.² Nearly half of Bangladeshi firms reported that they always had to offer unofficial payments to get government services. By comparison, in India and Indonesia fewer than 25 percent of firms had to pay for these services.



33. Corruption and weak law and order are symptoms of weak institutions and a poor governance framework. And Bangladesh is paying a high price, estimated at 2-3 percentage points of GDP annually in

² For additional information on the survey, see the draft report "Voices of the Firms" at www.info.worldbank.org/governance/wbes/.

forgone economic growth. There is a consensus among the various stakeholders that there is no easy solution. The most important recommended actions are:

- Introduce strong legal underpinnings for anticorruption measures and strengthen financial transparency and accountability.
- Improve procurement systems.
- Reform the civil service and the institutions of local government. Some cautiously advocate the benefits of decentralization, particularly in the social sectors.

The challenge of attaining the Millennium Development Goals

34. Reaching the Millennium Development Goals is a big challenge for Bangladesh. Most people have few opportunities to improve their income-generating capacity, so their ability to invest in their human capital is low. Attaining individual Millennium Development Goals requires additional resources and simultaneous improvements in the policy framework of many inter-linked sectors. Most critical for reducing the incidence of poverty (both income and human poverty) are improving the broad policy framework and generating broad-based economic growth. The evidence in the Poverty Assessment shows that Bangladesh needs to grow at about 6 percent a year to halve the incidence of poverty between 2000 and 2015 (World Bank 2002).³ This corresponds to the projected growth rate needed for Bangladesh to reach the present per capita income ceiling for eligibility for International Development Association (IDA) borrowing (\$885) in the next two to three decades (IMF 2002).

35. Even economic growth of 6 percent a year will not be sufficient to realize the non-income Millennium Development Goals in time. This is consistent with the evidence from other poor countries, where even reasonable rates of growth have taken too long to eradicate the worst forms of human deprivation.

- To halve child malnutrition by 2015, relying on increased household incomes alone, will require at least 8 percent per capita growth a year. Since such growth is not easily achievable, reaching this goal will require specifically tailored actions.
- Reducing maternal mortality will also require specific actions, such as drastic expansion of the training and recruitment of midwives and nurses.
- Even the education goal will require additional attention and resources. Although Bangladesh has achieved primary enrollment of 91 percent, pressures are growing on the Government to enhance the quality of education to ensure success not only in enrollment but also in completion rates, with a view to providing universal basic education and functional literacy for the poor.
- Based on the international benchmark cost for ensuring provision of a standard package of basic health services (\$44 per capita a year), Bangladesh will need substantial increases from its current \$11 per capita.
- Reducing indoor and urban air pollution and reversing resource degradation (soil, forests, fisheries) will require additional financial resources—one estimate puts the costs of environmental degradation as high as 5 percent of GDP.

36. As a result, while difficult to cost out, reaching all the non-income Millennium Development Goals will undeniably call for considerable additional public expenditures as well as substantial improvements in the efficiency of existing spending and in the broad policy framework across sectors.

37. Another Millennium Development Goal that needs special attention is promoting gender equality and empowering women. While there has been considerable improvement in women's education, health,

³ Assuming that the elasticity of poverty reduction with respect to growth remains the same.

and income status, in their participation in public life, and in their access to credit and the formal labor market, two challenges are daunting. There is a need to promote women's participation in the development dialogue by ensuring their adequate representation at the local and national levels, and a need to address more forcefully the skewed impact of the law and order situation on women. More detailed analysis needs to be undertaken to provide information on the most critical areas of public policy for gender equity.

Reforms and the way forward

38. The savings that can be generated by implementing reforms are substantial. ADP spending could be strengthened even if its level was reduced by 0.5-1.0 percent of GDP. The deficit of the SOE sector could be reduced by half (1.5 percent of GDP), and privatization of the commercial SOEs could bring in a large volume of resources. Eliminating leakages in some of the social safety programs could generate savings of about 0.2 percent of GDP. The combined financial impact of policy changes in these areas could easily exceed 2 percent of GDP, and could in fact attract more development assistance. These savings would finance the implementation of programs and reforms in areas that will help accelerate progress toward the Millennium Development Goals.

39. Following the October 2001 parliamentary elections, the political impetus for change is strong. In its *Memorandum for Bangladesh Development Forum 2002-2003*, the Government has provided a comprehensive list of areas where reforms are urgently needed. Topping this list is the intention to improve law and order and human rights. Several important actions have already been launched. In addition, an encouraging multisectoral program to strengthen Bangladesh's pillars of integrity has been promised, relating in particular to the Ombudsman Act, the recommendations of the Public Administration Reform Commission, establishing an independent Anti-Corruption Commission, separating the judiciary from the executive, and strengthening the audit, accounting, and procurement functions of government. The Government has also committed to privatize all types of state enterprises in a phased manner, and some privatization transactions are already under way. The most prominent of these is the closure of the Adamjee Jute Mills in August 2002. The FY03 budget represents an encouraging attempt at restoring fiscal sustainability. It is also encouraging that the Government is making much progress in defining its poverty reduction strategy.

40. The reform program that the Government has already committed to is laudable. The scope of the program is appropriate, and there is broad consensus among all stakeholders that these are priority areas for action. The most important objective at this stage is to ensure implementation of the policy commitments. The natural outcome of these changes will be domestic security and better delivery of public services—key ingredients for accelerated growth and poverty reduction in the medium term. The acid tests of success for the Government's reform agenda are:

- Restoring fiscal sustainability.
- Strengthening the ADP expenditures and those focused on the Millennium Development Goals.
- Privatizing SOEs engaged in commercial activities and the public financial institutions.
- Reducing corruption in the legal-judicial system, police, and public procurement.

Next steps

41. It is recommended that a formal mechanism be put in place to closely monitor policy implementation in the next few years. A Dhaka-based monitoring group of NGOs, the private sector, donors, and government officials could be created for this purpose. It is expected that the recommendations of the Public Expenditure Review will help in the formulation of the PRSP currently under way. A specific mission should be planned for the summer of 2003 to discuss more formally the

implementation status of the recommended policies in conjunction with the formulation and implementation of the PRSP. An attached table of summary recommendations could be used to measure the progress in policy implementation at that time.

42. After the completion of this Public Expenditure Review, several dissemination activities were held to assist the Government in carrying forward its reform agenda and implementing the policies recommended. Two seminars were scheduled in May-June 2002 in Dhaka and Washington to share the main conclusions with the extended country teams working on Bangladesh. This was followed by a conference involving a wide array of stakeholders in Dhaka in the fall of 2002. There are high expectations that the findings of this report, already discussed with various government officials over the last few months, will be used for the FY04 budget.

Main recommendations to strengthen the impact of public expenditures

Objectives	Recommendations
<p>1. Pursue the Millennium Development Goals and enhance the pro-poor bias of expenditures</p>	<ul style="list-style-type: none"> • Develop a comprehensive plan to accelerate progress toward the Millennium Development Goals, including increasing allocations for pre- and postnatal health services—drastically expanding the training and recruitment of midwives and nurses—with a view to reducing maternal and infant mortality; increasing allocations to nutrition programs; intensifying efforts toward reducing the fertility rate; and increasing women’s participation in the development dialogue. • Use area-based poverty indicators more widely in the allocation of public funds to social sectors, starting with the Cash for Education program, distribution of free teaching and learning materials in primary education, and the Female Secondary Stipends program • Increase monitoring and evaluation of safety net programs, including through more extensive use of client satisfaction surveys, participatory monitoring and evaluation, and Public Expenditure Tracking Surveys. • Expand access to electricity in rural areas along the lines followed by Rural Electrification Board (REB). • Introduce examination results to direct subvention payments to performing schools, particularly at the secondary and degree college levels.
<p>2. Strengthen financial management in the public sector: budget management, ADP expenditures, and state enterprises</p>	<ul style="list-style-type: none"> • Reduce the consolidated public sector deficit by several percentage points of GDP. • Establish a macroeconomic framework that includes the consolidated operations of the SOEs, in collaboration with the Finance Ministry’s Resource Committee. • Review the quality of existing projects through a tighter process of rationalizing public sector involvement in proposed activities. Refrain from implementing projects identified in Annex 4. • Privatize all SOEs involved in commercial activity (focusing on the 48 enterprises already approved for privatization by the Government). • Impose hard budget constraints and clear and attainable commercial performance objectives on SOEs that are not privatized—power, gas, fertilizer, and urban water supply. • Prepare a plan to clearly establish inter-enterprise arrears, to reduce them to prudent industry norms (such as a maximum of two months), and to accelerate revenue collection. Implement financial action plans for the Bangladesh Power Development Board (BPDB), the Dhaka Electricity Supply Authority (DESA), and Petrobangla. • Formulate a sound guarantee policy, make information on guarantees publicly available, and establish a strong monitoring mechanism at the central level to oversee the Government’s contingent liabilities.
<p>3. Increase private sector involvement in the economy (includes recommendations on SOEs)</p>	<ul style="list-style-type: none"> • Gradually withdraw the Bangladesh Agricultural Development Corporation from supplying seeds at highly subsidized prices and complete the liberalization of the urea market. • Phase out protection of the sugar industry. • Make greater use of the private sector in carrying out routine maintenance of roads, through area-based term contracts. • Concession the Patenga Container Terminal to the private sector. • Re-balance utility tariffs by adopting formula-based flexible price adjustments. • Adopt a strategy, with a timetable, for introducing private participation in the distribution of gas and electricity and in downstream petroleum operations.

Objectives	Recommendations
<p>4. Improve government's role in the provision of public goods</p>	<ul style="list-style-type: none"> • Establish a Judicial Service Commission and a Judicial Pay Commission, and launch radical reform of the police starting with the establishment of civilian oversight or a Police Commission to investigate misuse of power. • Increase budget allocations to agricultural research, but not before the National Agricultural Research System redirects its emphasis to non-rice crops and non-crop agricultural products. • Limit the role of rickshaws as a feeder service to mass transit buses running on rickshaw-free arteries and enforce the existing ban on non-motorized transport on national highways. • Introduce policy actions and programs to reduce pollution in major cities. • Set and enforce standards for the bridge network and berthing facilities in inland waterways. • Submit the draft Road Transport and Traffic Bill to Parliament to clarify the roles and responsibilities of agencies in traffic management, especially those of the Local Government Engineering Department (LGED) and Roads and Highways Department (R&HD). • Pass the Electricity and Gas Acts to establish an appropriate legal and regulatory framework.
<p>5. Strengthen institutions: combat corruption, strengthen procurement, and increase accountability, transparency, and efficiency</p>	<ul style="list-style-type: none"> • Appoint an ombudsman and create an independent Anti-Corruption Commission. • Publish a time-bound national anti-corruption action plan, endorsed by the Cabinet and the Prime Minister. • Formulate streamlined internal procurement procedures, publish all contract awards over \$200,000, and reduce the average public sector procurement time from 14 months to 12. • Announce a list and timetable of support services that will be sub-contracted to the private sector. • Require all ministries to publish annual reports, to be submitted to the relevant parliamentary committee. • Identify and publicize large power, gas, telecommunications, and water consumers who are significantly under-billed and have large arrears, and launch a collection drive. • Initiate a monitoring system to check leakages in the distribution of cash stipends, food, free textbooks, and medicines. • Carry out a Public Expenditure Tracking Survey in education, health, and social safety net programs. • Phase out the Government's role in publishing, printing, or distributing textbooks for any level of schooling, including primary.

PART 1: UNSUSTAINABLE PUBLIC SECTOR SPENDING AND WEAK GOVERNANCE

INTRODUCTION

1. Bangladesh's public sector has weakened significantly in recent years, mainly as a result of election-motivated budgetary expenditures during 1999-2001, inadequate revenue mobilization, and inappropriate pricing policies in state enterprises. The public sector deficit has been above sustainable levels for the last three years, and the extremely low level of foreign reserves reached at the end of 2001 compelled the Government to introduce temporary restrictions on access to foreign exchange. The progress in poverty reduction in the 1990s was commendable, but that progress will be at risk if the imbalances in the public sector persist.

2. In the face of the deteriorating economic situation, the newly elected Government started implementing corrective policies in late 2001. While these steps are in the right direction, they fall short of what is needed to guarantee growth rates high enough to make a dent in poverty. The most critical needs at this stage are to:

- Restore fiscal sustainability by reducing the public sector deficit by several percentage points of GDP.
- Strengthen the effectiveness of the Annual Development Program.
- Strengthen the institutions of public expenditure management with a view to promoting prioritization and accountability.
- Drastically reduce the involvement of state-owned enterprises in the economy through a first stage of privatization.
- Accelerate the momentum of growth through structural reforms in governance, banking, and energy.
- Implement a credible program of governance improvements with a view to strengthening public service delivery and the business climate.

3. The Government has committed to comprehensive fiscal and structural reforms. The budget for FY03 is an encouraging start in restoring fiscal sustainability. And the Government's own governance reform agenda, presented during the March 2002 Development Forum as well as the initial rounds of the PRSP process, represents a good starting point to improve the business climate and reduce poverty in Bangladesh.

Chapter 1

FISCAL SUSTAINABILITY

The fiscal deficit in Bangladesh has reached unsustainable levels and poses unjustified risks to social sector spending and external debt servicing. The consolidated public sector deficit should be reduced by several percentage points of GDP as soon as possible, and institutions of the budget need urgent attention. Equally important for Bangladesh at this juncture is to introduce structural reforms so as to ensure higher levels of growth and lower levels of real interest rates, both critical factors in achieving fiscal sustainability.

1. Background

4. Bangladesh is at a difficult juncture in terms of its overall fiscal situation. On the one hand, there are enormous challenges to bring down the levels of poverty in the country, and the Government faces continued pressures to increase the involvement of the State in the economy (public sector employment, public services in education and health, and the like). On the other hand, Bangladesh seems unable to mobilize the capacity to launch much-needed reforms across the economy, with the consequence that it is unable to tap the domestic and foreign resources available to the country. As a result, the fiscal situation has deteriorated slowly, but dangerously.

5. This chapter reviews Bangladesh's fiscal policy over the last decade and argues that while the country implemented sensible fiscal policies in the 1980s and early 1990s, the disequilibria toward the end of the 1990s created a situation that took the country to an unsustainable fiscal position. This chapter first measures the extent of potential fiscal instability and unsustainability using both a narrow (central government) and a wide (consolidated public sector) measure of government in Bangladesh. Second, it analyzes the potential macroeconomic and growth consequences of Bangladesh's fiscal deterioration, which could have a negative impact on poverty alleviation. It concludes that Bangladesh need to reduce its public sector deficit by several percentage points of GDP relative to FY01 as quickly as possible in order to preserve and bolster the past momentum of growth and poverty reduction.

2. The road to fiscal imprudence

6. Economic management in Bangladesh over the last decade has been mixed. While Bangladesh achieved high rates of growth, a steady reduction in poverty rates, low inflation, and fairly stable domestic debt, interest, and exchange rates, the foreign exchange position weakened steadily (Table 1.1).

Table 1.1: Bangladesh—macroeconomic indicators, FY91-01

	FY91	FY96	FY97	FY98	FY99	FY00	FY01	FY02
Economic growth (%)	3.3	4.6	5.4	5.2	4.9	5.9	5.3	4.4
Poverty rate (% , higher poverty line)	58.8	51.0	n/a	n/a	n/a	49.8	n/a	n/a
Poverty rate (% , lower poverty line)	42.7	34.4	n/a	n/a	n/a	33.7	n/a	n/a
Inflation (% change from previous year)	8.3	6.8	2.5	7.0	8.9	3.5	1.6	2.4
External current account balance (% of GDP)	n/a	-3.2	-1.3	-0.6	-0.9	0.0	-1.7	0.6
Total external debt (% of GDP)	39.2	37.3	34.7	31.6	32.7	34.0	34.3	34.9
Debt service (% of current receipts)	12.6	10.7	9.6	7.9	8.4	8.0	8.0	7.2
Foreign exchange reserves (months of imports)	n/a	3.5	2.9	2.8	2.3	2.3	1.7	2.0
Public debt (% of GDP)	n/a	45.7	43.8	41.5	43.8	46.9	48.7	51.6

Note n/a—not available

Source IMF, World Bank, and Government of Bangladesh

7. The fiscal deficit was maintained below 5 percent of GDP until the late 1990s. But in the absence of a strong medium-term strategy and sound institutional mechanisms, the country has remained vulnerable to inappropriate policy decisions, as evidenced by the weakened fiscal stance in FY99-00. Since that time the State has increased its direct participation in the economy, and both current and capital expenditures have grown significantly, reaching 14.8 percent of GDP in FY00. These election-motivated expenditure excesses and the increased budgetary financing of losses by state-owned enterprises (SOEs) generated large central government fiscal deficits, estimated at over 6 percent of GDP in FY00 (Table 1.2). An alternative measure of the fiscal deficit, consistent with the difference between government investment and savings levels, confirms the fiscal deterioration: the deficit rose from -0.5 percent of GDP in FY98 to 2.3 percent of GDP in FY01. The net result of this fiscal deterioration is that domestic bank financing of the budget deficit has increased considerably, and the stock of public debt rose to 52 percent of GDP in FY02, fueled mainly by an increase in the stock of domestic debt.

8. The financial situation of the non-financial public sector enterprises has deteriorated massively during the past few years, primarily because of unresponsive domestic pricing policies and poor internal governance. The consolidated deficit for the sector rose from 0.9 percent of GDP in FY99 to 3 percent of GDP in FY01. SOEs have also accumulated large foreign liabilities. The net budgetary resource transfer on local and foreign loans provided by the Government to these enterprises is estimated at about 1.2-1.5 percent of GDP annually in recent years. In the balance of payments the internal disequilibria led to deficits in the external current account, which rose from 0.6 percent of GDP in FY98 to 1.7 percent in FY01. Because exchange rate adjustments over the period were inadequate and frequently delayed, the balance of payments pressures translated into a steady fall in external reserves. External debt service has remained manageable over the years.

Table 1.2: Bangladesh—central government operations, FY91-02
(percentage of GDP)

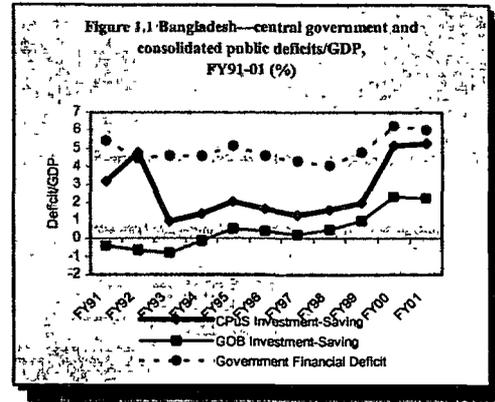
	FY91	FY97	FY98	FY99	FY00	FY01	FY02
Total revenue	7.2	9.2	9.3	9.0	8.5	9.0	10.2
Tax revenue	5.9	7.4	7.3	7.2	6.8	7.6	7.7
Non-tax revenue	1.3	1.8	1.9	1.8	1.7	1.4	2.4
Total expenditure	12.7	13.5	13.3	13.8	14.7	14.1	14.8
Current expenditure	6.5	6.8	7.2	7.6	7.8	7.7	8.0
Annual Development Program (ADP)	4.7	6.0	5.6	5.6	6.5	6.5	5.6
Non-ADP capital and net lending	0.5	0.4	0.4	0.3	0.2	-0.2	1.2
Overall budget balance (excluding grants)	-5.4	-4.3	-4.1	-4.8	-6.2	-5.1	-4.7
Net foreign financing	4.7	2.8	2.4	2.4	2.5	1.9	2.1
Grants	2.7	1.7	1.3	1.3	1.5	0.8	0.8
Net domestic financing	0.7	1.5	1.6	2.4	3.7	3.1	2.5
Banking system	0.2	0.9	0.6	0.9	1.5	1.5	0.8

*There is a discrepancy of 0.6 percent of GDP in the fiscal accounts of FY01 and FY02
Source: IMF, WB, and Government of Bangladesh.

9. A comprehensive assessment of the overall financial position of the public sector has been carried out, covering the five public sub-sectors (government, state-owned enterprises, nationalized commercial banks [NCBs], development finance institutions [DFIs], and Bangladesh Bank), combined in the consolidated public sector (CPuS).⁴ The overall deficit of the CPuS, measured by its savings-investment gap (see Annex 1), rose from 1.7 percent of GDP in FY98 to 5.2 percent in FY01, mostly because of the

⁴ Bangladesh's public sector extends far beyond the central Government, comprising a large SOE sector and a dominant public financial sector. The size and extension of these sectors exceed corresponding measures for many other countries. Therefore, an accurate assessment of fiscal policy in Bangladesh should be based on an analysis of the consolidated public sector.

deteriorating trends in the deficits of the Government and SOEs (Figure 1.1).⁵ Both deteriorating CPuS savings and expanding CPuS investment drive the exploding deficit, with the CPuS savings rates reaching their lowest levels in a decade (around 1.2 percent of GDP in FY01) and the CPuS investment rates increasing to 6-6.5 percent of GDP during the last two fiscal years. In that context the CPuS net liabilities rose from 44 percent of GDP to 55 percent of GDP, reflected by a large increase in public debt held by the private sector,⁶ which rose from 6.6 percent of GDP in FY99 to an estimated 16 percent in FY01.



3. The need to restore fiscal sustainability

10. Despite well-known concerns about fiscal sustainability, the term has numerous meanings.⁷ Nonetheless, there is convergence among the various definitions, with fiscal sustainability taken to mean the ability to remain solvent—that is, to repay debt incurred in the past—and to maintain confidence in the government's creditworthiness. In this report a fiscal policy path is considered sustainable if it is consistent with stable government debt dynamics and can be financed with available resources, domestic and external. To assess fiscal sustainability in Bangladesh, the report applies two versions of the extended accounting approach for fiscal sustainability. The first is a narrow version that derives a level for the primary (non-interest) deficit to GDP ratio consistent with constant money and public debt to output ratios. A broader version adds to that condition the requirement that the key variables determining the financing of the primary deficit attain more permanent or longer-term values. Sustainable deficit ratios based on both concepts are compared with actual deficit ratios, first for the central Government and then for the CPuS.

11. The sustainable level (in a narrow sense) of the Government's primary deficit is estimated at 2.7 percent of GDP, well below current levels. Hence the fiscal adjustment required to attain sustainability would involve reducing the current primary deficit and the Government's overall budget deficit by several percentage points of GDP. Applying a broader concept of sustainability—that is, adding the requirement that the actual interest rate paid by the Government on its domestic debt be increased to the level of the real domestic shadow rate (10 percent) given by the interest rate paid by the five year National Saving Deposit (NSD) certificates—implies giving up the domestic real interest rate subsidy, equivalent to 0.9 percent of GDP. This would require the Government to reduce its primary deficit accordingly. Should Bangladesh be required to forgo the concessional element of its foreign lending (including grants), the Government would be forced to attain a primary surplus of 1 percent of GDP. However, the sustainable deficit levels mentioned above assume the continuation of sizable concessional external financing in line with past trends.

12. Similar results are obtained for the CPuS. Hence Bangladesh's current fiscal stance is not sustainable because it implies steadily growing debt to GDP ratios and relies on significant amounts of foreign concessional lending. The calculations of sustainable primary deficit levels for the Government and the CPuS show that a fiscal correction equivalent to several percentage points of GDP is required for

⁵ Reported net profits of the NCB sector, which represents a large share of Bangladesh's banking system, have been seriously overstated because they do not take account of full provisioning requirements in line with international standards. The aggregate financial statement for the DFIs shows systematic net losses during the last nine years. The Central Bank's gross income has averaged 0.5 percent of GDP since 1994, of which 0.3 percent of GDP was transferred to the Government as dividend payments.

⁶ Mostly in the form of private holdings of National Saving Deposit (NSD) certificates and private deposits at NCBs.

⁷ The theoretical framework used to assess consistency between government debt dynamics and fiscal deficits is summarized in Schmidt-Hebbel (2001).

the primary deficit in order to attain constant liability to GDP ratios. Should the implicit subsidy from paying low domestic and foreign interest rates disappear, further primary deficit adjustment will be required to put the Government on a sustainable financing path and hence ensure long-term stability.

13. Bangladesh's growing public deficits demand increasing financing from the private sector. The past evidence on Bangladesh shows that the CPuS finances its growing deficits by issuing more bank and non-bank debt to the private sector. This reduces the bank credit available to the private sector, increases domestic interest rates, and consequently leads to lower private investment and

Table 1.3: Bangladesh—simple correlations for per capita GDP growth and determinants, FY74-98

	Per capita GDP growth	Population growth	Growth of external terms of trade	Investment-GDP ratio	Ratio of national to world per capita income
Per capita GDP growth	1.00	-0.42	-0.18	0.18	0.01
Population growth		1.00	0.13	-0.37	-0.41
Growth of external terms of trade			1.00	0.11	0.07
Investment-GDP ratio				1.00	0.81
Ratio of national to world per capita income					1.00

Source. Staff calculations

growth. These hypotheses are confirmed by empirical results obtained by estimating standard models for domestic bank lending rates, private investment rates, and per capita GDP growth rates highly significant and large for Bangladesh. The results show that outstanding bank credit to the public sector has an effect on the bank lending rate. This provides strong evidence that the public sector's demand for financial resources exerts a large upward influence on domestic interest rates. Private investment is crowded out by an expansionary fiscal policy in three ways: through higher domestic interest rates, through lower credit availability, and (if the fiscal expansion occurs through public investment) through the direct crowding out due to public-private investment substitution. The results for growth imply that a 1 percent increase in the private investment to output ratio could raise the rate of per capita GDP growth by 0.8 percentage point (Table 1.3 and Appendix Tables A1.1 and A1.2).

14. These results are used to simulate the effects of temporary and permanent fiscal deficit expansions (financed by greater bank credit to the public sector) on the real bank lending rate, the private investment ratio, and per capita real GDP growth. The increase in the public credit ratio leads to an identical reduction in bank credit available to the private sector and causes a major rise in the real lending rate. Consequently, the private investment ratio falls, and per capita GDP growth declines substantially. Hence an expansionary fiscal policy crowds out the private sector and leads to large negative long-term effects on private investment and aggregate growth in Bangladesh. Fiscal adjustment is advisable not only on grounds of public sector solvency, but also because it contributes to private sector development and higher growth.

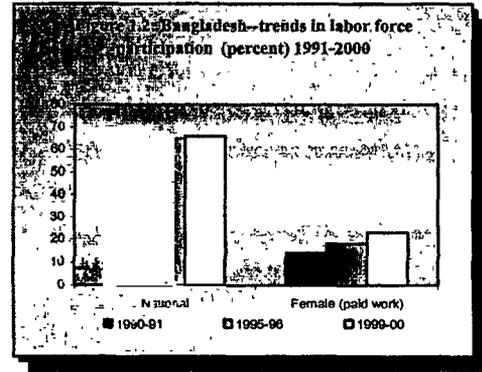
15. To complement the long-term impact of the fiscal deficit, a general equilibrium model has been prepared to simulate the short-term effects of fiscal expansions. Two expansionary fiscal policies have been considered: an increase in government expenditure and a cut in indirect tax rates. In both cases larger government deficits are financed by issuing domestic public debt to the private sector. Fiscal expansion raises real GDP in the short term but is highly inflationary, leads to much higher real interest rates, and crowds out private sector spending (Appendix Tables A1.3 and A1.4). Considering the large effects on private capital formation and medium- to long-term growth confirmed by the preceding simulations, domestic debt-financed-expansion is not advisable.

16. The implications of expansionary fiscal policies for income distribution and poverty alleviation in Bangladesh are potentially severe. The negative long-term growth effects of such policies diminish Bangladesh's prospects for reducing the number of its poor. There is a strong correlation between growth and poverty reduction in Bangladesh. It has been shown that for Bangladesh to attain its poverty reduction goals, it would need to achieve economic growth of at least 6 percent annually over the next decade (see

Poverty Assessment Report [2002]). In addition, the inflationary consequences have negative effects on real wages and income distribution because of the highly regressive nature of inflation. Therefore, fiscal adjustment toward sustainable deficit levels, at the level of both the central Government and the financial and non-financial public enterprises, is highly advisable in order to sustain high growth and alleviate poverty.

4. Social sector spending and sustainability

17. Bangladesh allocates almost 30 percent of its total budgetary expenditures to education, health, the social safety net, and disaster management. This strategy has yielded considerable results not only in improving the quality of the country's labor force but also in allowing wider segments of society to participate in the process of growth—for example, female participation in schools and the formal labor market has increased significantly over the years (Figure 1.2).



18. Nonetheless, given the macroeconomic limits on deficit financing, and assuming unchanged levels of tax revenues, it will become increasingly difficult to maintain such relatively high levels of social sector spending, especially as demands for funds for debt servicing, infrastructure maintenance, and reforms of the NCBs and SOEs continue to grow. Even though the share of social sector spending is high, Bangladesh's public spending per capita on education and health (\$12) is well short of India's (\$21) and Sri Lanka's (\$37) (Table 1.4). If health and education spending were kept at 3.3 percent of GDP, Bangladesh's GDP would need to be 1.8 and 3.2 times its current size to achieve the per capita spending on health and education in India and Sri Lanka. This example illustrates the immense need not only to fully tap the country's growth potential but also to reduce wasteful public expenditures, so that Bangladesh can catch up with its neighbors in investing in people. In this context the shedding of unnecessary expenditure burdens by the Government, such as budgetary support to the unproductive SOEs, assumes added significance.

Table 1.4: Per capita spending on education and health in South Asia, 1997-2002 (US\$)

	1997	1998	1999	2000	2002
India	15	16	15	19	21
Pakistan	15	14	13	12	13
Sri Lanka	32	34	33	35	37
Bangladesh	11	11	11	12	12

5. External debt sustainability

19. The issue of external debt sustainability—Bangladesh's ability to service its external debt in full without recourse to debt rescheduling or relief—has not been explored in this exercise. A cursory review of the main external indicators, however, points to a need for caution. Based on the main indicators of external debt and debt servicing, it appears that Bangladesh is not in a bad position. The debt to GDP ratio is relatively low by the standards of South Asian countries and well below the 200-250 percent range of heavily indebted poor countries (HIPC). The external debt to GDP ratio increased by 1.6 percentage points during the last three years, primarily because of a surge in costly suppliers' credit. Notwithstanding this increase, the debt service to export earnings ratio is still rather modest at less than 10 percent—well below the critical range of 20-25 percent—as a result of the high concessionality of Bangladesh's official multilateral and bilateral debt.

20. Nonetheless, there are weaknesses in Bangladesh's external position that need immediate redress. These weaknesses have their origin in the public sector. First, the rapid accumulation of foreign liabilities by SOEs under foreign suppliers' credit, independent power producers (IPPs), and production sharing

contracts (PSCs) has created greater risk for the medium term, especially as these liabilities are guaranteed by the Government (Table 1.5). Debt service payments on account of debt related to foreign direct investment (FDI) and suppliers' credit reached nearly \$400 million, which is equivalent to about 50 percent of the FY01 current account deficit or 20 percent of FY01 remittance inflows. Second, the current level of official reserves—equivalent to 1.5 months of imports—is critically low and provides little cushion against short-term external shocks. The decision to limit SOEs' access to foreign suppliers' credit and the corrective fiscal measures taken recently are steps in the right direction.

Table 1.5: Bangladesh—stock of FDI-related debt, suppliers' credit, and debt service payments, FY95-01
(US\$ millions)

	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Stock of debt	480	872	1,166	2,039	2,893	3,622	4,476
FDI debt	83	324	620	1,007	1,714	2,153	2,896
Suppliers' credit	397	548	546	1,032	1,179	1,496	1,580
Debt service	13	13	25	115	249	242	381
FDI debt	-	-	2	83	205	187	298
Suppliers' credit	13	13	23	32	44	55	83

6. The way toward restoring fiscal sustainability

21. The Government has already taken some measures to ease pressures on the budget and the balance of payments. These include pruning the Annual Development Program by about 1.1 percent of GDP, cancelling the Non-Aligned Movement Summit in Dhaka, reviewing contracts under suppliers' credit, imposing restrictions on recruitment in the public sector, and reducing the interest rate on savings certificates. The Government has also increased revenues by Tk 5 billion. Unfortunately, these measures fall short of the adjustment recommended by the fiscal sustainability analysis, especially if disbursements of concessional aid continue to fall. There is a need to introduce more forceful fiscal measures at the earliest time possible. The objective should be to reduce the deficit of the CPuS by several percentage points of GDP. The first step in pursuit of this objective is to establish an analytically sound macroeconomic framework that includes the consolidated operations of the SOEs. Commitment problems are common around the world because of the incentive for a government to spend excessively when it perceives that it may have a short tenure in office (Tabellini and Alesina 1990) or to sway voters before elections. While there is no ready-made solution to this problem, Bangladesh may want to experiment with rules such as "zero monetary financing" or a practice such as "two-thirds majority for reversal of policies."⁸ An engagement with the international financial institutions under economic reform programs can also provide an anchor for the implementation of policies. The newly elected government has a strong mandate, and the FY03 budget with its target of reducing the budget to 4 percent of GDP is a welcome move.

7. Additional aspects of fiscal sustainability

22. There are several additional factors (besides strengthening the budget) in the analysis of sustainability that are critical from a long-term perspective, especially in Bangladesh. Bangladesh's real GDP growth averaged slightly less than 5 percent in the 1990s, while its real interest rate was nearly 13.5 percent. Such a large divergence between real income growth and real interest rates implies highly unstable debt dynamics for Bangladesh, something the country can ill afford. This makes acceleration of growth, reductions in real interest rates, and stronger mobilization of revenues and concessional external financing extremely important.

⁸ Keefer and Stasavage (1998) argue that when the number of actors required to reverse a decision to adopt a rule is greater than the number of actors required to make ordinary policy decisions, a rule is more likely to have an impact on policy reforms.

Growth

23. Bangladesh needs to accelerate the momentum of growth in the new global environment. Steps taken in the early 1990s toward integration with the global economy were not maintained during the second half of the 1990s.⁹ The growth performance of Bangladesh during the decade, although healthy (and allowing the Government to borrow extensively in the domestic market at reasonable interest rates),¹⁰ was far short of outcomes in countries such as China and India. In the 1990s India's per capita GDP grew at an annual rate of 4.2 percent, significantly higher than Bangladesh's 3.1 percent. A reform program that increased openness and competitiveness while improving major elements of India's investment climate made this possible (Stern 2002). A more attractive investment climate could have stimulated faster growth in Bangladesh and enhanced market prospects for rural non-farm incomes and employment, which could have helped reduce rural poverty more rapidly. Instead, Bangladesh was not able to fully reap the benefit of the trade policy changes of the early 1990s because of the lack of thorough implementation of trade and industrial (SOE) policy reforms; extremely weak political cohesion; fragile rule of law; and lack of accountability in public service delivery. It has been shown that the loss of real per capita GDP growth due to financial distress in 1976-95 was as high as 0.7-1.6 percentage points per year, while the loss due to insufficient provision of energy could reach 0.6 percentage points annually.

24. Bangladesh has the potential to accelerate its growth through better governance, a concerted effort to improve the investment climate, sustained improvements in health and education, greater and more equitable involvement of women in economic and public life, and measures to take fuller advantage of the country's highly effective NGO infrastructure and grassroots capacity. Such actions, rather than continued expansion in public expenditures, will allow the country to realize higher returns on its human and physical capital. Some of the main areas of reform needed include liberalizing trade, strengthening the energy and banking sectors, improving governance, and restoring law and order.

Real interest rates

25. While real income growth is extremely important for fiscal sustainability, Bangladesh should spare no efforts to reduce the high level of domestic real interest rates, as these affect sustainability through their impact on the servicing of public debt and on economic growth itself. The real interest rate currently exceeds 11 percent in Bangladesh and is among the highest in South Asia (Table 1.6). With this level of real interest rates and real GDP growth of about 4-5 percent, it is difficult for Bangladesh to have sustainable debt dynamics. Reducing the high real interest rates in Bangladesh will depend not only on reducing excessive borrowing by the Government, but on eliminating the inefficiencies of the banking system. Loan classification and loss provisioning criteria, and their enforcement, are not stringent in Bangladesh by international standards. Even so, classified loans, which rose from 32 percent of total loan, in 1995 to 43 percent in June 1999 before falling to 31 percent by the end of 2001, are still large and

Table 1.6: Real interest rates in South Asia, March 2002

	Primary rate	Inflation	Real rate
	(1)	(2)	(3)= (1)-(2)
Bangladesh	13.8	2.2	11.6
India	11.0-12.0	1.4	9.6-10.6
Pakistan	12.0	3.6	8.48
Sri Lanka	13.98	11.4	2.58
Nepal	7.5-10.5	3.2	4.3-7.3

Source. Bangladesh BBS and Bangladesh Bank, various World Bank reports.

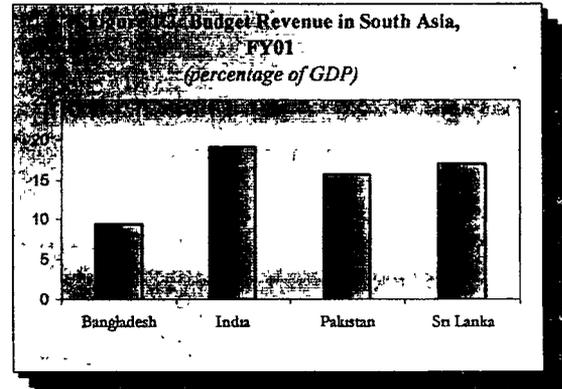
⁹ Based on its economic liberalization in the early 1990s, Bangladesh is categorized as a "globalizer" (see World Bank 2002a, 2002b.)

¹⁰ Growth in FY02 is expected to decline to 4-4.5 percent.

concentrated in NCBs and DFIs.¹¹ Commercial banks still face an overall provisioning shortfall of 44 percent, with NCBs accounting for the bulk of the shortfall. Actual provisioning at the end of 2001 was 35 percent for NCBs, 77 percent for private domestic banks, 100 percent for DFIs, and 124 percent for foreign commercial banks.

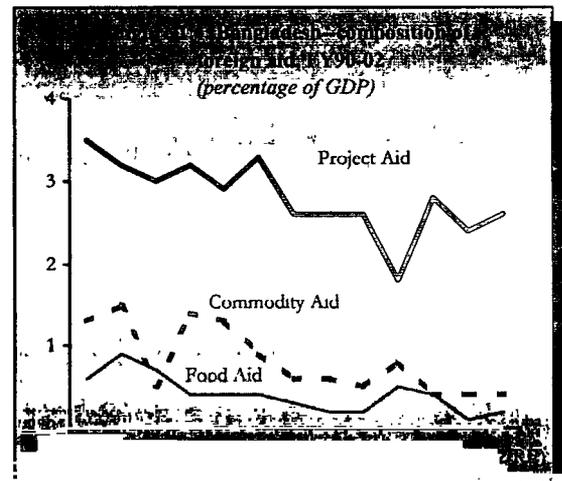
Revenues

26. Efforts in revenue mobilization need to be intensified. Bangladesh has one of the lowest level of tax revenues (and number of taxpayers) in the world (Figure 1.3), despite a 1.9 percentage point increase in the tax to GDP ratio during 1999-2001. In addition, Bangladesh remains heavily dependent on trade-based taxes, which represented about 52 percent of total tax collections in FY01. These distort incentives between export-oriented and import-substituting industries. There is consensus that among the most effective policies to increase revenues in Bangladesh are (i) broadening the tax base; (ii) reducing tax exemptions; (iii) improving tax administration; and (iv) tightening billing and collection in the delivery of public services. Furthermore, a fundamental shift from relying on import-based taxes in favor of domestic taxation, both direct and indirect, is needed.



External concessional financing

27. The decline in net concessional external financing, from 4.8 percent of GDP in FY90 to 2 percent of GDP in FY01, needs to be reversed (Figure 1.4). The decline reflects in part the declining need for food and commodity aid as Bangladesh has developed resilience to natural disasters. However, project aid has been declining too, except in the flood year. This largely reflects Bangladesh's weak and deteriorating absorption capacity. A much more developed capacity in project management is needed in order to accelerate disbursement from aid that has already been committed to Bangladesh (the pipeline exceeds \$5 billion). To build on the existing pipeline, Bangladesh needs to accelerate the policy and institutional reform agenda and strengthen its capacity to manage foreign-financed (as well as domestic) projects and programs, while the donor community needs to improve its coordination. The assistance process would clearly be enhanced if the Government were to take the lead and develop a public expenditure program that the donors could collectively agree upon and under which they could finance a time-slice of public spending. Donors could play an important role by supporting stable sectoral budget envelopes, provided there is agreement on development priorities and sector strategies. In this context the sector-wide approach (SWAp) in the health sector is a step in the right direction (see Chapter 6 for fuller discussion). Notwithstanding the



¹¹The ratio of classified loans to total loans in these financial institutions declined somewhat in 2001 because of stronger supervision and tighter enforcement of regulations.

implementation problems with SWAp related to procurement issues, the Government stated its unambiguous intention to retain the SWAp and apply it elsewhere, especially in education.

28. Addressing the challenges described in previous sections at an early stage is particularly important for Bangladesh because of the risks that fiscal slippages pose for financial stability, implementation of reforms across the economy, and political stability. The fiscal deterioration in Bangladesh contrasts with what has happened in most developing countries: recognizing the growth-enhancing impact of lower fiscal deficits, governments across the developing world reduced their deficits during the 1990s.

Chapter 2

MAIN FEATURES OF PUBLIC SPENDING

Public expenditures in Bangladesh are low by international standards and have reasonably good distributional impacts—with comparatively low levels of defense and interest payment outlays and high levels of social sector spending that are reasonably well targeted. However, they appear to suffer from the ills that often afflict developing countries: low effectiveness of capital spending, inadequate attention to operations and maintenance, inappropriate employment and pay policies, and the existence of fairly large subsidies.

1. Trends in public spending and financing

29. It is within the last five years that public spending has increased in an unaffordable way (see Table 1.2). Revenues have remained stable at around 9 percent of GDP while expenditures have increased by 1.7 percentage points of GDP, slightly skewed in favor of current outlays. Sectoral allocations over the years show a positive shift in favor of education, transport, energy, and housing and community services (Table 2.1). This is in line with the long-term trend in Annual Development Program (ADP) expenditures in particular, where there has been a clear shift in emphasis from agriculture and industries to the development of human resources and the rural economy (Figure 2.1).

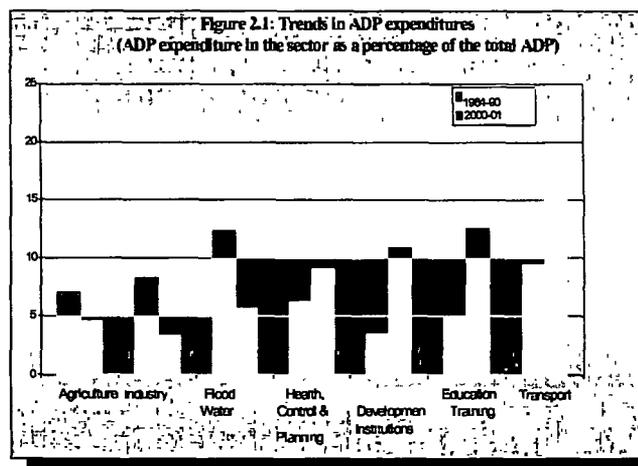


Table 2.1: Bangladesh—total expenditure by ministry or division, FY 98-01
(percentage of GDP)

Ministry or division	FY98	FY99	FY00	FY01
General Public Services	1.50	1.40	1.50	1.68
Defense	1.33	1.38	1.37	1.32
Public Order and Safety	0.67	0.67	0.73	0.70
Education*	2.08	2.15	2.21	2.26
Health	0.98	0.95	1.00	1.02
Social Security and Welfare	0.79	1.02	1.01	0.74
Housing and Community Services	1.10	1.30	1.56	1.58
Recreation, Culture, and Religious Affairs	0.22	0.17	0.18	0.19
Fuel and Energy	0.89	0.88	1.10	1.00
Agriculture, Fisheries, and Livestock	1.14	1.20	1.16	1.17
Mining, Manufacturing, and Construction	0.06	0.05	0.09	0.21
Transport and Communication	1.43	1.52	1.51	1.75
Other services	0.04	0.03	0.05	0.04
Interest	1.16	1.34	1.50	1.60
Total expenditure	13.39	14.06	14.97	15.26

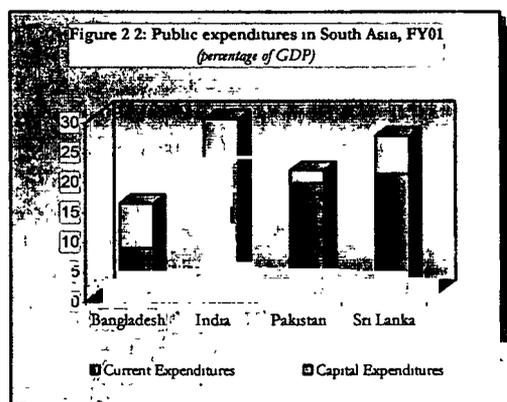
* Includes budgets of Ministry of Education and former Primary and Mass Education Division (PMED).

Source: Ministry of Finance revised budget estimates

2. Some important features of public spending in Bangladesh

Low levels of current spending, although government influence in the economy is large

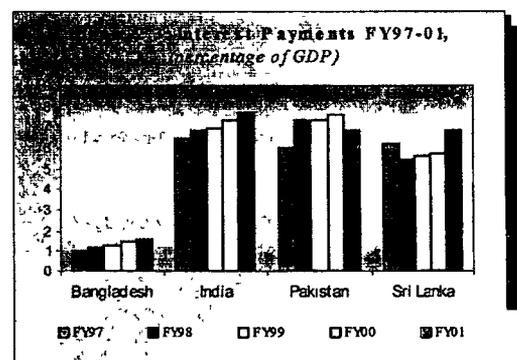
30. Bangladesh has one of the lowest levels of government spending in the world. Current spending amounted to 8 percent of GDP in FY01, by far the lowest in South Asia (Figure 2.2). This low level of expenditures results partly from the fact that the Government has not been able to mobilize large volumes of resources domestically, with the Government's own (tax) resources financing only 60 percent of these expenditures. As a result, budget financing remains heavily reliant on domestic borrowing. Having increased from 1.7 percent of GDP in FY96 to 4 percent in FY02, this budget financing puts Bangladesh in a vulnerable position with respect to macroeconomic stability, especially inflation, while constraining progress on growth and poverty reduction.



31. However, the current level of budgetary expenditures understates the full scope of general government activities. As shown in Chapter 3, state-owned enterprises (SOEs) are charged with important public policy objectives that imply quasi-fiscal expenditures. Taking into account SOE expenditures, for example, would raise total public spending in the economy to nearly 17 percent of GDP. The banking sector is another area of large government influence, as the four main public financial institutions are often used as instruments to directly support the Government's economic and social policies.

Low levels of interest payments, although on a rising trend

32. Bangladesh has avoided the borrowing spree that the neighboring countries have gone on (Figure 2.3). However, debt servicing in the budget has increased significantly, reflecting the increasing cost of domestic borrowing through nationalized commercial banks (NCBs) and foreign suppliers' credit. Budget outlays on interest payments were equivalent to 1.6 percent of GDP in FY01, compared with 1.1 percent of GDP in FY98. As in most developing countries, 80 percent of interest payments are on domestic borrowing.



Low level of defense outlays

33. Bangladesh has a relatively low level of defense outlays, representing 1.3 percent of GDP (Table 2.2), less than half the average for low-income countries and considerably lower than those in the rest of South Asia. The role of Bangladesh's defense forces in international peace keeping is a source of significant foreign exchange resources (about US\$200 million a year). There has, however, been substantial controversy recently over the appropriateness of the purchase of frigates and eight MIG-29 fighter jets in 2000. The non-monetary benefits (housing, food allowances, cadet colleges) accorded to military personnel are an additional source of controversy, and not all are included in

Table 2.2: Defense spending in South Asia, 2001 (percentage of GDP)

	Budget documents	IISS
Bangladesh	1.3	1.8
India	2.4	3.1
Nepal	0.9	0.9
Pakistan	4.5	5.8
Sri Lanka	4.9	5.3
Bhutan		5.6
Low-income countries		2.9

Source: International Institute for Strategic Studies (IISS) *The Military Balance, World Bank, and World Development Report 2001*

the defense outlays. Given the low revenue effort and the imperative of investing in health, education, and rural infrastructure, tight control should continue to be maintained on defense outlays.

High levels of social sector spending and good outcomes...

34. Public spending in Bangladesh shifted emphasis from agriculture and industries to the development of human resources and the rural economy during the last decade, and today combined expenditures on education, health, the social safety net, and disaster management are nearly one-third of total budgetary expenditures (see Table 2.1). This contrasts with the situation in most other developing countries with comparable per capita income. The results on social outcomes are quite good (see Table 3). In fact, progress in poverty reduction in Bangladesh was comparable to that in other countries in South Asia (Annex 5).

... as well as a relatively good redistributive role

35. There is no conclusive evidence on the overall redistributive effect of public expenditures. The only information available is that produced by the benefit incidence analysis of health and education spending,¹² the regional classification of expenditures, and some calculations of economic

Table 2.3: Bangladesh—median regression of 1999/2000 audited expenditures aggregated at a district level (dependent variable) and average district-level per capita household expenditures (independent variable)

Ministry	Coefficient*	Standard error	T-statistic
Primary and Mass Education Division (current)	-.083	.027	-3.02
Local Government Division (current)	-.025	.002	-16.55
Ministry of Agriculture (current)	-.015	.001	-10.04
Ministry of Health and Family Welfare (current and capital)**	-.016	.018	-0.86

*Negative coefficient indicates that poorer districts receive higher per capita allocations

** Excluding Dhaka district

subsidies accorded to a few specific items. Chapters 5-7 show that public expenditures in the social sectors are relatively high and play a reasonably good redistributive role. More precisely, the benefit incidence analysis has shown that public expenditures on education, health, and the social safety net contribute proportionally more to the welfare of the poor than to that of the better-off. The various social safety net programs in place achieve their development objectives and have a significant impact on desired outcomes. Moreover, there is evidence that social sector programs and expenditures favor women (for example significant outlays on female secondary stipends and maternal health). The redistributive role of public expenditures can also be seen in the historical emphasis on and successes in rural roads, food security, and disaster management. Importantly, high inflation—which has extremely adverse consequences for the poor by destroying the real value of informal sector wages and social assistance benefits—has been avoided in Bangladesh.¹³

¹² The shortcomings of BIA are well known (see van de Walle and Ned 1995 for a discussion). In addition, a standard assumption of BIA—that all expenditures allocated for specific purposes by the government translate fully into goods and services consumed by the public—appears difficult to justify in the case of Bangladesh. This is because of the widespread allegations of misuse of public funds. Recent data provide evidence for these allegations. In the case of social assistance spending, for example, the leakage from the Food for Education, Vulnerable Group Development, and Vulnerable Group Feeding appear large (see Chapter 7). In the case of health spending, the 2000 Household Income and Expenditure Survey indicates that the public is more likely to seek medical care from government-employed doctors working in private practices than from those working in public facilities. If, as is likely, these government-employed doctors treat private patients during official hours of work, then part of the government health subsidy intended for the public is misappropriated by them. A more appropriate instrument for gauging the distribution of public expenditures is Public Expenditure Tracking Surveys (see Chapter 11 for more details.)

¹³ Easterly and Fischer (2001) have shown that there is a significant association between improvements in the well-being of the poor and lower inflation.

36. Available information on the regional distribution of government expenditures also indicates that there is a statistically significant negative correlation between current expenditures of three ministries and per capita income, indicating that poorer districts tend to receive higher per capita allocations (Table 2.3 and Annex 3).

37. However, the distribution of several other items of public expenditure is clearly regressive. Subsidies to fertilizer, energy, and gas consumers not only transfer resources to the already wealthy, but also distort prices and lead to inefficient allocation of resources. For example, estimates based on the 2000/01 price environment show that the overall rate of economic subsidy to farmers on urea is less than 10 percent, compared with 27 percent for the subsidy rate to industries. It has also been demonstrated that most of the gas and power (economic) subsidies accrue to rich urban consumers (see World Bank 2002c). Finally, public sector institutions in Bangladesh have limited capacity to translate public spending into public services and desired developmental outcomes (see Chapter 4). This “weak link” significantly reduces the poverty impact of government expenditures. Still, when all these factors are considered, it appears that on balance public expenditures in social sectors do have a redistributive role in Bangladesh.

3. Weaknesses in public expenditures

Low quality of ADP spending

38. Bangladesh’s investment priorities are set by the Five-Year Development Plans, and the Annual Development Programs (ADPs) represent the yearly implementation of programs within this medium-term framework. In the past few years Bangladesh has devoted about 6-7 percent of GDP to the ADPs (Appendix Table A2.1), or about half of total budgetary expenditures. These high levels of spending depend heavily on the high level of concessional donor financing, including grants (Appendix Table A2.2).

39. There are two important features relating to the classification and quality of ADP expenditures that the overall size of the ADP does not obviously reveal. First, the ADP includes a significant amount of misclassifications of some expenditures: for example, more than 20 percent of ADP expenditures of the Ministry of Health and Family Welfare (MoHFW) is attributed to salaries paid to workers employed in donor-funded projects.¹⁴ In addition, some subsidies—most notably the conditional cash transfer programs such as Food for Education (0.2 percent of GDP in FY02)—are included in the education sector ADP. Second, the ADP includes a significant number of projects with a questionable rationale, low priority for public investment, or doubtful viability or equity. Questionable projects regularly find their way into the ADP mainly because of the weaknesses in the system of project management: (i) insufficient scrutiny of projects; (ii) weak capacity in project selection, design, and implementation; (iii) overly long periods for project implementation; and (iv) the political imperative of satisfying numerous demands through an excessive number of small projects. For example, ADP expenditures under Roads and Highways Department (R&HD) include about 800 sub-projects with annual ADP allocations of about 2-3 percent of their project cost, implying that it would take 30-50 years to complete these projects; the irrigation activities carried out by the Bangladesh Water Development Board lack cost recovery; and much of the investment of the other SOEs are questionable on grounds of public sector rationale, priority, viability, or cost effectiveness.

¹⁴ Donor assistance for family planning activities in Bangladesh is regarded as project funds even though it includes recurrent costs. Until recently the costs of staff engaged in family planning activities were financed through the Development Budget, and these staff were considered “on contract” and did not receive full civil service benefits. In fact, these staff were considered a parallel branch of the Health Service, managed separate from other health staff. An important organizational reform is under way to unite the two branches of health and family planning services (see Chapter 5).

40. Weaknesses in project management are compounded by two other disturbing practices relating to development projects—the inclusion of a large number of unapproved projects in the ADP and the absorption of a sizable number of personnel from completed development projects in the recurrent budget every year. Inadequate capacity to prepare projects and a limited pipeline of worthwhile projects, together with continued pressure to maintain a predetermined ADP size, have sustained the practice of including unapproved projects (which have not been properly evaluated and scrutinized) in the ADP over the years. This practice originates from the fact that under existing fund release procedures, provisions made for unapproved projects in the development budget allow spending based on recommendations by the Planning Commission. This may have been complicated by the fact that although the development budget makes a distinction between approved and unapproved projects, in practice it allows fund release and spending for even unapproved projects.

