

**Sixth Five Year Plan of Bangladesh  
2011-2015**

**Background Papers**

**Volume 3  
Social Sectors**

**Editors  
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## ACRONYMS

ADB	Asian Development Bank
ANC	Antenatal Care
BBS	Bangladesh Bureau of Statistics
BCC	Behaviour Communication Change
BDHS	Bangladesh Demography and Health Survey
BINP	Bangladesh National Nutrition Programme
BKB	Bangladesh Krishi Bank
BMET	Bureau of Manpower, Employment and Training
BNFE	Bureau of Non-formal Education
BOU	Bangladesh Open University
BRAC	Bangladesh Rural Advancement Committee
BRDB	Bangladesh Rural Development Board
BSCIC	Bangladesh Small and Cottage Industries Corporation
BTEB	Bangladesh Technical Education Board
CAMPE	Campaign for Popular Education
CC	Community Clinic
CCR	Clients Charter of Rights
CDR	Crude Death Rate
CIDA	Canadian International Development Agency
CMR	Child Mortality Rate
CNS	Child Nutrition Survey
CPD	Centre for Policy Dialogue
CPI	Consumer Price Index
DPE	Directorate of Primary Education
DTE	Directorate of Technical Education
DWA	Destitute Women's Allowance
DYD	Department of Youth Development
ECCE	Early Childhood Care Education
EDPT	Early Diagnosis and Prompt Treatment
EFA	Education for All
EGP	Employment Generation Programme
EMIS	Environmental Management Information
EOC	Emergency Obstetric Care
FFE	Food for Education
FFW	Food for Work

FGD	Focus Group Discussion
FREPD	Foundation for Research on Educational Planning Development
FWA	Family Welfare Assistant
FWV	Family Welfare Visitor
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GFC	Global Financial Crisis
GIS	Geographical Information System
GOB	Government of Bangladesh
GPS	Government Primary School
GR	Grameen Kalayan
GR	Gratuitous Relief
GSI	Good Seed Initiative
HDC	Health Advisory Committee
HIES	Household Income and Expenditure Survey
HRD	Human Resource Development
HSC	Higher Secondary Certificate
HYV	High Yielding Varieties
ICT	Information and Communication Technology
IEC	Information, Education and Communication
IED	Institute of Educational Development
ILI	Incremental Labour Intensity
ILO	International Labour Office
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
IPAP	Integrated Poverty Alleviation Programme
KB	Karmasansthan Bank
LBW	Low Birth Weight
LDC	Least Developed Country
LFPR	Labour Force Participation Rate
LFS	Labour Force Survey
LGED	Local Government Engineering Department
MDG	Millennium Development Goals
MIS	Management Information System
MMR	Maternal Morality Rate
MOE	Ministry of Education
MOHFW	Ministry of Health and Family Welfare

MoIE	Ministry of Labour and Employment
MOPME	Ministry of Primary and Mass Education
MOYS	Ministry of Youth and Sports
MTBF	Medium Term Budgetary Framework
MTME	Medium Term Macroeconomic Framework
MWCA	Ministry of Women and Children Affairs
NCLP	National Child Labour Policy
NER	Net Enrolment Rate
NGO	Non-government Organisation
NGPS	Non- Government Primary School
NHUF	National Health Users Forum
NNP	National Nutrition Programme
NPAN	National Plan of Action for Nutrition
NPO	National Productivity Organisation
NSIC	National Skill Development Council
NSP	National Tuberculosis Programme
OAAS	Old Age Allowance Scheme
ODA	Official Development Assistance
OSH	Occupational Safety and Health
PEDP	Primary Education Development Project
PESP	Primary Education Stipend Project
PHC	Primary Health Care
PKSF	Palli Karma Sahayak Foundation
PNC	Post Natal Care
PPP	Public Private Partnership
PRSP	Poverty Reduction Strategy Paper
RCTA	Registration, Certification and Training Authority
RDA	Rural Development Academy (Bogra)
RMC	Rural Maternal Centre
RMP	Rural Maintenance Programme
ROSC	Reaching Out of School Children
RSS	Rural Social Service
SBA	Skilled Birth Attendant
SESIP	Secondary Education Improvement Project
SLIP	School Level Improvement Plan
SPSN	Social Protection and Safety Net
SSC	Secondary School Certificate

SSNP	Social Safety Net Programme
SSS	Society for Social Service
TBA	Traditional Birth Attendant
TCC	Tripartite Consultative Committee
TFR	Total Fertility Rate
TLM	Total Literacy Movement
TPC	Tripartite Productivity Council
TQI	Teaching Quality Improvement
TR	Test Relief
TVET	Technical and Vocational Education Training
UAE	United Arab Emirates
UCD	Urban Community Development
UGC	University Grants Commission
UHC	Upazila Health Complex
UHFWC	Upazila Health and Family Welfare Centre
UK	United Kingdom
UNESCO	United Nations Education, Science and Cultural Organisation
UNICEF	United Nations Children Fund
URC	Upazila Resource Centre
USA	United States of America
VDP	Village Defence Party
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
WEEH	Women's Empowerment through Employment and Health
WFP	World Food Programme
WHO	World Health Organisation
YDTC	Youth Development Training Centre

## FOREWORD



**Air Vice Marshal (Retd.) A. K. Khandker**  
Minister  
Ministry of Planning  
Government of the People's Republic of Bangladesh

I am happy to learn that the General Economics Division (GED), Planning Commission and the Bangladesh Institute of Development Studies (BIDS) are jointly publishing the technical framework results and the background studies conducted for preparation of the country's Sixth Five Year Plan (2011-2015).

The technical framework of the Sixth Plan and the background studies generated quantitative/qualitative benchmark values and targets for all relevant sectors/indicators of the plan and identified critical macroeconomic foundation for future intervention. It also forms the basis for determining sectoral targets for prudent responses during the Sixth Plan period.

I am particularly pleased to note that this is a first attempt made in our plan history to publish the results of the economic models and background papers in six volumes that form the basis for the preparation of the Sixth Five Year Plan Document. It will be a useful reference to the policymakers, development planners, academics and researchers alike to examine and evaluate the rationale of plan targets and resource allocation. I am sure it will also provide impetus for preparing future models when formulating Seventh Plan for Bangladesh.

I am confident that the Sixth Five Year Plan will amply guide us in realising our "Vision 2021" goal of becoming a middle-income country by 2021 when we will celebrate the Golden Jubilee of our Independence.

Both the GED of the Planning Commission and the BIDS deserve my special thanks for undertaking this novel venture.



**Air Vice Marshal (Retd.) A. K. Khandker**

## **PREFACE**

The National Economic Council (NEC) in May 2009 decided to prepare the country's Sixth Five Year Plan (2011-2015) within the framework of the Perspective Plan (2010-2021) and keeping the goals of the Vision 2021 in view. The Planning Commission constituted a high level inter-ministerial "Steering Committee" with the Planning Minister as its chair and formed a "Panel of Economists" for guiding the process of formulating the Plan within a participatory framework.

The preparation of the Plan necessitated the formulation of the technical framework for finalising the Plan strategies and indicating the desirable development path that would lead to fulfilling its objectives. Several background studies were also undertaken for generating quantitative/qualitative benchmark values and targets for relevant indicators of the Plan and fill-in critical knowledge gaps. The Bangladesh Institute of Development Studies (BIDS) was assigned to conduct the background studies and develop the technical framework of the Plan for which renowned economists and development practitioners in the relevant fields were engaged to complete the tasks within the stipulated time period. The drafts of the studies were reviewed by relevant experts in the government as well as from the professional and academic community. Based on such elaborate feedbacks, the drafts were modified and finalised by the authors under the overall supervision of BIDS.

