Government of
Bangladesh

United Nations

MILLENNIUM DEVELOPMENT GOALS

Bangladesh Progress Report

2000

2005

2010

2015

Jointly prepared by the Government of Bangladesh
and the United Nations Country Team in Bangladesh

Millennium Development Goals

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February 2005

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Foreword

The 20th century produced **the Universal Declaration of Human Rights** – the first truly global "Magna Carta" (Great Charter) of civil and political liberties that were meant to be applicable to all of humankind. Inspired by the massive death and destruction of World War II and nurtured by a war-weary world's determination <u>never again</u> to succumb to tyranny, the Universal Declaration of Human Rights may well at its birth have been perceived by skeptics as a distant dream, as a naïve construct by people who were hopelessly out of touch with reality and "realpolitik".

Yet today, almost 60 years after its birth, the principles of the Universal Declaration – even its exact wording – have been solidly embedded into Constitutions and other key legislation in the vast majority of countries around the world. Not only that, while all too often blatant violations still take place, there is an overwhelming consensus in all corners of the world that **the ideals and principles of the Universal Declaration are the global norm** – and that departures from them are not only accidental lapses, but an unmistakable symptom of leadership failure.

At the dawn of the 21st century, the world has produced another distant dream, another seemingly naïve construct at odds with "realpolitik". Inspired by the increasingly obvious shortcomings of purely economic measures of social progress, the new dream – the **Millennium Development Goals** – articulates as forcefully as the Universal Declaration of Human Rights the solemn <u>obligations</u> of those who hold the reins of governmental power as well as the legitimate <u>aspirations</u> of their citizens for faster progress towards a better life. While the full achievement of the Millennium Development Goals may still elude us for years to come, the goals and targets of the MDGs are already fast becoming irrefutable and irrepressible global norms with a compelling legitimacy – and once again failure to achieve them will not constitute just accidental lapses, but an unmistakable symptom of leadership failure.

Against this background, it is critically important for every country – big or small, resource-rich or resource-poor – to put in place a rigorous MDG monitoring mechanism which is capable of taking regular stock of its MDG progress. For too long, it was possible to make the oft-repeated claim that "*if it cannot be measured, it cannot be done*". But now, with the MDGs at hand, a vast array of basic human aspirations can indeed be measured – and hence more easily turned from dream into reality. If this, the first MDG Progress Report for Bangladesh, will make a modest contribution towards that objective, it will have been well worth the many hours of painstaking analysis and careful calculations that were invested in it by the joint efforts of a long list of dedicated GoB and UN staff in Bangladesh.

Dhaka, 10 February 2005

Jørgen Lissner
UN Resident Coordinator in Bangladesh
on behalf of the UN Country Team

Preface

The Bangladesh MDG Progress Report is a product of the collaborative efforts of the Government of Bangladesh and the UN Country Team. This is the first attempt at a consensus stock-taking of the status of all the MDGs in Bangladesh.

Bangladesh has achieved remarkable progress in the areas of primary schooling, girls' education, immunization, micro-credit, female economic participation, birth control, physical mobility and safety nets. The most remarkable achievement is in the field of primary education with the country well on its way to meet the MDG 2 of universal primary education by 2015. The challenge here is ensuring adequate finances to keep up the momentum and ensuring quality education for all.

Although all relevant indicators of MDGs have moved towards their 2015 targets, their performances have been uneven. To understand this variation, it is important to analyse the reasons of the slowing down of the child mortality rate, the apparent plateauing of total fertility rate, the rise in youth unemployment rate, and most important of all what factors work in accelerating the pace of poverty reduction.

It is important because the main underlying factor for the slow pace of MDG achievement is poverty. Poverty permeates all sectors and holds back growth in every sense. To address this issue, Bangladesh is in the process of completing its first PRSP, which has taken into account the MDGs. The PRSP is addressing the issues of pro-poor growth and human development, and when implemented, will accelerate the achievement of the MDGs.

For this to happen successfully there is need for strong partnership at the global and at the national level. For countries like Bangladesh to meet the MDG commitments made at the 2000 Millennium Summit, industrialised countries must honour their commitments to finance development in developing countries. Trade barriers must be lifted and both the rich and the poor must be allowed to benefit from globalization so that we can all move towards a more equal world.

M. Saifur Rahman, MP
Minister of Finance and Planning
Government of the People's Republic of Bangladesh

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BANGLADESH MDGs
STATUS AT A GLANCE

GOALS	GLOBAL TARGETS	BANGLADESH TARGETS	INDICATORS	BASE YEAR	CURRENT STATUS	TARGET 2015	COSTING (US$)
GOAL 1 **ERADICATE EXTREME POVERTY AND HUNGER**	**Target 1** Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day **Target 2** Halve, between 1990 and 2015, the proportion of people who suffer from hunger	Reduce proportion of people below US$1 per day (PPP) from 58.8% in 1991 to 29.4% by 2015	Proportion of population below US$1 per day (PPP-values)	58.8%	49.6%	29.4%	
			Poverty gap ratio	17.2	12.9		
		Reduce proportion of people in extreme poverty from 28% in 1991 to 14% by 2015	Proportion of people in extreme poverty	28%	20%	14 %	
			Share of poorest quintile in national consumption	-	9%	-	
			Prevalence of underweight children (under five years of age)	67%	51%		
GOAL 2 **ACHIEVE UNIVERSAL PRIMARY EDUCATION**	**Target 3** Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	Increase net enrolment rate from 73.7% in 1992 to 100% by 2015	Net enrolment rate in primary education	73.7%	82.7%	100 %	1.32 billion per year, from 2005 to 2015. Of which: GoB - 0.50 b Hhs – 0.29 b Ext. – 0.53 b
		Reduce primary school dropout rates from 38% in 1994 to 0% by 2015	Proportion of pupils starting Class 1 who reach Class 5	42.5%	80.6%	100 %	
			Adult (15+ years) Literacy Rate	36.9%	38.8%		
GOAL 3 **PROMOTE GENDER EQUALITY AND EMPOWER WOMEN**	**Target 4** Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015.	Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015.	Ratio of girls to boys in primary secondary tertiary education	55:45 34:66 25:75	48:52 52:48 36:64	48:52 50:50 50:50	
			Ratio of literate females to males of 20-24 year olds	42:65	55:71	100:100	
			Share of women in wage employment in the non-agricultural sector		22%		
			Proportion of seats held by women in national parliament		2%		

Note:

- The base year varies depending on availability and acceptability of data. The range is between 1990 – 1995.
- The current status is the latest year for which acceptable data was available. The years range between 2000 - 2002.
- For assumptions made for costing the MDGs, see main report, technical notes.
- NA = not available.

Goals	Global Targets	Bangladesh targets	Indicators	Base Year	Current Status	Target 2015	Costing (US$)
GOAL 4 **REDUCE CHILD MORTALITY**	Target 5 Reduce by two thirds, between 1990 and 2015, the under-five mortality rate	Reduce under-five mortality rate from 151 deaths per thousand live births in 1990 to 50 by 2015	Under-five mortality rate (deaths per 1000 live births)	151	82	50	
			Infant mortality rate (deaths per 1000 live births)	94	56		
			Proportion of 1-year-old children immunized against measles	54%	69%	100 %	57 million per year, 2005-2015*
GOAL 5 **IMPROVE MATERNAL HEALTH**	Target 6 Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	Reduce maternal mortality from 57.4 deaths per 100,000 live births in 1990 to 14.3 by 2015	Maternal mortality ratio (deaths per 100,000 live births)	570	320 - 400	143	
		Increase the proportion of births attended by skilled birth personnel to 50% by 2010	Proportion of births attended by skilled health personnel	5%	12%	50% by 2010	
		Reduce TFR to 2.2 by 2010	Total Fertility Rate	3.3	3.3	2.2 by 2010	
		Reduce maternal malnutrition to less than 20% by 2015	Proportion of mothers who are malnourished		45%	< 20%	
		Increase by two years the median age of girls at first marriage	Legally stipulated age at girl's first marriage		18 years	20 years	
		Eliminate violence against women	Proportion maternal deaths caused by violence		14%	0 %	

* 80% coverage of full immunisation.

Goals	Global Targets	Bangladesh targets	Indicators	Base year	Current Status	Target 2015	Costing (US$)
GOAL 6 COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES	Target 7 Have halted by 2015 and begun to reverse the spread of HIV/AIDS	Have halted by 2015 and begun to reverse the spread of HIV/AIDS	Condom use rate among: female sex workers rickshaw pullers truck drivers		2 - 4% 2% 25%		
			HIV positivity among: IDUs female sex workers men who have sex with men		4 % 0.2 - 0.7% 0.2%		
			Needle sharing among IDUs		25 - 75%		
			Blood screened before transfusion		NA		
			Health facilities with adequate equipment for screening HIV-infected blood		NA		
	Target 8 Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.	Reduce by 50% the incidence of cases and the number of deaths from malaria by 2015	Prevalence of malaria (million cases annually) Death rates associated with malaria		1 1%	0.5 0.05%	
			Proportion of population in malaria risk areas using effective malaria prevention and treatment measures				
		Detect 70% and cure 85% of detected cases by 2005	Prevalence of tuberculosis (per 100,000) Death rates associated with tuberculosis (annually)		233 70,000		33 million for 2005. Of which: GoB – 12m NGO – 4m Ext – 17m
			Proportion of tuberculosis cases under directly observed treatment short course (DOTS): detected cured		34% 84%	70% by 2005 85% by 2005	

Goals	Global Targets	Bangladesh targets	Indicators	Base year	Current Status	Target 2015	Costing (US$)
GOAL 7 **Ensure environmental sustainability**	**Target 9** Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.	Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.	Proportion of land area covered by forest	9%	10.2%	20%	
			Proportion of protected area to surface area to maintain biological diversity		0.01%		
			Energy use (kilogram oil equivalent) per US$1000 GDP (PPP)	123.18	92.36		
			Carbon dioxide emissions (metric tons per capita)	0.141	0.189		
	Target 10 Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	Ensure that 100% of urban and 96.5% of rural population have access to safe water by 2015	Proportion of the population with sustainable access to an improved water source: urban rural		82% 72%	100 % 96.5 %	64 million for 2005-2015
		Ensure that 100% of urban and rural population have access to improved sanitation by 2010	Proportion of the population with access to improved sanitation: urban rural		56% 29%	85.5 % 55.5 %	
	Target 11 By 2020, have achieved a significant improvement in the lives of at least 100 million slum dwellers		Proportion of (urban poor) households: owning dwelling owning land		26% 18%		

Goals	Global Targets	Bangladesh targets	Indicators	Base year	Current Status	Target 2015	Costing (US$)
GOAL 8 **DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT**	**Target 12:** Develop further an open, rule-based, predictable, non-discriminatory trading and financial system **Target 13:** Address the special needs of the least developed countries **Target 14:** Not applicable for Bangladesh **Target 15:** Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long-term	Develop further an open, rule-based, predictable, non-discriminatory trading and financial system Address the special needs of the least developed countries Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long-term	ODA (billion US$) ODA to LDCs (percentage of OECD/DAC donors' GNI)		1.02 0.05%		
			Proportion of bilateral ODA of OECD/DAC donors that is untied		79.1%		
			Exports from Bangladesh to developed countries: value (billion US$) proportion admitted free of duties		58.31 66%		
			Average tariffs imposed by developed countries on textiles and clothing from Bangladesh		12%		
			Agricultural support estimate for OECD countries as percentage of their GDP		-		
			Proportion of ODA provided to help build trade capacity		-		
			Debt service as a percentage of exports of goods and services		7.29%		
	Target 16: In co-operation with developing countries, develop and implement strategies for decent and productive work for youth	In co-operation with developing countries, develop and implement strategies for decent and productive work for youth	Unemployment rate of 15-24 year-olds		8 %		
	Target 17: In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in Bangladesh	In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in Bangladesh	Proportion of Bangladesh population with access to affordable essential drugs on a sustainable basis		80 %		
	Target 18: In co-operation with the private sector, make available the benefits of new technologies, especially information and communication	In co-operation with the private sector, make available the benefits of new technologies, especially information and communication	Telephone lines and cellular subscribers per 100 population		1.32		
			Personal computers in use per 100 population and Internet users per 100 population		0.34		
			Internet users per 100 population		0.15		

Introduction

a. Objective of the MDG progress report

This, the first Bangladesh MDG Progress Report, has been prepared jointly by the Government of Bangladesh[1] (GoB) and the UN Country Team[2] in Bangladesh in consultation with other stakeholders. The objective of this report is to monitor the progress of the MDGs for advocacy purposes.

After China and India, Bangladesh has the third largest number of poor. The MDGs are the global common goals to be achieved by all the development partners and offer themselves as the nucleus around which development efforts can be elaborated at the country level. This report will bring to the attention of all stakeholders the development concerns that need especial focus, if the MDGs are to be achieved in Bangladesh by 2015[3].

While a sophisticated econometric model[4] has been applied to simulate the rates of growth required for relevant indicators to achieve the MDGs, attempts have been made to keep the report brief and simple, highlighting the gaps and challenges that need to be addressed to meet the MDGs.

This report will contribute to a substantive discussion on specific policies in the on-going Bangladesh PRSP process. The report also holds significant relevance for the country programme planning of the UN agencies under the forthcoming Bangladesh UNDAF 2006-2010.
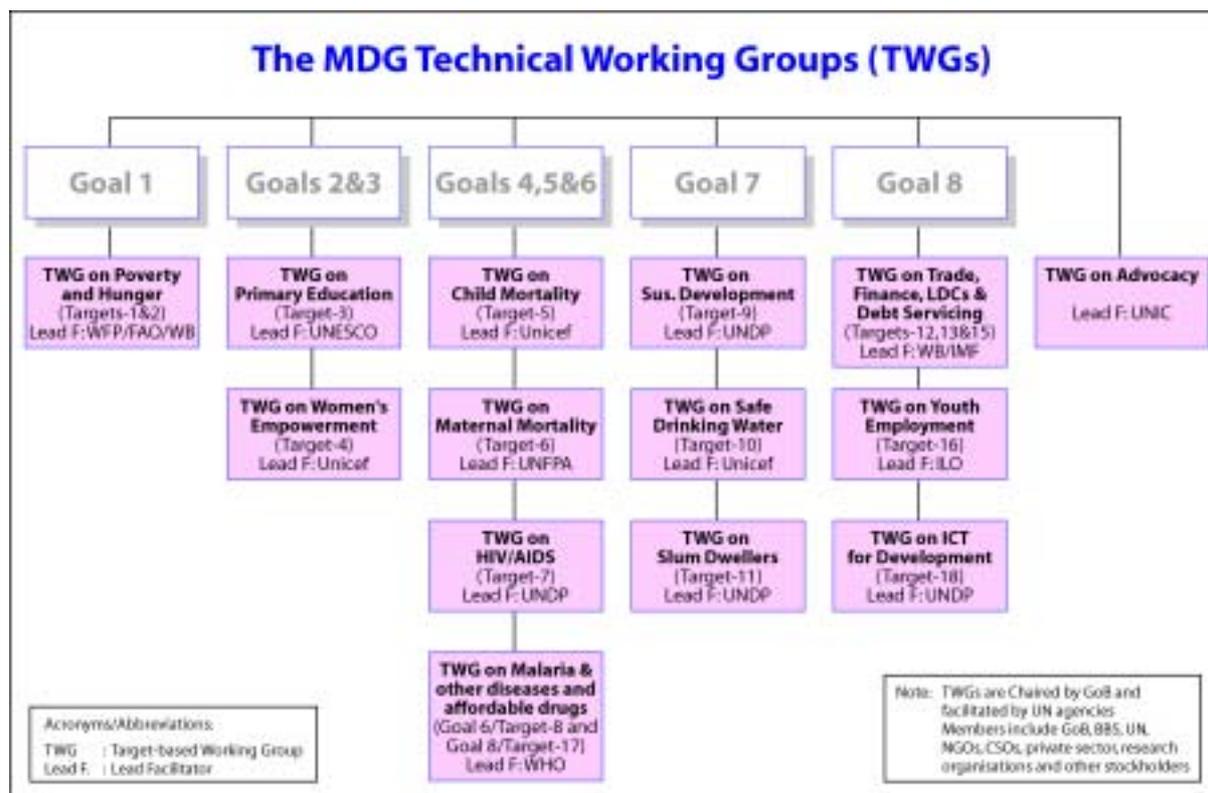
b. The Process

In the preparation of the report, as much stress was placed on the consultative process adopted in seeking consensus on the data cited, as on the quality of the report itself.

The process was initiated through a GoB-UNDP regional MDG workshop that was held in Dhaka, 23-25 February 2003. An important outcome of the workshop was an action plan developed jointly by GoB, NGOs and UN agencies for the preparation of the first Bangladesh MDG Progress Report.

Building on this initiative, the UN Country Team facilitated GoB to adopt a consultative process that included all stakeholders. Based on the targets of the eight MDGs, 13 technical working groups (TWG) were set up, each being facilitated by a UN agency with the relevant mandate. The participants in each TWG comprised the GoB, NGOs, the private sector (where relevant) and UN agencies. In addition, a fourteenth TWG, facilitated by UNIC, was created for developing an advocacy campaign for the MDGs. The organisation of the TWGs is given in the following page.

In order to be effective as an advocacy tool, it was essential to arrive at a consensus on the data used to monitor the progress of the MDGs. This was ensured through the TWGs whose terms of reference included identification of MDG targets and indicators relevant for Bangladesh, and if found necessary, to include additional targets and indicators to 'nationalize' the MDGs. In addition, the TWGs established the benchmark year from which the MDGs would be monitored. All the MDGs did not necessarily have the same benchmark year, as it depended on the quality and acceptability of available data. For reporting on the current status of the indicators, the TWGs used data as close to the year 2004 as possible.

The MDG Technical Working Groups (TWGs)

Goal 1	Goals 2&3	Goals 4,5&6	Goal 7	Goal 8	
TWG on Poverty and Hunger (Targets-1&2) Lead F: WFP/FAO/WB	TWG on Primary Education (Target-3) Lead F: UNESCO	TWG on Child Mortality (Target-5) Lead F: Unicef	TWG on Sus. Development (Target-9) Lead F: UNDP	TWG on Trade, Finance, LDCs & Debt Servicing (Targets-12,13&15) Lead F: WB/IMF	TWG on Advocacy Lead F: UNIC
	TWG on Women's Empowerment (Target-4) Lead F: Unicef	TWG on Maternal Mortality (Target-6) Lead F: UNFPA	TWG on Safe Drinking Water (Target-10) Lead F: Unicef	TWG on Youth Employment (Target-16) Lead F: ILO	
		TWG on HIV/AIDS (Target-7) Lead F: UNDP	TWG on Slum Dwellers (Target-11) Lead F: UNDP	TWG on ICT for Development (Target-18) Lead F: UNDP	
		TWG on Malaria & other diseases and affordable drugs (Goal 6/Target-8 and Goal 8/Target-17) Lead F: WHO			

Acronyms/Abbreviations:

TWG : Target-based Working Group
Lead F. : Lead Facilitator

Note: TWGs are Chaired by GoB and facilitated by UN agencies. Members include GoB, BBS, UN, NGOs, CSOs, private sector, research organisations and other stockholders

Using this information, the simulation model was applied to provide an indication of whether Bangladesh was on track to achieve the MDGs by 2015, and what gaps and challenges faced development partners to meet the MDGs.

c. Limitations of the report

It is important to emphasise that this report is an advocacy tool for the development partners. While every effort has been made to use the most reliable and recent data sources, the accent on consensus has influenced the selection of data sources and the figures cited. Wherever possible, the data range has been preserved and the various scenarios have been played out within the given range.

For these reasons, no attempt has been made to provide in-depth socioeconomic analysis at the national or sub-national level. In addition, the simulation exercise could not be applied to sectors such as health and environment, as they lacked the necessary parameters.

d. Linkages to PRSP

The Bangladesh PRSP is being prepared under full government ownership and direction. Twelve sectors have been identified for the Bangladesh PRSP and an equal number of thematic groups have been set up by the Government for coordinating the preparation of the various thematic background papers. A mapping of the sectors indicates that most of the sectors address the MDGs in some form or the other.

It is to be noted however, that at the Bangladesh Development Forum 2003 and 2004, the Government strongly emphasised its commitments to the MDGs, especially by

PRSP thematic sectors	MDGs
❖ Agriculture and Environment, including forestry, land use, safe water supply, and water resources management. ❖ Rural Development, including food security, disaster management, safety net programmes, micro-credit, and rural non-farm activities. ❖ Domestic Resources Mobilisation.	MDGs 1 & 7
❖ Macroeconomic Stability and Pro-poor Growth. ❖ Finance Sector Reform, including banking, trade and globalization. ❖ Private Sector Development.	MDGs 1 & 8
❖ Education, including primary and mass education, female education, vocational and technical education.	MDGs 2 & 3
❖ Women and children advancement and Rights	MDG 3
❖ Health, including population planning, nutrition and sanitation	MDGs 1,4,5,6 & 7
❖ ICT and Technology Policy	MDG 8
❖ Reforms in Governance, including civil service reforms, judicial reforms and law and order. ❖ Infrastructure Development and Reform, including power, energy and communications.	Cross-cutting all MDGs

focusing on poverty eradication (Goal 1), education (Goal 2) and health (Goals 4, 5 and 6). Towards this end, the Government has reinvigorated its pro-poor bias under the PRGF programme, allocating from FY04 an increased annual pro-poor spending of 1% of GDP. This link between the budgeting and the MDGs was clearly stated in the Finance Minister's budget speeches of FY 04 and FY05.

e. Linkages to UNDAF

The Bangladesh UNDAF 2006-2010 is in the process of being prepared and is expected to be completed by December 2004. An UNDAF prioritization retreat was held in August 2004. The participants included the National Poverty Focal Point, representatives from the various line ministries of the Government of Bangladesh, national research institutions and the UN Country Team. The exercise resulted in the identification of five priority areas of cooperation between the GoB and the UN agencies for the programme cycle 2006-2010. These areas were pro-poor economic growth; health,

nutrition and sustainable population; social protection; gender equity and the advancement of women and children; and good governance. These five areas have clear linkages to the MDGs as well as to the PRSP themes above.

GoB/UN prioritized areas of cooperation under the Bangladesh UNDAF 2006-2010	MDGs
Democratic Governance and Human Rights	Millennium Declaration
Health, Nutrition and Sustainable Population	MDG(s) 1, 4, 5, 6 & 7
Education and Pro-Poor Growth	Millennium Declaration MDG(s) 1, 2 & 8
Social Protection and Disaster Risk Reduction	Millennium Declaration and MDG 7
Gender Equity and Advancement of Women	MDG 3
Protection and Prevention against HIV/AIDS	MDG 7

The following sections assess the progress in achievement of the MDGs in Bangladesh.

Footnotes:
[1] While all relevant line ministries participated in the consultation process, the focal point for the MDG Report was the General Economic Division, Ministry of Planning. Team leader for the report writing was Shamim Hamid, Principal Officer, UN Resident Coordinator's Office. Consultants for the report were P.D. Sharma, Bazlul Haque Khondkar, M. Jami Hussain, and M. Salah Uddin Azad.
[2] The UNCT in Bangladesh comprises FAO, ILO, IOM, UNDP, UNESCO, UNICEF, UNFPA, UNHCR, WFP, WHO, the World Bank and IMF.
[3] Several in-depth socioeconomic analytical reports were scheduled for 2003-2004, including the Bangladesh I-PRSP, PRSP, a World Bank supported regional MDG report, and the CCA-II. In order to avoid duplication and repetition, GoB and the UNCT agreed to follow the MDG reporting guidelines of the UNDG which proposes using the MDG report as an advocacy tool.
[4] The simulation model was developed under the UNDP-supported project *Sustainable Human Development* in the Ministry of Planning, GoB.

millennium development goal 1
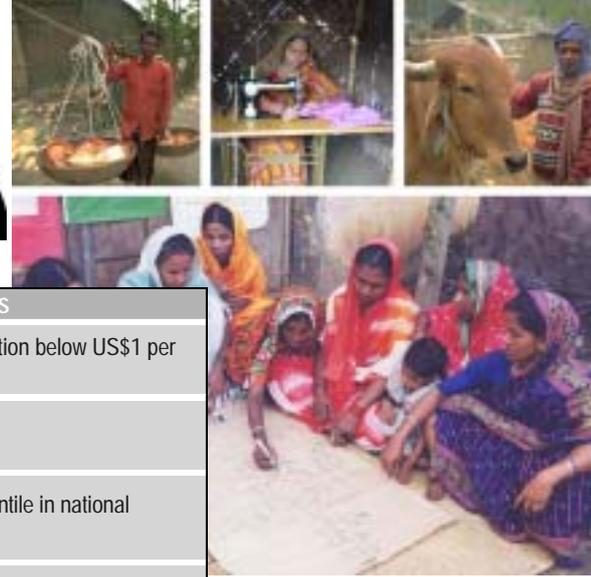
| GOAL	TARGETS	INDICATORS
GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER	Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.	Indicator 1: Proportion of population below US$1 per day (PPP-values)
		Indicator 2: Poverty gap ratio
		Indicator 3: Share of poorest quintile in national consumption
	Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.	Indicator 4: Prevalence of underweight children (under five years of age)

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one US dollar a day

To achieve MDG 1, Bangladesh must reduce by 2015 the proportion of population with income less than one US dollar (PPP) a day from 58.8 percent in 1991-92 to 29.4 percent, and the proportion of people in extreme poverty from 28 percent in 1990 to 14 percent by 2015.