41. About 25-30 percent of ADP projects are completed each year, and most ministries request transfer of the completed project staff to the revenue budget. The transfers, coming mostly from the big projects, can constitute up to 0.5 percent of total employment in the central Government each year. These transfers often take place in defiance of operational rules, such as the requirement that staff of completed ADP projects compete with outsiders to be included in the cadre, and they give rise to complications in the integration of project staff into the national pay and cadre schemes.

42. Bangladesh's development needs are huge. While there is no doubt that the level of capital expenditures should be sustained, several actions would improve the quality of these expenditures:

- Discontinue certain activities currently under implementation that are not in line with the comparative advantage and priority of the public sector, such as in manufacturing, trading, hotels, and tourism. (Annex 4 presents a partial list of such projects.)
- Improve the quality of the remaining projects through a tighter process of rationalization of public sector involvement in proposed activities. Unapproved projects need to be limited to those whose implementation cannot wait for the completion of the approval process because of demonstrated national urgency.
- Design an ADP with core and non-core components, based on transparent criteria for prioritization, with limits on the proportion of non-core projects.
- Streamline the project pipeline so as to reduce the number of projects and focus resources on projects that can be completed in shorter periods—the average period for completion of development projects in Bangladesh currently exceeds eight years.
- Strengthen the capacity of line ministries to identify and appraise projects in order to build a pipeline of high-impact projects, thus avoiding pressures for including unapproved projects. Capacity strengthening should involve the training of staff and the rebalancing of project staff between sector divisions of the Planning Commission and line ministries.

Low level of non-wage operations and maintenance expenditures, compromising the effectiveness of capital investments

43. Partly because donor assistance is concentrated on the ADP, the Government has tended to favor new investments, failing to provide for the recurrent costs of projects. The weaknesses in budget management described in Chapter 4, especially the absence of a unified budget system, are also partly responsible for the lack of operations and maintenance (O&M) expenditures, which represent a meager 1.1 percent of GDP (Appendix Table A2.3). To ensure the efficiency of past capital investments and the quality of service delivery, it is of utmost importance to secure an adequate amount of non-wage O&M expenditures at the earliest time possible in sectors such as education, health, and infrastructure, which have suffered heavily from the lack of such resources in the past. Over the medium term, however, O&M expenditures can be ensured only if they are dovetailed with the planned investments. Beneficiary

supervision can be a useful instrument for gauging the adequacy of these expenditures, especially when maintenance is simple and beneficiaries are concentrated and identifiable (such as in education, health, and public transport).

Wages and salaries reflecting an oversized bureaucracy, especially at the lower level

44. The Bangladesh civil service is small compared with those in the other South Asian countries, and its size has remained unchanged for several years. Expenditures on wages and salaries have remained at around 2.4 percent of GDP,¹⁵ reflecting reasonable control over salary increases. While the wage bill does not appear excessive by international standards, there are clear signs of reduced effectiveness and efficiency of government employees (see Chapter 4). Measures recommended by the Public Administration Reform Commission to halt or reverse this decline include monetizing benefits, overhauling the compensation package for senior civil servants, reducing the large numbers of Class III and Class IV employees, accelerating implementation of the voluntary retirement scheme, and combining ministries and departments so as to minimize duplication of functions. These would be steps in the right direction. Other actions that could be considered include extending the arrangements in the health sector (which explicitly limits the wage bill to less than 70 percent of total government expenditures in the sector) to other sectors.

Large hidden subsidies and growing contingent liabilities

45. Currently, direct budgetary subsidies amount to less than 0.5 percent of GDP and are provided for only a few items, including school textbooks, fertilizer distribution (with budgetary allocations only for imported urea), and several non-traditional exports (such as knitwear, leather, jute goods, flowers, and frozen food). Indirect subsidies, however, are estimated at 2.6 percent of GDP. These are provided through distorted gas and electricity prices as well as preferential interest rates on loans to SOEs (see Chapter 3). In these circumstances the first step for Bangladesh is to make the hidden subsidies more transparent in both the government budget and SOE finances. Similarly, large contingent liabilities have been accumulated on account of SOEs and the banking sector. Part of the increase comes from government-guaranteed non-concessional foreign suppliers' credit, which increased by more than 2 percent of GDP during the last three years. These could potentially exert considerable pressure on budgetary resources in the medium term.

¹⁵ If pensions, gratuities, and grants-in-aid (which are spent mostly on the salaries of teachers in non-government primary and secondary schools and colleges) are included, the expenditure on wages and salaries rises to 4.2 percent of GDP.

Chapter 3

STATE-OWNED ENTERPRISES

Bangladesh's large state-owned enterprises sector consists of enterprises operating in traditional utilities and infrastructure sectors as well as in manufacturing and other business activities. The sector uses a large volume of assets, has 20 percent of public sector employment (excluding public financial institutions), relies on very substantial public resources with a large transfer element, and exerts considerable influence on the economy through its supply of vital inputs and services, pricing policies, and wage-setting for blue-collar workers. The governance framework for these enterprises is weak, and their financial performance has deteriorated noticeably over recent years. Denationalization and divestiture, which started in the early 1980s, slowed considerably over the last decade.

The urgency of a decisive stance on implementing the unfinished reform agenda in various areas of state-owned enterprise activity, departmental enterprises, and public banking can hardly be overemphasized—particularly in the context of high fiscal and economic costs, a backlog of sector underdevelopment, emerging opportunities for private participation, and a need to prioritize the use of public resources to promote faster growth and poverty reduction.

1. The sector

46. The non-financial parastatal sector consists of some 41 state-owned corporations and boards and their approximately 200 subsidiary enterprises (Appendix Table A3.1). These were in most cases private enterprises nationalized after independence or under East Pakistan Industrial Development Corporation's (EPIDC) management. Their total assets are estimated at about 35 percent of GDP, and they are involved in a wide array of manufacturing and other business activities, such as jute products, textiles, steel and engineering, fertilizer, paper, tourism, hotels, and road and inland water transport. The public sector has accounted for a very large market share by virtue of a monopoly or near-monopoly position in many of these activities, such as external trade of petroleum, urea, and sugar as well as fixed line telephone services, rail transport, petroleum refining, power generation and distribution, gas production and distribution, sugar production, and jute goods manufacturing. The public goods content of Bangladeshi state-owned enterprises (SOEs) has been limited to a few areas, including flood control and drainage (Bangladesh Water Development Board [BWDB]) and the regulatory role of some agencies in inland water transport (Bangladesh Inland Water Transport Authority [BIWTA]), civil aviation (Civil Aviation Authority of Bangladesh [CAAB]), and urban construction (Rajdhani Unnayan Karttripakhya [RAJUK]). The financial parastatals consist of four nationalized commercial banks (NCBs) and four specialized development banks (SDBs), collectively referred to as public financial institutions (PFIs). The PFIs account for 56 percent of total bank deposits and advances.

2. Weakened financial performance

47. SOEs' contribution to the GDP, which averaged about 2 percent over the mid-1990s, has declined to less than 1 percent in recent years. This is largely due to a deterioration in the financial performance of entities in petroleum, power, jute, and fertilizer sectors. The weakened financial performance of SOEs, which is also reflected in the widening of their savings-investment gap (see Chapter 1), is due to both a sharp decline in their internal savings and a sizable increase in their investments. The savings decline has resulted from poor operational performance, partly due to unrealistic pricing policies (particularly in gas, petroleum, power, and fertilizer) as well as operational inefficiencies. Investment is substantial in power, water resources, oil, gas and mineral resources, and transport. The key aggregate indicators of SOE operations are presented in Appendix Table A3.2.

48. The government budget deficit includes a sizable part of the SOE deficit, which has been funded by various forms of budgetary financing. The unsatisfactory financial performance of the SOEs has adversely affected the budget through higher budgetary loans and equity for meeting recurrent operational expenses and investment and separation payments; through default on debt service liability (DSL), dividend, and tax payments; and through conversion of loans to equity and recapitalization of banks on account of classified loans owed by SOEs. The major category of SOEs' expenditure financed directly through the government budget is their investment program supported under the Annual Development Program (ADP), averaging 2 percent of GDP in recent years.¹⁶ The other items financed through the budget include loans or grants for wage support, direct subsidies to a few SOEs, working capital loans for purchase of raw materials, manpower separation payments, and infusion of new equity outside ADP projects. Much of the SOE deficit financing and budgetary resource transfer has been implicit, in various forms of hidden subsidy—subsidized lending, default on DSL payments, poor dividend return on equity, capital restructuring, and bank recapitalization on account of classified loans owed by SOEs to banks. In addition, there are off-budget transfers such as input and output subsidies and taxes that have not directly affected the budget deficit—for example, the gas subsidy to the Bangladesh Power Development Board (BPDB) and Bangladesh Chemical Industries Corporation (BCIC) and the losses of the Bangladesh Jute Mills Corporation (BJMC) and Bangladesh Textile Mills Corporation (BTMC) financed by the banking system.

3. Increased financing and budgetary support

49. Bangladesh's SOEs benefit from several types of budgetary support. These are quite large in financial terms, although they take the form mostly of hidden subsidies and off-budget transfers. SOE gross deficit financing rose from an average of 2 percent of GDP annually during FY93-99 to 2.5 percent of GDP in FY01 (estimated at 2.8 percent of GDP in FY02). The financing of the SOE deficit took the form of equity financing, long-term loans, and suppliers' credits. Much of this was budgetary financing—for example, the financing of SOEs' investment projects (excluding Bangladesh Telephone and Telegraph Board and Bangladesh Railway) under the FY01 ADP was 2 percent of GDP. This financing was largely on account of the BPDB, BWDB, Dhaka Electricity Supply Authority (DESA), Rural Electrification Board (REB), and Bangladesh Oil, Gas and Mineral Corporation (BOGMC) (Table 3.1).

Table 3.1: Bangladesh—sources of deficit financing of state-owned enterprises, FY91-02
(percentage of GDP)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02
Gross financing	4.4	4.3	2.9	2.4	2.4	1.8	2.1	1.6	1.6	2.4	2.5	2.8
Equity	0.4	0.3	0.7	0.7	1.5	0.4	0.6	0.4	0.4	0.4	1.0	0.9
Long-term loans	1.6	2.5	1.6	0.9	1.4	1.4	1.0	0.9	1.0	1.4	1.1	1.6
Other financing	2.4	1.5	0.6	0.8	-0.6	0.0	0.5	0.3	0.2	0.6	0.4	0.3

50. Budgetary subsidy to SOEs in the government budget includes only direct subsidies to a few SOEs and hence does not capture all budgetary transfers. Direct subsidies to SOEs have been limited (Tk 1.3 billion a year). These include about Tk 0.7 billion provided annually to BJMC as a cash export subsidy, and small outlays totaling Tk 0.6 billion to the BCIC, Bangladesh Steel and Engineering Corporation (BSEC), Bangladesh Inland Water Transport Corporation (BIWTC), BIWTA, *Palli Bidyut Samity*/ Rural Electrification Board (PBSS/REB), Bangladesh Small and Cottage Industries Corporation (BSCIC), Rajshahi Development Authority (RDA), Bangladesh Freedom Fighters' Welfare Trust (BFFWT), Bangladesh Handloom Board (BHB), and Bangladesh Sericulture Board (BSB) for subsidized

¹⁶ SOEs' share in the ADP has declined because of a faster expansion of public investment by government and local government entities and rising transfer payments under the ADP.

sales of their products or services or for promotional objectives. However, most government subsidies are outside the budgetary subsidy (narrowly defined), including:

- Explicit loss financing to BJMC (Tk 10 billion during FY93-96).
- Implicit subsidies due to administered pricing (such as on gas supplied to power and fertilizer plants, subsidized loans, default on DSL payments, or poor dividend return on equity financing).
- Economic subsidies on urea distribution, averaging Tk 7.8 billion annually during FY90-02 (Table 3.2).

Table 3.2: Bangladesh—domestic/world prices and economic subsidy on urea, FY90-02

	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	Average*
Ex-factory/import parity price ratio (percent)	69	55	52	65	63	39	36	37	59	69	67	49	49	52
Subsidy (billion Taka)	2.1	4.0	5.6	3.8	3.8	10.2	13.8	13.7	6.3	4.0	5.0	10.6	11.1	7.8

*Weighted average.

Source: BCIC and World Bank staff estimates.

51. The financing of manpower rationalization in SOEs benefited from Tk 18 billion from the budget during FY93-02 (Table 3.3), and an estimated 127,000 employees have been retrenched

Table 3.3: Budgetary financing for manpower separation, FY93-02
(Tk billions)

FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02
2.60	5.22	2.00	1.40	1.27	1.99	1.45	0.51	0.15	1.00

Source: Ministry of Finance and sector corporations.

under voluntary separation schemes since the early 1990s. The FY03 budget allocates Tk 4 billion for this purpose. A number of SOEs, notably the Adamjee Jute Mills, have been closed, and some 34,000 of their employees have been separated in FY03 so far. This has cost around Tk 7 billion in separation payments. Unfavorable financial outcomes have continued for some of these entities, particularly BJMC, despite the favorable impact on its wage bill from the reduction of manpower.

52. The size of the investment program of the SOEs (defined broadly to include BTTB and BR), financed under the ADP, has increased from around Tk 30 billion annually in the early 1990s to about Tk 50 billion, or one-third of the ADP, in recent years. The largest claimants of budgetary financing in the SOE investment program have been the power, water, and transport sectors. Allocations to power and transport have doubled since the early 1990s. The share of manufacturing in the SOE investment program fell in the 1990s, reflecting both the poor operational performance of these public sector enterprises and the increasing role of the private sector (such as in textiles, steel, engineering, and cement). A few new projects being initiated or planned by BCIC (including some lumpy ones in fertilizer and paper) have the potential to raise the share of public sector manufacturing in future years.

53. Budgetary resources, including external assistance, have financed about 95 percent of the SOEs' investment under the ADP because these entities have generated little internal savings. The limited self-financing, about 5 percent, has been contributed by just a few SOEs with relatively better revenue performance, including the CAAB, Chittagong Port Authority (CPA), Mongla Port Authority (MPA), and, until FY99, Bangladesh Petroleum Corporation (BPC).

54. Budgetary loans to SOEs have led to significant resource transfers through interest subsidy on government and on-lent foreign loans that are not explicitly reflected in the budget. The standard lending rate for budgetary loans to SOEs is 8 percent for most sectors and, 5 percent for power, while the REB receives highly concessional resources—local financing as grants and foreign loans at 0.75-2.0 percent. These rates are well below the market cost of funds (13-16 percent) or the Government's cost of non-bank

borrowing from special savings schemes (12-14 percent). This resource transfer is compounded by significant defaults on DSL payments by SOEs. In recent years the DSL recovery rate has fallen to only 10 percent of DSL demand. Three-fourths of the DSL default was concentrated in six entities, mostly in the energy and manufacturing sectors: BCIC, BPDB, BOGMC, DESA, BSEC, and Bangladesh Shipping Corporation (BSC).

55. The dividend rate of return on the Government's equity investment in SOEs has declined from 3 percent in the early 1990s to around 1 percent in recent years (Table 3.4). The average return on equity over the last decade was 1.3 percent, well below the market cost of funds for the Government. The poor dividend return reflects the deteriorating performance of SOEs in general, but especially the three biggest contributors (BPC, BOGMC, and CPA), which contributed almost all the dividend receipts during the 1990s.¹⁷ The recovery of the interest component of DSL has been around 1.5 percent of the stock of loans, significantly below the cost of capital. Based on these performance indicators and a cost of capital of 13 percent, the net implicit budgetary resource transfer on government investment in the form of equity invested and loans to SOEs—in terms of dividend return on equity and rate of interest recovery minus cost of funds—has been quite substantial, averaging 2.4-3.1 percent of GDP during FY97-00.

Table 3.4: Bangladesh—dividend return on equity invested in SOEs, FY91-02
(percentage of equity stock)

FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02
2.9	2.8	2.6	2.6	1.0	1.0	0.6	0.8	1.3	0.7	0.7	1.1

Source: Monitoring Cell and Economic Survey, Ministry of Finance.

56. The Government has been providing sovereign guarantees on loans to SOEs by domestic as well as foreign creditors, but information on their actual budgetary impact is not available in the public domain. Information on government guarantees is maintained in the form of a register of guarantees, which is classified information, unlike in other countries. Reportedly, some 40 government-guaranteed loans to SOEs and government agencies have been effective in the past year. The guarantees include these for SOEs' operational contracts with foreign investors, mostly in the energy sector. These are power purchase agreements between the BPDB and the independent power producers (IPPs) and production sharing contracts (PSCs) in the gas sector. The timely payment of these financial obligations will require drastic improvements in the operational performance of debtor enterprises as well as a strengthening of the foreign exchange earnings capacity of Bangladesh.

4. Governance and equity

57. Many of the financial and operational problems of Bangladesh's SOEs are reflections of underlying governance problems, as illustrated by the large power system losses (see Chapter 10). SOEs in Bangladesh have very limited operational autonomy, although they carry out commercial activities; in practice they suffer from considerable bureaucratic and political interference. Most have excessive staff but lack adequate professionally trained staff with technical and managerial skills, and their financial reporting and accountability mechanisms are weak. In many cases policies implemented through the Bangladeshi SOEs have not helped reduce inequities.

- Many SOE products and services have been priced significantly above world market or competitive prices (sugar, petroleum products, power and gas for some users, telephone service, bank credit), thus

¹⁷ However, the high indirect taxation of petroleum and gas, which is justified from an economic point of view, means that a part of the returns on investment in these sectors is collected in the form of taxes.

taxing consumers. The poor have benefited little from many of the services of the parastatals and the associated subsidies.

- Access to power is limited to 31 percent of the population—80 percent in urban areas and 19 percent in rural areas—while the power sector claims 12 percent of public resources under the ADP. Rural consumers have paid a higher price for power than urban residents.
- The fertilizer subsidy goes to farmers but also benefits intermediaries. It is not clear that sizable fertilizer subsidies to farmers are the most efficient and equitable form of resource transfer to the rural sector, and it is already known that underpricing of urea has encouraged excessive application of nitrogen, with adverse implications for soil fertility.
- Gas subsidies on domestic consumption are significant, with gas tariffs being a quarter of the cost of alternative fuels, but these subsidies benefit a small minority of urban residents.
- The tele-density of fixed telephone lines is just 0.4 per hundred people, one of the lowest in the world, and together with high telephone charges, this has deprived the poor in particular of the benefit of cost-effective communication services enjoyed in many other developing countries.
- Sugarcane farmers and gur consumers (largely the rural poor) and sugar consumers (households and food-processing firms) have been taxed in order to sustain sugar production.
- Finally, the gross losses of the SOEs have been equivalent to 25 percent of annual public spending on education and health since FY91 (or to the cost of building a “Jamuna” bridge every two and half years). Consequently, the budgetary financing of SOE deficits, together with coverage and pricing policies, has lowered the overall growth and poverty reduction impact of public expenditures.

5. Implementing parastatal reforms

58. The weak economic performance of Bangladeshi SOEs is due to several factors, including in particular (i) weak governance and accountability in these enterprises, leading to considerable investment misallocations, operational inefficiencies, over-employment, and inadequate revenue collection; (ii) inappropriate administered prices; and (iii) insufficient disengagement of the public sector in commercial activities. Bangladesh is not unique in having inherited a large and dominant SOE sector. But in the past two decades countries around the world have been aggressively restructuring and downsizing their public sectors through various means—liquidation, privatization, public-private partnerships, outsourcing, and floating of shares on the capital market. Bangladesh has lagged behind other developing countries in its privatization efforts, as reflected by a cross-country comparison of sales proceeds from privatized enterprises (Table 3.5 and Box 3.1). While sales proceeds from privatization are not comparable across countries without reference to the relative size of the SOE sector, sales as a proportion of SOE assets have also been very limited (0.7 percent) in Bangladesh compared with those in other countries.

Box 3.1: China is fast dismantling its state enterprises

For decades in China state enterprises have been a drag on the economy, employing up to 120 million people in jobs and factories that were notably unproductive. Now these factories are gradually being dismantled. Since the late 1990s state enterprises have laid off about 5 million workers a year, a pace that government economists expect to continue for the next three to five years. At least partial privatization of all but a handful of state enterprises is now the declared policy goal, with small and medium-size ones already sold or shut down. By 2005 some 75 percent of China's industrial economy will be in private hands, compared with less than 10 percent in 1980.

Prices as well as jobs are being left to the market. One estimate is that in 1985 only 2 percent of wholesale prices were determined by the market, with the rest decreed by the state. Today the market controls 98 percent of prices, the state only 2 percent.

59. In South Asia, Pakistan and Sri Lanka have taken the lead, with Sri Lanka successfully privatizing its national airlines and telephone system in strategic partnership with foreign investors. India has pursued divestiture for several years and recently announced an ambitious program for the coming years. These efforts reflect the almost universal recognition of the inefficiency and waste of scarce

resources that inevitably result from public management of business activities better left to the private sector.

**Table 3.5: Cross-country comparison of privatization of state-owned enterprises:
SOE sales proceeds during 1990-99
(US\$ millions)**

Bangladesh 60	China 20,593	Egypt, Arab Rep. 2,905	India 8,983	Indonesia 6,135	Malaysia 10,160	Nepal 15
Pakistan 1,992	Philippines 3,960	Sri Lanka 805	Thailand 2,986	Turkey 4,654	Venezuela, RB 6,072	Zambia 826

Source: World Bank, World Development Indicators 2001.

60. After some initial moves toward divestiture in the early 1980s, Bangladesh has lagged in privatizing and downsizing the state-owned sector. At the same time, however, SOEs in Bangladesh have remained a drain on public resources and have continued to prevent achievement of the 7-8 percent growth needed to significantly reduce poverty over the next decade. Major SOEs in power, gas, water supply, transport, and communications contributed a mere 0.8 percent to the absolute expansion in GDP (constant producer price) during FY92-00 (PEU 2001).

61. Where should the focus of parastatal reforms in Bangladesh be? Experience suggests that no single component of reform has worked by itself. The countries that have made the most progress are those that have pursued a comprehensive strategy of divestiture, competitive private sector participation, efficient pricing, hard budget constraints, improvements in the business relationship between SOEs and the government, and financial reforms, all simultaneously. Within such a framework of comprehensive reforms, a sequenced approach to privatization could be pursued: privatizing or liquidating the manufacturing enterprises and other business activities (such as hotels, tourism, road and water transport, and petroleum marketing and trading) seems the most urgent and justified priority, since they are involved in producing private goods best left to the private sector. The second stage should concentrate on devising a combination of outsourcing, divestiture, and public-private partnership strategies for utilities and services (gas, power, urban water supply, railways, airlines, shipping, and telecommunications). In any case actions can already be taken on many fronts.¹⁸

- Liquidate the non-viable enterprises if they cannot be easily divested in their present state. Several non-viable enterprises have already been identified, particularly in manufacturing. Liquidization will generate savings in terms of fiscal resources. The Government's recent announcement of its intention to privatize 53 such enterprises is a welcome move in the right direction. Privatization of manufacturing SOEs would also represent considerable savings for the economy as a whole (Table 3.6).
- Use the revenues from privatization to reduce SOE and government liabilities, which the experience of other countries suggests is their best use. This will alleviate the budgetary burden of government debt and gradually create fiscal space.
- Impose clear and attainable commercial performance objectives on SOEs that are not privatized (such as in power, gas, fertilizer, and urban water supply). The quasi-fiscal activities (non-commercial operations they carry out on behalf of government) should be clearly evaluated, and the enterprises adequately compensated for them. Hard budget constraints should be imposed on the enterprises by linking access to budgetary resources and bank credit to improved outcomes. Enterprises remaining in the public domain should first be corporatized, subjected to hard budget constraints, encouraged to seek financing from banks on the strength of their own balance sheets,

¹⁸ Some of these actions are described in more detail in other sectoral chapters, particularly energy.

and asked to mobilize funds from the capital market. These measures will bring out their inherent strength (or weakness).

- Institute consistent and transparent budgetary accounting of subsidies and taxes, especially in the SOEs in the utilities sector.
- Rationalize and prioritize SOE investment programs to avoid implementation of projects that can be left to the private sector under appropriate policy, legal, and regulatory frameworks (for a list of ADP projects that can be restructured or dropped from the ADP, see Annex 4). The SOE projects with low or doubtful viability, such as the coal-fired Barapukuria project and some planned fertilizer plants (such as the Shahjalal plant and DAP I and DAP II plants) should be reexamined for possible closure.
- Decentralize wage setting to allow corporation-level wage determination, so that enterprises can link wages with performance and productivity.
- Formulate a sound guarantee policy, make information on guarantees publicly available, and establish a strong monitoring mechanism at the central level to oversee the Government's contingent liabilities.
- Corporatize departmental enterprises such as the BTTB and Bangladesh railway with a view to privatizing the entities thereafter, in strategic partnership with foreign investors. Sri Lanka has adopted this option for its telecommunications company (and airline and port operation) and has thus achieved impressive success in increasing investments in the sector and expanding service coverage and improving quality.
- Revisit the rules of business guiding relationships between SOEs and the Government and the legal framework for the operations of SOEs, with a view to restoring the SOEs operational autonomy while at the same time instituting accountabilities for performance.
- Introduce adequate loan loss provisioning, following the standards of the Bank for International Settlements, and strengthen official reporting by NCBs and development finance institutions in order to get a true and fair view of their financial conditions. Recapitalization of banks, if warranted, should be part of a broader program of fundamental restructuring to deal effectively with the governance and operational factors contributing to their insolvency.

Table 3.6: Bangladesh—overview of the manufacturing SOEs

SOE	Sector	Public-private role and market share	Share in SOE employment FY01 (percent)	Share in SOE assets FY01 (percent)	Return on assets FY91-01 (percent)	Share in SOE losses FY01 (percent)
BJMC	Jute goods	Public market share 70 percent	33.4	7.1	-3.1	-9.0
BCIC	Fertilizer	Public monopoly in urea	8.1	14.3	0.4	-4.8
BTMC	Textiles	Dominant private sector	5.1	2.9	-3.6	-2.0
BSEC	Steel & engineering	Dominant private sector	1.7	2.9	-0.2	0.1
BSFIC	Sugar	Public monopoly in production and, until FY02, imports	7.9	1.6	0.0	-2.0
BFIDC	Wood products	Dominant private sector	1.8	0.4		0.3
Total			58.0	30.5	-0.8	-17.4

Source: Monitoring Cell, Ministry of Finance, and World Bank staff estimates

Note: Bangladesh Sugar and Food Industries Corporation (BSFIC), Bangladesh Forest Industries Development Corporation (BFIDC)

Chapter 4

THE PUBLIC SECTOR

Bangladesh has effected some improvements in its budgetary systems and processes in recent years. However, it is still a long way from turning the budget into an effective instrument of economic management. The environment and culture surrounding the budget—from formulation to implementation and evaluation—are still archaic. The budget continues to be seen largely as a process unto itself. In the absence of an overall macroeconomic perspective, the links between policy, planning, and budgeting are weak; systems are fragmented; and accountability for outcomes is diffuse. The weak expenditure management framework, combined with other institutional weaknesses across the economy, has resulted in a low quality of public services and a hostile investment climate, constraining Bangladesh's progress toward rapid poverty reduction. The most glaring examples of poor public service delivery are the deteriorating law and order situation (which results from an ineffective legal-judicial system and police); the high perception of corruption and citizens' dissatisfaction with services; and an inefficient bureaucracy that still maintains tight controls over critical business processes.

1. Introduction

62. Efficiency in the formulation, implementation, and evaluation of the budget is a pre-requisite for improving the effectiveness of public expenditures in reducing poverty. Translating government expenditures into efficient and equitable development outcomes depends critically on the institutional environment, which influences the size, allocation, and use of budgetary resources. In order to maximize the efficiency and effectiveness of government programs and improve the quality of service delivery, it is essential that institutional arrangements provide incentives for good performance, with rules that are simple to understand, procedures that are easy to implement, and transparent enforcement of both. Above all, it is important to have in place a system that holds individuals and organizations accountable for outcomes.

63. The challenge of how to strengthen Bangladesh's institutions for efficient public expenditure management (PEM) has been reviewed extensively in several diagnostic reports prepared by the World Bank. *The Public Expenditure Review* (PER), published in 1996, provided a preliminary assessment of the budgetary process and made several suggestions for improvement. This was followed by a *PER Update* in 1997, which reviewed issues pertaining to the management of development expenditures (Box 4.1). A 1998 review of Bangladesh's *Institutional Capacity for Macroeconomic Management* focused on planning and budgeting and presented several short- and long-term recommendations to address institutional capacity constraints. More recently the Bank's *Country Financial Accountability Assessment* (CFAA) and *Country Procurement Assessment* (CPA) examined more closely the downstream aspects of fiscal management, including financial management standards and practices of central government agencies and state-owned enterprises. They also assessed the institutional capacity and practices of external oversight entities, such as the audit agencies and the parliamentary oversight committees. This chapter draws heavily from these studies, all of which have been discussed extensively with representatives of the Government and civil society through a series of workshops, and highlights their key recommendations. Many of the recommendations here are similar to or complement those made by the Public Administration Reform Commission (PARC) in its report *Public Administration for the 21st Century*.

Box 4.1: Recommendations of previous Public Expenditure Reviews

The 1996 Public Expenditure Review (PER) and the 1997 PER Update identified serious weaknesses in the basic structure of Bangladesh's public expenditure management system and the way the system is actually used. The PERs noted the absence of a medium-term macroeconomic framework to ensure aggregate fiscal discipline, of sound mechanisms for revealing demand and of incentives for policy-makers to set sectoral priorities in accordance with the development outcomes sought by Bangladesh society, and of adequate systems of financial control to ensure proper monitoring and assessment of the budget progress at the microeconomic level. The PERs made the following recommendations to address the weaknesses identified:

Strengthening the capacity to assess total resources. The PERs recommended improving the monitoring, estimation, and planning capacity for aggregate capital and recurrent expenditure, tax and non-tax revenue, the fiscal deficit, and public debt.

Strengthening and integrating the overall budgetary framework. The PERs called for moving toward program budgeting and a multi-year framework for both the Annual Development Program (ADP) and the revenue budget, supported by comprehensive medium-term policy frameworks for each major sector.

Strengthening the system of accounting, audit, evaluation, and expenditure control. The PERs recommended measures that included improving accounting practices, strengthening the capacity to evaluate prioritization and the output of expenditures, improving the quality and coverage of audit practices (including performance audit), and improving transparency and expenditure control mechanisms.

Strengthening institutions, management, technology, and skills. The PERs emphasized the need for more training and human capital development and for the streamlining and simplification of multi-layered procedures and diffusion of responsibilities. They also emphasized the need for greater financial and operational autonomy together with effective controls.

Strengthening the management of the ADP. The PERs recommended fundamental review of the existing administrative arrangements that dichotomize development and revenue budgets, and allow for the dispersion of responsibility among and within organizations. The PERs emphasized the need for strengthening the responsibility and corresponding authority for implementation of projects, and deepening the scope of audit of development projects.

While some improvements have been made in the Government's accounting system, most of these recommendations remain essentially unheeded.

2. Issues in budget preparation

Strategic framework

64. General analytical capacity within the Government is very weak, and the budget lacks a strategic framework. The Government produces a Five-Year Plan (FYP) that sets out, in considerable detail, its development objectives and strategies for the medium term and makes indicative investment allocations. However, the sectoral strategies contained in the plan document are so broad that they provide a pass-through to almost every project that is presented for consideration. As a result, scarce resources are spread thinly across a large number of projects, many of which have very little public good content. The broad strategies also preclude giving attention to the likely multi-year recurrent cost implications of the large number of investment projects included in the development budget.

65. In the early 1990's an attempt was made to link the FYP with the annual budget through a series of three-year rolling public investment programs. It was hoped that experience with preparing rolling investment plans would allow the country to gradually move toward the development of a medium-term expenditure framework, which could link medium-term planning, policy, and annual budgeting in a formal and structured way. However, this effort was not sustained because of a lack of administrative

will and planning capacity. Encouragingly, the Government has committed to prepare a Medium-Term Fiscal Framework, beginning with the preparation of a Three-Year Rolling Investment Program (TYRIP) in a participatory manner.

66. Notwithstanding substantial technical assistance, attempts by the Ministry of Finance (MoF) to make better fiscal projections using a general equilibrium model have so far not been successful.¹⁹ The MoF uses simple rules of thumb for its projections, but is generally overoptimistic in its growth and revenue forecasts. The absence of a consistent macroeconomic framework precludes examining the impact of the level and composition of public expenditure on macro aggregates such as the GDP growth rate, inflation rate, and interest rates. The effect of the budget on private investment or on the balance of payments also gets limited attention. There are no laws limiting borrowing or the government deficit. A Fiscal Analysis and Monitoring Unit (FAMU) has recently been set up in the Budget Wing of the Finance Division to strengthen the macroeconomic underpinnings of the budget, among other functions. Whether FAMU, which will report to the Technical Secretariat of the Resource Committee, can make a difference remains to be seen.

67. Expenditure estimates are largely prepared on an incremental basis from previous years' allocations. This lack of a medium-term strategic framework, combined with extensive political interference in the prioritization of projects within sectors and little participation by line ministries in the planning process, has resulted in a situation where resources are spread thinly across a large number of projects. For example, the Roads and Highways Department implements three large umbrella projects with 800 subprojects. A typical Annual Development Program (ADP) allocation to each of these subprojects represents 2-3 percent of the project cost, implying that it would take 30-50 years to complete each project. Line ministries work in silos and the approach to planning is essentially sectoral rather than programmatic, thus reducing greatly the impact of expenditures.²⁰ The organizational and procedural separation of sectoral programs into a "revenue budget" and a "development budget" leads to a major loss of resource efficiency. There is no mechanism to ensure that project-related operating and maintenance costs are estimated and included in the revenue budget once these projects are completed. This contributes to a syndrome commonly found in countries using similar dual budgeting systems: roads without maintenance, hospitals without doctors, and schools without books and teachers.

Transparency and participation

68. The planning and budgeting process could be made more transparent with an increase in pre-budget consultations. In recent years there has been some effort by the Government toward soliciting public opinion as a pre-budget exercise. In particular, the Finance Minister consults industry and business groups and also seeks the opinions of eminent economists through a Macroeconomic Committee for Policy and Planning. This commendable initiative is still a far cry from structured institutional mechanisms allowing civil society to have a say in the budgetary process, particularly on the level and composition of spending and the quality of service delivery. Parliamentary working committees do not get an opportunity to review and discuss budget proposals before they are tabled in the full house. The budget is normally presented early in June for the fiscal year starting July 1. This falls well short of the OECD Fiscal Transparency Guidelines, which recommend that the budget be presented to the legislature three months ahead of the commencement of the fiscal year to provide sufficient time for debate and

¹⁹ The ADB-supported project that led to creation of a computable general equilibrium (CGE) model of the economy has not had the desired impact of improving economic management. Apparently, there are not enough trained personnel in the ministry to use the CGE model for economic analysis

²⁰ For example, a larger improvement in public health might come about through protected water supply (a project in the domain of the Local Government Engineering Department) rather than through a direct public health intervention (the domain of the Ministry of Health and Family Welfare).

revision, as necessary. In addition, it is important to ensure that women as well as men have a voice as stakeholders.²¹

3. Issues in budget implementation

Resource management

69. It is accepted practice in Bangladesh to spend resources on initiatives that are considered to be of national importance even if these have not been included in the approved budget. Several projects of this nature are then “regularized” ex post through parliamentary approval of a supplementary budget. Ex post approval of expenditures can undermine fiscal discipline and impede ex ante prioritization of expenditures. While the use of revised estimates, which are prepared in the second half of the fiscal year to effect a mid-course correction in expenditures, is a useful fiscal management tool, care needs to be exercised to make sure that the process is not used to reallocate available funds to preferred projects that are of doubtful quality. With insufficient ex ante prioritization of expenditures, resource shortfalls generally result in expenditure cuts that are disproportionately applied to “discretionary” operations and maintenance expenditures, often with adverse consequences for growth and poverty reduction outcomes.

Procurement

70. There are substantial delays in the procurement of goods and services and increasing allegations of corruption at all levels. Public procurement is estimated at about Tk 150 billion a year, of which Tk 100 billion is externally funded, most of it for public corporations. According to a study by the Ministry of Planning’s Implementation Monitoring and Evaluation Division (IMED) covering 148 procurement cases in FY98, the average time from inviting bids to awarding a contract was 14 months, resulting in higher costs, delayed benefits, non-participation of good firms, and increased scope for corruption (World Bank 1999). The deficiencies of the current public sector procurement practices are the single most serious issue affecting the entire public sector’s activities. These deficiencies, identified in the World Bank’s CPAR, include the absence of a sound legal framework governing public sector procurement, outdated procurement rules and procedures leading to the proliferation of diverse rules and procedures among various agencies, inadequate capacity and lack of a critical mass of professionals to manage public procurement as reflected in poor-quality bidding documents and bid evaluation, inordinate delays in completing the procurement process, ineffective contract administration, protracted bureaucratic procedures allowing multi-point rent seeking, and the absence of mechanisms for ensuring transparency and accountability in public procurement. All these have adversely affected the country’s aid utilization capacity and effectiveness. Procurement reform has become one of the priority areas for governance improvement.

71. The government has broadly endorsed the CPAR findings and has recently undertaken a Public Procurement Reform Technical Assistance project with IDA assistance. It has created a Central Procurement Technical Unit (CPTU) in IMED as a permanent institution funded under the revenue budget, with adequate staffing and logistics, for carrying out procurement reforms following the recommendations of the CPAR. The CPTU will have no procurement or contracting functions at any level except for its own needs. It will provide technical and professional advice on generic procurement issues referred to it but will not get involved in or provide opinions on any specific procurement evaluation or contract award, thus preserving its pristine role as a policy, technical assistance, training, and oversight unit. The CPTU is mandated to follow a participatory consultation process involving government and

²¹ The practical importance of these issues is demonstrated in a recent paper by Chattopadhyay R. and Duflo E 2001. Analyzing data from West Bengal, India, the authors find that the gender of the village leader and the extent of female (vs. male) participation in local politics significantly affect the identification of development priorities and the composition of public spending at the local level.

private sector stakeholders to build ownership and support for reforms. A series of actions have been identified for improving procurement efficiency, transparency, accountability, and management capacity.²²

Asset, cash, and debt management

72. As in other countries that use a cash-based system of accounting (see below), there is a lack of accountability for government assets. Asset registers are generally not maintained, facilitating the loss of stores and supplies and the loss and misuse of equipment and vehicles. This can be prevented through proper maintenance of asset registers and periodic independent physical inspections.

73. The systems for cash and debt management in Bangladesh are rudimentary, somewhat informal, and inadequate relative to the complexity of the task. The responsibility for cash and debt management is divided between the Finance Division (Budget Wing), Economic Relations Division (external flows and debt), and Bangladesh Bank (domestic flows and debt). Quarterly releases of funds to the spending ministries are usually delayed. Final quarter releases are sometimes received late in June, so they cannot be legitimately used within the financial year. The Government's entire cash balance with Bangladesh Bank is treated as one entity, although separate "windows" for each Chief Accounting Officer are maintained within this balance. There are many bank accounts, established mostly at the request of donors, which hold government funds and are not reflected within government accounts. Bangladesh Bank acts solely as a banker, clearing checks that are properly drawn, and does not check aggregate payments against budgets.

74. Shortcomings in cash management cause wide month-to-month fluctuations in government borrowing from Bangladesh Bank, which finances whatever deficits emerge each day. While the MoF is involved in the monthly auction of Treasury bills by Bangladesh Bank, T-bills are viewed more as instruments of monetary management, overlooking their role and importance in deficit financing. This lack of focus on deficit financing results in increased, and avoidable, interest costs to the Government and undermines monetary management. Furthermore, presumably to encourage domestic savings, the Government issues savings instruments on tap with high interest rates and attractive tax benefits. This results in a high cost of government borrowing, even when cheaper options are available, and adds to the Government's debt service burden.

75. Transparency in public debt management needs to be improved. The office of the Comptroller and Auditor General (C&AG) does not include debt in its audit reports, even *ex post facto*. While the External Relations Division provides Parliament with an annual update on external public debt, a similar effort is not made for reporting domestic public debt. Total debt could be reported annually, for example, as an annex to the Finance Accounts, and classified by type of instrument and sector of debt-holder as required by the IMF in its system of Government Finance Statistics. There is also presently no reporting of government guarantees, which have increased significantly in recent years. The volume of contingent liabilities, mainly from guarantees to lenders to public enterprises and counterguarantees to Bangladesh Bank, is unknown. These potential liabilities should similarly be reported in accordance with generally accepted international standards of fiscal transparency, as recommended by the IMF and OECD.

Accounting

76. Notwithstanding some recent improvements, the Government's accounting system remains more concerned with recording transactions than with providing a management information system. The accounting system is outmoded, dating back to the 1930s, and a program of modernization is necessary to

²² For details, see World Bank, "Project Appraisal Document for the Public Procurement Reform Project", April 4, 2002.

develop the management functions of the system and strengthen expenditure control. This process has started. The standards of central government accounts contained in the Accounts Code, the General Financial Rules, Treasury Rules, and subsidiary rules have been consolidated, and a comprehensive new edition was published in 1998, supported by the Reform in Budget and Expenditure Control (RIBEC) project. However, no rationalization or simplification has been made so far, and the revision of codes and manuals needs to go beyond routine consolidation. It should result in an overhaul of procedures and pave the way for modern accounting systems. Under RIBEC, a new system of accounts classification had been designed and implemented. But the system is still plagued by the lack of effective and timely reconciliation between expenditure transactions as recorded by the Government's accounting system and cash transactions as recorded by the banking system across the entire hierarchy.

77. Government accounting is cash-based and follows single-entry accounting principles. A transaction is recorded at the time cash is paid or received. This leads to the recording of a transaction only when the actual inflow or outflow of cash occurs.²³ In reality, resources are committed with the start of the procurement process—that is, when a work order is placed and a commitment made. Cash-based accounting does not recognize this. The former system of commitment accounting—entering every purchase order, work order, and contract as a memorandum record at the time of commitment—has fallen into disuse. This has weakened expenditure control and cash management, as the volume of commitments in the pipeline is not known. Control over commitments needs to be restored. Cash-based accounting also complicates the treatment of expenditures carried over from the previous year (float). This is not an insignificant problem in Bangladesh. In July 2002, the size of the total float was Tk 16.4 billion (0.6 percent of GDP), compared with Tk 13.2 billion (0.5 percent of GDP) in July FY01 and Tk 9.1 billion (0.4 percent of GDP) in July FY00.

78. The accuracy of the government accounts is questionable. Major unexplained differences exist between the bank balances shown in the Government's balance sheet and the balance shown in the bank statements (scrolls) of Bangladesh Bank. These are likely to include losses as well as irregularities. Only regular monthly reconciliation can remove this discrepancy, which, because of the sheer volume of transactions, will be possible only through computerized matching of checks drawn and checks cashed.

4. Issues in budget oversight

Budget monitoring and reporting

79. Budget monitoring and reporting is generally not effective. The Controller General of Accounting (CGA) office uploads budget data from the Finance Division database. It sends these data, combined with revenue and expenditure data from the district and thana offices, to the respective Chief Accounting Officers (CAOs) on a monthly basis. All secretaries get monthly management reports from their CAOs. The Finance Division receives monthly reports of expenditure from the CGA. A recently established Financial Information Monitoring Unit analyzes these reports. Comparisons with the budget are left to the individual ministries and divisions until mid-year, when they are called on to provide their supplementary estimates.

80. The fiscal reporting system does not adequately monitor the fiscal deficit and its financing, provide information for managing the Government's cash and debt position, monitor expenditures in relation to appropriations, or provide analysis to assist policy formulation and performance measurement. As a result, initial budget allocation decisions are less well-informed, and intra-year control measures are cruder and more abrupt, than they should be. Notwithstanding major improvements in capturing spending

²³ Note, however, that cash payments made during the first two weeks of July are treated as expenditures of the previous fiscal year.

on a monthly basis, there is no consolidation of central government accounts with local authority accounts to form general government accounts, nor consolidation of general government with public enterprises to form consolidated public sector accounts (as is now expected under the IFAC standard on consolidated financial statements).²⁴

Internal audit

81. The existing systems for accounting, expenditure control, and internal audit fail to deliver adequate accountability because of flaws in the procedures themselves as well as, the bureaucratic culture and environment in which they are applied. Rules and responsibilities are narrowly interpreted, and the bending of rules and failure to enforce them are widely accepted. There is ambiguity in the assignment of responsibility for expenditure control and, as a result, limited accountability for outcomes. The internal audit function is at an early stage of development in government agencies in Bangladesh. Internal audit units exist only in large ministries and major autonomous bodies, and mainly perform pre-audit functions. There are no common policies on such issues as operational independence, professional competence and training, scope of work, conduct of work, involvement in risk management, reporting, or quality review. There is no central oversight of internal audit standards, and performance audit is virtually unknown.

82. Efforts to increase transparency and accountability in the public sector therefore have yet to be translated into the expected outcomes because of weaknesses in implementation and lack of proper accounting and financial management systems in line agencies. These problems have also undermined the performance of the state-owned enterprises. The severe limitations of the accounting and auditing systems are detrimental to technical efficiency because they create an environment more conducive to widespread leakages. The Secretary, as Principal Accounting Officer (PAO), needs to ensure that, with the support of the Chief Accounting Officer and Internal Audit Officer, procedures are clearly laid down, that officers are trained in them, that records are properly managed, and that officers are supervised and corrected where necessary. When these actions are low on the scale of executive priorities, frauds and errors multiply. While there is a lot of emphasis on the improvement of audit, relatively little attention is paid to improving the material audited.

External audit

83. The Comptroller and Auditor General (C&AG) is a linchpin in the system of public accountability to Parliament. In theory, the C&AG has constitutional independence, and the appropriation of his audit directorates is not subject to parliamentary vote. In practice, however, the role of external audit in Bangladesh is compromised by its simultaneous responsibility for both accounting for and subsequently auditing the expenditures incurred by the Government and by its financial and administrative dependence on the executive branch. In addition, the pace of audit settlement is extremely slow, which seriously undermines the incentive for quality audit report.

84. C&AG's audit staff are drawn from the same cadre as accountants, and trained auditors can be transferred back into accounting posts. The C&AG is treated as part of the executive and in practice seeks approval from the Ministry of Finance and the Ministry of Establishment for financing and staffing decisions. As a result of insufficient qualified auditors, public audit covers only 16-25 percent of the C&AG's mandate each year, and major areas of public activity, such as public revenues, are not audited.

²⁴ Bangladesh just started reporting its government finance statistics annually to the IMF in accordance with its Government Finance Statistics (GFS) system, which about 120 other countries are doing. This required a reclassification of central government revenue, expenditure, and debt, economically and (expenditure only) functionally, in accordance with the GFS standards. However, the latest submitted GFS data (January 2001) have not been published because of problems with data quality and reliability.

The focus of audits generally tends to be on auditing minute details of transactions rather than ensuring an effective overall control environment. This in turn weakens the incentives to comply with the Government's financial regulations and makes it difficult to impose management accountability for performance. There is also a problem of insufficient transparency, as audit reports, which are presented to Parliament, are generally not available to the public except through occasional media leakage.

85. Separating the accounting and auditing functions must be made an immediate priority, as has been done in several countries including those in the South Asian region. The Controller of Government Accounts (CGA) should be given complete responsibility for accounting functions, including controlling all accounting staff. Parliament presently has no say in the selection of Auditor General and the Public Accounts Committee, the main user of the C&AG's services, and is not involved in the nomination process. The C&AG should be appointed as an officer of Parliament for a fixed term of five years on the recommendation of the Public Accounts Committee, with the approval of the Prime Minister.

Parliamentary oversight

86. The development of parliamentary surveillance is one of the main indicators of progress in a nascent democracy. In recent years Bangladesh has made some progress in instituting parliamentary oversight of the budget, although there is significant scope for improvement. The principal institutions of parliamentary surveillance are the Public Accounts Committee, Public Estimates Committee, Public Undertakings Committee, and 35 standing committees on individual ministries. Despite the opposition party boycotting Parliament, the committee system has functioned reasonably well, and the Public Accounts Committee in particular has done a commendable job in reviewing the reports prepared by the Comptroller & Auditor General and asking the executive to respond to audit objections.

87. However, the parliamentary sub-committees are dominated by members of the party in power. It is generally difficult for back-bench members to express independent opinions, particularly if these go against the ruling party, as they are dependent on the party for appointment to positions of influence. The role of the opposition, including the need for constructive criticism and having in place checks and balances, is not properly understood. Since committee meetings are not open to the media and most committees do not prepare reports of their proceedings, the work of the committees goes largely unknown and unnoticed. For these reasons, the committees are insufficiently accountable to the House and to the general public. The relationship between the executive and the legislative organs of the state continues to be guided by the traditional concept of the supremacy of the executive.

88. Several of these weaknesses have been identified in the PARC report, which rightly recommends strengthening the oversight functions of the committees by providing their members with appropriate training and a supportive work environment. "Involving the media in open meetings of the committees may help increase transparency and public awareness. Each member of Parliament should be given an office, a computer, a personal staff with computer literacy and a small fund to collect information and prepare briefs for facilitating due discharge of his/her responsibilities."²⁵ The PARC report also recommends that opposition members of Parliament (MPs) head some of the committees and ensure that there is at least one woman MP in each committee.

²⁵ *Public Administration for the 21st Century*, Report of the Public Administration Reform Commission, Volume 1, June 2000, p. xiv.

5. Issues in budget effectiveness

89. As in many developing countries, the Government has very limited capacity to measure the development impact of fiscal expenditures, and most agencies are preoccupied with reporting how *inputs* have been used rather than highlighting *outcomes* achieved (Box 4.2). The Implementation Monitoring and Evaluation Division (IMED), Ministry of Planning, is mandated to monitor and evaluate development projects. As a watchdog body of the executive branch, it monitors project implementation and provides a project completion report (PCR) for every project that comes to an end. On average, there are 1,200 projects, new and ongoing, in the portfolio, and close to 200 are completed every year. Based on its monitoring, IMED provides feedback to the line ministries on a monthly basis. More formal reports, including PCRs, are presented to the National Economic Council (NEC), which is chaired by the Prime Minister and has other ministers and secretaries as members. IMED started doing project evaluations (including beneficiary surveys) in 1995/96. Findings from the completed impact evaluation work have been presented to the concerned ministries, which in turn have noted the flaws in their project design and implementation. Hoping to learn and improve, a few ministries have even asked IMED to carry out benefit evaluations of their projects.

Box 4.2: Improving results orientation

While the transformation from an input orientation to a focus on outputs and results cannot be implemented overnight or across the board, it is critical to embark upon the process of linking expenditure allocations to outcomes. Results orientation has to start at the top—with Ministers and Secretaries who are performance-conscious and willing to experiment. Planning and budgeting are the responsibility of line managers, not planning officers or budget officers. The Reform in Budget and Expenditure Control (RIBEC) project has proposed a Budget Committee in each ministry, headed by the Secretary, to start building a medium-term rolling planning process involving all line directors. The budget would reflect the first-year slice of the plan and would spell out not only the agreed functions, but also the objectives and outputs that are to be achieved. To provide the appropriate incentives, the Ministry of Finance would give each ministry a budget ceiling early enough in the budget cycle with an assurance that no cuts would be made except in exceptional circumstances. In return, ministries would be expected to clearly articulate the outcomes they expect to achieve, and they would be held accountable for these, with future resource allocations tied to the achievement of the results. Instead of the automatic ratcheting up of budgetary allocations, increased allocations could be used to reward the agencies that live up to their commitments.

90. The Evaluation Unit in IMED faces a number of constraints. It lacks adequate qualified manpower to carry out the evaluations. Even if a small sample of all the completed projects in a year are selected from critical sectors for impact evaluation, the Evaluation Unit is ill equipped to carry out this task. Another related problem is the less than satisfactory quality of evaluations. Also, IMED does not have any enforcement function. If a line ministry ignores the advice and recommendations of IMED—a routine affair—it has no recourse to follow up.

91. Several other initiatives are currently under way in Bangladesh to gauge the satisfaction with public services. These follow the example of the first “score-cards” survey conducted in 1994 by the Public Affairs Center, an independent NGO in Bangalore, Karnataka, covering accessibility and usage, satisfaction with individual services, responsiveness of service providers, cases of bribes (extortionary or voluntary), and willingness to pay for better services. Three NGOs in Bangladesh initiated similar surveys: *Action Aid* is developing in-house capacity to prepare report cards at the city and division levels; *Democracy Watch* looking at service delivery issues in Chittagong City Corporation and, in partnership with Transparency International-Bangladesh, is preparing a manual in Bangla for division-level score cards; and *People’s Participatory Research Center* (PPRC) is also preparing reports on best practices at the local government level, based on a nationwide survey and a report card on Dhaka city.²⁶ The success

²⁶ A recent survey of public opinion, *Improving Governance for Reducing Poverty* (World Bank 2002c), has been conducted by the World Bank in collaboration with several donors and a local NGO.

of these initiatives will depend on public agencies embracing greater transparency and taking corrective actions.

92. More broadly, however, improved information-based public policy-making, as well as the promotion of accountability, requires the development and maintenance of good information systems on outcomes as well as inputs (expenditures).

6. The information base for measuring outcomes²⁷

93. As a result of a long-term capacity-building effort,²⁸ Bangladesh now has a reasonable system for the monitoring of outcomes in human development—covering poverty, demography, health, education, nutrition, and access to services. The two most important data collection systems are the decennial population census and the Bangladesh Bureau of Statistics' (BBS) Household Income and Expenditure Survey (HIES). For example, the 2000 HIES is the 13th in BBS's series of household expenditure surveys dating back to 1973-74. Similarly, the nationally representative Labor Force Survey (LFS) and the Child Nutrition Survey (CNS) were conducted by BBS in 1999-2000 and 2000, respectively, as part of a long-standing survey series.

94. Other government agencies also maintain an extensive database on a number of sector-specific indicators. For example, the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) database includes geographically disaggregated information on schools, teachers, and other important inputs, as well as on enrollments of children by grade and gender. Data on morbidity and mortality are produced through the Bangladesh Health and Demographic Surveys (BHDS) conducted by the Ministry of Health and Family Welfare in collaboration with BBS. Other independent (or semi-autonomous) data collection initiatives include the National Institute of Population Research and Training's (NIPORT) Bangladesh Demographic and Health Surveys (DHS) and the Helen Keller International's Nutrition Surveillance Project, which provide extensive data on health, family planning, and nutrition processes and outcomes. A large, nationally representative data collection exercise was conducted recently under the aegis of the Education Watch Project, in which detailed education-related information was collected through a household survey, school visits, and assessment of basic competencies. These data provide a good platform for the monitoring of important poverty and social development indicators, particularly those relating to the Millennium Development Goals.