These studies provided valuable information/inputs which significantly contributed towards drafting the Sixth Five Year Plan. The studies are rich in contents and, if made available, will enrich the knowledge base relating to development challenges and development options facing Bangladesh. In view of the importance of these studies, it has been decided that BIDS and the General Economics Division (GED) of the Planning Commission will jointly publish these studies, including the technical framework, for making these available to interested readers and users. It may be added here that similar studies conducted during the preparation of the earlier Plans have not been made available in the public domain.

The studies have been published in six separate volumes. It is expected that these volumes will help the readers to understand the rationale for the choice of the specific paradigm underlying the Plan and the design of the policy package adopted for the Plan for reconciling the goals of efficiency with those of equity. The studies attempt to spell out a reform strategy and agenda for agriculture, food security,

industrialisation, poverty reduction, social development, sustainable management of natural resources, and other development issues in Bangladesh in the light of current conditions as well as past experience.

We would like to express our deep gratitude to the authors of the technical framework and background studies for their sincere efforts in finalising the manuscripts in time. We are also indebted to the relevant officials of GED and BIDS for their untiring support and cooperation. We hope that the relevance of the issues and the diverse contents and analysis of the publications would make these volumes useful for the research community, policymakers, and others interested in understanding the development challenges of Bangladesh.

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## Chapter 1

# Employment and the Labour Market: Recent Changes and Policy Options for Bangladesh

*Rushidan Islam Rahman  
Abdul Hye Mondal  
Zabid Iqbal*

## 1.1 INTRODUCTION

### *1.1.1 Importance of Employment Growth: The Context*

During the last two decades, Bangladesh achieved considerable success on two fronts—acceleration of economic growth and advancement of social development goals including poverty reduction. The objectives of the Sixth Five Year Plan (SFYP) include further acceleration of economic growth and faster pace of poverty reduction. Progress in these two fronts requires judicious choice of policies and strategies so that the critical resource constraints are taken into account and the relatively abundant resources are used more intensively. Therefore, the present paper examines the role of labour as an abundant resource for development of the country. To utilise the growing labour force, the characteristics of the labour force need attention.

The SFYP aims to achieve high rates of economic growth and such growth will obviously help absorb the surplus labour. A high rate of economic growth is, of course, a necessary condition for rapid growth of employment, but it is not a sufficient condition. The relationship between economic growth and employment growth is not invariant. Similar rates of economic growth may be associated with varying magnitudes of employment creation.

The link between economic growth and employment generation is established by labour intensity of economic activities. In this context, one must emphasise the following:

- Quality of labour force is relevant in the context of both employment generation and GDP growth.
- Productivity growth must take place to enhance the quality of employment.
- Harmonious labour relations are important in ensuring growth and labour productivity.

- Employment growth can help poverty reduction in addition to economic growth.

The present study generates benchmarks and targets for employment generation for the SFYP (2010-2015). This is based on an analysis of the evolution of the labour market and employment situation in the country. A review of past policies and an outline of the future approach to employment generation strategies are presented. The thrust is on identifying strategic elements and important employment policies.

The paper also examines some specific issues related to employment policies. For example, various types of safety net employment programmes are reviewed to draw lessons for the future. In particular, focus is on special employment programmes for poor wage labourers. It also examines the situation of youth labour force so that employment policies can focus on proper utilisation of this particular section of the workforce.

### ***1.1.2 Notes on Data***

The analysis is based mostly on secondary data and national sample survey data. Reports on Labour Force Survey for various intermittent years provide the major data source. Unit records from the 2006 LFS have been reanalysed.

To provide practical insights into safety net employment generation for extreme poor workers and for labour force in coastal disaster prone areas, field visits have been conducted (details are in relevant section of the paper).

### ***1.1.3 Organisation of the Paper<sup>1</sup>***

The organisation of the paper is as follows:

Section 1.2 provides a brief analysis of the evolution of employment situation and labour market in the country.

Section 1.3 examines the real wage trends disaggregated by sectors and gender and identifies the determinants of wage variation.

Section 1.4 looks at the rationale for considering youth labour force as a distinct group in the SFYP and analysis of supply-side issues linked with youth employment including labour force participation among youth population. Education level of youth labour force, sector and status of employment and incidence of

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<sup>1</sup> In the process of preparation of the background paper, we received comments from a number of institutions. We are grateful for the comments.

un/underemployment among youth labour force are analysed. Section 1.5 presents the benchmark employment scenario in 2010 and targets for employment for the SFYP.

Section 1.6 reviews the targeted employment programmes with a view to examining how far these programmes can help fulfill employment generation targets for the SFYP. This section will also assess the desirability of employment guarantee schemes like the 100-day employment programme and what are the special needs to boost employment in disaster hit coastal areas.

Section 1.7 examines the prospects of overseas employment and remittance growth, while section 1.8 discusses the prospects of promoting decent work in Bangladesh. Section 1.9 concludes the paper with strategies and policies for employment expansion during the SFYP of Bangladesh.

## **1.2 LABOUR MARKET DEVELOPMENTS**

This section reviews the labour market developments in Bangladesh during the last decade or so. Labour force participation rate (LFPR) and growth of labour force over the period of 1996 to 2006 are examined in Section 1.2.1. Section 1.2.2 analyses the changes of unemployment and underemployment in Bangladesh. The changes in the sector composition and status of employment of the labour force are examined in Section 1.2.3.

### ***1.2.1 Labour Force and Employment Growth***

Labour force growth depends on labour force participation rate and age structures of population. Tables 1.1 and 1.2 present data on labour force growth and LFPR. Table 1.1 shows that labour force growth rate accelerated during the 1996 to 2003 period. The trend has been reversed during 2003 to 2006. The growth rate of labour force during this period was 2.2 per cent per annum compared to 4.6 per cent per annum during 2000–2003 and 3.2 per cent during 1996-2000. Growth of employment (Table 1.2) has been close to the growth of labour force. It implies that in a labour market dominated by self- and family employment, labour force and employment growth vary more or less concomitantly. It also indicates the presence of a “potential demographic dividend” which is the outcome of rapid population growth during the late 1970s and the early 1980s.

Comparable data on LFPR for 15 years and above aged population are available for the period 1990-91 to 2006. Data on LFPR for 15 and above aged group presented in Table 1.3 show a more or less continuous increase of LFPR during the entire period. This implies that the deceleration of growth of labour force in the

latest period cannot be attributed to reduction of LFPR. The conclusion that follows is that the decline in labour force growth has been associated with decline of growth of population in labour force age group. LFPR has increased from 51.2 per cent in 1990-91 to 54.9 per cent in 1999-2000, which further increased to 57.3 and 58.5 per cent in 2002-03 and 2005-06 respectively. Male LFPR is much higher than female LFPR. Female LFPR has significantly increased during the period 1991-2006. Male LFPR declined slightly during 1996-2000 and the trend reversed during 2000-2006.

TABLE 1.1  
GROWTH RATES OF LABOUR FORCE: 1991-2006

(Average annual growth rate, %)

Year	Sex	Labour force growth
1991-1996	All	3.4
	Male	2.7
	Female	4.5
1996-2000	All	3.2
	Male	1.2
	Female	14.4
2000-2003	All	4.6
	Male	3.9
	Female	7.1
2005-2006	All	2.2
	Male	1.2
	Female	5.5

Source: LFS (various years).