Situational Analysis

Poverty reduction

Bangladesh has made good progress since FY92[1] in reducing income poverty based on the national poverty line. The country was able to lower the overall incidence of poverty from 58.8 percent in 1991-92 to about 50 percent in 2000, or one percentage point per year. Bangladesh's good economic growth performance – with overall GDP growth averaging 5 percent and per-capita growth averaging 3.3 percent per annum during FY1992-2001 – contributed much to this progress. This was achieved despite a rise in inequality during the nineties – with overall Gini coefficient rising from 0.259 in 1992 to 0.306 in 2000 – which partly offset the positive impact of growth. In spite of the advancement, 63 million people are poor with one-third caught in hard-core or extreme poverty[2].
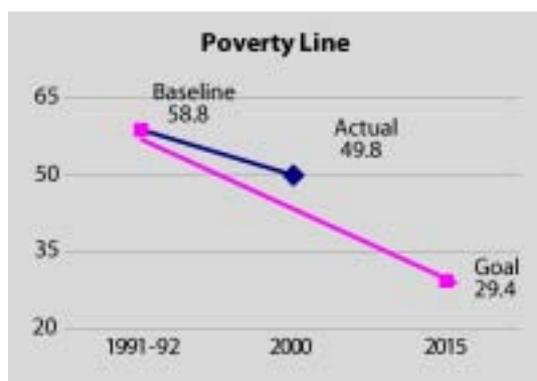
Proportion of Population Below the National Poverty Line			
Year	National	Rural	Urban
1991-92	58.8	61.2	44.9
2000	49.8	53.0	36.6
2015 (Target)	29.4		

Source: BBS and World Bank estimates

Poverty gap (PG) and squared poverty gap[3] (SPG)

Trends in the poverty gap show a drop from 17.2 in 1991/92 to 12.9 in 2000. This suggests that even among the poor a greater share of the people are now closer to the poverty line than at the beginning of the 1990s. It is also worth noting however, that the distributionally sensitive measures (PG, SPG) declined relatively more rapidly than the poverty headcount rate. On average, rural areas did better than urban areas in reducing the depth and severity of poverty, which implies that growth in rural areas was more pro-poor than in urban areas. The urban poverty gap stood at 9.5 percent in 2000.

Poverty Gap and Squared Poverty Gap

Year	Poverty Gap (P1)			Squared Poverty Gap (P2)		
	National	Rural	Urban	National	Rural	Urban
Using the lower poverty line						
1991-92	10.7	11.7	4.9	3.9	4.3	1.5
2000	7.3	8.2	3.8	2.3	2.6	1.2
Using the upper poverty line						
1991-92	17.2	18.1	12.0	6.8	7.2	4.4
2000	12.9	13.8	9.5	4.6	4.9	3.4

Source : BBS and World Bank estimates based on various rounds of HIES data

Inequality

Income inequality in Bangladesh rose during the nineties, particularly in urban areas. Inequality in the distribution of per capita household expenditure, as measured by the Gini coefficient, rose from 0.259 in 1991/92 to 0.306 in 2000 [4].

Trends in Inequality : Gini Coeffcients

	Upper Poverty Line			Lower Poverty Line		
	1991-92	1995-96	2000	1991-92	1995-96	2000
National	0.259	0.302	0.306	0.272	0.315	0.318
Urban	0.307	0.363	0.368	0.311	0.369	0.370
Rural	0.243	0.265	0.271	0.251	0.267	0.275

Source : BBS and World Bank estimates based on HIES data

The inequality in Bangladesh is explained by the fact that around three-fifths of total income or consumption accrues to the highest two quintiles of the population, while the lowest three quintiles receive about two-fifths. The shares are comparable to other countries of the region.

Percentage Share of Income or Consumption by Quintiles

	Year	Lowest 20% Q1	2nd 20% Q2	3rd 20% Q3	4th 20% Q4	Highest 20% Q5
Bangladesh	2000	9.0	12.5	15.9	21.2	41.3
India	1999-2000	8.9	12.3	16.0	21.2	41.6
Pakistan	1998-99	8.8	12.5	15.9	20.6	42.3
Sri Lanka	1995	8.0	11.8	15.8	21.5	42.8
Nepal	1995-96	7.6	11.5	15.1	21.0	44.8

Source: World Development Indicators, 2004 (Table 2.7)

Rural and urban dimensions of poverty

Despite good progress in reducing the overall incidence of poverty in the nineties, the absolute number of poor continues to be nearly 63 million, with poverty remaining largely a rural phenomenon. An estimated 85 percent of the country's poor – 53.5 million out of a total of 62.7 million poor – live in the rural areas.

Progress in reducing poverty incidence in the nineties was equal across urban and rural areas, even though average per capita expenditures increased much faster in urban areas. A sectoral decomposition of the change in national poverty incidence suggests that the rural sector, with 80 percent of the population, contributed 78 percent of the total decrease in national poverty incidence between 1992 and 2000. The urban sector contributed about 13 percent, while migration from rural to urban areas, where poverty is lower, accounted for the remaining 9 percent decline.

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Situational Analysis

Prevalence of underweight children[5]

The prevalence of moderately[6] underweight children (6-71 months) has declined noticeably from 67 percent in 1990 to 51 percent in 2000, while that of severely[7] underweight children of the same age group has been halved from 25 to 13 percent during roughly the same period. Also, the proportion of moderately underweight children under the age of five years reduced from 56 to 48 percent during the period 1997-2000.

Child malnutrition

Despite the progress achieved, child malnutrition in Bangladesh remains among the highest in the world, and more severe than that of most other developing countries, including the countries of sub-Saharan Africa. The proportion of underweight children in Bangladesh is 16 percent higher than 16 other Asian countries at similar levels of per capita GDP. Nearly half the children are underweight or stunted, with 13 to 19 percent being severely underweight or stunted in terms of being more than three standard deviations below the relevant NCHS standards[8]. This suggests that children in Bangladesh suffer from short-term acute shortfall in food intake as well as longer-term under-nutrition. Much remains to be done in this vital area.

Trends in Various Indicators of Malnutrition							
Nutrition Status Indicator	BBS Child Nutrition Surveys (percent **Children 6-71 months**)					Bangladesh DHS (% 0-59 months)	
	85-86	89-90	1992	95-96	2000	96-97	99-00
Stunting (height-for-age)							
% below 2 std. Deviations	69	66	64	51	49	55	45
% below 3 std. Deviations	-	-	33	24	19	28	18
Wasting (weight-for-height)							
% below 2 std. Deviations	15	15	17	17	12	18	10
% below 3 std. Deviations	-	-	2	3	1	4	1
Underweight (weight-for-age)							
% below 2 std. Deviations	72	67	68	57	51	56	48
% below 3 std. Deviations	-	-	25	18	13	21	13

Source: Various CNS and BDHS reports
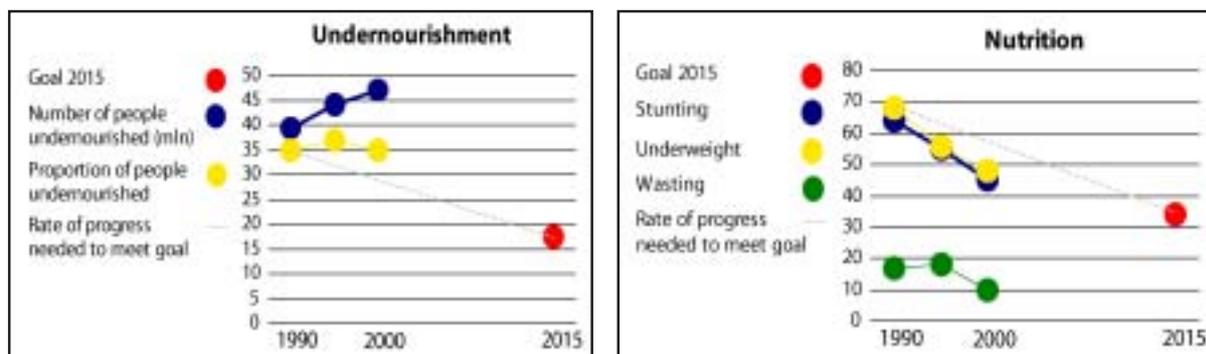
There are also large differences in child malnutrition rates across economic groups. Child malnutrition is pervasive among the poor. More than 60 percent of the children 6-71 months old suffering from stunting, belong to the bottom consumption quintile. Contrary to expectation however, nearly a third of the children from the richest quintile also suffer from malnourishment. This suggests that factors other than income play an important role in this phenomenon.

Such factors include per capita household food intake; infant feeding practices; maternal schooling and hygiene practices; access to safe drinking water, sanitation and health facilities, quality of village infrastructure and protection against natural disasters. Presence of NGOs and public relief programs have been found to have strong correlation to reduction in child malnutrition in the lowest consumption quintile.

Challenges

Much will need to be done to achieve the MDG target of halving the proportion of poor whose income is less than one dollar a day, and halving the proportion who suffer from hungry and malnutrition. Bangladesh has nearly 63 million poor – the third largest poor population in any country after China and India – and one of the highest rates of child malnutrition in the world. One third of the population lives in extreme poverty, and nearly half of Bangladesh's children are underweight. Demographic changes in upcoming years are likely to affect poverty and hunger in adverse ways. Achieving the MDGs within the next decade will require Bangladesh to develop and implement more ambitious and effective strategies. The primary challenges and actions needed to address them are summarized below.

Challenge 1: Addressing income poverty: Promoting strong economic growth

Various empirical analyses have concluded that economic growth is the most important factor contributing to poverty reduction. Achieving and sustaining strong economic growth will require attention on many fronts such as:
- Pursuing monetary and fiscal policies that sustain macroeconomic stability.
- Improving transparency, accountability and efficiency of the Government in all key areas, including taxation, public procurement, land administration, law enforcement, administration of justice and regulation of banking, insurance, and the credit market.

- Enhancing government effectiveness by focusing on core state functions and delivery of public services.
- Expanding national capacity to design and enforce policies, laws, and regulations that facilitate private sector investment.
- Further liberalizing the trade regime to exploit the advantages of the rapidly globalizing world economy.
- Restructuring and privatizing state-owned enterprises and business activities under appropriate incentive and regulatory schemes, and reallocating public resources to the provision of high priority public goods.
- Accelerating development of infrastructure in key areas – such as power, ports, roads, inland water transport, and telecommunications – that have been identified as constraints on the investment climate.
- Strengthening capacity for enhanced absorption of aid resources.

Challenge 2: Reaching the poor: Promoting pro-poor growth

The initial level of inequality of income and ownership of assets and its possible further deterioration will determine the poverty outcome. Pro-poor growth, therefore, needs to be promoted so that the positive impact of economic growth on poverty reduction is increasingly larger than the adverse impact of income inequality, and the poor are able to participate more actively in the growth process and derive increasingly higher benefits from it. Creation of more jobs and opportunities for entrepreneurship and self-employment by the poor will need to be speeded up aggressively, so as to address the massive backlog of underemployment, as well as the large annual addition to the labour force on account of demographic factors. Income growth in rural areas has proven to be pro-poor in Bangladesh, and its continuation will need to be promoted pro-actively. Coordinated actions will be required in areas such as:

- Building the income-generating capacities of the poor by pursuing social sector programmes and policies that develop their human capital. This should include improving poor people's access to the essential health service package (ESP), addressing the problem of child malnutrition, and undertaking a comprehensive programme to improve the coverage and quality of education and skill development.
- Enabling the poor to participate more actively in economic activities through initiatives to facilitate their access to markets for credit, land, and labour.
- Expanding national capacity to design and enforce policies, laws, and regulations that facilitate pro-poor activities of the civil society.
- Enhancing cooperation and partnership among Government, the private sector, and civil society in scaled-up efforts to implement the PRSP.
- Identifying and addressing policy and institutional biases – in public spending, taxation, trade and regulation, for example – that may work against the rural sector and the urban poor.

Challenge 3: Protecting the vulnerable: Supporting effective and sustainable safety net programmes for the vulnerable in poor areas

The persistence of disparities in poverty and hunger warrants the evaluation of social safety net options that target particular groups and areas. Some groups of the poor and hungry are chronically vulnerable, and some face vulnerabilities that are regional or seasonal in nature. Targeted interventions will need to be designed and prioritized taking

into account their financial sustainability and the country's other demands for pro-poor spending. Tradeoffs between reaching the poorest and the not-so-poor, and the distinctions between short-term palliatives and long-term measures to enhance the prospects for poverty reduction, must be recognized.

Types of targeted interventions that should be introduced include:
- Identifying and promoting infrastructure investment projects with high expected impacts on employment, growth, and market access in poor (especially rural) areas.
- Supporting safety nets for protection against natural disasters and the associated hardships in disaster-prone areas.
- Undertaking targeted nutrition interventions for vulnerable groups and areas by, for example, expanding the reach and effectiveness of the National Nutrition Programme.

Challenge 4: Reducing hunger and malnutrition: Comprehensive programme of integrated actions on many fronts

Halving the proportion of people who suffer from hunger will be a challenging task. Speeding up per capita income growth and pursuing targeted safety net programmes as discussed under Challenge 1 above, are needed for the expansion of household food intake. A comprehensive programme to address hunger would include interventions in the following additional areas:
- Promoting food security by sustaining strong growth of domestic food production and implementing a liberalized regime for food imports.
- Promoting change in food habits for increasing nutritional intake of vulnerable people.
- Promoting improved infant feeding practices, including breast feeding practices.
- Supporting maternal schooling and hygienic practices.
- Improving access to safe drinking water, especially by addressing the threat of arsenic contamination of underground water.
- Improving access to sanitation.
- Improving access to basic health facilities.
- Supporting safety nets for protection against natural disasters;
- Promoting partnership among the Government, private sector and NGOs in designing and implementing interventions to promote food security.

Footnotes:
[1] The fiscal year (FY) in Bangladesh extends from 1 July to 30 June.
[2] For a regional analysis of poverty see Technical Notes.
[3] Poverty gap, PG, estimates how far below the poverty line the poor are on average as a proportion of the value of that line. Squared poverty gap, SPG, takes into account not only the distance separating the poor from the poverty line but also inequality among the poor. The poverty gap and the squared poverty gap estimates are calculated using the cost-of-basic-needs method.
[4] Some cross-country comparisons of inequality, based on this coefficient, are : 0.325 for India (1999-2000); 0.33 for Pakistan (1998-99); 0.367 for Nepal (1995-96) and 0.344 for Sri Lanka (1995). Source: World Development Indicators, 2004, Table 2.7.
[5] The data were derived from various Child Nutrition Surveys (CNS) conducted by BBS and the Bangladesh Demographic and Health Surveys (BDHS).
[6] Percent below 2 standard deviations
[7] Percent below 3 standard deviation
[8] CNS 2000 and BDHS 1999-2000

millennium development goal 2

GOAL	TARGET	INDICATORS
GOAL 2: **ACHIEVE UNIVERSAL PRIMARY EDUCATION**	**Target 3:** Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.	Indicator 6: Net enrolment ratio in primary education
		Indicator 7: Proportion of pupils starting Class 1 who reach Class 5
		Indicator 8: Adult Literacy Rate (Ages 15+ years)

Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

To achieve MDG 2, Bangladesh must increase the primary school enrolment rate from about 73.3 percent in 1992 to 100 percent by 2015, increase the primary school completion rate from 62 percent in 1994 to 100 percent by 2015, and reduce the drop-out rates from 38 percent in 1994 to 0 percent by 2015.
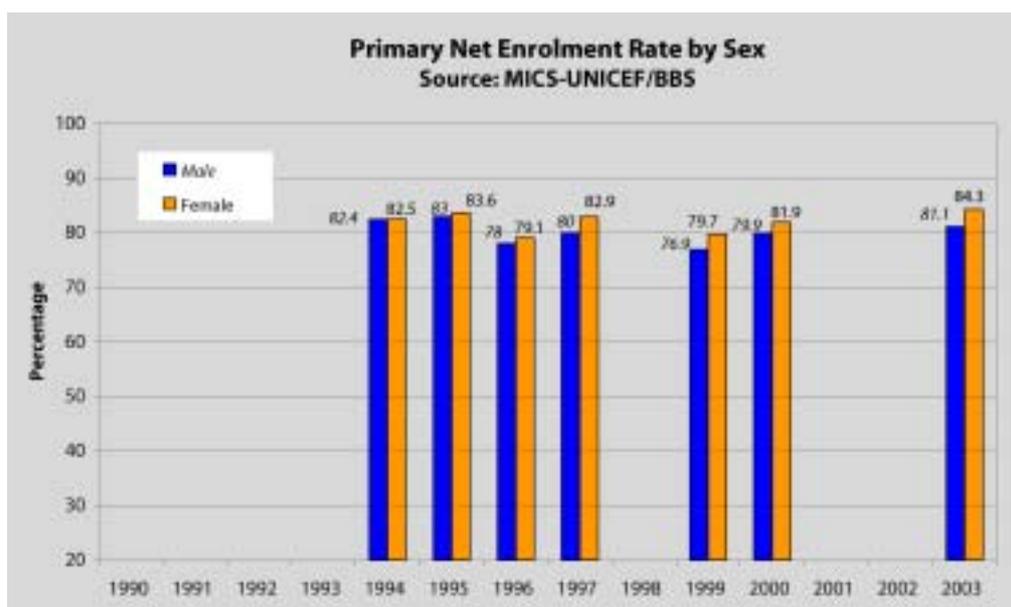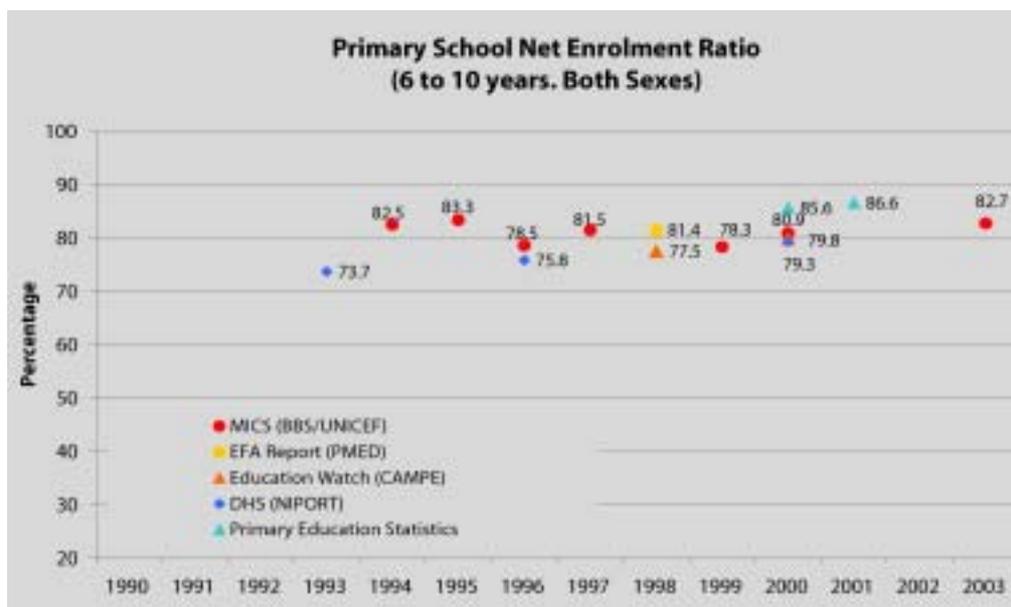
Situational Analysis

The Compulsory Primary Education Act, 1990, has made primary education (Class I-V) in Bangladesh free and compulsory for all children. The Government is committed to the goals of the Dakar Framework Education for All (EFA) which aims at achieving the MDG targets by the year 2015. The National Plan of Action (NPA) also aims to achieve the six EFA Dakar goals by 2015.

Primary School Enrolment Rate

Various data sources[1] indicate that between 1994 and 2003 the primary school net enrolment rate has oscillated around 80 percent for 6-10 year old children. While the range indicates that the rates have been slightly higher for females (83-84%) compared to males (81-82%), the female rates show a plateauing trend. Improvement in the enrolment rates was due to increase in the Government's budgetary allocation for girls' education, free primary education, massive stipend programmes at the primary level, and the Food for Education Programme.

In order to promote further equity and access of underprivileged children to primary education, the Government replaced the Food for Education programme with a five-year country-wide Primary Education Stipend Project.[2] In spite of these initiatives, however, some 2.4 million 6-10 year old children are still not enrolled in primary schools.

Taking into account demographic considerations and the rate of population growth, it is estimated that to meet MDG 2 by 2015, the primary school enrolment rate should increase annually at a rate of 1.25 percent point for girls and 1.5 percent point for boys.[3]

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Primary School Net Enrolment Ratio
(6 to 10 years. Both Sexes)

Primary Net Enrolment Rate by Sex
**Source: MICS-UNICEF/BBS**

Primary School Completion

While drop out rates in the primary school cycle have fallen from 38 percent in 1994 to 33 percent in 2004, the rates have been found to be higher (36%) in government schools compared to private ones (13%). Among those who are not enrolled and those who have dropped-out, a significant number come from poor households and live in rural areas, urban slums, coastal areas and the Chittagong Hill Tracts (CHT).

Repetition rates remain high (39%), implying that on average, a child needs 6.6 years to complete a five-year primary education cycle. Attendance rate in the year 2000 was

about 58 percent, with girls having a slightly higher (60%) attendance rate compared to boys (57%).
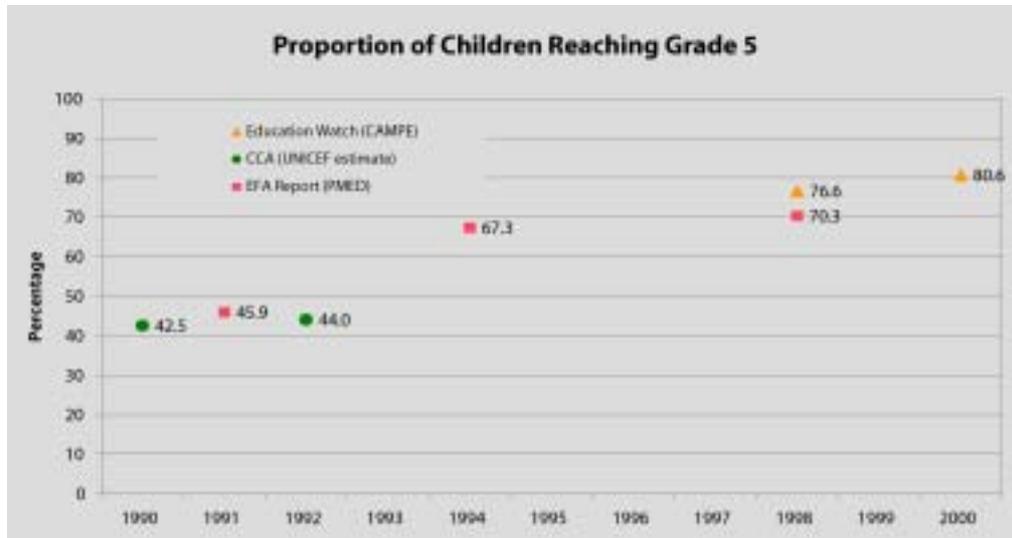
Primary school completion depends on the ability of the system to prevent drop-outs and successfully deliver education services. Historically there is evidence of a strong up-trend. This has to continue to achieve the targets.

Quality of Education

Although primary school completion rates show an increasing trend, there is concern over the quality of education and the competency level of primary school graduates.
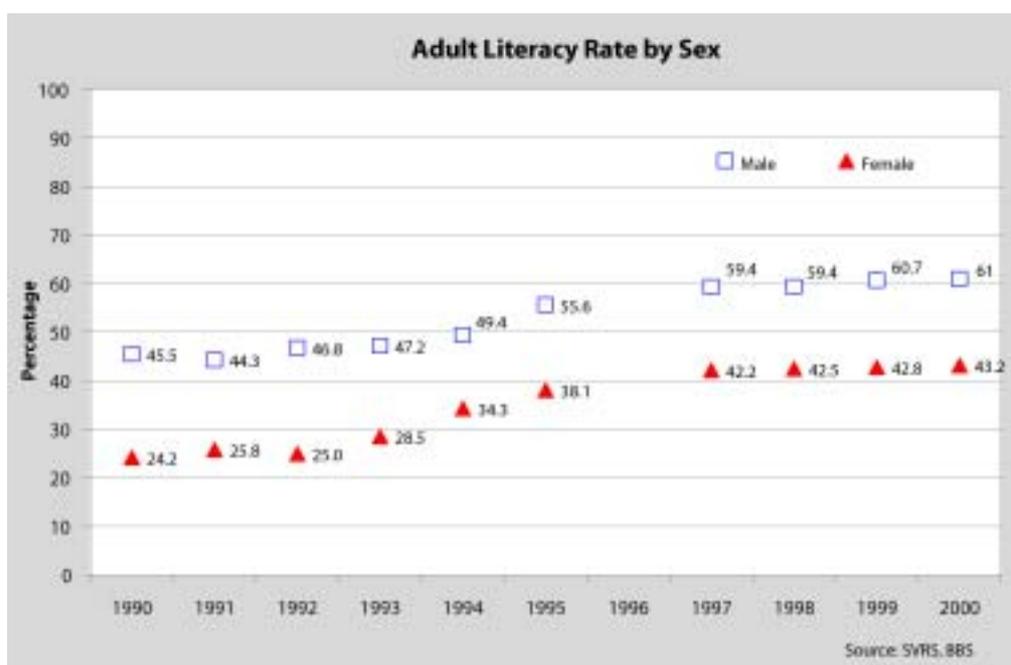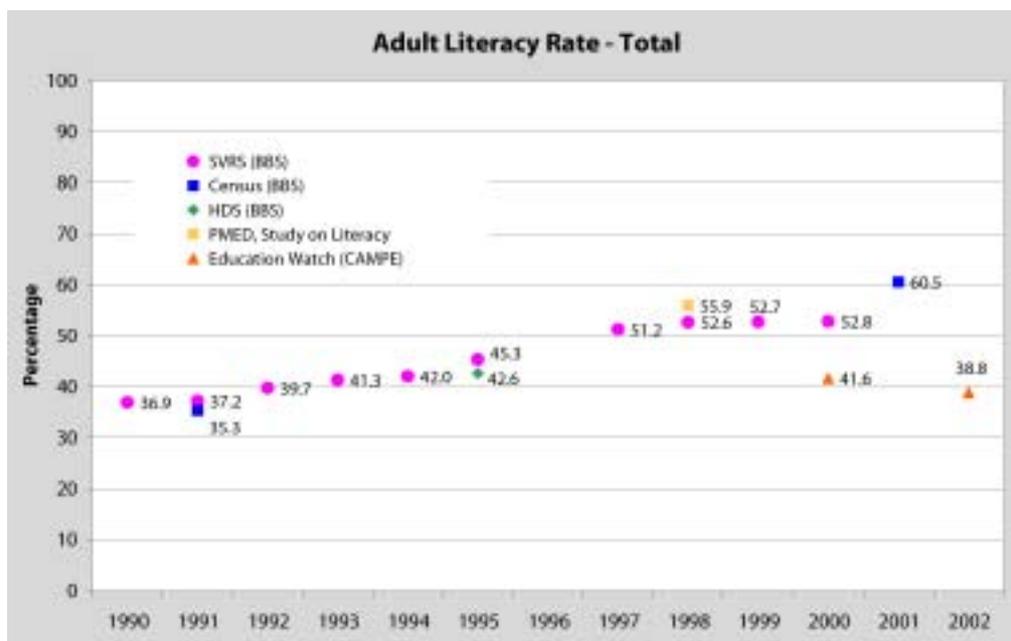
The reasons for the lack of quality in education services include insufficient contact hours and unfavourable student-teacher ratio. The contact hours of 120 minutes per day for classes I-II and 240 minutes for classes III-V are significantly low compared to those in the countries in the region. Moreover, the 59 students to one teacher ratio[4] is unfavourable to maintaining quality education. The ratio is more skewed in government primary schools (66 students to a teacher) compared to private schools (43 students to a teacher). Population demographics and Government efforts to achieve the EFA targets, indicate that this unfavourable trend will increase over the years unless proper balancing measures are introduced.