95. This relatively good database notwithstanding, several constraints impede the effective use of available data in the decision-making process. Considerable gains in reliability and timeliness could be realized by extending many of the good practices adopted for the HIES (such as the team-based data collection approach, field-based data entry, and quality control checks) to other surveys conducted by BBS. There is a need for a clearly articulated information and disclosure policy with regard to the use of disaggregated data from surveys. Currently the large volume of data routinely collected by BBS is grossly under-utilized, with many institutions, think-tanks, and researchers often unable to exploit the full potential of the data collected. The lack of access to data often forces institutions and donors to engage in time-intensive and costly data collection efforts, thus diverting precious analytic and financial resources

²⁷ Extract from *Poverty in Bangladesh: Building on Progress*, World Bank 2002.

²⁸ In particular, since late 1994 both the World Bank and the Asian Development Bank have worked with staff at the Bangladesh Bureau of Statistics (BBS) to help expand and enhance the information base on poverty. Extensive technical assistance and grant funding have been provided to help strengthen the national accounts system as well as to enhance BBS's Household Expenditure Survey (HES) series.

into data collection at the expense of analysis. Opening up access to unit-record data from these surveys to the general public—as has recently been done in India and Nepal—would help facilitate greater use of these data. In order to further enhance the integrity and credibility of the data collected, there is a need for greater autonomy for BBS and other statistical units in government (see Box 4.3 for the Indian experience in this respect).

Box 4.3: Reform of the statistical system in India

India is undertaking wide-ranging reform of its statistical system. The Government of India appointed a National Statistical Commission in 2000 to examine the national statistical system with a view to identifying deficiencies and weaknesses and making recommendations accordingly. Among the various reforms proposed as a prerequisite to improving the system, the commission has recommended establishment of a permanent and statutory National Commission on Statistics to serve as a nodal policy-making body for all statistical activities in the country. Taking similar steps in Bangladesh to establish priorities for the statistical system, and to help safeguard it against possible political pressure against reporting information unfavorable to the government in power, merits serious consideration.

96. Work is currently under way on a project within BBS and the Ministry of Planning to develop a National Databank. The long-range vision is to provide an integrated database system accessible across all government departments and agencies. There are often large discrepancies in data available from different sources, such as in school enrollment estimates by the Primary and Mass Education Division compared with those from the Education Watch survey or the 2000 HIES. Greater independence from political interference, coupled with concerted efforts to better reconcile the (at times) contradictory data from the different sources, would help restore the various information systems to their rightful role as effective management information tools. As part of the process of forging consensus on a comprehensive set of national development indicators within the ongoing PRSP, there is a need to specify clearly the data sources through which each indicator will be monitored as well as the desired periodicity of data collection.

7. The Role of Donors

97. Uncoordinated assistance from multiple donors has been an issue in budgetary management in Bangladesh, notwithstanding the existence of a fairly active mechanism for donor coordination in the form of the Local Consultative Group (LCG) and its various thematic and sectoral subgroups. While the share of foreign financing has been declining over time (see Chapter 1), external resources still finance around 50 percent of Bangladesh's ADP. Although donor activity is coordinated by the External Relations Division (ERD) of the Ministry of Finance, and line ministries generally keep ERD informed about donor-related initiatives, the sectors tend to enter into bilateral deals for enclave-type project financing, often not linked to sector strategy, in order to alleviate their budget constraints. From the donors' perspective, Bangladesh's development projects suffer from insufficient scrutiny at the entry level, a slow rate of disbursement, and institutional handicaps at the implementation stage. In addition to stretching scarce capacity, uncoordinated development assistance aggravates the cumulative demand for counterpart funds and gives rise to future demands for recurrent cost or debt service payments that are inconsistent with the macroeconomic framework.

98. The introduction of a sector-wide approach (SWAp) in the health sector is a step in the right direction, as it changes the incentives in the aid relationship for both the Government and donors (Box 4.4). It gives the Government much more control and can also significantly reduce the informational, management, transaction, and reporting costs of managing multiple projects. However, since it transfers a large management burden from donor project officers to government staff, it requires improved capacity in financial management and especially in procurement (see Chapter 6 for a fuller discussion).

8. Priority reforms in strengthening budget management

99. The stage for developing and implementing a carefully sequenced reform program is now set with the establishment of a Public Administration Reform Monitoring Commission (PARMOC), a Revenue Commission, and a Public Expenditure Review Commission. These reforms, taken together, extend well beyond the public expenditure management system, encompassing the key dimensions of the public sector presence in the economy. Priority reforms for improving fiscal management are summarized below.

Improving budget preparation

- Integrate the planning and budgeting process by merging the Ministries of Finance and Planning.
- Prepare the budget on the basis of a multi-year macroeconomic framework that integrates the fiscal, monetary, and external sectors.
- Phase in a medium-term expenditure framework that takes into account the recurrent cost implications of capital expenditures.
- Improve the quality of planning and budgeting by adopting strict criteria, based on internal rate of return analysis, for including projects and programs in the ADP. Institute strategic planning in sectoral ministries and agencies through budget committees.
- Discuss both tax policy issues and expenditure allocation proposals extensively with civil society groups before the budget is finalized. Extend the budget cycle by initiating such discussions in October and November of every year. Present the budget to Parliament three months prior to the commencement of the new fiscal year.
- Increase, through the Rules of Business Committee of Parliament, the time allocated to the parliamentarians for debate on the budget.

Box 4.4: A sector-wide approach for better aid effectiveness

In Bangladesh a consortium of donors led by IDA pools resources and expertise to support a sector-wide Health and Population Sector Program (HPSP), fully owned by the Government. Most of the 130 donor-financed projects in the health sector have been consolidated and brought within the development budget's allocation and accounting framework and under the management control of the Ministry of Health and Family Welfare's line directors. The Planning Commission, which is responsible for the development budget, now regards external and government contributions to the Health Development Budget as a single "project." A key innovation associated with the HPSP is the introduction of full reporting of international donor contributions to the sector under the sector-wide approach agreed with the Ministry of Health and Family Welfare. Once projects are approved, the Planning Commission transfers funds to the Ministry of Health as quarterly lump sums, to be managed by line directors (rather than by a project director). The sector-wide approach has clearly been effective in aligning foreign assistance, although procurement problems prevent its full effectiveness.

The absence of such an approach in, for example, primary education has been an impediment to achieving the intended outcomes despite the inputs of numerous donors. The challenge ahead is for donors and the Government to seek ways to eliminate deficiencies in procurement procedures and apply the sector-wide programmatic approach more widely.

Improving budget implementation

- Streamline cash management to avoid unnecessary borrowing costs.
- Increase transparency in public debt management and strictly enforce limits on recourse to non-concessional financing such as suppliers' credits.
- Overhaul procurement procedures by:
 - Formulating streamlined internal procurement procedures, with a significantly reduced number of layers and with safeguards for impartiality and transparency.
 - Publishing all contract awards over \$200,000.
 - Reducing the average public sector procurement processing time to 12 months (the benchmark IMED 1998 survey estimate was 14 months).
- Assign Bangladesh Bank certain expenditure control functions such as checking aggregate payments against budget allocations.
- Strengthen internal control systems and procedures for tracking and monitoring expenditures.
- Reduce the number of operating accounts and strengthen controls on commitments and disbursements.

Box 4.5: Procurement reforms in the Indian state of Karnataka

The Government of Karnataka enacted a Transparency in Public Procurement Act and a progressive Right to Information Act in 2000. Accordingly, details of all tender applications received and accepted are now required to be published in a Tender Bulletin maintained by departments at both state and district levels. The rules, notified in October 2000, also lay down clear procedures for tender inviting and tender accepting authorities and provide for an appeals process and penalties for officials who contravene the provisions of the law. The Government is now starting to place its Tender Bulletins on the Internet and to undertake sample audits of selected procurement processes and contracts.

The Government also now publishes monthly financial accounts and releases to the public information on tax expenditures and tax arrears at regular intervals. In the context of last year's budget commitments, it introduced an "action taken report" and published a review of fiscal operations easily accessible by the public.

Improving budget oversight

- Institute internal audit in all ministries.
- Make all special public funds transparent and subject to external audit under appropriate arrangements for confidentiality.
- Subject the C&AG's office to the same independent scrutiny as all other institutions of the State.
- Increase the involvement of opposition MPs in parliamentary oversight committees, including allowing them to chair key committees.
- Make the Bureau of Anti-Corruption independent, reporting to an ombudsman, and enforce accelerated investigation of fraud and corruption.
- Invite media to meetings of parliamentary committees.
- Separate the accounting and auditing functions. The C&AG should report to Parliament and be appointed for a period of no less than five years, based on the recommendations of the Prime Minister and the Public Accounts Committee.
- Require the Public Accounts Committee and the Public Estimates Committee to submit annual reports to Parliament and allow media to observe their proceedings.
- Require all ministries to publish annual reports, to be submitted to the relevant parliamentary committee within one month.

Improving budget effectiveness

- Establish a PRSP unit (Box 4.6).
- Institute a comprehensive fiscal reporting system.
- Strengthen IMED's capacity for impact evaluation assessment of a sample of development projects every year through extensive staff training and other forms of technical assistance. Ensure that the feedback is given to the concerned departments, which in turn take actions.
- Start training government officials in performance-based management systems by tapping the expertise of such organizations as the Institute of Business Administration in Dhaka.
- Initiate a monitoring system to check leakages in the distribution of food, free textbooks, and medicines. Conduct Public Expenditure Tracking Surveys in education, health, and social safety nets to establish benchmarks against which future progress can be tracked (Box 4.7).
- Initiate the public dissemination of citizen charters.
- Institutionalize the score-cards and, in due course, have every public agency publish and post on its Web site regular score-cards on its performance.
- Establish a collaborative framework with research institutes to initiate impact analysis of government programs.
- Continue building statistical capacity for monitoring and evaluation by:
 - Extending many of the good practices adopted for the HIES (such as the team-based data collection approach, field-based data entry, and quality control checks) to other surveys conducted by BBS.
 - Clearly articulating an information and disclosure policy with regard to the use of disaggregated data from surveys.
 - Ensuring greater autonomy for BBS and other statistical units in government.

Box 4.6: A PRSP unit in Bangladesh

Under the I-PRSP, establishing an institutional focal point with strong inter-ministerial linkages for effective monitoring of poverty and tracking of progress is envisaged as a high-priority need. Along with monitoring I-PRSP progress and outcome indicators and using poverty diagnostics to set medium- and long-term outcome-oriented targets, such a unit would be expected to periodically engage in consultations with civil society and stakeholders. In addition, civil society initiatives for monitoring poverty are being considered for the purpose of obtaining independent assessments of trends in poverty and poverty reduction policies.

Source: GOB 2002.

Box 4.7: Public Expenditure Tracking Surveys

Public Expenditure Tracking Surveys (PETS) track the flow of public funds and determine the extent to which resources actually reach the target groups. The surveys examine the manner, quantity, and timing of release of resources to different levels of government and to the beneficiaries. They can be used to get information on delays, leakage, and corruption. PETS consist of two components. First, an *expenditure tracking* exercise that tracks budget flows through the various layers of the system, assessing how much of the intended funds reach every administrative level and how long they take to get there. Second, a quantitative *survey of facilities* that gathers data from service providers' own records and includes information on the quantity and quality of outputs, inputs, and resource allocations within facilities such as service categories; financing management systems (including user fees and donor financing) and incentives; community participation; and staff attendance and staff qualifications.

After a 1995 PETS in Uganda showed that at most 20 percent of the intended non-salary public spending on primary education reached schools, the Government took several steps to increase information flow and transparency (for example, transfers of public funds to districts were announced regularly and publicly in newspapers and on the radio, and schools were required to post receipt of funds). A follow-up survey four years later showed a dramatic improvement, with schools receiving 90 percent of their budgeted allocations on average (Reinikka 2001).

For examples of PETS, see <http://www.worldbank.org/research/projects/publicspending/tools/tools.htm>.

9. Perceptions of poor quality and corruption in the provision of public services

100. The weak expenditure management framework, combined with other institutional weaknesses across the economy, has resulted in a low quality of public services and a hostile investment climate, constraining Bangladesh's progress toward rapid poverty reduction. The most glaring examples of poor public service delivery are the deteriorating law and order situation (which results from an ineffective legal-judicial system and police); the high perception of corruption and citizens' dissatisfaction with services; and an inefficient bureaucracy that still maintains tight controls over critical business processes.

101. A large number of studies have analyzed the various aspects of public services and institutions in Bangladesh. They include *Taming Leviathan* (World Bank 2002d), *Urban Service Delivery Score Card* (World Bank 2002e), and *Improving Governance for Reducing Poverty* (World Bank 2002f), and various reports produced by Transparency International-Bangladesh that document in detail citizens' perceptions of the way corruption actually takes place in various areas of public service delivery. For example, recent survey results reveal low levels of satisfaction with the quality of services provided to urban households

Table 4.1: Bangladesh—satisfaction with services
(percentage of all households)

Service	Dhaka	Chittagong	Khulna	Rajshahi
Police	2	0	1	2
Land registration	2	1	10	4
Transport	7	3	19	6
Electricity	8	2	12	2
Judiciary	8	1	2	5
Health care	11	4	18	9
Garbage disposal	15	10	12	10
Sewerage/ sanitation	17	16	11	16
Education	21	5	28	12
Drinking water	27	9	11	8
Gas	75	29	.	..

Source: World Bank 2002e.

(Table 4.1). Less than 20 percent of the households in each of the four major cities in Bangladesh indicated that they were satisfied with police, land registration, transport, electricity, judiciary, health care, garbage disposal, and sewerage and sanitation services. Gas provision in Dhaka is a pleasant exception, with about 75 percent of the respondents in Dhaka expressing satisfaction.²⁹

A deteriorating law and order situation and a weak judiciary is a concern shared by all

102. The institutions responsible for maintaining law and order have the lowest satisfaction ratings in Bangladesh. Although the Supreme Court continues to command respect, Bangladesh's legal-judicial system in general is not capable of administering the rule of law promptly and impartially. Bangladeshi citizens and businesses hold the country's courts and its dispute resolution organizations in low regard, seeing them as inefficient and prone to corruption. These weaknesses have resulted in a huge backlog of cases and substantial transaction costs to clients. These failures of the legal-judicial system undermine the workings of civil society, linking the administration of justice not to the rule of law but to the ability of participants to pay for treatment that courts should administer impartially. A perverse result of the inefficiencies of the legal-judicial system is the intentional use of the courts by some to delay payment of taxes and utility fees and to default on loans from public financial institutions (PFIs).

²⁹ Widespread dissatisfaction with service delivery is nothing unique to Bangladesh. For example, in surveys conducted by the Public Affairs Center (India), less than 17 percent of households were satisfied with the services surveyed in Ahmedabad, less than 25 percent were satisfied in Bangalore, and less than 26 percent in Pune.

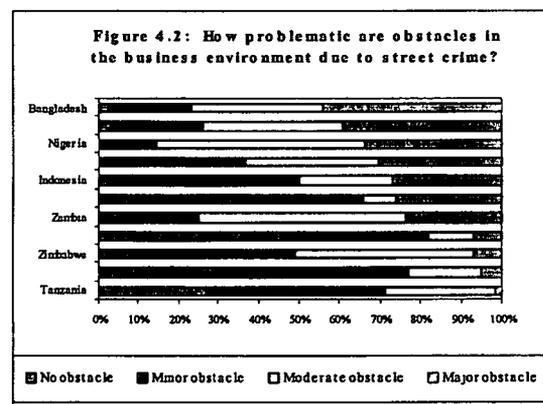
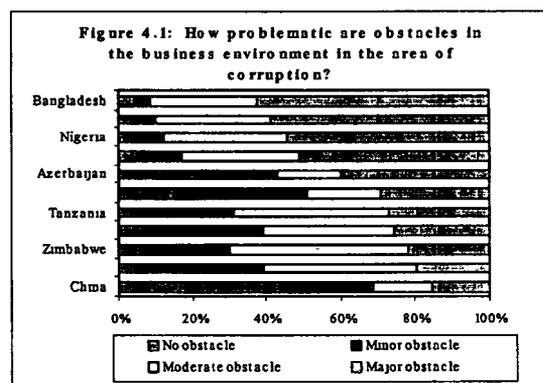
103. Various surveys have repeatedly identified the police force as one of the most corrupt arms of the Government.³⁰ Moreover, it appears that the corruption and police inefficiency perceived by Bangladeshi citizens have increased in recent years. While a 1998 study conducted by the Mahbub-ul-Haq Human Development Center estimated that slightly over one-half (54 percent) of all respondents in Bangladesh reported “heavy or malignant corruption” in the police force, the most recent survey estimated that 71 percent of households perceived the police as being corrupt (World Bank 2002f).

104. The bleak state of law and order in Bangladesh is due to the lack of transparency and accountability and insufficient human and resource capacity in the police and civil justice system. Although there has been some progress toward making the judiciary independent—including delegation of authority to the Supreme Court to incur expenditure and to determine the salaries and security of tenure of judges—the judiciary is still not separate from the executive wing, and laws such as the Special Powers Act 1974 are perceived as a violation of the basic rights of the people stipulated by the constitution.

105. Allocations to public order and safety were 0.7 percent of GDP in 2001. Bangladesh has fewer police officers per 1,000 citizens than any of its neighbors except Pakistan. It has the highest rates of armed robbery and reported rapes in South Asia. Each police station in Bangladesh is responsible for maintaining law and order for, on average, more than a quarter million people. Such inadequate police staffing not only encourages crime but also discourages the politically less influential and destitute victims from making formal complaints. This and the poor career prospects (less than 1 percent of the force is at the supervisory level), inadequate training (only 0.5 percent of the police budget is allocated to training), and low salary levels provide fertile ground for breeding corruption. Procedures and rules for recording and instigating cases are not enforced, and there is no civilian oversight or Police Commission to investigate the misuse of power. This has resulted in a pervasive feeling among the population that the police are anti-poor and cannot be relied upon to maintain law and order or redress violations of human security.

Corruption is high and undermines the business climate³¹

106. The bureaucracy, which still maintains tight controls over critical business processes, and crime are major barriers to improving the investment climate in Bangladesh. On measures of the extent of corruption, the rule of law, and government effectiveness, Bangladesh ranks worse than competitors such as China and India



³⁰ See two recent surveys (1999 Transparency International-Bangladesh chapter and 2002 Urban Service Delivery Score Cards). Public opinion regarding the integrity of the judiciary and police is extremely low, and the majority of the population believes that police tend to serve special interest groups. In particular, 97-98 percent of those surveyed by Transparency International-Bangladesh and Score Card have no faith in the integrity of police; 89-92 percent of the same interviewees had no faith in the integrity of the lower judiciary.

³¹ The weak state of the financial sector is described in IMF, *The Banking Sector in Bangladesh*, March 2001. This sector is also perceived to have a high level of corruption; see World Bank, *Bangladesh: Improving Governance for Reducing Poverty*, draft, March 2002.

(Stern 2002; Figures 4.1 and 4.2). In the World Bank's Business Environment Survey, covering a modest number of firms in about 100 countries, Bangladesh stood out as one in which all the firms surveyed reported that they made off-the-record payments to get things done.³² Nearly half of the Bangladeshi firms reported that they always had to offer unofficial payments to get government services. By comparison, in Indonesia and India fewer than 25 percent of firms had to pay for these services.

107. A more recent World Bank survey of 1,446 Bangladeshi firms revealed that, despite the liberalization measures introduced in the 1990s, businesses must still obtain multiple permissions, clearances, licenses, and no-objection certificates to start activity—a time-consuming process that under-the-table payments considerably shorten. Registration reportedly required between 1.5 and 2.8 weeks and—for 76 percent of the entrepreneurs—bribes paid at the Registrar's office were on average nearly twice the actual registration fee. The Chamber of Commerce also reportedly received bribes that were twice its regular fee (World Bank 2002e).

10. Institutions, growth and poverty reduction

108. Corruption and the weak law and order situation are the symptoms of weak institutions and a poor governance framework (Box 4.8). Bangladesh is paying a high price for its public service inefficiencies and poor governance, estimated at about 2-3 percentage points of GDP growth annually forgone (Rahman, Kisunko, and Kapoor 2000). This is consistent with international evidence relating to the quality of formal institutions and growth and poverty reduction. Cross-country studies have shown strong associations between per capita incomes and measures of strength of property rights and the absence of corruption. The causal effect of better governance on improved development outcomes has also been demonstrated (Mauro 1995; Acemoglu, Johnston, and Robinson 2000; Kaufmann, Kraay, and Zoido-Lobaton 1999; Kumar and Swaroop 2002). There are many links through which institutions affect outcomes. Property rights and rules for setting up and operating a commercial activity enhance the investment climate. A state's ability to empower and invest in citizens, including the poor, depends on its ability to deliver public services effectively, which in turn depends not only on expenditures on these services but also on the "weak link"—the presence of checks and balances and the accountability and transparency of public officials.³³

Box 4.8: What are institutions?

Institutions are *rules, enforcement mechanisms, and organizations* distinct from policies, which are the goals and desired outcomes, institutions are the rules by which agents interact. Corporate collateral and bankruptcy laws are *public institutions*, as are the judiciary, tax collection agencies, and regulatory agencies. Banks, reciprocity between community members, and land inheritance norms are *private institutions*.

The enforcement of rules can be internal, implemented by the parties affected by the rules, or external, implemented by a third party. Informal institutions and private formal mechanisms generally rely on their own members for enforcement. External enforcement mechanisms, such as judicial systems are critical for the development of integrated markets. They allow access to market opportunities for a broader group of market participants. For external enforcement to be effective, the *legitimacy* of the enforcer is vital. When the state acts as an agent that shares the objectives and beliefs of its citizens—and implements rules consistent with those objectives and beliefs—it is more likely to build effective formal institutions to support market development.

Historically, the government's role in the protection of property rights and the provision of other public goods has been closely linked to its role in ensuring peace or law and order. Conflicts over property rights between private agents, and between the state and private agents, are some of the most important issues that governments have to deal with, because they often lead to a breakdown of law and order.

Source: Adapted from World Bank, *World Development Report 2002*

109. Formal establishment of rules of conduct has little effect in the absence of credible commitment by the state to respect and enforce them. Enforcement is intimately tied with the legitimacy of the state

³² The World Business Environment Survey (WBES). For additional information on the survey, see the draft report "Voices of the Firms" at <http://info.worldbank.org/governance/>

³³ See Filmer, Hammer, and Pritchett, "Weak Links in the Chain: A Diagnosis of Health Policy in Poor Countries" for evidence showing the weak relationship between government spending for services to improve health and actual improvements in health status. See Hanushek and Luque (2001) and Wobmann (2001) for similar evidence on education spending.

(see Box 4.8).³⁴ In other words, if a state and its representatives, such as high-ranking public officials, are perceived as pursuing their personal gains rather than social objectives, it is easier for low-level officials (district officers, teachers, and doctors) to defy the formal rules and abuse their powers. These practices are corrosive of social capital. When the state cannot enforce property rights and maintain security, one strong individual will offer “protection” against others for a price, thus making it much more difficult for the state to collect a tax of its own.

110. When written rules have little effect on actual behavior, and corruption and weak enforcement flourish, society as a whole loses, but it is the poor who suffer the most. A number of studies have shown that the burden of corruption and arbitrariness falls disproportionately on the poor, since they are less able to afford bribes (Kaufman, Zoido-Lobaton, and Lee 2000). It severely impedes their access to publicly provided services such as public health, education, or police, denying them the human capital that they need to climb out of poverty.

11. The new Government’s governance reform agenda

111. The present Government, which took office in October 2001, campaigned for election on a promise to strengthen law and order so as to ensure “human dignity and security of life and property.” The voters embraced that pledge with an overwhelming mandate. The political impetus for change is therefore strong. In its *Memorandum for Bangladesh Development Forum 2002-2003*, the Government provided a comprehensive list of areas where reforms are urgently needed to improve governance, transparency, and accountability. Topping this list is the problem of law and order and the human rights situation. A law and order monitoring committee has been constituted to review the situation every week and take appropriate measures. Law and order committees have also been formed at the district level, and similar committees will be formed for upazilas and unions. The Public Safety Act, generally regarded as an oppressive law, has been repealed. A new law called the Law and Order Disruption Crimes (Speedy Trial) Act 2002 has been enacted to deal with crimes relating to terrorism and extortion. Steps have been taken to collect illegal arms and arrest criminals irrespective of their party affiliation. The success of these measures lies in non-partisan application to bring to justice those responsible for disrupting law and order and endangering the security of life and property of all residing in Bangladesh. The Government has also committed to complete the process of establishing a National Human Rights Commission by the end of 2002.

112. An ambitious multi-sectoral program to strengthen Bangladesh’s pillars of integrity has also been promised. The Ombudsman Act 1980 has been made effective through a gazette notification, thus giving effect to a law that provides for the institution of the Office of Ombudsman. The Government has ensured that an ombudsman will be appointed very soon, and posts have been created for the Office of the Ombudsman. The Government has accepted the PARC recommendation to establish an independent Anti-Corruption Commission vested with the authority to investigate allegations of corruption against all the citizens of the country, irrespective of rank and position. A high-level inter-ministerial task force has also been formed to determine an effective strategy to combat corruption. Furthermore, steps are being taken to separate the judiciary from the executive, a constitutional requirement in Bangladesh supported by all political parties; to separate the audit and accounting functions of government; and to strengthen the public procurement system.

113. In the area of public administration reforms, a Cabinet Committee headed by the Finance Minister and a Secretaries Committee headed by the Cabinet Secretary have been constituted to scrutinize the PARC reports and make recommendations for implementation. Based on recommendations of the Secretaries Committee, a few actions have already been taken. These include abolition of the Jamuna

³⁴ It is also linked to the severity of punishment for non-compliance.

Bridge Division, the Statistics Division, and the Department of Supplies and Inspection; a temporary freeze on recruitment for government posts except at the level of entry posts in cadres; an initiative to redesign the performance appraisal system to give more weight to merit than seniority in promotion decisions; adoption of the policy to appoint competent persons from the private sector as heads of four to five key organizations; a decision to contract out on a pilot basis some support services to the private sector; and a decision to introduce information technology in phases in all offices, including those at the field level, in order to gradually introduce e-government.

114. The Government has committed to privatize all types of state-owned enterprises (SOEs) in a phased manner (Box 4.9). This contrasts with past privatization efforts, which focused on the sale of mostly loss-making enterprises in the manufacturing sector. The Government has also modified its

Box 4.9: Thrust of the Bangladesh Government's reform effort

"A major thrust of our reform effort will be on the state-owned enterprises. In pursuit of our policy of private sector-led growth, we want to get the Government out of business activities and let the private sector take over."

—Prime Minister Begum Khaleda Zia, in her message
at the Development Forum, February 2002

privatization policy statement to ensure smooth implementation of the privatization process. The modifications include identifying the SOEs for privatization in consultation with the concerned ministries and with the approval of the Government, as compared with the previous system of leaving the initiative only with the ministries concerned; empowering the Privatization Commission to sign the sale contracts and agreements with the buyers and to hand over the enterprises; paying off with an additional gratuity all the staff of the SOEs being privatized so that the new owners can make a fresh start; providing a rebate of 35-40 percent of the sale price with full payment of the total sale price; assuming all short-term liabilities of the privatized entities and, in difficult and complicated situations, all long-term liabilities by the Government; and specifying in the tender documents all conditions for the sale and disposal of SOEs. The Prime Minister recently approved 48 enterprises for privatization (Annex 9). A decision has been made to impose hard budget constraints on the remaining SOEs by limiting their access to government-guaranteed credit, suppliers' credit, and budgetary financing. The voluntary separation scheme is being continued as part of the manpower rationalization policy.

12. Implementing the Government's governance strategy

115. The governance reform program to which the Government has already committed itself is laudable. Speedy and effective implementation will be the key to success. The scope of the Government's program is appropriate, although it should be complemented by strategic prioritization and a medium-term action plan. Bangladesh can build on its own experience with institutional successes (Annex 2) as well as the experiences of other countries, which have invested substantial resources in making their governments more accountable, transparent, and responsive to the needs of their citizens (Box 4.10). The acid test of success for these reforms will be to privatize the SOEs engaged in commercial activities and the PFIs and to reduce corruption in the legal-judicial system, police, bureaucracy, and social services.

Box 4.10: Improving governance

Countries that are beginning to show early signs of success in improving accountability and transparency are those that have unbundled the governance agenda so that they can implement a variety of structural reforms aimed at changing the manner in which their governments conduct business. A broad menu of options for consideration in Bangladesh includes voter education programs in Thailand, citizen report cards and SMART in India, Public Expenditure Tracking Surveys in Honduras and Uganda, judicial reforms in Peru, administrative reforms in the Republic of Korea, deregulation in Mexico, and privatization in Argentina.

Restoring the rule of law is the first and foremost priority in Bangladesh

116. In pursuit of this objective, the following additional steps are worth considering: separation of the lower judiciary from the executive wing; establishment of a Judicial Service Commission and Judicial Pay Commission (to review the insufficient human and resource capacity as well as the outmoded office technology, weak case-load and case-flow management in the civil justice system, and the code of conduct); a radical reform of the police starting with the establishment of civilian oversight or a Police Commission to investigate misuse of power.³⁵ Budgetary allocations to lower judiciary and police should support these reforms.

Ensuring legal underpinnings for anti-corruption measures is imperative

117. As indicated in the government's program, the Government will appoint an Ombudsman and an anti-corruption commission. To ensure its independence, the anti-corruption commission should not be placed in the Prime Minister's Office. In addition, the Government should publish a time-bound national anti-corruption action plan, endorsed by the Cabinet and the Prime Minister at the earliest possible time. In this context Bangladesh can build on the experience of Hong Kong's Independent Commission against Corruption (ICAC), widely cited as one of the successes stories in the campaign against corruption. Its legislative model has served as a model in many other countries (such as Botswana and Malawi). The success of Hong Kong's ICAC is attributed to three factors: adequate human capital; independent leadership; and political will to combat corruption (Box 4.11). However, there are also examples from developing countries that demonstrate the tendency among political leaders to keep a tight control over the investigative process in anti-corruption cases. Also, many political leaders use anti-corruption initiatives as political vendettas, against their predecessors. It is important for Bangladesh to avoid such pitfalls.

Box 4.11: Hong Kong Independent Commission against Corruption

The Hong Kong Independent Commission against Corruption (ICAC) was established by the Independent Commission against Corruption Ordinance. It consists of a commissioner, a deputy commissioner, and other officers. Both the commissioner and the deputy commissioner are appointed by the chief executive. The commissioner is answerable to the chief executive in the exercise of his functions under the ordinance but is not otherwise subject to the direction or control of any other person. The role of ICAC is to receive and investigate allegations of corruption, including alleged or suspected offenses under the ordinance and related legislation (such as the Prevention of Bribery Ordinance and Corrupt and Illegal Practices Ordinance) and alleged or suspected cases of blackmail involving public officials or misuse of public office. The commission can also examine the practices and procedures of government departments with a view to facilitating the discovery of corrupt practices, securing the revision of work methods and procedures, and advising on changes in practices and procedures needed to reduce the likelihood of corrupt practices.

Source: Adapted from W. Paatii and others, *Combating Corruption: A Comparative Review of Selected Legal Aspects of State Practice and Major International Initiatives* (Washington, D.C.: World Bank, 1999).

Reforms in civil service are urgently needed

118. The success and sustainability of a strategy for better governance depends on having an honest and competent administration. A competent and well-motivated public administration lies at the core of good government. Reform of Bangladesh's public administration has been extensively studied, most importantly by the Government's Public Administration Reform Commission. The commission's recommendations, emphasizing both incentives and oversight, deserve priority attention from the new

³⁵ Important recommendations on the police reform are expected from the forthcoming technical assistance study by the U.K. Department for International Development.

Government. Public administration reform in Bangladesh has repeatedly been postponed. It is time to reactivate the reform process. Specific civil service reforms required in the short and medium term are to:

- Continue the freeze on recruitment for vacant posts, pending the ongoing review of the recommendations of the Public Administration Reform Commission.
- Announce and begin preparation of a new personnel management and compensation system that will be phased in starting July 1, 2003, including monetization of all benefits and merit-based promotion, and adopt a manpower rationalization plan.
- Announce a voluntary separation scheme, with a special focus on Class III and IV employees.
- Announce a policy for lateral entry from the private sector for senior-level positions within the Government and autonomous bodies. Appoint four senior economic and finance advisors reporting directly to the Minister for Finance and Planning.
- Introduce mechanism for fast track promotions and performance-based salaries.
- Rationalize and overhaul the cadre system: reduce the number of cadres to no more than five and abolish the quota for the administrative cadre.

13. Conclusion

119. Failures of public service delivery do not arise simply out of managerial weaknesses and archaic systems of budget preparation, monitoring, and control, and they cannot be fully redressed by reforms in the institutions of budget management alone. There are broader problems of political governance that affect decisions and outcomes (Mahmud 2002). The literature in Bangladesh tends to favor the argument that the structure of Bangladesh's polity is such that the self-interest of legislators, political power brokers, and ministers do not coincide with making government agencies accountable and transparent, judging officials with well-defined yardsticks of performance, and decentralizing authority. This may be a promising avenue for further research in Bangladesh, in particular to find a way out of the political economy gridlock.

PART 2: FUNCTIONAL ANALYSIS OF EXPENDITURES

120. In this part of the Public Expenditure Review the policies and economic trends in several sectors are reviewed with a view to understanding more clearly what main factors explain the broad sector successes or failures. The six sectors that were selected jointly with the Government were chosen mainly because of their size in the total public expenditure program of the Government, their potential impact on poverty, and their perceived importance in Bangladesh's economy. The six sectors include the three main areas of human development—education, health, and the social safety net—and three other sectors—rural development, transport, and energy. The main findings of these policy reviews are summarized below.

Relative success in the social sectors

121. Public spending in Bangladesh shifted emphasis from agriculture and industries to the development of human resources and the rural economy during the last decade, and today combined expenditures on education, health, the social safety net, and disaster management are nearly one-third of total budgetary expenditures. This contrasts with the situation in most other developing countries with comparable per capita income.

122. There is widespread recognition today that the emphasis in public expenditures and policies on the social sectors are the source of Bangladesh's rapid progress in human development and poverty reduction in the last decade. Three factors have contributed to the progress:

- Sustained attention from public officials and sustained levels of public expenditures.
- The strong support from various stakeholders in pursuing human development objectives. Efforts in this area have seen the largest number of NGOs, considerable donor financial support, the involvement of communities, and substantial mobilization of private resources.
- An improved policy framework that has facilitated the participation of non-governmental partners and enabled considerable innovation—demand-side interventions in education, girls' education, good targeting of emergency food assistance, micro-credit. An added value of the community involvement in these sectors is that it ensures the presence of a minimum amount of accountability. The most urgent need at this juncture is for the Government to establish a clear strategy for accelerating progress toward a few Millennium Development Goals on which Bangladesh is lagging currently.

123. The success in the social sectors contrasts with the outcomes in the physical infrastructure (including telecommunications, energy, and public utilities), for example, where there is a strong perception of relative failure, primarily because of the less developed policy framework in these sectors, which failed to attract sizable private sector involvement, and poorly performing state enterprises.

Mixed outcomes in the other sectors

124. Compared with the record in the social sectors, public policies and spending in rural development and transport appear to have been less of a success. In both sectors there have been strong, pro-active public policies that have helped reduce poverty significantly, especially by reducing vulnerability to disasters and improving the environment for rural development. Particularly impressive achievements are the productivity-led acceleration in agricultural production and food self-sufficiency, improvements in disaster mitigation—a high priority for Bangladesh—and the development of a vast rural road network well connected to markets. However, there remains a tall agenda for reform in the rural economy given

the high level of poverty and extreme poverty, the threat of water contamination by arsenic, and infrastructure congestion, among other factors.

125. The energy sector represents the most egregious example of government failure in Bangladesh. The weak policy and governance framework in this sector has been very costly to the economy as a whole. Private investments in energy have been constrained by the absence of a stable policy environment and the presence of well-entrenched state-owned enterprises (SOEs) with divergent vested interests. Foreign direct investment was successfully mobilized in recent years, but this was achieved at very high costs in terms of foreign suppliers' credit and government guarantees.

126. Public spending and policies in almost all sectors (except energy and ports) have undeniably contributed to growth and hence poverty reduction. This contribution, however, has fallen well short of the potential because the weak institutions in place have reduced the effectiveness of expenditures, both public and private. This is most visible in the case of the energy SOEs and the social safety net, where the weak institutions even threaten to undermine the laudable development objectives in the sector. Improving governance should be at the heart of the strategy to increase expenditure effectiveness.

The priority—redefining the role of government ...

127. The most important challenge for the future development of Bangladesh is for the Government to embrace the role of regulator and standard setter—focusing on the provision of public rather than private goods—de-emphasizing along the way the large indirect role it plays in the provision of services. The large presence and influence of government departments and SOEs in the provision of services in the various sectors—railways, water, ports, fertilizer, energy—represent a huge obstacle to the development of the sectors. At the same time, however, there are huge gaps in the provision of public good-type services such as road safety, pollution control, inland waterway traffic, and crop research (not to mention law and order). At this juncture the Government should resist pressures for expanding public services (which exist in areas such as education, health, and fertilizer production).

...and increasing education and health expenditures under appropriate safeguards

128. There is a case for expanding public expenditures in education and health, given the needs of the population. However, this should not take place before the introduction of significant improvements in the policy framework in these sectors, in particular the announcement of a clearer long-term strategy for quality improvements. The sector reviews show that outcomes depend closely on (i) the degree of involvement of the private sector and existence of an appropriate regulatory framework for its activities, (ii) whether the Government is playing the right role in the sector, and (iii) whether there are adequate maintenance expenditures to maintain infrastructure investments. Additional expenditures on health and education could be financed through reductions in indirect subsidies to SOEs and savings in the Annual Development Program.

Chapter 5

EDUCATION

Considering the pervasiveness and depth of poverty in Bangladesh and the country's vulnerability to calamities of all sorts, its education outcomes are indeed highly impressive, particularly in ensuring wide coverage and access to primary and, to some degree, secondary education. The achievement of gender and urban-rural parity in Bangladesh contrasts sharply with the experience of many neighboring countries. Unfettered commitment to education on the part of the Government and civil society and sustained injection of public resources on both the supply and the demand side have made this possible. However, enrollment expansion and gender parity have not been matched by improvements in the quality of education. Quality remains low because of the poor quality of education inputs and learning processes, weak accountability and incentive mechanisms, and inadequate checks and balances for teachers and administrators. The tertiary sector, relatively small but in high demand, subsidizes private goods and does not focus enough on science and technology. Public education expenditures now need to be directed to improving quality in basic education and providing access to the hard-to-reach poor. Policy changes are needed to make the tertiary system less dependent on the budget and transform it into one of quality and relevance.

1. Overview

Outcomes

129. Coverage and access to education over the past two decades have exceeded expectations. The main successes include (i) rapid expansion of primary education (the gross primary enrollment rate increased from 72 percent in 1990 to 91 percent in 2000); (ii) a narrowing of disparity between rural and urban primary enrollments; and (iii) the closing of the gender gap, including among the very poor (Table 5.1).³⁶ In addition, enrollment in junior secondary and secondary education expanded at an annual rate of 10 percent during 1993-99. Gender and urban-rural parity in Bangladesh are comparable that in to Sri Lanka. Close to 9 out of every 10 children eventually enroll in primary school, and Bangladesh has achieved levels of primary and secondary gross enrollment similar to those in countries with higher per capita income, such as Vietnam, Thailand, and Indonesia (Appendix Table A5.1).

Table 5.1: Bangladesh—gross enrollment rates by gender and poverty status, 2000
(children enrolled in grade as a percentage of all children in target age)

	Urban			Rural			Overall		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Primary (grades 1-5)									
Poor	81.2	88.8	84.9	82.1	87.3	84.6	82.0	87.5	84.6
Non-poor	104.8	97.3	101.1	99.1	101.8	100.4	100.3	100.8	100.5
Total	93.5	93.3	93.4	88.6	92.7	90.6	89.4	92.8	91.1
Junior secondary (grades 6-8)									
Poor	26.1	37.2	31.1	29.3	42.6	35.9	28.8	41.8	35.1
Non-poor	75.8	75.2	75.5	60.5	79.5	70.0	64.1	78.4	71.4
Total	53.2	61.1	57.2	43.3	59.3	51.2	45.3	59.7	52.5
Secondary (grades 9-10)									
Poor	11.3	30.2	21	19.3	21.9	20.5	18.1	23.4	20.6
Non-poor	88.8	83.3	85.9	72.7	77.9	75	76.5	79.5	77.9
Total	61.7	64.9	63.3	47.4	49.4	48.3	50.3	51.3	51.6
High secondary (grades 11-12)									
Poor	21	9.6	15.3	15.9	8.6	13.4	16.7	8.9	13.8
Non-poor	118.5	107.6	113.6	72	56.1	65.8	83.4	70.9	78.4
Total	90.3	74.7	83.1	48.3	38.3	44.6	57	48.4	53.6

Source: World Bank staff estimates based on 2000 Household Income and Expenditure Survey (HIES).

³⁶ Filmer (1999) reports gender gaps in education across poor and non-poor households for some 40 countries. Bangladesh's closing the gender gap among the poor sharply contrasts to the experience of Pakistan, India, Egypt, Morocco, and a number of other countries in Filmer's study. For example, the male-female enrollment ratios among 6-14 year olds are as follows: India, non-poor -1.03, poor -1.64; Nepal non-poor -1.11, poor -1.47; Pakistan, non-poor -1.01, poor -2.35.

130. However, the quality of education has not kept pace with this expansion. Students' attendance rates are low (62 percent), teacher absenteeism is high (5-20 percent, depending on the type of school), the curriculum is of limited relevance (particularly at the secondary level), and teacher-pupil contact time is very low (CAMPE 1999, 2000). Together with the poor quality of instruction, these result in low learning achievements as well as low passing and completion rates. Data from the 2000 Household Income and Expenditure Survey (HIES) show that only 56 percent of all children 11-19 years old complete grade 5. In addition, survey-based estimates indicate that primary enrollment stagnated during the last five years and that poor children are less likely to be enrolled in school at all levels.

Structure

131. In *primary education* (grades 1-5), the Government, involved as financier and provider, directly operates about half of all schools, accounting for 60 percent of overall enrollment. Registered non-government primary schools account for 25 percent of primary schools and 24 percent of enrollment. Another large group of schools, the *ebtedayee madrasas* (religious schools), accounts for an additional 9 percent of primary schools and 5 percent of enrollment. Most of these schools are heavily subsidized by the Government, which provides on average 80 percent of teacher salaries and free textbooks. All primary schools adhere strictly to the national curriculum developed by the National Curriculum and Textbook Board (NCTB), which is also responsible for preparing, printing, and distributing all textbooks at the primary and secondary levels. NGO-run schools (not supported by the Government) provide non-formal primary schooling to about 2 million children (about 10 percent of total enrollment in the 6-10 age group).

132. The *mass education* system is designed to provide (i) non-formal education for children ages 8-14 currently out of school, to enable them to transition to the formal schooling system upon completion of their non-formal course, and (ii) adult literacy training. In adult literacy about 330 NGOs directly implement the non-formal education programs of the Government, which aim to cover nearly 30 million adult learners.

133. Most *secondary schools* (covering grades 6-10 and 11-12) are privately managed (98 percent of all secondary schools, 94 percent of enrollment), but a substantial part of their expenses is covered by government salary subvention payments for teachers and staff and block grants for construction and maintenance. The Government also supports the religious secondary schools known as *dakhil* (grades 6-10) and *alim* (grades 11-12) *madrasas*.³⁷

134. The *tertiary education system* is intended to prepare high-level manpower for professional, technical, and administrative positions in the labor market; generate new knowledge through research; and extend that knowledge to the society at large. Pressed by lack of employment opportunities at lower levels and attracted by high rates of return (over 10 percent annually), about three out of four students who pass the higher secondary certificate (HSC) examination go on to some form of higher education. About 15 percent of the entrants are admitted to the universities, and the rest are channeled into the nearly 900 degree colleges, most of which are non-government. The Bangladesh Open University was established in 1992 in order to make university education more accessible. In 1999 it enrolled nearly 0.18 million students. There are currently 29 private universities, permitted for the first time in the 1990s, and 13 government universities. Private universities are not subsidized by the Government, and even though the official government policy is to encourage them, there are numerous bureaucratic hurdles to their establishment.³⁸

³⁷ See Appendix Tables A5.2 and A5.3 for details on the structure of the primary and secondary school systems.

³⁸ The Private Universities Amendment Act is currently being prepared with a view toward easing some of the regulatory constraints.

135. Bangladesh's *Technical and Vocational Education (TVET) system* is relatively small, absorbing about 2 percent of the education budget and enrolling only 30,000 students at the certificate and diploma levels combined. There are a few reasonably good-quality public training institutions, including some technical training centers (TTCs) under the Ministry of Labor and rural training centers under the Ministry of Youth. Good models for skills training are provided by some NGOs. The Technical Education Board is a small, self-supporting, and relatively effective organization for curricula, teaching materials, and trade tests.

Financing

136. The household sector represents the most important source of education financing in Bangladesh. Starting from the primary level, schools collect fees or contributions to cover costs, and households pay for supplementary educational materials, private tutoring, and other education-related expenditures. Households' annual expenditures per student equal government expenditures per student at the primary and tertiary levels. At the secondary level, however, private expenditures exceed government spending by a large margin (Table 5.2). Secondary education in Bangladesh is not free, and households incur extremely high costs for private tutoring geared toward passing the public secondary school certificate (SSC) and higher secondary certificate examinations.

Table 5.2: Bangladesh—Education expenditure per student, 2000 (US\$ per year)

	Public	Private (households)
Primary	13	13
Secondary	27	73
Tertiary	155	151

Source: PMED and MOE data for public, HIES 2000 for private expenditures.

2. Public Spending and Policies

137. Three key public policies underpinned Bangladesh's education successes. These include (i) sustained injections of public resources³⁹; (ii) effective partnerships with the private sector for service delivery; and (iii) provision of subsidies to influence the demand for education in favor of the poor and girls.

Education expenditures increased dramatically in the early to mid-1990s, are high relative to other government expenditures, and focus on basic education

138. Bangladesh's public policy and expenditures have consistently emphasized education, and the sharp increases in education spending that occurred during the mid-1990s have been sustained. Education is by far the largest recipient of budgetary funds in combined Annual Development Program (ADP) and recurrent budgets. Total government expenditure on education is currently about 2.2 percent of GDP and 15-16 percent of total government spending (see Table 2.1).

139. Most government expenditure on education is directed to basic education—primary and mass education and secondary education (Table 5.3). However, during the past decade there has been a significant shift within basic education from the primary to the secondary level. For example, primary education's share of the recurrent education budget decreased from 48.5 percent to 39.5 percent over the course of the 1990s, while secondary education's share increased from 36.8 percent to 48.4 percent. While the pressure to accommodate the increasing demand for continuing education from the cohort that finished primary school contributed to this trend, it also reflected a policy shift to widen the provision of secondary education, particularly to girls.

³⁹ The expansion of education was mostly financed from domestic resources. The ratio of sectoral project aid to sectoral ADP spending declined from 47 percent in the early 1990s to 27 percent in 2000 (Appendix Table A2.2).

Table 5.3: Bangladesh—public education expenditure by level of education

Revenue (recurrent)							
Fiscal year	as percent of GDP	Percentage Distribution					Total
		Primary	Secondary & Higher	Technical	University	Other Ed. System	
1991-92	1.14	48.5	36.8	2.4	8.5	3.7	100.0
1992-93	1.34	45.5	40.6	2.3	7.9	3.7	100.0
1993-94	1.30	47.0	41.1	2.2	7.9	1.8	100.0
1995-96	1.30	44.2	42.5	2.1	8.0	3.3	100.0
1996-97	1.30	43.5	42.9	2.1	7.9	3.6	100.0
1997-98	1.39	42.6	46.0	1.5	7.3	2.7	100.0
1998-99	1.35	40.4	47.6	1.4	7.0	3.7	100.0
1999-00	1.37	39.5	48.4	1.4	8.0	2.7	100.0

Development Expenditure								
Fiscal Year	as percent of GDP	Percentage Distribution					Total	
		Primary	Non-Formal Education	Secondary & Higher	Technical	University		Other Ed. System
1991-92	0.21	62.1	1.5	10.7	3.3	10.1	12.3	100.0
1992-93	0.47	66.7	1.2	20.4	2.1	7.1	2.4	100.0
1994-95	1.06	56.5	2.3	34.1	0.4	0.7	6.1	100.0
1995-96	0.83	57.6	2.3	34.9	0.4	3.0	1.8	100.0
1997-98	0.73	46.0	6.9	33.7	1.6	9.9	1.9	100.0
1998-99	0.80	46.7	9.2	29.5	3.1	1.7	9.9	100.0
1999-00	0.84	49.2	5.9	33.4	5.1	5.9	0.4	100.0

The expansion of primary education took place both within and outside the public sector, while the rapid expansion of secondary education occurred mainly through partnerships with private providers

140. There was a large expansion in primary schools in Bangladesh in the early 1990s, and by 1996 there were 37,710 government primary schools (GPS) and 19,683 registered non-government primary schools (RNGPS) operating in the country. In fact, even after the growth in GPS and RNGPS leveled off in 1996, local communities continued to organize schools with government support. Compared with GPS, the RNGPS and community schools tend to have lower teacher salaries, a higher number of students per classroom, and higher student-teacher ratios, thus resulting in lower per-pupil costs.

141. The large expansion in primary enrollment eventually resulted in increased demand for continuing into the secondary level. To achieve rapid expansion of secondary enrollment, the Government opted for even wider partnership with the private sector, which allowed lower per-pupil costs. As a result, today more than 95 percent of secondary schools are non-government, with a unit cost per pupil of \$16, compared with \$68 in government secondary schools.⁴⁰ This difference in unit cost is due to lower teacher-student ratios as well as lower teacher salaries (in non-government secondary schools the Government pays 90 percent of the base teacher salary; see World Bank 2000c).

⁴⁰ The unit cost estimates include all recurrent costs incurred by schools irrespective of their financing.

Despite high administrative leakage, the Government strategy to promote education of the poor and girls through demand-side interventions delivers results

142. Currently, two demand-side conditional education transfer programs provide subsidies to selected schools and direct benefits to selected groups of students and their families. The Food for Education (FFE) program provides grain rations (recently monetized) to disadvantaged families if they send their children to primary school. The Female Secondary Stipends (FSS) program provides stipends and tuition waivers to girls residing in non-municipal areas if they attend grades 6-10. About 16 percent of all education ADP spending is devoted to FSS, and another 20 percent to FFE and primary stipends⁴¹ combined (Table 5.4).

Table 5.4: Bangladesh—Annual expenditures on conditional educational transfers

	FY 97	FY 98	FY 99	FY 00
FFE (Tk bn)	3.3	3.7	4.0	3.9
FSS (Tk bn)	2.2	2.6	2.8	3.1
FFE as a percentage of education ADP	22.6	25.2	23.6	19.7
FSS as a percentage of education ADP	15.0	17.7	16.5	15.7

Source: World Bank staff calculations from various budget documents

143. Evidence from surveys suggests that the FFE program is reasonably well targeted toward the poor. For example, those in the poorest 20 percent of the income distribution are nearly five times as likely to participate in the FFE program as are the richest 20 percent of the population. In addition, there is strong evidence from the mid-1990s that the FFE program succeeds in attracting poor children to school (Ravallion and Wodon 2000). Specifically, estimates show that participation in the FFE program increases the probability of attending school by 20 percent on average. Evidence from the 2000 HIES shows that these gains have been sustained.

144. While the FSS program is not pro-poor and no formal evaluation of its effectiveness has been done, it is deemed to have raised girls' secondary enrollments as high as or higher than those for boys for all but the wealthiest 20 percent of the population (see Table 5.1).

145. More recent information indicates that the effectiveness of the programs in place is significantly negated by implementation problems. Most disturbing are estimates of aggregate household transfers for the FFE and FSS programs obtained from the HIES 2000. The administrative leakage in the FFE program is such that a large portion of the aggregate program allocation is not accounted for in the survey estimates. What is particularly worrisome in the Bangladeshi context is that similar calculations for the FFE program using the 1995-96 Household Expenditure Survey (1995-96 HES) indicate substantially lower discrepancy, suggesting that problems of leakage have worsened over time (see Chapter 7).

3. Equity of public sector spending in education

146. Benefit incidence analysis has been carried out using data from the 2000 HIES in conjunction with government expenditure data. The per-student subsidy is calculated as total government revenue expenditures (separately for primary, secondary, and tertiary) divided by the total number of users (level specific, estimated from the 2000 HIES).⁴² Revenue expenditures were available in disaggregated form at the district level for primary education but not for secondary and tertiary education. Thus the data allowed the analysis to account for geographic variation in subsidies to primary, but not to secondary and tertiary

⁴¹ In 2000 the Government introduced a Primary Education Stipends Program covering poor rural families in non-FFE areas. This program pays a cash stipend of Tk 25 per student per month using the same targeting criteria as the FFE program.

⁴² There were two reasons not to include capital expenditures. First, many current capital expenditures in education are financed directly by donors, and complete information on these, let alone regionally disaggregated information, is not available. Second, to incorporate the annual user cost of capital, lagged capital expenses should be constructed from capital stock series. These are not available either.

students. Results are summarized by expressing subsidies received by a group (a population quintile or those classified as poor and non-poor) in terms of its percentage share in the total subsidy (Table 5.5). These results indicate that public spending on education has a strong redistributive impact. In making this assessment, the following criterion has been used. A distribution is considered *weakly pro-poor* if the poor receive a larger share of education subsidy than their share in total consumption. It is considered *strongly pro-poor* (and more efficiently targeted) if the poor receive a share larger than their share in the total population (van de Walle and Ned 1995; Prescott 1997).

Public primary education expenditures are strongly pro-poor. The key factor driving the pro-poor distribution of primary education spending is the age composition, which more than offsets the lower enrollment rates among the poor

147. Combining information on enrollment across households with estimated per-pupil government subsidies reveals that the poor receive 56 percent of all government subsidies on primary education. Since the poor account for 50 percent of the total population, primary education spending is strongly pro-poor. In theory, the amount of subsidy accruing to a sub-group depends on the number of potential users, the rate of use among those users, and the level of per-user subsidy. In the case of primary education the number of potential users is largely determined by the demographic composition and, more specifically, by the number of children. Twenty-seven percent of all children 6-10 years old belong to the poorest 20 percent of the population, while only 12 percent belong to the richest 20 percent (Table 5.5). Overall, three out of five children in this age group come from poor households, and two out of five come from non-poor households. The rate of use (enrollment rate) is lower among the poor, and per-student subsidies are roughly comparable across income groups. Thus the key factor driving the pro-poor distribution of primary education spending is the age composition, which more than offsets the lower enrollment rates among the poor.