TABLE 1.2  
GROWTH RATES OF EMPLOYMENT: 1991-2006

(Average annual growth rate, %)

Year	Sex	Employment
1991-1996	All	2.7
	Male	2.3
	Female	5.0
1996-2000	All	3.0
	Male	1.1
	Female	14.5
2000-2003	All	4.4
	Male	3.4
	Female	7.7
2005-2006	All	2.2
	Male	1.5
	Female	4.6

Source: LFS (various years).

TABLE 1.3  
**LABOUR FORCE PARTICIPATION RATES (LFPR) IN BANGLADESH: 1991-2006**

Year	LFPR (per cent) among population aged 15 & above		
	All	Male	Female
1990-1991	51.2	86.2	14.0
1995-1996	52.0	87.0	15.8
1999-2000	54.9	84.0	23.9
2002-2003	57.3	87.4	26.1
2005-2006	58.5	86.8	29.2

**Source:** LFS (various years).

### ***1.2.2 Unemployment and Underemployment***

Open unemployment rates provided by Labour Force Survey data are based on the conventional definition. Table 1.4 presents data on unemployment rate in Bangladesh. Unemployment rates are actually very low, 4.3 per cent in each of the last three rounds of LFS. This figure is so low that one cannot but express doubts about the quality of data. Low unemployment rates shown in Table 1.4 actually imply that the use of the conventional definition results in underestimation of unemployment rate in a country like Bangladesh.<sup>2</sup> Despite the deficiency in definition, this data can at least provide a comparison at various points of time because the same definition has been used in these rounds of LFS.

TABLE 1.4  
**UNEMPLOYMENT IN BANGLADESH: 1996-2006**

	<i>(In Per cent)</i>			
	1995-1996	1999-2000	2002-2003	2005-06
Total	3.5	4.3	4.3	4.3
Male	2.8	3.4	4.2	3.4
Female	7.1	7.4	4.9	7.0

**Source:** BBS, Labour Force Survey (LFS) (various years).

Table 1.4 shows that unemployment rate increased from 3.5 per cent in 1996 to 4.3 per cent in 2000. Between 2000 and 2006, unemployment rate did not change. Among male labour force, it has declined during 2003 to 2006. Among female

<sup>2</sup> The reasons are well-known and have been elaborated in Rahman (2007b).



labour force, between 2003 and 2005-06, there has been an increase in unemployment rates.

Since the enumeration of open unemployment is beset with deficiency of definition and difficulties in the method of data collection, underemployment has been accepted as a more relevant indicator of surplus labour in Bangladesh. Time criterion is a frequently used method of measurement of underemployment. The method is based on the choice of a norm of standard hours of employment and those who work less than this norm are identified as underemployed. Labour Force Survey of Bangladesh uses 35 hours a week as the cut-off point for the calculation of underemployment rate. The LFS method of measurement of underemployment based on standard weekly hours is also faced with conceptual inadequacies. Here a person in the labour force is not supplying information on his/her willingness to work more hours. If the willingness criterion is added, underemployment rate is likely to be much lower. This is especially relevant for female labour force (Rahman 2007a). Table 1.5 presents data on underemployment during 1996-2006. Underemployment rate declined during 1996 to 2000, although the growth rate of labour force during 1996-2000 was higher than during 2000 to 2006. But during the later period underemployment rate increased. Thus labour force growth and underemployment situation did not move in the same direction. Underemployment rates among both female and male labour force were higher in 2006 compared to 2000.

TABLE 1.5  
UNDEREMPLOYMENT RATES IN BANGLADESH: 1996-2006

Underemployment rate (%)	1995-96	1999-2000	2005-06
Bangladesh: Total	17.6	16.6	24.5
Male	13.0	7.4	10.9
Female	45.5	52.8	68.3

Source: LFS (various years).

### ***1.2.3 Structural Changes in the Labour Market: Sector and Status of Employment***

Structure of employment is expected to change with economic development. Acceleration of economic growth will involve employment generation in sectors with higher productivity. This involves a movement of labour force from agriculture to non-agriculture and such structural change can be used as an indicator of the transformation of the economy. The secondary sectors are usually expected to lead in this process and tertiary sectors are likely to follow. This section examines whether Bangladesh's labour market has undergone such transformation. Changes

in the composition of employment, both in terms of sector and status (paid and self-employment), are examined in this context.

### **1.2.3.1 Changes in the Sectoral Distribution of Employment**

Table 1.6 presents data on broad sectoral distribution of employment based on the LFS rounds 1996 to 2006. Distribution of employment by broad sectors shows that during the period of 1996 to 2006 there has been a small decline in the share of agriculture in total employment. Agriculture absorbed 48.9 per cent of total employment in 1996, which declined to 48.1 per cent in 2006. There was a reverse change in the distribution during the period 1996 to 2003. In 2003, agriculture's share stood at 51.7 per cent.

The change in the employment share of agriculture has been quite different among the male and the female. During this period there was a large increase in the share of urban female employment in agriculture. As a result, agriculture's share of total employment shows a rise during this period although the share of male employment in agriculture has been declining continuously.

It is difficult to explain the change of sectoral composition of the female employment. More in-depth examination of data shows that the large increase of female employment in agriculture actually consists of women's work in animal husbandry which usually consists of small units for family's use. The rise of female employment in agriculture may at least partially reflect better enumeration.

While the rapid spread of micro-finance has made a contribution to women's employment in poultry/livestock and fishery (Rahman 2000), expansion of irrigation boosting multiple cropping, crop diversification and the adoption of high-yielding varieties (HYV) of crops may have increased the absorption of female labour in agriculture, especially in post-harvest processing of higher volumes of HYV output.

Detailed sector classification of employment has been shown in Table 1.7. The percentage of the employed population in the manufacturing sector was almost the same in 2000 and 2003 and increased by 1.2 percentage points during 2003 to 2006. Employment share of trade, hotel & restaurant and transport & communication also increased during 2003 to 2006. Manufacturing employment increased by 0.5 million over this period. Other sectors which absorbed a significant number of additional workers are trade, finance and community and personal service. Share of women's employment in manufacturing declined during this period.

The reduction of women's share of employment in manufacturing sector is puzzling, given the rapid growth of women's employment in the readymade garment (RMG) sector. Part of it may be attributed to data problem. LFS provides

an underestimation of women's employment in the RMG. For example, weaving apparel (except fur) manufacturing shows employment of 659,000 and 421,299 women in the years 2000 and 2006 respectively, whereas BGMEA sources claimed it to be more than one and a half million in those years. Tables 1.6 and 1.7 show that structural change in the labour market has been rather small.

TABLE 1.6  
DISTRIBUTION OF MALE AND FEMALE EMPLOYMENT BY BROAD ECONOMIC  
SECTOR: 1991-2003

(Per cent)

Year	Male			Female			Male and Female		
	Agriculture	Non-Agriculture	Total	Agriculture	Non-Agriculture	Total	Agriculture	Non-Agriculture	Total
1995-1996	52.3	47.7	100.0	27.8	72.2	100.0	48.9	51.1	100.0
1999-2000	51.8	48.2	100.0	46.9	53.1	100.0	50.8	49.2	100.0
2002-2003	49.8	51.2	100.0	58.7	42.3	100.0	51.7	48.3	100.0
2005-2006	41.8	58.2	100.0	68.3	31.7	100.0	48.1	51.9	100.0

**Note:** Usual definition, age 15+

**Source:** LFS (various years).

TABLE 1.7  
DISTRIBUTION OF EMPLOYED PERSONS BY INDUSTRY AND SEX: 1996-2003

(Per cent)

Major Industry	1995-96			1999-2000			2002-2003			2005-2006		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Agri. forestry and fisheries	48.9	52.3	27.8	50.8	51.8	46.2	51.7	49.8	58.7	48.1	41.8	68.3
Mining & quarrying	0.1	0.1	0.0	0.5	0.3	1.0	0.2	0.2	0.0	0.1	0.1	0.1
Manufacturing	10.2	7.7	25.3	9.5	7.5	17.7	9.8	7.6	17.3	11.0	10.9	11.5
Electricity, gas and water supply	.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.1	0.2	0.2	0.0
Construction	2.9	3.1	1.5	2.8	3.2	1.3	3.5	4.2	1.0	3.2	3.9	0.9
Trade, hotel & restaurant	17.2	18.5	9.8	15.8	18.2	6.3	15.1	18.6	2.5	16.5	20.4	4.1
Transport, storage and communication	6.3	7.2	0.7	6.3	7.8	0.6	6.8	8.7	0.3	8.4	10.8	0.6
Finance and business services	0.6	6.6	0.3	1.0	1.2	0.6	0.5	0.6	0.2	1.6	1.7	1.1
Community and personal services and others	13.6	10.1	34.9	12.9	9.6	26.2	12.2	9.9	20.1	10.9	11.0	13.6
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Source:** LFS (various years).