Current Government interventions for improving the quality of primary education is concentrated in five areas – organizational management, schools and classrooms, infrastructure development, support to equitable access, and management and monitoring.

Adult Literacy

Various estimates indicate that adult (15 years +) literacy rate during 1990 - 2002 ranged between 37 and 61 percent, with urban rates higher (64%) than rural (46%). In spite of women's literacy rate increasing steadily since 1990, male rates remained higher (61%) than female (43%) in 2000.

Adult Literacy Rate - Total

Legend:
- SVRS (BBS)
- Census (BBS)
- HDS (BBS)
- PMED, Study on Literacy
- Education Watch (CAMPE)

Data points:
- 1990: 36.9
- 1991: 37.2, 35.3
- 1992: 39.7
- 1993: 41.3
- 1994: 42.0
- 1995: 45.3, 42.6
- 1997: 51.2
- 1998: 55.9, 52.6
- 1999: 52.7
- 2000: 52.8, 41.6
- 2001: 60.5
- 2002: 38.8

Adult Literacy Rate by Sex

Legend: Male, Female

Male:
- 1990: 45.5
- 1991: 44.3
- 1992: 46.8
- 1993: 47.2
- 1994: 49.4
- 1995: 55.6
- 1997: 59.4
- 1998: 59.4
- 1999: 60.7
- 2000: 61

Female:
- 1990: 24.2
- 1991: 25.8
- 1992: 25.0
- 1993: 28.5
- 1994: 34.3
- 1995: 38.1
- 1997: 42.2
- 1998: 42.5
- 1999: 42.8
- 2000: 43.2

Source: SVRS, BBS

It has been found that there is a positive correlation between the adult literacy rate and the standard of living in terms of GDP(PPP).[5]
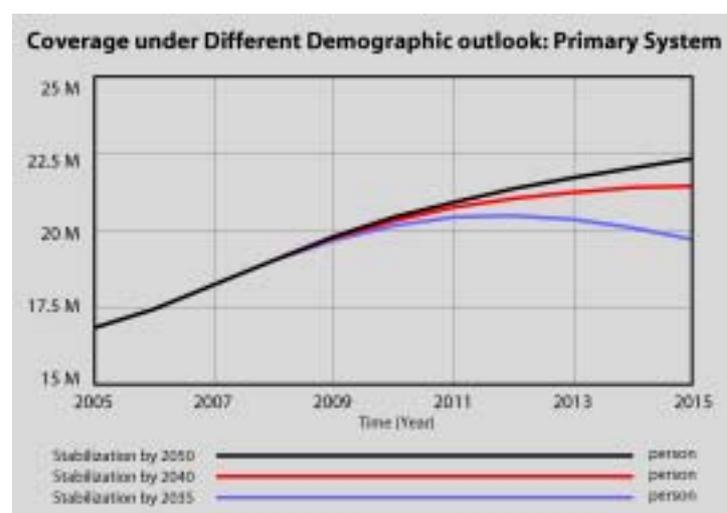
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Public Spending on Primary Education

Public expenditure on primary education as a percentage of GDP increased from an average of 0.09 percent between 1973-83 to 2.40 percent in 1995. Since then there has been a downward trend, public expenditure falling to 2.30 percent in 2000 and 2.21 percent in 2001. Budgetary allocation for education has thus dropped from 16.4 percent in 1995 to 15 percent in 2002. Some of the slack has been taken up by the private sector and NGOs.

The Cost of Achieving MDG 2

In order to estimate the cost of achieving MDG 2, three population scenarios were considered – population stabilizing by 2035, by 2040, and by 2050. The financing was derived from three primary sources: households, government and external[6].

At the most optimistic scenario of population stabilization by 2035, to achieve MDG 2 nearly 17 million children will have to be covered in 2005, and in 2015, 213 million will have to be reached. For the least optimistic scenario of population stabilization by 2050, the target population to be covered will reach 220 million in 2015.
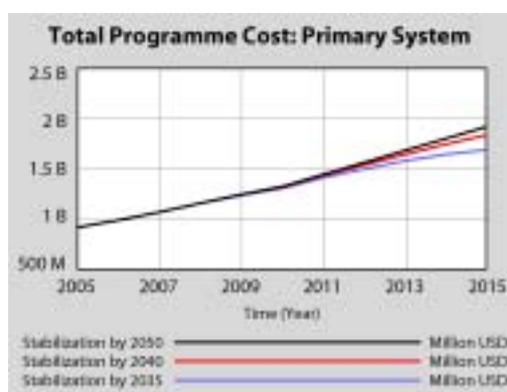
Under the circumstances, if population stabilizes by 2035, the total primary education programme cost will require $928 million in 2005, steadily increasing to an amount of $1.7 billion in 2015. Of this expenditure domestic financing must cover US$ 564 million in 2005, rising to over one billion dollars in 2015. The parallel external financing needs will be $364 million dollars in 2005, culminating at $666 million in 2015.

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Coverage under Different Demographic outlook: Primary System											
Stabilization by 2050	16.87 M	17.49 M	18.26 M	19.08 M	19.83 M	20.45 M	20.95 M	21.35 M	21.70 M	22.03 M	22.36 M
Stabilization by 2040	16.87 M	17.49 M	18.26 M	19.07 M	19.77 M	20.34 M	20.76 M	21.04 M	21.24 M	21.38 M	21.49 M
Stabilization by 2035	16.87 M	17.49 M	18.25 M	19.06 M	19.71 M	20.19 M	20.46 M	20.50 M	20.37 M	20.10 M	19.72 M

Units: Million

Total Programme Cost

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Programme Cost: Primary System											
Stabilization by 2050	927.97 M	997.33 M	1.077 B	1.164 B	1.249 B	1.329 B	1.449 B	1.567 B	1.684 B	1.802 B	1.923 B
Stabilization by 2040	927.97 M	997.33 M	1.077 B	1.163 B	1.246 B	1.322 B	1.436 B	1.544 B	1.648 B	1.749 B	1.848 B
Stabilization by 2035	927.97 M	997.33 M	1.077 B	1.162 B	1.242 B	1.312 B	1.415 B	1.505 B	1.580 B	1.644 B	1.696 B

Units: Million US$

Domestic Financing

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Domestic Financing: Primary System											
Total Domestic Financing	564.02 M	601.06 M	671.29 M	751.36 M	845.20 M	960.82 M	974.73 M	988.65 M	1.002 B	1.016 B	1.030 B
Household Expenditure	211.75 M	222.54 M	245.20 M	270.67 M	298.94 M	331.40 M	337.30 M	343.20 M	349.11 M	355.01 M	360.91 M
Government Expenditure	352.27 M	378.51 M	426.09 M	480.68 M	546.26 M	629.42 M	637.43 M	645.44 M	653.45 M	661.46 M	669.47 M

Units: Million US$

External Financing Need

External Finance Need: Primary System

Stabilization by 2050	Million USD
Stabilization by 2040	Million USD
Stabilization by 2035	Million USD

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Programme Cost: Primary System											
Stabilization by 2050	927.97 M	997.33 M	1.077 B	1.164 B	1.249 B	1.329 B	1.449 B	1.567 B	1.684 B	1.802 B	1.923 B
Stabilization by 2040	927.97 M	997.33 M	1.077 B	1.163 B	1.246 B	1.322 B	1.436 B	1.544 B	1.648 B	1.749 B	1.848 B
Stabilization by 2035	927.97 M	997.33 M	1.077 B	1.162 B	1.242 B	1.312 B	1.415 B	1.505 B	1.580 B	1.644 B	1.696 B

Units: Million US$

Challenges

The situation analysis of primary education in Bangladesh indicates a positive trend towards the achievement of MDG 2 - Target 3. To ensure that this trend continues several challenges will have to be met by the development partners.

Challenge 1: Meeting the cost of education

Under the most optimistic scenario of population stabilization by 2035, Bangladesh will need $928 million in 2005, the amount increasing annually to reach $1.7 billion by 2015 to maintain the momentum for achieving MDG 2. About 40% of this will need to come from external financing. That is, external financing needs in 2005 will be $364 million increasing annually to reach $666 million in 2015. Government share of the cost will be $352 million in 2005, rising to $669 million in 2015.

Challenge 2: The primary school enrolment rate has to grow at a rate of 1.25 percent point a year for girls and 1.5 percent point for boys

Eligible Population for Primary Schools

Time (Year)	1992	1995	1998	2001	2004	2007	2010	2013	2050	
Total Eligible for Primary School										Scenario
[male]	9.907 M	10.07 M	10.09 M	10.20 M	10.63 M	11.34 M	11.84 M	12.02 M	11.13 M	Stable Pop by 2050
	9.907 M	10.07 M	10.09 M	10.20 M	10.63 M	11.32 M	11.56 M	10.94 M	7.990 M	Stable Pop by 2035
	9.907 M	10.07 M	10.09 M	10.20 M	10.63 M	11.33 M	11.77 M	11.85 M	9.955 M	Stable Pop by 2045
	9.907 M	10.07 M	10.09 M	10.20 M	10.63 M	11.33 M	11.73 M	11.66 M	8.942 M	Mdg Pop
[female]	8.689 M	8.810 M	8.921 M	9.091 M	9.481 M	10.11 M	10.56 M	10.72 M	9.924 M	Stable Pop by 2050
	8.689 M	8.810 M	8.921 M	9.091 M	9.481 M	10.09 M	10.31 M	9.759 M	7.124 M	Stable Pop by 2035
	8.689 M	8.810 M	8.921 M	9.091 M	9.481 M	10.10 M	10.49 M	10.56 M	8.875 M	Stable Pop by 2045
	8.689 M	8.810 M	8.921 M	9.091 M	9.481 M	10.10 M	10.46 M	10.39 M	7.972 M	Mdg Pop

One of the main challenges to be faced by the development partners is the stabilization of population to ensure containment of expenditure and to provide quality primary level education. It is estimated that if population is stabilized earliest by 2035, more than 8 million girls and 11 million boys will need to receive primary education in 2015.

Taking into account the rate of population growth of relevant age groups, and the enrolment and drop-out rates, it is estimated that to reach nearly 100 percent by 2015, the primary school enrolment rate has to grow annually at a rate of 1.25 percent age point for girls and at 1.5 percent age point for boys.

Challenge 3: The excluded population

Among those who are not enrolled and those who have dropped-out, a significant number come from poor households and live in rural areas, urban slums, coastal areas and the Chittagong Hill Tracts (CHT). It is estimated that they currently total some 2.4 million in number. These children must be brought into the national compulsory primary education system.

Challenge 4: Quality education

The I-PRSP projection of public expenditure on education as percentage of GDP indicates a gradual increase from 2.62 percent in FY2004, to 2.81 percent in FY2005, and to 2.93 percent in FY2006. If this scenario is realized and GDP continues to grow at the current rate and the National Plan of Action on education is implemented according to schedule, the quality and quantity of education can be improved to achieve the MDG for primary education. Additional support will however, also be needed for technical and managerial capacity building of the government departments and NGOs at all levels.

Footnotes:

[1] GoB/PMED 2000; BBS/Unicef; NIPORT, Campe 2000, 2002

[2] Under this project parents of poor children receive a monthly stipend support for two children attending primary school from the same family. The Government, with support from donors, bears the full cost of primary education in Bangladesh as well as covers 90 percent of basic salaries of non-government registered primary schools.

[3] For details see Technical Notes.

[4] The ratio ranges between 19-22 in countries in the region such as China, Thailand, Indonesia, and Malaysia

[5] A comparative analysis against some Asian countries appears to indicate that there is a positive correlation between the adult literacy rate and standard of living in terms of GDP (PPP). Thus, Bangladesh with GDP of US$1,610 has adult literacy rate of 40 percent; India with GDP of US$ (PPP) 3,190 has adult literacy of 58 percent; Malaysia with GDP US$ (PPP) 8,750 has 88 percent adult literacy, while South Korea with GDP US$ (PPP) 15,090 has adult literacy of 98 percent.

[6] For details see Technical Notes.

millennium development goal **3**

| GOAL	TARGET	INDICATORS
GOAL 3: **PROMOTE GENDER EQUALITY AND EMPOWER WOMEN**	Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015.	Indicator 9: Ratio of girls to boys in primary, secondary and tertiary education
		Indicator 10: Ratio of literate females to males of 15-24 year olds
		Indicator 11: Share of women in wage employment in the non-agricultural sector
		Indicator 12: Proportion of seats held by women in national parliament

Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015

To ensure gender parity in education levels under MDG 3, Bangladesh will have to increase the female:male participation ratio at tertiary levels from 36:64 to 50:50.

Situation Analysis

Gender disparity is a reflection of complex social, cultural, and economic issues. While some improvement in gender equality has been achieved in sectors such as education, health and family welfare, labour and employment, and democratic participation, in Bangladesh true empowerment is still a distant goal.

Disparity in Education
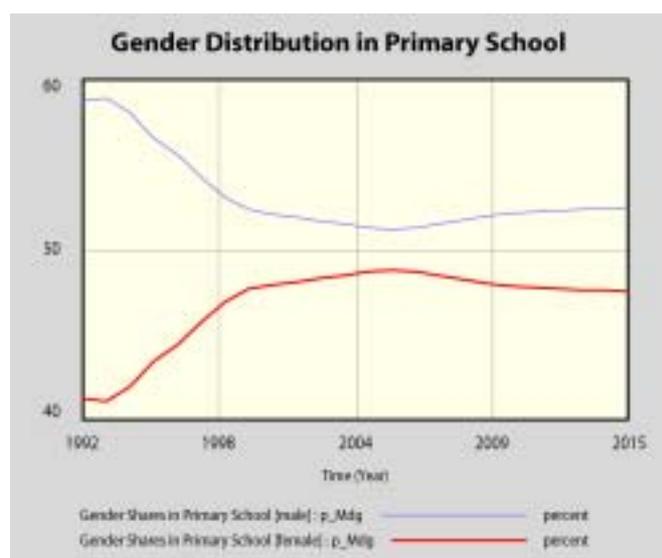
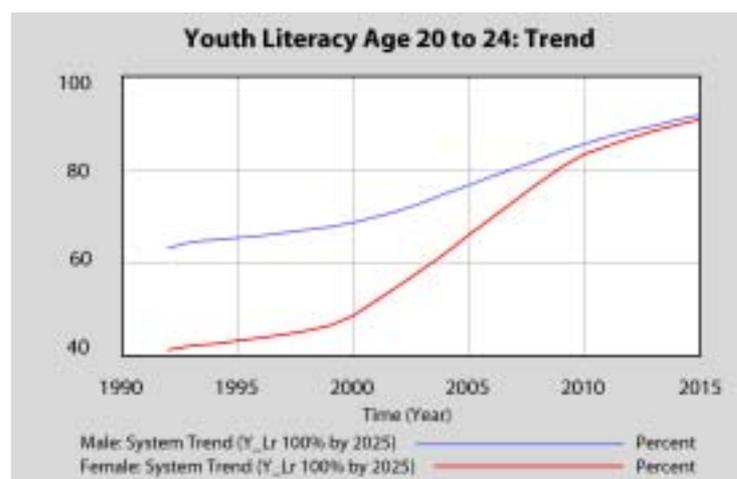| Time (Year)	1992	1995	1998	2001	2004	2007	2010	2013	2015
Gender Shares in Primary School									
[male]	58.73	56.53	53.09	51.87	51.24	51.5	52.11	52.33	52.47
[female]	41.26	43.46	46.9	48.12	48.75	48.49	47.88	47.66	47.52

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Female share in primary school shows an increasing trend since 1992 reaching a ratio of 48:52 in 2002 for female to male primary school enrolment rate. Under present demographic trends arising from the existing sex ratio in the population, this is the optimum possible ratio, and the challenge now is to maintain the momentum until 2015 and beyond. The largest disparity exists at the tertiary level of education. Although female:male ratio has improved from 25:75 in the 1990s to 36:64 in 2002, much remains to be done to achieve 50:50 distribution by 2015.

Gender Inequity in Education, 2001
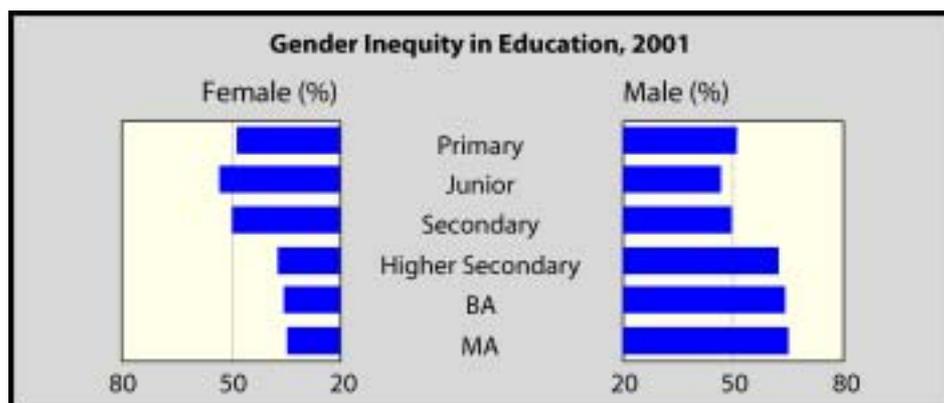
Gender Inequity in Youth Literacy Rates
Despite the general improvement in school enrolments, a large disparity continues to exist between male and female literacy rates. While no data is available for the suggested global indicator - ratio of literate females to males of 15-24 year olds – literacy rates by age cohorts help to give an indication of the youth literacy rates. The literacy rate of 15-19 year olds show a narrowing of the gap with male rates at 68 percent and female at 61 percent. However, the gap is significantly large for the older age cohort of 20-24 year olds where male literacy rates were 71 percent, compared to 55 percent for females in 2002.

Youth Literacy Age 20 to 24: Trend

Male: System Trend (Y_Lr 100% by 2025) ——— Percent
Female: System Trend (Y_Lr 100% by 2025) ——— Percent

Time (Year)	1992	1995	1998	2001	2004	2007	2010	2013	2015
Youth Literacy Age 20 to 24: Trend									
Male: System Trend (Y_Lr 100% by 2025)	64.53	65.87	67.67	71.19	76.68	82.08	86.84	90.53	91.66
Female: System Trend (Y_Lr 100% by 2025)	42.2	43.89	46.65	55.22	65.91	77.02	85.03	89.49	90.72

Units: Percent

Girls not completing the secondary cycle face a severe limitation to their participation in economic and social areas throughout life. Even when they do continue with secondary school, their low competency levels place them at a disadvantage from the very beginning. To overcome these barriers, access to quality education for all girls, completion of basic education with acceptable competency levels and relevant life skills, and equitable roles for women and girls in society need to be addressed.

Moreover, to achieve the goal of empowering women and promoting gender equity, disparities in other areas such as access to health services, employment opportunities, and political participation must be reduced, and the elimination of violence against women must become an important area of focus.

Disparity in Health

In the health sector, women's status compares unfavourably with that of men. Although the life expectancy gap between men and women has narrowed over the last decade, Bangladesh continues to be amongst the very few countries in the world where women's life expectancy is lower[1] than that of men: in 1990, life expectancy at birth was 56.4 years for males; 55.4 years for females. The maternal mortality rate, estimated to be in the range 320 to 400 per 100,000 live births in 2001, is among the highest in Asia. Pregnancy-related problems, including early and frequent pregnancies, are among the major causes of these phenomena.

While the country's overall HIV prevalence rate is believed to be less than one percent, sexual behaviour of partners put women at high risk of HIV/AIDS infection. Sex workers in Bangladesh brothels have an average of 19 clients a week, which is among the highest turnover rates in Asia. This is even higher (44 clients per week) for hotel-based sex workers. Condom use among the clients of sex workers is very low, and condom use among female sex workers is the lowest in Asia (two to four percent). The majority of married men who frequent brothels or have sex with street girls, engage in unprotected sex while continuing to maintain sexual relationship with their wives.[2]

Violence Against Women

Violence often arises from the subordinate position of women in relevant socioeconomic, legal and cultural contexts. Although the Bangladesh Constitution guarantees equality and equal protection for all citizens, the principle is often severely curtailed with respect to women's rights. Thus, women continue to face various forms of violence, harassment and humiliation, one particularly vicious and damaging form of violence being acid attacks which have traumatic consequences, scarring the victims physically, psychologically, and socially for life. The overwhelming majority of the victims are women, and nearly half are below eighteen years of age. Like other forms of violence and discrimination, acid violence arises from the broader problem of the low social and economic status of women.

The Government has taken several measures in trying to address this complex problem. In 2002, a country-wide awareness campaign on violence against women was initiated. The introduction of quick tribunals has resulted in bringing to trial the perpetrators of some of the more sensational cases of violence against women. Two laws on acid attacks were enacted with severe penalties for perpetrators. The One-Stop-Crisis Centre in

Dhaka and other regional administrative headquarters have been introduced, together with a Hot Line System for women vulnerable to acts of violence.

Members of civil society are now allowed to monitor the conditions of female victims of violence. Under the supervision of the Ministry of Women and Children Affairs, a safe home has been established for women and children awaiting trial. In addition, public bus services reserved for women have been introduced.

Economic Disparity

There is substantial gender disparity in the economic area. Although employment opportunities for women have increased in the last decade or so, especially in industries such as the urban-based, export-oriented, readymade garment factories, construction, ceramics, and the informal sector, a social perception persists that women should remain in the household looking after children, cooking food, cleaning and fetching water and fuel.

Gender Inequity in Employment, 2000
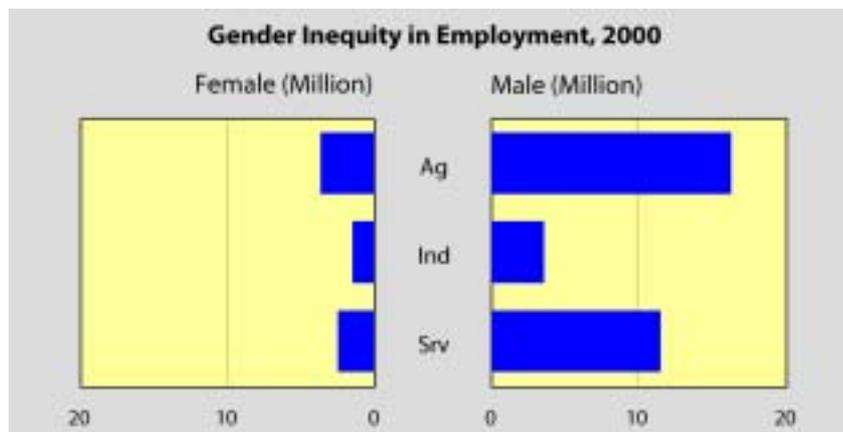
In 1997, about 10 percent of all employees were women and of these, 11 percent held professional jobs. Since then, women's employment opportunities and in 2000, about 22 percent of the paid non-agricultural workers and 19 percent of the paid agricultural labourers were female. Although there are no official gender-based wage differentials in the public sector, female wage in the agriculture sector is 70 percent, and in the non-agricultural sector 42 percent, of male wage. Insufficient education, training and skills, together with low productivity, often arising from poor health, contribute to women's weak bargaining power.

Female-headed households face more serious poverty, in terms of food insecurity and lower income, than male-headed households. About 45 percent of female-headed households fall below the poverty line, compared to 39 percent of male-headed households.

Gender Inequity in Employment by Economic Sector, 2000

Time (Year)	2000
Female Sector Employment Shares	
Female (%) of Agricultural Employment	19
Female (%) of Industrial Employment	31
Female (%) of Service Employment	18
Female (%) of Non-Agricultural Employment	22
Female (%) of Total Employment	20

Steps taken by the Government to promote women's economic equality include the withdrawal of a ban on women's employment abroad[3], building capacity in the newly established Ministry of Manpower Development and Export for providing security to women workers, and introducing a 60 percent quota in the recruitment of primary school teachers.

However, other policy areas also need attention. For example, there is an urgent need for equal employment laws and equal wages for similar work outside the public sector. Again, while micro-credit programmes have benefited women economically, in order for them to graduate to the next economic stage, funds for small and medium size enterprise development must be made available to women entrepreneurs. Similarly, garment workers, especially women, should be given the option to participate in equity ownership in the garment sector. Furthermore, to forestall possible large-scale unemployment following the lapse of the Multi Fibre Arrangement from 2005, women garment workers need to receive skills development and vocational training that will equip them for employment in other existing and emerging sectors of the economy.

In addition, to encourage the participation of women in the labour market, a proper working environment and facilities for women need to be established in the work place, and crèches and day care centres should also be made available.

A policy should be introduced that will help to gradually increase of female participation in the public sector to 50 percent.