Table 5.5: Bangladesh—Distribution of per capita expenditure, population, private education expenditures, and public subsidies across expenditure quintiles and poor and non poor
(percent)

	By quintile					By poverty status		Total
	1 lowest	2	3	4	5 highest	Poor*	Non-poor	
Per capita expenditure	8.1	12.1	15.8	22.1	41.9	26.1	73.9	100
Population								
6-10 years old	26.7	24.1	19.7	17.6	12.0	58.9	41.1	100
11-13 years old	21.2	21.9	21.3	19.6	16.1	52.0	48.0	100
14-15 years old	16.7	19.9	20.0	22.8	20.5	45.7	54.3	100
16-17 years old	12.8	18.5	20.8	22.2	25.6	38.1	61.9	100
All individuals	20.0	20.0	20.0	20.0	20.0	49.7	50.3	100
Private education spending								
Primary education	6.7	11.9	16.4	23.2	41.7	25.3	74.7	100
Junior secondary	4.3	10.0	15.3	27.7	42.7	18.9	81.1	100
Secondary	1.1	5.7	11.0	26.6	55.6	9.9	90.1	100
High secondary	1.0	3.2	7.6	24.8	63.3	5.9	94.1	100
Tertiary	0.7	1.1	9.1	17.9	71.2	5.3	94.7	100
All education	3.1	7.4	12.4	25.3	51.8	14.5	85.5	100
Public education spending								
Primary education	22	23	22	19	14	56	44	100
Secondary	6	11	16	28	40	24	76	100
Tertiary	6	6	10	21	57	17	83	100
All education	12	15	17	23	32	35	65	100

*As defined by the poverty levels described in *Poverty in Bangladesh. Building on Progress*, WB 2002.

148. The gap in enrollment rates between poor and non-poor widens considerably at the junior secondary level (where for every 2 non-poor children enrolled only 1 poor child is enrolled) and further at the secondary and higher secondary level (where the ratios are 1 to 4 and 1 to 6, respectively) (see Table 5.1). Possibly, this is attributable to higher primary dropout rates among the poor and the fact that secondary education is much more costly. Thus secondary and tertiary spending are not pro-poor. However, the distribution of government spending in these two sub-sectors is quite comparable with that in other countries with similar levels of per capita income (Appendix Table A5.4).

There is considerable scope to improve the pro-poor focus of government expenditures, even at the primary level. This is especially important given the high dependence on households for education financing and the inability of poor households to match the contributions of the wealthier households

149. Public resources cover roughly half of education costs, and since household expenditure is less equitably distributed relative to income than is public expenditure (see Table 5.5), the distribution of total expenditure in education across income quintiles is considerably less equitable than the benefit incidence of public expenditure. Private education expenditures are lower among the poor, implying that poor children have fewer supplies and other learning materials, which hampers their learning achievements. In addition, since much of the private spending is devoted to tutoring and the poor are less able to afford it, this might lead to direct discrimination by teachers against the poor and possibly to less able students among the poor (Box 5.1). These factors indicate that while it is not possible to equalize total (public and private) education expenditures between the poor and the non-poor, reducing inequality in the education resources devoted to the poor would call for improvements in targeting.

Box 5.1: Results from classroom observations

The in-depth classroom observations carried out under the Government's Primary School Performance Monitoring Project (PSPMP) showed that poor physical facilities, inadequate teaching materials (including textbooks), a memory-based teaching style, and lack of remedial measures in the classroom are the main reasons for poor performance. A particularly disturbing feature of the instruction observed in the government and private schools is that it tends to focus more on the better students (who tend to sit on benches in the front of the classroom), with the weaker students neglected or even physically or verbally abused. There also was typically little opportunity for writing.

Source: 1999 Education Waich Survey (CAMPE 1999)

4. Key sector issues

150. As described above, the Government has implemented several policies in the education sector that have yielded laudable results. The outcomes certainly would have been much better if the handicaps, mostly of an institutional nature, did not hold back the system.

Low quality and internal inefficiency is a major problem in primary and secondary schools

151. Low quality⁴³ and internal inefficiency manifest themselves in low attendance rates, low completion rates, limited relevance of the curriculum (particularly at the secondary level), limited teacher-pupil contact time, and poor quality of instruction. Survey findings show that student attendance rates

⁴³ Interdisciplinary research on education distinguishes two concepts of quality. The first is *process quality* of schools. It is described by schools' environment, such as the style of teacher-pupil interactions, teachers' responsiveness to pupils' requests, teachers' treatment of weaker students, and the like. The interdisciplinary education literature considers process quality the main factor affecting pupil performance (achievements in competency tests, grade completion). The second concept is *structural quality*, which includes such characteristics as the teacher-pupil ratio, teacher experience, teacher education, teacher absenteeism, and availability of books and other supplementary materials. The literature links process quality and structural quality by considering structural quality one of the inputs into the production of process quality. Improving the quality of education means improving structural quality, which would in turn improve process quality, with the ultimate goal being to improve pupil performance.

average 62 percent and are highest in informal NGO-run schools (CAMPE 1999). Absenteeism among teachers is over 20 percent in registered and unregistered non-government schools, 13 percent in government schools, and 5.3 percent in NGO-run informal schools. The assessment of Basic Competency (ABC), administered in 1993 and 1998, showed that only 30 percent of children ages 11-12 years old satisfied the minimum levels in all four competency areas (reading, writing, numeracy, life skills). Compared with 1993, basic achievement in 1998 had improved but only slightly, from 26.7 percent to 29.7 percent. Basic achievement was 56.9 percent among children who had completed five years of schooling, compared with only 20.8 percent among children with only three years completed and 7.5 percent among those with only one year of schooling completed. Importantly, achievement varies significantly by type of school, with informal NGO-run schools registering the highest achievement levels⁴⁴ (Table 5.6). Primary dropout rates are high, ranging between 8 percent and 13 percent in each primary grade every year (Table 5.7), and repetition rates are high as well. On average, it takes 8.7 years to produce a graduate of a five-year primary cycle, while a similar graduate in Vietnam is produced in 6.8 years, for example.

Table 5.6: Bangladesh—basic achievements
(percentage of all children currently enrolled in class 5 achieving)

	Basic education (4 areas)	Literacy (3 areas)
Government primary	37.7	59.0
Non-government primary	34.7	53.4
Non-formal primary	66.3	76.8
Madrasa	25.8	66.0

Source: 1999 Education Watch Survey (CAMPE 1999).

152. At the secondary level, the SSC and HSC examinations do provide a proxy measure for the quality of education outcomes, albeit an imperfect one. Despite problems with these examinations, cheating in particular, it is commonly acknowledged that the results are generally reliable in that the most meritorious students tend to be at the top of the list of most successful candidates. In the 1990s the number of candidates for the HSC examination increased almost threefold while pass rates generally declined. Only a fraction of the students who enter secondary education complete grade 10 and pass the SSC examination (no more than one in five). Even fewer complete grade 12 and pass the HSC examination.

Table 5.7: Bangladesh—Primary school dropout rates at end of grade
(percent)

Grade I	Grade II	Grade III	Grade IV
10	8	13	11

Source: World Bank staff estimates based on 1999 and 2000 enrollment data by grade in PMED, Primary Education Statistics in Bangladesh 2000

153. In addition, there is growing public dissatisfaction with the quality of governance in education. Perceptions of corruption and negligence, concerns about the influence of wealth on access to schooling, and complaints about teachers giving private students priority over public ones are on the rise. Recent surveys report the public's frustration with the delayed supply of textbooks and the need to buy primary-level textbooks instead of getting them free of cost (see World Bank 2002f). Many teachers do not teach in school unless they are also engaged as private tutors at home.⁴⁵ There are also widespread allegations of corruption regarding school registration (for entitlement to government subvention for teacher

⁴⁴ Differences in the background characteristics of students undoubtedly play an important role in influencing education outcomes. In fact, the socioeconomic characteristics of students were found to be significantly related to their performance. For example, learning achievement was negatively related to a student's age and positively related to parents' education, to self-perceived yearly food security status, and to the use of a private tutor. The results presented here, however, are generally robust after controlling for these background characteristics.

⁴⁵ According to the survey data, 36 percent of the households with school-going children reported irregularities in the conduct of teachers. Half of those who complained specified teachers' negligence, and 23 percent charged that teachers do not teach in school unless they are also engaged as private tutors at home. About 15 percent of surveyed households with school-going children reported difficulties in obtaining textbooks.

salaries), appointment of teachers in primary and secondary schools, and subvention based on enrollment by Thana Education Officers (TEO).

Accountability and incentive mechanisms and checks and balances for teachers and administrators are extremely weak. The Government's centralized administration and the lack of involvement of communities also handicap the efficiency and effectiveness of resources devoted to education

154. As in many developing countries, in Bangladesh the central Government carries out a combination of functions emphasizing regulation, supervision, and implementation of policies. Since the line ministry manages the overall education budget, it has an incentive to recommend expansion and construction as a solution to most education problems. This is in contradiction to the expected role of the central Government, which in basic education should be confined to the provision of technical services, including transparently allocating resources among districts, setting standards, establishing sector policy and curricula, conducting research, and disseminating research results and other education-related information to local governments and to the general public. The task of creating an effective, decentralized management of primary and secondary education will require several years. It should proceed according to a plan, possibly on a phased basis (those districts that are judged ready to manage their schools effectively should be permitted to do so).

155. As far as local participation is concerned, there is little delegation of authority to School Management Committees (SMCs) or local government. Even when SMCs are established, local elites often dominate, leaving little room for real representation by parents and objective community members. One of the best ways to get better education results is to make those who deliver education accountable to stakeholders and beneficiaries. The locus of managerial control over educational institutions needs to shift to those closest to the place of learning. This enables better adjustment of available resources to local needs and circumstances. In basic education real authority over teacher appointments and school budgets should be put in the hands of local school boards or management committees while ensuring that they are genuinely representative of the local communities.

156. At the secondary level the Government provides its subsidies directly to a "qualified" set of private schools. Once the schools have attained their eligibility to receive government subsidies, however, the subsidies continue to flow regardless of performance or community satisfaction. The Government has little leverage beyond periodic non-renewal of accreditation and discontinuation of subventions, measures it rarely employs. SMCs are comprised predominantly of male elites and are not always representative of their communities. There are few ministry staff at the field level to monitor the quality of the services they are essentially purchasing. The consequence is a sub-system of uneven but generally poor quality, in which considerable rent-seeking behavior is alleged to occur.

157. Notwithstanding recent improvements in data collection and dissemination (see Chapter 4), Bangladesh's education administration at the central level and the policy planning and implementing agencies are not adequately equipped to perform their oversight role. They have minimal capacity to conduct policy research, do planning and budgeting, monitor and evaluate programs, and assess school performance. The ministries do not have sufficient capacity to monitor the financial aspects of the subvention system, not to speak of the quality of instruction. They have little control over the collection of information from schools, resulting in substantial delays in the production of basic statistics. Information about student and school performance and about finances is not always reliable, nor is it available to the public.

158. Teachers' wages are not related to performance. While teacher salaries are low,⁴⁶ it is not clear that this is the reason for their poor performance, as manifested by their high rate of absenteeism. It appears that misgovernance in teacher recruitment, training, assignment to schools, salary payments, and supervision are some major factors behind the very low motivation on the part of the teachers to teach. Only these can explain why, despite being paid less than their counterparts in the government and government-aided schools, teachers in NGO schools seem to do better in classrooms (CAMPE 2000).

Low efficiency is due in part to unbalanced expenditures on labor and non-labor teaching inputs

159. A high share of government education expenditure at all levels is directed to teachers' salaries and salary-related subsidies to non-government institutions. In 1999/2000 salaries and salary-related subsidies accounted for 97 percent of recurrent expenditure at the primary level and 80 percent at the secondary level. Thus little funding is available for other inputs such as teaching materials, supplies, in-service training, and maintenance. Construction is another large item in education budgets. For example, although the number of government and government-supported primary schools has been largely stable for several years (there were 37,710 government primary schools in 1996 and 37,677 in 2000; see Government 2001a), construction of government-aided schools absorbed 28 percent of the capital budget in 1999-2000.

The tertiary sector, relatively small but in high demand, tends to subsidize private goods and does not focus enough on science and technology. It also fails to fully mobilize private resources.

160. Even though they still have pockets of excellence, Bangladeshi *universities* are deteriorating rapidly because of shortages of funding and the rapid politicization of campuses. Access to library, laboratory, and computer resources is very limited, and teacher salaries and related personnel costs absorb most of the resources. Few resources are available for research, even in the best universities. Within universities, resources are allocated among departments based on staffing and historical patterns instead of being responsive to the needs of students (or the economy). Consequently, there is intense competition for admission into some facilities, and scarcely any for admission into others. The universities tend to produce relatively few graduates in science and technology. Most graduates are in general studies. Appointments to the faculty are made by administrators, and promotions are largely unrelated to teaching performance or research output. Both students and faculties have become intensely political in recent years, with the consequence that university campuses have become quite unstable. Much instructional time is lost to demonstrations and strikes. Most government funding is used to support purely private services (the degree training of undergraduates and master's degree candidates) and, within this category, those majoring in general studies instead of scientific and technical fields.

161. The other part of higher education, the *degree colleges*, account for about 85 percent of higher education enrollment. Although they are subsidized by the government (albeit at a much lower level per student than the universities),⁴⁷ they finance about two-thirds of their costs through student fees. Because of the sub-system's rapid expansion, many of those teaching in degree colleges have limited education themselves. The degree colleges are nominally supervised by the universities, including the National University (NU), created expressly for this purpose, which currently supervises more than 900 degree colleges. However, the supervision is largely ineffective because of the limited capacity of the NU. It is difficult to justify the payment of subsidies to degree colleges, since the services they provide are mainly "private." It would be better to gradually terminate the subsidies that private degree colleges receive and

⁴⁶ NGO-run schools have lower teacher salaries, but tend to employ individuals with a lower level of formal education and less tenure

⁴⁷ Government degree colleges receive about 13 percent of the unit subsidy received by government universities, while non-government degree colleges receive about 6 percent (World Bank 2000).

privatize most of the remaining government degree colleges. The savings generated could be directed to the universities (public and private) to support their research programs.

The TVET system lacks links to the job market, has no impact on poverty reduction, and is almost entirely dependent on state subsidies

162. Employers complain that TVET training programs do not produce the needed skills. No incentives are given to managers or instructors to consult with employers. On the contrary, the centralized training system imposes rigidities on managers of institutions and limits the possibilities of capitalizing on local responsibilities and initiatives. TVET is almost exclusively geared to in-school male youth, while underprivileged youth outside the school system, especially girls, do not have access. Last but not least, TVET is expensive relative to degree colleges, and the beneficiaries—students and enterprises—share virtually none of the costs. The Government pays all the expenses, including providing trainees with stipends and subsidizing their accommodations. At the same time, equipment and consumable supplies are chronically underfinanced in most public institutions.

5. Policy priorities

163. As a result of a significant decline in fertility, Bangladesh is projected to experience declining demographic pressure on primary and secondary education. In particular, the population of primary age is expected to shrink from 16.7 million in 1999 to 14.2 million in 2005 and 13.6 million in 2008. The number of lower-secondary- and secondary-age children is also projected to decline. Analysis of public resource requirements under alternative scenarios indicates that in order to maintain the present coverage or even increase it from the existing 91 percent gross enrollment rate to 100 percent while maintaining inflation-adjusted unit costs and thus the “low quality,” the share of education in the budget can actually decline if annual GDP growth is maintained at around 5 percent, the average of the 1990s. If, however, the goal is to provide primary education to all and to improve the quality of this education—which would require more and better textbooks, better classroom facilities, more and better teaching and learning materials, better academic supervision, incentives for teachers to teach more hours per day, the hiring of additional teachers, provision of in-service training to teachers, provision of adequate sanitary facilities, and provision of universal coverage of lower secondary by 2008—the resource requirement rises to nearly 3 percent of GDP. This is most likely a minimum estimate of the true requirement because the calculations do not fully take into account the amount of additional resources needed to retain enrolled children and serve those who need to repeat grades. Building an increase in coverage at the secondary level to 50 percent of the age group by 2008 and allowing enrollment growth in higher secondary, tertiary, and technical education at its historical rate would increase the resources required to expand coverage and improve quality to 4 percent of GDP by 2008.⁴⁸

164. Given the Government’s already overstretched capacity (financial and managerial) and the poor quality of the existing education system, *the greatest challenge at this stage is to improve the quality of education services across the board,⁴⁹ reach the poorest of the poor, and resist popular pressures to expand the Government’s role as a provider of education.*

⁴⁸ See World Bank 2000 for estimation details.

⁴⁹ In fact, as *Engendering Development* (World Bank 2001a) reports, there is evidence that household demand for girls’ schooling tends to be more sensitive to school quality than household demand for boys’ schooling. Future improvements in school quality in Bangladesh should (at least in the long run) help reduce the need for large price subsidies to get girls into school. This would potentially free up budgetary resources for other uses.

165. Many of the strategies in the National Education Policy (2000)⁵⁰ are essentially sound and consistent with both sector needs and with standard economic criteria of efficiency and equity. However, some of the proposed strategies need rethinking in terms of priority and sequencing. For example, extending primary education from five to eight years should be viewed as a less urgent objective than improving the quality of the existing primary education system. Expanding vocational education at the secondary level should not be provided as part of the regular school curriculum. Expanding university capacity in science and technology by establishing more new universities is less desirable than improving the quality of existing science and technology universities (which are starved of resources). Government policy should be more supportive of private universities while putting in place quality assurance mechanisms for both private and public universities as well as for degree colleges.

166. The quality of education across the board is the main concern of civil society, parents, the public at large, and development partners. Intertwined with quality deficiencies are concerns about equity. Specific policy and management improvements in pursuit of better quality and equity include:

- Increasing funding for education from 2.2 percent of GDP currently to 4 percent by 2010 while giving the highest priority to improvements in the quality and equity of basic education. Analysis of public resource requirements under alternative scenarios indicates that in order to maintain the existing coverage with the existing “low quality,” the share of education in the budget can stay at its current level (see World Bank 2000c). Improving the quality and expanding the coverage of post-primary education would call for significant additional resources.
- Rebalancing expenditures on labor and non-labor teaching inputs. Increasing the allocation for teaching and learning materials from the current \$0.50 per student to the UNESCO recommended norm of \$5 per student at the primary level is desirable.
- Expanding the program of contracting the management of non-performing government schools and non-formal education to NGOs and the private sector. The non-formal basic

Box 5.2 BRAC: Innovation in Basic Education

BRAC has been at the forefront of innovative delivery mechanisms in education to the underprivileged rural children using a variety of methods which now have been replicated around the world. BRAC education programs target two age groups: 8-10 year old with a 4-year program called Non-Formal Primary Education (NFPE); and 11-14 year old with a 3-year program called Basic Education for Older Children (BEOC). Starting in 1985 with experimental programs in two pre-primary schools and 20 non-formal primary schools, the program has expanded gradually and currently covers over 300 Thanas with 34,500 non-formal primary schools. The total enrollment in these schools is 1.1 million (66 percent of which are girls).

The schools are organized by BRAC staff and communities which donate rooms while parents contribute Tk. 5 per child per month to cover the cost of learning materials. Schools are run by Management Committees and parents have to attend monthly meetings which fosters their interest in education. Almost all BRAC teachers are local women with at least 9 years of education who receive foundation and mathematics training and attend a one day refresher course every month.

BRAC schools have flexible hours of operation (subject to parents' agreement), but contact time with teachers is fixed at 3 hours for grades I-III and at 4 hours for grades IV-V. Supplementary materials (story-books, work-books) are widely used in addition to government textbooks, which is especially suitable for underprivileged children. The curriculum is designed to suit children's receptivity and based on the assessment of demands and activity-based methods. Some life-skills supplementary subjects (health, family, environment) are also taught in grades IV-V. The program is characterized by co-education practices which help the development of the mental and recreation facilities of the children. As a result, the drop-out rate is very low and the rate of admission of BRAC graduates to the government schools is over 90 percent.

Source: Innovation and Experience in the Field of Basic Education in Bangladesh, CAMPE 2000.

⁵⁰ The National Education Policy prepared by the previous Government has not been endorsed by the current Government. A number of committees are working on policy issues.

education system provides good learning opportunities to large numbers of primary-age children, including some of the most disadvantaged and hard to reach (Box 5.2). The nature of provision within this sub-system is varied and provides some examples of innovation in teaching practice.

- Increasing community involvement. Although there has been some progress in increasing community involvement, the selection of SMC members is not altogether transparent. The representation of women is low, and the members are often unrepresentative of the local community. A critical evaluation of SMCs is warranted, especially since it cannot be assumed that they always work toward increasing provision for marginalized groups.
- Using area-based poverty indicators more widely in the allocation of public funds under the recently monetized FFE (now called Stipends for Primary Education), in the distribution of free teaching and learning materials in primary education, and in the Female Stipends Program in secondary education.
- Using examination results as well as other performance-based criteria (e.g., indicators of effective school management practices, number of qualified teachers) to direct subvention payments to performing schools, particularly at the secondary and degree college levels.⁵¹
- Undertaking several institutional and management changes that would also help improve the efficiency of service delivery, including:
 - Refocusing the roles of the central Government and district- and thana-level authorities in the sector. Management of primary and secondary education should be decentralized to the district and thana levels, while the central Government's role in basic education should be confined to the provision of technical services, including transparently allocating resources among districts, setting standards, setting sector policy and curricula, conducting national assessments at regular intervals, conducting research, and disseminating research results and other education-related information to local governments and to the general public.⁵²
 - Adopting a programmatic approach in the education sector for budgeting and accounting.
 - Rationalizing (including phasing out) the publishing, printing, or distribution of textbooks for any level of schooling, including primary, while maintaining the Government's role in curriculum development and maintenance of standards in textbook contents.
 - Streamlining the procurement processes for works, goods, and services, especially in the Facilities Department, where there are widespread governance problems. Strengthening monitoring and evaluation mechanisms.
- Reducing the dependence of public universities on the budget and instead tapping the resources available from a student population that is already buying private education—the most important measure, given the private good nature of tertiary education. At the same time, the Government needs to shift its university funding from financing private services (undergraduate and master's degree-level education) to those functions of higher education that are more nearly public goods. Financial support for research should be the highest priority and should be equally accessible to public and private universities, independently of their ability to mobilize grant funding from the non-government sector (so as to prevent discouraging universities' entrepreneurial activity).

⁵¹At the same time it is necessary to strengthen the safeguards to ensure that the system is not abused through manipulation of examination results.

⁵²Implementation of the Secondary Education Sector Improvement Project (SESIP) and the Primary Education Development Program (PEDP) with ADB assistance aims to improve the system in areas such as decentralization of management, teacher training and academic supervision.

- Introducing fees for university undergraduate and master's courses. These should be accompanied by a means-tested scholarship program and, if possible, a government-supported loan program. Additional resources for expanding university revenues and augmenting staff incomes could come from formalizing consulting work, establishing business offices, and forging links with industry and services (under appropriate safeguards).
- Focusing TVET expenditures on labor market research that could guide private investments in TVET. Over the long term the best hope for a vibrant TVET system is to turn it over to the non-government sector, which has demonstrated the capacity to develop local needs-based curricula customized to the experiences of trainees and has achieved strong employment rates for graduates.

Chapter 6

HEALTH

Health outcomes have improved over the years. The advances are due to the Government's close partnership with NGOs, the implementation of an affordable national health policy, and significant improvements in the availability of food, infrastructure, information, and knowledge. Public resources devoted to health have been rising over the years, but still are quite limited, representing 1 percent of GDP. Apart from improving the efficiency of the existing health system, the challenge for the future is to find a way to de-link the Government's provider and financier functions, and concentrate service provision on areas of comparative advantage (referral, specialist, emergency) and public good (policy, regulation, and information). The poverty focus of health expenditures could be best improved through provision of much-needed services to hard-to-reach populations (especially in urban areas), expanded coverage of nutrition programs, and increased expenditures for pre- and postnatal care.

1. Introduction

167. Bangladesh has an impressive record of health outcomes over the years. Infant and under-five mortality has been reduced by 50 percent, the total fertility rate halved through voluntary acceptance of contraception, life expectancy increased by 14 years, and substantial progress made in prevention of cholera and malaria as well as in near-elimination of polio and leprosy. The latter is a Millennium Development Goal of the Government that has already been achieved. These advances are due to the Government's close partnership with NGOs, especially in the area of family planning and immunization, and the implementation of an affordable (basic) national health

program. Sound interventions in other sectors—such as wider availability of food, expansion of education, and access to safe water—leading to an increase in people's demand for better health services, have also been important contributing factors (Box 6.1). Taking into account the Government's low level of resources, the national health policy rightly focused on the most pressing needs of the population—primary health care in rural areas, population control, and immunization. Nevertheless, there are still major gaps in health outcomes and policies: maternal mortality is very high, the child malnutrition rate is among the highest in the world, and one of Bangladesh's successes, the provision of safe water supply to 97 percent of the population, is jeopardized by the extensive presence of ground water contaminants such as arsenic. There are other lingering problems: low birth weight, a slowdown in the reduction in fertility rates,⁵³ and the persistence of infectious diseases (see Table 3 for health indicators).

Box 6.1: Other determinants of health outcomes

In the economic literature causal links have been firmly established between outcomes such as child health and factors such as mother's education, availability of safe water and sanitation, access to credit,* and prices of food. Similarly, a number of empirical studies in diverse cultures have documented that improvements in women's labor force participation or education reduce fertility rates. And improved food availability is one of the most important factors leading to higher life expectancy. All such factors (apart from a recent setback in access to safe water due to arsenic contamination) have consistently and dramatically improved over the course of three decades in Bangladesh (see Chapters 6 and 9).

*The impact of micro-credit programs, including the Grameen Bank, on the nutritional status of children in rural Bangladesh was evaluated in Pitt et al. (1998). Credit programs directed to women have a large and statistically significant impact on two of three measures of the nutritional well-being of both boy and girl children.

⁵³ There is a debate on the trends in the fertility rate. The main sources of the total fertility rate (TFR) data for Bangladesh are the Bangladesh Demographic and Health Surveys (BDHS) conducted in 1993/94, 1996/97, and 1999/2000. The TFRs from these three surveys refer to the three-year period before the survey date: 3.4 births per woman for 1991-93; 3.3 for 1994-96; and 3.3 for 1997-99. The confidence intervals around these estimates indicate that there is no significant difference between the estimates, suggesting that fertility in Bangladesh has remained constant and unchanging since the early 1990s. However, another source for

168. Given the limited amount of government resources devoted to health (around US\$3.60 per year per capita), the private sector plays a large role in the provision and financing of health services. The largest group of providers are qualified and unqualified drug retailers, who serve the dual purpose of prescribing and selling drugs and accounted for almost half of the value of all health services provided in 1997. In addition, there are private qualified and unqualified practitioners who provide modern care as well as traditional and homeopathic care. Since households extensively use their private resources to purchase health care (US\$7 per year per capita), the operation of such a large number of private agents in an unregulated framework is a matter of concern (Bangladesh National Health Accounts 1998).

169. The government health program is organized into a four-tier system. Forty-four medical colleges (including specialized hospitals) and 80 district hospitals represent the two highest tiers of the health system. Upazila Health Complexes (460) provide both inpatient and outpatient services; and Union Health and Family Welfare Centers (3,275) deliver mostly primary services. Until recently within each union, health services were provided to communities by outreach or “door-step” programs and mobile clinical staff. Community clinics extend the health infrastructure to the community level in certain areas. The Ministry of Health and Family Welfare (MoHFW) is the apex body managing the government health sector. It consists of two major directorates—the Family Planning and Health Directorates—and several auxiliary directorates (i.e., the Directorate of Drug Administration, National Institute of Population Research and Training (NIPORT)). The first two directorates have some duplicate functions.

2. Government expenditures and policies

There is broad agreement among the Government, donors, NGOs, and other stakeholders on the priorities of the health policy. This policy, supported by sustained increases in resources, emphasizes rural primary care and family planning

170. Bangladesh’s national health program has over the years focused on the provision of affordable rural primary health care (through Upazila Health Complexes and Union Health and Family Welfare Centers) and on developing partnerships with NGOs.⁵⁴ NGOs have been an extremely important source of Bangladesh’s successes, especially in the area of family planning and immunization services. Historically, most health promotion services have been supplied by NGOs. They are credited with popularizing oral rehydration therapy (ORT) for diarrhea and the use of contraceptives as well as for providing services in nutrition and in tuberculosis (TB) and leprosy management, mainly under contract from the Government. The immunization program, implemented in a collaborative framework, expanded from less than 1 percent of the population in 1981 to over 90 percent in the early 1990s. More recently NGOs have become increasingly active in promoting behavioral changes to reduce the spread of HIV/AIDS, and they are increasingly being commissioned by the Government to provide primary and community-based health care and nutrition services.

TFR data—the Bangladesh Bureau of Statistics’ (BBS) Health and Demographic Survey (HDS) 2000—shows a slight decline during the 1990s, down to 2.9 births per woman. There are reasons to believe, however, that this figure might underestimate the true TFR, since the low birth rate for teenage women (15-19 years) reported in the HDS is not corroborated by the data from the other surveys. Besides, other sources indicate that there has been little sign of delay in early marriage, little increase in contraceptive use among teenage married women, and little or no increase in average age at first births. Therefore, the flat fertility figures during the 1990s estimated from the BDHS seem more plausible.

⁵⁴ Over the period 1975-98 the development of the health and population system was undertaken by the Government and its development partners through the implementation of a large number of projects—Pop-1, Pop-2, Pop-3, and the Fourth Population and Health Project (FPHP). The FPHP provided support to virtually all aspects of health and family welfare. In this sense it was a sector project, unlike its predecessors, which had emphasized population issues. There were 11 co-financiers, and additional parallel support was provided by other donors, including UN technical agencies. The World Bank led a consortium of these donors.

171. Consistent with the long-standing emphasis accorded by public policy to human resource development, public spending on health has been increasing in both nominal and real terms during the past 30 years. Table 6.1 provides a broad view of the evolution of public expenditure on health over this period, showing consistent increases at least until 1997.

Table 6.1: Bangladesh—health and family welfare allocation and expenditure in successive Five-Year Plans, 1973-2002

Category	First FYP (1973-78)	Two-Year Plan (1978-80)	Second FYP (1980-85)	Third FYP (1985-90)	Fourth FYP (1990-95)	Fifth FYP (1997-2002)
Allocation (crore taka*)	147.8	117.6	781.0	1,420.0	2,658.0	9,086.2
Share of health and family welfare allocation in total budget allocation (percent)	3.7	3.6	4.9	5.7	7.7	10.58
Expenditure (crore taka)	133.17	114.57	717	917.5	2,499	n.a.
Share of Health and Family welfare expenditure in total budget expenditure (percent)	8.1	4.8	5.2	5.5	7.8	n.a.

*Prices of the first year of the Five-Year Plan.

Source: Health Economic Unit (2000), PER Health and Population Sector. MoHFW.

Introduction of the Health and Population Sector Program in 1998 brought about major structural reforms in the sector

172. In 1998 the Government adopted a new donor-supported approach to health service delivery called the Health and Population Sector Program (HPSP). The program implementation plan prepared for the HPSP estimated its cost at US\$3.2 billion in 1998-2003, of which US\$900 million was to be provided by the development partners. The HPSP represents a shift from a project to a program approach and involves extensive policy and structural reform. It focuses on delivering an Essential Services Package (ESP) and envisages the following reform actions:

- Unifying the bifurcated health and family planning service delivery structure.⁵⁵
- Shifting to provision of “one stop” service delivery by phasing out the existing Expanded Program of Immunization (EPI) outreach and satellite clinics and establishing fixed service points (community clinics).
- Reorganizing the directorates and the ministry through a redefinition of roles, responsibilities, and accountabilities (especially developing integrated support services focusing on human resource management, development, and training; management information systems; behavior change communication; quality assurance; and procurement).
- Decentralizing thana-level health and family planning services.
- Improving hospital management through delegation and financial authority.
- Enhancing cost recovery (through fee retention and local fee utilization).

173. The ESP includes five main categories of services—child health, limited curative care, maternal and other reproductive health, family planning, and communicable disease control and behavior change communication. It was designed to constitute 60-70 percent of the combined health budget. It was envisaged that the ESP would be delivered through facilities at the thana level and below, including

⁵⁵ The MoHFW is organized into separate health and family planning cadres. The health services infrastructure and personnel are predominantly supported by the revenue budget, while the family planning infrastructure and personnel are mostly supported from the development budget.

through the construction of 13,500 “one stop” community clinics over a four-year period. A mechanism for expanded community participation in the management and funding of these community clinics was envisaged under the HPSP. Some services were planned to be delivered through specialized NGOs. With respect to hospital-level services, an especially important element was to make the ESP referral system effective.

174. The shift in budget management from a project to a programmatic approach (including integrating financial management and streamlining procurement systems) under the HPSP, called the sector-wide approach (SWAp), mandated that 130 donor-financed projects in the health sector be brought within the development budget’s allocation and accounting framework under the management of line directors (as opposed to project directors) in the MoHFW. The HPSP also envisaged policy and regulatory actions, especially in the area of drugs and private sector involvement.

Health expenditures declined in real terms between 1997 and 2000, largely because of deficiencies in the procurement system

175. Analysis carried out by the Health Economics Unit (HEU) of the MoHFW over 1993-2000 shows that, while the budget allocations to health continued to increase, since 1997/98 actual expenditures declined both in real percapita terms (see Figure 6.1)⁵⁶ and as a share of GDP. Total spending in 1999/2000 was only 84 percent of the original budget (Table 6.2). This expenditure under-run, which is mostly in the development budget, is largely the result of less than full utilization of donor contributions, which represent over 70 percent of all development budget resources.

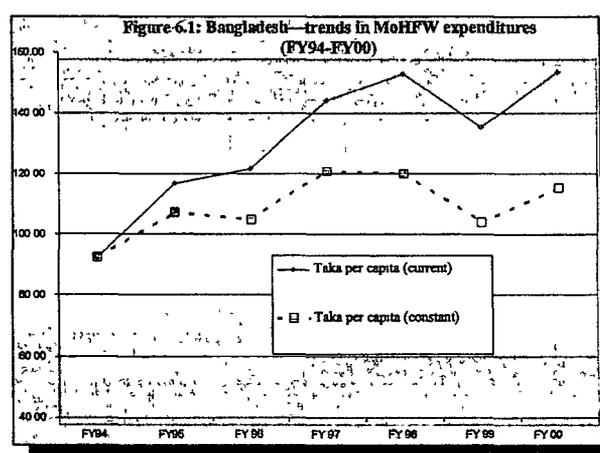


Table 6.2: Bangladesh—ministry of health and family welfare current and Annual Development Program expenditures, FY94-00 (Tk millions at current price, exc)

	FY94	FY95	FY96	FY97	FY98	FY99	FY00
Current expenditure							
Expenditure	5,040	5,930	6,470	7,330	7,860	8,760	9,430
Expenditure as a share of budget allocation (percent)	116	103	94	103	101	92	97
Share of MoHFW in total current expenditure (percent)	6.6	6.2	6.0	6.2	6.0	6.0	3.4
Annual Development Program (ADP) expenditure							
Expenditure	5,690	7,810	8,120	10,250	11,120	9810	10,260
Expenditure as a share of budget allocation (percent)	109	102	91	108	98	77	75
Share of MoHFW in total ADP expenditure (percent)	6.7	8.1	8.5	9.2	9.0	6.9	10.9
Total MoHFW budget (current and ADP)							
Expenditure	10,720	13,740	14,590	17,580	18,980	18,570	19,690
Expenditure as a share of budget allocation (percent)	112	102	92	106	100	87	84
Share of MoHFW in total Government expenditure (percent)	6.6	7.2	7.2	7.6	7.5	6.5	5.3
Total MoHFW expenditure as a share of GDP (percent)	1.12	1.27	1.21	1.36	1.34	1.15	1.10

Source: Health Economics Unit, MoHFW (2001a).

⁵⁶ During the last two years of the HPSP total annual health spending has declined by 0.8% in real terms, compared with an 18% increase in the previous two years (HEU, MoHFW, 2001a).

176. The HEU analysis suggests that the shortfall in spending is due to two factors: (i) the general and continuing lack of understanding about procurement procedures (IDA and GOVERNMENT) due to an acute shortage of trained procurement experts; and (ii) cumbersome and time-consuming guidelines for procurement of supplies and services, particularly through the reimbursable program aid pool (RPA). A recently completed World Bank mid-term review of the HPSP identified procurement as the single most critical operational issue in the HPSP. Disbursements from IDA and pooled funds during the first two years of the implementation of HPSP was US\$136 million, or about 40 percent of the original commitment (World Bank 2000d).

Several important policy objectives of the Health and Population Sector Program—such as focusing resources on the Essential Services Package, directing resources to facilities located close to users, and limiting the wage bill—have been achieved

177. The HPSP target allocations to the ESP have been preserved. As shown in Table 6.3, the ESP claimed 58 percent of the total MoHFW expenditures in 1999. In line with government policy objectives, expenditures on reproductive health and child health represented, respectively, 45 percent and 36 percent of the total ESP (or, respectively, 26 percent and 21 percent of the combined MoHFW development and revenue budgets).

Table 6.3: Bangladesh—MoHFW development and revenue budget expenditures by ESP component, 1999

ESP component	Development budget expenditure (attributed to ESP)			Development budget plus apportioned revenue		
	Government (Tk millions)	RPA* + DPA** (Tk millions)	Total (Tk millions)	Share (percent)	Total (Tk millions)	Share (percent)
Reproductive health						
Family planning	2,344	1,952	4,296	61.1	3,213	28.1
Maternal health	113	260	373	5.3	1,512	13.2
Other reproductive health	13	72	85	1.2	491	4.3
Child health	168	904	1,072	15.2	4,049	35.5
Communicable disease control	23	2	25	0.4	387	3.4
Curative care	1		1	0	1,431	16.4
Behavior change communication	15	316	331	4.7	331	12.5
Overhead	759	89	848	12.1	0	2.9
Total ESP	344	3,595	7,031	100.0	11,439	100.0
Total MoHFW expenditure			1,026		19,690	
ESP share of total MoHFW expenditure (percent)				69		58

Note To infer the share of ESP in the total MoHFW budget, spending from both budgets for each of the main ESP components were analyzed separately. In the case of the Development Budget, expenditure under each Program line was assessed separately for ESP content. In order to apportion expenditure from the Revenue budget, a time use survey was carried out to assess the amount of time staff spent on delivering each type of service. Details of the analysis can be found in HEU, MoHFW (1999) and HEU, MoHFW (2001).

* Reimbursable program aid, ** Direct project aid

Source Health Economics Unit, MoHFW, 2001

178. Table 6.4 shows that the HPSP target to direct resources to the facilities closest to users has also been achieved, with 44 percent of current expenditures spent on facilities at the thana level and below, and more than one-third spent at the district level. All services delivered at the thana level and below as well as some other services delivered at the district level are considered part of the ESP.

Table 6.4: Bangladesh—allocations of MOHFW revenue budget, FY98/99

	Expenditure (Tk million)	Share (percent)
Thana and below	3,824	44
District level	3,060	35
Medical education institutes	384	4
Divisional institutions	21	0
Secretariat	901	10
Director general office	185	2
Others	377	4
Total	8,752	100

Source: Health Futures in Bangladesh. World Bank (2002), based on MoHFW data.

179. The HPSP target to contain the wage and salary bill to under 50 percent was also met. As shown in Appendix Table A6.1, this item accounted for 48 percent of total MoHFW expenditure (67 percent of the revenue budget and 28 percent of the development budget).

180. There were other notable areas of progress under the HPSP. The sector-wide program management approach has been well adopted in the MoHFW; the unification of health and family planning services at the thana level and below has been completed; support functions, such as monitoring, training, procurement, and communications, have been unified; and a substantial number of field staff have been transferred from the development budget to the revenue budget and their job descriptions have been rationalized and revised.

Public health expenditures play an important redistributive role. Outlays for child care and prenatal care benefit the poor the most

181. The benefit incidence analysis of public expenditures on health was conducted in parallel with that of education expenditures.⁵⁷ District-level disaggregated data from the MoHFW were used in conjunction with utilization episodes from the 2000 Household Income and Expenditure Survey to infer the per-visit health subsidy.⁵⁸ The analysis shows that the share of all public health expenditures accruing to the poor is an estimated 45 percent, while their share in the population is 50 percent and their share in overall income is an estimated 26 percent (Table 6.5). Such a distribution of health expenditures reduces inequality and adds proportionately more to the welfare of the poor. In fact, the health subsidy represents 1.45 percent of the average per capita expenditure of the poor and 0.8 percent of that of the non-poor. Also, public health expenditures are more equitable than private health expenditures. Of all categories of health expenditure analyzed in this report, ESP allocations to child health reduce inequality the most. The distribution of these outlays is found to be strongly pro-poor, in large part because poor households tend to have more children. By contrast, allocations to limited curative care show the most unequal distribution, with the poorest 20 percent of the population having considerably less access to the subsidy than to the rest of the population.

⁵⁷ Caveats to BIA are mentioned in Chapter II. In addition, a recent finding shows that a substantial part of health expenditures is diverted from health care as absenteeism among doctors reaches about 40 percent at the thana level and nearly 75 percent at the UFWC.

⁵⁸ As in the case of education, allocations for health are made from the revenue and development budgets. But unlike for education, development expenditures are used to finance salaries and operating costs. This analysis is based on recurrent and apportioned ADP expenditures. Additionally, the following assumptions were made: (i) child health expenditures benefit users of immunization services and users of curative care for child illnesses; (ii) curative care expenditures as well as expenditures on the non-ESP components benefit users of curative care in government facilities and from government doctors, (iii) maternal health expenditures benefit women who utilized prenatal or postnatal services or delivered a child in an institutional setting; and (iv) expenditure on family planning and communicable disease control benefited the population in a district as a whole.

182. The rural and urban poor command about the same proportion of overall health subsidies in their respective sectors. However, the very poor (the poorest 20 percent) of the urban population commands a smaller share of subsidies than their rural counterparts (Appendix Table A6.2). This pattern is driven by the fact that the poorest 20 percent of the urban population has considerably less access to government subsidies for curative care.

Table 6.5: Bangladesh—distribution of units of government-provided care, private health expenditures, and government subsidies across income strata, 2000

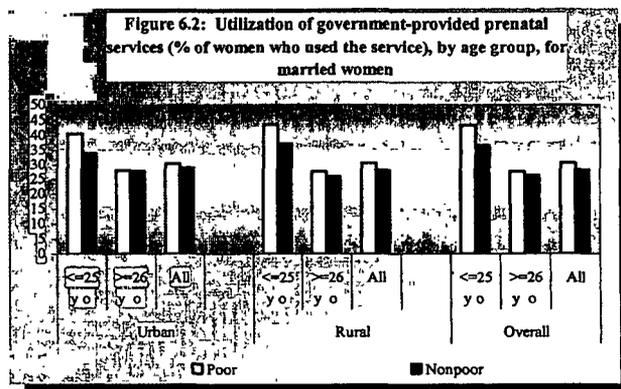
	By quintile					By poverty status		Total
	1 lowest	2	3	4	5 highest	Poor	Non-poor	
Per capita expenditure	8	12	16	22	42	26	74	100
Visits to public facilities								
Curative visits	15	13	23	24	26	38	62	100
Child care curative visits	16	17	27	21	18	46	54	100
Prenatal visits	19	20	21	20	20	50	50	100
Deliveries	10	12	14	21	42	28	72	100
Postnatal visits	13	16	18	23	30	38	62	100
Immunization visits	27	23	20	17	13	61	39	100
Private expenditures (for curative visits to government facilities)								
Fees	9	5	13	24	49	19	81	100
Drugs	7	10	18	21	44	23	77	100
Transportation costs	5	10	13	28	45	19	81	100
Informal payments	4	5	14	8	71	14	86	100
All private medical costs	7	8	15	18	52	20	80	100
Public subsidies								
Family planning and control of communicable disease	18	18	19	19	24	46	54	100
Limited curative care	11	21	22	18	28	42	58	100
Maternal health*	20	13	20	18	29	44	57	100
Child health**	23	21	19	18	18	54	46	100
All health expenditure	16	19	21	18	26	45	55	100
Total health subsidy as a percentage of per capita expenditures	1.65	1.38	1.16	0.77	0.60	1.45	0.78	1.11

* Combines expenditure on maternal health with utilization of prenatal and postnatal services and institutional deliveries

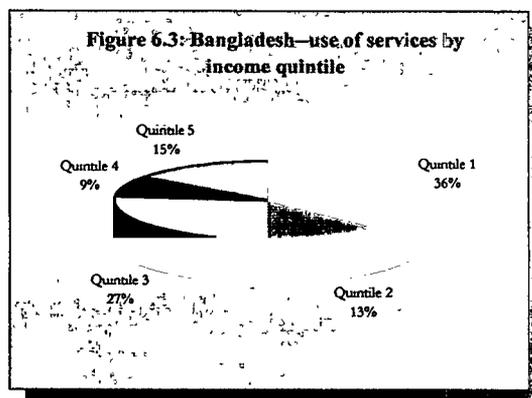
**Combines expenditure on child health with curative visits for child illnesses and immunization visits

Source: World Bank staff estimates from 2000 HIES and MoHWF data.

183. An especially encouraging finding is that the HPSP targeting of the poor with prenatal care and immunization services has been successful. As shown in Figure 6.2 and Appendix Table A6.3, the utilization rate for poor women below 25 years of age, estimated at 43 percent, is higher than that for their non-poor counterparts, estimated at 37 percent. The difference in immunization rates between poor and non-poor children is negligible, with both estimated at about 90 percent (Appendix Table A6.4).



184. The HEU has carried out benefit incidence analysis based on an exit survey of 1,000 patients during August-September 2000 in four divisions of the country—Barisal and Rajshahi and later Chittagong and Sylhet—in a range of facilities at upazila level and below, sampling both outpatients and inpatients (HEU 2001a). Its analysis of attendance rates shows that primary health services are primarily used by lower-income groups. The bottom quintile accounts for more than 35 percent of visits, while the richest group accounts for only 15 percent (Figure 6.3).



3. Key sector issues

185. Despite this relatively strong record, there are still numerous gaps in health outcomes. Bangladesh is not likely to achieve some Millennium Development Goals. At 392 per 100,000, its maternal mortality ratio is among the highest outside of Sub-Saharan Africa, mainly because of the low level of clinic deliveries (95 percent of deliveries take place at home) and insufficient number of trained midwives. And despite increasing use of contraceptives, the total fertility rate has been stagnating at around 3.2 births per woman for the last five to six years. This is due in part to insufficient diversification of available modern contraceptives and their irregular use.

186. Another Millennium Development Goal—reduction in child malnutrition—remains a challenge. A first generation of strategic goals in reducing malnutrition has been achieved in Bangladesh. This includes the generation of a high level of policy support, development of a programmatic approach, and evolution of conducive structures in the health and food policy arena. While future economic growth will provide strong impetus for continued reductions in malnutrition, it is most likely that achievement of this Millennium Development Goal will require additional interventions. For example, a recent study of poverty and child malnutrition in Bangladesh shows that there are a host of factors that need to be addressed to improve child malnutrition (Deolalikar 2002). Using data from both the Child Nutrition Survey (CNS) 2000 and the 1999-2000 Demographic and Health Survey (DHS), the study shows that delayed and early terminated breastfeeding, low family food intake, low mother's education, lack of access to health facilities, low village electrification, high food prices, and lack of access to safe water and sanitation are associated with worse nutrition outcomes for children⁵⁹. Thus efforts to improve

Box 6.2: Bangladesh Integrated Nutrition Program

The Bangladesh Integrated Nutrition Program (BINP) is a large, coordinated effort launched by the Government in 1995 to address the high prevalence of child malnutrition in the country. Under the community-based nutrition component a large number of female community nutrition promoters are employed to undertake growth monitoring and promotion among children, nutritional support for pregnant and lactating women, behavior change communication about nutrition and related issues for the whole community, and supplementary feeding for severely malnourished or growth-faltering children and pregnant and lactating women. Services are provided through 9,000 community nutrition centers donated and managed by village committees and 14 non-governmental organizations contracted by the Government to mobilize communities and deliver services.

In 1998 a World Bank team reviewing project progress noted that severe malnutrition among children under two had declined from the baseline figure of 13 percent to 2 percent. Also, the number of low-birth-weight babies decreased by 30 percent, and there had been an improvement in weight gain among at least half of the pregnant women in project areas. The success of the BINP, undertaken in limited area, has demonstrated that community mobilization and community-based nutrition services delivered with the help of NGOs can bring rapid, sustainable reductions in severe malnutrition among children and deliver targeted food and micronutrient supplements to reproductive-age women suffering chronic energy and micronutrient deficiency.

Source: *Poverty in Bangladesh: Building on Progress* WB 2002.

⁵⁹ The presence of public food distribution programs (Food for Work and Vulnerable Group Feeding) does not have large effect in reducing malnutrition on average, but has a large positive effect in reducing malnutrition among the poorest. For more detail, see the companion Poverty Assessment Report (2002).

child health outcomes should be supported through cross-sectoral interventions that include improvements in access to clean water, currently threatened by such contaminants as arsenic and pathogens. Future interventions should also build on the success of the Bangladesh Integrated Nutrition Program to expand the coverage of nutrition programs (Box 6.2).

187. There are other lingering problems, such as low birth weight and the persistence of infectious diseases. In addition to the emerging additional burden of arsenic poisoning, there are serious challenges associated with the changing disease patterns. Currently, infectious and communicable diseases as well as non-communicable diseases are prominent causes of mortality. Injuries (road traffic accidents and drowning) are by far the leading cause of death for 5-14 year olds and 15-44 year olds (Appendix Table A6.5). Respiratory and digestive problems take the highest and second highest toll on the 0-4 and 5-15 age cohorts, respectively. Tuberculosis is the second most common cause of death among adults ages 15-44, and cardiovascular diseases for those ages 45 and older. The contribution of injuries and non-communicable diseases to total morbidity and mortality is projected to increase, placing new challenges on the health system.

188. Besides the shortfalls in health outcomes, substantial inequalities persist in many health indicators, especially those relating to child health (Table 6.6).

Table 6.6: Bangladesh—infant and under-five mortality rate and children's nutritional status, 1996/97

Quintile	Infant mortality rate*	Under-five mortality rate *	Children stunted (percent)	Children moderately underweight (percent)	Children severely underweight (percent)
Poorest	96.3	141.1	50.5	60.3	28.7
Second	98.7	146.9	50.8	53.5	26.2
Middle	97.0	135.2	41.9	49.2	21.7
Fourth	88.7	122.3	34.8	41.8	13.1
Richest	56.6	76.0	23.5	28.1	5.6
All	89.6	127.8	41.3	47.6	19.8
Poor/rich Ratio	1.70	1.85	2.149	2.15	5.13

*deaths per 1,000 live births

Source: Demographic and Health Survey (DHS) 1996/97.

189. There are three institutional problems in the health care system, that, if not addressed, will seriously inhibit the Government's ability to address the increasing health needs of the population.⁶⁰ These problems pertain to (i) the slow progress in implementing the HPSP; (ii) the lack of efficiency in the public sector; and (iii) the ill-defined role of the non-public sector.

- **The HPSP is facing implementation problems.** The most important of these problems are (i) lack of capacity in procurement, financial management, accounting, and auditing, which leads to delay and disruption in project implementation; (ii) delay in the unification of health and family planning services at the district and central level, which leads to confusion over roles and responsibilities at the field level, wastage of resources, and duplication of activities; and (iii) lack

⁶⁰ There is also a growing perception of increasing corruption in health service delivery. Doctors as well as the public are very vocal about systemic corruption in procurement, the registration of clinics, the provision of medicine and supplies, and the appointment, posting, and promotion of medical professionals. Even after admission, extra payments are routine aspects of treatment, whether in government or private facilities. Another set of problems pertains to the rigidities in budget management and the duality of the health budget, leading to sub-optimal geographic allocation rules and imbalances between recurrent and development expenditures. These problems, however, are symptomatic for nearly all sectors of the economy and thus discussed in Chapter 4

of coordination and politicization of site selection for community clinics, a large and basic component of the program, which has made many facilities functionally ineffective.⁶¹ The Government recognizes these operational problems and delays. It has expressed reservations about the complexity of the program and has indicated that it finds it difficult to monitor the various components of the program.⁶² In order to make the program effective, the Government intends to commission a full review by the Implementation and Monitoring and Evaluation Division (IMED) of the operational strengths and weaknesses of the HPSP sector approach. Notwithstanding these problems, the Government stated its unambiguous intentions to retain the SWAp and possibly expand it to other social sectors.

- **The productivity of thana and union facilities is very low by international standards.** Poor management of thana and union facilities, sub-optimal location and staffing of the facilities, and doctor absenteeism and inadequate provision of medical supplies lead to low quality and hence low attendance rates and low productivity and high unit costs relative to facilities in other large low-income countries (Appendix Table A6.6). This situation is particularly worrisome because these facilities attract the bulk of resources and represent the backbone of health service delivery. One of the reasons for low productivity is that government clinicians have weak incentives to increase their productivity in government work, since they can sell their services to private clients. In fact, the public (especially the urban non-poor) is more likely to seek medical care from government-employed doctors working in private practices than from those working in public facilities (Appendix Table A6.7).⁶³
- **Contrary to the objectives of the HPSP, there has been little progress toward efficient mobilization of private providers.** Given the deep penetration of private providers in the health market and the large volume of private health spending, regulation and enforcement of quality and standards have become essential to ensure the effectiveness of private spending.

4. Policy priorities

190. As medical technology continues to improve worldwide, new treatments are becoming available, improving the means to prevent and cure disease. Education and rising incomes give citizens greater control over their health, leading to increased demand for various treatments. Bangladesh's public health system suffers from major inefficiencies, and public

Box 6.3: Toward comparative advantage in health service provision?

Facility	Type of service
	Public
Medical college hospitals	Referral services
District and general hospitals	Curative and emergency services
Thana health complexes	Curative and emergency services
Union-level facilities and below	Preventive and simple curative services
	Private
Qualified practitioners	Curative services
Private clinics and hospitals	Curative services
NGOs	Health promotion, preventive, and specialist services (such as for TB and leprosy)
Unqualified practitioners	Simple curative services
Pharmacists	Simple curative services

Source: *Health Futures in Bangladesh: Some Key Issues and Options*, World Bank 2000.

health facilities are not the preferred choice of the public. In this context the most promising avenue for responding to the increasing health needs of the population is to de-link the Government's provider and financier functions, and concentrate service provision on areas of comparative advantage (referral,

⁶¹ See Bangladesh Health and Population Sector Program, Aide-Memoire, Mid-Term Review, and Annual Program Review (December 2000) for a complete list of implementation problems facing the HPSP.

⁶² In addition, the Government is concerned about the large amount of resources devoted to consultants' wages and training financed from donor resources.