### 1.2.3.2 Structural Change in the Labour Market: Status of Employment

LFS identifies five major status of employment: regular employee, self-employment, unpaid family employment, casual/day labourer and employer (with a residual category of others). Table 1.8 presents the distribution of employment by status in the various rounds of LFS. Data presented in Table 1.8 shows that the employers and others account for only a small share of total employment. The largest share of employment is self-employed. The share was 42 per cent in 2006 and was around 45 per cent in the earlier years. Unpaid family employment and irregular/casual daily employment contributed 21.7 and 20.1 per cent respectively in 2005-06.

TABLE 1.8  
DISTRIBUTION OF EMPLOYED PERSONS BY STATUS  
OF EMPLOYMENT: 1996-2006

Status of employment	<i>(Per cent)</i>			
	1995-1996	1999-2000	2002-2003	2005-06
Self-employed	45.4	46.7	44.8	42.0
Employer	0.4	0.3	0.4	0.3
Employee	16.8	16.7	13.7	13.9
Unpaid family helper	12.0	12.0	18.4	21.7
Day labourer/irregular	25.3	24.3	20.0	20.1
Others	-	-	1.7	2.0
All	100.0	100.0	100.0	100.0

**Source:** LFS (various years).

During the period of 1996 to 2006, clear decline in the shares of regular employees and day labourers can be observed. Self-employment and unpaid family employment played important roles in absorbing the fast growing labour force. Share of unpaid family employment increased substantially between 1996 and 2003 (from 12 per cent to 21.7 per cent), when the growth rate of labour force was high. Share of self-employment plus unpaid family employment increased from 57.4 to 63.2 per cent during this period. It stagnated during the latest period, 2003 to 2006. Influx of unpaid family employment is clearly an outcome of the non-availability of paid jobs.

The situation is unlikely to reverse because the aged labour force, whose share is expected to increase in the coming decade, is unlikely to find paid jobs and thus will join the swelling self and family worker group. Studies for other countries also

show that agriculture accounts for higher LFPR among the aged. This is possibly linked with higher share of self-employment in agriculture.

Self-/family employment is more flexible in terms of hours of work as well as location of work compared to paid work. Therefore, women especially in the rural areas prefer this mode of employment. Moreover, there is hardly any choice for women when paid employment opportunity is scanty. Rise of self-/family employment may lead to overcrowding in the family farm/enterprise and drive down marginal productivity. Therefore, it may not be possible to depend only on self-employment for absorbing the growing labour force.

### 1.2.3.3 Formal and Informal Employment

Formal sector accounts for 24 and 16 per cent of male and female employment respectively. The share of formal sector employment is less in 2006 than in 2000. If one considers the aggregate male and female employment, the share has declined by 3.2 percentage points from 24.7 per cent in 2000 to 21.5 per cent in 2006.

TABLE 1.9  
SIZE AND SHARE OF EMPLOYMENT IN FORMAL AND INFORMAL SECTOR  
(share (%) of labour force)

Sex	Formal sector			Informal sector		
	2006	2003	2000	2006	2003	2000
Male	23.82	21.10	27.01	76.18	28.90	74.99
Female	14.16	20.20	15.38	85.84	79.80	84.62
M&F	21.52	20.77	24.68	78.48	79.23	75.32
	Size (million) of labour force					
Male	8.6	7.3	8.4	27.5	27.2	22.7
Female	1.6	2.0	1.2	9.7	7.9	6.6
M&F	10.2	9.2	9.6	37.2	35.1	29.3

It should be mentioned that all of the formal sector employees may not enjoy the full benefits of such employment. Many enterprises do not abide by the rules of formal appointment and other benefits to be provided by the formal sector. Therefore, the share of employed population who actually enjoy the benefits of formal sector is actually less than the figures shown in Table 1.9.

Above data have important implications for policies related to type of employment generation. Growth of quality employment requires expansion of the formal sector. Growth of formal sector employment can influence the quality of employment in other segments of the labour market, through either competition or demonstration. Therefore, suitable incentive for growth of formal employment is urgently needed.

Since 78 per cent employment is in the informal segment, serious attention is also needed for development of informal sector enterprises which face many constraints. There is lack of guidelines for providing support vs subjecting to eviction. The enterprises suffer from lack of formal support and thus are deprived of formal finance. As a result, they cannot have access to modern technology. Therefore, policy support is urgently needed and should take diverse approaches for rural and urban areas. Such policies may include provision of finance, marketing facilities, infrastructure development, etc.

### **1.3 WAGE VARIATIONS AND TRENDS**

This section examines the changes of real wage during 1990 to 2008 (the latest year for which data is available). Previous studies on wage covered earlier periods extending from the mid-1970s to the late 1990s in most cases. The major sectors, namely agriculture, manufacturing, construction and a general index are covered in the analysis of real wage. Data from two major sources, namely Statistical Yearbook of Bangladesh (SYB) and LFS are examined.

Analysis in the paper often refers to sub-periods within the one and a half decades. Three sub-periods have been used: 1990 to 1996, 1996 to 2000 and 2000 to 2006. Unequal sub-periods have been chosen to enable comparison of annual data from SYB with other surveys, especially LFS. Comparable rounds of LFS are available for 1996, 2000 and 2006. LFS rounds of pre-1996 period are non-comparable to the latest surveys because a different definition of labour force was used in those rounds.

#### ***1.3.1 Real Wage in Major Sectors***

The analysis begins with data from one of the most commonly used official statistics in Bangladesh, namely SYB. This source provides annual series on wage, CPI, etc. Wage data from this source have been quoted (Table 1.10) for three major sectors: agriculture, manufacturing and construction. This source provides a general index as well.

Real wage growth in agriculture is positive when the entire 1990 to 2006 period is considered (last column of Table 1.10). However, the rate of change of real wage in agriculture has been fluctuating. Index of real wage in agriculture decreased by 6 percentage points during 1990 to 1996 and was almost stagnant over 1996 to 2000. During 2000 to 2006 the index has risen by 19 percentage points. For 2007 and 2008, BBS did not provide comparable estimates of real wage.

Past studies on real wage in Bangladesh focused mainly on rural/agricultural wage. Trends of real wage in manufacturing received less attention and therefore this sector deserves a detailed discussion in the present context.

As shown by the annual series in Table 1.10, real wage growth in manufacturing has been spectacular, especially in the recent period (2000 to 2006). The index of real wage in manufacturing increased by 8, 14 and 46 percentage points respectively during 1990-1996, 1996-2000 and 2000-2006.