Disparity in the Political Field

There are currently only six women parliamentarians in the 300-seat National Parliament of Bangladesh. The provision in the Constitution for 30 reserved seats for women lapsed in 2001. It was replaced by the introduction of the Fourteenth Amendment in the Constitution which reserves 45 seats for women in proportion to parliamentary representation. This Amendment, which will increase the total parliamentary seats to 345. The situation is slightly better in the case of local government. Twenty five percent

of the members in the Union Parishads (Councils)[4], the City Corporation and Pourashava (municipality) are women who have been directly elected to the local bodies.

Challenges

In spite of the many initiatives undertaken in Bangladesh, progress in the area of gender equality and women's advancement remains limited. Expanded policy interventions with effective implementation; awareness building at family, institution and community levels; and better follow-up and intensified efforts for integrating gender dimensions in different programme areas are needed. Complementary efforts by civil society are crucial to the improvement of women's status at the grassroots level.

Challenge 1: Designing and Implementing Effective Policies

While the Government has taken several positive measures for promoting the equality of women, implementation of such policies remain weak. For example, although 18 years is the legal age for marriage for girls, it is not uncommon to see brides of 15 years or less. Early marriages result in early pregnancies, increase the risk of maternal death, and are amongst the main causes of poor enrolment and high female drop-out rates at the higher education levels.

To ensure women's legal rights, existing laws on sexual harassment and sexual assault must be effectively implemented.

In spite of being elected representatives at the local government level, and although a government order is in force for including women in the decision-making process, in many cases women are not included in the management committees. To help ensure implementation of such policies, the roles and functions of women representatives need to be identified and clarified in the Union Parishads.

Challenge 2: Mainstreaming gender equity principles into policies, strategies, and institutional practices

In order to mainstream the advancement of women, gender equity principles must be built into policies, strategies and institutional practices to promote and ensure equal opportunity and treatment for girls and boys, and women and men.

Challenge 3: Gender sensitizing all institutions involved in implementing interventions for promoting gender equality

All Members of Parliament and elected members of local government bodies need to be sensitized to discriminatory practices against women and the roles that the MPs can play in removing such discriminations.

Institutions such as the MOPME/DPE, local education officers, teachers, and community groups need awareness raising on gender issues that will enable them to effectively implement gender-related policies and programmes. In addition, principles of gender equality need to be incorporated, reviewed and revised in school curricula, textbooks and teaching/learning materials.

In the health sector, further training and capacity building are required for the improvement of the clinical and personal dimensions of medical care in Bangladesh.

Raising gender awareness, specially among adolescent girls, is needed for breaking the silence about issues such as trafficking, sexual exploitation, HIV/AIDS, acid attacks, early marriage and domestic child labour, as well as to create a more open and empowering environment for the girls.

Challenge 4: Protecting women against discrimination and domestic violence

The reservations of the Government on the CEDAW need to be withdrawn. Some existing laws, such as the Criminal Procedure Code, the Civil Procedure Code and the Evidence Act, provide a legal basis in Bangladesh for discrimination against women. Such laws must be identified and revised to remove gender discrimination.

Domestic violence against women must be included in the Nari-O-Shishu Nirjatan Daman Ain 2000 (Women and Children's Repression Prevention Act 2000).
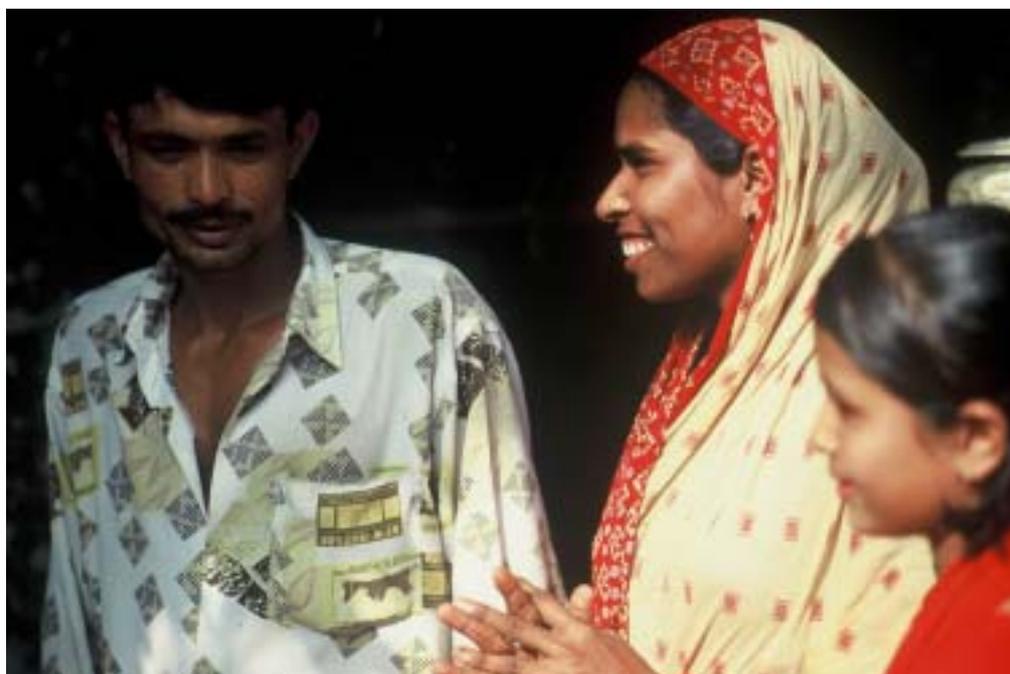
Footnotes:

[1] A 2001 BBS survey indicates that life expectancy for women leapt to 68 years compared to 58.6 years for men. However, rationalization of this sudden increase is yet to be determined.

[2] FHI Survey.

[3] The ban was imposed following reports and complaints of abuse of Bangladeshi women who were working mainly as domestic help in foreign countries.

[4] Union Parishads are the lowest tier of elected local government.
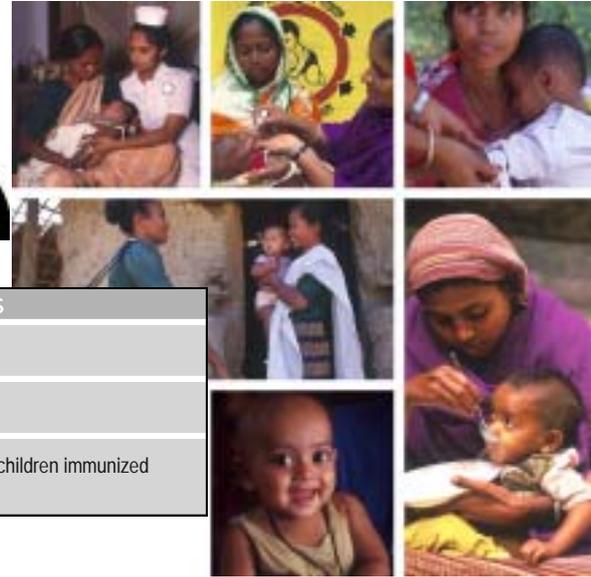
GOAL	TARGET	INDICATORS
GOAL 4: REDUCE CHILD MORTALITY	Target 5: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate.	Indicator 13: Under-five mortality rate
		Indicator 14: Infant mortality rate
		Indicator 15: Proportion of 1-year-old children immunized against measles

Target 5: Reduce under-five mortality rates by two-thirds between 1990-2015

MDG 4 indicates that under-five mortality rate must be reduced from 151 deaths per thousand live births in 1990 to 50 in 2015.

Situation Analysis

Under-five Mortality

While there has been an appreciable drop in under-five death rates from 151 deaths per thousand live births in 1990 to 87 in 1999, the rate has since slowed considerably, with the figure standing at 82 in 2001. From this base, it will be necessary to maintain a pace of annually reducing under-five deaths by at least three deaths per thousand live births to achieve MDG 4 by 2015.
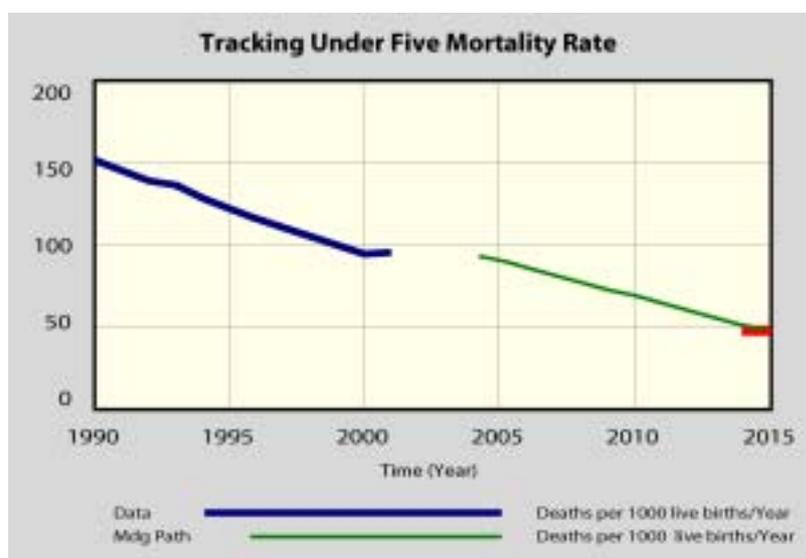
Child mortality rate is a reflection of the care, health and nutrition status of children below the age of five years and also indicates the social, cultural, and economic progress in the country.

Under-Five Mortality Rate

In the case of under-fives, neonatal and perinatal causes contribute to 48 percent of the deaths. Other factors include very low rates of institutional deliveries (8.6%), low attendance of deliveries by skilled personnel (12%), and low utilization of antenatal care (48%). More than 71 percent[1] of these neonatal deaths were due to non-communicable diseases, mainly birth-related ailments as well as neonatal tetanus.

Other major causes of under-five deaths are pneumonia (18%), diarrhoea (6%), injuries and drowning (8%), and measles, with malnutrition underlying most other causes (13%). Poor care-seeking behaviour and practices are also important contributing factors. Only 8 percent of parents of sick children under the age of five seek care from qualified health care providers.

In order to reduce deaths from diarrhoea, the oral rehydration therapy (ORT) campaign has been in effect for several decades. The use of oral rehydration solution (ORS) has increased from 62 percent in 2000 to 68 percent in 2003.

Tracking Under Five Mortality Rate

| | Data | Deaths per 1000 live births/Year |
| Mdg Path | Deaths per 1000 live births/Year |

Time (Year)	1990	1993	1996	1999	2001	2005	2008	2011	2014	2015
Under Five Mortality Rate										
Data	151	139	117	87	82	--	--	--	--	--
Mdg Path	--	--	--	--	--	81.24	71.08	60.93	50.77	47.4

Units: Per 1000 births/Year
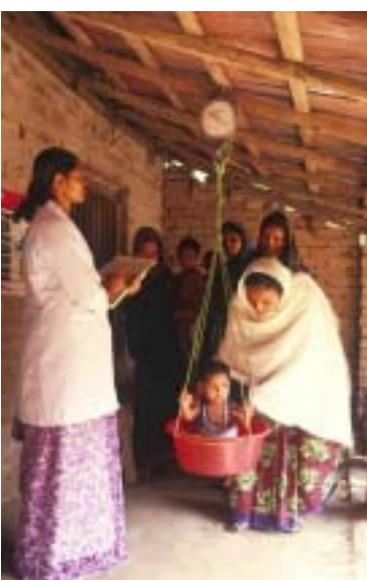
Malnutrition contributes to over one half of child deaths, with low birth weight estimated to affect 30 to 50 percent of infants. Over the years, appropriate interventions have helped to reduce the proportion of underweight children from 66.5 percent in 1990 to 51.1 percent in 2000, and child stunting from 65.5 to 48.8 percent. In spite of this, the prevalence of child stunting and underweight is still very high according to WHO criteria. To address child malnutrition, it is essential to improve the nutritional status of adolescent girls and mothers, because if mothers are malnourished, their children are much more likely to have low birth weight, and to remain malnourished throughout their lives. Although chronic energy deficiency in non-pregnant women has declined from 52 percent in 1997 to 45 percent in 2000, it still remains at unacceptably high levels.

Since 1997, the prevalence of night blindness, an early indicator of Vitamin A deficiency, has been maintained below the one percent threshold that indicates a public health problem. This success has largely been due to the Vitamin A supplementation programme, which increased coverage from 41 percent in 1993 to over 85 percent in the second half of the decade by linking the distribution of Vitamin A capsules with the NIDs. Coverage of iodized salt increased from 19 percent in 1993 to 70 percent in 1999, and correspondingly, the prevalence of iodine deficiency fell from 69 to 43 percent.

While these findings are encouraging, they mask the fact that infants and children continue to consume diets that are grossly inadequate in Vitamin A, iron and other micro-nutrients. Anaemia, which is largely due to iron deficiency, affects about 50 percent of under-five children, a prevalence level that denotes a severe public health problem. Breastfeeding is rarely exclusive for the first six months of life, and complementary foods are often introduced too early or too late and are of poor quality.

There is urban-rural difference in under-five mortality rates. In 2001, the rate in urban areas was 52 percent while in rural areas it was 89 percent. Similarly, there is also difference in under-five mortality rate between boys and girls. In 2001, the under-five mortality rate for boys was 84 percent and for girls 81 percent.

There has been an epidemiological transition of mortality pattern in Bangladesh. Due to the relative decline in deaths caused by infectious diseases, statistics now reveal that injuries and accidents are also important causes of deaths. For example, 8 percent of all under-five deaths and 30 percent of total deaths among children aged 1-4 years have been found to be caused by injuries and accidents such as drowning.

Infant[2] Mortality

The trend shows that there has been a steady decline in the infant mortality rate (IMR) from 94 per thousand live births in 1990 to 56 per thousand in 2001[3]. About two-thirds of infant mortality are from neonatal deaths which are a direct consequence of factors such as low birth weight, pre-term delivery and birth asphyxia.

Infant Mortality Rate

Time (Year)	1990	1993	1996	1999	2001	2005	2008	2011	2014	2015
Data	94	84	67	59	56	--	--	--	--	--
Mdg Path	--	--	--	--	--	55	48	41	34	32

Units: Deaths per 1000 live births/Year

It is estimated that to achieve the goal of 32 deaths per thousand live births, the current declining rate must be sustained. That is, infant death rates must be reduced annually by at least two deaths per thousand live births between 2005 and 2015.

Immunization

Access to vaccination has been among the foremost interventions that have helped reduce mortality rates in Bangladesh. National Immunization Days (NID) have been observed for many years and have proved very successful. Since 2001 not a single case of wild polio virus transmission has been confirmed in the country. The percentage of fully immunized children increased from 53 percent in the 1990s to 69 percent in 2000 but the coverage remains below expectations[4]. In 2003 BCG coverage was 96 percent while measles coverage was only 69 percent.

The reasons for the low rates from the demand perspective, include drop-outs resulting from the lack of awareness of the need for immunization, lack of information on the medical aspects of the vaccines, and distance of the vaccination centres. From the supply side, the low rates arise from the absence of medical personnel in the health centres, irregular review of the immunization programme and inadequate supervision costs.

To offset some of these problems, supplementary immunization activities have been introduced and currently 86 percent of new-borns are protected at birth against neonatal tetanus. Since 2003, under the Expanded Programme of Immunization, Hepatitis B vaccination has been introduced, along with the use of auto destruct syringes. The programme has been activated in seven districts and one City Corporation, and by 2005 will cover all districts in the country.

Measles Immunization Coverage Rate: Valid Coverage by Age 12 Months
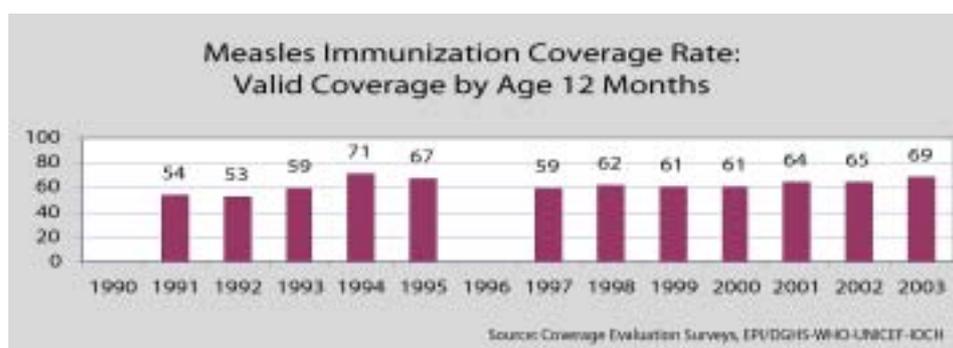
Challenges

Challenge 1: Cost of immunization

The multi-year EPI plan estimates that to fully immunize the under-one population at 80 percent per annum will require US$57 million per year[5]. An additional US$ 5.2 million per year will be required for scaling up the Integrated Management of Childhood Diseases (IMCI), an important component of the Health, Nutrition and Population Sector Programme (HNPSP) that addresses childhood mortality. The nutrition component of the same programme is estimated to cost US$36.9 million annually. The cost of other related programmes will add to the financial requirements.

Challenge 2: Sustaining Success

Success has been achieved in Bangladesh because of the close attention paid to infectious and parasitic diseases in the past two decades. To achieve MDG 4 by 2015 this momentum has to be sustained by:

- Consolidating and strengthening achievements in on-going interventions that address fundamental causes of childhood mortality. These include routine immunization, and control of diarrhoeal diseases, and acute respiratory infection.
- Accelerating the pace of reduction in neonatal mortality through ensuring antenatal care, skilled attendance at birth, and emergency obstetrics care for those in need.
- Enhancing the effectiveness of interventions for reducing malnutrition among children and women, with a special focus on adolescent girls, through bridging deficiencies of both macro and micro-nutrients (especially iron and iodine).
- Exploring interventions required to address the contemporary causes of mortality, i.e., accidents and injuries, specially drowning.
- Strengthening partnerships between the Government, NGOs, specialized agencies and local government institutions.
- Integrating vertical programmes for reduction of childhood mortality such as ARI and CDD, to achieve efficiency gains for both care seekers and providers.
- Focusing on consumer awareness and communication strategies for promoting behavioural change.
- Ensuring need-based-targeting of un-reached and un-served populations, especially for area-specific health and nutrition interventions in urban slums, the Chittagong Hill Tracts and coastal areas.
- Strengthening the management information system through establishing a database for informed decision support, information gaps, consistency and veracity.

Footnotes:
[1] ICMH Survey 2003
[2] Children undr one year of age.
[3] SVRS, 2001.
[4] Coverage Evaluation Surveys 2000 and 2003
[5] This includes both recurrent and capital costs of current routine vaccines and Hepatitis B: cold chain equipment, needles and syringes, and other similar logistics, as well as other recurrent costs such as staff salaries and allowances and buildings.

millennium development goal **5**

GOAL	TARGET	INDICATORS
GOAL 5: **IMPROVE MATERNAL HEALTH**	Target 6: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.	Indicator 16: Maternal mortality ratio
		Indicator 17: Proportion of births attended by skilled health personnel

Target 6: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

To achieve MDG 5, Bangladesh must reduce maternal mortality from 574 deaths per 100,000 live births in 1990 to 143 by 2015; increase the proportion of births attended by skilled health personnel to 50%, and reduce the Total Fertility Rate to 2.2 per woman by 2010[1].

In addition to the above, a third target[2] for Bangladesh is Reproductive Health (RH) Services for All as this is closely linked to maternal mortality and morbidity. The indicators for RH are maternal malnutrition and median age at marriage. The target is to reduce maternal malnutrition from 45 percent in 2000 to less than 20 percent by 2015, and to increase the median age of girls at first marriage from 18 to 20 years.

Situation Analysis

Maternal Mortality

In spite of the fact that maternal mortality has declined from nearly 574 per 100,000 live births in the 1990 to between 320 and 400 in 2001[3], the maternal mortality ratio (MMR) in Bangladesh remains one of the highest in the world. It is estimated that 14% of maternal deaths are caused by violence against women, while 12,000 to 15,000 women die every year from maternal health complications. Some 45 percent of all mothers are malnourished[4].

The population of Bangladesh is relatively young, with a third falling within the age group of 10-24 years. Nearly half the adolescent girls (15-19 years) are married, 57 percent of them become mothers before the age of 19, and half these adolescent mothers are acutely malnourished. Thus MMR among adolescent mothers is 30-50 percent higher than the national rate.

The chief causes of maternal deaths are haemorrhage, unsafe abortion, and the 'three delays dynamics'. The first delay, arising mainly from poverty, is in seeking professional care; the second delay is logistical as most of the health centres and private clinics are located in district towns whereas 70 percent of the population are rural based; the third delay arises from the lack of adequate human recourses and trained personnel at the service centres.

Time (Year)	1990	1992	1996	2000	2002	2005	2008	2011	2014	2015
Maternal Mortality Rate										
Data	57	47	48	40	--	--	--	--	--	--
System Trend	--	--	--	--	--	33.76	27.92	22.08	16.24	14.3

Units: Per 10,000 births/Year

Births attended by skilled health personnel[5]

The number of births attended by skilled health personnel has increased from 5% in 1990 to 12% in 2000. In the context of Bangladesh, the increase is insignificant as the majority still do not receive such services. However, there are wide variations among income groups: 40 percent of births in the highest income quintiles are attended by skilled health personnel, compared to only four percent in the lowest quintiles.
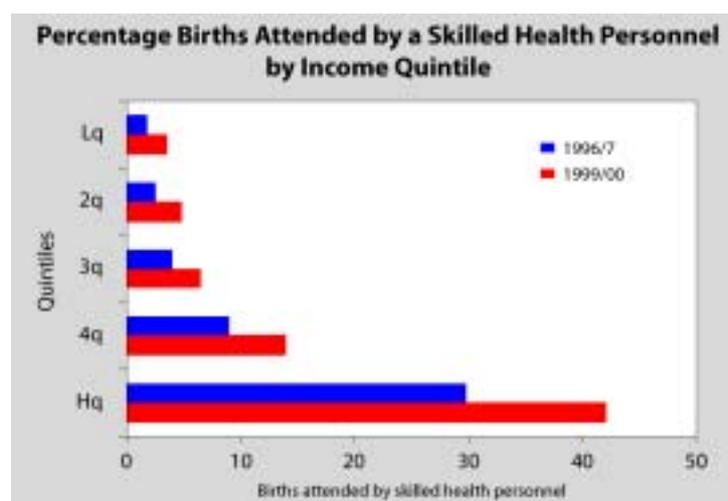
Total Fertility Rate

There has been significant decline in the total fertility rate (TFR)[6] from 6.6 per thousand live births in the mid 1970s to 3.3 in the mid 1990s with regional variations in the reduction pattern[7]. However, in spite of a steady increase in contraceptive prevalence

rate from 45 percent in 1994 to 54 percent in 2000, TFR has plateaued, partly due to adolescent fertility which is extremely high at 14.4 per 1000 live births.

Several measures have been taken to address these problems. The Essential Obstetrics Care (EOC) programme through the Maternal and Child Welfare Centers (MCWC) was introduced in the early 1990s. Subsequently, a more holistic approach was adopted through the National Maternal Health Strategy 2001 which takes a rights-based approach to maternal health with Safe Motherhood as its central theme. The Strategy has been integrated into the Health and Population Sector Program, (HPSP 1998-2003) and into its follow-up the Health, Nutrition and Population Sector Program, (HNPSP 2004-2006).

Interventions such as Safe Motherhood Services that provide iron, folic acid and vitamin A supplements to the target population[8] have been included in the HNPSP, with the objective of reducing maternal malnutrition to below 20 percent by 2015. Other interventions under this project include training programmes for skilled health personnels[9].

Both the Government of Bangladesh and the donors are giving priority to the promotion of safe motherhood from the grassroots level upwards, through antenatal care, safe delivery, pre-natal care, essential obstetrical care and family planning.

Challenges

Challenge 1: Reducing the Total Fertility Rate

If the population of Bangladesh stabilizes by 2035, there will be over 40 million women of reproductive age (15-45 years) in 2015 who will be the target poulation for preventive and awareness raising programmes on safe motherhood. In order to further reduce TFR, studies must be conducted to analyse the causes of its current stagnation. Advocay programmes must be introduced on population stabilization.

Female Population of Reproductive Age									
Time (Year)	1993	1996	1999	2002	2005	2008	2011	2014	2015
Females of Reproductive Ages									
Stable Pop by 2050	30.69 M	32.21 M	33.64 M	34.94 M	36.18 M	37.38 M	38.60 M	39.97 M	40.43 M
Stable Pop by 2045	30.69 M	32.21 M	33.64 M	34.94 M	36.18 M	37.38 M	38.60 M	39.97 M	40.43 M
Stable Pop by 2035	30.69 M	32.21 M	33.64 M	34.94 M	36.18 M	37.38 M	38.60 M	39.97 M	40.44 M

Units: Persons Age 15 to 45

Challenge 2: Achieving MDG 5 – Target 6 : Reduce the maternal mortality ratio to 143 per 100,000 live births by 2015

If MMR is to be reduced to 143 per 100,000 live births by 2015, the decrease will have to be at substantial rates:
- During 2005-2008 MMR must be reduced by 5.6 percent points a year
- During 2008-2011 MMR must be reduced by 7 percent points a year
- During 2011-2014 MMR must be reduced by 8 percent points a year
- During 2014-2015 MMR must be reduced by 12 percent points a year

Meeting this challenge will require the following:

- Bringing about a fundamental change in knowledge, attitude and behavior towards safe motherhood and gender equality through an advocacy campaign on safe motherhood involving 13 relevant ministries.
- Increasing access to quality health facilities through public, private and NGO initiatives.
- Increasing financial investments in the health sector including in skills development.
- Specifically targeting the poor for reproductive health interventions, as maternal mortality and morbidity is highest in the lower income groups.
- Accelerating the reduction of malnutrition, especially for females of reproductive age.

Challenge 3: Rapidly increasing the proportion of births attended by skilled health personnel

If population is stabilized by 2035, 2.52 million children will be born in 2010; 2.56 million in 2013 and 2.6 million in 2015. The 2001 Bangladesh National Strategy for Maternal Health calls for 50 percent of all deliveries to be attended by skilled health personnel by 2010. This implies that 1.26 million deliveries will be attended by skilled health personnel in 2010. To achieve this target, there must be a rapid increase in the rate of growth of births attended by skilled health personnel, which will in turn requires an accelerated increase in the number of trained personnel.