⁶³ If, as is likely, these government-employed doctors treat private patients during official hours of work, then part of the government health subsidy intended for the public is misappropriated by them.

specialist, emergency) and public good (policy, regulation, surveillance, information) (Box 6.3).⁶⁴ Taking into consideration the capacity and resource constraints in the public sector, the Government should capitalize on the existing potential for greater involvement of the private sector, NGOs, and grass-roots community organizations, and contract out the provision of services at the primary level while improving the incentive system for productivity enhancements in public facilities. The following policy changes appear necessary:

- Make strategic choices about the role of the Government in improving health outcomes in a resource-constrained environment. Extensive work is required to assess the efficiency of different providers (the Government, NGOs, and private providers) and to develop an adequate regulatory framework. The Government needs to reassess the effectiveness of its strategy for mobilizing the potential of private providers and informal pharmaceutical markets. There is considerable scope to attract greater participation of NGOs in service delivery. Since the Government's capacity for monitoring is weak, promoting self-regulation and strengthening the consumers' voice by setting up consumer councils at national and regional levels should be part of this strategy.
- Review closely the experience with establishing the first 2,500 of the proposed 13,500 community clinics throughout the country before further implementation. It appears that there are weaknesses in operationalizing these "close to client" services, especially the politicization of site selection and the coordination of construction, staffing, and supply.⁶⁵ In recognition of the need to ensure that the basic services are available in close proximity to users, the Government should provide clear guidelines to field staff on how to provide services both with and without community clinics. A positive development is the recent pilot testing of NGO management of community clinics.
- In the public sector, (i) unify the health and family planning services—particularly at the district and national levels—to reduce uncertainty, waste, and duplication⁶⁶; (ii) reverse the declining trend in disbursements under the SWAp by revisiting financial management and procurement rules; (iii) establish Facility Management Boards with considerable management autonomy, starting with tertiary care hospitals, medical college hospitals, and district hospitals; (iv) extend the current experience with contracting-out by piloting a management contracting program for support services (such as cleaning, security, and catering) and for large hospitals, starting with Kuwait Friendship Hospital and Narayanganj Hospital; and (v) introduce a more appropriate incentive regime for staff. In addition to introducing greater flexibility and decentralization in the use of budgetary allocations, budget transfer norms should be de-linked from bed and staff numbers and should instead be anchored on caseloads and poverty.
- Increase the provision of much-needed services, particularly limited curative care, to hard-to-reach populations, especially in urban areas.
- Increase public expenditures for the expansion of pre- and postnatal care, with a view to reducing maternal and infant mortality and arresting the declining trend in fertility reduction. These aims cannot be achieved through health sector measures alone, however. They imply wider communications on behavioral change (contraception, hygiene, assisted

⁶⁴ There is considerable information about specific issues of health status in Bangladesh. However, there is little systematic utilization of this information for policy or managerial purposes, particularly the surveillance of disease patterns.

⁶⁵ The early findings of an ongoing IDS-BIDS study show that some community clinics are in fact functioning quite well, with substantial community participation through a representative committee. In many cases villagers have contributed toward furnishing the clinics. In addition, some clinics succeed in charging income-differentiated user fees. Thus the clinics that are already operating and where community participation is evident could be allowed to operate on an experimental basis under close monitoring.

⁶⁶ As described earlier, these services have already been integrated at the community and thana levels.

delivery), access to tertiary facilities, and improved birth attendance at the household level by trained personnel, among others.

- Expand the coverage of the community-based nutrition program beyond the currently covered 59 upazilas to the entire country. This should be accompanied by the expansion of community-based behavior change activities, such as addressing mothers' nutrition and health care knowledge and practices, as well as interventions to improve access to safe water and sanitation.

Chapter 7

PUBLIC SOCIAL SAFETY NET

Bangladesh has a fairly large social safety net. Recent estimates from the household survey show that most of the programs appear to have large administrative leakage, although the benefits that can be accounted for are reasonably well targeted. The programs in place also succeed in achieving their development objectives. In this context, to enhance the effectiveness of government-provided social protection, the GOB should emphasize improved administration of these programs rather than their expansion, and improved targeting of poor areas by the center.

1. Government programs and their outcomes

191. Bangladesh has a long history of extensive social safety net provision, testament to the commitment of successive governments to a minimum level of protection in the face of frequent natural calamities.⁶⁷ Budgetary expenditures on safety net programs are equivalent to almost 1 percent of GDP, and 95 percent are directed towards targeted food transfer programs (Table 7.1). Four food assistance-based programs—Food for Work (FFW), Food for Education (FFE), Test Relief (TR), and Vulnerable Group Development (VGD)—aim at promoting human capital development and creating productive physical assets, while two other programs—Vulnerable Group (VGF) and Gratuitous Relief (GR)—aim at responding to the calamities-related emergency needs. The remaining 5 percent of government expenditures on the safety net are directed towards smaller programs supporting the elderly, orphans, and widows.

Table 7.1: Bangladesh—social safety net programs under the government budget, 2001-02

Name of program	Program description	Tk millions
Programs with development objectives or related to emergency needs		
Food for Work (FFW)	An umbrella program for programs and projects that provide employment for the poor, through development and maintenance of rural infrastructure, mainly in the dry season (between January and April).	9,920
Food for Education (FFE)	Provides monthly food transfers to poor households that enroll their children in primary schools, with the objectives being increased school enrollment, better school attendance, lower dropout rates, and higher quality of primary education	4,610
Vulnerable Group Development (VGD)	Provides assistance to disadvantaged women in rural areas, training in market-based income-generating activities, and functional education (literacy and numeracy training; credit and savings mobilization, and health and nutrition education)	2,293
Test Relief (TR)	Provides employment for the poor, mainly in the rainy season (July-November), through development and maintenance of rural infrastructure. Similar to FFW except with lighter labor requirements	1,452
Gratuitous Relief (GR)	Provides emergency, short-term relief to disaster victims.	290
Vulnerable Group (VGF)	Provides emergency, short-term relief to disaster victims (together with GR).	217
Pure transfer programs	Including voluntary women's social welfare center; national social welfare council; private orphanages; distressed, widowed, or divorced women; old-aged pension; cash assistance for poor freedom fighters, Housing Fund.	1,093

⁶⁷ The companion paper, *Poverty in Bangladesh. Building on Progress*, presents a more detailed account of the main food-assisted transfer programs in Bangladesh as well as the analysis of their targeting effectiveness and assessment of leakage.

The safety net programs are reasonably well targeted and have significant development impact

192. A number of evaluation studies have provided evidence that the four large safety net programs (FFE, VGD, VGF, GR) are reasonably well targeted towards the poor and those affected by disasters. They also succeed in achieving their development objectives. Estimates based on the 2000 Household Income and Expenditure Survey (HIES) data show that households in the lowest 20 percent of the income distribution are nearly five times as likely to participate in the FFE program as those in the highest 20 percent (Table 7.2). These targeting outcomes are comparable to those of targeted programs in other countries.⁶⁸ In addition, there is strong evidence from the mid-1990s that the FFE program achieves its development objective by attracting poor children to school (Ravallion and Wodon 2000). Estimates show that, on average, participation in the FFE program increases the probability of attending school by 20 percent. Preliminary evidence from the 2000 HIES shows that these gains have been sustained.

Table 7.2: Bangladesh—average participation rates, in selected social safety net programs by quintile, 2000
(percent)

Program	Per capita consumption quintile					Overall
	1 (lowest)	2	3	4	5 (highest)	
FFE	5.3	4.0	1.3	2.0	1.1	2.8
VGD	8.5	7.0	3.9	2.8	2.1	4.9
VGF	4.9	4.0	3.2	1.9	1.3	3.1
Overall	17.7	13.4	7.5	6.6	3.9	9.8

Source. 2000 Household Income and Expenditure Survey Rural sample only

193. The VDG-program also has reasonably good targeting, and the difference between the proportion of poor and non-poor participating in the program is only slightly smaller than that for the FFE program. A recent study on the development impact of the VGD program compared the socio-economic status of the beneficiaries one year after joining the program with their status two years after leaving the program (World Food Program 1997). The study found that VGD beneficiaries owned more assets (beds, tin roofs, clothing), had more savings, and had better access to credit after the program. Importantly, the beneficiaries perceived significant improvements in their decision-making ability within the family, in the health of their family, and in incomes.

194. The two main relief programs—GR and VGF—played an important role in assisting flood households during the massive flood in 1998. Studies by the Food Management and Research Support Project—International Food Policy Research Institute (FMRSP-IFPRI) suggest that while direct distribution through these programs was quite small in comparison with private imports, the programs played an invaluable role in targeting relief to those in need. The GR program, for example, distributed more than 74,000 metric tons of wheat and rice in 1998-99, and only 11.4 percent of the recipients were not directly exposed to floods. The VGF program targeted resources to all areas (both flooded and non-flood-affected areas) of the country. As a result, while it was less effectively targeted to flood exposure, it was successful at reaching the poor. Approximately 25 percent of VGF recipients were not directly exposed to the flood, but households in the three lowest expenditure quintiles received an estimated three-quarters of the food grains distributed.⁶⁹

⁶⁸ Grosh (1994) reports that a median targeted program delivered about 70 percent of all benefits to the poorest 40 percent of the households.

⁶⁹ Although a significant proportion of flood victims are deemed to have been left out (FMRSP-IFPRI; del Ninno and Dorosh 1999; del Ninno and Roy October 1999).

195. One important reason for the relative success of these large programs in targeting the poor is the system of identification of beneficiaries at the local level.⁷⁰ Based on the methodology developed in Ravallion (2000), the *targeting differential* that estimates the difference between the proportion of poor and non-poor participants can be disaggregated into an inter-village and an intra-village component. The first measures the success of the center at channeling resources to poor villages, and the second captures the success of villages in reaching poor households. Table 7.3 presents the decomposition, which suggests that most of the pro-poor targeting performance of the FFE and VGD programs is due to pro-poor targeting within rather than across villages. Therefore, the weakest link in channeling resources from the center to the poor appears to be the process by which the center allocates resources across regions.

Table 7.3: Bangladesh—inter- and intra-village decomposition of targeting performance: FFE and VGD

	Proportion receiving transfers		Targeting Differential (1)-(2)	Decomposition of targeting differential	
	Poor (1)	Non-poor (2)		Intra- village	Inter- village
FFE					
In all villages	0.118	0.079	0.039	0.036	0.003
In participating villages	0.462	0.315	0.134	0.146	-0.012
VGD					
In all villages	0.071	0.030	0.040	0.040	0.000
In participating villages	0.097	0.042	0.055	0.055	0.000

Source: FFE results from Galasso and Ravallion (2000), calculated from 1995 Household Expenditure Survey (HES) VGD results calculated from the 2000 HIES.

196. The FFW program—an umbrella of different programs and projects—is the main one aiming to help households cope with seasonal fluctuations in their wages and income. While there is no recent evaluation of this program, studies carried out in the early to mid-1990s show that these programs are well targeted to the poor, but are less cost effective than other food interventions primarily because of padding of the volume of work done and underpayment of workers (Chowdhury and Sen 1997; Osmani and Chowdhury 1983; Ahmed et al. 1994).

The development impact of safety net programs is severely limited by unacceptably high administrative leakage

197. Recent evidence indicates that the effectiveness of the various social safety net programs is significantly reduced by implementation problems. Most disturbing are estimates of aggregate household transfers from the VGD, VGF, and FFE programs obtained from the 2000 HIES. The administrative leakages in these three programs appear large, with 20-70 percent of the aggregate program allocation not accounted for in the survey estimates: 35 percent of the food grains allocated to the VGF, 41 percent of the VGD, and an overwhelming 75 percent of allocations to the FFE appear not to reach any household, whether an intended or unintended beneficiary (see Table 7.4 and the background

Table 7.4: Bangladesh—survey estimates of accounted for grain as percentage of aggregate program allocation

Program	Five percent confidence intervals
VGD	[34% – 59%]
VGF	[30% – 65%]
FFE	[10% – 25%]

Source: 2000 Household Income and Expenditure Survey (HIES).

⁷⁰ In all these programs beneficiary selection is decentralized, with local committees choosing participants based on centrally defined eligibility criteria. For example, the VGD program chooses functionally landless women, women who are day laborers, women who lack productive assets, female heads of household, and the like. The FFE program targets school-going children in household of day laborers, distressed female heads of households, low-income tradesmen, functionally landless households, and so on.

paper “Food Assistance Programs in Bangladesh”). What is particularly worrisome is that similar calculations for the FFE program using the 1995-96 Household Expenditure Survey (HES) reveal substantially lower discrepancy, indicating that problems of leakage have worsened over the last five years. Any conclusions about the effectiveness and targeting efficiency of these programs based on the incidence analysis presented earlier must be balanced against these findings.⁷¹

2. Policy Priorities

Improved administration of the safety net programs rather than their expansion is the main policy imperative and would yield considerable gains in enhancing the effectiveness of government-provided social protection

198. The recent government decision to replace the FFE (in-kind) benefits with cash stipends is a welcome move to strengthen program implementation.⁷² Other possible actions to reduce leakage are (i) strengthening the administrative systems for the monitoring of expenditures (such as through internal and independent external audits and strengthening the participation of local bodies) and (ii) increasing public access to information (such as through Client Satisfaction Surveys, participatory monitoring and evaluation, and Public Expenditure Tracking Surveys). The Government might also consider piloting new initiatives (such as smart cards—cards with memory chips containing information on program entitlement and transaction issues for program participants)⁷³ that have been tried in India, for example, to improve program administration and reduce leakage.

Development of finer targeting criteria and improved geographic targeting to concentrate resources in poor areas are also reform priorities

199. There is considerable scope for improving the geographic targeting of poor areas by the center. In programs funded by the Government, resources are by and large allocated to different districts, thanas, and unions according to population only. Only the VGD program, the Rural Development program (a food for work program supported by the World Food Programme) and, to a limited extent, the FFE program attempt regional targeting. The requirement that all thanas participate constrains the scope of pro-poor geographic targeting. Targeting thanas can significantly reduce leakage to the non-poor. Having recently completed both a census and a nationally representative household survey, Bangladesh is well positioned to do so by preparing poverty maps.

⁷¹ The survey-based estimates of leakage should be treated with caution. It is possible that the discrepancies are due to respondent misreporting, recall difficulties, and sampling errors rather than to misappropriation of resources. At the same time, studies of other transfer programs (for example, Alderman 2001) find a closer correspondence between what households reported and what was authorized using the same methodology.

⁷² Cash-based programs tend to have lower system losses. See Chowdhury and Haggblade (2000) and Dorosh and Haggblade (1997).

⁷³ There is an up-front investment cost of producing and distributing smart cards and setting up terminals that can read these cards. However, the technology is well worth exploring, since it holds the possibility of reducing administrative costs and leakage.

Chapter 8

AGRICULTURE AND RURAL DEVELOPMENT

Bangladesh is now self-sufficient in food, and has achieved impressive growth in fisheries production as well as in the rural non-farm sector. Productivity-led acceleration of agricultural production, diversification within and outside the agriculture sector, development of rural infrastructure, improvements in disaster management and mitigation systems, partnerships with nongovernmental organizations (NGOs) in service delivery and microcredit, and import liberalization policies contributed to these achievements. Rural development policies have shifted from an emphasis on direct market interventions and large capital spending on flood control, irrigation, and drainage projects to a strategy based on human resource development and market-oriented agricultural growth. There has also been a shift in public expenditures away from crops. Bangladesh still has the potential to accelerate rural farm and non-farm growth by realigning government policies to reduce the bias against the rural non-farm sector, grooming institutions for provision of public rather than private goods, developing supporting infrastructure, and removing barriers to the efficient functioning of markets.

1. Overview

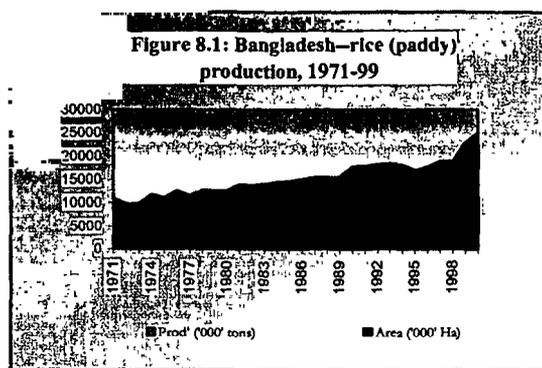
200. Despite rapid urbanization in the past decade, the rural areas still contain 80 percent of Bangladesh's population. Notwithstanding a decline in rural poverty of about 1 percent a year over the past decade, poverty in Bangladesh remains unacceptably high—with 53 percent of the rural population deemed poor and 37 percent living in extreme poverty. Bangladesh represents one of the world's largest concentrations of people in a highly disaster-prone environment, and high population pressure (Table 8.1) creates a push to exploit marginal and sub-marginal lands more intensively.

Afghanistan	38
Bangladesh	965
Bhutan	16
India	330
Maldives	875
Nepal	160
Pakistan	171
Sri Lanka	291

201. Agriculture remains the mainstay of Bangladesh's economy, contributing about 25 percent of the country's GDP and employing about 63 percent of its labor force. Agricultural production is dominated by crops, with rice covering about 75 percent of cultivated land and contributing 14 percent to GDP. Fisheries contribute 6 percent of GDP, with marine capture accounting for more than half of fish production, but inland culture fisheries (shrimp and pond fisheries) providing an important source of export earnings. After several decades of slow growth (1.6-2.8 percent a year), agricultural value added grew at 4.7 percent per year in the second half of the 1990s largely due to an acceleration in foodgrain production (6.6 percent a year in 1995-2000) and consistently high growth in the fisheries sub-sector (8-9 percent in 1990-2000).

202. The rural non-farm (RNF) sector, which produced about 28 percent of GDP in 1995-96, grew at a compound rate of 7 percent a year during 1991-96, allowing for employment growth of 2.6 percent a year (compared with 1 percent employment growth in agriculture). This reflected sustained expansion in services and small-scale manufacturing.

203. Productivity-led acceleration of agricultural production (Figure 8.1), diversification within and outside the agriculture sector, development of rural



infrastructure, and import liberalization policies have transformed the rural economy. Three major outcomes of this transformation include the elimination of famines and attainment of foodgrain self-sufficiency, a decline in income poverty, and the containment of the impact of the natural disasters. These were proclaimed as national objectives by previous governments.

2. Public spending and policies

204. *Government policies have traditionally emphasized the development of the rural economy as a means to alleviate poverty and contain the impact of natural calamities.* In the 1970s and early 1980s the broad agriculture sector claimed over 30 percent of public investments.⁷⁴ But since the late 1980s there have been noticeable improvements in the policy framework for rural and agricultural development. The previous emphasis on direct market interventions and large capital spending on flood control, irrigation, and drainage projects has been replaced by a strategy based on human resource development and market-oriented agricultural growth (Table 8.2; see also and Chapters 5 and 6). In the 1980s most public expenditures (especially ADP) focused on broad agricultural development (with relatively low emphasis on rural infrastructure), but today a larger share is spent on education and rural infrastructure—roads and electricity (Table 2.1).

Table 8.2: Bangladesh—distribution of ADP expenditure in agriculture and rural development, 1980-2001
(percent)

Area	1980/81	1984/85	1989/90	1994/95	2000/01
Agricultural research	2.95	4.73	4.14	3.57	3.84
Extension & training	5.31	4.02	9.65	6.03	5.00
Market & institution development	21.27	17.33	27.52	6.75	5.75
Rural infrastructure (roads and electricity)	6.09	9.03	15.69	47.64	56.60
Water control & irrigation	46.72	64.30	42.65	28.95	25.47
Mixed types	1.04	0.59	0.35	1.16	2.15
Miscellaneous	16.62	0.00	0.00	4.91	2.19
Total	100.00	100.00	100.00	100.00	100.00
Percentage of GDP	2.40	1.70	1.80	1.60	1.50

Source: ADP documents, various years.

205. *There also has been a shift in agricultural policy away from investments in crops* (although allocations to the crops sub-sector are still predominant). Agricultural diversification was spurred by changing demand patterns due to higher incomes, increased urbanization, self-sufficiency in rice, and a supportive policy reflected in steady increases in ADP expenditures on sectors other than rice. For example, the share of the fisheries sub-sector in agricultural ADP increased from 8 percent in 1976-81 to 12 percent in 2000-01 (Table 8.3). The share of forestry increased from 7 to 17 percent and the share of livestock increased from about 4 to 14 percent. The impressive increase in rice production also allowed for a withdrawal of public agencies from food marketing, lowering the sub-sector's share from 13 percent in 1976-81 to 6 percent in 2000-01.

⁷⁴ Public expenditures in agriculture are classified in narrow (traditional) and broad definitions. Narrow definition includes crop, forestry, food marketing, fisheries, and livestock. Broad definition adds rural infrastructure, institutions, flood control, and water resources.

Table 8.3: Bangladesh—distribution of ADP expenditures on narrow agriculture
(percent)

Sub-sectors	1976/81	1984/90	1991/95	1995/00
Crops	68.6	50.5	45.8	51.5
Forestry	7.1	13.6	16.3	16.6
Food Marketing	12.9	8.1	7.2	5.8
Fisheries	7.8	16.0	16.9	11.7
Livestock	3.6	11.8	13.8	14.4
Total	100.0	100.0	100.0	100.0

Source. ADP documents, various years.

Because of Bangladesh's highly disaster-prone environment the Government has continuously maintained high disaster mitigation expenditures as a means of protecting the population.

206. The threat of natural disasters imposes permanent pressures on public finances for disaster management and mitigation. And when they occur, natural disasters call for additional expenditures—especially to help the poor—causing disruptions in economic management. Beyond the public sector, disasters also sap savings and investments because of protection measures needed in a high-risk environment. Because of Bangladesh's topology—the flow of the Ganges, the Brahmaputra, and the Meghna, rivers in a flat delta plain—the biggest problem in disaster management is flood management and drainage in the wet season. Consequently, large amounts of public resources (0.6 percent of GDP) are directed to water management control, especially drainage; holding food stocks; emergency relief; and flood protection and cyclone shelters. Expenditures on disasters are implemented through various line ministries. The largest allocation is made to water management and flood control, irrigation and drainage, and erosion control, which constitutes 25 percent of broad agriculture expenditure (see Table 8.2). In addition, a significant part of the government's 1 million tons of foodstock is intended for emergency relief. The long-term impact of sustained levels of expenditures in this area, in addition to improved cooperation with NGOs, is that today both agricultural and nonagricultural components of GDP are much less sensitive to natural disasters (Appendix Figure A9.1).

207. Disaster coping mechanisms at the micro level are also much stronger today. Weather monitoring and early warning systems have been strengthened. The ability to evacuate people from disaster zones and to provide shelter has improved. The 1998 flood was unprecedented in its scale and duration, especially in the central part of Bangladesh. Despite the scale of damage, no major food shortages were reported at any time throughout the flood period, and households were by and large able to maintain consumption levels.⁷⁵ In addition, the 1998 flood inflicted a far lower death toll (1,100 fatalities) compared with the staggering 138,000 deaths during the 1991 cyclone, 2,055 deaths during the 1987 flood, and 2,000-6,500 fatalities during the 1988 floods (Pantelic and others 2000).

208. ***A number of other strategic policies accompanied and facilitated*** public and private investments in rural development. Input market reforms, revised import and tax policies, and strategic partnerships with NGOs have played a substantial supporting role in Bangladesh's agricultural transition.

⁷⁵ Dorosh (2001) shows that development of small-scale irrigation, which has allowed expansion of boro (dry season) rice to compensate losses during the monsoon (flooding period), has contributed to reduced sensitivity of agricultural production to floods. The sensitivity of food security to natural disasters has also been reduced by, inter alia, the removal of restrictions to private rice trade in 1992, which allowed commercial imports of rice (for example from India).

(i) Liberalization of input markets

209. Bangladesh is among the few developing countries that have considerably liberalized seed policy.⁷⁶ In 1984-85 the private sector was allowed to import seed. Liberalization of seed policy proceeded further in 1992 with liberalization in the procurement of imports (including seeds of notified crops) and domestic seed varieties (including direct purchases from research institutes). The Seed Act was revised in 1997 to allow for imports of vegetable seeds without testing. It also reduced the two years testing period for imported seeds of notified crops.

210. The fertilizer market was liberalized starting in the early 1980s, and by the early 1990s all aspects of fertilizer marketing (including imports) were placed in the private sector. Production of urea and pricing of urea at the factory gate continued to remain in the public domain. But during a drastic shortage in 1995, extensive controls were introduced in the urea marketing and distribution process, and subsidies on urea sales from factories and sales of public sector urea imports were largely revived. Subsidies on urea distribution, calculated by comparing ex-factory with import parity prices, amount to about Tk 7 billion a year in recent years (see Chapter 3, Table 3.2). The brunt of the urea subsidy is borne by the gas industry through low gas prices charged to urea factories; only small budgetary outlays are accorded to fertilizer distribution outlets.

(ii) Import and tax policies

211. The withdrawal of restrictions on imports of irrigation equipment and pumping installations in the late 1980s induced fast expansion of irrigated area.⁷⁷ It also allowed a shift in public investments away from large irrigation investments into development of rural infrastructure. As a result, today less than 10 percent of irrigated land in Bangladesh is serviced from public irrigation facilities, although distribution of irrigation development across the districts of Bangladesh is very uneven. Because coastal and low-lying northeast areas do not have easy access to tubewell irrigation, the Bangladesh Water Development Board's (BWDB) flood control and drainage projects are concentrated in these areas.⁷⁸ The elimination of duties on power tillers and engines in 1989 was instrumental in increasing their use, while the reduction in duties on equipment and raw materials for food processing helped develop the nonagricultural rural sector.

(iii) Partnerships with NGOs in providing social services and microcredit

212. Recognizing the enormous task ahead, the Government encouraged NGO-led development of microcredit institutions. Following the success of the Grameen Bank in 1976, microcredit initiatives have flourished in rural areas over the last two decades. A groundbreaking feature of these initiatives was that they targeted not only those lacking collateral, but women in particular. In 2000 the microcredit programs delivered by the Government and NGOs covered over 10 million individuals (including Grameen Bank 2.4 million, BRAC 3.3 million, Proshika 1.7 million, Association for Social Advancement 1.2 million). A number of studies have shown that NGO activities are well targeted to the poor and women and have positive impacts on food consumption, savings behavior, and health and education outcomes (Zeller and others 2001, and citations therein). Over time, large volume of public and donor resources have become

⁷⁶ Ahmed, R. and others (2000) argue that liberalization of input markets, particularly the urea market, was the main factor contributing to growth in agricultural production.

⁷⁷ Currently, the net cultivable land area of Bangladesh is estimated at 83 million hectares, of which about 4.3 million is irrigated, (Ahmed and others 2000). Reflecting low penetration of electricity in rural areas, almost all irrigated area (over 80 percent) is irrigated using diesel pumps.

⁷⁸ The Bangladesh Water Development Board (BWDB) is responsible for surface irrigation, development of surface water, and river management. It owns and operates more than 400 schemes with various combinations of flood control, drainage, irrigation, and saltwater intrusion mitigation objectives, covering most flood-prone areas over a total area of about 3 million hectares, or almost 40 percent of the cultivated area of the country.

available through these credit programs. In particular, the *Palli Karma Sahayak* Foundation (PKSF) was established as an apex organization to provide credit through various partner organizations that onlend these funds to their clients.⁷⁹ These initiatives helped raise incomes and improve human development outcomes in rural Bangladesh.

(iv) Sustained emphasis on crop research

213. About 30 percent of ADP expenditures in the two most successful agriculture sub-sectors—rice and fisheries—are allocated to research activities (Appendix Table A9.1). Even though public investments in research were relatively low in absolute terms during 1980-2000 (3-4 percent of broad agriculture expenditures, or 0.4 percent of agricultural GDP), they paid off very well. The Bangladesh Rice Research Institute (BRRI) has released about 45 high-yielding rice varieties that are used in 60 to 65 percent of rice production. Rice research in Bangladesh raised total factor production in rice production by around 1 percent a year during 1975-97 (Ahmed, and others 2000). The rapid development of the fisheries sector can also be attributed in part to success in adopting new fish varieties and technologies.⁸⁰

214. An important achievement of rural development policies is the more broadly shared pattern of growth in rural areas relative to urban areas. Even though growth in average per capita expenditure over the past decade was lower in rural than urban areas (1.7 compared with 2.8 percent a year), rural growth was much more evenly distributed across income levels. Consequently, poverty has declined at the same rate across urban and rural areas, and severe poverty has declined faster in rural areas⁸¹. Growth in per capita consumption in rural areas in the past decade seems to be associated with greater diversification. There have been large increases in service workers, factory workers, and artisans relative to agricultural laborers. Small cottage industries have developed in rural areas, albeit mostly in villages with connections to electricity. The land rental market has also developed, with tenancy rising from 16 percent of operated area in 1983-84 to 22 percent in 1996. Fixed rent tenancy also rose in importance relative to sharecropping, from 26 to 38 percent of total area under tenancy in 1996 (see *Poverty in Bangladesh: Building on Progress*, World Bank 2002).

3. Key issues and policy priorities

215. Bangladesh could further accelerate growth in rural farm and non-farm sectors by realigning government policies to strongly encourage the rural non-farm sector, grooming institutions for provision of public rather than private goods (including technology), developing supporting infrastructure, and removing barriers to the efficient functioning of markets (including protection of the sugar industry). In the environment of accelerated growth, equipping poor people with private and public assets, as well as continuing to reduce their vulnerability through targeted interventions, is the best way to raise their incomes and enable them to participate in the growth process.

Improving the environment for rural non-farm growth...

216. The rural non-farm sector has the potential to become the leading sector of Bangladesh's economy. However, its growth and employment-creating opportunities need to be nurtured carefully through a strong rural focus in the provision of public goods (infrastructure, market information) and credit delivery. Any urban bias caused by more favorable treatment accorded to urban industry needs to

⁷⁹ The Government acts as a conduit for distributing concessional donor loans through PKSF.

⁸⁰ The most promising is the polyculture fishpond technology introduced by the International Center for Living Aquatic Resources Management in collaboration with NGOs.

⁸¹ However, migration patterns might have contributed to this result since rural-urban mobility was quite high and the urban population grew four times faster than the rural population in the past decade (according to preliminary results of the 2000 population census)

be removed. For example, tax holidays, enhanced depreciation rates, and lower capital gains tax rates are offered to export-oriented manufacturing industries (such as garments and leather) located in cities, but are not available to agroprocessing industries.⁸² To boost the agroprocessing industry, tariffs on raw materials and inputs used by rural industry must be reduced further and supplementary duties withdrawn.

... and supporting diversification in the farm sector

217. The capacity of the rural non-farm sector to reduce poverty heavily depends on consumption and production linkages with agriculture, and hence on strong agricultural growth. The Government needs to focus its policies on sustaining recent agricultural growth through promotion of agricultural diversification.

Reforming outdated institutions for rural development and building new ones

218. Moving to commercialized and diversified agriculture requires a major shift in the role and functions of government while strengthening the base for deeper involvement of private entrepreneurs in rural areas. In this context the Government should stop subsidizing fertilizer and sugar and intervening in agricultural prices, and undertake more functions such as disseminating information, overseeing the process of quality control (for example standardization and grades), and monitoring farm input quality (for example inspection, sampling, and testing of fertilizer and seeds). The government should also foster the development of institutions to take on such roles as livestock disease surveillance and control and development of veterinary services.

219. In this context the Bangladesh Water Development Board (BWDB) needs major reform. A number of studies have demonstrated that BWDB projects are of limited effectiveness (Box 8.1; Annex 6). Most of the shortcomings stem from the institutional setting of this organization—particularly its technocratic approach, which undervalues consultations with local communities and lacks proper planning for the maintenance of

Box 8.1: Evaluation of the System Rehabilitation Project: negative experience with BWDB projects

By the beginning of the 1990s, the BWDB had completed a large number of small and medium-scale projects to control flooding, facilitate drainage and irrigation. But most of them were not producing much benefit without further rehabilitation. Therefore, the Government implemented a System Rehabilitation Project (SRP), initially planned for 80 projects but, later revised to cover only 35. The SRP focused on institutional, structural, and participatory elements of water resource development. An evaluation of the SRP offers lessons for future initiative:

- The original purpose of projects developed by the BWDB was vindicated by more than 80 percent of the people where the projects are located. However, a lack of people's participation, absence of institutions to mobilize people, and faulty designs contributed to project failures.
- Only 1 of the 35 projects could be successfully rehabilitated.
- Many problems with design specification were identified; in particular, neglect of details of local circumstances was a profound cause of failure.
- To capture local diversity and provide a strong foundation for operation and maintenance, local participation is crucial.

Source: Soussan, and Data 1998.

⁸² In addition all imports of industrial capital machinery are exempt from the value added tax (VAT), advance income tax (AIT), and license fees (for undeveloped areas only). By contrast, items such as bottle filling and cap sealing machines (vital to the packing of processed foods) are excluded from this benefit. For these machines, VAT and AIT have to be paid in addition to duties and an infrastructure development surcharge. Similarly, tetra pack (aseptic paper for packing beverages for long periods) is subject to a large supplementary duty. The recently announced FY03 budget remedies some of these problems. It proposes that investment in agroprocessing industry enjoy similar tax amnesty as other sectors. It proposes that incomes of agroprocessing industry be fully exempt from income tax until June 2005. Supplementary duties will be withdrawn for 120 categories of goods out of 170, and SD rates will range from 10 to 60 percent as against 2.5 to 270 percent previously. The customs duty on a number of products (mango pulp, spice premix) has been significantly reduced. Moreover the budget proposes withdrawal of the VAT on tractors, power tillers, aerators and full fat soyabean at both import and local production stages. It also proposes a total withdrawal of the VAT on electricity used for irrigation purposes and on home-made *gur* (raw sugar).

constructed facilities. To ensure the cost-effectiveness of its interventions, the BWDB needs to divest functions that can be performed more effectively by local communities, local governments, or the private sector and become more accountable to users through performance-based linkages and introduction of user fees, where applicable. The experience of the Rural Electrification Board shows participatory processes greatly improve efficiency and user satisfaction.

220. The government is currently preparing a Water Management Improvement Project incorporating a new approach to water resources management. Major elements include:

- A holistic, multi-sectoral approach to surface water management, taking into account agricultural and other needs—notably fisheries, livestock, navigation, wetlands conservation, and environmental and health considerations.
- Active participation of local stakeholders in all aspects of water management.
- A sustainable operation and maintenance framework.

The Government has taken a number of actions in the policy and institutional areas to lay the foundations for this new approach to water management, including the National Water Policy (1998), BWDB Act (2000), National Water Management Plan (2001), and Guidelines for Participatory Water Management.

221. In addition, while the construction of defensive infrastructure such as coastal and river embankments has helped mitigate the impact of natural disasters, existing flood control and drainage projects have already covered the most suitable areas, as acknowledged in the Government's National Water Policy. No additional rural schemes should be constructed. Instead, communities outside the present system should be assisted with non-structural flood-proofing initiatives. Implementation of these policies could free considerable resources since BWDB takes Tk 800-900 million (0.4 percent of GDP) per year from the government budget.

222. Changing patterns of demand for food, degrading resources, the emergence of new areas of integrative research (biotechnology, agroforestry), and stagnant yields for many crops pose new challenges for the agricultural research and extension system. Sustaining recent agricultural growth will require addressing these new challenges, but the budgetary impact for the Government will depend on the strategy adopted. Given the fledgling state of private sector research today, in the short and medium term the bulk of the needed research work will have to come from the public sector, and this will require stable, significant public financial support. Over the longer term the budgetary impact could be reduced if the Government encourages entry by the private sector and builds a strong partnership with it. Establishing and enforcing intellectual property rights is important in this context to ensure private investments in such areas as seed research, livestock, and horticulture. The Government's commitment to grant access to World Trade Organization member countries to conduct agricultural research in Bangladesh is a welcome move.

223. It is also necessary that the Government-run Bangladesh Agricultural Development Corporation (BADC) gradually stop supplying seeds at highly subsidized prices, a practice that constrains the emergence of private sector initiatives.⁸³ Phasing out the BADC and terminating of a number of development projects will generate additional budgetary savings.⁸⁴ The Government has decided to terminate most BADC activities and retrench about 3,000 of its employees.

⁸³ Especially in the five notified seeds (rice, wheat, potato, sugarcane, and jute) business.

⁸⁴ If the BADC gives up seed production and supply, it has only two other types of activities—minor irrigation and regional development. The minor irrigation projects are of questionable impact, and the regional development projects are very similar to the ones being implemented by the Bangladesh Rural Development Board. Moreover, the BADC is a loss-making state enterprise, suffering losses of Tk 200-300 million annually. At this juncture in Bangladesh's agricultural development, the BADC needs to be replaced by new institutions organized to monitor progress, provide information, and guide private sector development in the supply of agricultural inputs.

224. Government allocations on research should be increased, and the National Agricultural Research System should redirect its emphasis and intensify research efforts in nonrice crops and non-crop agricultural products. Inland culture fisheries development offers opportunities for income, employment, and foreign exchange generation. At the same time, the Government-led system of extension services would benefit from closer collaboration with NGOs and should be redirected toward provision, on demand, of know-how on higher-value crop varieties, improved soil and farm water management practices, post-harvest handling and processing, fertilizer use, and product standardization for export markets.

225. Rural institutions are critical in ensuring the inclusiveness of growth, which requires not only that the poor build up their assets (especially health and education) but also that the returns to these assets are enhanced. A critical factor in raising returns is better-defined property rights⁸⁵ and clearer regulations on common resource management,⁸⁶ as the poor themselves have indicated (“Consultations with the Poor” in Bangladesh). If poverty is to decline, it is also imperative that stronger enforcement mechanisms be in place to guarantee those rights, which in turn calls for governance improvements (see Chapter 4). The Poverty Assessment Report (2002) shows that the poor in Bangladesh still have much lower access to community and natural assets such as *beels* (large waterbodies) and *khas* land.

Developing and upgrading physical, financial, and social infrastructure

226. Sustained development in rural areas is not possible without adequate infrastructure. Notwithstanding the improvements in access to electricity in recent years, rural electrification is abysmally low, with only one out of five rural households having access to electricity (Table 8.4). Lack of access to electricity is a major obstacle to rural development, especially for agricultural diversification and rural non-farm growth.⁸⁷

227. Upgrading rural roads offer another avenue for rural development in Bangladesh. Rural roads are plentiful, but their integration into a coherent network as well as their maintenance require immediate attention (see Chapter 9).

Table 8.4: Distribution of households with access to electricity (percent)

Country	Year	Wealth Quintile					Average
		Poorest	Second	Middle	Fourth	Richest	
Bangladesh	1995/96	6.6	14.3	19.4	26.58	35.8	20.5
Bangladesh	2000/01	11.7	20.7	30.2	38.4	54.8	31.2
Bangladesh (rural)	2000/01	2.9	7.8	15.6	23.5	43.5	18.7
India	1992/93	0.3	9.4	55.9	92.4	99.7	51.5
Indonesia	1997	35.0	76.3	91.9	98.9	99.9	80.4
Kazakhstan	1995	99.7	100.0	99.6	100.0	100.0	99.9
Nepal	1996	0.0	0.0	0.6	19.1	70.4	18.0
Pakistan	1990/91	1.2	48.9	71.9	92.5	99.8	62.9

Source: *Socio-Economic Differences in Health, Nutrition, and Population 1995-96 HIES, 2000 HIES*

⁸⁵ Deficiencies in establishing property rights on land reduce access to credit since they preclude using land as collateral. In some areas, 60 percent of all litigation cases concern land property rights.

⁸⁶ The absence of clear and enforceable common property rights demonstrated most vividly in the fisheries sector, where “water lords” capture common land and use it for culture fisheries while the poor whose livelihoods depend on rice growing suffer as a result. Aggressive commercial capture fishing also leads to depletion of fish stocks, an important source of livelihoods for the poor.

⁸⁷ Agricultural diversification, including production of time-sensitive (perishable) goods, requires good transport (roads, ports, and airports) and reliable energy for processing and cold storage.

228. Improvements in rural financial infrastructure will not be possible without removing handicaps in the entire banking system. Access to credit remains limited, while the two agricultural banks are saddled with the same problems as other financial institutions—undercapitalization and high non-performing loans. Large landowners are the principal beneficiaries of agricultural credit, which precludes access by small and medium-size farmers, traders, and organized processors. Continued support and encouragement of grassroots organizations and NGOs as providers of rural services, as well as introduction of new modes of social engagement (contract farming, access to local and international markets) will yield high dividends in terms of spreading the benefits of innovation and growth to wider segments of the rural population.

Removing barriers to efficient functioning of agricultural markets

229. Given Bangladesh's spectacular success following the liberalization of fertilizer and irrigation equipment markets, removing remaining market barriers could bring high benefits. Priorities in pursuit of this objective include:

- Complete liberalization of the urea market, which is a more effective way of guaranteeing price stability. Government policies, currently guided by fears of supply instability, are misplaced because the urea subsidy does not guarantee a stable supply if world urea prices fluctuate. In addition, the subsidy disproportionately benefits the nonpoor (mostly public sector industrial producers) and deteriorates soil fertility balance. Maintaining the gas subsidy to public sector urea factories prevents private sector entry in urea production. This entry, as well as private sector imports, are further blocked by the Government's maintaining an administered price lower than the factory production cost or import price.
- Phasing out remaining public interventions such as open-market sales and domestic procurement in the foodgrain market, notwithstanding the already low level of support for domestic foodgrain. Private imports are highly responsive to wholesale prices and thus to shortfalls in production, while price fluctuations have been dramatically reduced by the use of new technologies that allow production of foodgrain throughout the year. The government's role in holding foodgrain stocks should be limited to management of an emergency stock to insure against natural disasters (as opposed to procurement for price stabilization purposes).
- Phasing out protection to the sugar industry by freeing administrative procurement prices of sugar, lifting the state monopoly on sugarcane imports, and divesting of sugar mills. Current policies, including the restrictive input procurement system, result in a high level of taxation of sugarcane farmers, and indirect taxation raises consumer prices of sugar significantly.⁸⁸

⁸⁸ The FY03 budget proposes to increase protection to domestic sugar mills by raising the customs duty on sugar from 25 to 32.5 percent, and also imposing a 20 percent supplementary duty.

Chapter 9

TRANSPORT

Roads have traditionally attracted the most Government attention in the transport sector. The Government's strategy for road development has consistently been to develop and improve five major corridors and to develop and connect rural growth centers. Following many years of sizable public investments in road construction, Bangladesh today has one of the most extensive road networks in a developing country, which has contributed to growth and poverty reduction—especially in rural areas. But, road construction has been outpaced by economic activity, especially on national and regional highways, resulting in congestion and environmental problems. At the same time, shortcomings in engineering design and labor-intensive technology have resulted in ever-deteriorating quality, especially on rural roads. At this stage of Bangladesh's development it is imperative for the Government to embrace the role of regulator and standard setter. Road safety, pollution control, and inland waterways are three areas where these needs are most pressing. The highest dividends in terms of growth and poverty reduction will be achieved if the Government focuses on maintaining (not expanding) the core network, enhancing capacity on major highways, bridging river gaps, and replacing ferries with bridges. The large network of rural roads also requires more maintenance, not expansion. Restoring the competitiveness of Bangladesh's ports is another major imperative.

1. The Sector

230. Bangladesh's peculiar landscape—a lower riparian country in the floodplains of the Ganges, Brahmaputra, and Meghna rivers and their tributaries and distributaries, together with the fact that 70 percent of its land area is below sea level—poses a daunting challenge to the transport sector. Large volumes of water cover much of the country in the wet season, destroying road bases and surfaces.⁸⁹ In this terrain Bangladesh has developed a transport network that includes roads, railways, inland waterways, two maritime ports, and civil airports catering to both domestic and international traffic. Road transport is the fastest-growing mode, with average annual growth of 7 percent for passengers and 9 percent for freight since the early 1990s. The total volume of goods moved by all modes has increased by 6 percent a year during the same period. Roads account for around 80 percent of passenger and freight movement.

231. The road network consists of four broad categories. National highways connect the national capital with divisional headquarters, ports, and international highways and represent 3 percent of all road length (Table 9.1). Regional highways form a five-way regional corridor representing 2 percent of all road length. There are also feeder roads type A and B representing, 15 percent and 19 percent of the total road network. FRA connect thana headquarters and growth centers with the arterial road system; FRB connect growth centers and markets with thana headquarters. There are also rural roads type R1, R2, and R3. But R2 roads, with a crest width of 3.7 meters, and R3 roads, with a crest width of 2.4 meters, can hardly be used by motorized vehicles and are in effect no more than

Table 9.1: Bangladesh—length of roads by category (kilometers)

Category	Length(km)
National highway	3,144 (3.0%)
Regional highway	1,746 (1.7%)
Feeder road type A	15,964 (15.1%)
Feeder road type B	19,490 (18.5%)
Rural road class 1 (R1)	65,222 (61.8%)
Rural road class 2 (R2)	50,880
Rural road class 3 (R3)	66,147
Total	222,593

Source: RHD and LGED 2001.

Note: The figures in parentheses provide the share of each road type in total road length in the country, excluding R2 and R3 roads

⁸⁹ The average water flow in peak wet season (August) is nearly 112 billion cubic meters, compared with 4 billion cubic meters in the dry season (February).

footpaths.⁹⁰ R1 roads represent the largest part of the Bangladesh road system, constituting 62 percent of the total road network. Construction and maintenance of national highways, regional highways, and feeder roads type A are under the jurisdiction of the Roads and Highway Department, in the Ministry of Communications. Construction and management of feeder roads type B and R1, R2, and R3 roads fall under the jurisdiction of the Local Government Engineering Department (LGED) in the Ministry of Local Government, Rural Development, and Co-operatives.

232. Historically, the Government's transport strategy aimed to support economic development by expanding linkages in the internal transport system and to promote local market integration, especially in rural areas. Bangladesh boasts two successes with respect to its road network. First, as a result of many years of sizable public investments in road construction (1.8 percent of GDP in 2000), Bangladesh today has an extensive road network—222,600 kilometers—surpassing other South Asian countries in total road density (Table 9.2). Second, Bangladesh's extensive rural road network has

Country	Road density total land (km per 100 km ²)	Road density agricultural land (km per 100 km ²)	Road density (km per 1,000 person)
Bangladesh	69.2 (27.8)	77.8 (32.6)	0.88 (0.34)
China	9	20	1
India	45	74	1.5
Korea, Rep.	52	230	2.5
Malaysia	18	134	-
Nepal	3	9	-
Sri Lanka	50	130	-
Thailand	15	37	-
United States	70	149	27

Note. Data in parentheses exclude rural roads
Sources: World Bank, Bangladesh Transport Sector Review, 1991; LGED & RHD, 2001, 2000 Statistical Year Book of Bangladesh

contributed greatly to growth and poverty reduction by diffusing agricultural technology and raising agricultural productivity, facilitating economic activity (leading to higher wages and employment), and lowering transport costs (see Annex 7). In addition, road construction has had a direct employment creation effect as many of the rural roads built in the 1960s and 1970s occurred through the Food-for-Work and other labor-intensive rural development programs.

233. Yet economic activity has outpaced road construction, resulting in congestion on major highway corridors and environmental problems. Pollution and congestion are also relatively high in cities. The Food-for-Work and other rural development emphasized using labor-intensive technologies instead of more advanced technologies and engineering design. Consequently, 80 percent of the rural road network is composed of narrow roads in poor condition because they were built with poor compaction and without proper structures.

234. The great potential of Bangladesh's ports is not utilized well. While Bangladesh's ports generate small operational surpluses and receive negligible amounts of ADP expenditures, all three major ports suffer from overstaffing, excessive labor strikes, cumbersome customs procedures, and outdated and inefficient work rules and management practices. This represents a hefty tax on Bangladesh's economy, and the costs of these inefficiencies are passed on to traders and consumers. The cargo yards at Chittagong, which handle 80 percent of Bangladesh's foreign trade, are severely congested—containers are filled and emptied in port, and cargo handling equipment is often out of commission for want of spare parts. Heavy siltation makes Mongla's approach channel difficult to maintain, resulting in low berth use because most cargo has to be lightened at anchorage. Turnaround time for feeder vessels in Chittagong is 6-10 days, compared with 2 days in Bangkok and 1 day in Singapore. In addition, unofficial costs are

⁹⁰ R2 and R3 are classified as roads in government statistics. Except for some food aid-assisted programs and the rural maintenance program at the union level, budgetary resources are not available for investment in the construction of these roads. The statistics related to these roads are often unreliable. Unless indicated otherwise, they are not included in the statistics and analysis presented in this chapter.

inordinately high. Bangladesh moves a container for \$600, compared with \$150-300 in neighboring ports such as Bombay and Shanghai.

2. Government expenditures and policies

Transport sector expenditures grew in real and relative terms over the last two decades and are increasingly focused on roads.

235. Between the early 1980s and late 1990s transport expenditures increased from less than 10 to more than 20 percent of total ADP expenditures. During FY97-00 transport sector expenditures grew at 5.1 percent a year in real terms, reaching around 2.3 percent of GDP in FY00 (Table 9.3; Appendix Tables A9.1-A9.3). About 44 percent of total transport expenditures are allocated for major highways and 34 percent for rural roads. Railways and inland waterways together account for 12 percent of transport expenditures. Given the prominence of roads as a mode of transportation and as a recipient of public expenditures, this chapter is predominantly focused on the roads sub-sector.

Table 9.3: Bangladesh—total transport expenditure by sub-sector, FY 97-00
(percentage of GDP)

	FY97	FY98	FY99	FY00
Roads:	1.22	1.27	1.58	1.84
R&HD Construction, upgrading, and rehabilitation	0.58	0.57	0.75	0.87
R&HD Maintenance	0.12	0.13	0.14	0.14
LGED Construction, upgrading, and rehabilitation	0.43	0.47	0.59	0.73
LGED Maintenance	0.04	0.05	0.05	0.05
Funding for Rural Roads through Thana Assistance	0.05	0.05	0.05	0.05
Jamuna Multipurpose Bridge Authority	0.54	0.38	0.17	0.07
Bangladesh Railway	0.13	0.15	0.26	0.20
Civil Aviation Authority of Bangladesh	0.02	0.03	0.05	0.09
Inland Waterways	0.02	0.04	0.04	0.06
Ports and Shipping	0.00	0.00	0.00	0.00
Total	1.93	1.86	2.10	2.27

Source: Annual Development Program, R&DH, LGED

236. Trends in road expenditures reflect the government's two-pronged strategy of concentrating on five strategic corridors: Dhaka-Chittagong, Dhaka-Northwest, Dhaka-Khulna, Dhaka-Sylhet, and Khulna-Northwest, with special emphasis on Dhaka-Chittagong, Dhaka-Northwest, and Khulna-Northwest arterial corridors; and improving integration of rural markets by developing rural growth centers focus on feeder roads type B (especially those that connect growth centers to thana headquarters or all-weather roads), selected type R1 and R2 rural roads, and provision of drainage structures (culverts and bridges) on important rural roads.

R&HD and LGED activities are mostly directed to expansion (and some rehabilitation) of the existing network. Maintenance expenditures lag behind and do not match with the size of the network.

237. The annual growth rate of road expenditures during FY97-00 was about 13 percent in real terms. R&HD expenditures grew annually at 12 percent and the length of road and highways under R&HD responsibility increased from 14,900 kilometers to 20,800 kilometers, (a 12 percent annual increase, on average). Maintenance expenditures under R&HD, however, grew only at 4 percent annually. Analysis of the R&HD road network using the Highway Development and Management Model suggests that the

long-term level of spending on preventive maintenance should be about Tk 5 billion (US\$100 million) per annum. Presently expenditure on maintenance activities⁹¹ is about Tk 2.2 billion (US\$44 million) a year, implying a year shortfall of Tk 2.8 billion (US\$56 million) relative to the estimated need.⁹² In addition, the considerable underfunding of maintenance for many years has contributed to a large backlog of deferred maintenance, currently at around Tk 24 billion (US\$480 million; R&HD 2001).

238. Expenditures under LGED grew even faster during this period, at an average of 19 percent a year, adding 19,000 kilometers of earthen roads, (see Appendix Tables A9.4 and A10.5 for detailed descriptions of financial and physical achievements under R&HD and LGED between FY97 and FY00). The maintenance expenditures of LGED grew at an average rate of 7 percent, reaching only Tk 1.2 billion in FY00. As with R&HD, a sizable gap exists between what is available for rural road maintenance from all sources, about Tk 1.7 billion, and what is required, about Tk 2.4 billion.⁹³

239. Recent improvements in road conditions are mainly due to the execution of a number of projects with significant donor contributions.⁹⁴ In particular, 35 percent of the entire R&HD network has been resurfaced, and the share of roads in “good condition” under LGED increased from 5 percent in 1993 to 37 percent in 2000. These efforts will be wasted if funds allocated for routine and periodic maintenance remain as low as they are currently.

Presence of low quality projects hampers effectiveness of investments in roads.

240. Three large umbrella projects are under implementation by R&HD. These are the Thana Connecting Road Project and phases 1 and 2 of the Construction of Public Priority Roads and Bridges Project, under which there are about 800 sub-projects. Most of these small projects are improvements or rehabilitation of feeder roads and to a certain extent, rural roads. Annual ADP allocations for these small projects are very small—typically about 2-3 percent of their project cost, implying that it would take 30-50 years to complete these projects with these low levels of funding.⁹⁵

Fragmentation and lack of clarity over administrative responsibilities reduce the effectiveness of public investments in roads.

241. Clear and appropriate assignment of responsibilities for the management of different types of roads, for providing adequate funds, for regulating traffic, for managing street, parking and for enforcing road rules is a prerequisite for a sound road transport system. Yet the relationships between the Ministries of Finance, Planning, Local Government and Development, Communications, and various implementing agencies are unclear. Furthermore, there are no formal mechanisms for allowing a constructive dialogue on overall sector policy and strategy, inclusive of all the major stakeholders within and outside the Government. Attempts have been made to do this through the creation of an Inter-Ministerial Steering Committee and the strengthening of the Planning Commission’s Infrastructure Division. However, these efforts have not been effective at resolving the problem.

⁹¹ The maintenance activities under the Revenue Budget include periodic and routine maintenance of existing roads (e.g. cleaning drainage, patching potholes, etc.) as well as operation and maintenance of ferry systems.

⁹² One estimate of recommended targets for road sector funding allocations stipulates 9 percent new construction, 65 percent renewals, 20 percent periodic maintenance, and 6 percent routine maintenance. *Road Maintenance Initiative*, World Bank PIARC 1999.

⁹³ An additional Tk 0.5 billion for rural roads maintenance is available through Thana Assistance grants.

⁹⁴ These rehabilitation projects under ADP include resealing; re-building base and surface course; widening and upgrading of existing road pavements; construction of new bridges replacing ferries or old bridges, and construction of culverts.