TABLE 1.10  
WAGE INDICES BY SECTOR (BASE: 1969-70=100): BANGLADESH 1990-2008

Year	Nominal Indices				Real Wage Indices*			
	General	Manufacturing industry	Construction	Agriculture	General	Manufacturing industry	Construction	Agriculture
1989-1990	1426	1502	1475	1245	110	115	113	110
1990-1991	1482	1575	1487	1321	107	114	107	95
1991-1992	1553	1641	1512	1421	107	113	104	98
1992-1993	1638	1724	1579	1523	113	119	109	105
1993-1994	1709	1828	1598	1593	114	121	106	106
1994-1995	1786	1947	1613	1653	111	121	100	103
1995-1996	1900	2064	1754	1738	114	123	105	104
1996-1997	1989	2161	1848	1804	120	130	111	108
1997-1998	2141	2395	1990	1870	122	137	114	107
1998-1999	2259	2522	2163	1950	118	131	113	102
1999-2000	2390	2702	2286	2037	121	137	116	105
2000-2001	2489	2832	2356	2141	125	142	118	107
2001-2002	2637	3035	2444	2262	130	150	121	112
2002-2003	2926	3501	2624	2443	142	169	127	118
2003-2004	3079	3705	2669	2582	146	177	125	121
2004-2005	3293	4015	2758	2719	149	181	124	123
2005-2006	3507	4293	2889	2926	149	183	123	124
2006-2007	3779	4636	3135	3156	-	-	-	-
2007-2008	4227	5197	3549	3524	-	-	-	-

**Source:** Economic Survey 2007, Statistical Yearbook of Bangladesh (various issues), last column: authors' calculation.

**Note:** \*Uses industrial workers' CPI as the deflator.

During 1996 to 2006, the rise of real wage index in agriculture and construction was almost equal (20 and 18 percentage points respectively). In contrast, the rise of real wage in manufacturing was much higher (60 percentage points). It is difficult to explain the observed difference between change of real wage in manufacturing and other sectors. This is especially true for construction sector which is mainly concentrated in the urban areas. Therefore, one cannot but question the reliability of data on manufacturing sector wage provided by this source.

Wage series of Table 1.10 is used extensively by official documents (MoF, Bangladesh Bank) and private researchers. Therefore, it is pertinent that the

shortcomings of this data set are highlighted. One obvious problems of this series is that the base is old. With an old base year, the annual changes are small and therefore comparisons over short periods may be misleading. The weights used in the construction of CPI with 1969–70 as the base year must have gone through a substantial change over the period of 1970 to 2009. Moreover, the weights used in the base year are not available in any of the publications. The absolute values of wage behind the published indices are not available. So there is no scope of crosschecking these data with other sources of information. The weight of various sub-sectors within each broad sector has not been spelt out.

Important sources of inadequacy of the annual data series are changes in the method of generating data and change in the content of reported data. Moreover, many of the changes are not usually reported in the published sources. Informal discussions revealed that the method of selection of villages for wage data of SYB changed from time to time.

SYB also used to publish a district level wage series and specified “wage of male agricultural labour” in its title. But the annual series of wage index quoted in Table 1.10 does not mention whether it is male wage or average of male and female wage, since 1998 SYB discontinued the table on district level wage.

To probe into the incredibly fast growth of real wage in manufacturing, the composition of manufacturing in the SYB’s wage data was examined. Going back to the very early issues of SYB, it was discovered that the manufacturing wage is an average of wage in five sub-sectors: cotton and jute textile, engineering, edible oil and matches.<sup>3</sup> These five sub-sectors dominated the manufacturing sector during the 1990s and early 1980s. However, the structure of the manufacturing sector has changed during the last two decades. At present, RMG and drugs and pharmaceuticals are the most important sub-sectors within formal manufacturing (CMI various years). RMG contributes about 60 per cent of all manufacturing employment. Since wage in RMG is much lower than in other manufacturing sub-sectors (CMI of BBS), with growing weight of RMG in manufacturing, the average manufacturing wage is unlikely to rise especially after 1999-2000. Thus the manufacturing real wage index series in SYB cannot provide a meaningful picture of recent movements of real wage in the sector as a whole. In contrast to the SYB series, data from LFS provides a better estimate of real wage as it is based on nationally representative sample. The following section examines LFS data on the change of real wage and the sectoral variation of wage.

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<sup>3</sup> The SYB volumes of last 15 years do not mention anything about the constituent subsectors.



### 1.3.1.1 Problems of Choice of Deflator

For the sake of completeness of the assessment of quality of real wage data, a few comments on the choice of deflators are pertinent. Choice of deflator for the estimation of real wage is a complex question. For converting wage rates of urban sectors, a separate CPI for urban industrial workers has been produced by BBS.<sup>4</sup> In the absence of CPI for rural wage labourers, one of the following may be used for obtaining real wage in agriculture/construction: (a) the CPI for all rural population, (b) CPI for the industrial workers, and (c) the rice price. Some studies have used a 'poverty line' deflator based on HIES data. The users should be alert to the problems underlying each of them.

The criticisms against the use of HIES price is that these prices are based on all rural households and not labourer households only and in this respect cannot be considered superior to the rural CPI. Moreover, HIES prices are actually by-products of expenditure data as the actual data pertains to quantity consumed and total expenditure. Expenditures on many items are imputed values for family produced goods. It is most unlikely that the respondents will use uniform retail market prices as conversion factors. A study by Sen and Hulme (2005) use a combination of HIES based CPI and rice price based deflator for comparison of wage at various points of time. The use of a single series of deflator is preferable if a consistent trend is to be measured.

CPI based on all rural population will have a lower weight on food (especially cereals) compared to what one would get if only wage labour group was considered. Therefore, in periods of higher food inflation, use of general rural CPI instead of wage labourers' CPI will overestimate real wage.

### 1.3.2 Change of Real Wage: LFS Data on Rural-Urban and Sectoral Wage

A second source of wage data is Labour Force Survey of Bangladesh. LFS data (Table 1.11) show that real wage has grown during 1996 to 2006. Nonetheless, there has been a slight deceleration of the growth of real wage during the latest sub-period. Real wage has increased 14.12 and 14.96 per cent during 1996–2000 (4 years) and 2000–2006 (6 years) respectively. Urban wage has increased at a lower pace compared to rural wage. In fact, during 2000–2006, real wage in urban areas remained almost stagnant<sup>5</sup> and has experienced a 13 per cent increase during the previous four year period (1996–2000).

<sup>4</sup> This series is based on data from two cities only and the sample is small. This has been mentioned by BBS officials in an informal discussion.

<sup>5</sup> A third source of manufacturing wage is Census of Manufacturing Industries (CMI) data. This source shows that many of the important sub-sectors of manufacturing have experienced decline of real wage

TABLE 1.11  
**REAL WAGE IN URBAN AND RURAL AREAS: BANGLADESH**  
**LABOUR FORCE SURVEY DATA 1996 TO 2006**

(Base: 1996)

Year	Urban		Rural		Urban & Rural	
	Tk./day	Change (%) over previous survey	Tk./day	Change (%) over previous survey	Tk./day	Change (%) over previous survey
1996	57.0	-	41.0	-	43.0	-
2000	64.4	12.98	47.5	18.29	49.1	14.12 (in 4 years)
2006	64.6	0.31	54.8	15.37	56.6	14.96 (in 6 years)

**Source:** LFS (various years).

According to LFS data, rural-urban wage inequality is low and has undergone a decline during 1996 to 2006. The ratio of urban to rural real wage declined from 1.39 in 1996 to 1.35 in 2000 and 1.18 in 2006. Eighteen per cent higher wage in urban areas can hardly be sufficient to meet the costs of labour transfer. Urban employed population is more educated than those in rural areas and therefore the observed wage difference can be considered as low. The observed changes are likely to be welcomed by the proponents of urban-rural inequality reduction.<sup>6</sup> Nonetheless, the narrowing difference may in future lead to stagnation of rural wage. Lack of growth of formal employment and expansion of low productive informal employment have possibly resulted in the slow growth of urban wage.