Challenge 4: Increasing by two years the median age of girls at first marriage

There is a significant relationship between delayed marriage and lower fertility and greater health seeking behaviour. Thus, increasing the median age of marriage of girls by two years can significantly lower adolescent fertility, reduce MMR, slow the rate of population growth, and improve the nutritional level of young mothers and children.

This can be achieved by providing greater access to higher education for adolescent girls through scholarship and stipend programmes. Such interventions must be accompanied by advocacy and awareness raising campaigns on safe motherhood to promote changes in attitudinal and cultural behaviour.

Challenge 5: Providing reproductive services to all by 2015[10]

In addition to the MDG 5 global targets, Bangladesh will also attempt to achieve the following RH target[11]:

- Halve maternal morbidity
- Halve maternal malnutrition
- Reduce TFR to 2.2
- Improve adolescent reproductive health
- Eliminate violence against women

In aiming for such ambitious targets some constraints need to be taken into consideration:

- Reliable national estimates are not available for morbidity. Age specific female mortality rates will serve as proxies until better parameters are identified.
- The picture of maternal malnutrition is bleak in Bangladesh – 45 percent of all mothers are malnourished and only one percentage point decline has been achieved per year. In a business-as-usual scenario, by 2015, about 25 to 30 percent of mothers will still remain malnourished. It is expected that the new HNPSP will address some of the challenges relating to maternal malnutrition.

● Adolescent reproductive health has to receive increased attention to ensure an improved health life cycle, and to put early preventive measures to the threat of the spread of HIV/AIDS. As data on ARH is scanty, teenage (15-19 years) pregnancy and motherhood can be used as a proxy. A survey carried out in 1999-2000 shows teenage pregnancy to be as high as 35 percent. A comprehensive strategy has to be developed if it is to be almost eliminated by 2015.

● Violence against women is a major concern for health, productivity, dignity and maternal mortality in Bangladesh. It is estimated that 14 percent of maternal deaths are caused by violence. Inclusion of this indicator when monitoring the MDGs will help raise awareness of this national problem. It will also promote quantitative methods for monitoring the progress towards the elimination of violence against women.

Footnotes:

[1] The two latter goals are Bangladesh national goals articulated in the Bangladesh National Strategy for Maternal Health, 2001.
[2] This target and its indicators were agreed upon by the GoB and the UNCT during the consultative process of the MDG report preparation.
[3] Bangladesh Maternal Mortality Survey (BMMS), NIPORT, 2001. A data range is from various sources such as WHO, UNICEF, and GOB.
[4] A Body Mass Index (BMI) of less than 18.5 indicates acute malnutrition. BMI = Weight in kg / Square of height in meters.
[5] Definition of skilled health personnel is not standardized across countries leading to wide discrepancy in such estimates.
[6] TFR is the average number of children a women produces.
[7] TFR in Sylhet is 4.0; in Chittagong 4.1; in Khulna 2.7; and in Rajshahi 3.0.
[8] PIP of HNPSP (July 2003-2006)
[9] Here skilled health personnel cover all medical professionals, including nurses, midwives and Skilled Family Welfare Visitors (FWVs).
[10] The Bangladesh Interim-Poverty Reduction Strategy Paper (IPRSP) stated that "Access to Reproductive Health to all by 2015" as a means to achieving MDG 5.
[11] The Government of Bangladesh is still to formally adopt indicators for monitoring Reproductive Health; this list is a tentative one, agreed to after some discussions with various stakeholders including GoB.

GOAL	TARGETS	INDICATORS
GOAL 6: COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES	Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS.	Indicator 19: Condom use rate
	Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.	Indicator 21: Prevalence and death rates associated with malaria
		Indicator 22: Proportion of population in malaria risk areas using effective malaria prevention and treatment measures
		Indicator 23: Prevalence and death rates associated with tuberculosis
		Indicator 24: Proportion of tuberculosis cases detected and cured under directly observed treatment short course (DOTS).

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

Situation Analysis

It is estimated that the prevalence rate of HIV infection among adults (15-49 years) is less than 0.1 percent. As of end November 2003, the Ministry of Health and Family Welfare reported a total of 363 cases. However, as there is no functional reporting system on HIV/AIDS and the information remains incomplete, Bangladesh is classified as a low HIV prevalence country. Nevertheless, latest surveys indicate a rapid increase of HIV positivity among injecting drug users (IDUs) from 1.7 percent in 2000 to 4 percent in 2002. Such concentrated HIV epidemic can have far reaching implications on HIV transmission to other vulnerable populations in the community.

Based on the HIV/AIDS situation in the country, and because of the absence of data on global indicators of HIV pregnancy age, and HIV/AIDS orphans, additional indicators have been selected for monitoring this target in Bangladesh. These are:

- Percentage of HIV positivity among the most vulnerable groups: IDUs, female sex workers (SW), men who have sex with men (MSM).
- Percentage of condom use among most vulnerable groups: SW, MSM, rickshaw-pullers, trucker drivers.
- Percentage of needle sharing among IDUs.
- Percentage of blood being screened for HIV before transfusion.
- Percentage of health facilities at the different levels (tertiary, district and upazila) with adequate capacity for screening blood for HIV before transfusion.

Percentage of HIV positivity among the most vulnerable groups[1]

Among IDUs surveyed in Central-A Bangladesh the HIV sero prevalence has risen from 1.7 percent in 2000 to 4 percent in 2002. There was no HIV detected in IDUs surveyed from other sites.

The HIV infection rate among sex workers surveyed was 0.2, 0.7 and 0.5 percent in Brothel SW in Central-B, Central-D and Southwest-B respectively. Furthermore, 0.2 percent of Street and Hotel based SW in Central-A were found HIV positive.

Of the MSMs tested in Central-A, 0.2 percent were positive during the fourth round surveillance.

Percentage of condom use among most vulnerable groups

Consistent condom use is only 2 and 4 percent for brothel and street based sex workers, respectively. Among their clients, 75 percent of truckers reported that they did not use condoms the last time they purchased sex, and only 2 percent of rickshaw-pullers reported using condoms consistently when having sex with sex workers. The majority (two thirds) reported that they had never used a condom. Out of 101 college/university students, 30 percent reported consistent condom use during the past year.

Percentage of needle sharing among IDUs

Two thirds of IDUs reported receptive needle sharing (i.e. receiving a shared needle to inject drugs) in Central Bangladesh. The rate was higher (75%) in the southeast. However in northwest, where there is an active needle exchange programme, only 25 percent reported needle sharing and HIV prevalence at this site remains zero.

Percent of blood being screened for HIV before transfusion

Although 98 blood transfusion centres have been set up throughout the country, a comprehensive policy and strategy to ensure safety of blood and blood products is yet to be finalized and implemented. There is need to establish the baseline information on percentage of blood being screened in the 98 centres and in all the other facilities that carry out blood transfusion.

Percentage of Health facilities at different levels with adequate capacity for screening blood for HIV before transfusion

Minimum standards and requirements for health facilities to qualify and be authorized to screen blood for HIV before transfusion should be defined by the National Policy and Strategy on blood safety.

The Government and donor initiatives include developing a National Strategic Plan (NSP) for comprehensive and integrated action in response to HIV/AIDS. The NSP will also elaborate a national Monitoring and Evaluation System that will strengthen follow up of MDG and UNGASS indicators; interventions targeted at most vulnerable groups are being scaled up; HIV/AIDS advocacy and blood safety campaigns are underway; and a GFATM-assisted project on HIV/AIDS and the Adolescents and Young People is in progress.

Challenges

- While Bangladesh has a relatively low HIV prevalence, there are many factors that make it particularly vulnerable to HIV/AIDS. They include socio-economic and cultural factors that can only be addressed effectively through a multi-sectoral and multi-dimensional approach. Sentinel surveillance remains key to follow trends of HIV infection and behaviour change as well as to monitor the outcome and impact of responses to HIV/AIDS.
- Essential policy review and legal/law reform to enhance enabling environment and the impetus for HIV/AIDS prevention, care and support need to be promoted and facilitated by the different stakeholders.
- Initiatives should be intensified to mainstream HIV/AIDS into different public and private sectors and to ensure effective leadership support and involvement at all levels in advancement of appropriate measures to deal with HIV/AIDS.
- Since HIV/AIDS is a development concern all development and health programmes such as PRSP, SWAp and HNPSP are expected to accord due prominence to and coverage of HIV/AIDS.

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and tuberculosis

To achieve this target, Bangladesh will have to halve the one million people annually afflicted by malaria and reduce the number of deaths from one percent to half a percent by 2015. Also, by 2005, Bangladesh will have to increase the success rate of detection of tuberculosis cases under DOTS from 34 percent in 2000 to 70 percent, and the cure rate from 84 percent to 85 percent.

Situation Analysis

Malaria

Malaria is one of the major public health problems in Bangladesh. Out of 64 administrative districts, 13 belong to the high-risk malaria zone.

Prevalence and death rates associated with malaria

A total of 14.7 million people are at high-risk and drug resistance to chloroquine and sulphadoxine-pyramethamine is posing a problem. The Malaria and Parasitic Diseases Control Unit in the Directorate General of Health Services implements control interventions based on the Revised Malaria Control Strategies viz: Early Diagnosis and Prompt Treatment (EDPT); Selective vector control; Promotion of Insecticide Treated Mosquito Nets (ITMN); Epidemic preparedness and response; and community involvement and partnerships with NGOs and private sector. The Roll Back Malaria initiative was piloted in one district and is now being scaled-up to three hill districts. There is an increasing trend of case incidence and deaths in the border districts, particularly in the hard-to-reach areas.

Proportion of population in malaria risk areas using effective malaria prevention and treatment measures

An estimated one million clinical cases of malaria are treated every year. During 2002, the Annual Parasitic Incidence was 4.2 in the high endemic districts, leading to 61,495 laboratory confirmed cases, and 598 reported deaths. *Plasmodium falciparum* is the predominant infection (61-71%) and *An. dirus* the principal vector. The current programme aims to reduce by 50 percent the incidence of cases and the number of deaths from malaria by the year 2015.

- **13 out of 64 districts are high endemic**

- **14.7 million people are at high risk**

- **60,000 – 75,000 lab confirmed cases per year**

- **Estimated 1.0 million clinical cases annually**

- **Focal outbreaks in eastern border are not infrequent**

- **Drug resistance (CQ, SP) reported in CHT; Data needs validation; drug policy to be updated.**

Challenges

Scaling up ITN programme to achieve coverage up to 70 percent of 14.7 million high-risk population, especially in the remote, poor and tribal families remains a major challenge. To overcome the problem of drug resistance effective treatment and rapid diagnostic tests need to be introduced. To be fully effective, the current programme must substantially increase the number of trained manpower and malaria experts, at various levels.

Tuberculosis

Prevalence and incidence
Bangladesh ranks fourth on the list of the 22 highest TB burden countries in the world. In 2002, the incidence of all cases and of new smear-positive cases was estimated to be 233 and 105 per 100,000 respectively[2]. About 70,000 patients die of TB each year. Bangladesh is committed to the 2005 international targets of detecting 70 percent and curing 85 percent of the detected smear-positive patients. To further decrease incidence and prevalence of TB, the momentum must be maintained (or increased) beyond 2005. The survey of 1986-88 found a 0.7 percent prevalence of sputum smear-positive TB in adults. The countrywide prevalence/incidence survey planned for 2004-2005 will provide the baseline for monitoring progress towards achievement of the MDG 2015 target. This survey will also provide information on the male/female ratio among TB patients.

Proportion of cases detected and cured under DOTS
Eighty four percent of cases diagnosed in 2001 were cured under DOTS. In 2002 the case-detection rate of new smear-positive cases was 34 percent. Of the new smear-positive patients, the M/F ratio was 1:0.44, which indicated an under diagnosis of female cases. Increased detection and cure of females will have a considerable impact on maternal mortality as TB has been found to be the major cause of maternal death in high TB burden, low income countries.

Challenges

The major challenge is to simultaneously increase case detection, maintain a high cure rate, and improve the quality of the diagnostic services. This calls for strengthening the management of NTP at central, divisional and district levels, intensifying effective partnerships and collaboration, expanding diagnostic and treatment services, implementing quality assurance of smear microscopy and BCG strategies, and strengthening monitoring and evaluation. Other essentials include human resources development and uninterrupted supply of drugs and laboratory provisions.

It is estimated that $33 million will be needed to achieve the 2005 international targets of 70 percent case-detection and 85 percent cure. Of this, $12 million is expected to be Government contribution, $4 million NGO contribution, and $17 million must come from external resources.

Footnotes:
[1] Information is collected through the National HIV and Behavioural Surveillance (NHBS). This has been in operation since 1998 at specific sites in the country.
[2] WHO, 2002.

millennium development goal 7

GOAL	TARGETS	INDICATORS
GOAL 7: **ENSURE ENVIRONMENTAL SUSTAINABILITY**	Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.	Indicator 25: Proportion of land area covered by forest
		Indicator 26: Ratio of protected area to surface area to maintain biological diversity
		Indicator 27: Energy use (kilogram oil equivalent) per US$1000 GDP (PPP)
		Indicator 28: Carbon dioxide emissions per capita
	Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.	Indicator 29: Proportion of the population with sustainable access to an improved water source
	Target 11: By 2020, have achieved a significant improvement in the lives of at least 100 million slum dwellers.	Indicator 30: Proportion of the population with access to improved sanitation
		Indicator 31: Proportion of households with access to secure tenure

Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Situation Analysis

Proportion of land area covered by forest

According to the Forest Master Plan and the Forestry Policy of Bangladesh only about 769,000 hectares or six percent of the country has actual tree cover. This includes the mangrove and the planted forests. About 1.41 million hectares[1] of former forest is now covered only by grass. Consumption of wood for fuel has contributed to deforestation and other environmental problems in Bangladesh. It is estimated that 9000 hectares of forestland are lost every year[2]. Depletion has taken place in all major forest areas, including the Chittagong Hill Tracts, Cox's Bazar and the sal (indigenous teak) forest areas. Per capita forestland in Bangladesh has shrunk from 0.035 hectares in 1980 to around 0.022 in 1990[3], the lowest in the world. In the 1990s, reforestation and regeneration projects by the forest department helped to increase forestland but only by an insignificant 0.01 percent[4].

Protection of the remaining forests is a major challenge for the Government and other stakeholders. The forest sector strategies under the 1992 Environment Policy include conserving, developing and augmenting forests for sustainable ecological balance and to meet socioeconomic needs; incorporating tree plantation programs in all relevant development schemes; arresting the depletion of forestland and forest resources; and developing and encouraging the use of substitute forest products.

Ratio of protected area to surface area for maintaining biological diversity

Only three percent of existing forestland is designated as protected area. Almost half of the forestland is under different types of non-forest land-use, e.g. shifting agriculture, illegal occupation, unproductive and other areas.

Bangladesh has the world's largest mangrove forest which houses flora and fauna of innumerable species, many of which, including the Royal Bengal Tiger, need protection from extinction. Bangladesh is signatory to the Convention on Biological Diversity and several projects addressing biodiversity are being implemented. However, weak institutional capacity prevents Bangladesh from accessing its due share of globally competitive resources such as the Global Environmental Facility (GEF) which was created in 1991 to assist countries with a per capita income of less than US$4000 to address four main global environmental problems.

Within these constraints, the Ministry of Environment and Forests is in the process of acquiring a GEF funded project under which a National Biodiversity Strategic Action Plan (NBSAP) will be developed for a coordinated framework of various biodiversity related programmes[5].

Target 9: Indicators for Bangladesh											
Time	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Target 9											
Forested land area as percentage of land area (FAO estimates)	9	-	-	-	-	-	-	-	-	-	10.2
Ratio of protected area to surface area (UNSD calculated from UNEP)	-	-	-	-	-	-	-	0.01	-	-	-
Energy use (Kg oil equivalent) per $1,000 (PPP) GDP (World Bank)	123.18	113.08	110.95	108.79	107.69	109.81	103.46	102.49	102.31	96.97	92.36
Per capita carbon dioxide emissions (metric tons per capita) (UNFCCC-CDIAC)	0.141	0.141	0.141	0.145	0.153	0.177	0.183	0.186	0.177	0.189	
Carbon dioxide emissions (metric tons of CO_2) (UNFCCC-CDIAC)	15,369,048	15,776,005	16,193,961	17,121,530	18,412,061	21,891,361	23,126,897	24,025,136	23,376,204	25,462,318	-
Ozone-depleting CFCs consumption in ODP metric tons (UNEP-Ozone Secretariat)	195	93	213	227	181	281	628	832	830	801	805

Energy use (kilogram oil equivalent) per US$1000 GDP (PPP)

Bangladesh has one of the lowest per capita energy consumption rates in the world. Changes in this ratio over time and across countries reflect structural transitions in the economy, and energy efficiency of different fuel mixes in different sectors. In principle, the lower the ratio, the higher the energy efficiency. Over time Bangladesh has been able to improve its energy efficiency from 123 per US$1000 GDP (PPP) in 1990 to 92 in 2000.

Fifty five percent of the total energy consumed in Bangladesh is collected from the traditional organic fuels. Natural gas meets 24 percent of the country's total fuel need while hydroelectricity provides another two percent. Nineteen percent of the fuel comes from imported coal and mineral oil[6].

Carbon dioxide emission and consumption of ozone-depleting chlorofluorocarbons

The carbon dioxide emission in Bangladesh is insignificant compared to the global consumption pattern, as more than 60 percent of the energy used comes from biomass and more than 60 percent of the commercial energy used comes from natural gas.

During 1995-2002, consumption increased for certain ozone-depleting substances and decreased for others. For example, the use of CFC–11 dropped from 88.61 metric tons in 1995 to 2.32 in 2002. On the other hand the use of HCFC–22 increased from 35.17 metric ton to 132.27. Under the National ODS Phase-out Plans prepared and approved by the Montreal Protocol Multilateral Fund, aerosol phase out took place in 2002 with recovery of ozone depleting substances starting in 2003. For the mitigation of health risks caused by such emissions, it is essential to introduce programmes for continuous monitoring of the six "criteria pollutants" particulate matter such as CO, SO_2, Nox and Ozone.

Proportion of population using solid fuels

Although not a global indicator, it was considered important for Bangladesh to track the proportion of population using solid fuel.

About 67 percent of commercial energy consumption is met from natural gas, the remainder coming from oil augmented by hydropower and coal. Only 18 percent of the population (25% in urban areas and 10% in rural areas) has access to electricity, and per capita commercial energy consumption is among the lowest in the world[7].

Non-commercial energy sources, such as wood, animal wastes and crop residues, are estimated to account for over half of the country's energy consumption. In the 1980s, 65 percent of the total energy supply of the country came from organic fuels. Currently, 20 to 30 percent of the total organic energy demand is met by fuel wood, and the remaining from agricultural by-products and cow dung. As the heavy reliance upon bio-fuel in the rural areas has direct influence on the physiochemical characteristics of soil and the availability of fodder and fruit trees, there is urgent need for introducing alternative energy technology in the rural area. The lack of alternatives has already adversely impacted the greener concerns of environment and if allowed to continue, will lead to the rapid depletion of forest resources.

Target 10: Halve by 2015 the proportion of people without sustainable access to safe water and basic sanitation

In the case of Bangladesh the target is to increase coverage of safe water from 99 percent to 100 percent in urban areas and from 76 percent (arsenic-adjusted estimate) coverage to 96.5 percent in rural areas by 2015.

In addition, access to improved sanitation must be increased from 75 percent to 85.5 percent in urban areas, and from 39 percent to 55.5 percent in rural areas by 2015.

Situation Analysis

In the case of Bangladesh, MDG 7 - Target 10 was modified to highlight the crucial role that access to water and to sanitation play in maintaining a healthy and productive population. Besides the global indicator of the proportion of population with sustainable access to an improved water source, a second indicator was included - the proportion of urban and rural population with access to improved sanitation.

Proportion of population with sustainable access to an improved water source

This indicator is defined as *the percentage of the population who use any of the following types of water supply for drinking: piped water, public tap, borehole or pump, protected well, protected spring or rainwater*. By this definition nearly 100 percent of the population in Bangladesh has access to water. However, over the last few years thousands of tube-wells have been found to be contaminated with naturally-occurring arsenic at higher than WHO-recommended levels. If quality is taken into account, access to safe water drops to only 72 percent in rural areas. In spite of the fact that this is good coverage by developing country standards, it implies that 30 million people remain without access to safe water. Coverage in urban areas is 82 percent.

Proportion of the urban and rural population with access to improved sanitation

In rural areas access to improved sanitation has increased from 11 percent in 1990 to 29 percent in 2002. In the case of urban areas however, the situation has deteriorated, coverage dropping from 71 percent to 56 percent. This is mainly due to unbridled and unplanned urbanization that has been taking place in recent years.

Although technologies such as sewers, septic tanks, pour-flush latrines, simple pit latrines, and ventilated improved pit latrines contribute towards the achievement of target 10, additional factors also need to be taken into consideration. For example, it is essential in the case of simple pit latrines that excreta are adequately treated before being discharged into the environment. Even in towns and cities with sewerage systems, discharges are passed untreated directly into the environment. Solid waste disposal remains an environmental sanitation hazard, especially in the urban areas.

Access to Improved Sanitation (%)

	1990	2002	2010 (target)
Rural	11	29	100
Urban	71	56	100

Source: Baseline sanitation survey, GoB, 2003

The Government recognizes the importance of increasing access to sanitation. Following a major initiative that culminated in the SACOSAN Conference in Dhaka in October 2003, the Government declared its own target of achieving 100 percent sanitation coverage by 2010, and has allocated two percent of its annual development budget for the task.

Challenges

Challenge 1: Ensuring 100 percent coverage of safe water

To be able to ensure nearly 100 percent coverage by 2015, at least 25 million people must gain access to arsenic-free, safe water over the next 10 years. This is a considerable challenge, since at present there is no effective solution for communities which are highly affected by arsenic. Technologies for removing arsenic from water are in the process of being introduced on a large scale. However, as each option has some disadvantage, communities and individuals will have to learn to use water from different sources for different purposes, if their water demands are to be met at a viable cost. This requires a level of sophistication by the consumer which has not been necessary in the past. Resources will therefore be required, not only to support the installation of water sources, but also to raise awareness and train communities in appropriate water use.

In the longer term, other issues are likely to arise in relation to access to safe water. In particular, there is growing concern regarding the availability of groundwater. Currently groundwater is used widely for irrigation, leading to a lowering of the water table. A proper groundwater management strategy will be necessary to safeguard the resource. Other problems include water salinity in coastal areas.

Challenge 2: Ensuring access to basic sanitation

If the health benefits of sanitation are to be fully realised, good hygiene practices such as hand washing at critical times are crucial. It is important therefore to monitor indicators that include latrine coverage, the condition and use of sanitary facilities, and the adoption of good hygiene practices. Regular national sanitation surveys can be used for tracking these indicators including the treatment of sewage and the collection and disposal of solid waste.

Challenge 3: Resources needed to meet Target 10

It is estimated that US$64 million will be required to meet the water and sanitation goals by 2015.

To be most effective, national processes such as Poverty Reduction Strategy Paper, the Pro-Poor Strategy and the Sector Development Framework should coordinate efforts by the Government, NGOs and other stakeholders to achieve and even surpass the targets for water and sanitation under the various development initiatives.

Those sections of population who continue to be excluded from programmes that provide access to safe water and sanitation should be especially targeted. Strategies need to ensure that the poor and marginalized, such as slum dwellers in urban areas, are supported in appropriate ways.

Target 11: Significantly improve the lives of at least 100 million slum dwellers by 2020

The global indicator for Target 11 is the proportion of households with access to secure tenure. Four additional dimensions of this target[8] have been identified by UN Habitat: i) access to safe water; ii) access to sanitation; iii) durability of housing; and iv) sufficient living area.

Situation Analysis

Access to safe water

In 1999 on average 45 percent of the urban population had access to safe drinking water. This access varied regionally: 94 percent of households in the capital city of Dhaka had access to drinking water compared to 71 to 85 percent in the three[9] other major cities. Water supply from public sources was better in Dhaka and Chittagong, than in Khulna and Rajshahi where there was a much higher dependency on private water suppliers. The lack of adequate public water supply however has greater negative impact on the poor – 91 percent of poor[10] households in Khulna and 65 percent in Rajshahi used private water suppliers[11].

Access to sanitation

Access to sanitation and to sanitation services also varies according to region. While 43 percent of urban households use water sealed latrines, only 14 percent of slum households in metropolitan cities have access to any type of sanitary latrines, the majority (85%) using hanging latrines. Regional variations exist, with households in urban metropolitan areas having better access to sanitation that rural.

Secure tenure/Durability[12] of housing

In 1999, nearly half the urban population lived in marginal or informal settlements with little or no rights to public services such as water, sanitation and electricity. About 26 percent of urban poor households owned a dwelling unit, although only 18 percent owned any land[13]. The majority (75%) of the houses of the urban poor are built of temporary material, and on average 22 percent have access to electricity.

Challenges

Urban population in 2000 was estimated to be 26 million. Under the assumption that population growth will stabilize by 2035, and that current rate of rural-urban migration is maintained, it is estimated that urban population in 2015 will reach nearly 50 million. The majority will be living in the four major cities of Dhaka, Chittagong, Khulna and Rajshahi. To achieve Target 11 by 2015, health, water and sanitation services must be reached to 50 million urban dwellers, while ensuring that the services also reach urban slum dwellers.

Footnotes:

[1] SEHD 1998

[2] FAO 1997

[3] BBS 1999

[4] UNSD

[5] The Plan will enable Bangladesh to meet its obligations under the Convention on Biological Diversity by addressing issues such as the direct dependence on biodiversity and natural resources by the majority of the population; the linkage between poverty and the loss of biodiversity; the significant role of NGOs in providing development services and inputs; the need to adopt innovative approaches to *in situ* conservations, and the need to integrate biodiversity concerns into all relevant sectors.

[6] World Bank, 1995

[7] World Bank, 2000.