⁹⁵ Weak selection and implementation of projects in the road sector are indicative of a wider problem related to overall budget management. Similar to other sectors, issues of project prioritization, non-transparent procurement and contract assignment, and financial management and audit of the transport sector need to be addressed. These wider problems are discussed in Chapter 5.

242. The ownership of many roads in Bangladesh is misallocated. R&HD, whose primary responsibility is construction and maintenance of national and regional highways, is also responsible for feeder roads type A—which in effect are rural roads type B. This affects the priority schedule of R&HD. LGED has jurisdiction over construction and maintenance of feeder roads type B and R1 roads, but also the two categories of low-level roads (R2 and R3). Local governments (Union Parishads) do not contribute enough to maintenance of this low-level network, and thus LGED resources are spread too thinly.

Bangladesh has a vibrant road construction industry. But private sector involvement in road building is riddled with high transaction costs and lack of transparency.

243. All new road construction and major periodic maintenance is implemented by private (domestic and foreign) contractors, but competition is still limited due to the scope of works being contracted out. When the private sector is contracted, small contract sizes (1-2 kilometers for LGED and 5-10 kilometers for R&HD) place unnecessary administrative burdens on road agency staff. In addition, there is inadequate delegation of authority to make decisions on the procurement process. There are too many procurement committees, and decisions on contracts that would be considered modest by international standards are passed on to the cabinet committee and even the prime minister for ratification. Routine maintenance of the R&HD and LGED networks is still carried out almost exclusively by work charged and muster roll labor. R&HD has a substantial though antiquated and nonstandard equipment fleet (2,000 units) and a large muster roll staff (about 12,000). A notable recent achievement, however, is that the conditions of the contract used for most smaller contracts (Form 2911) have been repealed.⁹⁶

The potential for resource mobilization from road users is underutilized.

244. High toll rates and usage on the Jamuna bridge indicate that road users in Bangladesh are willing to pay for good service. Moreover, international experience has demonstrated that an effective way to achieve resource mobilization is by requiring road users rather than taxpayers to pay for improved road maintenance through the imposition of a range of explicit road user charges. Practices like charging Tk 20 per vehicle to use Ashulia road need to be introduced on other highways as well. To ensure support for such charges, it is essential that those paying them have more say on how revenues are used.

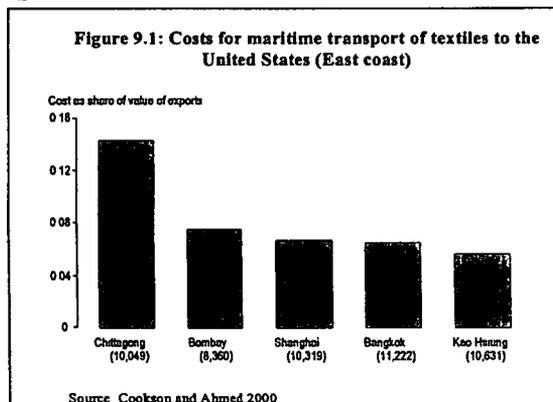
3. Key development problems in the sector

245. ***Lack of proper maintenance and upgrading compromises the efficiency of major highway corridors.*** Notwithstanding progress in improving the condition, capacity, and reach of the road and bridge network in Bangladesh over the last 10 years, much of the road network is very narrow and in poor condition by international standards. The increasing volume of traffic on major highway corridors has resulted in congestion, delays, and high transport costs. A large proportion of the major highway network carries high traffic volumes. A nationwide traffic survey conducted in FY00 showed that on average some 4,950 four-wheeled vehicles a day drive on each national road, while the average for regional roads is 1,748 and that for feeder roads is 596 (R&HD 2000). Two-lane roads with carriageway width of 5.5-7.0 meters carry, on average, 4,170 motor vehicles and 2,667 nonmotorized vehicles per day. The most heavily used national road (N3 Tongi-Joydevpur road, with four traffic lanes) carries 33,908 vehicles per day. These use levels are approaching the absolute capacity of these roads. The capacity of the road network is further weakened by the large number (99) of unbridged river crossings currently serviced by ferries.

⁹⁶ Form 2911 stipulated a unit rate for every type of work.

246. **Lack of enforcement of traffic regulations leads to very high road accidents and fatality rates.** The number of fatalities on Bangladesh's roads (73 per 10,000 vehicles a year) is the highest in South Asia. The corresponding number for Pakistan is 25; for Karnataka, India, it is 18; and for Uttar Pradesh, India, it is 23. Injuries (including those from road traffic accidents) are the leading cause of death among those age 5-44 years old (see Appendix Table A7.5). Often those injured or killed are pedestrians or users of nonmotorized transport, whose segregation from motorized transport is not well enforced.

247. **Environmentally inappropriate modes of transport result in high air pollution and traffic congestion in urban areas.** Dhaka is one of the most traffic-congested and polluted cities in the world. Conservative estimates place the cost of these inefficiencies to the economy at about Tk 32 billion a year (Center for Policy Dialogue Task Force 2001). Emissions from vehicles with two-stroke engines (baby taxis, tempos, motor-cycles), as well as trucks and buses, are one of the main causes of air pollution.⁹⁷ Although not a direct cause of air pollution, large numbers of slow-moving bicycle rickshaws and their noncompliance with traffic rules are a principal reason for traffic congestion and subsequent air pollution from idling traffic.



248. **Ports are highly ineffective.** Port inefficiencies, estimated to cost the economy about \$1.1 billion a year, represent a major hindrance to international trade (Cookson and Ahmed 2000). Studies looking at the effect of high shipping costs on the garment sector estimate that Bangladeshi exporters could earn about 30 percent more if various port inefficiencies were removed (Figure 9.1). Delays and uncertainties lead to long delivery times, lowering prices and prompting buyers to shift orders to other countries. Tardy delivery of imported fabrics reduces the productivity of garment factories. If ports continue to choke the economy's international trade links, no amount of macroeconomic, trade, or industrial reform will produce the massive export push needed to accelerate economic growth.

4. Policy priorities

249. The priority for the Government in the transit sector is to embrace the role of regulator and standard setter. Road safety, pollution control, and inland waterways are three areas where these needs are most pressing. The highest dividends in terms of growth and poverty reduction will be achieved if the Government focuses on maintaining (not expanding) the core network, enhancing capacity on major highway corridors, bridging river gaps, and replacing ferries with bridges. The large network of rural roads also requires more maintenance, not expansion. Combining rural roads maintenance with the Food-for-Work program is a winning strategy, but more engineering supervision and local participation are required to improve the sustainability of these actions. Institutional changes are necessary to support these strategic choices. The following policy changes appear most appropriate.

Favor upgrading and maintenance over expansion...

250. Bangladesh already has one of the highest road densities in the world. This asset, valued at over \$7 billion, needs to be conserved. Expenditures meant for construction of new roads should be reallocated

⁹⁷ The main pollutant in Dhaka is breathing particles smaller than 10 microns diameter (PM10) together with carbon monoxide (CO) and hydrocarbons (HC). The transport-related fraction of PM10 is estimated to be around 27 percent of the yearly average, rising to as much as 41 percent during dry months.

to upgrading and routine maintenance, especially of the core network. The same principle (priority to maintenance) should apply to the management of rural roads, since many of these roads have overlapping population catchments containing communities that cannot afford to lose the farm land acquired for road construction.

... and use private sector to improve the efficiency of expenditures

251. The efficiency of spending on maintenance could be improved by making greater use of the private sector in the execution of routine maintenance under sound competitive guidelines, using area-based term contracts that in time might move toward performance- rather than input- based specifications. Implementation of R&HD recommendations on revising contract size guidelines would also improve the efficiency of spending on maintenance. Proper application of the revised joint registration system for contractors and implementation of the new standard bidding documents for all road agencies and for all funding sources will further ease the conditions for private sector involvement.⁹⁸

252. These changes will require a framework for greater participation by all nongovernment stakeholders (road users, private sector, and others) in overall policy formulation (in an advisory capacity) and in the governance of implementing agencies (in an executive capacity). In addition, the Government should consider putting in place public monitoring systems—for example, through road user satisfaction surveys or regular workshops—to collect, disseminate, and debate data showing progress against established performance indicators.

Implement management reform

253. The Government should submit the Land Transportation Policy Bill to Parliament for enactment to clarify the roles and responsibilities of agencies in traffic management. This will formalize the relationships among R&HD, LGED, Bangladesh Road Transport Authority, and Home Office and encourage synergy rather than competition between sector agencies. It will also provide a basis for holding implementing agencies accountable for their performance.

254. R&HD should be made responsible only for the construction and maintenance of national and regional highways. Construction and maintenance of feeder roads and R1 roads, on the other hand, are better carried out by LGED. The two remaining road categories, R2 and R3, should be transferred to the management of Union Parishads. The new division of responsibilities will enable R&HD and LGED to have more focused programs. It will be particularly helpful for R&HD to phase out the large umbrella projects related to feeder roads (type A) to avoid wasting of resources. Some projects with questionable rationales that should be removed from the ADP are listed in Annex 4.⁹⁹

Improve resource mobilization and cost recovery

255. Additional funds for maintenance could come from the establishment of a dedicated road maintenance fund managed on commercial lines that would in time collect charges from road users. Workshops held several years ago explored the concept of such a fund, operating at arm's length from government. The stalled debate on the commercialization of the sector should be quickly revived with a wide audience. An autonomous road maintenance fund managed along commercial lines through a

⁹⁸ These changes are part of a broader revision of public procurement policy, legislation and practice as detailed in the World Bank's Country Procurement Assessment (WB 1999a).

⁹⁹ Several other problems also need to be resolved. R&HD has an outdated structure with in-house work execution, limited autonomy, weak human capacity and lack of capacity to manage social issues, and inadequate stakeholder participation. The flawed public procurement process limits private sector participation in the delivery of transport services

public-private board is likely to offer the best chance to ensure adequate and stable recurrent financing for all roads in the country.

256. Another important source of additional resources that can be easily tapped is improved collection of existing direct road taxes and charges. Poor collections are a major problem stemming from the weak vehicle registration system, fake licenses, the absence of fitness and tax certificates, and pilferage of receipts.¹⁰⁰ For example, only some 35,000 baby taxis are officially registered in Dhaka, while the number in circulation is believed to be 50,000-65,000. One recent government estimate of the losses involved in revenue collection put the shortfall at about Tk 10 billion per year (R&HD 1999).

Embrace regulatory and standard setter functions

257. Urgent actions are needed to enforce the existing ban on nonmotorized transport on national highways and to overhaul highway policing for enforcing traffic rules and axle load controls. This will require increasing training and equipping a dedicated highway police force to enforce traffic rules. In addition, in order to improve traffic efficiency, there is a need to establish better rickshaw traffic through either the introduction of free arteries or a traffic ban in city centers (as in Mumbai, India). While this low-cost, preferred mode of transportation generates considerable employment, it imposes negative externalities in terms of traffic congestion, pollution, and delays. A manageable strategy, therefore, is to limit the role of rickshaws as a feeder service to mass transit buses running on rickshaw-free arteries, and to localized transport on nonarterial roads. The establishment in 1996 of a National Road Safety Council to provide institutional support for these activities was a step in the right direction, but making it more efficient and operational will bring high benefits in terms of improved coordination and road safety.

258. Reducing pollution, especially in Dhaka, should also be an important goal. In pursuit of this objective, the Government should:

- Disseminate information on the negative effects of lube oil on engine wear and pollution.
- Consider importing diesel containing lower levels of sulfur.
- Reduce the price differential between diesel and gasoline, as cheaper diesel and kerosene have higher pollutant emissions and thus negative impacts on public health.
- Reduce duties on four-stroke three-wheelers.
- Use incentive schemes to phase out two-stroke three-wheelers, as has been successfully done in Delhi.
- Enforce emission controls through vehicle testing programs in cooperation with the Department of Environment, the Bangladesh Road Transport Authority, and the police.

Devote more attention to inland waterways

259. The inland waterway system, which carries large volumes of the nation's freight, is not used to its full potential due to silting waterways, lack of ghat berthing facilities, and obstructions caused by low or narrow road bridges and irrigation channel sluice gates. In recent years the bridging of river crossings on the highway network has proliferated in an ad hoc fashion, imposing numerous obstructions to waterborne traffic (due to insufficient vertical or width clearance) and creating a major challenge for the future development of the whole transport sector. Local authorities need to be encouraged to organize

¹⁰⁰ In addition, it is not clear whether the level of road user taxation is in line with the level of investments made in the sector; it is also difficult to determine what level of existing vehicle and fuel taxation should be attributed to the roads sector. The last rigorous attempt to do this was in 1999. It was concluded then that the road user charging system was generally efficient in its use of instruments and equitable in its differentiation between road users, and that at least recurrent sector costs could be met from sector revenues. It is likely that road user charges are now too low given the high level of investments the Government is making in the network.

self-financing ghat facilities through user charges. Close coordination between projects is needed to provide clearances under road bridges and consider the needs of country boats in siting and designing sluice gates. Setting and enforcing standards for the bridge network and berthing facilities in inland waterways has become a priority.

Restore port competitiveness

260. The Government needs to increase private sector participation in the management of ports under sound competitive guidelines while addressing the legitimate concerns of organized labor. In the near term the concessioning of the Patenga Container Terminal to the private sector should be completed and labor reform (especially the issue of severance payments for redundant workers) should be worked out through collaboration among the Government, port authorities, private, companies and unions. In the longer run port authorities should be given greater autonomy under the watch of appropriate regulatory authorities.

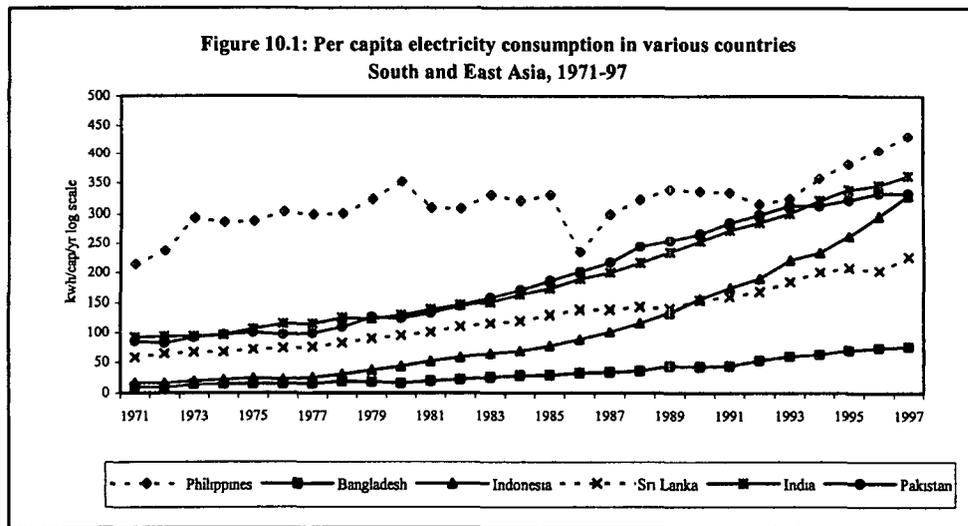
Chapter 10

ENERGY

The performance of the energy sector reflects one of the most egregious failures of public policy and governance in Bangladesh. Coverage and per capita consumption of commercial energy are very low, even by developing country standards. The quality of service is unsatisfactory. System losses are excessive. And some prices are below cost. Moreover, the inefficient provision of energy has imposed high fiscal and economic costs, including through inequitable subsidy schemes. The financial condition of the sector is poor because of weak governance, as manifested by high system losses—many of which are caused by pilferage and theft; substantial under pricing of power and gas for privileged groups of consumers; unsound taxation policies; and weak financial performance. The sector is behind in paying private suppliers and in servicing its debts. The sector relies on concessional budgetary resources to finance operating losses and investment requirements. In addition, Bangladesh has underwritten considerable contingent liabilities in the form of take or pay contracts and other payment guarantees to suppliers and investors. The establishment of an independent regulatory framework for gas and electric power has been under consideration for several years but has yet to materialize. A much stronger commitment to sector reform is essential if Bangladesh is to provide commercial energy of acceptable quality to meet the requirements of the economy. Reform would also considerably improve the quality of life of Bangladeshis—including the poor, most of whom are presently denied the benefits of commercial energy

1. The Energy Sector

261. Bangladesh's energy sector includes production, transmission, and distribution of gas and electricity and refining, import, and distribution of petroleum products. The country's per capita electricity consumption is the lowest in South Asia (Figure 10.1).¹⁰¹ The provision of commercial energy is dominated by public enterprises, with private participation limited to power purchase agreements with independent power providers, production sharing contracts with international oil companies, and retail distribution of petroleum products.¹⁰²



¹⁰¹ India, for example, with a comparable income level, has about 10 times the electricity consumption of Bangladesh. Overall, commercial energy provides only 35 percent of Bangladesh's total energy use.

¹⁰² For a more detailed discussion of the major financial and technical aspects and policy options for the restructuring of the energy sector see: *Bangladesh: A Review of Public Enterprise Performance and Strategy. Key Issues and Policy Implications* WB 2002c, *Bangladesh. Considerations on Energy Pricing*, WB 2001c, and *Bangladesh. Energy Strategy Note*, 1998.

262. The downstream petroleum market is dominated by the Bangladesh Petroleum Corporation (BPC), which is the sole importer of crude oil and petroleum products and the owner of the only refinery (ERL). Three BPC affiliates are entrusted with oil marketing. These companies purchase oil from BPC, ship products to depots (using privately owned barges, rail tank-wagons, and road tankers), and sell them to major customers as well as public and private dealers and retailers. Oil marketing, normally a highly competitive activity, operates in Bangladesh as an integrated state monopoly.

263. The natural gas sector is dominated by the Bangladesh Oil, Gas, and Mineral Corporation (BOGMC, commonly referred to as Petrobangla), which through its affiliates produces, transmits, and distributes natural gas throughout Bangladesh. Two international oil companies produce natural gas that they sell to BOGMC.¹⁰³

264. The public power sector is dominated by the Bangladesh Power Development Board (BPDB), an integrated utility accounting for about 80 percent of generation, 55 percent of transmission, and 40 percent of distribution (mainly in urban areas, with the exception of Dhaka). The transmission and dispatch activities are gradually being transferred to the Power Grid Company of Bangladesh (PGCB). The Dhaka Electric Supply Authority (DESA) covers most of Dhaka, while the Dhaka Electric Supply Company (DESCO) covers a small zone within Dhaka.¹⁰⁴ The Rural Electrification Board (REB) distributes power in rural areas through its 67 cooperatives, referred to as Palli Bidyut Samity (PBSS). Several independent power providers also supply electricity to the grid, and now account for about 20 percent of power generation.

265. Energy sector investments account for about 14 percent of ADP allocations, compared with 55 percent for education and health (Appendix Table A10.1); 80 percent of energy sector investments are earmarked for the power sector. The return on assets of state-owned energy enterprises has been very poor, averaging -0.5 percent during FY91-01 as a result of inadequate pricing policies, considerable inefficiencies, and mismanagement (Table 10.1). The enterprises' losses are conservatively estimated at a considerable 2.1 percent of GDP.

Table 10.1: Bangladesh—size, structure, and operational performance of major energy enterprises

Enterprise	Sectors covered	Public-private role and market share	Share of state enterprise employment (percent)	Share of state enterprise assets (percent)	Return on assets (percent)	Share of state enterprise profit/ loss (percent)
BPC	Petroleum refining, import, and marketing	Monopoly on crude oil and petroleum product imports. Owns ERL refinery and the three oil marketers, all fully in the public sector.	1.3	5.7	-1.4	-62.9
BOGMC	Natural gas	BOGMC: 80 percent of production International oil companies: 20 percent	2.8	7.6	4.0	6.0
BPDB	Power	BPDB: 83 percent of generation Independent producers: 17 percent	9.5	25.8	-0.9	-20.3
DESA	Power	Public monopoly on transmission and distribution outside Dhaka Public monopoly on distribution in Dhaka	1.9	6.4	-4.6	-10.6
Total (Average)			15.5	45.5	-0.5	-87.8

Source: Monitoring Cell, Ministry of Finance

¹⁰³ The operators are Shell and UNOCAL. They account for approximately 20% of total production (about 1 billion cubic feet per day).

¹⁰⁴ DESCO is incorporated, with large public ownership.

2. Downstream petroleum activities

266. Petroleum products account for 25 percent of commercial energy use in Bangladesh. As the country produces little oil, a third of the supply is in the form of crude oil, processed locally; the balance of the supply is imported directly. Crude and product imports represent about 10 percent of total export earnings. The main product is diesel oil, which at 1.9 million tons a year represents about 55 percent of overall consumption. It is mainly used for transport and agricultural pumping.

267. Most commonly, the price of petroleum products comprises the import parity price, taxes, terminal fees, storage fees (transport), and wholesale and retail margins (Table 10.2). Given the continuous fluctuations in international petroleum prices, the import parity price changes daily. As a result, in competitive markets the retail price is revised continuously. On the other hand, in regulated markets prices are revised periodically (quarterly, monthly, or fortnightly) under a predictable framework based on a transparent formula. In Bangladesh, however, no formal formula exists, so it is difficult to assess how prices are constructed. Moreover, prices are revised on an ad hoc basis with little transparency.

Table 10.2: Bangladesh Petroleum Corporation marketing margins for key products, January 2002
(taka per liter)

	Gasoline	Diesel	Kerosene	Jet Fuel
Import Parity Price	8.0	8.6	9.2	9.4
Taxes	8.9	8.9	7.4	10.0
Marketing Margins	0.9	0.7	0.6	1.0
BPC Margin	5.2	-2.7	-1.8	-4.4
Consumer price	23.0	15.5	15.5	16.0

Source: Bangladesh: Considerations on Energy Pricing, World Bank 2001.

268. BPC incurs losses on all products except for gasoline, which is minor in relation to diesel. Hence the surplus generated on gasoline did not suffice to bridge the gap. As a result BPC lost Tk 19.5 billion in FY01—losses that were covered by bank borrowings. Overall borrowings from domestic and foreign institutions reached Tk 27 billion by December 31, 2001. Such a policy is obviously unsustainable.

3. Natural gas subsector

269. Power generation and fertilizer production account for, respectively, 50 and 25 percent of gas use in Bangladesh. The financial performance of the gas sector has been well below potential, depriving the sector entities from greater investible surpluses and the public exchequer from additional gas revenues. In the 1990s BOGMC's profit averaged Tk 1.2 billion a year, with pre-interest return on assets (ROA) averaging 4 percent. The implied shortfall in returns has been on average equivalent to 0.25 percent of GDP a year. This is unsatisfactory performance for a state monopoly exploiting natural resources. The operational performance of BOGMC and its subsidiary entities has been affected largely by three factors:

- **Operational inefficiencies.** Losses in the gas system, customarily below 1 percent, have increased from 5 percent of total production in the early 1990s to 7 percent currently. The economic cost of this system loss was estimated at Tk 3.9 billion in FY02. One problem is that there is considerable resistance to metering households. A second area of inefficiency relates to the unsatisfactory management of gas infrastructure, one aspect of which is inadequate investment in expansion of the gas transmission and distribution network and inadequate operation and maintenance.

▪ **Pricing, taxation, and subsidies.** Gas tariff adjustments in the 1990s were wholly inadequate in the context of the requirements of the sector. Throughout the 1990s prices remained largely unchanged in real terms (Table 10.3). Moreover, since 1998 BOGMC has been buying gas from international oil companies under a pricing formula linked to international oil prices. Taxes constitute 55 percent of the gross revenue of BOGMC. Cross-subsidies are considerable and socially questionable. The 4 percent of households with access to gas receive a subsidy estimated at Tk 1.6 billion a year while those without access have to resort to considerably more expensive fuels (liquefied petroleum gas, kerosene) or traditional fuels, which provide lower quality heat with adverse environmental consequences.

▪ **Non-payment.** BOGMC's financial distress has been compounded by non-payment of bills by major consumers against which it was unable to take remedial actions. Against a norm of 2 months of sales equivalent, account receivables from BPDB are equivalent to 10 months. Similarly, the payment record of the fertilizer industry has been inadequate, reportedly on account of underpricing of urea. In all, BOGMC met only 18 percent of its debt service obligations in FY00, and has built considerable arrears to the international oil companies from which it purchases gas.

Table 10.3: Bangladesh—natural gas tariff structure and adjustments, FY93-02
(Taka per million cubic feet)

Use	FY93	FY94	FY99	FY01	FY02	Av Annual Increase FY93-02 (percent)
Power	43.04	47.6	54.7	62.9	62.9	4.3
Fertilizer	37.38	41.3	47.6	54.7	54.7	4.3
Industry	93.73	103.1	118.9	136.7	136.7	4.3
Household	82.12	82.1	94.9	109.1	109.1	3.2
Commercial	134.22	147.5	169.7	195.4	195.4	4.3
Average		57.1	61.7	66.8	76.8	4.2

Source : BOGMC

4. Power subsector

270. The coverage of power supply and per capita availability in Bangladesh are low, supply is unreliable, and associated subsidies are inequitable. Power shortages and outages have imposed substantial costs on the economy. The power elasticity of GDP in Bangladesh is estimated at 0.03-0.05, implying that a 10 percent power shortfall could lower GDP growth by 0.3-0.5 percent.¹⁰⁵ Power outages in Bangladesh cost about \$1 billion a year and reduce GDP growth by about half a percentage point.¹⁰⁶ In addition, shortages of electricity hurt consumers, particularly the poor, who are more likely to be underserved. Evidence gathered through the 2000 Household Income and Expenditure Survey indicates that about 31 percent of households now have access to electricity (80 percent urban, 19 percent rural), compared with 21 percent in 1995-96 (73 percent urban, 10 percent rural). The richest 20 percent of the urban population is more than twice as likely to have an electricity connection than the poorest 20 percent—and the richest 20 percent of the rural population is 15 percent as likely to have a connection.

271. Together BPDB and DESA have been estimated to incur an annual cash shortfall in the vicinity of \$180 million. As a result these companies are unable to operate, maintain, and expand their grids in line with the requirements of the market. The potential for private sector involvement in distribution has not been exploited, partly because of the absence of a coherent strategy and because of strong opposition by various stakeholders. The underdevelopment of the energy sector represents a major obstacle to Bangladesh's economic growth. The Fifth Five-Year Plan (1997-2002) rightly envisaged a minimum growth rate of electricity supply at a multiple of 1.5 of GDP growth. Hence, unless bold decisions are

¹⁰⁵ The impact of power shortages has been studied in a production function framework. In this framework, energy enters as a key intermediate input, and appears to have strong complementarity with a primary input, capital. For estimation details see *Macroeconomic Framework for Energy Sector Strategy in Bangladesh* (World Bank 1999).

¹⁰⁶ *Cost of Electricity Outage in Bangladesh* (World Bank 2000).

made, the sector will continue to be a significant impediment to Bangladesh's economy. The failure in the sector over the years is largely attributable to high system losses, poor financial management (inadequate pricing, poor billing and collection), and ineffective or unresponsive governance:

- **High system losses due to power pilferage and theft.** In recent years the combined system losses of BPDB and DESA have been around 35 percent of gross generation and power purchase; only 90 percent of billing has been collected (Table 10.4).

- **Default by consumers.** Because of poor recovery efforts, the account receivables of BPDB tripled between FY96 and FY01, reaching over 12 months' sales revenue (Table 10.5). DESA's account receivables also nearly tripled during this period, reaching 16 months' sales. These levels are unacceptably high by any standard. DESA alone accounts for about 50 percent of BPDB's account receivables. Much of DESA's account receivables, in turn, are on account of public sector consumers.

- **Inadequate tariffs.** Power tariff rates for domestic, industrial, and commercial use have been raised by 4-5 percent a year in nominal terms since the mid-1990s (Table 10.6). The existing formula for tariff adjustments is deficient and does not fully capture the revisions needed to attain cost recovery. In FY00 BPDB's average power tariff was 6 percent below the long-run marginal cost (LRMC) of power (Appendix Table A10.2). Power supplied to agriculture was subsidized at a level of 48 percent of LRMC and domestic power consumption at 36 percent in that year. Interestingly, urban households have benefited from lower tariffs than their rural counterparts. Moreover, the first block of the tariff structure, reduced recently from 300 to 100 kilowatt-hours, is still high by developing country standards (Appendix Table A10.4).

- **Poor investment choices.** Examples of bad investments include opting for coal-fired, rather than gas-fired plants and using supplier credits for public power generation rather than using concessional lending.

272. For example, a coal mine with an adjacent steam-turbine coal-fired power plant was recently contracted (250 megawatts at Barapukuria). Its capital and operating costs are expected to be at least 70 percent higher than a combined-cycle gas-fired plant under private ownership (Box 10.1). The cost of ancillary investments (such as transmission lines and coal transportation infrastructure) will add considerably to the cost of power supply. A World Bank study (2000f)¹⁰⁷ on the use of supplier credits

Table 10.4: Bangladesh—utility system losses and collection efficiency

Fiscal year	System losses (percent)	Collection as % of billing	Collection as % of generation
FY95	32	95	68
FY96	31	94	68
FY97	30	89	63
FY98	31	91	67
FY99	30	85	64
FY00	33	90	67
FY01	31	90	68

Note: Data refer to BPDB, DESA, and REB combined.
Source: BPDB, DESA, RFR

Table 10.5: Trends in Account Receivables of BPDB and DESA (in billion Taka)

	FY96	FY97	FY98	FY99	FY00	FY01
BPDB	9.9	12.3	16.8	23.2	27.9	33.5
DESA	6.3	7.9	10.0	12.4	14.0	14.8

Source: BPDB and DESA

Table 10.6: Power Tariff Structure and Adjustments (Tk/kWh)

	Residential	Commercial	Industrial	Agricultural
1995	1.65	3.70	2.45	1.75
2001	2.15	4.65	3.30	1.75
Annual increase (percent)	4.5	3.9	5.1	0

Source: BPDB

¹⁰⁷ World Bank. 2000f. *Supplier's Credit as External Finance: Challenges for Fiscal and External Debt Management*. Washington, D.C.

found that the lack of a competitive environment for projects financed by such credits (such as a plant developed under Chinese credit) means that Bangladesh is paying a much higher price than implied by the credit terms. Moreover, power plants funded by supplier credits have often had unsatisfactory technical performance.

Box 10.1: The Barapukuria coal mine and power plant complex

The first contract for this project was signed with a Chinese supplier in 1994. The project consists of a coal mine (production capacity of 1 million tons a year) and a steam power plant (250 megawatt) at a total cost (including transmission lines) of \$400-500 million. The project is located in northwest Bangladesh, where potential demand is small—requiring the transmission of the power. The complex will produce power for approximately \$0.05/kWh, which compares with \$0.02/kWh for large-scale independent power providers. The sponsor of the mine is BOGMC, which has created a subsidiary to manage the project, though BOGMC has virtually no expertise in coal (and the accounts of the subsidiary are difficult to access). BPDB is the sponsor of the power plant. While the plant will generate economic activity in its vicinity, it has wide-reaching negative implications:

- Both BOGMC and BPDB are in financial distress—they do not even have the funds required to operate and maintain their respective systems. The rationale for using their scarce resources for this project has yet to be made.
- The project will result in very expensive power (see below) and cause a significant increase in tariffs that will affect all power users in Bangladesh.
- The project will have adverse implications for the environment (emissions, ash disposal, water treatment and disposal) that will have to be addressed. It is unclear whether an environmental impact assessment has been made.

The economics of coal-fired and gas-fired power plants

	Unit	Coal-fired steam plant	Combined-cycle gas turbine (natural gas)
Cost/kW	US\$	1,000	600
Annual generation	GWh	1,752	1,752
Total capital cost	US\$ million	250	150
Annual cost	US\$ million	27	18
Fuel cost	US\$/ton or mcf	80.0	2.4
Operations and maintenance	US\$ million	8	2
Total fixed costs	US\$ millions	34	19
Fixed cost	US\$/kWh	2	1
Total annualized cost	US\$/kWh	5.1	3.0

5. Recent energy policies

273. The opening of the upstream petroleum sector and the power generation market to private investments has had a favorable impact on energy supply. International oil companies have made significant discoveries, some of which have been developed. Large combined-cycle, gas-fired independent power providers supply electricity at competitive prices and have improved the quality and reliability of the power supply. BOGMC has fallen behind in its payment obligations to international oil companies. BPDB has a better record toward independent power providers. To some extent, that is because it has incurred huge arrears to BOGMC and so is somewhat responsible for BOGMC's difficulties. Given the increasing share of independent power providers in the power market (Table 10.7), unless the financial performance and creditworthiness of the power sector improves to a considerable degree, government guarantees are likely to be called—raising the risk of a macroeconomic crisis similar to the one that hit Pakistan in the 1990s. With respect to the capability of the state to generate foreign

exchange commensurately with the anticipated requirements, a World Bank study (1999c)¹⁰⁸ concluded that unless new sources of foreign exchange earnings are tapped (such as gas exports), Bangladesh could find it increasingly difficult to meet the financial obligations arising from power purchase agreements with independent power providers or production sharing contracts with international oil companies.

Table 10.7: Bangladesh—installed capacity of independent power providers, FY99-05
(megawatts)

Power Plant	UNIT	CAPACITY	TYPE	FUEL	FY99	FY00	FY01	FY02	FY03	FY04	FY05
<i>Existing</i>											
East											
Mymensingh (RPC)	4X35 MW	140	CT	Gas P	-	70	140	140	140	140	140
Haripur Bmpp (New England)	8X15 MW	110	D	Gas P	-	110	110	110	110	110	110
Haripur (AES)	360 MW	360	CC	Gas P	-	-	235	360	360	360	360
West											
Baghabari Bmpp (West Mont)	2X45 MW	90	CT	Gas P	-	90	90	90	90	90	90
Khulna Bmpp (KPCL)	18X6 MW	110	D	F.Oil	110	110	110	110	110	110	110
<i>New</i>											
East											
Meghnaghat (AES)	450 MW	450	CC	Gas P	-	-	-	-	450	450	450
West											
Baghabari (Cinergy)	170 MW	170	CC	Gas P	-	-	-	-	170	170	170
Baghabari (West Mont)	40 MW	40	ST	Gas P	-	-	-	40	40	40	40
Total installed capacity					110	380	685	850	1,470	1,470	1,770
Total capacity excluding RPC					110	310	545	710	1,330	1,330	1,630

Source: World Bank staff estimates.

274. Some initiatives were taken recently to improve the performance of the sector. Energy prices were adjusted in January 2002, but the revisions were insufficient given the financial requirements of the power and gas sectors. The Government is in the process of preparing Electricity and Gas Bills that would empower a future Energy Regulatory Commission to set gas and power tariffs. BPDB and DESA have initiated a drive to strengthen revenue recovery by disclosing the names of delinquent consumers. The Government has also commissioned two committees to assess the merits of gas exports. And new guidelines on supplier credits are expected to contain recourse to this inefficient mode of financing.

6. Key sector issues and reform options

275. Poor governance and lax accountability of state-owned energy enterprises have created opportunities for large-scale corruption and patronage. Corruption and performance lapses have taken many forms and shapes, including meter readers colluding with unscrupulous consumers in appropriating revenues, illegal connections, tampering with meters, use of multiple meters by single customers to take advantage of subsidized rates under the first block of tariffs, poor enforcement of peak-hour tariffs, misprocurement of equipment, lax enforcement of volume standards for petroleum products, and adulteration of products. The energy sector is perceived as highly corrupt based on feedback obtained through consumer surveys (Transparency International, Bangladesh chapter, December 2001). Improving governance in state energy enterprises should be the first and foremost priority.

¹⁰⁸ World Bank 1999. *Foreign Direct Investments in Bangladesh: Issues of Long-Run Sustainability*. Washington, D.C.

276. Inadequate tariffs have undermined the financial solvency of the energy enterprises. Bringing these in line with market realities (for petroleum products) and the economic costs of supply (for gas and power) is essential. Given the competing demand for scarce government resources for non-revenue-earning activities (particularly in the social sectors) and the limited access to commercial energy sources, there is a strong case for inviting the private sector to own, operate, and develop energy infrastructure in line with demand growth, under a competitive framework (except when competition is not feasible, in which case rates should be set by independent regulators).

277. It is also well accepted that the public sector alone will not be able to finance the considerable investment requirements of energy-related activities. To attract private investment on a sustained basis:

- Downstream petroleum activities should be restructured to enable competition in procurement, transport, and distribution of petroleum products. In addition common carrier arrangements (or third party access) should be provided for essential infrastructure.
- The gas sector should be restructured so that gas producers compete with each other in selling gas to regional distribution companies through an independently regulated high—pressure transmission system operating as a common carrier.
- The power sector should be restructured so that corporatized generating plants (or clusters of generating plants), the transmission grid, and corporatized distribution zones operate in a commercial environment, at arm's length from each other.
- For all three activities, the legal and regulatory framework should be reconsidered to create the essential conditions for competitive environments, transparent and predictable pricing policies, and, in the case of power and gas, independent regulation.

278. Considerable analytical work is available for policymakers to examine the various issues that power sector reform will entail and create a broad consensus on the overall sector reform program.¹⁰⁹ Lessons from other countries that have carried out energy sector restructuring, including some in the region, could be drawn upon (Annex 8).

279. In the short term the following measures should be considered:

- Passing the Bangladesh Electricity and Gas Acts to introduce an appropriate legal and regulatory framework.
- Introducing transparent fortnightly price adjustment mechanisms for petroleum products reflecting international prices and current taxation policies, quarterly adjustments for natural gas tariffs linked to movements in international high-sulfur fuel oil prices, and quarterly adjustments for power tariffs linked to movements in supply costs, including gas and fuel oil prices and other variable costs.¹¹⁰
- Abandoning the Barapukuria coal-fired power plant given its cost (close to \$500 million, including transmission extensions and coal transportation infrastructure), the resulting costly power it will generate, and its adverse environmental implications (emissions, ash disposal, and so on).
- Consolidating the whole gas transmission network into the Gas Transmission Company Limited to operate as a common carrier.

¹⁰⁹ There are some disagreements even among specialists about the sequencing and speed of privatization in the power sector. For details see Newbery 2001, *Background Paper. Public Expenditure Review of Energy Sector*, World Bank, Dhaka.

¹¹⁰ For details see *Bangladesh. Considerations on Energy Pricing* World Bank, 2001c.

- Commercializing the relationships between state enterprises and in particular requiring advance payments (or equivalent payment guarantees) from other state enterprises and public sector customers.
- Applying strict disconnection policies to delinquent customers and making periodic disclosure of the highest defaulters to the media.
- Implementing financial action plans for BPDB, DESA, and BOGMC to address their high levels of account receivables and payables and past financial claims, arranging for the financial pass-through of gas purchases from international oil companies and the settlement of arrears with them, addressing their inadequate capitalization, making adequate provision for pension and other employee liabilities, and providing adequate budgetary resources for government entities to pay for energy and other utility services.

APPENDIX TABLES AND FIGURES

Table A1.1: Estimation Results for Per Capita GDP Growth (OLS), FY1974-FY1998

Dependent Variable: npc				
Method: Least Squares				
Sample (adjusted): 1974 1998				
Included observations: 25 after adjusting endpoints				
Newey-West HAC Standard Errors & Covariance (lag truncation=2)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.436346	0.179394	-2.432339	0.0245
d(ln(N))	-5.272686	2.498191	-2.110602	0.0476
D(ln(ToT))	0.154146	0.078182	1.971631	0.0626
PI(-1)/Y	0.780881	0.385662	2.024784	0.0564
LOG(Y(-1)/N(-1)/ (Y*(-1)/N*(-1)))	-0.384658	0.125423	-3.066897	0.0061
R-squared	0.453707	Mean dependent var		0.037200
Adjusted R-squared	0.344448	S.D. dependent var		0.065161
S.E. of regression	0.052759	Akaike info criterion		-2.869322
Sum squared resid	0.055669	Schwarz criterion		-2.625547
Log likelihood	40.86653	F-statistic		4.152594
Durbin-Watson stat	1.894259	Prob(F-statistic)		0.013108

Table A1.2: Estimation Results for Per Capita GDP Growth (TSLs), FY1974-FY1998

Dependent Variable: npc				
Method: 2-Stages Least Squares				
Sample(adjusted): 1974 1998				
Included observations: 24 after adjusting endpoints				
Newey-West HAC Standard Errors & Covariance (lag truncation=2)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.321124	0.181412	-1.770139	0.0927
d(ln(N))	-3.900701	1.670029	-2.335709	0.0306
d(ln(ToT))	-0.046329	0.037073	-1.249657	0.2266
PI/Y	0.856413	0.400346	2.139184	0.0456
LOG(Y(-1)/N(-1)/ (Y*(-1)/N*(-1)))	-0.264333	0.111493	-2.370846	0.0285
R-squared	0.311428	Mean dependent var		0.027083
Adjusted R-squared	0.166466	S.D. dependent var		0.041961
S.E. of regression	0.038309	F-statistic		2.275693
Sum squared resid	0.027884	Prob(F-statistic)		0.098946
Durbin-Watson stat	2.256306			

Table A1.3: CGE Model Simulation 1: Macroeconomic Effects of a Rise in Government Current Expenditure by 1% of GDP

	Year 1	Year 2
Real GDP ^a	+0.7%	+0.5%
Price Level ^a	+2.7%	+2.3%
Govt. Expenditure/GDP ^b	+1.19	+2.18
Govt. Income/GDP ^b	+0.4	+0.38
Fiscal Deficit/GDP ^b	+0.79	+1.8
Real interest rate ^c	+0.8	+3.52
Trade Balance/GDP ^b	-0.49	-0.44
Real Exchange Rate ^a	-2.7%	-3%
Private Investment/GDP ^b	+0.12	-0.15
Private Consumption/GDP ^b	-0.82	-1.59

Source: Staff calculations.

a: Percent change over simulated values in the model

b: Change in the ratio of the variable over GDP

c: Change in real percentage points

Note: results were obtained by running the Macro CGE Model of the Ministry of Finance of Bangladesh

Table A1.4: CGE Model Simulation 2: Macroeconomic Effects of a Reduction in Indirect Tax Rates from 11% to 9.8%

	Year 1	Year 2
Real GDP ^a	+0.4%	-0.3%
Price Level ^a	+3.7%	+3.3%
Govt. Expenditure/GDP ^b	+0.49	+3.16
Govt. Income/GDP ^b	-0.51	+0.02
Fiscal Deficit/GDP ^b	+1.00	+3.14
Real interest rate ^c	+0.68	+5.01
Trade Balance/GDP ^b	-0.64	-0.52
Real Exchange Rate ^a	+3.8%	+3.4%
Private Investment/GDP ^b	+0.22	-0.33
Private Consumption/GDP ^b	-0.07	-2.31

Source: Staff calculations.

a: Percent change over simulated values in the model

b: Change in the ratio of the variable over GDP

c: Change in real percent points

Note: results were obtained by running the Macro CGE Model of the Ministry of Finance of Bangladesh

Table A2.1: Budget Indicators in South Asia, FY95-FY01
(in percent of GDP)

	Bangladesh			India			Pakistan			Sri Lanka		
	FY-95	FY-00	FY-01	FY-95	FY-00	FY-01	FY-95	FY-00	FY-01	FY-95	FY-00	FY-01
Fiscal Deficit	5.2	6.2	6.0	9.1	11.0	10.5*	6.7	6.4	5.2	9.1	6.9	9.9
Budget Revenues	9.3	8.5	9.4	21.0	18.7	19.1	16.3	16.6	15.7	20.4	18.3	17.0
Current Expenditures	6.8	7.8	8.0	22.7	23.0	23.2	18.2	20.3	18.8	21.9	18.7	20.3
Capital Expenditures	7.8	6.8	7.4	9.6	6.6	6.4	4.7	2.8	2.2	6.9	6.5	6.5
External Financing	2.4	2.5	2.0	0.4	0.7	0.3	1.7	2.2	2.3	2.0	0.1	1.0

* includes public enterprise deficit

Source: World Bank SIMA Database

Table A2.2: Ratio of Sectoral Project Aid to Sectoral ADP
(per period average)

Sector	1976-81	1984-90	1991-95	1995-00
Agriculture	0.20	0.52	0.56	0.52
Rural Dev. & Inst.	0.26	0.84	0.62	0.49
Flood Control & Water Resource	0.23	0.61	0.48	0.55
Industry	0.53	0.61	0.20	0.23
Power	0.40	0.75	0.48	0.33
Natural Resources	0.37	0.55	0.58	0.49
Transport	0.37	0.55	0.58	0.49
Communication	0.24	0.48	0.31	0.27
Physical Planning and Housing	0.24	0.43	0.40	0.39
Education and Training	0.14	0.60	0.47	0.30
Health, Pop. Contl and Family Planning	0.35	0.61	0.60	0.63
Soc. Welf., Woman's Affrs. And Youth Dev.	0.13	0.31	0.30	0.24

Source: Staff estimates on the basis of budget documents.

Table A2.3: Economic Analysis of Revenue Expenditure

Description	Taka in Billions								As a percent of GDP			
	FY99	% total	FY00	% total	FY01(R)	% total	FY02(B)	% total	FY98	FY99	FY00	FY01(R)
Pay And Allowances	51.00	30.4	57.15	31.0	59.49	28.8	61.42	27.9	2.1	2.2	2.2	2.3
Pay of Officers	5.51	3.3	5.86	3.2	6.12	3.0	6.30	2.9	0.2	0.2	0.2	0.2
Pay of Establishment	24.34	14.5	25.29	13.7	26.44	12.8	27.28	12.4	1.0	1.0	1.0	1.0
Allowances	21.15	12.6	26.00	14.1	26.93	13.0	27.84	12.6	0.9	0.9	1.0	1.0
Goods and Services	22.56	13.5	24.56	13.3	28.39	13.7	29.50	13.4	0.9	1.0	1.0	1.1
Supplies and Services	14.40	8.6	16.41	8.9	19.74	9.6	20.91	9.5	0.6	0.6	0.6	0.8
Repairs, Maintenance and Rehabilitation	8.16	4.9	8.15	4.4	8.65	4.2	8.59	3.9	0.3	0.3	0.3	0.3
Interest Payments	29.46	17.6	35.54	19.3	41.26	20.0	45.60	20.7	1.1	1.2	1.4	1.6
Domestic	22.21	13.2	27.69	15.0	33.06	16.0	36.30	16.5	0.7	0.9	1.1	1.3
Foreign	7.25	4.3	7.85	4.3	8.20	4.0	9.30	4.2	0.3	0.3	0.3	0.3
Subsidies and Current Transfers	48.50	28.9	48.46	26.3	55.78	27.0	54.70	24.8	1.7	2.0	1.9	2.2
Subsidies	4.33	2.6	5.94	3.2	5.44	2.6	6.09	2.8	0.3	0.2	0.2	0.2
Grants in Aid	33.22	19.8	31.26	16.9	36.15	17.5	32.63	14.8	1.1	1.4	1.2	1.4
Contributions in International Organizations	0.17	0.1	0.18	0.1	0.20	0.1	0.20	0.1	0.0	0.0	0.0	0.0
Pensions and Gratuities	10.78	6.4	11.08	6.0	13.99	6.8	15.78	7.2	0.4	0.5	0.4	0.5
Block Allocations	6.43	3.8	9.14	5.0	12.38	6.0	19.85	9.0	0.4	0.3	0.4	0.5
Unexpected	1.00	0.6	1.00	0.5	0.90	0.4	4.10	1.9	0.0	0.0	0.0	0.0
Others	5.43	3.2	8.14	4.4	11.48	5.6	15.75	7.1	0.4	0.2	0.3	0.4
Acquisition of Assets and Works	10.24	6.1	10.14	5.5	10.23	5.0	11.39	5.2	0.5	0.4	0.4	0.4
Acquisition of Assets	7.67	4.6	7.09	3.8	7.58	3.7	8.90	4.0	0.4	0.3	0.3	0.3
Acquisition of Land	0.15	0.1	0.44	0.2	0.05	0.0	0.06	0.0	0.0	0.0	0.0	0.0
Construction and Works	2.42	1.4	2.61	1.4	2.60	1.3	2.43	1.1	0.1	0.1	0.1	0.1
Total	168.19		184.99		207.53		222.46		6.7	7.1	7.2	8.0
Deduct	0.54	0.3	0.55	0.3	0.91	0.4	2.08	0.9	0.1	0.0	0.0	0.0
Recoveries	0.54		0.55		0.91		2.08		0.0	0.0	0.0	0.0
Extra Ordinary Charges												
Net Total	167.65	100.0	184.44	100.0	206.62	100.0	220.38	100.0	6.6	7.1	7.1	8.0

Table A3.1: List of State-Owned Enterprises

Manufacturing		
BTMC		Bangladesh Textile Mills Corporation
BJMC		Bangladesh Jute Mills Corporation
BSEC		Bangladesh Steel and Engineering Corporation
BSFIC		Bangladesh Sugar and Food Industries Corporation
BCIC		Bangladesh Chemical Industries Corporation
BFIDC		Bangladesh Forest Industry Development Corporation
Electricity, Gas & Water		
BPDB		Bangladesh Power Development Board
DESA		Dhaka Electricity Supply Authority
REB		Rural Electrification Board
BOGMC		Bangladesh Oil, Gas and Mineral Corporation
BPC		Bangladesh Petroleum Corporation
CWASA		Chittagong Water and Sewerage Authority
DWASA		Dhaka Water and Sewerage Authority
Transport and Communication		
BSC		Bangladesh Shipping Corporation
BIWTC		Bangladesh Inland Water Transport Corporation
BIWTA		Bangladesh Inland Water Transport Authority
BBC		Bangladesh Biman Corporation
BRTC		Bangladesh Road Transport Corporation
CPA		Chittagong Port Authority
CPDMB		Chittagong Port Dock Management Board
MPA		Mongla Port Authority
MPDMB		Mongla Port Dock Management Board
Trading		
TCB		Trading Corporation of Bangladesh
BJC		Bangladesh Jute Corporation
Water Resources		
BWDB		Bangladesh Water Development Board
Agriculture		
BADC		Bangladesh Agriculture Development Corporation
BFDC		Bangladesh Fisheries Development Corporation
Construction		
RAJUK		Rajdhani Unnayan Kartripakhya
CDA		Chittagong Development Authority
KDA		Khulna Development Authority
RDA		Rajshahi Development Authority
Service		
BFFWT		Bangladesh Freedom Fighters' Welfare Trust
BFDC		Bangladesh Film Development Corporation
CAAB		Civil Aviation Authority of Bangladesh
BSCIC		Bangladesh Small and Cottage Industries Corporation
BEPZA		Bangladesh Export Processing Zone
BHB		Bangladesh Handloom Board
BSB		Bangladesh Sericulture Board
BTB		Bangladesh Tea Board

Table A3.2: State Owned Enterprises Operational Indicators
(in billion taka)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02
Operating Revenue	113.63	129.17	137.73	144.48	160.01	167.81	166.64	186.72	201.91	216.87	255.94	296.8
Cost of Goods & Services	89.54	100.25	102.20	105.60	124.99	135.52	140.36	149.56	162.14	192.41	233.28	262.05
Value Added	24.09	28.92	35.52	38.88	35.02	32.29	26.28	37.16	39.77	24.46	22.66	34.75
Wage Bill	10.75	13.07	14.93	14.88	14.97	16.06	15.93	15.95	15.96	17.25	18.33	19.73
Depreciation	6.95	9.00	11.04	11.39	13.66	12.62	15.79	16.50	19.54	19.90	21.19	20.81
Operating Surplus	6.40	6.85	9.56	12.61	6.39	3.61	-5.44	4.71	4.28	-12.69	-16.86	-5.79
Non-operating Income	-0.03	-2.08	1.46	0.78	0.00	5.58	3.08	3.56	2.47	3.99	5.71	6.1
WPPF	0.11	0.10	0.15	0.17	0.16	0.19	0.18	0.23	0.22	0.23	0.24	0.29
Subsidy	0.01	0.16	0.01	0.01	0.01	0.09	0.09	0.09	0.36	0.14	0.09	0.09
Interest	9.14	11.21	10.41	7.30	8.60	7.91	7.87	9.81	8.99	9.58	12.32	14.65
Direct Tax	3.82	5.18	4.69	5.59	2.09	1.51	1.09	1.20	2.00	1.32	1.83	2.12
Dividend	2.56	3.66	4.29	5.11	2.06	2.10	1.47	1.76	3.16	1.70	1.55	2.51
Retained Income	-9.26	-15.22	-8.52	-4.79	-6.52	-2.44	-12.89	-4.64	-7.27	-21.39	-27.00	-19.17
Profit after Tax	-6.70	-11.56	-4.23	0.33	-4.46	-0.34	-11.42	-2.88	-4.11	-19.69	-25.45	-16.66
Gross Savings**	-2.32	-6.22	2.53	6.61	7.14	10.17	2.91	11.86	12.27	-1.49	-5.81	1.64
Capital Expenditure	37.16	33.46	22.96	25.14	29.02	28.70	29.54	31.47	31.38	35.26	40.63	56.24
Loan Repayment	8.64	11.77	15.51	14.23	14.66	12.01	10.67	13.01	16.68	19.86	17.77	22.23
Deficit***	-48.11	-51.44	-35.95	-32.76	-36.53	-30.54	-37.30	-32.62	-35.79	-56.61	-64.21	-76.83
Equity Financing	4.36	3.97	8.65	9.62	23.34	6.20	10.77	8.98	8.36	10.43	25.08	25.1
Long Term Borrowing	17.40	29.55	19.85	12.64	22.02	23.54	17.93	18.63	22.79	33.07	26.82	43.52
Residual Financing	26.34	17.93	7.45	10.50	-8.82	0.80	8.61	5.02	4.64	13.11	12.31	8.21
Equity Stock	88.17	129.21	168.31	198.58	215.35	219.27	237.64	226.47	244.07	233.81	224.93	229.37
Total Liabilities	332.59	340.29	409.67	415.63	435.70	440.42	464.99	482.83	517.68	583.61	674.27	730.03
Total Asset	420.76	469.50	577.98	614.21	651.05	659.69	702.63	709.30	761.75	817.42	899.20	959.40
Personnel ('000)	283.07	316.70	307.65	276.15	264.50	266.81	267.66	252.55	245.95	243.62	244.67	245.448

**Gross Savings is equal to Retained Earning plus Depreciation

***Deficit is equal to Gross Savings minus Capital Expenditure minus Loan Repayment

Source. Monitoring Cell, Ministry of Finance

Table A5.1: Selected Primary Schooling Indicators among Asian Countries

	Gross enrollment ratio, 1997	Net enrollment ratio, 1997	Coefficient of efficiency, 1995-98	Primary repetition rate, 1997	Primary student-teacher ratio, 1994-96
Bangladesh	^a 97	^a 83	75.7	6.8	^c 63
Nepal	113	^a 70	40.5	26.6	39
Cambodia	113	100	39.5	26.3	44
Lao PDR	112	72	51.5	23.4	30
Pakistan	^a 82	^a 50	^b 68.3	na	^c 43
Vietnam	114	Na	79.6	na	34
India	100	^a 60	66.6	3.7	47
Sri Lanka	109	^a 95	^b 90.4	2.3	28
China	123	102	^b 94.2	1.6	24
Indonesia	113	95	88.3	5.8	23
Philippines	117	101	^c 76.1	na	35
Thailand	89	Na	93.7	na	^c 22
Malaysia	101	102	98.2	na	19

Source: World Bank, except Col. 5 (Asian Development Bank)

^a Refers to 1997-98.