Urban-rural wage inequality is also linked to sectoral wage difference. Before we move on to sectoral wage difference, it should be clarified that the status of employment is different among sectors and the daily earnings of casual/daily status workers are likely to be different from daily earnings of regular employees. Regular employment is dominant in some sectors, especially in manufacturing. Whereas agriculture and construction are dominated by casual or daily workers.

Data on daily earning in major sectors of the economy have been presented in Table 1.12. It is expected that manufacturing wage will be higher than agricultural wage because manufacturing represents the technologically advanced sector. Difference between wage in other non-agricultural sectors (construction, trade, etc.) is difficult to predict. The real wage series of SYB shows the expected pattern—the index of real wage in manufacturing is much higher than the index for agriculture and construction and the difference has grown over the years. Given the

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growth during the late 1990s, although a direct comparison of CMI data with Table 1.10 is not possible because CMI data is available only up to 2002.

<sup>6</sup>Lipton (1978), for example, identified such inequality as an important factor behind “Why Poor People Stay Poor.”

shortcomings of this data series, the LFS data have been used here to compare the sectoral wage rates and the changes between 2000 and 2006. Last column of Table 1.12 shows that over the six year period construction sector experienced the smallest increase of wage, followed by manufacturing. Nominal wages in trade and agriculture underwent higher increase.

TABLE 1.12  
DAILY EARNING FROM PAID EMPLOYMENT IN MAJOR SECTORS:  
2000 AND 2006

Sector	<i>(Nominal wage Tk/day)*</i>		
	2000 (Tk/day)	2006 (Tk/day)	% Change in 6 years
Agriculture	56.34	88.45	57.0
Manufacturing	73.42	108.20	47.4
Construction	94.53	129.75	37.2
Trade	79.77	130.56	63.6
Transport	104.34	150.76	44.6
Financial service	184.54	403.24	117.5
Other Service	102.88	274.03	166.3
Total	77.82	140.11	80.1

**Source:** LFS (various years).

Table 1.13 shows that wage in manufacturing was 30 and 23 per cent higher than in agriculture in 2000 and 2006 respectively.

TABLE 1.13  
CHANGES IN THE RATIO OF DAILY EARNING FROM PAID EMPLOYMENT IN  
AGRICULTURE AND NON-AGRICULTURAL SECTORS

Ratios	<i>(Ratio of Nominal Wage per day)</i>	
	Year 2006	Year 2000
Manufacturing: Agriculture	1.23	1.30
Construction: Agriculture	1.47	1.67
Trade: Agriculture	1.48	1.44

**Source:** LFS (various years).

Wage is higher in construction and in trade compared to both agriculture and manufacturing (Table 1.13). The ratio of wage in trade sector and in agriculture stands at 1.48 in 2006.

The observed differences between wage in manufacturing and trade services raise a question: why inter-sectoral shift of investible resources and the process of

equalisation of wage does not take place? In fact, information on education level shows that manufacturing sector employs persons with higher levels of education, compared to agriculture, construction and trade. Therefore, the productivity of labour in manufacturing sector and wage in this sector are expected to be higher. Wage divergence among sectors and lower wage of manufacturing workers compared to other non-farm sectors is likely to be rooted in various types of segmentation of the labour market. Manufacturing provides scope for year-round job and in many sub-sectors the tasks are physically less demanding compared to construction and transport. Regular job is often preferred especially by young educated persons even if wage per day is lower.

Wage difference between male and female labour force may also contribute to inter-sectoral wage differential. In this country male-female wage differential is large. Therefore, a larger share of women employment in a sector pulls down the average wage in that sector. This factor plays an important role in the context of manufacturing sector which employs a much larger share of female workers compared to construction and trade. Women's share in manufacturing employment has rapidly increased in Bangladesh. During this period, female labour intensive and export-led "wearing apparel" sector underwent an accelerated growth. Gender difference of wage also affects rural urban difference of wage because women constitute a larger share of paid employment in the urban areas. The decline of the ratio of urban to rural wage is at least partly due to this factor. This aspect of wage differential, therefore, deserves a detailed discussion and section 1.3.4 takes up the relevant analysis.

### ***1.3.3 Gender Dimensions of Wage Differential<sup>7</sup>***

Male-female wage differential prevails in almost all low income countries and especially in labour abundant economies. The ratio of male to female wage rate is expected to decline with economic growth and expansion of employment opportunities for women. The experience of Bangladesh in this context needs closer scrutiny.

Data on male and female wage disaggregated by location has been presented in Table 1.14. Data show that in the rural areas male to female wage ratio was almost unchanged between 1996 and 2000. The ratio declined during 2000 to 2006. Expansion of rural non-farm activities is likely to have contributed to increased employment and wage for women.

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<sup>7</sup> This section draws from author's previous papers especially Rahman (2004).

TABLE 1.14  
**RATIO OF MALE AND FEMALE WAGE IN BANGLADESH: 1996 TO 2006**  
*(Wage Tk/per day)*

Location	Sex	Year		
		1996	2000	2006
Urban	Male wage	60	85	111
	Female wage	36	59	69
Rural	Male wage	44	63	93
	Female wage	25	35	61
Urban and Rural	Male wage	46	65	95
	Female wage	26	38	63
Urban	Ratio Male/Female	1.67	1.44	1.61
Rural	Ratio Male/Female	1.76	1.80	1.52
Urban and Rural	Ratio Male/Female	1.77	1.71	1.51

**Source:** LFS (various years).

A different pattern can be observed in the urban labour market. The ratio of male to female wage declined during 1996 to 2000 and increased during the latest sub-period. Male-female wage differential is large and the absolute value of the difference increased over time. Rising ratio of the male to female wage in urban sectors during 2000–2006 is commensurate with the employment situation. LFS data shows that paid employment opportunities for women slightly declined during 2000-2006 which stands in contrast with changes of male employment situation during this period.

Lower wage of women is usually explained by the differences in human capital endowment of male and female labour force and by job segmentation, women's employment being concentrated in the low productive and low wage segments. Women's lower bargaining power is also responsible for gender related wage difference.

In Bangladesh, school enrolment of girls has increased during the last decade. The reduction of inequality of human capital endowment should reduce gender related differential of wage. But its impact is not observed to be strong which is due to demand side factors. Although girls' school enrolment rate has risen, their school completion rate has not risen to the same extent and with education less than SSC level, wages are low and opportunity of employment is rather limited. The better paid jobs are usually offered to men. The rate of employment creation is insufficient even for male workers as revealed by rise of underemployment rate. Therefore, male female wage difference continues to be high. Slow pace of reduction of gender wage gap (or even reversal in the urban areas) indicates that the societal factors

influencing female wage have not shown much improvement. On the supply side, girls who complete primary or SSC level usually come from better-off households and therefore they may not enter the labour market.

Societal forces contributing to male-female wage differential include certain attitudinal factors on the part of the employers. They consider women as secondary earner who can accept low wage. They consider women's work as light work. In general, social attitude favours that better paid jobs should go to men. Employers believe that certain jobs should not be offered to women as long as men are available.