[8] The definitions are taken from UN Habitat, 2003: **A slum** is a contiguous settlement where the inhabitants are characterised as having inadequate housing and basic services. A slum is often not recognized and addressed by the public authorities as an integral or equal part of the city; **secure tenure** is the right of all individuals and groups to effective protection by the State against unlawful evictions; **A slum household** is a group of individuals living under the same roof that are lacking in at least one of the components of access to sanitation, access to safe water, secure tenure, durability of housing and sufficient living area.

[9] Chittagong, Khulna and Rajshahi.

[10] Those reporting monthly income of less than Taka 2000.

[11] World Bank, Score Card, 2002

[12] A house is considered "durable" if it is built on locations free from floods, industrial pollution, noise pollution from railway lines, main roads, power lines, etc.; is constructed from quality material and follows building standard compliance; and protects its inhabitants from the elements.

[13] Households may own the structure but not the land on which it is constructed.

millennium development goal 8

GOAL	TARGETS	INDICATORS
GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT	**Target 12:** Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. **Target 13:** Address the special needs of the least developed countries. **Target 14:** Not applicable for Bangladesh **Target 15:** Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long-term.	Indicator 33: Net ODA, total and to LDCs, as percentage of OECD/DAC donors' gross national income
		Indicator 34: Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services
		Indicator 35: Proportion of bilateral ODA of OECD/DAC donors that is untied
		Indicator 38: Proportion of total developed country imports (by value and excluding arms) from developing countries and LDCs, admitted free of duties
		Indicator 39: Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries
		Indicator 40: Agricultural support estimate for OECD countries as percentage of their GDP
		Indicator 41: Proportion of ODA provided to help build trade capacity
		Indicator 42: Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)
		Indicator 43: Debt relief committed under HIPC initiative, US$
		Indicator 44: Debt service as a percentage of exports of goods and services
	Target 16: In co-operation with developing countries, develop and implement strategies for decent and productive work for youth.	Indicator 45: Unemployment rate of 15-24 year-olds
	Target 17: In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in Bangladesh.	Indicator 46: Proportion of population with access to affordable essential drugs on a sustainable basis
	Target 18: In co-operation with the private sector, make available the benefits of new technologies, especially information and communication.	Indicator 46: Telephone lines and cellular subscribers per 100 population
		Indicator 47: Personal computers in use per 100 population
		Indicator 48: Internet users per 100 population

Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system

Target 13: Address the special needs of the least developed countries

Target 15[1]: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

Situation Analysis

The indicators used to track the progress of targets 13 - 15 can be classified into three main categories: official development assistance, market access, and debt sustainability.

Overseas Development Assistance (ODA)

Official Development Assistance from countries belonging to the Development Assistance Committee (DAC) has been decreasing in recent years, both in real value and as a share of the GNI of donor countries. It has dropped from US$ 1.24 billion (0.28 percent of GNI) in 1996 to US$ 1.02 billion (0.22 percent of GNI) in 2001[2]. ODA to LDCs has also fallen from 0.06 percent of donors' GNI in 1996 to 0.05 percent in 2001. This is far from the target of 0.7 and 0.15 percent, respectively, set as the MDG requirements for these indicators. However, the past year has seen some progress towards increasing aid to developing countries. The EU has announced plans to increase its assistance to an average of 0.39 percent of national income by 2006 and the US also plans to increase its annual contribution by US$5 billion. If commitments made by donor countries at the UN International Conference on Financing for Development 2002 are fulfilled, it will add US$15 billion per annum to ODA. However, ODA needs to double from its present level if the poorest countries are to achieve the MDGs[3].

In addition to increased resources, there is also a need to improve the effectiveness of that aid. Although untied aid has proven to be less effective than tied aid, the proportion of untied aid has grown but slowly, increasing from 71.3 percent of bilateral ODA commitments in 1996 to 79.1 percent in 2001. To increase effectiveness, the UK has proposed an International Financing Facility, designed to provide additional financing to help meet the MDGs. Donors would make commitments to provide a flow of payments over time to the Facility. The Facility would then issue bonds on the strength of these commitments and allocate these funds through existing bilateral/ multilateral institutions to countries pursuing strong policy programmes[4].

Market Access[5]

Tariffs and quantitative restrictions in the QUAD countries, not to mention the huge subsidies on agriculture, fall heavily on the exports of poor countries and serve as barriers to market access for products such as agriculture, textiles and footwear. Improvement of market access for poor countries by reducing tariffs and other trade

barriers in the developed countries could potentially increase income in the poor countries by US$520 billion, thereby lifting as many as 140 million poor people out of poverty by 2015. Removing these barriers and creating market access for exports from poor countries will thus have a salutary impact on global reduction of poverty. Although average tariffs have been falling since the 1994 Uruguay Round, the trend masks the high tariffs aimed at some goods. The EU initiated a program to eliminate tariffs on developing country exports of "Everything but Arms" and many LDCs avail of the GSP scheme which grants lower tariffs for certain products, albeit subject to specified rules of origin.

Tariff Rates for Textiles and Clothing without GSP Preferences in the European Union and the US (2001)				
	Average Tariff Rate (%)		Average Tariff Rate faced by GSP Recipients (%)	
	EU	US	EU	US
Textiles and Yarn	5.4	7.8	4.6	7.2
Apparel and Clothing	10.2	15.3	8.8	15.9

Source: Global Economic Prospects: 2004

The majority of Bangladesh's exports to the EU and Canada are currently quota and duty free and account for almost 48 percent of its total exports. Bangladesh exports of woven garments and knitwear to the US amounted to almost US$2.2 billion in 2001 – facilitated by the MFA quota, while non-quota items face an average tariff of 12 percent. However, this quota system is being phased out by 2004, which raises concerns for Bangladesh's RMG sector – a major foreign exchange earner, accounting for 78 percent of total exports in 2002-03.

Bangladesh Exports Admitted Free of Duty or Quota (2004)			
Country/Origin	Exports Admitted Free of Duty or Quota US$ million	Total Exports	Share of Total Exports (%)
EU[a]	2,960.44	2,960.44	45.78
USA	771.00[b]	2,500.42	38.66
Canada[c]	125.66	125.66	1.94
Australia		26.20	0.41
New Zealand		2.77	0.04
Norway		18.21	0.28
India		63.40	0.98
Pakistan		32.69	0.51
China		12.32	0.19
Japan[d]		197.58	1.66
South Korea		22.07	0.34
Thailand	11.15	29.34	0.45
Total	2,097.25	5,901.10	91.25
Total Bangladesh Exports	6,467.30		
Proportion of duty/quota-free export to total exports	47.89		

a/ With a few exceptions, most exports to EU are granted duty-free and quota-free access, through their *Everything but Arms Initiative (EU-EBA)*
b/ This comprises: $731 million for textiles and clothing exports not subject to quotas and about $40 million for other exports not subject to tariffs (Ministry of Commerce)
c/ With a few specific exclusions (certain supply-managed agricultural products), most exports to Canada are granted duty-free and quota-free access
d/ Almost 99% of industrial products enjoy duty-free and quota-free under Japan's GSP, which started in April 2001

Source: Staff calculations with data from Export Promotion Bureau

Subsidies to the agricultural sector in OECD countries act as another barrier to exports from developing countries. Among the most distorted sectors in international trade, agricultural support in the OECD countries was estimated at US$330 billion in 1999-2001. Of the US$250 billion subsidy that goes towards supporting producers, US$160 billion comes from border measures, such as tariffs and quantitative restrictions and account for 70 percent of total protection in the OECD countries. This stimulates overproduction in the rich countries and shuts out the potentially more competitive exports from poor countries. Thus, agricultural exports from developing to rich countries grew at just half the rate than they did to other developing countries in the nineties[6]. The WTO talks in Cancun in September 2003, did little to aid the progress towards achieving the goal of greater market access for developing countries.

Official Development Assistance Flows				
	1996		**2001**	
	US$ billion	as % of GNI	US$ billion	as % of GNI
Total ODA from DAC members	61.32	0.276	57.91	0.220
Total ODA from selected non-DAC members	1.04	0.00	1.18	0.004
Total ODA from DAC and non-DAC	62.36	0.28	59.09	0.225
Total ODA to developing countries	55.62	0.25	52.34	0.20
Total ODA to LDCs	13.58	0.06	12.94	0.05
GNI of OECD Countries	22,248.80		26,318.18	
Untied aid as % of bilateral ODA commitments	71.30		79.1	

Source: World Development Indicators 2003
Table 6.9 : Aid flows from Development Assistance Countries members
Table 6.9a : Official Development Assistance from selected non-DAC donors
Table 6.10 : Aid dependency

Agricultural and Manufacturing Tariffs in QUAD Countries[a] (%)		
	Agriculture	Manufacturing
QUAD countries	10.7	4
United States (2001	9.5	4.6
Canada (2001)	3.8	3.6
European Union (1999)	19	4.2
Japan (2001)	10.3	3.7

a/ Most favoured nation, applied, ad valorem, out-of-quota duties

Source: Global Economic Prospects 2004

Debt Sustainability[7]

Monitoring a country's debt situation is an important factor in determining a country's ability for sustainable development. Bangladesh has been performing well in terms of bringing down its debt service as a percentage of total exports, which stood at 7.29 percent in 2001 – low compared to India (11.7%) and Pakistan (25.8%). Under World Bank criteria, Bangladesh is classified as a Less Indebted Country. The high concessionality of Bangladesh's official bilateral and multilateral debt enables the ratio of debt service to export earnings to be modest. Costly suppliers' credit have been largely discontinued and foreign exchange earnings have been improving. Exports and workers' remittances in FY03 stood at US$3.0 billion. However, as a Least Developed Country, Bangladesh faces potential vulnerabilities in the global marketplace. Its survival as a leading exporter of labour-intensive garments will depend on its ability to raise productivity, reduce lead times and vigorously penetrate markets in North America and EU while diversifying into new areas in the East and Far East.

Agricultural Support in the OECD Countries, 1999-2001	
	US$ billion
Total agricultural support of which:	329.6
Consumers[a]	26.2
General Services[b]	55.1
Producers[c]	248.3
Producers support comes from:	
Domestic measures[d]	88.2
Border measures	160.1

a/ Programmes that directly benefit consumers, such as food stamps
b/ Services to agriculture, such as public investment in agricultural products
c/ Support to production through direct subsidies
d/ Tariffs and quantitative restrictions

Source: Global Economic Prospects 2004 (Table 3.10, pg. 120)

Target 16: In co-operation with developing countries, develop and implement strategies for decent and productive work for youth

Situation Analysis

The share of youth labour in the total labour force stood at 38 percent in 2000 having declined from 44 percent in 1991. Of the more than two million youth labour in 2000, 44 percent were female. The majority (82%) were rurally based[8].

Economic Characteristics of Youth Population				
	Total		Youth	
	1990/91	1999/00	1990/91	1999/00
1. Population (million)	109.0	127.5	27.4	30.6
2. Labour force (million)	45.1	53.5	19.8	20.3
Female	18.1	20.1	8.2	8.9
Male	27.3	33.4	11.6	11.5
Rural	37.3	43.4	16.3	16.6
Urban	8.1	10.0	3.5	3.7
3. Labour force participation rate (%)	75.9	72.1	72.3	66.4
Female	62.6	55.9	60.7	55.4
Male	88.3	87.3	83.4	78.3
Rural	79.4	75.5	76.7	70.4
Urban	63.1	60.4	57.0	52.8

Note: The total labour force covers labour force participants 15 years and over while youth labour force refers to age group 15-29 years. The labour force is based on 'extended definition' which includes, in addition to persons employed or unemployed, persons who engage themselves in such household activities as threshing, cleaning, care of livestock and poultry, food processing and similar activities. For details, see Labour Force Survey, 1990-91.

Source: Reports of the Labour Force Survey, 1990-91 and 1999-2000, BBS.

The youth labour force participation rate has also declined, dropping from 72 percent in 1991 to 66 percent in 2000. The participation rate was higher in the rural areas (70%) compared to the urban areas (53%) with male youth participation rate being higher (78%) compared to female (55%).

Composition of Employed Labour Force				
				(Million)
	Total employed labour		Youth employed labour	
	1990/91	1999/00	1990/91	1999/00
Total	44.7	51.8	19.2	18.7
Female	17.7	19.4	7.9	8.2
Male	27.0	32.4	11.3	10.5
Rural	36.8	42.3	16.0	15.5
Urban	7.9	9.5	3.3	3.2

Note: Based on extended definition and labour force 15 years and over.

Source: Reports of the Labour Force Survey, 1990-91 and 1999-2000, BBS.

Employment of youth labour declined from 19.2 million in 1991 to 18.7 million in 2000, the loss being borne by the males as female employment increased by 0.3 million during that period. Youth employment declined in both rural and urban areas, which total youth labour force increased by 0.5 million during that period, thus worsening their employment situation.

Literacy level of youth labour was low at 53 percent with only 41 percent of the employed female labour being literate compared to 57 percent male. The level of education was also low, nearly 69 percent of the total employed youth labour having either no schooling or only primary education. Only 11 percent of the total employed youth labour had education at post-secondary and higher levels. The females were more disadvantaged: more than 77 percent of the female employed youth had no schooling or only primary schooling compared to 65 percent of the males.

Agriculture dominated youth employment.[9] Some 48 percent of the youth labour were engaged in agriculture, 34 percent in services and 18 percent in industry.

In the absence of a composite set of indicators, youth unemployment rate was considered an important indicator of decent work. The total number of unemployed persons increased from 0.68 million in 1991 to 1.75 million in 2000, the bulk of which belonged to the youth labour category. In 2000, 1.61 million of the total 1.75 million unemployed persons were youth.

Youth Unemployment-Level and Trend in the 1990s									
	Unemployed labour (million)						**Unemployment rate (%)**		
	Total labour		Youth labour		Share of youth in total (%)		Total labour		Youth labour	
	1990/ 1991	1999/ 2000	1990/ 19991	1999/ 2000	1990/ 1991	1999/ 2000	1990/ 1991	1999/ 2000	1990/ 1991	1999/ 2000
Total	0.68	1.75	0.57	1.61	84	92	1.50	3.27	2.88	7.93
Female	0.32	0.67	0.24	0.62	75	93	1.77	3.33	2.93	6.97
Male	0.36	1.08	0.33	0.99	92	92	1.32	3.23	2.84	8.61
Rural	0.50	1.22	0.42	1.14	84	93	1.34	2.80	2.58	6.87
Urban	0.18	0.53	0.15	0.47	83	89	2.22	5.30	4.29	12.70

Source: Labour Force Survey, 1990-91 and 1999-2000, BBS.

While the total unemployment rate increased from 1.5 to 3.3 percent during the 1990s, youth unemployment rate rose to nearly 8 percent in 2000. Both female and male youth unemployment rates increased sharply from less than 3 percent in 1991 to nearly 7 and 9 percent respectively in 2000. Youth unemployment rate increased from 2.6 percent to nearly 7 percent in rural areas and from around 4 percent to nearly 13 percent in urban areas.

Nearly 64 percent of the unemployed youth have secondary or post-secondary and higher education, with little difference between females and males.[10]

Based on certain assumptions[11], it is projected that Bangladesh will have a civilian labour force (aged 15 and over) of 59 million in 2005 which will reach 76 million in the year 2015[12]. Of the total, the youth labour force will constitute around 22 million in 2005 and is likely to reach nearly 30 million in 2015. The economy therefore needs to

grow rapidly to meet the challenge of absorbing the large labour force under decent working conditions.

Educational Status of Unemployed Youth Labour			
			(percent)
	Total	Female	Male
No schooling	13.1	16.0	11.3
Primary education	22.9	23.1	22.8
Secondary education	32.4	30.9	33.3
Post-secondary and above	31.6	30.0	32.6
Total	100	100	100

Source: Labour Force Survey, 1999-2000, BBS.

The projections indicate that, by the year 2015, agriculture is likely to provide employment to around 50 to 52 percent of the labour force compared to 63 percent in 2000. In absolute terms, agricultural employment is likely to increase by between 4 to 5 million. The services sector, however, is likely to emerge as the major employment-generating sector of the economy contributing between 64 and 72 percent of the projected additional employment generation of 19 to 24 million by the year 2015. As the simulations show, given the labour supply, the only way by which the unemployment rate can be reduced to acceptable levels is through implementing measures that would sufficiently increase employment elasticities of growth to absorb the growing labour force. In addition, higher growth in both income and employment is a necessity.

Challenges

Challenge 1: Youth employment

The challenge in the case of youth labour, which is likely to reach a level of nearly 30 million in 2015, is to create employment at a much faster rate compared to other segments of the labour force. For example, if the target is to reduce the youth unemployment rate to the same level of the total labour force in 2015, then Bangladesh will have to generate more than 11 million jobs specifically for the youth population.

There are two important issues to be considered First, the problem of unemployment mostly affects the youth labour in Bangladesh. The economy therefore needs to accelerate the generation of employment opportunities for the youth. Second, the large majority of the educated youth remain unemployed due to mismatch between supply and demand in the labour market, inappropriate and inadequate skills and the slow pace of job creation, particularly in the formal sector.

In order to meet the challenge of the youth labour market, Bangladesh will need to rapidly expand the productive and skill-intensive formal and informal sectors.

Global partnerships can contribute by providing new formats and strategic directions in creating decent and productive employment for the youth. Although domestic investment is the main driver of growth and foreign direct investment (FDI) flows are

yet to rise rapidly in Bangladesh, development dimensions of the youth can be made an integral part of the country's FDI policy through global partnerships in transferring technology, upgrading skills and management capabilities of the youth labour force that will attract not only more FDI but also support its higher productivity.

Beneficial global partnerships can also create opportunities for skilled and knowledge-based youth manpower export. Collaborative efforts for producing trained youth labour in strategically chosen thrust areas, such as the maintenance of community and social services in developed countries which face increasingly severe demographic imbalances due to the shortage of working age population, can emerge as effective global means of addressing the youth labour issues in Bangladesh.

Challenge 2: Expansion of urban employment

The urban population and the urban labour force, will experience accelerated growth due to natural increase, rural-urban migration, and reclassification of rural into urban areas. As the large majority of the urban labour force will belong to the youth labour category, the formal sector will be required to provide employment to a progressively larger segment of the youth labour force. This has direct implications for ensuring decent work to meet the dual role of employment in terms of both generating income and fulfilling the individual's social functions.

Target 17: In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in Bangladesh[13]

Situation Analysis

The global pharmaceutical market has witnessed an increase in the number of products circulating worldwide, leading to a rapid growth in both consumption of and expenditure on medicine. In spite of this growth, WHO estimates that, as of 1997[14], at least one-third of the world's population still lack access to essential medicines, either because they are not available, are too expensive, or because there are no adequate facilities or trained professionals to prescribe them. In poorer areas of Asia and Africa this figure may be as high as one-half.

There is lack of detailed and publicly available official information about the impact of the pricing control on production, availability and access to essential drugs. Various estimates indicate that in 1997, about 80 percent of the people of Bangladesh had sustainable access to affordable essential drugs. A study is planned in 2005 on pricing control for ensuring affordability of essential drugs.

Bangladesh formulated the National Drug Policy (NDP) and promulgated the Drugs Control Ordinance, in 1982. The stated aim of the NDP is to ensure that common people can get the essential and necessary drugs easily and to ensure the quality and safety of these essential drugs. It identified 150 essential drugs for controlled pricing. Since 1993, the number of the price-controlled essential drugs has been reduced to 117 primary health care drugs. The state-owned Essential Drugs Company Limited produces and supplies essential drugs for the public health sector.

According to the Directorate of Drug Administration, in 2002, all the essential drugs in the local market were produced locally utilizing about 45 percent of the production capacity of the local pharmaceutical industries. About 85 percent of the raw material used in the local production are imported. Being a drug exporting, least developed country, Bangladesh, has a unique position in the region, of not being required to adhere to the TRIPS Agreement until 2016.

Challenge: Ensuring access to essential affordable drugs

To address the current problems related to the procurement, local production, quality control, distribution and utilization of drugs, the Government formed a National Drug Policy Review Committee for updating the 1982 National Drug Policy. The revised NDP is expected to reiterate the commitment of the Government and the local pharmaceutical companies to ensure the access of the people to affordable essential drugs.
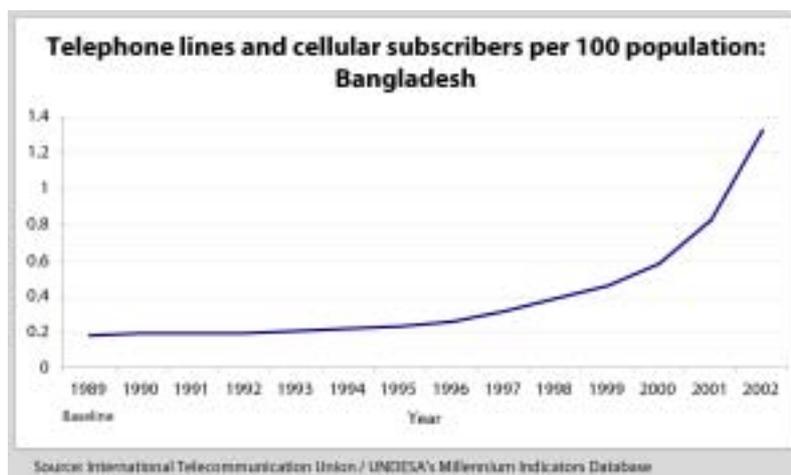
A major issue that the revised NDP will have to confront is the globally relevant matter of price control of essential drugs as there is growing pressure from national pharmaceutical manufacturers to lift such controls.

Target 18: In co-operation with the private sector, make available the benefits of new technologies, especially information and communication

Situation Analysis

After near stagnation in the growth of telecommunication subscribers, a marked increase was seen from the late 1990s to the early 2000s. This surge is mainly due to the advent of cellular telephony in Bangladesh and the almost exponential increase in the number of cellular telephone subscribers.

Bangladesh's cellular phone subscribers outnumber the fixed line subscribers and have a compound annual growth rate (CAGR) of 110.5 percent, a figure that is almost three times the global average. This statistic reflects the high demand for telecommunication services, and one that is not being catered to by the fixed line operator. In spite of its annual growth rate being almost double that of global average, the state-owned fixed line telephone company (the only one in the fixed-line segment) is constantly struggling to meet the increasing demands for its services.

Telephone lines and cellular subscribers per 100 population: Bangladesh

Source: International Telecommunication Union / UNDESA's Millennium Indicators Database

Main Lines and Cellular Telephone subscribers per 100 population: South-Central Asia													
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Maldives	2.93	3.48	3.78	4.30	4.98	5.67	6.13	7.58	8.33	9.51	11.92	16.83	25.29
Sri Lanka	0.74	0.77	0.83	0.96	1.22	1.47	1.86	2.55	3.85	5.07	6.47	7.99	9.58
India	0.60	0.67	0.77	0.89	1.07	1.30	1.58	1.96	2.32	2.85	3.56	4.38	5.19
Pakistan	0.75	0.97	1.05	1.26	1.47	1.70	1.90	2.08	2.27	2.43	2.41	2.89	-
Bhutan	0.37	0.49	0.56	0.70	0.81	0.90	1.01	1.04	1.64	1.82	2.15	2.60	2.84
Nepal	0.32	0.35	0.36	0.37	0.38	0.41	0.54	0.66	0.98	1.18	1.24	1.39	1.51
Bangladesh	0.20	0.20	0.20	0.21	0.22	0.24	0.26	0.32	0.39	0.46	0.58	0.83	1.32

Source: International Telecommunication Union / UNDESA's Millennium Indicators Database

Selected Telecommunications Indicators: World		
	CAGR (1997-2002)	% of total telephone subscribers (2002)
Cellular	40.2	51.6
Fixed Line	6.7	-

Source: International Telecommunication Union 2003

Selected Telecommunications Indicators: Bangladesh				
	Subscribers ('000)		CAGR (1997-2002)	% of total telephone subscribers (2002)
	1997	2002		
Cellular	26.0	1075.0	110.5	61.2
Fixed Line	368.0	682.0	13.1	-

Source: International Telecommunication Union 2003

From the base year 1990 until 2002 there has been a nearly 600 percent growth in the sector as a whole. Although this growth figure is encouraging, the telecommunication reach, in terms of per 100 population for Bangladesh, still remains one of the lowest in the region. One of the underlying reasons for this low figure is the high population base compared to smaller South-Central Asian countries.
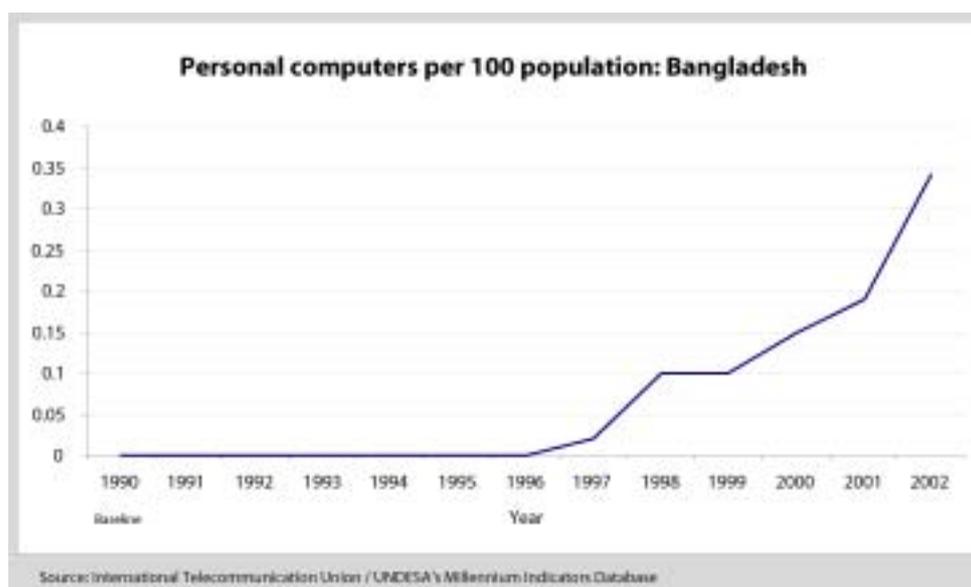

Source: International Telecommunication Union / UNDESA's Millennium Indicators Database

Personal Computers in use per 100 population: South-Central Asia													
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Maldives	-	-	-	-	-	1.23	1.40	1.57	1.74	1.89	2.04	2.19	3.58
Bhutan	-	-	-	-	-	-	-	-	0.39	0.46	0.76	1.04	1.45
Sri Lanka	0.02	0.04	0.06	0.08	0.10	0.11	0.34	0.42	0.50	0.57	0.73	0.93	1.32
India	0.03	0.04	0.05	0.06	0.09	0.13	0.16	0.21	0.27	0.33	0.45	0.58	-
Pakistan	0.13	0.17	0.21	0.24	0.28	0.35	0.36	0.37	0.43	0.43	0.42	0.41	-
Nepal	-	-	-	0.05	0.08	0.12	0.17	0.21	0.23	0.27	0.31	0.35	-
Bangladesh	-	-	-	-	-	-	-	0.02	0.10	0.10	0.15	0.19	0.34

Source: International Telecommunication Union / UNDESA's Millennium Indicators Database

The diffusion of personal computers into the Bangladesh user market started in the mid 1990s and progressed at a rate slower than in other countries in the region. From a historical perspective the first main frame computer was introduced in the country in 1968 and the first PC was purchased in 1981. High cost and limited access to technology slowed the diffusion of PCs in the country.