^b Refers to primary schooling only.

^c Refers to 1990.

Table A5.2: The Structure of Primary Schooling, 2000

Type of school	Number of schools	% of total	Number of Teachers	% of total	Students	% of total	% female students
Government primary school	37,677	49.1	158,216	51.1	10,832,476	61.3	49.5
Experimental schools	53	0.1	259	0.1	11,482	0.1	47.0
Registered non-government primary school	19,253	25.1	76,267	24.7	4,170,925	23.6	47.5
Community school	3,061	4.0	8,949	2.9	454,905	2.6	51.6
Satellite school	3,884	5.1	6,123	2.0	209,238	1.2	52.2
Primary school attached to high school	1,220	1.6	7,971	2.6	499,353	2.8	50.1
Non-registered non-government primary school	2,126	2.8	8,603	2.8	307,867	1.7	47.9
Kindergarten	2,296	3.0	13,507	4.4	345,088	2.0	47.7
Ebtedayee madrasah	3,710	4.8	14,760	4.8	417,411	2.4	46.1
Ebtedayee madrasah attached to high madrasah	3,437	4.5	14,318	4.6	403,621	2.3	44.0
NGO-operated full primary school	92	0.1	368	0.1	15,619	0.1	47.5
Totals	76,809	100	309,341	100	17,667,985	100	48.9

Source: Department of Primary Education (GOB 2001a).

Table A5.3: Structure of Secondary Education in Bangladesh, 1997

	Number schools	of % total	of Teachers	% total	of Students	% total	of % female students
Junior Secondary and Secondary (VI-X)							
Government							
Government secondary schools	317	1.5	7,500	2.7	245,900	3.1	46.6
Madrasah Dakhil schools	4,795	23.0	58,400	21.1	840,400	10.6	27.3
Sub-total: Government	5,112	24.5	65,900	23.9	1,086,300	13.7	31.7
Non-government							
Junior secondary schools	3,002	14.4	19,300	7.0	632,200	7.9	53.9
Non-government secondary schools	10,459	50.2	130,300	47.2	5,245,900	65.9	53.5
Subtotal: Non-government	13,461	64.6	149,600	54.1	5,878,100	73.9	53.6
Subtotal: Secondary (VI-X)	18,573	89.1	215,500	78.0	6,964,400	87.5	50.1
Higher secondary (XI-XII)							
Government							
Government intermediate colleges	8	0.0	100	0.0	6,500	0.1	27.7
Government degree colleges	225	1.1	9,500	3.4	307,400	3.9	34.6
Madrasah Alim colleges	983	4.7	17,500	6.3	61,900	0.8	10.2
Subtotal: Government	1,216	5.8	27,100	9.8	375,800	4.7	30.5
Non-government							
Non-government intermediate colleges	893	4.3	15,800	5.7	249,400	3.1	43.3
Non-government degree colleges	159	0.8	17,900	6.5	367,300	4.6	32.3
Subtotal: Non-government	1,052	5.0	33,700	12.2	616,700	7.8	36.8
Subtotal: Higher secondary (XI-XII)	2,268	10.9	60,800	22.0	992,500	12.5	34.4
Total Government	6,328	30.4	93,000	33.7	1,462,100	18.4	31.4
Total Non-government	14,513	69.6	183,300	66.3	6,494,800	81.6	52.0
Total	20,841	100.0	276,300	100.0	7,956,900	100.0	48.2

Source: World Bank (2000)

Table A5.4: Distribution of Public Education Expenditures across Welfare Classes, various countries

	Year	Source	Welfare class					Total
			1 (lowest)	2	3	4	5 (highest)	
Vietnam	1998	Vietnam PER, WB 2000						
Primary		-	26.1	24.6	23.4	16.2	9.7	100
Secondary		-	12.7	19.1	23.3	23.9	21	100
Upper secondary		-	4.4	10.7	16.8	30.3	37.8	100
Higher and vocational		-	0.6	1.8	6.2	19.7	71.7	100
Bolivia (urban only)	1989	Grosh						
Primary		-	40	28	18	10	4	100
Secondary		-	30	29	22	13	6	100
Tertiary		-	8	17	24	27	23	100
Chile	1983	Petrei						
Primary		-	37	28	19	11	5	100
Secondary		-	21	27	22	19	10	100
Tertiary		-	6	7	14	20	54	100
Costa Rica	1986	Sauma and Trejos						
Primary		-	30	27	21	14	8	100
Secondary		-	18	21	23	21	17	100
Tertiary		-	10	5	14	29	43	100
Cote d'Ivoire	1995	Demery et. al						
Primary		-	19.1	21.0	23.9	22.1	13.9	100
Tertiary		-	5.9	20.2	14.9	13.3	45.8	100
All education		-	13.5	17.4	17.1	17.2	34.8	100
Albania	1996	WB 2001*						
Basic		-	22	22	20	20	16	100
Upper secondary		-	6	10	21	25	38	100
Tertiary		-	5	5	29	21	40	100

*Source "Albania. Public Expenditure and Institutional Review", WB 2001

Table A6.1: Actual expenditure from Revenue Budget (RB) and Development Budget (DB) in 1999-2000 (taka '000)

	Revenue, Budget & Expenditure				Development Budget Expenditure							Total expenditure			
	Original Budget	Actual Expend.	Shares	Spend/budget	GoB Dev.	RPA Pool	Other RPA	DPA	Total	Shares	Spend/budget	Total	Shares	Spend/budget	
Salaries & allowances	6,318,718	6,324,268	66.88%	100.1%	1,513,949	904,767	0	3,279	2,421,995	27.9%	82%	8,746,263	48.2%	94.4%	
<i>Of which</i>															
Salaries	3,510,968	3,700,725	39.13%	105.4%	848,396	539,945	0	2,960	1,391,301	16.0%	88%	5,092,026	28.1%	99.8%	
Allowances	2,807,750	2,623,543	27.74%	93.4%	665,553	364,822	0	319	1,030,694	11.9%	83%	3,654,237	20.2%	90.2%	
Supplies and services	1,992,949	2,001,435	21.16%	100.4%	523,363	64,624	716,705	4,127,998	5,432,690	62.6%	82%	7,434,125	41.0%	86.3%	
Repairs, Maintenance and Rehabilitation	210,915	212,065	2.24%	100.5%	3,236	270,704	18,431	3,103	295,474	3.4%	46%	507,539	2.8%	59.9%	
Term Loan Interest	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Floating Loan Interest	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Interest on Foreign Debt	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Grants in Aid	412,550	503,563	5.33%	122.1%	186,425	0	68,820	19,597	274,842	3.2%	80%	778,405	4.3%	103.0%	
Contributions to International Organizations	3,031	2,020	0.02%	66.7%	0	0	0	0	0	0.00%		2,020	0.00%	66.7%	
Pensions and Gratuities	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Transfer, Adjustment & Others	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Block Allocations	963,900	413,152	4.37%	42.9%	65,949	0	0	0	65,949	0.8%	4%	479,101	2.6%	18.4%	
Advances to Government Employees	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Term Loan Repayments	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Foreign Debt Repayment	0	0	0.00%		0	0	0	0	0	0.00%		0	0.00%		
Development Import Duty and VAT	0	0	0.00%		184,153	0	0	0	184,153	2.1%	23%	184,153	1.0%	23.0%	

Source: Health Futures in Bangladesh. World Bank (2002), based on data supplied by MAU, MoHFW

Table A6.2: Distribution of sector-specific government health subsidies across expenditure quintiles

	Urban						Rural					
	1		5		Total	Total	1		5		Total	Total
	lowest	2	3	4			highest	lowest	2	3		
Family planning and communicable diseases	17	19	19	22	23	100	20	20	20	21	20	100
Child health	23	22	20	23	12	100	25	22	21	18	14	100
Maternal Health	13	17	24	23	24	100	23	17	21	18	22	100
Curative care	10	32	16	24	18	100	14	18	26	22	21	100
All Health Subsidies	14	26	18	23	19	100	19	19	23	20	20	100

Source: Staff estimates from HIES 2000

**Table A6.3: Utilization of government-provided prenatal services
(percentage of women who used the service), by age group, for married women**

	Urban			Rural			Overall		
	25 y and younger	26 y and older	All	25 y. and younger	26 y. and older	All	25 y and younger	26 y and older	All
1 Lowest	36.0	26.7	28.4	44.5	28.4	31.1	42.9	28	30.6
2	43.3	28.9	31.7	42.9	26.4	29.7	43.9	26.8	30.1
3	47.0	29.1	32.9	41.7	27.6	30.4	41.2	28.2	30.9
4	25.9	28	27.6	39.4	26.2	28.9	39.1	25.3	28
5 Highest	26.5	26.9	26.9	34.9	25.3	27.1	31.9	26.7	27.6
Poor	40.6	28.1	30.4	43.7	27.6	30.6	43.3	27.7	30.6
Nonpoor	34.1	27.8	28.9	37.3	25.9	28.1	36.6	26.4	28.3
Total	36.4	27.9	29.4	40.5	26.7	29.4	39.7	27.0	29.4

Source: Staff estimates, HIES 2000

**Table A6.4: Utilization of government-provided immunization services
(percentage of children below 5 years old who received the service)***

	Urban			Rural			Overall		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1 Lowest	89.7	84.7	87.2	87.5	87.6	87.5	88.4	87	87.7
2	87.0	88.8	87.9	88.6	86.3	87.5	88.9	86.7	87.8
3	93.4	90.5	91.9	94.4	91.7	93.1	93.3	91.6	92.5
4	88.6	84.7	86.7	92.4	88.7	90.6	91.7	88.6	90.2
5 Highest	82.6	83.6	83.1	93.5	89.6	91.6	91.3	88.2	89.8
Poor	89.0	85.9	87.4	89.4	88	88.7	89.3	87.7	88.6
Nonpoor	88.6	87.3	88.0	93	89.5	91.3	92.1	89.0	90.5
Total	88.8	86.6	87.7	90.7	88.5	89.6	90.4	88.2	89.3

Source: Staff estimates from HIES 2000

* Received at least one of BCG, DPT1—DPT3, POLIO1—POLIO3, or measles vaccines in government facility or from a government worker

Table A6.5: Top ten causes of death in Bangladesh by age group, 2000

	0 to 4 yrs		5 to 14 yrs		15 to 44 yrs		45 to 59 yrs		60+ yrs	
		%		%		%		%		%
Respiratory Diseases	24.2		Unintentional injuries	35.8	Unintentional Injuries	28.2	Cardio-vascular	32.4	Cardio-vascular	52.7
Diarrhoeal	23.1		Respiratory	20.3	Tuberculosis	17.3	Tuberculosis	18.7	Respiratory	18.9
Perinatal	21.6		Diarrheal	10.9	Maternal	10.9	Malignancies	17.9	Malignancies	8.2
Childhood Diseases	8.8		Childhood Diseases	7.3	Intentional injuries	10.7	Unintentional injuries	10.4	Tuberculosis	6.8
Congenital Diseases	5.4		Nutritional/Environment	5.7	Cardio-vascular	7.7	Respiratory Diseases	7.9	Unintentional injuries	3.3
Nutritional/Environment	4.5		Tuberculosis	3.5	Malignancies	6.5	Intentional injuries	3.4	Diarrheal Diseases	3.0
Unintentional injuries	3.9		Intentional injuries	2.6	Respiratory Diseases	4.5	Digestive Diseases	3.4	Digestive	2.6
Syphilis	1.0		Congenital Diseases	2.3	Digestive Diseases	4.0	Diabetes	1.8	Diabetes	1.9
Tuberculosis	0.6		Cardio-vascular	2.3	Diarrheal Diseases	2.4	Diarrheal Diseases	1.5	Nutritional/Environment	1.3
Cardio-vascular	0.5		Tropical diseases	1.8	HIV-AIDS	1.6	Nutritional/Environment	0.8	Intentional injuries	0.5

(Source: Streetfield, P. K. (2000) Status of performance indicators, Dhaka, ICDDR,B, Report prepared for PCC and World Bank for the Mid-term review of the Bangladesh Health and Population Sector Program.)

**Table A6.6: Comparison of hospital unit costs as a percentage of per capita GNP
(selected countries)**

Level I hospitals			Level I hospitals			Level I hospitals			Level I hospitals		
Country	Year	%	Country	Year	%	Country	Year	%	Country	Year	%
Bangladesh	1997	2.2	Colombia	1978	25.0	Niger	1986-87	710.0	Indonesia II	1985	0.7
Niger	1986-87	2.2	Bangladesh	1997	26.0	Indonesia II	1985	756.0	Papua New Guinea	1988	0.7
Indonesia II	1985	2.8	Indonesia II	1985	26.0	Bangladesh	1997	864.0	China (Barnum, 1989)	1988	0.8
China (Barnum, 1989)	1988	3.0	Niger	1986-87	32.0	Papua New Guinea	1988	962.0	Colombia	1978	0.8
China (Chen, 1988)	1988	3.2	Papua New Guinea	1988	33.0	Colombia	1978	985.0	Bangladesh	1997	0.8
Papua New Guinea	1988	3.3	Zimbabwe	1987	33.0	China (Barnum, 1989)	1988	1039.0	Indonesia II	1985	0.7
Colombia	1978	3.4	Jamaica	1985-86	40.0	China (Chen, 1988)	1988	1119.0	China (Barnum, 1989)	1988	0.8
Jamaica	1985-86	3.7	China (Barnum, 1989)	1988	76.0	Jamaica	1985-86	1148.0	Colombia	1978	0.8
Zimbabwe	1987	4.3	China (Chen, 1988)	1988	90.0	Zimbabwe	1987	1393.0	Bangladesh	1997	0.8
Rwanda	1984	5.2				Rwanda	1984	1867.0	Rwanda	1984	1.3
									Jamaica	1985-86	1.5
									Zimbabwe	1987	1.6
									Niger	1986-87	5.4
Level II & III hospitals			Level II & III hospitals			Level II & III hospitals			Level II & III hospitals		
Country	Year	%	Country	Year	%	Country	Year	%	Country	Year	%
Indonesia II	1985	1.1	Indonesia II	1985	6.6	Indonesia II	1985	221.2	Zimbabwe	1987	0.3
China (Chen, 1988)	1988	1.5	Belize	1985	12.9	China (Chen, 1988)	1988	502.0	Indonesia II	1985	0.3
St. Lucia	1986-87	1.5	Bangladesh	1997	13.9	Belize	1985	505.9	Malawi	1987-88	0.4
China (Barnum, 1989)	1988	1.8	Malawi	1987-88	17.0	Rwanda	1984	556.6	China (Barnum, 1989)	1988	0.5
Malawi	1987-88	1.9	Zimbabwe	1987	17.0	China (Barnum, 1989)	1988	584.2	Papua New Guinea	1988	0.5
Indonesia I	1987	2.0	Jamaica	1985-86	18.3	Zimbabwe	1987	667.0	Bangladesh	1997	0.5
Rwanda	1984	2.6	St. Lucia	1986-87	21.0	Papua New Guinea	1988	734.0	Indonesia I	1987	0.6
Jamaica	1985-86	2.7	China (Barnum, 1989)	1988	29.8	Malawi	1987-88	806.0	Rwanda	1984	0.6
Zimbabwe	1987	2.7	China (Chen, 1988)	1988	30.0	St. Lucia	1986-87	808.0	Jamaica	1985-86	1.1
St. Lucia	1986-87	3.0	Papua New Guinea	1988	38.7	Jamaica	1985-86	812.3	St. Lucia	1986-87	1.3
Papua New Guinea	1988	3.1				Bangladesh	1997	867.4			
Bangladesh	1997	3.6									
Belize	1985	3.7									

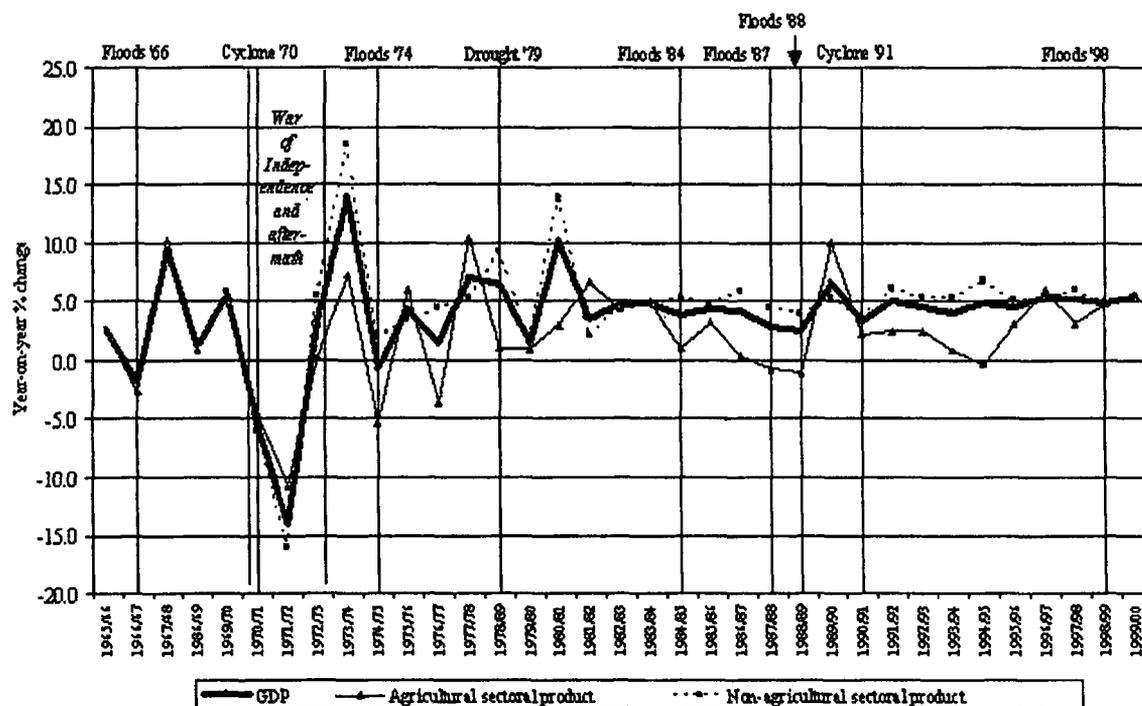
Source: Barnum and Kutzin (1993); IPS database; Mahapatra and Berman (1994)

**Table A6.7: Structure of Health Care Utilization
(visits to a particular provider as a percentage of the total number of visits; among those who sought curative health services in the 30 days preceding the survey)**

	Government	Government doctor, private practice	NGO	Private formal	Informal	Pharmacy	Other	Total
Overall								
Poor	9.0	9.5	0.9	24.2	8.6	44.0	3.8	100
Nonpoor	11.5	21.0	0.9	24.0	6.0	33.4	3.2	100
Total	10.4	15.8	0.9	24.1	7.2	38.2	3.5	100
Urban								
Poor	16.1	13.8	1.8	20.3	8.5	38.9	0.6	100
Nonpoor	11.2	28.5	1.0	23.6	5.8	28.4	1.4	100
Total	13.0	23.1	1.3	22.4	6.8	32.3	1.1	100
Rural								
Poor	7.8	8.8	0.8	24.8	8.6	44.8	4.3	100
Nonpoor	11.6	19.0	0.9	24.1	6.1	34.7	3.6	100
Total	9.8	14.1	0.9	24.5	7.3	39.5	4.0	100

Source: Staff estimates from HIES 2000

Figure A8.1: Bangladesh—real annual fluctuations in GDP, agricultural and non-agricultural sector product, 1966-2000



Source : World Bank, various

Table A8.2: Distribution of ADP Across Functional Categories by Sub-sectors, 2000/01

Sub-sectors	Functional Categories					Total
	Infrastructure	Extension	Research	Markets & Inst.	Mixed Type	
Percent in the sub-sector						
Crop	4.0	20.7	29.0	35.4	10.9	100
Forestry	2.1	61.0	13.7	5.0	18.2	100
Fisheries	1.3	20.1	34.4	10.0	34.2	100
Livestock	-	71.0	8.7	18.1	2.2	100
Rural Dev. Institutions	79.2	-	-	20.8	-	100

Source: ADP documents, various years

Table A9.1: Transport Expenditure by Sub-sector
(in Taka million)

Sub-sector	Expenditures by Fiscal Year			
	1996/97	19 97/98	1998/99	1999/00
1. Roads	21,444	23,413	30,613	37,730
2. Jamuna Multipurpose Bridge Authority	9,380	6,930	3,250	1,520
3. Bangladesh Railway	2,238	2,685	5,090	4,174
4. Civil Aviation Authority of Bangladesh	282	640	895	1,940
5. Inland Waterway	416	680	817	1,182
6. Ports and Ocean Shipping	0	8	13	2
Total	33,760	34,356	40,679	46,549

Source. Annual Development Program, R&HD, LGED

Table A9.2: Expenditures of R&HD
(in Taka million)

	FY97	FY98	FY99	FY00
Development Projects	10159	10526	14535	17909
of which foreign aide	3592	4112	4763	6989
Revenue (maintenance)	2114	2460	2699	2810
Total	12273	12986	17235	20719
3. Expenditure/Allocation Ratio	99.4%	99.3%	96.0%	103.6%

Source. Roads and Highways Department

Table A9.3: Expenditures of LGED
(in Taka million)

	FY97	FY98	FY99	FY00
Investment (ADP)	7665	8814	11633	15301
Maintenance (Revenue Budget)	750	950	1020	1100
Total	8415	9764	12653	16401

Source. Local Government Engineering Department

Table A9.4: R&HD Physical achievement during FY1996/97 -FY1999/00

Type of Work	Year				Total
	1996/97	1997/98	1998/99	1999/00	
Earth works (km)	408	540	485	890	2324
Ashphalt Pavement(km)	524	682	697	692	2596
Brick Pavement (km)	338	480	482	327	1628
Surfacing (km)	386	484	543	635	2050
Sealcoat (km)	266	314	161	335	1078
RCC bridge (running meter)	1869	2320	2,525	2709	9424
Bailey/steel bridge (running meter)	3114	3354	3354	6318	16140
Box culvert (running meter)	759	1179	1767	947	4653

Source: Roads and Highway Department

Table A9.5: LGED Physical achievements during FY1996/97 -FY1999/00

Name of Principal Components	Unit of Physical Achievement	FY 1996-97	FY 1997-98	FY 1998-99	FY 1999-2000	Total
Earthen roads construction (FRB and RR)	Km	3348	4264	5888	5525	19025
Paved road construction	Km	2415	1795	1946	2142	8298
Bridges/culverts construction	M	21250	33192	34757	46448	135647
Growth center development	no.	92	143	213	176	624
Maintenance of earthen roads/flood Rehabilitation	Km	73615	85238	86256	4979	250088
Maintenance of paved roads/flood rehabilitation	Km	529	693	4414	3114	8750
Maintenance of bridge and culverts/flood rehabilitation	M	379	340	5318	16650	22687

Source: LGED, 2001

Table A10.1: Development Expenditure by Ministry/Division
(Taka in Billion)

Ministry/Division	FY98	% total	FY99	% total	FY00	% total	FY01(R)	% total	FY02(b)	% total
General Public Services	5.98	4.86	5.41	3.83	6.33	3.71	8.14	4.35	15.05	7.77
Defense	0.23	0.19	0.87	0.62	0.30	0.18	0.1	0.05	0.15	0.08
Public Order and Safety	0.71	0.58	0.72	0.51	0.97	0.57	0.83	0.44	1.06	0.55
Education	14.68	11.94	17.51	12.40	19.81	11.61	22.55	12.04	23.92	12.35
Health	11.51	9.36	11.93	8.45	13.91	8.16	15.28	8.16	16.21	8.37
Social Security and Welfare	9.84	8.00	10.55	7.47	15.37	9.01	9.45	5.05	8.11	4.19
Housing and Community Services	17.00	13.82	23.33	16.52	31.22	18.30	34.41	18.38	33.00	17.03
Recreation, Culture and Religious Affairs	2.34	1.90	1.90	1.35	2.13	1.25	2.49	1.33	2.92	1.51
Fuel and Energy	17.83	14.50	19.20	13.60	26.03	15.26	25.60	13.67	29.04	14.99
Agriculture, Fisheries and Livestock	16.72	13.59	19.06	13.50	19.95	11.70	21.65	11.56	20.44	10.55
Mining, Manufacturing and Construction	0.75	0.61	0.75	0.53	1.73	1.01	4.94	2.64	2.55	1.32
Transport and Communication	25.27	20.55	29.83	21.12	32.07	18.80	41.22	22.02	40.59	20.95
Other Services	0.12	0.10	0.16	0.11	0.74	0.43	0.57	0.30	0.68	0.35
Total Development Expenditure	122.99		141.22		170.56	100.00	187.23		193.72	100.00
Self Financing by Autonomous Bodies	1.70		1.84		2.50		2.50		2.50	
Non ADP FFW	-2.69		-3.06		-8.06		-7.73		-6.22	
Annual Development Program	122.00		140.00		165.00		182.00		190.00	

Table A10.2: Subsidy on Power Distribution

	LRMC Cents/kWh	LRMC Tk/kWh	Average Tariff Tk/kWh	Tariff/LRMC (percent) Ratio	Unit Subsidy/Tax Tk/kWh	Unit Subsidy/Tax (percent)	Power Sales GWh	Total Subsidy/Tax Billion taka
LRMC-Based Subsidy on BPDB's Power Distribution in FY02								
Domestic	7	4.02	2.44	61	-1.59	-39	2017	-3.20
Agriculture	7	4.02	1.89	47	-2.14	-53	130	-0.28
Small Industrial	7	4.02	3.55	88	-0.48	-12	525	-0.25
Non-Residential	7	4.02	3.08	76	-0.95	-24	103	-0.10
Commercial	7	4.02	4.96	123	0.93	23	515	0.48
Industry (med. Volt)	5.7	3.27	3.37	103	0.09	3	1361	0.12
DESA	3.5	2.01	1.95	97	-0.07	-3	8469	-0.55
Industry (high volt)	4.3	2.47	3.24	131	0.77	31	416	0.32
REB/PBSS	4.3	2.47	1.75	71	-0.72	-29	2668	-1.93
REB/PBSS	5.7	3.27	1.85	56	-1.43	-44	71	-0.10
Street Lighting	7	4.02	3.38	84	-0.65	-16	101	-0.07
Total/Average	4.57	2.62	2.28	87	-0.35	-13	16376	-5.55
Total excluding DESA	5.71	3.28	2.63	80	-0.65	-20	7907	-5.00
LRMC-Based Subsidy on DESA's Power Distribution in FY02								
Domestic	7	4.02	2.10	52	-1.93	-48	1917	-3.69
Agriculture	7	4.02	1.83	45	-2.20	-55	1	0.00
Small Industrial	7	4.02	3.32	82	-0.71	-18	370	-0.26
Non-Residential	7	4.02	3.03	75	-1.00	-25	37	-0.04
Commercial	7	4.02	4.44	110	0.41	10	195	0.08
11 KV Bulk	5.7	3.27	3.04	93	-0.24	-7	1109	-0.27
DESCO	5.7	3.27	2.12	65	-1.16	-35	542	-0.63
33 KV Bulk	4.3	2.47	2.34	95	-0.14	-5	321	-0.04
REB/PBSS	5.7	3.27	2.06	63	-1.22	-37	1781	-2.17
Street Lighting	7	4.02	3.23	80	-0.80	-20	20	-0.02
Total/Average	6.15	3.54	2.41	68	-1.13	-32	6293	-7.04

Source: DESA, Energy Sector Note, 1998 World Bank and Bank staff estimates

Table A10.3 : Cross-Country Comparison of Subsidized Block of Domestic Power Supply, 2001
(kWh per month per metre)

Bangladesh BPDB/DESA	Bangladesh PBS.	India (Bombay)	India (Ahmedabad & Calcutta)	India (Gujarat)	Pakistan	Laos	Thailand
300 up to Dec 2001 ; 100 since Jan 2002	0	100	25	20	50	50	5

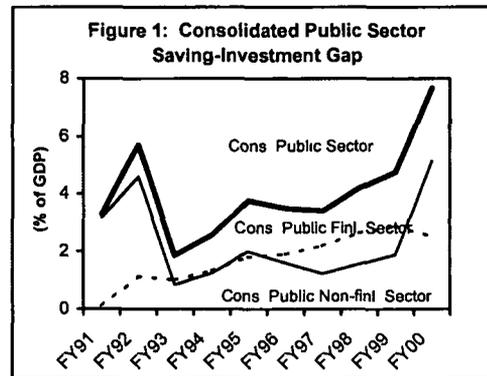
Source: Energy Sector Note, World Bank

ANNEXES

ANNEX 1: CONSOLIDATED PUBLIC SECTOR DEFICIT - CONCEPTS AND DEFINITIONS¹

How the fiscal deficit is measured has an important bearing on an analysis of the sustainability and macroeconomic implications of deficits. The composition of the public sector and the economic relevance (or quantifiability) are key dimensions of various types of deficit measures. The composition of the public sector can be defined in three different ways: central government only; consolidated non-financial public sector, which adds local government, social security, and non-financial public enterprises; and consolidated total public sector, which adds the central bank and public financial institutions. Deficit based on the most inclusive definition of public sector are more informative of a country's fiscal position and public sector resource

transfers if they are not subject to arbitrary accounting conventions. Practitioners often limit the deficit measure to non-financial public sector deficit. This leaves out an important fiscal element, the profit/losses of the central bank and other public financial institutions from quasi-fiscal operations that subsidize activities in private and state enterprise sectors. A comparison of quasi-fiscal deficits and conventional non-financial public sector deficits illustrates how misleading non-financial public sector deficits are as indicators of overall fiscal policy when quasi-fiscal operations are large. In FY99, for instance, the public financial sector deficit was larger than the non-financial sector deficit (Figure 1).



There are also several ways of measuring the deficit that are more or less economically relevant. The nominal cash approach permits broad comparability of deficits across countries. A variant, the operational deficit, deducts the inflationary component from nominal interest payments on public debt. The deduction, reflecting the compensation of debt holders for erosion of the real value of public debt caused by inflation, is an important correction for high inflation, high domestic debt economies. Despite recent increases, Bangladesh is still a low domestic debt economy and inflation rate has been in low single digits. Consequently, the inflation correction is not critical for Bangladesh.

An accrual or, payments order, approach measures income and spending actions when they occur, even if they do not immediately involve cash flows. Deficits measured on an accrual basis would be larger than those measured on a cash basis when arrears have been allowed to accumulate on government payments of interest, wages, or purchases of goods. Accrual-based deficits open the door to a whole set of unconventional deficit measures based on considerations of public net worth or inter-temporal budget constraints. Such measures constitute the most meaningful gauge of a government's fiscal position, but they are not observable.

There are other economically meaningful measures. Despite their usefulness for assessing overall fiscal stance and issues of sustainability and solvency, the questions addressed in the analysis of Bangladesh's fiscal deficit require the use of cash-based nominal deficit measures with the widest available coverage of the public sector. Consolidated Public Sector (CPuS) comprises of five entities: (i) Central Government (GOV) (ii) State-owned Enterprises (SOEs) (iii) Nationalized Commercial Banks (NCBs) (iv) Development Financial Institutions (DFIs) and (v) Bangladesh Bank (BB).

¹ Draws heavily from Easterly, W and Klaus Schmidt-Hebbel (1993).

- *Central Government:* Overall Deficit is measured by the central government's Saving-Investment gap. Central government Savings is calculated by subtracting Current Expenditure and Food Account deficit from the sum of Revenues and Foreign Grants. Central government Investment is the part of ADP, which the central government spends directly and not through SOEs.
- *State-owned Enterprises:* Gross saving is calculated by adding depreciation to retained income. The latter is the part of net profit retained after subtracting tax and dividend payments. SOE investment is their capital expenditures.
- *Nationalized Commercial Banks:* Saving of the NCBs is their net profit where net profit is the difference between total income and total expenditure.
- *Development Financial Institutions:* DFI saving is defined in the same manner as that of NCBs.
- *Bangladesh Bank:* The central bank pays a significant portion of its profit to the government as dividend. Thus, saving of Bangladesh Bank is calculated by subtracting dividend payment from net profit.

Consolidated Public Sector (CPuS) Deficit is defined as the Saving-Investment gap where the CPuS Saving comprises of the saving of all the five entities of the public sector and CPuS Investment is the sum of the Investment of Central Government and SOEs. This treatment effectively defines public sector deficit as the difference between aggregate public sector saving and aggregate public sector investment which is financed by surpluses from other sectors. Thus, CPuS can be re-written in terms of the economy's aggregate resource or saving-investment constraint:

$$CPuS\ Deficit = Public\ Investment - Public\ Saving = (Private\ Saving - Private\ Investment) + Foreign\ Savings$$

Larger CPuS Deficit must lead to some combination of lower private consumption (at a given level of income), lower private investment, and higher foreign saving (current account deficit). Which of the three components bears the burden of higher CPuS depends broadly on factors that influence the private domestic and foreign response to public deficits: the flexibility and sophistication of domestic financial markets, access to external financing, the source of domestic financing (bank and non-bank), planning horizons of consumers and investors, and the composition of the deficit.

ANNEX 2: BUILDING ON BANGLADESH'S OWN INSTITUTIONAL STRENGTHS

Despite the disheartening record of failures, Bangladesh has some institutional achievements, which can be capitalized upon. Bangladesh's Supreme Court is well respected in the country and has established a strong record of independence. Several organizations are in the forefront of improved service delivery. The Rural Electrification Board (REB) commands considerable respect for its innovative practices, e.g., REB has instilled a culture of consultations with communities, and has adopted performance-based management practices and reliance on non-unionized workers in meter reading. As a result system losses of REB are the lowest compared to PDB and DESA. Also, two large projects in the electricity sector (Haripur and Meghnaghat) recently received international awards, and have been recognized as pioneering project financing deals in a difficult frontier market. Both these projects were competitively bid by Bangladesh and have the lowest power prices in the world—less than US 3 cents per Kwh. Lastly, the success of the Jamuna bridge is a well documented case of partnership and improved social mobilization and cohesion. Building the bridge demonstrated what a combination of client ownership, political commitment, stakeholder and NGO participation, foreign donor partnerships, and Government institutional strength can achieve. Successive Governments since independence have remained committed to the bridge, some of Bangladesh's most capable civil servants have led the Jamuna Multipurpose Bridge Authority, and the NGOs, consultants, contractors, co-financiers involved in the endeavor cooperated extremely well.

Bangladesh's vibrant civil society organizations and its NGOs are good examples emulated around the world. NGOs have injected considerable synergy in the fight against poverty and blurred lines between traditional NGO activities and functions of the Government. This largest-in-the-world network covers large populations with a wide range of services. Microcredit programs cover about 11 million individuals, education service are provided to over 1.2 million students by BRAC non-formal primary education program alone, and certain health and population control services are provided exclusively through NGOs (population control in the 1970s, HIV/AIDS prevention currently). NGOs provide skills training, water supply, sanitation, extension services, and are involved in managing common property resources, developing agribusiness opportunities, social mobilization and advocacy for women and the poor. Evaluations of the impact of Bangladesh NGOs have demonstrated that, overall, NGO activities are well targeted to the poor, improve accountability through community mobilization, social education, and empowerment, and their service delivery methods have substantial demonstration effects. Surveys also showed that NGO-run schools and health facilities are preferred by users for their superior quality. The sustainability of micro credit interventions, however, remain an open question.²

Bangladesh's advances in improving women's lives are truly remarkable, even though a lot more needs to be done. The last two decades saw considerable improvements in women's education, health, nutrition, income status, as well as their participation in public life, access to credit, formal labor market, and legal aid. Currently, around 2 million women work in formal sector jobs and earn higher relative wages as compared to mid 1980s (Tables 1 and 2). These advances in turn exerted backward linkages³ and enhanced the pace of Bangladesh's development. Nonetheless, the remaining challenges for greater gender equity are daunting. The existing legal framework still does not provide women with joint property rights with husbands and limits their right to inherit parents' and husbands' property. Personal law continues to be practiced in many family matters. Concerted actions from all parties involved – the GOB, the civil society, NGOs, media, women themselves—are needed to reverse the situation. Atrocities directed to women—acid throwing, rape—persist and lack of accountability in judiciary and police allows

² Although access to credit generally raises wages thus enabling borrowers to repay their loans, administrative overheads are quite large and interest rates are below those necessary to cover these overheads.

³ Numerous studies from all parts of the world and from Bangladesh in particular show that women's access to resources increases investments in child health and education, i.e., growth-enhancing investments.

for these irregularities to continue. Safeguards against police brutality towards women should be put in place.

Table 1: Female Employment as Percentage of Total Employment in Selected Industries
(percent of the total workforce)

Industry	85/86	88/89	90/91	91/92	95/96
Food Manufacturing	1.15	7.86	8.49	7.79	8.22
Rice Mill	4.02	13.62	14.41	12.85	17.04
Tea & Coffee Processing	20.06	36.21	10.12	12.93	11.44
Cotton Textile	0.83	2.54	4.64	0.92	3.50
Textile	0.65	1.08	1.87	1.63	3.24
Handloom	2.27	1.50	1.91	4.18	7.13
Man. of Textile	1.02	6.71	5.56	6.77	11.35
Readymade Garments	67.98	70.98	70.47	69.39	66.05
Wearing Apparel	67.98	70.97	70.47	69.39	66.05
Embroidery	-	-	98.90	96.79	-
Bamboo & Cane Products	-	67.65	73.02	65.78	-
Wood & Cork	0.29	16.66	20.78	24.51	0.22
Allopathy & Drugs	6.59	6.22	5.57	5.74	6.45
Drugs & Pharmaceuticals	6.59	6.22	7.71	5.74	5.99
Fertilizer Manufacturing	9.29	2.42	2.17	2.14	1.69
Matches Manufacturing	2.93	7.37	1.83	3.49	3.46
Other Chemical Products	1.82	3.29	1.49	2.35	2.06
Pottery	-	19.96	-	-	16.46
China & Clay Ware	1.02	3.74	1.63	1.51	3.37
Brick, Tiles & Clay Products	-	2.83	1.28	1.45	-
Non-Metallic Products	1.19	2.68	1.25	1.54	0.19
Electronic Spares	-	-	17.56	21.82	-
Electrical Machinery	2.68	3.24	2.12	2.69	1.01
Handmade Decorative Products	-	73.40	48.98	11.11	-
All Industries (per cent)	3.04	14.1	15.72	15.29	29.96

Source: "Globalization and Gender in the context of Bangladesh", research report of CPD Independent Review of Bangladesh Development 2001. Based on BBS CMI various years

Table 2: Female-Male Wage Differential
(in percent)

	1983-84	1995-96
Rural areas	47.6	56.8
Urban areas	48.9	60.0
Agriculture	48.3	71.4
Industry	n/a	50.8
Services	n/a	21.4

Source: HDC Human Development in South Asia 2000.

ANNEX 3: REGIONAL DISTRIBUTION OF EXPENDITURES

Education and health outcomes, as well as poverty rates and the pace of poverty reduction in Bangladesh vary by region. The companion poverty assessment Report (*Poverty in Bangladesh: Building on Progress*) describes these variations in details, and Table 1 presents selected outcomes across five divisions in Bangladesh. Lack of regional level information on the variety of factors which affect poverty reduction and growth precludes an empirical explanation of why such variations exist. However, casual empiricism suggests that demographic, climatic, geographic conditions as well as the host of economic, regulatory and social factors determining the investment climate influence growth and living standards and thus lead to these observed differences. In addition, disparities in initial conditions (social and physical assets) also play an important role in explaining both levels of poverty and the trends in poverty reduction.⁴ For example, the higher level of poverty in Khulna and Rajshahi divisions is most likely due to the fact that these divisions have much less developed physical infrastructure and are located in more adverse climatic conditions. Poverty reduction was the fastest in Dhaka division, reflecting perhaps the growing importance of Dhaka city as the administrative, political, financial and industrial center of the country. The stagnation of poverty in Chittagong is due to both lower growth and faster increase in inequality in Chittagong as compared to other divisions (see Poverty Assessment Report [2002]).

Table 1: Selected outcomes by divisions

	Growth in mean Per-capita expenditures (% annual)	Headcount Poverty Rate (%)			Children satisfying "Basic Education" criteria (% rural areas only)		
		1991-92	2000	Change	1993	1998	Change
All Divisions	2.4	58.8	49.8	-9.0	23	27	4
Chittagong	1.5	46.6	47.7	1.1	21	18	-3
Dhaka	3.2	59.3	44.8	-14.5	29	24	-5
Khulna	2.1*	59.6*	47.0*	-12.6*	18	38	20
Barishal	-	-	-	-	23	32	9
Rajshahi	2.4	71.9	61.0	-10.9	23	31	8

* Including Barishal division

Source: BBS and World Bank staff estimates for growth, poverty and *Hope, Not Complacency*, 1999, (reproduced from Table 5 19) for quality of education

This annex attempts to assess the regional distribution of Government expenditures of two ministries in social sectors (MoHFW and PMED) and expenditures of the Ministries of Agriculture and Local Government Department. The assessment is based on a complete set of data on recurrent and capital expenditures of MoHFW in 1999/00 available largely due to the efforts of the Health Economics Unit; a complete data on recurrent expenditures of Primary and Mass Education Division; and a partial data set on recurrent expenditures of the Local Government Department and Ministry of Agriculture available from the Reform in Budgeting and Expenditure Control (RIBEC) database (Box 2).⁵

As may be expected, the analysis reveals that there are large variations in per-capita spending of all four ministries:

⁴ See Sachs, J. (2001) and Ravallion, M., and Datt G (2001)

⁵ Only audited expenditures are used for analysis in this report. In the case of education and health, all executed expenditures were audited and available for analysis, while in the case of Ministry of Agriculture, about 70 percent of allocated funds were executed and audited. In the case of Local Government Department, information on about 90 percent of allocated funds was available.

- In the case of health expenditures, Dhaka receives the highest per-capita allocations, but this is largely due to its having the largest concentration of public tertiary facilities. These facilities are used by residents from all parts of the country. The same is true, to a lesser extent, for Rajshahi. This location of tertiary facilities allows economies of scale, but obviously rests on the assumption that there are reliable referral systems in place. Per-capita expenditures outside of Dhaka also vary, ranging from Tk.32 (Gazipur and Narsingdi) to Tk.196 (Rangamati), (see also Ensor et al. [2001]).
- In the case of primary education, variation in per-capita expenditure across districts is high, with Khagrachari and Rangamati district having the highest (Tk. 176-182) and Dhaka and Narayanganj the lowest (Tk 14-46) per-capita expenditures.
- Similar patterns are observed for recurrent expenditures of Local Government Department and Ministry of Agriculture – substantial variation in per-capita spending and presence of one or two districts with unusually high expenditures.

The analysis also examined whether the expenditures of these four ministries are consistent with the redistributive goals of the GOB by calculating the correlations between the per-capita expenditures of these four ministries and the average per-capita income of households across Bangladesh's districts. Based on the estimation of the median, rather than the mean,⁶ there is a small, but statistically significant, negative correlation between expenditures of three ministries (PMED, Local Government Department and Ministry of Agriculture) and per-capita income, indicating that poorer districts tend to receive higher per-capita allocations. Thus, distribution of expenditures at the district level is consistent with the redistributive role of the Government. Allocations to MoHFW and per-capita income show no significant statistical association (Table 2).

Table 2: Median regression of 1999-00 audited expenditures aggregated at a district level (dependent variable) and average district-level per capita household expenditures (independent variable)

Primary and Mass Education Division (current)						
Median regression			Number of obs =		60	
Raw sum of deviations 1140.865 (about 87.515259)			Pseudo R2 =		0.1052	
Min sum of deviations 1020.859						
pc_nd24	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcexp_mn	-.0834948	.0276489	-3.02	0.004	-.13884	-.0281496
_cons	159.0633	22.65162	7.02	0.000	113.7212	204.4055

Ministry of Health and Family Welfare (current and capital)						
Median regression			Number of obs =		59	
Raw sum of deviations 1010.687 (about 50.513466)			Pseudo R2 =		0.0256	
Min sum of deviations 984.8579						
pc_nd27	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcexp_mn	-.0157946	.0184034	-0.86	0.394	-.0526468	.0210576
_cons	63.68417	14.94294	4.26	0.000	33.76145	93.60689

⁶ Estimation command QREG in STATA, which allows to mitigate the effect of outliers. In this respect, our results are different from those of Ensor, T. et al. The biasing effect of outlier observations on the econometric analysis was brought up by several participants in the PER-PA Workshop, Dhaka, October 2001.

Local Government Department (current)

Median regression
 Raw sum of deviations 400.6995 (about 22.506815)
 Min sum of deviations 293.1271

Number of obs = 60
 Pseudo R2 = 0.2685

pc_nd37	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcexp_mn	-.0250948	.0015166	-16.55	0.000	-.0281307	-.0220589
_cons	43.07275	1.558664	27.63	0.000	39.95275	46.19276

Ministry of Agriculture (current)

Median regression
 Raw sum of deviations 279.0634 (about 14.651451)
 Min sum of deviations 203.0222

Number of obs = 60
 Pseudo R2 = 0.2725

pc_nd43	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
pcexp_mn	-.0147537	.0014692	-10.04	0.000	-.0176947	-.0118127
_cons	26.98328	1.505284	17.93	0.000	23.97012	29.99643

Source: Staff calculations based on RIBEC database for GOB expenditures, 2000.
 HIES for household income and population estimates

Considerable caution is advisable in projecting the findings of partial regional analysis into policy conclusions. A snapshot of the relationship between poverty and Government expenditures never fully captures the Government's broader efforts at poverty reduction and social equity. Also, the relationship between public expenditures and availability of public services is not a direct one. These reservations aside, in the case of social spending, however, the reasons for redistribution are quite compelling and the relationship between Government expenditures and availability of public services is more direct. The lack of a negative association between health expenditures and regional per capita income is thus a concern and warrants further investigation.

Reducing regional disparities is a well-recognized role of the Government. All five-year development plans of Bangladesh explicitly recognize this. The Government has put in place several tax incentives to encourage private initiatives for the reduction of regional disparities. Public investment projects have also been used as instruments to achieve this goal with mixed results. While the Jamuna bridge is an example of successful policy to reduce regional disparity because of its good engineering and financial resources (especially cost recovery), the Barapukuria coal mine and coal-fired power plant tries to reduce disparities at a prohibitively high financial and environmental cost. Also, the extension of generous tax holidays for regional developments are highly distortionary. Most important, they do not seem to have worked.

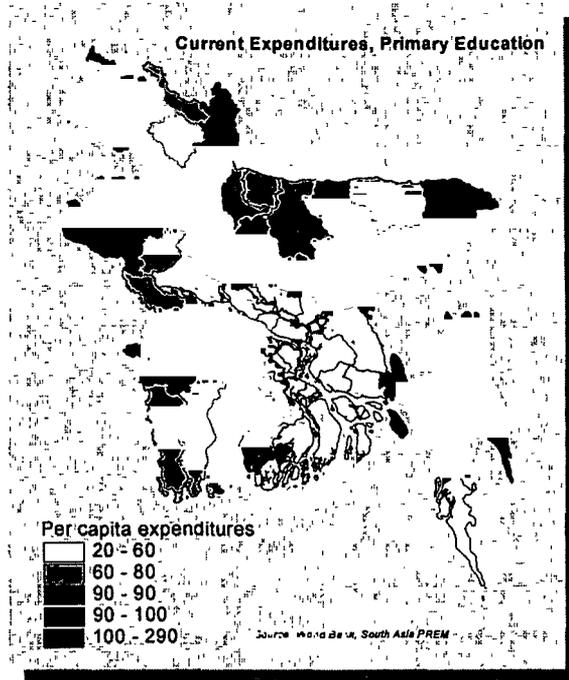
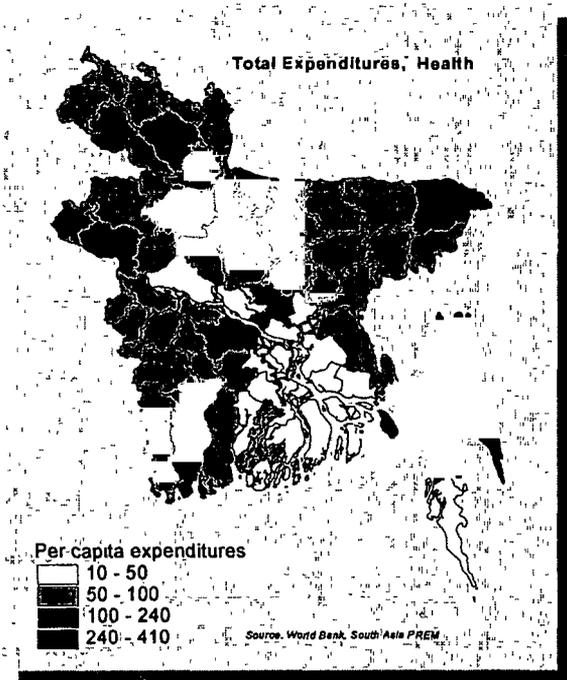
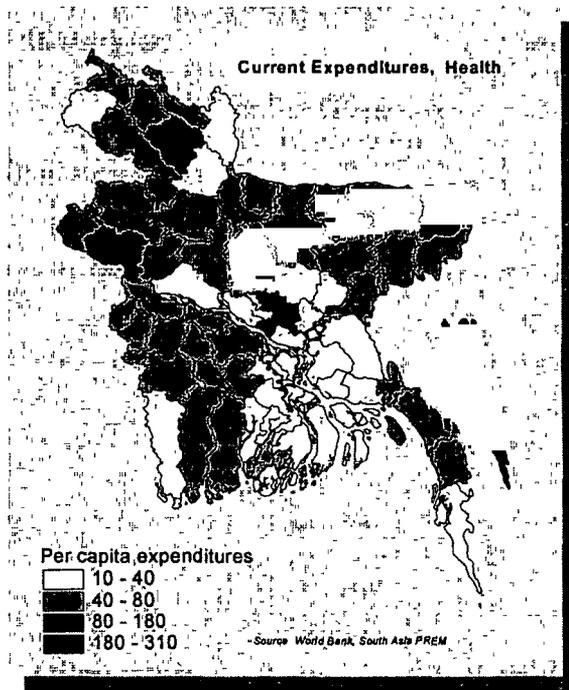
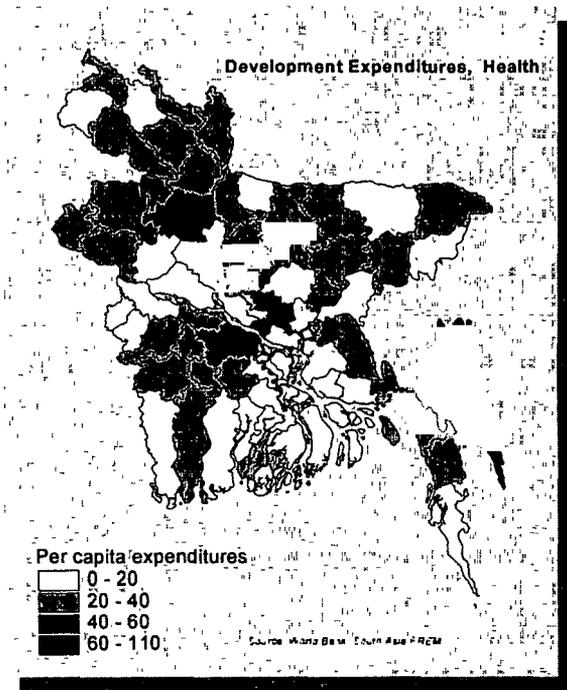
It would be useful to extend the regional analysis to certain specific areas of poverty in Bangladesh as a part of GOB's monitoring and evaluation efforts. Using finer, disaggregated maps of poverty and other social outcomes, together with information on a wider range of disaggregated Government expenditures, offers potential to address problems especially such as child malnutrition, and the low levels of education enrollments and achievements which, as the Poverty Assessment Report 2002 has showed, are geographically concentrated (Table 1 and Box 1). Specifically, GOB would need to maintain a detailed database of outcomes and expenditures in these specific areas. A more in-depth analysis of the composition of expenditures within these divisions compared to those in better performing divisions, as well as an analysis of expenditures on functions other than education and health (e.g., water and sanitation) might offer insights on what particular interventions are lacking. RIBEC already has made good progress in compiling and maintaining a consistent expenditure database. Supplementing this with the outcome data (e.g, poverty maps) could greatly enhance GOB's monitoring and evaluation efforts.

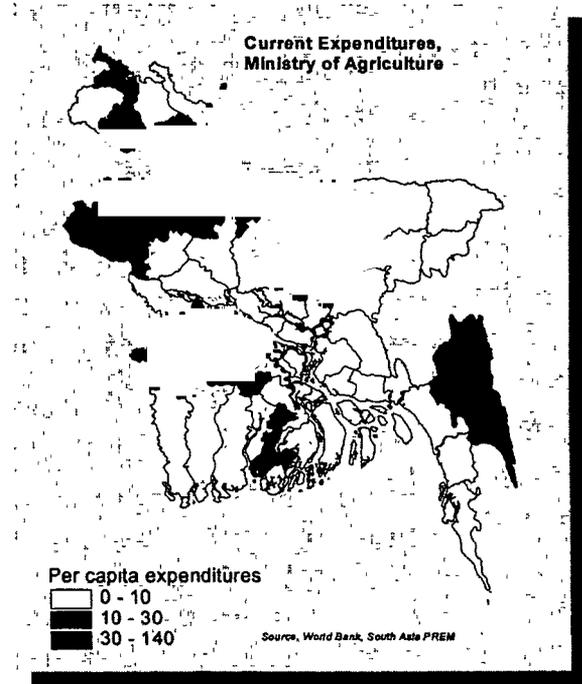
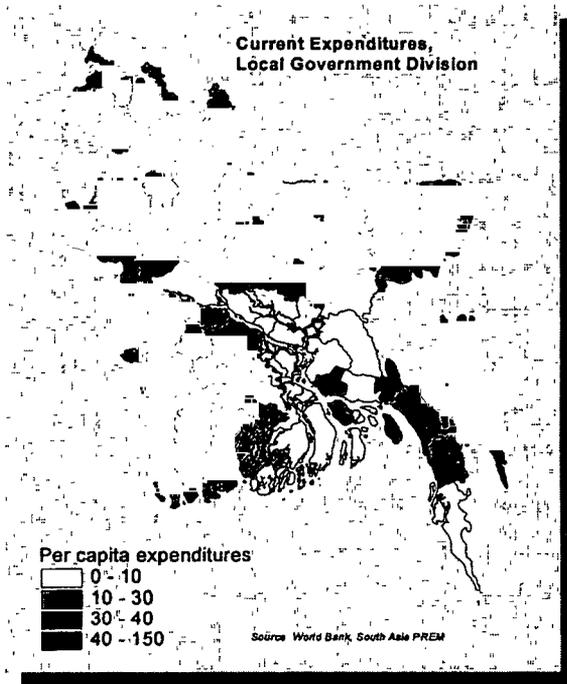
Box 1: Incidence of malnutrition in Bangladesh is geographically concentrated

Malnutrition rates in Bangladesh vary significantly across rural and urban residence, with children in rural areas (especially girls) having a higher incidence of malnutrition than urban children. In addition, there is also a strong regional dimension to child malnutrition. The rural districts of Sylhet, Comilla, Faridpur, Tangail, Jamalpur, Noakhali and Chittagong account for nearly one-half of all severely stunted children in the country. By contrast, the lowest rate of child malnutrition are found in the urban areas of Dhaka and Khulna division – roughly half the rates in rural Barishal and Pathuakali. The regional concentration of malnutrition means that geographical targeting of nutritional interventions can have high payoffs for achieving the largest absolute reduction in child malnutrition in the country.