It can be argued that male-female wage difference, which is apparently linked with pure gender bias, in fact, reflects the lower bargaining power of women in the labour market in Bangladesh. A number of factors operating at both household level and societal level result in lower bargaining power of female workers seeking paid job. The perception that women are secondary earners may also influence the institutional wage setting process. Minimum wage recommended for the sub-sectors with a higher share of female workers is sometimes observed to be lower than the recommended wage for sub-sectors of manufacturing industries dominated by male workers. This factor obviously weakens women's bargaining power. Families of female earners do not provide adequate support to women workers, which would help them overcome the barriers. Families' male guardians (especially from low income groups) sometimes keep a pressure that women accept employment even if the wage is low. Women without male earner in the household are required to earn to ensure survival and cannot bargain for higher wage.

#### ***1.3.4 Determinants of Wage: Results of Multiple Regression Analysis***

An analysis of the determinants of wage can throw light on the contribution of the human capital endowment of the workforce, location and other characteristics on wage. OLS regression equations in semi-log form have been estimated to provide an understanding of factors affecting wage variation. Two separate equations have been estimated with wage data of the LFS 2000 and 2006 (Tables 1.15 and 1.16). Independent variables in the equations include individuals' human capital characteristics, family characteristics and location/region.

The regression results show that the influence of personal characteristics tally with common perception. Education has positive influence, the coefficients are higher as the level of education rises. A comparison of coefficients in 2000 and 2006 reveals that the coefficients of education are slightly lower in the latter year. This indicates that there is a lack of movement of the economy to more knowledge based activities. It implies a lack of growth of employment opportunities for school educated persons and or a decline of the returns to education due to deterioration of

quality of education. This has serious policy implications. Steps for the much talked about quality improvement of school education must be taken immediately. Suitable employment opportunities should be created to absorb the growing stream of school educated youth. The coefficient of the 'dummy for training received' has also declined. This raises doubts about the appropriateness and quality of the training imparted in recent years. It implies that market oriented training facilities should be generated for the young labour force who did not complete SSC level of education, so that the demand-supply imbalance on this front is reduced and real wage growth is accelerated. Women's disadvantage has declined in the later year: coefficient of the dummy for female is negative and has smaller absolute value in 2006. Public sector wage advantage has increased during the period. Dummy for administrative Divisions should be interpreted cautiously because price levels differ among regions.

TABLE 1.15  
DETERMINANTS OF VARIATION OF WAGE: RESULTS  
OF OLS REGRESSION, 2006

Dependent variable: log of daily wage<sup>a</sup>

Explanatory Variable	B	t	Sig.
(Constant)	3.72	114.64	.00
Age of workers	.03	17.05	.00
Square of workers age	.00	-15.85	.00
Primary dummy	.16	10.27	.00
Secondary dummy	.12	9.33	.00
SSC + dummy	.57	39.06	.00
Regular salaried employee dummy	.00	.10	.92
Formal dummy	.13	10.58	.00
Public dummy	.39	27.95	.00
Land owned in decimal	.00	5.80	.00
Head dummy	.06	4.89	.00
Whether received any training?	.08	6.20	.00
Division dummy for Chittagong	.07	6.21	.00
Division dummy for Khulna	-.16	-12.30	.00
Division dummy for Rajshahi	-.19	-18.11	.00
Division dummy for Barisal	-.00	-.09	.93
Division dummy for Sylhet	.14	7.60	.00
Dummy for female	-.34	-25.84	.00
Area dummy	.11	13.29	.00
Sample size	20332	-	-
Value of F	729.73	-	.00
Adjusted R-square	0.39	-	-

**Source:** Estimated from the LFS 2000 data.

a. Log of daily 8 hourly wage calculated from weekly earning and weekly hours of employment.

TABLE 1.16  
**DETERMINANTS OF VARIATION OF WAGE: RESULTS OF  
 OLS REGRESSION, 2000**

Dependent variable: log of daily wage

Explanatory Variable	B	t	Sig.
(Constant)	3.28	53.49	.00
Workers age	.04	10.40	.00
Square of workers age	.00	-9.34	.00
Primary dummy	.16	7.79	.00
Secondary dummy	.23	9.44	.00
SSC + dummy	.67	26.53	.00
Regular salaried employee dummy	-.31	-14.44	.00
Formal dummy	.25	11.97	.00
Public dummy	.31	13.38	.00
Land owned in decimal	.00	4.38	.00
Head dummy	.17	7.70	.00
Whether received any training	.21	6.36	.00
Barisal dummy	-.07	-2.34	.02
Chittagong dummy	-.03	-1.27	.20
Khulna dummy	-.10	-4.36	.00
Rajshahi dummy	-.21	-9.66	.00
Sylhet dummy	.05	1.13	.26
Dummy for female	-.50	-23.10	.00
Area dummy	.19	7.71	.00
Sample size	6505	-	-
Value of F	313.68	-	.00
Adjusted R-square	0.46	-	-

**Source:** Estimated from the LFS 2000 data.

## 1.4 CHARACTERISTICS OF YOUTH LABOUR FORCE

### 1.4.1 *Why Focus on Youth Labour Force?*

There have been a number of studies on the characteristics of labour market in Bangladesh and the changes in the labour market. But none of the studies provided in-depth analysis of youth labour market. The present study therefore intends to focus on this aspect. Youth labour force may face additional vulnerability because of their age. The transition from schooling to workforce is often difficult, especially for youth from low income families who are likely to enter the labour force earlier than others. Poverty can have separate implications for the youth labour force. In addition, this segment of the labour market will influence poverty accentuation/reduction through separate routes. Therefore, this group's special needs and problems should be addressed.

Younger labour force requires separate analysis because this group is likely to face distinct types of demand generated by separate sets of employers. The supply



considerations are also likely to differ among the youth population and aged population.

The fact that youth labour force did not receive adequate attention in the context of analysis of Bangladesh's labour market is, to some extent, due to the lack of emphasis on the process through which they enter the labour market. In an economy dominated by family employment, the entry of youth labour force may be viewed as an automatic process where they are engaged as unpaid family worker. But this may no longer be valid as the youth labour force receive education and move to new occupations. In fact, youth labour force should receive attention because they are likely to be the more dynamic component of the labour market.

This section of the paper aims to examine the factors related to employment of the youth labour force and suggest policies for improvement of their future position in the labour market.

#### **1.4.2 Labour Force Participation among Youth Population**

The shares of labour force in the youth and older age groups are expected to change with the changing age composition of labour force which is associated with the demographic changes taking place in the country. In addition, the share will be influenced by LFPR in all age groups. Data presented in Table 1.17 show that LFPR among 20-29 years age groups are higher in 2006 than in 2000. This factor, however, did not compensate the decline of the youth labour force due to declining share of youth in total population. A decline in the share of youth in the labour force can be observed in Table 1.18. In the years 2000 and 2006, the share of youth labour forces was 38.1 per cent and 35.8 per cent respectively. This was compensated by 1.0 and 1.4 percentage point increase of labour force respectively in 30-59 years and 60 and above year's age groups.