The recent increase in PC density was due to improvement of computing technology leading to worldwide drop in price, and the Government's withdrawal of all forms of taxes and duties from this sector. Further Government reforms to promote this sector include the formation of the Bangladesh Telecom Regulatory Commission, and opening up of the fixed phone market to private entrepreneurs.

Source: International Telecommunication Union / UNDESA's Millennium Indicators Database
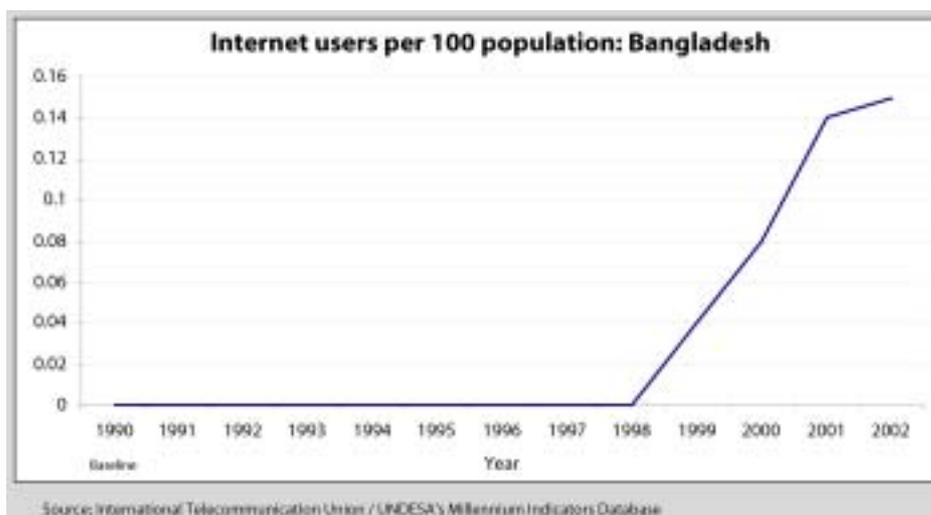
Internet users per 100 population: South-Central Asia													
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Maldives	0	0	0	0	0	0	0.23	0.31	0.58	1.14	2.23	3.65	5.38
Sri Lanka	-	-	-	-	0	0.01	0.06	0.17	0.30	0.35	0.66	0.80	1.06
Bhutan	-	-	-	-	-	-	-	-	-	0.11	0.34	0.74	1.45
India	-	-	0	0	0	0.03	0.05	0.07	0.14	0.28	0.54	0.68	-
Pakistan	-	-	-	-	-	0	0	0.03	0.05	0.06	0.21	0.34	-
Nepal	0	0	0	0	0	0	0	0.02	0.07	0.16	0.22	0.26	-
Bangladesh	-	-	-	-	-	-	-	0	0	0.04	0.08	0.14	0.15

Source: International Telecommunication Union / UNDESA's Millennium Indicators Database

Challenges

Challenge 1: Improving technology infrastructure

Bangladesh went "online" in mid-1996, at around the same time as most South-Central Asian countries. Reliance solely on satellite solutions, has however, translated into limited bandwidth and slow access speeds.

To circumvent such problems, in the third quarter of 2005, Bangladesh will be connected to the global fibre optic link through the submarine cable consortium. To distribute this huge bandwidth the Bangladesh Telegraph and Telephone Board is actively considering some action plans under a project that will connect the national network with the global Internet backbone via high speed fibre optic link.

This however, will not be sufficient and concerted efforts need to be taken to oversee a planned growth of private sector (telecom operators) based on submarine cable for optimum utilisation of this national reserve.

Challenge 2: Increasing PC diffusion

The growth of Internet users is further impeded by a number of factors, that include low PC diffusion in the country; low literacy rate; lack of infrastructure such as tele-density for Internet connections; lack of localized content and operating system. Internet reach is however steadily increasing mainly due to the proliferation of cyber-cafés and kiosks, especially in the rural areas.

Footnotes:

[1] Target 14 is not relevant for Bangladesh.

[2] Global Development Finance 2003

[3] World Bank. *World Development Indicators 2003*

[4] World Bank. *Global Development Finance 2003*

[5] The indicators examined are: Proportion of exports admitted free of duties and quotas; Average tariffs and quotas on agricultural products and textiles and clothing; Domestic and export agricultural subsidies in OECD countries; Proportion of ODA provided to help build trade capacity.

[6] World Bank.*Global Economic Prospects 2004*

[7] Debt service as a percentage of exports of goods and services

[8] Here, youth labour is defined as those persons in the labour force in the age group of 15-29 years.

[9] One should, however, note that there are some inherent problems in classifying sectoral composition and occupational pattern of employment. For example, the classifications are based on principal occupational category rather than actual allocation of time to different activities in case of multiple occupations that seems to be a very common practice under the existing realities of the labour market in Bangladesh.

[10] Among others, one factor that may have contributed to the high unemployment rate of the educated youth is that the educated youth are less likely to move into the 'discouraged workers' category and withdraw from the labour force. They are more likely to seek employment and not discouraged just because their unemployment rate is high relative to other working age populations since the group belongs to the earlier stage of their life cycle.

[11] See Technical Notes for details on the projection assumptions.

[12] It may be mentioned here that the projection of the labour force is a complicated exercise which involves, among others, the estimation of the participation rate, that is, the ratio of the labour force to the population in the working age group. In practice, the participation rate is not exogenous as the ratio tends to increase in a period of rising labour demand and fall when the demand for labour rises slowly. In this case, the average rate has been used and the estimates should be taken as an order of magnitude rather than precise ones.

[13] WHO Global Action Program on Essential Drugs defines essential drugs as those drugs that satisfy the health care needs of the majority of the population.

[14] 1997 is the baseline year selected for this target.

The SHD Simulation Model - An Overview

The SHD modelling system is an instrument to account for *sustainable human development (SHD)* interventions and impacts at the meso and macro level of the economy. Using state-of-the-art modelling technology, it provides the Government and other stakeholders with consistent numerical information for assessing interrelated economic trends, evaluating development options and framing national policy. This task is accomplished using high-resolution mathematical models based on *consistent country data* within a simulation environment which tracks process change in time intervals from six-months out to multi-year long-run processes. The current version of the SHD model, developed for Bangladesh, has the functionality to focus on the following issues:

- Assessing long-term growth prospects, its required resource envelope and constraints
- Growth process analysis, targeting employment and unemployment
- Reduction of poverty and income disparity by location
- Circular flows for income-expenditure, investment-savings and other major macro variables
- Population stabilization and its interrelated issues
- Impacts of income and population growth on poverty levels and per capita entitlement incomes
- Natural disaster impacts (floods, etc.) on depletion of capital stock and the effects of such impacts on production processes
- Infant mortality, under five mortality and life expectancies
- Education issues, their cost effectiveness, inter-sectoral impacts, access to primary and secondary education by gender, implication of achieving the goals for female primary teachers
- Developing time frames for achieving literacy targets by gender.

The SHD modelling system like other planning models builds a dynamic computable general equilibrium module (CGE) on a balanced and consistent *input-output framework* and a consistent *social accounting matrix* (SAM). These are the foundations of a *consistency framework*. However, unlike most planning models, the SHD modelling system includes a dynamically linked cohort-component demographic module that provides inputs to the economic CGE module and computes distribution outcomes over time[1].

Currently the SHD modelling system con-sists of eight major component modules, each built from one or more sub-models. These modules are (1) income distri-bution and poverty module; (2) an economic module; (3) dynamic social accounting matrix module; (4) dynamic multiplier module; (5) population dynamics module; (6) education module; (7) poverty and distribution module; and (8) the MDG module. A menu driven user interface with on-screen prompts has been devel-oped for basic operation of the SHD system.

One of the novel features of the SHD modelling system is that all the outcomes are derived from a consistency framework. For Bangladesh, the model-generated information accurately replicates historical national account data up to 1998 and then projects outcomes from alternative policy interventions within a consistency framework over medium to long-term periods. The system thus allows the authority to analyse and monitor outcomes under alternative policy interventions. The novel features of the system are outlined below:

- The model outputs are consistent over time
- Its structure is modular, inter-linked and dynamic
- It validates known history with accuracy and projects future conditions across alternative development pathways (scenarios).

Theoretical Foundations

The SHD model is based on existing and well-established theories and economic models, which are widely acknowledged in academia and with practitioners in the field. The SAM, CGE and cohort-component population models as well as models regarding household consumption patterns, income distribution patterns and the entrance-dropout education models are all well known and respected in the field. Equations used in the SHD modelling system are specified according to this theoretical foundation.

Data Requirements

The SHD modelling system uses the following data:

- Primary data, such as population census information, demographic surveys, household expenditure surveys, labour force surveys, education surveys, health surveys, etc.
- Secondary data, such as national accounts, monetary statistics, financial statistics, price statistics, trade statistics, balance of payments statistics, etc.
- Derived data, such as SAM's and Input-Output Tables.

The SHD modelling system has been developed in a step-wise manner with various 'modules', starting initially with consistent demographic and social accounts modules (including a balanced Input-Output Table) that form the two principal databases on which the SHD model constructed. As data permits, additional modules can be added to the SHD modelling system.

Parameters used in the SHD model are estimated from primary and secondary data. These include price elasticities, mapping from households to activities, propensities for groups to save and consume, productivity, fertility rates, infant mortality rates, under-five mortality rates, school enrolment and dropout rates, and labour force participation rates.

The Model Structure and Feedback Mechanisms

The following figure provides an overview of the principal feedback mechanisms captured in model specification.

SHD MODEL ver 2: Coupled Economic and Demographic Systems
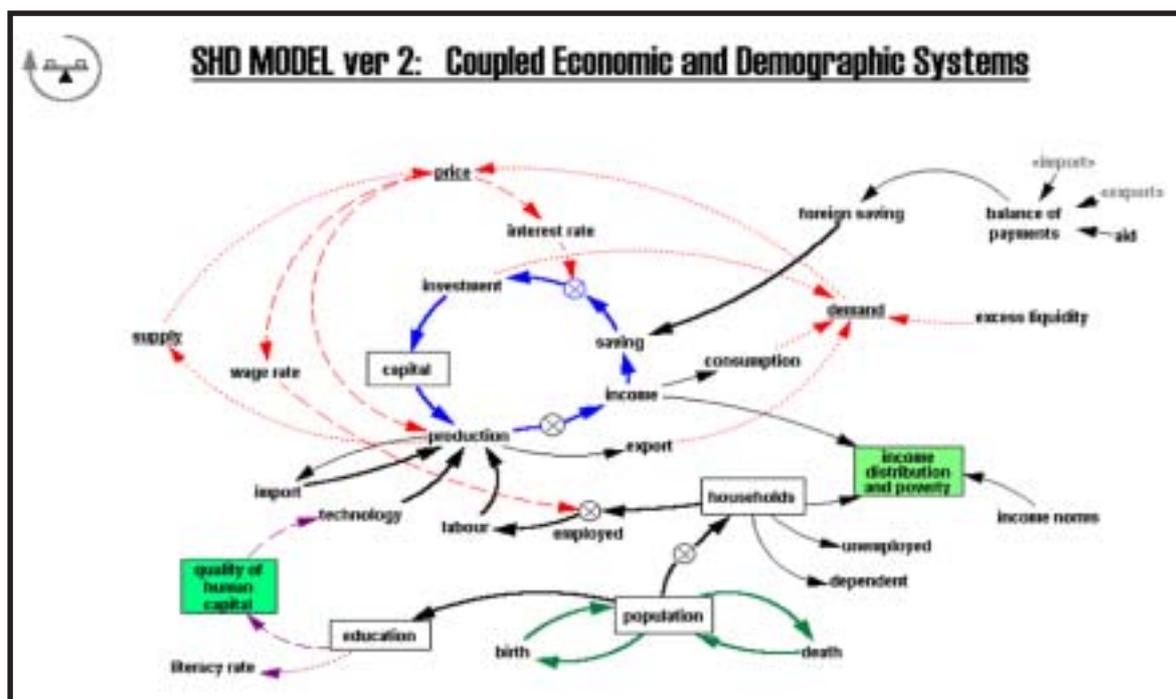
The blue circle depicts *production*, powered by labour and capital along with technology and imports that generate income, which is then used for consumption and any balances are saved. Then, foreign savings are combined with domestic savings and are mapped to investments and capital formation, which is channelled back to production. This feedback mechanism is embedded in the SHD model. Distinction is made between the variables on the circle. The former are termed jointly dependent or endogenous and the rest are predetermined or exogenous variables. The SHD model specification and properties may vary depending on this classification. Macro models are often used to compute the investment requirements for alternate growth paths. This requires 'solving' the model for the endogenous variables given feasible values of the exogenous variables, such as labour or technology, which are determined outside the model. In general equilibrium models, the demand-supply balance for each activity sector endogenously generates the price signals. The supply and demand balance is checked for each interval of time for which the model is solved.

In various ways these price signals influence economic decisions for the chosen time interval.

The SHD model includes two major feedback systems – an economic system and a demographic system. The latter is specified as a *cohort-component model* with rural-urban migration and annual age cohorts (0 to 80) disaggregated by gender. Consequently, it is possible to:

- Map populations to multiple household categories, nine different categories were considered in Bangladesh
- Refine the specification of labour supply to include labour force participation decisions by household category

- Allocate available labour supply to labour demand in various production activities depending on wage rates and other labour market characteristics
- Derive income and income distribution by household category and by 40 subgroups within each category in an ascending order of average income
- Link the education module with the demographic module to compute the number of persons with primary (formal and non-formal), secondary and adult education. These computations lead to the overall literacy rate. In turn, the literacy rate may linked to labour by skill categories and refinements in specification of production functions.

There are at least two important links emanating from education. The first concerns the quality of the skilled labour force and the associated refinements of production functions. The second, to the more informed choices and decisions about family size and child survival.

Human development includes, at a minimum, education and health. Modelling 'health' development would require embedding another module in the SHD model relating to the issues of force-of-infection, nutrition, morbidity, health services, health status and mortality. These concerns impact human well-being, directly and often with multiplier effects.

Inadequate nutrition (the *'poverty of consumption'*) is associated with inadequate income. As well, food security considerations play an important role in managing an overall security net for vulnerable groups. Within the SHD model, both issues (nutrition and income) suggest the need for policy interventions. Addressing this would require extension of the distribution module to include nutritional status by household categories.

Environmental balances require estimating the emission of 'green house gasses' linked to production, household consumption and unwanted imports. Production also contributes to natural resource depletion. Future versions of the SHD model will include extensions to the environment, along with an account for household wastes.

The Millennium Development Goals

MDG 1

Regional Dimensions of Poverty in Bangladesh

The incidence of poverty and progress in poverty reduction vary considerably across regions. Aside from the tendency of urban households to be better off than rural ones, large differences in poverty incidence also occur across regions and between urban and rural areas within those regions. The Dhaka administrative division had the lowest poverty incidence (44.8%) in 2000 while Rajshahi division had the highest incidence (61%) (Table 1.2). Progress in poverty reduction was also unequal across regions, with rapid progress in Dhaka and virtual stagnation in Chittagong division. The rapid reduction in poverty in Dhaka division is not surprising, given Dhaka's importance as the administrative, political and financial center of the country. In fact, one of the likely reasons why poverty in the Dhaka division did not decline even more may have been the influx of poor migrants from other parts of the country.

Regional Trends in Poverty				
	Poverty Headcount Rate (percent)			Annual Growth in mean
	1991-92	2000	Change	per-capita expenditures (percent)
All Divisions	**58.8**	**49.8**	**-9.0**	**2.4**
Chittagong	46.6	47.7	1.1	1.5
Dhaka	59.3	44.8	-14.5	3.2
Khulna*	59.6	47.0	-12.6	2.1
Rajshahi	71.9	61.0	-10.9	2.4

*Including Barisal division
Source: BBS and World Bank staff estimates.

Absolute number of poor

The largest number of the country's poor live in Rajshahi (29%), closely followed by Dhaka (28%) and Chittagong (25%), while Khulna's share is lower (18%).

| Total Number and Regional Distribution of Poor in Bangladesh: 2000 HIES ('000)			
	Urban	Rural	Overall
All Divisions	**9263**	**53478**	**62741 (100%)**
Chittagong	2470	13455	15925 (25%)
Dhaka	3652	14064	17716 (28%)
Khulna*	1359	9756	11115 (18%)
Rajshahi	1783	16203	17985 (29%)

Regional incidence of malnutrition

Incidence of malnutrition in Bangladesh is geographically concentrated. Children, especially girls, in rural areas have a higher incidence of malnutrition than those in urban areas. 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 rates of child malnutrition are found in the urban areas of Dhaka and Khulna division – roughly half the levels in rural Barisal and Patuakhali. This regional concentration of malnutrition calls for geographical targeting of nutritional interventions for accelerated and rapid reduction in child malnutrition.

MDG 2

The various data sources on primary school enrolment and completion rates vary within a range. The SHD simulation model was applied to this range within a 2% upper and lower bound. The following graphs and tables illustrate the required trends between 2005 and 2015 in enrolment and completion rates to achieve MDG 2 by 2015.
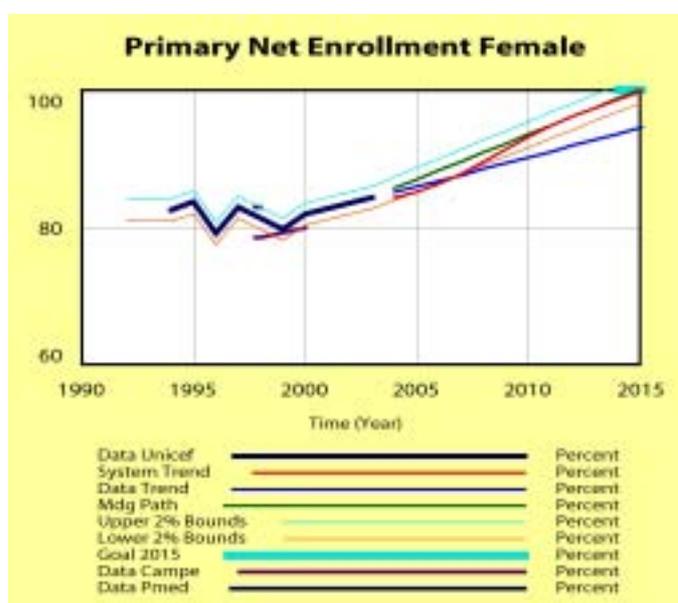
Time (Year)	1993	1996	1999	2002	2005	2008	2011	2014	2015
Primary Net Enrolment – Female									
Data Unicef	--	79.05	79.7	--	--	--	--	--	--
System Trend	--	--	--	--	85.12	89.57	94.73	98.52	99.66
Data Trend	--	--	--	--	85.91	88.4	90.95	93.58	94.47
Mdg Path	--	--	--	--	86.91	90.84	94.76	98.69	100

Units: Percent
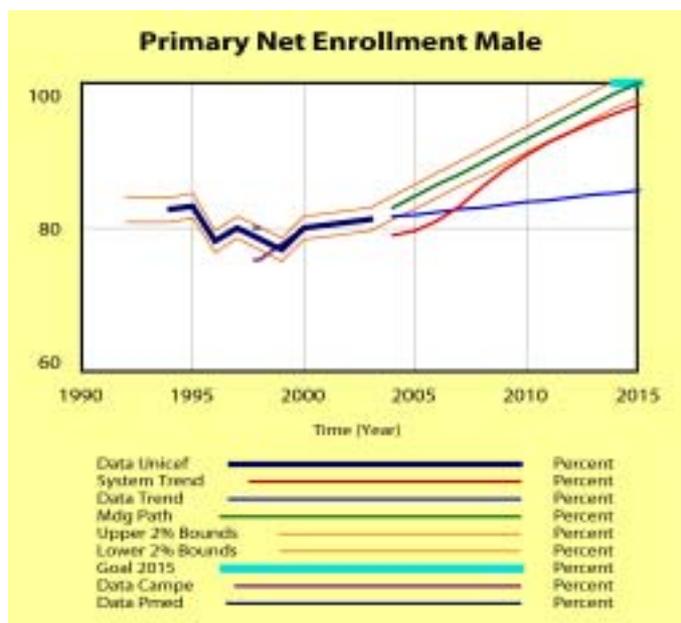
Time (Year)	1993	1996	1999	2002	2005	2008	2011	2014	2015
Primary Net Enrolment – Male									
Data Unicef	--	78.01	76.9	--	--	--	--	--	--
System Trend	--	--	--	--	79.52	85.62	92.16	96.68	98.07
Data Trend	--	--	--	--	81.75	82.73	83.73	84.74	85.08
Mdg Path	--	--	--	--	84.24	88.96	93.69	98.41	99.98
Upper 2% Bounds	84.06	79.57	78.43	82.31	85.93	90.74	95.56	100.38	101.98
Lower 2% Bounds	80.77	76.45	75.36	79.08	82.56	87.19	91.81	96.44	97.98
Goal 2015	--	--	--	--	--	--	--	99.98	99.98
Data Campe	--	--	--	--	--	--	--	--	--
Data Pmed	--	--	--	--	--	--	--	--	--

Units: Percent
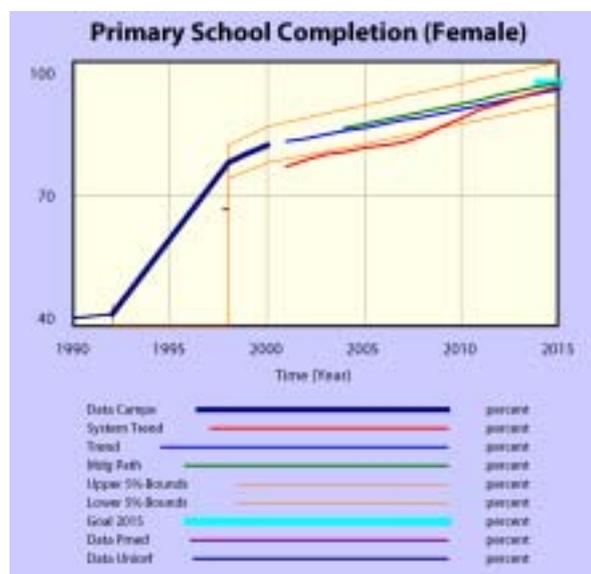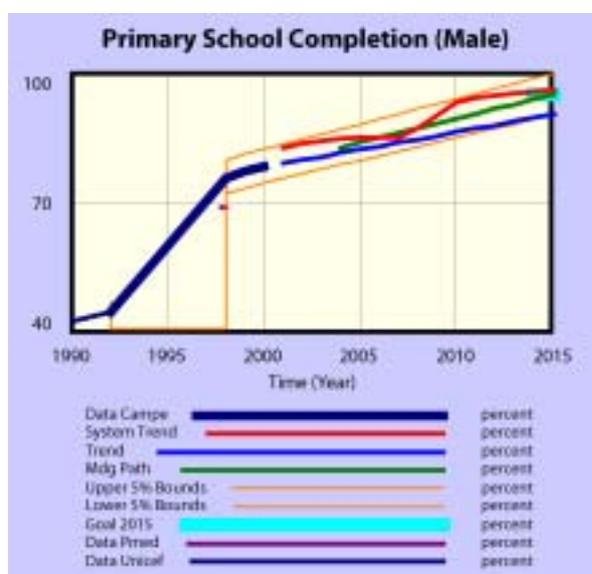
Costing Education

Within the modular SHD modelling system, the population outlooks of the demographic module, and the economic outcomes of the economic module, are integrated with specific costing and financing parameters developed to allow the *costing module* to analyse impacts on a target programme's coverage, cost and financing needs. As all the necessary parameters were available for primary education, the costing exercise was conducted only for MDG 2.

Three different population stabilization scenarios and a 'trend and investment' scenario were used for costing education. The financing was derived from three primary sources – households, government and external. Total household education expenditures, across nine representative household groups[2], were used to derive that sectors contribution to the total programme cost. The contribution of the national government to the programme cost is estimated from the total government budget for education expenditure.

The expenditure on education is generally composed of different types of education, i.e. primary, secondary and higher education. For the purpose of this analysis, the specific share for primary education by each of the nine household groups derive that household's contribution towards financing the Goal 2 programme cost. It is assumed that a household's primary education spending share, out of their total education expenditure, declines for the well-off household groups compared to the less well-off households[3]. It is assumed that the Government spends half its education expenditure on the primary education system. The external resource requirement is then derived by deducting domestic contributions (household and Government) from the total programme cost.