Source *Poverty in Bangladesh: Building on Progress*, WB 2002

Box 2: Distribution of expenditures by Districts, 1999/00





ANNEX 4: SAMPLE OF ONGOING OR PLANNED ADP PROJECTS WITH QUESTIONABLE RATIONALE OR PRIORITY FOR PUBLIC INVESTMENT OR DOUBTFUL VIABILITY

This sample is based on projects included in the FY03 ADP with specific allocations. The sample also includes a few projects from a larger list of 152 projects, which have the Government's endorsement in principle, subject to availability of funds. The latter category of projects has been included in the FY03 ADP, without any allocation, in order to facilitate the mobilization of foreign assistance, and are shown with an asterisk after the project name.

SECTOR/NAME OF PROJECT	PROJECT COST (in billion takas)	COMMENTS
Agriculture		
1 Seed Development Project	2.16	This project subsidizes BADC's inefficient seed operations, and subsidized sales of seed benefits some intermediaries and results in disincentives for active private sector participation which is needed for efficient development of the seed sector.
2. Balancing, Modernization, Renovation and Expansion of Government Flour and Animal Feed Mill	0.22	Supplying flour is essentially a private sector activity and so the project should be dropped and the enterprise divested
Industry		
3. Shahjalal Fertilizer Factory.	10.63	It would be prudent to reexamine the viability of new investment in the context of excess global capacity, low netback value of gas in urea production and options for FDI or cost effective imports. This needs to be assessed in the context of BCIC's limited ability to service debts associated with new investments, linked to its low efficiency of operations as well as administered underpricing of domestically-produced urea without any budgetary compensation, unlike in India, for instance
4 DAP-1	3.93	The investments need reexamination in the context of their doubtful viability, in addition to the limited domestic use of DAP compared to the output of these plants.
5. DAP-2	4.52	
6. Establishment of a Fertilizer Factory in the North-West *	n.a.	Same as for project number 3 listed above.
7. BMRE of Kamaphuli Paper Mill	5.02	It might be prudent to leave BMRE decisions to the new private sector owner, following possible divestiture.
8. Augmentation of Capacity of Sylhet Pulp and Paper Mill (60 tons/day) *	0.85	This should be a private sector activity, and it will be prudent to leave investment decisions relating to expansion to future private owners.
9 District-Based Industrial Estates for Development of Small and Cottage Industries	0.83	The concern is that many BSCIC estates have remained seriously underutilized for many years, linked to, among other factors, problems of location and access to utility services.
10. Industrial Park at Sirajganj	1.97	Have options for private investment been explored before making the public investment decision? The poor utilization of many industrial estates is a concern, which needs to be considered in these investment decisions.
11. Dhamrai Industrial Estate	0.12	
12. Noakhali Industrial Estate	0.06	
13. Mymensingh Industrial Estate Phase 2	0.01	
14 EPZ at Mongla – Phase 1	0.60	
15. EPZ at Ishurdi – Phase 1	0.74	Some EPZs had initially been set up in the public sector, and private participation is highly desirable now in the context of the Private EPZ Act. The systemic problems in the sector, as experienced in the implementation of the first private EPZ in Chittagong, should be addressed. Have options for private investment in these projects been explored before undertaking public investment?
16 EPZ at Comilla – Phase 1	1.18	
17. EPZ at Syedpur – Phase 1	0.59	
Power		
18 300 MW Barapukuria Coal-Based Power Plant	16.63	The main concerns about this lumpy investment are : its low viability, linked to its high capital cost (\$957/KW); high cost of generation, compared to that of efficient gas-based generation, which is likely to impact adversely on BPDB's viability and power tariffs; and environmental pollution costs.

19	300 MW Meghnaghat Thermal Power Station	14.69	In the context of BPDB's serious financial problems, its inability to mobilize concessional sources of financing and the need for the most cost-effective supply of power, it would be desirable to first explore options for cost-effective power purchase from IPPs and implement them, to meet as much of the incremental demand as possible. This is, however, subject to prudent limits on power purchase agreements (PPAs) from IPPs, which is currently 1780 MW up to FY05. An additional 500 MW could be contracted with IPPs, if needed, until the limit is reviewed in FY05. Once the most efficient IPP options have been utilized, the most efficient options for BPDB-executed generation should be considered to meet the remainder of the required expansion in power supply.
20	90 MW Sylhet Combined Cycle	5.06	
21	120 MW Siddhirganj Gas Turbine	3.83	
22	80 MW Tongi Gas Turbine	3.64	
23	20 MW Bhola Gas Turbine	0.80	
24	210 MW Siddhirganj Steam Turbine	6.44	
25	150 MW Chandpur Combined Cycle	2.82	
26	150 MW Sylhet Combined Cycle	3.43	
27	109 MW Haripur Combined Cycle (Expansion)	3.92	Given the expiry of 15 years of the plant's economic life, it might be more prudent to build a new plant, compared to adding capacity to the old plant.
Oil, Gas and Natural Resources			
28	Barapukuria Coal Mine	8.87	Given the financial risks associated with the doubtful commercial viability of the projects, exploiting the mineral resources under a concession to private operators would have been a more prudent option.
29	Madhyapara Hard Rock	8.95	
Physical Planning and Housing			
30	Twenty Apartments for Ministers at Minto Road	0.15	Other options, such as utilizing available Government buildings, would have been more cost effective.
31	Construction of Residential Buildings of Speaker and Deputy Speaker at National Assembly Area	0.6	More cost effective options, such as utilizing other available Government buildings, are worth considering.
32	Construction of 2000 Residential Flats for Government Officials in Dhaka	1.52	The rationale and priority of public housing, particularly in large cities, appears doubtful because of a number of reasons: (i) high capital cost and maintenance and other recurrent expenses involved, (ii) it is administratively burdensome for the Government; (iii) questionable equity of access to subsidized housing by a small proportion of employees, allotment being without any transparent eligibility criteria. Cash house-rent allowance is a much less burdensome option for the Government. Investment in public housing should be limited to key public service positions and essential services, and locations without a housing market. Problems of housing need to be addressed in the context of a broader reform of the compensation of Government employees, including monetization of in-kind benefits, and reform of the land, housing and financial markets.
33	Construction of 100 Flats for Senior Government Officials in Dhaka	0.28	
34	Engineering Staff College	0.22	Setting up a new institution, with associated high capital and recurrent costs, appears to be of doubtful priority. Alternative cost-effective arrangements, using expertise of BUET or the private sector, could be used to address training needs of PWD employees.
35	Special Apartment Improvement Project	2.05	Following the cancellation of the NAM Conference in Dhaka, continued funding of construction of 668 apartments/suites is of doubtful priority for the Government, and disposal of the assets through competitive auctions should be considered.
36	Rehabilitation of Slum Dwellers of Dhaka City in Multi-Storeyed Buildings	3.47	The soundness of the project, in terms of cost effectiveness, coverage and sustainability, in the context of the massive number of slum dwellers in Dhaka city and problems of governance, is worth examining.
37	Motel and Recreation Centre at Khagrachari	0.04	Have options for private investment been explored? This is of doubtful priority for the Government as it should be a private sector activity.
38	Motel and Recreation Centre at Bandarban	0.04	
39	Motel and Recreation Centre at Benapole	0.03	
40	Motel and Recreation Centre at Dinajpur	0.04	
41	Motel and Recreation Centre at Dinajpur	0.05	
Transport			
42	Thana Connecting Roads	109.8	The ADP allocation in FY03 for this large umbrella project, consisting of over 1000 components, is 1% of the unimplemented part, leading to thin spreading of resources over too many roads. It will take decade to complete the investment at this level of funding. The number of components will need to be prioritized in order to complete the projects within a reasonable time frame and realize benefits from the investment.

43 Public Priority Project (Phase 1)	6.24	The FY03 ADP allocation for this project is 5% of the unimplemented part of the investment, implying that it will take decades to complete the investment, and so the number of components needs to be prioritized
44 Public Priority Project (Phase 2)	15.4	The FY03 ADP allocation for this project is 2% of the unimplemented part of the investment, implying that it will take decades to complete the investment, and so the number of components needs to be prioritized
45 350 Double Decker Buses	0.77	Have options for private investment been explored? These projects should be undertaken by the private sector, while the Government, instead of entering into commercial activities, should facilitate private investment in this sector, for instance, by facilitating access to land for building bus depots by the private sector
46 Procurement of 500 Double Decker Buses by BRTC*	8.00	
47 Procurement of 1000 Trucks by BRTC*	14.00	
48. Purchase of 200 Trucks by BRTC*	0.43	
49. Advanced Driving Training Centre by BRTC	0.09	
50 Motor Driving Training Centre by BRTC	0.03	
51 Purchase of 2 Row Row Ferry*	1.08	
52 Procurement of 5 Inland Water Transport Vessels *	0.36	
53 Procurement of 4 Passenger Sea Trucks for Coastal Areas *	0.06	
54. Procurement of Three Inland Passenger Vessels by Selling Old Vessels	0.15	The rationale for procurement of new passenger vessels by the public sector seems questionable in an area in which the private sector has been actively involved
Communications		
55 Mobile Phone System by BTTB*	9.70	BTTB's planned entry into the mobile phone market raises two questions First, will this affect the priority of expansion and upgrading of its fixed phone network, with one of the lowest teledensity of fixed phones in the world? Second, will it affect the ability of existing private mobile operators to compete with BTTB on an equal footing on a level playing field? The upgrading of existing interconnection facility and the establishment of an efficient interconnection regime are needed to address this major constraint on the expansion of the mobile phone market
56 Interface Equipment and Transmission Link for Interconnection between BTTB and Private Telecom Operators *	13.14	The possibility of private participation is worth pursuing, particularly given the large size of the investment and the fact that the private sector will be benefiting from the investment .
Education		
57. Establishment of 13 New Polytechnic Institute	0.70	Adding new technical and vocational training institutes needs to be reexamined in the context of the existing unfavorable situation characterized by little or no linkage of these entities with the job market, and poor outcomes, in terms quality of training and success in the job market, linked to the poor functioning of the institutes due to a variety of institutional and other problems
58. Establishment of Science and Technology University in 12 Old Districts FY02 ADP	0.91	Investing in new universities needs to be reexamined in the context of the demand of existing science graduates, job prospects and the unsatisfactory functioning of similar institutions
59. Establishment of 10 Higher Secondary Model Schools in Dhaka	1.14	This appears to be of doubtful priority for the public sector because the private sector is actively involved. The equity impact is doubtful because the beneficiaries are likely to be mostly the children of the affluent in Dhaka
60 Establishment of Computer Institute at Feni	0.38	Given the active role played by the private sector in this area, the rationale for public investment appears weak.
Public Administration		
61 Institutional Development of BCS Administration Academy	0.10	The focus in this area should be on fully utilizing existing training facilities, including upgrading them, if necessary, rather than supporting proliferation of new training institutes, when existing ones – such as the Public Administration Training Centre (PATC), Savar, the apex training entity in the public sector -- remain seriously underutilized
62. Construction of Regional Public Administration Centre at Sylhet and Barisal.	0.11	

ANNEX 5: PACE OF POVERTY REDUCTION IN BANGLADESH AS COMPARED TO OTHER SOUTH ASIAN COUNTRIES

Extract from Poverty in Bangladesh: Building on Progress, the companion poverty assessment report World Bank 2002

Based on analysis of various Household Expenditure Surveys (HES) conducted by the Bangladesh Bureau of Statistics during the nineties shows that the incidence of poverty, as measured by both the upper and lower cost-of-basic needs (CBN) poverty lines, has fallen considerably (Table 5.1). In 2000, 50 percent of the country's population was poor (as measured by the upper poverty line), compared to 59 percent in 1991-92. Similarly, the extreme poverty rate (below the lower poverty line) declined from 43 percent in 1991-92 to 34 percent in 2000. Thus, according to both the upper as well as lower poverty estimates, the incidence of poverty in Bangladesh declined by about 9 percentage points over the course of the decade.

The poverty gap (P1) estimates how far below the poverty line the poor are on average as a proportion of that line. The squared poverty gap (P2) takes into account not only the distance separating the poor from the poverty line, but also inequality among the poor. Trends in these measures broadly mirror those observed with the headcount rates.

The decline in income poverty of about one percentage point per year during the 1990s is in sharp contrast to the virtual stagnation Bangladesh experienced during the 1980s. It also compares favorably with other countries in the region. In India, where the economy grew at close to 6 percent per annum during the nineties, consensus is emerging that poverty declined by roughly 5-10 percentage points over a 6 year period, a magnitude similar to that observed in Bangladesh. However, in Pakistan where the rate of GDP growth has slowed down considerably in the latter part of the 1990s, recent evidence suggests that poverty has more or less stagnated over the 1990s. And in Sri Lanka, poverty declined at a considerably slower pace, by 6 percentage points between 1985 and 1995.

Table 1: Trends in CBN Poverty Measures

	Upper Poverty Line			Lower Poverty Line		
	1991-92	1995-96	2000	1991-92	1995-96	2000
HEADCOUNT RATE (P₀):						
National	58.8	51.0	49.8	42.7	34.4	33.7
Urban	44.9	29.4	36.6	23.3	13.7	19.1
Rural	61.2	55.2	53.0	46.0	38.5	37.4
POVERTY GAP (P₁):						
National	17.2	13.3	12.9	10.7	7.6	7.3
Urban	12.0	7.2	9.5	4.9	2.6	3.8
Rural	18.1	14.5	13.8	11.7	8.6	8.2
SQUARED POVERTY GAP (P₂):						
National	6.8	4.8	4.6	3.9	2.5	2.3
Urban	4.4	2.5	3.4	1.5	0.7	1.2
Rural	7.2	5.3	4.9	4.3	2.8	2.6

Source: Poverty in Bangladesh: Building on Progress, World Bank 2002, based on World Bank staff estimates.

While *trends* in poverty reduction are comparable across countries in South Asia, estimates of poverty incidence *levels* are not. The national statistical offices in India, Pakistan, and Bangladesh all prepare poverty estimates using data from fairly similar national household surveys conducted on a regular basis in their respective countries. In India, the NSSO Consumer Expenditure Survey Series is used to estimate the incidence of poverty in the country. The Government of India Planning Commission's latest estimates using the 1999-00 survey show poverty in India to be 26.1 percent. In Pakistan, the Household Income

and Expenditure surveys (HIES) conducted by the Federal Bureau of Statistics are used to estimate the incidence of poverty. Using data from the 1998-99 HIES, the incidence of poverty in the country was estimated to be 32.6 percent. In Bangladesh, two measures of poverty are estimated by BBS, corresponding to the upper and lower poverty lines. Using the upper poverty line, poverty was estimated to be 49.8 percent in 2000, while the lower poverty line yielded estimates of extreme poverty of 33.7 percent. Is poverty in Bangladesh so much higher than in India or Pakistan, as indicated by these estimates?

Comparing the poverty lines used across these three countries suggest that part of the reason why poverty estimates in Bangladesh are so much higher than in either India or Pakistan is that a considerably higher poverty line is used to assess poverty. In US dollar terms, the upper poverty lines in use in Bangladesh are considerably higher than those in India and Pakistan (at prevailing exchange rates, not PPP-adjusted like the often used \$1 per person per day line), Table 2.

Table 2: Poverty Lines in India, Pakistan, and Bangladesh

Country/Year	Poverty line per capita per month (local currency)	Poverty Line US\$ (prevailing exchange rate)	Ratio to upper line (in US\$) in Bangladesh
India (1999-00)	Urban: Rs. 454	9.88	0.62
	Rural: Rs. 328	7.14	0.57
Pakistan (1998-99)	Urban: Rs. 665	13.27	0.84
	Rural: Rs. 589	11.76	0.95
Bangladesh (2000)	Upper line. Urban: Tk. 832	15.85	1.00
	Rural: Tk. 652	12.42	1.00
	Lower line. Urban: Tk. 628	11.96	0.75
	Rural: Tk. 549	10.46	0.84

Source: *Poverty in Bangladesh: Building on Progress*, World Bank 2002, based on World Bank staff estimates

How do non-income indicators of living standards in Bangladesh compare to other countries? Using measures of stunting, wasting and underweight children from Demographic and Health Surveys carried out in India and Bangladesh in 1998-99 and 1999-00 respectively, Bangladesh compares favorably with India. The comparison with Pakistan and Sri Lanka is more mixed. While Bangladesh has lower rates of stunting and wasting than Pakistan, the percentage of underweight children is far greater (Table 3).

Table 3: Bangladesh and South Asia: Comparison of Selected Indicators of Child Nutrition

Nutrition Status	Bangladesh (1999-00)	India (1998-99)	Pakistan (1990-91)	Sri Lanka (1987)
Stunting (height-for-age)				
Moderate or severe	50	57	57	34
Severe	20	32	36	-
Wasting (weight-for-height)				
Moderate or severe	9	13	10	13
Severe	1	2	1	-
Underweight (weight-for-age)				
Moderate or severe	56	58	46	48
Severe	17	24	19	-

Source: Poverty Assessment Report (2002) based on various DHS Reports. For comparability, comparison limited to children 24-35 months (24-36 for Sri Lanka)

Comparisons of other development indicators show that Bangladesh, with a lower GNP per capita, has done reasonably well on some dimensions but lags with respect to others when compared with other South Asian countries (Table 4). It has lower population growth and mortality rates than both India and

Pakistan. Access to improved water supply is better in Bangladesh, although this success is being threatened by the problem of arsenic contamination of groundwater. Adult literacy remains a problematic area relative to other countries, although Bangladesh has made significant strides in improving gender parity in enrollments.

Table 4: International Comparisons of Selected Development Indicators

Indicator	Bangladesh	China	India	Pakistan	Thailand	Vietnam
GNP per capita: US\$	370	780	450	470	1,960	370
Population growth: %	1.6	1.1	1.8	2.5	1.2	1.8
Urban population: % of total	24	32	28	36	21	20
Health						
Male life expectancy at birth: years	58	68	62	61	70	66
Infant mortality: per 1,000 live births	73	31	70	91	29	34
Under-5 mortality rate: per 1,000	96	36	83	120	33	42
Access to water and sanitation (% of population with access)						
Access to improved water source	84	90	81	60	89	36
Access to sanitation	35	21	16	30	96	21
Literacy and Education						
Male illiteracy: % of age 15 & older	49	9	33	42	3	5
Female illiteracy: % of age 15 & older	71	25	57	71	7	9
Net primary school enrollment	75	100	77	-	88	100

Source: *Poverty in Bangladesh. Building on Progress*, World Bank 2002, based on World Development Indicators.

Notes: Estimates are from 1999, or most recent estimates reported in the Database.

ANNEX 6: LIST OF STUDIES OF IMPACT OF BWDB PROJECTS

1. Rahman, R. and Chowdhury, 1999, Macro Impact of Flood Control projects on Aman rice production, Institute of Flood Control and Drainage Research, University of Engineering and Technology, Dhaka.
2. Matt McDonald International Ltd. And others, 1993, Final Report on North Western Regional Study, Flood Action Plan Study no. 2, Vol. I, Dhaka.
3. Soussan, J. and A. Datta, 1998, Community Partnership of Sustainable Water Management: Experience of BWDB Systems Rehabilitation Project (5 volumes) Vol. I Summary report, University Press Ltd. Dhaka.
4. Harza, 1991, Evaluation of Historical Water Resource Development and Implication for national Plan Project, Phase 2, Dhaka.
5. HTSL, 1992, Flood Action Plan Study, no. 12, Flood Control, Drainage, and Irrigation: Agriculture Study FPCO, Dhaka.
6. Ahmed, Raisuddin, 2000, Retrospect and Prospect of Rice Economy of Bangladesh, University Publishing Ltd., Dhaka

ANNEX 7: SOCIO-ECONOMIC IMPACT OF ROADS AND RURAL INFRASTRUCTURE IN BANGLADESH

Roads and other rural infrastructure play an important role in the socio-economic development of rural areas, both directly and indirectly. In direct terms, the development of roads and rural infrastructure provides immediate cash income. It is estimated that the cost of hiring local unskilled labor accounts for 12.0-17.5 percent of total project cost for rural infrastructure projects.⁷ These provide substantial employment opportunities to farmers and rural population through infrastructure construction and operations.

Indirectly, improvement of infrastructure can reduce the cost and effort of transport and thus of marketing agricultural products. It can increase prices paid to farmers for their products, facilitate access to modern improved inputs and improve access to social and welfare services. Improvement in infrastructure also helps the diffusion of technology in agriculture. Better transport usually means better access to schools and education institutions as well as increased likelihood that financial institutions will establish branch offices.

A few studies have provided the evidence on these benefits: (a) Development Impact Study by International Food Policy Research Institute (IFPRI) in association with the Bangladesh Institute of Development Studies (BIDS); (b) Tangail Infrastructure Development; (c) ADB Project Experience; and (d) Bangladesh Rural Infrastructure Strategy Study (BRISS) by the World Bank.

IFPRI/BIDS Study on Development Impact of Rural Infrastructure. (R. Ahmed and M. Hossain. *Development Impact of Rural Infrastructure, Bangladesh*. International Food Policy Research Institute (IFPRI) in collaboration with Bangladesh Institute of Development Studies (BIDS), 1990)

The study is based on a pilot survey of 129 villages in various parts of the country and presents data on the access in these villages to various forms of transport. Only 7 percent of the villages had a bus station, almost 50 percent were more than 5 km away from a bus station, and about 20 percent were more than 16 km away. In order to access bus services, two thirds of the villages reported rickshaws, bicycles or travel by foot as the primary mode of transport. Another 22 percent used country boats or launches. About 10 percent of the villages reported that bus stations were not accessible. About 11 percent of the villages were within 1.6 km of a train station, while over 60 percent are located at a distance of more than 8 km from a railway station, and more than 30 percent of the villages considered the railway inaccessible.

The study categorized the villages in its sample into two groups, based on the average index which reflected the ease of access to various forms of transport, namely developed and underdeveloped. The “developed” villages with respect to transport infrastructure were found to have the following benefit to the “underdeveloped” villages:

Agricultural benefits:

- 14 percent lower fertilizer prices;
- 12 percent higher wage rate;
- 105 percent more land under irrigation;

⁷ Accurately quantifying the amount of cash generated for local labors through construction requires exhaustive analysis on project cost. The quantity may also vary significantly. However, indicative analysis using unit cost and the empirical data from Local Government Engineering Department (LGED) revealed that 20-25 percent of the civil work cost of roads and rural infrastructure improvement project are the salaries and wages paid to locally hired unskilled labor. It is further estimated that on the average, civil engineering cost accounts for 60-70 percent of the total projects. Thus, 12.0-17.5 percent of the total project cost are salaries and wages paid to locally hired unskilled labors. In other words, for every \$10 million investment in rural infrastructure, \$1.2-1.75 million becomes the income of local labors.

- 92 percent higher use of fertilizer;
- 4 percent greater agricultural labor use;
- 24 percent greater technical efficiency in input use.

Income and employment benefits:

- 3-13 percent decline in agricultural labor by landowners;
- 33 percent increase in agricultural labor by landless;
- 30 percent higher supply of non-agricultural labor;
- 100 percent more landless women in the labor force;
- 24 percent higher household income from crops;
- 78 percent higher household income from livestock and fisheries;
- 100 percent higher household income from wages;
- 17 percent higher household income from business.

Socio-Economic Impact of Tangail Infrastructure Development Project (RDP-14).⁸ (Tangail Infrastructure Development Project (TIDP), KfW, November 1194)

The socio-economic monitoring and evaluation exercise carried out during Phase I (November 1994) of RDP-14 (funded by GTZ of Germany), suggests that the project has had a significant impact on employment, price of agricultural products, transport charges, traffic as well as land prices:

Effect on Employment and Income. The project created large direct employment opportunities, and a substantial amount of indirect jobs by expanding transport facilities and transport business, and newly established shops and workshops along the improved roads and in the markets. The prices of agricultural output produced in the project area have increased noticeably. The establishment of all-season roads has reduced the risk of losses of perishable commodities (e.g., fruit and vegetable). The prices for industrial items like kerosene, fertilizer and salt imported from outside project area declined to the levels of the major economic centers.

Transport Costs. While previously there were a large number of road gaps, after the improvement with bitumen surface the roads can be used on their entire length and all year round. Transport charges declined significantly. Within one year, the average transport charges for cargo decreased by 18.7 percent, and for passengers by 23.3 percent.

Traffic Growth. Within a period of one year, the number of non-motorized vehicles using the roads increased by 85 percent, while the number of motorized vehicles increased by 135 percent. In contrast, the non-motorized and motorized traffic on the roads which has not been improved in the same area increased by only 7 and 12.7 percent per annum respectively during the last decade.

Effects of Market Improvement. Following improved access roads, major changes occurred in the amount of market auctions, land prices, average daily attendance, and traffic and sales turnover. The auction amounts for the three improved markets increased by 100 percent, while the unimproved markets increased only by 28 percent on the average. Land prices in these markets increased by more than 180

⁸ During the 1990s, LGED was entrusted with most of rural infrastructure (rural roads and markets) development and maintenance projects funded by foreign agencies and the Government. These projects are generally designated as Rural Development Projects (RDPs) in a series, as they are designed to implement the rural development strategy which the Government announced in 1984. Some of these projects have other titles, and have components other than rural infrastructure (such as minor irrigation, schools, etc.) However, the predominant proportion of the funding goes to the improvement of rural roads and markets. Tangail Infrastructure Development Projects is the 14th of such project. The project is located in Tangail District and financed by German Government.

percent, and average daily attendance increased by 22 percent. The daily use in the number of non-mortised and motorized vehicles increase by 88 and 136 percent respectively; and the total cargo sales increase by 71 percent.

Impact of Rural Development Project –13

A comprehensive survey of the socio-economic impact of RDP-13 (Rural Development Project-13: Infrastructure in Old Dinajpur and Jamalpur District) was carried out after the completion of the project which supported the improvement of 682 kilometers of roads and 70 growth centers. The survey found that the impact on employment generation was remarkable. The project generated 1,398,460 person-days of employment during the construction period. In addition, some 16,623 persons who had been previously unemployed or under-employed were employed in vehicle operation. Some 30,443 persons also had found gainful employment in shop keeping, petty trade and small and cottage industries.

Impact of Road Overlay and Improvement Project (Binayak Sen, The survey was done in 17-22 August of 1998. See *Addressing Poverty in Bangladesh*, Asian Development Bank, Bangladesh Resident Mission, June 2000)

A study undertaken by the Asian Development Bank on Road Overlay and Improvement Project compared the wages in villages located along the roadside with those in remote areas (defined as being located at least 4 kilometers away from the project road for boro (paddy) harvest as well as during transplantation seasons. The study shows that the wage rate was higher in roadside villages in both seasons. The matched difference (the simple average) between the two groups of villages was 13.3 percent during the time of paddy harvest. This difference was 10.2 percent during paddy transplantation season.

Bangladesh Rural Infrastructure Strategy Study (BRISS). (*Bangladesh Rural Infrastructure Strategy Study*, the World Bank, 1996)

The study assessed the association between agricultural productivity and rural infrastructure supply at the macro-level utilizing a cross-country district level regression model. The model uses financial value of major crops per acre per annum as dependent variable while using density of major highways, density of rural roads, percentage of roads paved and percentage of roads in good conditions as explanatory variables. It was found that the density of major highways as well as rural roads were correlated significantly with agricultural production. However, the percentage of paved roads and roads in good conditions was found to be positively and significantly correlated with the agricultural production.

The estimated regression model suggests that a 10 percent increase in the density of paved rural road is associated with a 0.5 percent increase in agricultural productivity; a 10 percent increase in the density of good roads is associated with almost 1 percent increase in agricultural productivity. The central message of this finding is that with such large rural road network, it is the condition, and not the size, of this network that is (more) relevant variable in explaining productivity differentials in a district. These findings have significant policy and operational relevance. They suggest that maintaining and upgrading the current network are more important than expanding the network.

ANNEX 8: EXPERIENCE OF POWER SECTOR RESTRUCTURING IN OTHER COUNTRIES

Pressures for restructuring and privatizing the electricity supply industry (ESI) in mature industrial economies came out of a growing disillusionment with the performance of state-owned enterprises, and the happy discovery that selling telecommunication utilities was both profitable and raised performance. One of the lessons from UK electricity restructuring is that increased competitive pressure in generation is needed to reduce costs, which in turn requires separating generation from transmission and distribution. Whether these benefits will be passed on to consumers depends upon the intensity of competition. Unregulated industries, even if privatized, appear to deliver little benefits. Efficiency improvements in transmission and distribution require tough regulatory price controls. Conscious efforts are needed to counteract market power in the potentially competitive sectors, possibly including further divestment of capacity, if consumers are to gain from restructuring and associated efficiency improvements. The lesson that unbundling is necessary has been taken to heart in restructuring choices around the world.

The standard model in developing countries, as in most developed countries, was vertical integrated production under state ownership. A franchise monopoly allows prices to be set to finance expansion, and this was the model in developed countries, but where governments could borrow from the World Bank, this discipline was weakened and with it the need to set remunerative prices. Over time, as inflationary and budgetary pressures increased, the margin between revenue and costs was squeezed, maintenance was delayed, management deteriorated, and over-manning through political patronage increased. Under-pricing to favored groups (mostly urban consumers and farmers) became politically more salient and harder to reverse, while theft and losses in urban areas further undermined the financial viability of the sector. The sector was in crisis, though for different reasons than those experienced in developed countries.

Experience elsewhere, in South Asia and other parts of Asia, has shown that energy reforms can lead to problems unless they are well conceived and managed carefully. Both India and Pakistan experienced considerable difficulties with their power purchase agreements (PPAs) with IPPs, largely because the process of contracting for new capacity was not sufficiently competitive and transparent. In addition, the Government of Pakistan had offered a price for the purchase of power from IPPs which was overly generous, and assumed most of the risks of IPP operation in order to attract FDI. These contracts exacerbated the balance of payments problems for Pakistan. The PPAs proved to be financially unsustainable for both countries, exposing them to the associated contingent liabilities, and were the subject of a lot of controversy. The contracts had to be renegotiated but nonetheless imposed a cost on the countries. Experience from other countries suggests that inefficient state owned distribution utilities which have a bad track record of high technical and non-technical losses, and politicized tariff policy, are bad for PPA with IPPs. In the area of energy pricing, Pakistan has been successful in establishing a realistic pricing framework. Under a new framework adopted three years ago, petroleum product prices have been adjusted fortnightly and gas prices on a bi-annual basis, based on transparent pricing formulae, and reforms have been implemented satisfactorily in these sub-sectors. Power tariffs have been revised periodically under a regulatory framework on account of structural and fuel cost adjustment for thermal power units during the last few years. While the power regulatory system is not perfect – with the regulator and utility not always agreeing fully on tariff determination -- the sector's financial position has improved in the last three years. These represent a major improvement over the previous system of administered energy pricing decisions by the Government.

The Indian experience

The financial crisis is readily illustrated by the case of India -- losses of State Electricity Boards (SEBs) rising from US\$1.6 bln (0.6% of GDP) in FY92 to US\$6.2 bln in FY02. (*Economic Times*, March 7, 2001). The cost of theft to the exchequer is US\$4.4 bln annually (*The Statesman*, March 4, 2001). Some Indian states

have been more proactive in restructuring their electricity industries, and their experience might provide the closest parallel to the problems and proposed reforms in Bangladesh. These reforms are proceeding slowly, and their outcome will be of interest to countries pursuing similar reforms. Their problems and reform strategies demonstrate that significant legal, institutional and regulatory reforms are possible in a country that shares many of Bangladesh's problems and institutional history. India has suffered the same power shortages and poor financial performance as in Bangladesh. The State Electricity Boards (SEBs) were bankrupt and not credit-worthy, and so reforms were essential for private investment to address their generation shortfall. This prompted India to permit private investment into the ESI as early as in 1991.

The first State to develop and implement such a reform strategy was Orissa, starting in 1993. Orissa has a low per capita income, equivalent to 60 percent of Bangladesh's per-capita income, a generation capacity of 2,900 MW and 1.3 million power consumers, of whom less than half were metered. Losses exceeded 50%. The Orissa Electricity Regulatory Commission (OERC) was set up as an independent regulator in 1995. It was mandated to promote efficiency, competition and private sector participation, and empowered to issue licenses for transmission, distribution and retail supply, to resolve disputes and regulate the bulk supply tariff and the final retail tariffs. The Orissa Electricity Reform Act came into force on 1 April 1996. The Act set in chain a sequence of reforms, starting with the unbundling of the Orissa SEB into various companies, starting with Gridco (transmission and distribution), Orissa Power Generating Corporation (OPGC) containing the thermal plants, and Orissa Hydro Power Corporation (OHPC) holding the hydro plant. Four distribution companies were set up later by Gridco. As in Bangladesh, with the creation of DESCO out of DESA, the employees remained with Gridco, and management continued to be subject to continued political interference. It became clear that more radical reform of privatizing the distribution companies was required. The Government of Orissa invited competitive tenders to strategic investors for 51% of the shares of each of the four distribution companies in late 1997. Bids were submitted in the second half of 1998, and three discos were awarded to BSES in April 1999 and the fourth to AES Corp (USA) in September 1999. AES also took 49% of the equity of the Orissa Power Generating Corporation. Part of the delay in negotiations with AES was caused by the need to resolve the issue of whether the same company was allowed to hold both generation and distribution assets.⁹

The Orissa ESI now operates with Gridco as the single buyer, buying from the generating companies under long-term PPAs, and selling to the discos at the regulated bulk supply tariff (BST). The regulator, OERC, holds open annual tariff hearings that result in revisions to the BST and to the tariffs set by the discos. There were tariff orders in March 1997, November 1998 and December 1999. One of the key issues in setting the tariffs is the level of losses that is assumed in determining the revenue requirements of the companies, and this has been gradually forced down to provide incentives for the companies to reduce losses.

The experience of these early tariff revisions has been mixed. OERC has insisted on keeping uniform tariffs across the state despite differences in costs, and has differentiated the BST charged to each disco to compensate. OERC kept down the lifeline tariff (on the first 100kWh/month) after the 1998 cyclone, and denied interest payments on bonds raised to securitize payables and raise working capital. This totally undermined the financial recovery plan which had been recently prepared for Gridco (Frontier Economics, [2000]).

The lessons from this reform are also mixed. Privatization of both existing generation plant and distribution has been shown to be possible, with distribution assets sold for 140% of book value. However, Gridco, still in

⁹ Perhaps surprisingly, the government does not appear to have imposed any initial restrictions on horizontal or vertical common ownership, so that AES now has a dominant position both in generation and, to a lesser extent, in distribution. Other countries like Argentina have prevented generation companies from owning either transmission or distribution, while most competition agencies would look askance at a company being awarded licences for three-quarters of a market (as BSES has in distribution).

state ownership, is essentially bankrupt, largely because it was not financially restructured and retains past accumulated losses on its former sales to distribution companies. It does not help relations between Gridco and the distribution companies that Gridco still retains 49% of the shares of the distribution companies. The obvious solution is to financially restructure Gridco with suitable equity and debt, and transfer its share ownership to a state property agency as part of the financial work-out.

The sector continues to make substantial losses, and OERC is now perceived to be less independent than expected, pursuing social goals that should be the responsibility of the Government, rather than the commercial goals set out in its charter. The annual resetting of tariffs gives little stability and involves the companies in annual regulatory battles that have not encouraged investor confidence. An additional problem is that politicians have lost a large part of their control over and patronage with the privatized distribution companies, particularly AES, and hence are more hostile and critical of the reforms, compounding regulatory problems. AES appears to be performing better than BSES, but must be having serious doubts about the wisdom of acquiring further distribution companies in the sub-continent.

It is possible to draw more optimistic conclusions from the Orissa experience. The distribution companies have been more effective in dealing with theft control, including disconnections of those who do not pay, even municipalities of main cities. They are addressing employee issues (recruitment and the employee culture), and dealing better with rural electricity committees. Customer service is improving, and so is metering, and the system rehabilitation is making progress. The government has stopped supporting the sector financially, and has in fact drawn money out since corporatization in 1996. Given the serious financial burden that state electricity boards place on governments elsewhere, this is clearly a major achievement.

Another positive lesson from India is the way regulatory commissions are maturing, not only in Orissa but in several states. By Indian standards, these have achieved unprecedented transparency and public participation. Andhra Pradesh demonstrates that privatization may not be necessary to improve solvency, although this is in the context of political leadership by the Chief Minister driving improvements with great determination. The government has launched an intensive program to improve governance and control theft and losses. While Gridco was unsuccessful in this regard in Orissa, the program has been successful so far in Andhra Pradesh, because the utility and the state government administration are cooperating closely. Political, government and utility leaders agree that this kind of program is probably not sustainable in the long run, and thus is not a substitute for privatization. However, it is an excellent prelude to privatization, particularly if combined with building the institutional capacity of the regulatory commission.

Perhaps the most worrying aspect of recent South Asian experience is that the initial enthusiasm by foreign investors in the power sector is rapidly waning. Enron's very public dispute at Dabhol, and the failure of single buyers to honor their PPAs must have damaged confidence in IPP investment. The fact that only one foreign company bid for a distribution company in Orissa (and then only when combined with purchasing second-hand generation), and has subsequently continued to make losses, will surely depress bidding for distribution privatizations. Whether there are enough local private companies with the necessary finance, experience, and political independence to provide an adequate substitute for experienced foreign electricity companies is unclear, though BSES provides at least one example. The early optimism that privatization and restructuring were the obvious solution to seemingly otherwise intractable problems now seems less securely based than it did in the early aftermath of successful European and Latin American reforms. California has demonstrated that distribution companies are financially very risky if regulation is not well designed, and can rapidly go bankrupt if shortages force up wholesale electricity prices. The problems have evidently been solved reasonably well in some countries (notably Latin America), but remain remarkably hard to solve in others.

ANNEX 9: LIST OF SOEs APPROVED FOR PRIVATIZATION

Enterprises under the Jute Ministry:

1. Eastern Jute Mills Limited, Aatra, Khulna;
2. Peoples' Jute Mills Limited, Khulna.

Enterprises under the Ministry of Textiles:

Bangladesh Textile Mills Corporation

3. Darwani Textiles Mills, Darwani, Nilphamari;
4. Orient Textile Mills, Mirerbagh, Dhaka;
5. Magura Textile Mill;
6. Kurigram Textile Mills Limited, Kurigram;
7. Ahmed-Bawani Textile Mills excluding Surplus Land.

Bangladesh Handloom Board

8. Service Facilities Centre (SFC), Belkuchi, Sirajgonj;
9. Service Facilities Centre (SFC), Tangail ;
10. Service Facilities Center (SFC), Bancharampur, Brammyanbaria ;
11. Textile Facilities Centre (TFC), Chowmuhoni, Noakhali ;
12. Handloom Service Centre, Raipur, Narsindi.

Enterprises under Ministry of Industries :

Bangladesh Chemical Industries Corporation:

13. Khulna Hardboard Mills Ltd., Khulna;
14. North Bengal Paper Mills Ltd., Pakshi, Pabna;
15. Sylhet Pulp and Paper Mills Ltd., Sylhet;
16. Khulna Newsprint Mills Ltd., Khulna (excluding surplus land).

Bangladesh Steel & Engineering Corporation:

17. Bangladesh Diesel Plant Ltd., Joydevpur, Gazipur;
18. Narayanganj Dockyard, Narayanganj.

Sugar and Food Industries Corporation

19. Rangpur Sugar Mills Ltd., Mahimaganj, Gaibandha ;
20. Shetabganj Sugar Mills Ltd., Shetabganj, Dinajpur.

Enterprises under Ministry of Forestry and Environment:

21. Chittagong Cabinet Manufacturing Unit;
22. Dhaka Cabinet Manufacturing Unit;
23. Khulna Cabinet Manufacturing Unit;
24. Woodtreating Unit, Chittagong;
25. Wood treating Unit, Khulna;
26. Chittagong Board Mills, Chittagong;
27. Eastern Wood Works;
28. FeedCo. Furniture Complex;
29. Karnaphuli Timber Extraction Unit;
30. Lumber Processing Complex;

31. Particle Board Veneering Plant;
32. Procurement and Sales Organization;
33. Shangu Matamuhuri Timber Extraction Unit;
34. Shangu Valley Timber Industries.

Enterprises under the Ministry of Civil Aviation:

Parjatan Corporation:

35. Hotel Shaibal, Coxsbazar;
36. Motel Laboni, Coxsbazar;
37. Hotel Poshur, Mongla, Bagerhat;
38. Parjatan Motel, Rangpur;
39. Parjatan Motel, Sylhet.

Enterprises under Fuel and Minerals Division:

40. Padma Oil Company Ltd.
41. Yamuna Oil Company Ltd.,
42. Meghna Petroleum Ltd.,
43. LP Gas Ltd.
44. Eastern Lubricant Ltd.
45. Standard Asiatic Oil Company Ltd. .

Enterprises under the Ministry of Commerce:

46. Bijoy Nagar Tea Garden.,
47. Potiya Tea Garden.

Enterprise under the Ministry of Finance:

48. Bangladesh Shilpa Rin Shangshtha (BSRS)

ANNEX 10: BANGLADESH MACROECONOMIC INDICATORS

Description	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02
Growth Rates (%)												
GDP Growth	3.3	5.0	4.6	4.1	4.9	4.6	5.4	5.2	4.9	5.9	5.3	4.4
GDP Growth Per Capita	n/a	3.0	2.6	2.2	3.1	2.8	3.6	3.5	3.6	4.9	3.7	2.9
Per Capita GDP Atlas Method (US\$)	292.4	298.0	297.8	298.1	313.3	332.8	347.9	350.7	354.1	367.3	371.1	372.0
Saving & Investment (% of GDP)												
Gross Domestic Saving	13.1	14.1	14.0	14.5	12.7	12.2	14.6	17.4	17.7	17.9	18.0	18.2
Gross National Saving	15.5	16.9	17.2	18.1	16.3	16.0	18.6	21.8	22.3	23.1	22.4	23.4
Private Investment	10.3	10.3	11.5	11.8	12.4	13.6	13.7	15.3	15.5	15.6	15.8	16.8
Public Investment	6.6	7.0	6.5	6.6	6.7	6.4	7.0	6.4	6.7	7.4	7.3	6.4
Central Govt. Budget (% of GDP)												
Total Revenue	0.0	8.3	9.1	9.3	9.3	9.0	9.2	9.3	9.0	8.5	9.0	10.2
Total Expenditure	1.3	12.7	13.3	13.8	14.6	13.4	13.5	13.3	13.8	14.7	14.1	14.8
Overall Budget Balance	4.7	4.5	4.4	4.5	5.2	4.5	4.3	4.1	4.8	6.2	5.1	4.7
Balance of Payments (% of GDP)												
Exports	5.6	6.4	7.4	7.5	9.2	9.5	10.5	11.7	11.6	12.2	13.8	12.5
Imports	11.4	-11.3	-12.7	-12.4	-15.4	-17.1	-16.9	-17.1	-17.5	-17.8	-19.9	-16.3
Services & Income (net)	n/a	-0.1	0.0	0.0	-0.3	-0.1	0.1	0.2	0.1	-0.1	-0.5	-1.7
Current Transfers	n/a	4.6	4.5	4.7	4.8	4.5	5.1	4.6	4.9	5.7	4.9	6.0
Current Account Balance (including transfers)	n/a	-0.4	-0.8	-0.3	-1.8	-3.2	-1.3	-0.6	-0.9	0.0	-1.7	0.5
External Indicators												
External Debt (US\$ b.)	12.7	13.3	13.6	15.4	16.8	15.2	15.0	14.0	14.8	16.2	16.8	17.3
Ext. Debt as % of GDP	39.2	39.5	39.6	43.8	44.6	37.3	34.7	31.6	32.7	34.0	34.3	34.9
BB Gross Reserves (US\$ b.) (end of period)	0.9	1.6	2.1	2.8	3.1	2.0	1.7	1.8	1.5	1.6	1.3	1.6
BB Gross Reserves (in months of imports)	n/a	5.5	6.3	7.9	6.3	3.5	2.9	2.8	2.3	2.3	1.7	2.0
External Debt Service Ratio (% of Export Earning)	12.6	15.8	13.6	12.9	11.5	10.7	9.6	7.9	8.4	8.0	8.0	7.2
Exchange Rate												
Nominal Period Average (TK/US\$)	35.7	38.2	39.1	40.0	40.2	40.8	42.7	45.5	48.1	50.3	54.0	57.4
Nominal End of Period (TK/US\$)	35.8	39.0	39.8	40.3	40.1	41.8	43.7	46.3	48.5	51.0	57.0	57.9
Real Effective (1990=100)	97.9	95.4	91.5	92.3	90.9	93.4	93.5	101.9	104.4	102.6	101.2	
Rate of Inflation (%) (year on year)	8.3	4.6	2.7	3.3	8.8	6.8	2.5	7.0	8.9	3.9	1.6	2.4
Total Public Debt (% of GDP)	n/a	n/a	45.2	50.9	51.9	45.7	43.8	41.5	43.8	46.9	48.7	51.6
Memorandum Items												
GDP at Current Prices (Taka bill)	1105.2	1195.4	1253.7	1354.1	1525.2	1663.2	1807.0	2001.8	2197.0	2370.9	2535.5	2732.0
GDP at Current Prices Atlas Method (US\$ bill)	32.5	33.8	34.4	35.1	37.6	40.6	43.2	44.4	45.4	47.7	48.9	49.5
Population (mill)	111.0	113.0	114.9	116.9	118.8	120.8	122.6	124.5	126.3	128.1	129.9	131.6
Population growth Rate	n/a	n/a	1.7	1.7	1.6	1.7	1.5	1.5	1.4	1.4	1.4	1.3

Source: Various publications of the World Bank, ADB and Bangladesh Bureau of Statistics

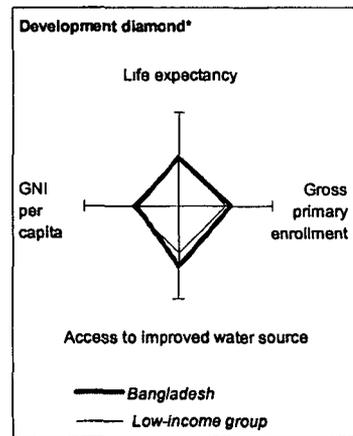
ANNEX 11

Bangladesh at a glance

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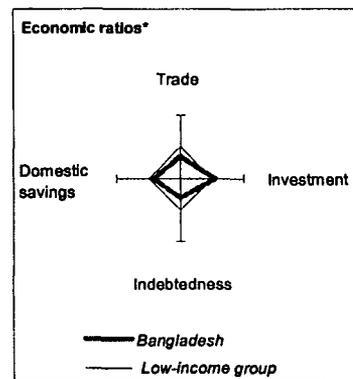
POVERTY and SOCIAL

	Bangladesh	South Asia	Low-income
2001			
Population, mid-year (<i>millions</i>)	133.4	1,355	2,459
GNI per capita (<i>Atlas method, US\$</i>)	380	460	420
GNI (<i>Atlas method, US\$ billions</i>)	50.7	617	1,030
Average annual growth, 1995-01			
Population (%)	1.7	1.9	1.9
Labor force (%)	2.9	2.4	2.4
Most recent estimate (latest year available, 1995-01)			
Poverty (% of population below national poverty line)	34		
Urban population (% of total population)	26	28	32
Life expectancy at birth (<i>years</i>)	61	63	59
Infant mortality (<i>per 1,000 live births</i>)	60	74	77
Child malnutrition (% of children under 5)	48	47	
Access to an improved water source (% of population)	97	87	76
Illiteracy (% of population age 15+)	58	45	38
Gross primary enrollment (% of school-age population)	106	100	96
Male	108	110	102
Female	105	90	86



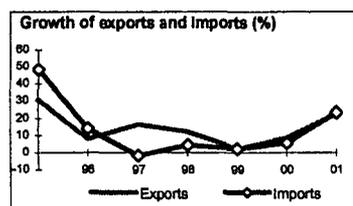
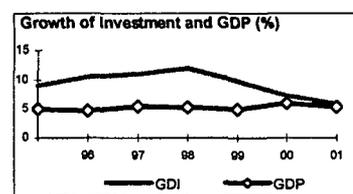
KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1981	1991	2000	2001
GDP (<i>US\$ billions</i>)	19.8	31.0	47.2	47.0
Gross domestic investment/GDP	17.6	16.9	23.0	23.1
Exports of goods and services/GDP	5.3	6.7	14.0	15.4
Gross domestic savings/GDP	12.5	14.6	17.9	18.0
Gross national savings/GDP	17.8	19.7	23.1	22.4
Current account balance/GDP	-4.3	-3.1	-0.6	-2.2
Interest payments/GDP	0.3	0.5	0.4	0.3
Total debt/GDP	21.9	42.4	0.0	0.0
Total debt service/exports	2.6	20.7	9.1	7.4
Present value of debt/GDP	20.3	..
Present value of debt/exports	110.8	..
	1981-91	1991-01	2000	2001
<i>(average annual growth)</i>				
GDP	3.7	5.0	5.9	5.3
GDP per capita	1.1	3.2	4.1	3.4
Exports of goods and services	5.0	13.2	8.6	22.8



STRUCTURE of the ECONOMY

	1981	1991	2000	2001
<i>(% of GDP)</i>				
Agriculture	30.9	29.5	24.6	23.3
Industry	20.3	21.1	24.4	25.1
Manufacturing	13.4	13.0	14.7	15.1
Services	48.8	49.4	51.0	51.6
Private consumption	87.1	84.5	77.7	78.5
General government consumption	4.5	4.1	4.6	4.5
Imports of goods and services	14.5	12.2	19.2	21.5
	1981-91	1991-01	2000	2001
<i>(average annual growth)</i>				
Agriculture	2.1	3.3	7.4	3.1
Industry	6.0	7.3	6.2	7.4
Manufacturing	5.4	6.9	4.8	6.7
Services	3.8	4.8	5.2	5.3
Private consumption	3.0	3.9	5.3	6.2
General government consumption	2.5	4.4	0.9	4.5
Gross domestic investment	6.7	9.6	7.3	6.8
Imports of goods and services	2.9	10.8	5.7	23.5

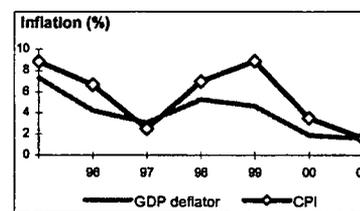


Note 2001 data are preliminary estimates

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

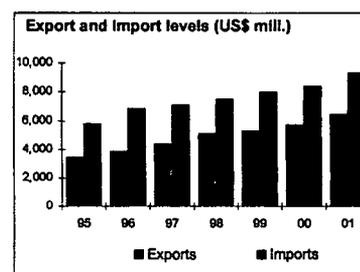
PRICES and GOVERNMENT FINANCE

	1981	1991	2000	2001
Domestic prices (% change)				
Consumer prices		8.3	3.5	1.6
Implicit GDP deflator	10.5	6.6	1.9	1.6
Government finance (% of GDP, includes current grants)				
Current revenue		7.2	8.5	9.0
Current budget balance		0.7	0.7	0.7
Overall surplus/deficit		-5.4	-6.2	-5.1



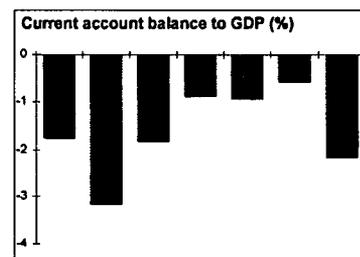
TRADE

	1981	1991	2000	2001
TRADE (US\$ millions)				
Total exports (fob)		1,698	5,752	6,467
Raw jute		120	72	67
Leather and leather products		138	195	254
Manufactures		1,278	5,123	5,761
Total imports (cif)		3,510	8,403	9,363
Food		297	381	349
Fuel and energy		204	684	905
Capital goods		1,231	2,133	2,515
Export price index (1995=100)		85	127	118
Import price index (1995=100)		89	136	134
Terms of trade (1995=100)		96	94	88



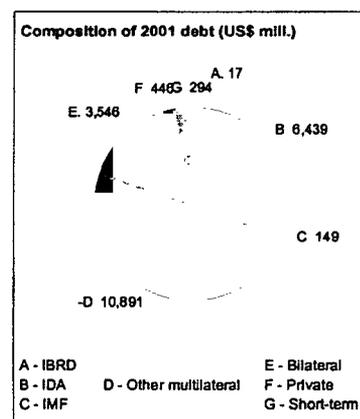
BALANCE of PAYMENTS

	1981	1991	2000	2001
BALANCE of PAYMENTS (US\$ millions)				
Exports of goods and services	933	2,113	6,811	7,178
Imports of goods and services	2,718	3,829	9,060	10,103
Resource balance	-1,785	-1,717	-2,449	-2,925
Net income	-23	-102	-221	-264
Net current transfers	963	846	2,392	2,171
Current account balance	-844	-973	-278	-1,018
Financing items (net)	445	1,354	357	716
Changes in net reserves	399	-381	-79	302
Memo:				
Reserves including gold (US\$ millions)		880	1,599	1,307
Conversion rate (DEC, local/US\$)	16.3	35.7	50.3	54.0



EXTERNAL DEBT and RESOURCE FLOWS

	1981	1991	2000	2001
EXTERNAL DEBT and RESOURCE FLOWS (US\$ millions)				
Total debt outstanding and disbursed	4,326	13,141	15,613	15,294
IBRD	55	65	24	17
IDA	1,085	4,360	6,431	6,439
Total debt service	36	610	789	678
IBRD	4	5	7	7
IDA	7	47	129	143
Composition of net resource flows				
Official grants	543	1,153	561	432
Official creditors	10	485	336	401
Private creditors	-4	34	13	270
Foreign direct investment	0	1	194	174
Portfolio equity	0	0	3	0
World Bank program				
Commitments	212	451	233	280
Disbursements	159	255	357	312
Principal repayments	0	18	87	99
Net flows	159	238	270	213
Interest payments	11	34	49	50
Net transfers	149	203	221	163



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