The unit cost estimates for capital and variable cost types are obtained from the Bangladesh country study prepared by the Bangladesh Institute of Development Studies (BIDS)[4]. Options that vary the unit costs by types and sex for each year are incorporated into the Goal 2 costing module. The variation options accommodate such changes as general price levels and exchange rates.
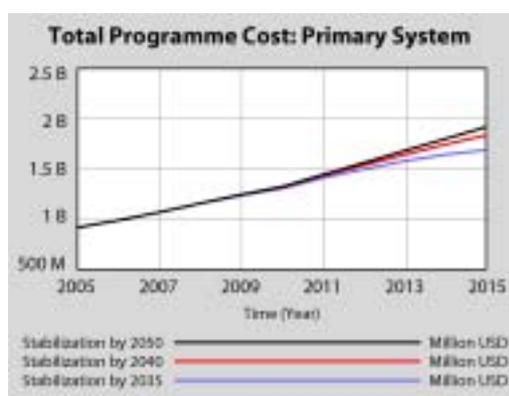
The analysis of the external finance need is based on three associated estimates; (1) Programme coverage (i.e. outcomes of demographic performance-population stabilization); (2) Total programme cost (i.e. based on school size and unit capital and variable costs-obtained from 'Millennium Project'); (3) The total contribution of domestic institutions such as households and national government (i.e. based on 'trend' economic scenario and assumed expenditure shares for primary education by household groups and the government).

The external resource requirement is then derived by deducting domestic contributions (household and government) from the total programme cost. It is relevant to note that the resource requirements from external sources may vary due to the following factors:
1. Variations in school population size due to different population stabilization periods.
2. Variations in total programme cost due to changes in capital and variable unit costs and/or changes in primary school size.
3. Variations in the contribution of domestic institutions (i.e. households and government) due to differential performance of the economy and/or changes in an institute's contribution pattern.

Programme Cost

The bases of the programme, sorted by gender, are derived from the population stabilization scenarios. The unit cost of the primary education system, by capital and fixed cost types, is obtained from the 'Millennium Project' report on Bangladesh. The unit costs by type (capital and variable) are then applied to primary school sizes by sex to calculate total programme costs by types and sex for the period 2005 to 2015. It is noted that possibilities for variations in the unit cost are incorporated in the costing module, along with variation options that are incorporated to accommodate changes in general price levels and exchange rates within the larger economy.

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Programme Cost: Primary System											
Stabilization by 2050	927.97 M	997.33 M	1.077 B	1.164 B	1.249 B	1.329 B	1.449 B	1.567 B	1.684 B	1.802 B	1.923 B
Stabilization by 2040	927.97 M	997.33 M	1.077 B	1.163 B	1.246 B	1.322 B	1.436 B	1.544 B	1.648 B	1.749 B	1.848 B
Stabilization by 2035	927.97 M	997.33 M	1.077 B	1.162 B	1.242 B	1.312 B	1.415 B	1.505 B	1.580 B	1.644 B	1.696 B

Units: Million US$

Financing of Program Costs

In accordance to the 'Millennium Project' approach, it is envisaged that the total programme cost would be financed from three sources (institutions). These are households, national government (domestic financing) and external sources.
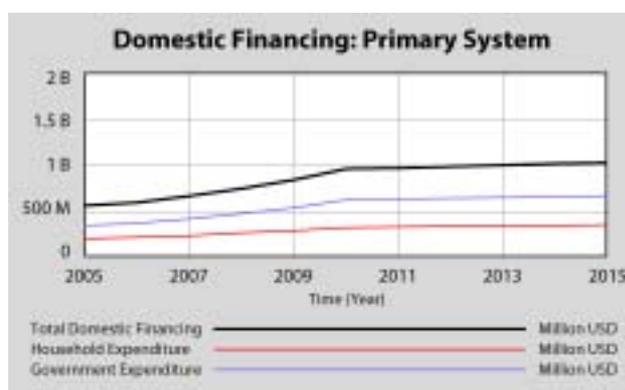
The outcomes of the SHD modelling system's economic module (i.e. the computable general equilibrium model) have been used to derive the contribution of the domestic institutions towards the financing of Goal 2. The expenditure on education is composed of different types of education, e.g. primary, secondary and higher education. Household expenditures on education are calculated across nine representative household groups. For the purpose this analysis, the sum of the specific share for primary education by each of the household groups derives the household contribution. Within the Bangladesh context, it is assumed that the share of primary education spending by households (out of their total education expenditure) declines for the well-off household groups compared to their less well-off counterparts.

The government's contribution to primary system is calculated assuming that the government spends half of its education expenditure on the primary system (case specific to Bangladesh). Again, the performance of the general economy will affect the government contribution to financing Goal 2.

Deducting domestic contributions from the total programme cost then derives the external resource requirement. It is relevant to note that resource requirements from external sources may vary due to following factors:

1. Variations in school population sizes due to different stabilization periods.
2. Variations in total programme cost due to changes in capital and variable unit costs and/or changes in primary school sizes.
3. Variations in contribution of domestic institutions (i.e. households and government) due to differential performance of the economy.

Domestic Financing

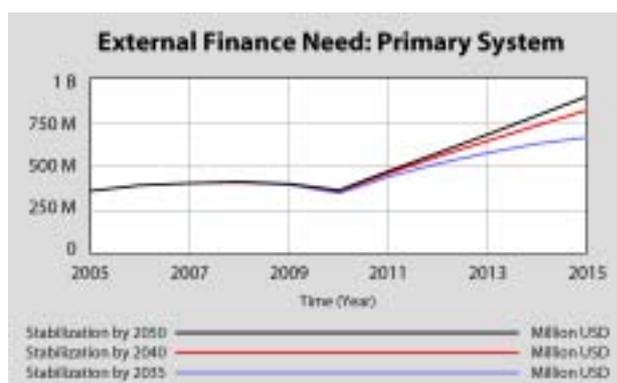| Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Domestic Financing: Primary System											
Total Domestic Financing	564.02 M	601.06 M	671.29 M	751.36 M	845.20 M	960.82 M	974.73 M	988.65 M	1.002 B	1.016 B	1.030 B
Household Expenditure	211.75 M	222.54 M	245.20 M	270.67 M	298.94 M	331.40 M	337.30 M	343.20 M	349.11 M	355.01 M	360.91 M
Government Expenditure	352.27 M	378.51 M	426.09 M	480.68 M	546.26 M	629.42 M	637.43 M	645.44 M	653.45 M	661.46 M	669.47 M

Units: Million US$

Since, households and national government spending on primary education is calculated from the trend economic scenario, domestic financing under the three population stabilization scenarios would remain the same. It suggests a plateau of domestic contribution as the time frame approaches 2010[5].

Decomposition of Household Financing

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Household Financing											
Total Household Expenditure	211.75 M	222.54 M	245.20 M	270.67 M	298.94 M	331.40 M	337.30 M	343.20 M	349.11 M	355.01 M	360.91 M
Rural Household Categories											
Landless	777,557	817,662	900,474	990,225	1.085 M	1.186 M	1.186 M	1.186 M	1.186 M	1.186 M	1.186 M
Marginal Farmer	18.71 M	19.74 M	21.82 M	24.09 M	26.55 M	29.26 M	29.26 M	29.26 M	29.26 M	29.26 M	29.26 M
Small Farmer	29.08 M	30.64 M	33.77 M	37.15 M	40.68 M	44.31 M	45.78 M	47.26 M	48.74 M	50.21 M	51.69 M
Large Farmer	21.96 M	23.17 M	25.60 M	28.27 M	31.13 M	34.28 M	34.28 M	34.28 M	34.28 M	34.28 M	34.28 M
Non-Farm HH	56.29 M	59.36 M	65.57 M	72.47 M	80.00 M	88.51 M	92.93 M	97.36 M	101.78 M	106.21 M	110.64 M
Urban Household Categories											
Illiterate	26.02 M	27.40 M	30.28 M	33.56 M	37.30 M	41.82 M	41.82 M	41.82 M	41.82 M	41.82 M	41.82 M
Low Education	27.37 M	28.65 M	31.49 M	34.72 M	38.42 M	42.86 M	42.86 M	42.86 M	42.86 M	42.86 M	42.86 M
Medium Education	13.44 M	13.95 M	15.21 M	16.77 M	18.65 M	21.01 M	21.01 M	21.01 M	21.01 M	21.01 M	21.01 M
High Education	18.05 M	18.78 M	20.51 M	22.61 M	25.09 M	28.13 M	28.13 M	28.13 M	28.13 M	28.13 M	28.13 M

Units: Million US$

External Financing

The observed variations in external resource requirements are due to the variations in total programme cost associated with three population stabilization scenarios. Largest external cost requirement is found for the population stabilization at 2050 and lowest requirement is observed for the population stabilization at 2035.
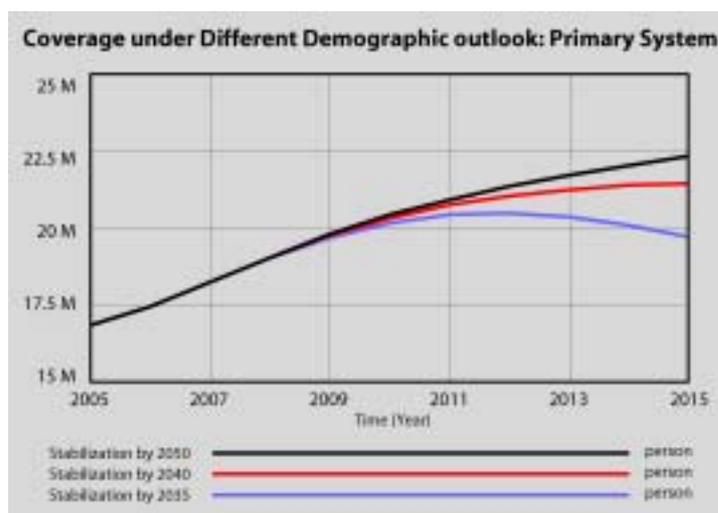

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Domestic Financing: Primary System											
Stabilization by 2050	363.94 M	396.27 M	406.13 M	412.85 M	404.22 M	368.88 M	475.04 M	578.81 M	681.91 M	786.14 M	892.87 M
Stabilization by 2040	363.94 M	396.27 M	406.08 M	412.10 M	400.92 M	361.85 M	462.09 M	556.30 M	645.92 M	733.15 M	818.39 M
Stabilization by 2035	363.94 M	396.27 M	406.03 M	411.32 M	397.00 M	351.85 M	441.14 M	516.65 M	578.43 M	628.35 M	665.83 M

Units: Million US$

Programme Coverage

The primary school sizes under the three population stabilization scenarios are derived from the 80 age-cohort demographic module within the SHD modelling system. The school-age classes VI-X constitute the primary school population size. In line with expectations, it is found that the size of the primary school population is significantly lower if a general population stabilization occurs in 2035, compared to stabilizations at 2040 and 2050. The variations in the size (i.e. base or coverage) would have implications on the total cost and financing requirements. The larger the size of primary school the larger is the programme cost, and hence the financing requirements.

Coverage under Different Demographic outlook: Primary System

Time (Year)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Coverage under Different Demographic outlook: Primary System											
Stabilization by 2050	16.87 M	17.49 M	18.26 M	19.08 M	19.83 M	20.45 M	20.95 M	21.35 M	21.70 M	22.03 M	22.36 M
Stabilization by 2040	16.87 M	17.49 M	18.26 M	19.07 M	19.77 M	20.34 M	20.76 M	21.04 M	21.24 M	21.38 M	21.49 M
Stabilization by 2035	16.87 M	17.49 M	18.25 M	19.06 M	19.71 M	20.19 M	20.46 M	20.50 M	20.37 M	20.10 M	19.72 M

Units: Million

The performance interdependence between one specific programme on the outcomes of other programmes is determined by the size differences of the primary schooling needs under the three population stabilization scenarios. Therefore the success of any population programme has direct impact on the coverage (base), cost and financing requirements of the primary school system. The benefits of faster population stabilizations are evidenced by a lower size of primary education programme.

MDG 8 – Target 16

Decent Employment for Youth: Concept and Indicators

The ILO describes decent work as 'opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity'[6]. In addition to being an important objective in its own right and a means of ensuring human rights, decent work is fundamental to promoting sustainable development and ensuring poverty reduction in a country like Bangladesh. The conceptual underpinning of decent work can be elaborated in terms of six dimensions[7]. These may be summarised as follows:

Opportunities for work: All persons (women and men) who want work should be able to find work. In this respect, the underlying concept of work is a broad one encompassing all forms of economic activity including self-employment, unpaid family work and wage employment in both formal and informal sectors.

Work in conditions of freedom: This dimension requires that work should be freely chosen and not forced on individuals along with the condition that certain forms of work are not acceptable e.g. bonded labour, slave labour and child labour. Also workers should have the freedom to join workers organisations.

Productive work: It is essential for the workers to have acceptable livelihoods as well as to ensure sustainable development and competitiveness of enterprises.

Equity in work: There should be fair and equitable treatment and opportunity in work, absence of discrimination at work and in access to work, and the worker shall have the ability to balance work with family life.

Security at work: The conditions should be mindful of the need to help safeguard health, pensions and livelihoods, and to provide adequate financial and other protection in the event of health and other contingencies. This also recognises the worker's need to limit insecurity associated with the possible loss of work and livelihood.

Dignity at work: The workers should be treated with respect at work, and be able to voice concerns and participate in decision-making about working conditions. Worker's freedom to represent their interests collectively is also an essential ingredient of ensuring dignity.

It may be noted here that the first two dimensions (e.g. work opportunities and freedom of choice) are primarily concerned with availability and acceptable scope of work. On the other hand, the remaining four dimensions (productive work and equity, security and dignity at work) define the quality of employment. Taken together, these dimensions highlight the comprehensive nature of the concept of decent work and the need to adopt a set of indicators that can measure the changes in relevant indicators over time and monitor progress in its entirety. In addition, the concept of decent work has significant gender implications in Bangladesh since women constitute a vast majority of the labour force, particularly youth labour in many sectors (e.g. readymade garments industries), and women are usually the worst victims of failures to ensure decent work conditions.

Of necessity, the specification of statistical indicators of decent work in Bangladesh should be taken as an on-going activity mainly due to two reasons: *first,* decent work is a multi-dimensional concept that includes different characteristics covering, among others, the level, pattern, sustainability and other qualitative dimension of work which should be defined in a context-specific manner; and *second,* the traditional focus of employment data till now mostly covers the employment-unemployment dimensions which does not reveal much regarding the comprehensive characteristics and different dimensions of decent work.

One approach proposed by Anker et. al. (2002) is to adopt eleven groups of indicators for monitoring decent work comprising of: employment opportunities; unacceptable work; adequate earnings and productive work; decent hours; stability and security of work; combining work and family life; fair treatment in employment; safe work environment; social protection; social dialogue and workplace relations; and economic and social context of decent work[8]. Obviously, the suggested groups cover a wide range of decent work concerns and inclusion of additional indicators and/or refining the proposed indicators – keeping the country concerns and data availability in view – will provide a useful framework to measure and monitor decent work.

Decent Work Indicators for Youth Labour in Bangladesh

The operationalization of a framework encompassing all relevant decent work indicators, however, will be a time consuming process in Bangladesh. The monitoring of decent work indicators for youth labour covering the entire range of dimensions would depend, in addition to availability of relevant data, on arriving at an agreed set of country-specific indicators that can capture these dimensions. Obviously, the process needs to recognize Bangladesh's labour market and other socioeconomic characteristics and arrive at the indicators that, at the end, would probably reflect some compromise between conceptual rigor and practical application due to constraints in data availability and institutional and other limitations.

The present study examines the available data relating to youth labour in Bangladesh and provides the present status and future challenges relating to the unemployment rate of youth labour, the proposed decent work indicator by the ILO. It should, however, be emphasized that there is a need for arriving at a set of indicators covering different dimensions of decent work. This would require further refinements in the available indicators based on existing realities along with achievable improvements and possible widening of scope to cover relevant features in the collected data. In addition, the process needs wider interactions among the relevant stakeholders to arrive at a consensus on the conceptual basis and specific indicators that would be realistic in the case of Bangladesh.

Similarly, since the indicators would cover the youth labour force, the youth population needs to be specifically defined for the purpose. In this context, it is worth noting that the definition of youth labour is subject to varied interpretation in Bangladesh. The ILO practice is to adopt the 15-24 year olds as the youth as a universal measure. In Bangladesh, however, the youth population has experienced changing definitions. For example, 1999/2000 Labour Force Survey treats the age group of 15-29 years as comprising the youth labour force while the recently framed National Youth Policy 2003 considers all people in the age group of 18-35 years as belonging to the youth population[9].

Employment Projections

Employment projections are sensitive to growth assumptions that we make for the period. As a major tool of reducing poverty, our concern here is employment generation which is growth-induced since only growth can ensure sustained expansion of productive and remunerative employment. For achieving the MDG relating to income poverty reduction and considering the observed growth elasticity of poverty reduction, Bangladesh's poverty reduction strategy maintains that '... *if the goal of reducing the incidence of national poverty prevailing in the year 2000 by half is to be achieved by 2015 then Bangladesh needs to sustain a GDP growth rate of about 7 percent per year over the next 15 years'*. In view of the need to accelerate growth, the projections use two alternative growth rates – around 6 and 7 percent per year till 2015.

Based on plausible assumptions, the results of two alternative projections for the labour market are presented in Table 8.14. Two different scenarios of future growth and employment elasticities have been illustrated. In Scenario 1, GDP growth rate of 6.1 percent per year is assumed for the period until 2015 along with somewhat moderate values of sectoral employment elasticities (agriculture 0.3, industry 0.4 and services 0.9). The sectoral growth rates reflect both the historical pattern and the needed acceleration that would be required to attain higher overall growth. In this case, agriculture grows at a rate of 3.5 percent per year compared to a growth rate of 9 percent for industry and 6 percent for services. In Scenario 2, the higher GDP growth of 7.3 percent per year is mainly led by industry and services (industry and services growing by 11 and 7% respectively compared to 4.5% growth of agriculture). In this case, since growth is the overriding concern, lower sectoral employment elasticities have been assumed (agriculture 0.2, industry 0.1 and services 0.7). Still, these compare favourably with the observed values of employment elasticities during the 1990s which were 0.27 for agriculture, -0.11 for industry, 1.06 for services, and 0.31 in the aggregate.

For both the scenarios, an annual average growth of 2.5 percent for the labour force is assumed. This is marginally higher that the pace of growth of the working age population in the 1990s but less than that of the 1980s when the growth of the labour force reached nearly 3 percent.

Tracking Employment Growth and Labour Market (Million)

		Benchmark	Scenario 1			Scenario 2		
		2000	2005	2010	2015	2005	2010	2015
A.	Employed labour							
	Agriculture	32.6	34.0	35.8	37.7	33.8	35.3	37.0
	Industry	5.2	6.0	7.2	8.5	5.4	5.7	6.1
	Services	14.0	17.3	22.5	29.2	17.0	21.5	27.4
	Total	51.8	57.3	65.5	75.4	56.2	62.5	70.5
B.	Total labour force	53.5	59.1	67.0	75.7	59.1	67.0	75.7
C.	Unemployment rate (%)	3.2	3.0	2.2	0.4	4.9	6.7	6.9

The figures relate to labour force 15 years and over and uses the extended definition. Scenario 1 assumes a GDP growth rate of 6.1 percent per year along with somewhat of moderate values employment elasticities (agriculture 0.3, industry 0.4, and services 0.9). The sectoral growth rates are: agriculture 3.5 percent, industry 9.0 percent and services 6.0 percent. In Scenario 2, the implicit GDP growth rate is 7.3 percent per year (agriculture 4.5%, industry 11.0% and services 7.0%). In this case, however, higher economic growth is associated with lower employment elasticities (agriculture 0.2, industry 0.1 and services 0.7). It may be mentioned here that the observed employment elasticities with respect to real sectoral growth during the 1990s has been calculated at 0.27 for agriculture, -0.11 for industry and 1.06 for services[10].

Under both the scenarios, although agriculture will continue to be the major source of employment, its capacity to generate additional employment will decline.

Footnotes:

[1] The modelling platform is 'VENSIM', a fourth generation modelling and simulation environment that enables the development of large inter-linked dynamic models.

[2] The nine household groups are composed of five rural and four urban household types. The rural household groups are classified according to their primary occupation and land ownership; they are the landless, marginal farmer, small farmer, large farmer and non-agriculture. The urban households are classified by the educational status of the head of household. The four urban groups are classified as illiterate, low education, medium education and high education.

[3] For instance, heavily poverty-ridden households groups (i.e. landless, marginal and illiterate) may spend 90% of their education expenses on primary schooling. On the other hand, the corresponding share for richer household groups (i.e. high and medium educated and large farmer) may only vary between 30 to 40 percent.

[4] '*Millennium Development Goal Needs Assessment-Bangladesh Country Study*', a study prepared by Bangladesh Institute of Development Studies in collaboration with the Millennium Project Secretariat, 17 January 2004.

[5] Adjusting the economic module's time horizon to 2015 (instead of 2010) leads to a rise in government and household expenditure along the 'trend' scenario path. This is reflected as a rise in domestic financing over the 2010 to 2015 period, instead of the observed plateau for domestic financing during the same period.

[6] ILO, *Decent Work: Report of the Director General,* International Labour Conference, 87th Session.

[7] See, for example, Richard Anker, Igor Chernyshev, Philippe Egger, Farhad Mehran and Joseph Ritter, *Measuring Decent Work with Statistical Indicators,* Working Paper No. 2, Policy Integration Department, Statistical Development and Analysis Group, International Labour Office, Geneva, October 2002.

[8] For details, see Anker et. al., op. cit.

[9] See *Report of the Labour Force Survey Bangladesh 1999-2000,* Bangladesh Bureau of Statistics, Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka 2002 and *National Youth Policy 2003,* (in Bangla), Ministry of Youth and Sports, Government of the People's Republic of Bangladesh, Dhaka 2003.

[10] Source: Author's calculations.

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ACRONYMS

ADB	Asian Development Bank
API	Annual parasitic incidence
ARH	Adolescent reproductive health
ARH	Adolescents Reproductive Health
ARI	Acute respiratory infections
ARI	Acute Respiratory Infections
BBS	Bangladesh Bureau of Statistics
BCG	Bacilli Chalmette-Guerin
BDHS	Bangladesh Demographic and Health Survey
BIDS	Bangladesh Institute of Development Studies
BMI	Body mass index
BMMS	Bangladesh Maternal Mortality Survey
CAGR	Compound annual growth rate
CBD	Convention of Biological Diversity
CBN	Cost of basic needs
CCA	Common Country Assessment
CDD	Control of Diarrhoeal Diseases
CDIAC	Carbon Dioxide Information Analysis Centre
CEDAW	Convention for the elimination of discrimination against women
CFC	Chlorofluorocarbons
CGE	Computable general equilibrium
CHT	Chittagong Hill Tracts
CNS	Child Nutrition Survey
CO_2	Carbon dioxide
CPR	Contraceptive prevalence rate
CSO	Civil society organisation
DAC	Development Assistance Committee
DfID	Department for International Development (UK)
DoE	Department of Environment
DOTS	Directly Observed Therapy (DOTS combines five elements: political commitment, microscopy services, drug supplies, surveillance and monitoring systems, and use of highly efficacious regimes with direct observation of treatment).
DPE	Department of Primary Education
EDPT	Early diagnosis and prompt treatment
EFA	Education for All
EOC	Essential Obstetrics Care
EPI	Expanded Programme on Immunisation
ESP	Essential health service package
EU	European Union
FDI	Foreign direct investment
FY	Fiscal year
GDP	Gross domestic product
GEF	Global Environment Facility
GFATM	Global fund to fight Aids, tuberculosis and malaria
GHG	Greenhouse Gas
GNI	Gross national income
GoB	Government of Bangladesh
GSP	General system of preference

HIES	Household Income and Expenditure Survey
HIPC	Heavily Indebted Poor Countries
HNPSP	Health, Nutrition and population Sector Programme
HPSP	Health and Population Sector Programme
HRD	Human resources development
ICMH	Institute of Child and Mother Health
IDU	Injecting drug users
IMCD	Integrated management of childhood diseases
IMR	Infant mortality rate
I-PRSP	Interim-PRSP
ITMN	Insecticide treated mosquito net
ITN	Insecticide treated netting
LDC	Least development countries
MCWC	Mother and Child Welfare Centre
MDG	Millennium Development Goal
MFA	Multi-fibre Arrangement
MMR	Maternal mortality rate
MoEF	Ministry of Environment and Forests
MOPME	Ministry of Primary and Mass Education
MSM	Men who have sex with men
NBSAP	National Biodiversity Strategic Action Plan
NCHS	National Centre for Health Statistics / CDC
NDP	National Drug Policy
NEMAP	National Environment Management Action Plan
NGO	Non-government organisation
NID	National Immunization Day
NIPORT	National Institute of Population Research and Training
NOx	Oxides of nitrogen
NPA	National Plan of Action
NRR	Net Reproduction Rate
NSP	National Strategic Plan
NTP	National Tuberculosis Programme
ODA	Official development assistance
ODS	Ozone depleting substance
OECD	Organisation for Economic Cooperation and Development
ORT	Oral rehydration therapy
PC	Personal computer
PG	Poverty gap
PMED	Primary and Mass Education Directorate
PPP	Purchasing power parity
PRSP	Poverty reduction strategy paper
Quad	Four major industrialised-country markets: US, Canada, European Union, and Japan
RDT	Rapid diagnostic test
RH	Reproductive health
RMG	Readymade garment
ROO	Rules of origin

SACOSAN	South Asian Conference on Sanitation
SAM	Social accounting matrix
SBA	Skilled birth attendant
SEMP	Sustainable Environment Management Plan
SHD	Sustainable human development
SEHD	Society for Environment and Human Development
SO_2	Sulphur dioxide
SOx	Oxides of sulphur
SPG	Squared poverty gap
SVRS	Sample Vital Registration System
SW	Sex worker
SWAp	Sector wide approach
TB	Tuberculosis
TFR	Total fertility rate
TRIPS	Trade-related aspects of intellectual property rights
TWG	Technical working group
U5MR	Under five mortality rate
UNCT	UN country team
UNDAF	UN Development Assistance Framework
UNDESA	United Nations Department of Economic and Social Affairs
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework of Convention on Climate Change
UNGASS	United Nations General Assembly Special Session
UNSD	United Nations Statistics Division
VAW	Violence against women