TABLE 1.17  
LFPR AMONG YOUTH AND OLDER POPULATION: 2000 and 2006

*(Per cent)*

Age (yrs.)	Both sex		Male		Female	
	2000	2006	2000	2006	2000	2006
15-19	41.66	41.66	55.85	62.88	27.35	13.76
20-24	47.04	53.03	74.01	80.41	26.30	29.00
25-29	54.22	60.84	91.30	95.28	27.08	33.69
30-34	60.80	64.66	95.70	98.68	26.50	34.88
35-39	63.70	66.22	98.20	98.81	25.70	34.82
40-44	66.60	68.19	97.80	97.72	26.60	35.15
45-49	66.00	68.82	97.60	97.75	23.40	32.62

TABLE 1.18  
**SHARE OF LABOUR FORCE IN YOUTH AND OLDER AGE GROUPS: 2000 and 2006**  
*(Per cent)*

Age (yrs.)	2000	2006
15-29	38.13	35.80
30-59	56.08	57.01
60+	5.79	7.19

The factors affecting LFPR are likely to differ between the fourth and older population. Logistic regressions have been estimated to explain the probability that a youth participates in the labour force. Separate equations for male and female youths have been presented in Tables 1.19a and 1.19b. Direction of influence is more or less same for the explanatory variables. Only exception is the dummy for “married” persons which have a negative coefficient for female and positive coefficient for male youths. This is somewhat obvious, given the tradition that married men take up the responsibility of earning bread, while married women are in charge of household chores. The most important policy variable linked to LFPR is education. All levels of education have negative influence on labour force participation.

TABLE 1.19A  
**DETERMINANTS OF LABOUR FORCE PARTICIPATION OF YOUTH AND OLDER POPULATION: FEMALE**

Variable	Female, without student and age 30+		Female, without student and age 15-29	
	Coeff.	Sig.	Coeff.	Sig.
NOCB6	-.07	.00	-.01	.70
AGE	.06	.00	.38	.00
SAGE	-.00	.00	-.06	.00
PRIMARY	-.16	.00	-.11	.01
SECONDARY	-.30	.00	-.34	.00
SSC	.45	.00	-.15	.02
HEDUC	-.10	.00	-.05	.00
HEAD_D	.80	.00	.66	.00
RMO	.32	.00	.22	.00
LAND	.00	.00	.00	.09
MARRIED	-.03	.44	-.71	.00
WDWD	.73	.00	.29	.03
BA_D	.47	.00	.25	.00
CH_D	.09	.02	.17	.00
KH_D	-.01	.75	-.08	.13
RA_D	-.05	.16	-.09	.07
SY_D	.55	.00	.30	.00
Constant	-1.85	.00	-5.55	.00
Nagel Kerke R-bar square	.08	-	.05	-
Log-likelihood sq.	37758.8	.00	22234.9	.00
Sample size	33,525	-	20,195	-

Being “household head” has the largest positive influence on “odds-ratios,” “Number of small children in the household’ is expected to reduce the probability of female labour force participation through the impact on family care responsibility. The coefficients of this variable are not significant in the female equations. The negative impact is possibly nullified through the positive push factor of higher consumption needs of the larger number of children.

The results discussed above imply that there is inadequate demand for educated labour force and push factors dominate in the decision about labour force participation, especially among the youth population.

TABLE 1.19B  
DETERMINANTS OF LABOUR FORCE PARTICIPATION  
OF YOUTH AND OLDER POPULATION: MALE

Variable	Male, without student and age 30+		Male, without student and age 15-29	
	Coeff.	Sig	Coeff.	Sig
NOCB6	-.04	.15	-.04	.28
AGE	-.07	.00	-.45	.00
SAGE	-.00	.00	.01	.00
PRIMARY	.13	.05	.01	.95
SECONDARY	.24	.00	-.30	.00
SSC	.15	.21	-.10	.00
HEDUC	-.07	.00	-.16	.00
HEAD_D	1.78	.00	1.26	.00
RMO	.41	.00	.23	.00
LAND	.00	.00	-3.8E-05	.68
MARRIED	1.32	.00	.45	.00
WDWD	-.21	.52	-1.33	.00
BA_D	.27	.00	.05	.59
CH_D	-.13	.01	.20	.01
KH_D	.53	.00	.46	.00
RA_D	-.07	.28	.32	.00
SY_D	.21	.05	.84	.00
Constant	4.12	.00	6.79	.00
Nagel Kerke R-bar square	.38	-	.13	-
Log-likelihood sq.	14250.5	.00	10357.4	.00
Sample size	36,232	-	18,235	-

Source: Estimated from the LFS 2006 data.

### 1.4.3 Education of Youth Labour Force

With the recent expansion of schooling facilities, the educational composition is likely to change. Table 1.20 shows that such change has taken place. In the years 2000 and 2006, 38.6 per cent and 27.8 per cent youth were respectively without any education. There has been increase in the share of youth labour force in education groups primary, secondary and higher secondary levels. The changes have taken place among both male and female in the age group 15 to 29 years.

TABLE 1.20  
YOUTH LABOUR FORCE (AGED 15-29 YEARS) BY LEVEL OF EDUCATION: 2000  
AND 2006

*(Per cent)*

Level of education	2000			2006		
	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
No schooling	38.6	34.3	49.4	27.75	25.87	33.17
class i – v	26.3	28.0	22.2	28.90	29.54	27.04
Class vi – viii	15.0	16.8	10.4	17.56	18.06	16.12
Class ix – x	6.7	7.0	6.7	10.38	10.76	9.28
SSC/HSC & equivalent	9.4	9.6	9.1	11.72	12.06	11.75
Degree & above	4.0	4.3	3.2	3.44	3.47	3.37

### 1.4.4 Sector and Status of Employment

Status and sector of employment of youth and sectoral distribution of youth employment have been shown in Table 1.21. Agriculture has absorbed the highest share of youth labour force, followed by manufacturing and trade. The share of agriculture has declined by 4.4 percentage points, while the share of the other two has increased.

TABLE 1.21  
SECTORAL DISTRIBUTION OF YOUTH (15-29 YEARS) EMPLOYMENT

*(Per cent)*

Industry	2006			2000		
	Total	Male	Female	Total	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture, hunting and forestry	41.64	34.86	61.93	46.0	46.9	43.8
Fishing	2.31	2.85	0.68	1.3	1.5	0.8
Mining and quarrying	0.15	0.17	0.07	6.5	0.2	1.3
Manufacture	15.60	15.06	17.20	13.2	10.1	21.8

*(Cont. Table 1.21)*

Industry	2006			2000		
	Total	Male	Female	Total	Male	Female
Electricity, gas and water supply	0.19	0.23	0.06	0.3	0.3	0.2
Construction	3.73	4.65	1.00	2.8	3.2	1.6
Wholesale & retail trade	14.87	18.60	3.73	13.6	16.7	5.1
Hotels and restaurants	1.54	1.96	0.31	1.5	1.9	0.5
Transport, storage and communications	9.25	12.10	0.73	7.3	9.7	0.8
Financial intermediation	0.71	0.86	0.85	0.4	0.4	0.7
Real estate, renting and business activities	0.36	0.46	0.07	0.3	0.4	0.2
Public administration and defense	1.07	1.17	0.77	1.0	1.4	0.5
Education	1.93	1.46	3.33	2.3	1.8	3.5
Health and social work	0.47	0.32	0.93	0.4	0.4	0.4
Community, social and personal service	6.19	5.46	8.35	9.1	5.2	19.3

Table 1.22 shows that the share of paid employment, especially regular employment, has declined during 2000 to 2006. The share of “unpaid family worker” status has increased from 21.7 per cent in 2000 to 33.1 per cent in 2006.

TABLE 1.22  
DISTRIBUTION OF EMPLOYED YOUTH AGED 15-29 YEARS  
BY STATUS IN EMPLOYMENT

	<i>(Per cent)</i>	
	2000	2006
Total	100.0	100.0
Regular paid employee	19.8	15.11
Employer	0.1	0.26
Self-employed	32.0	27.56
Unpaid family worker	21.7	32.19
Irregular paid worker (agri., non-agri.)	26.4	22.19
Domestic worker/maid servant	-	0.71
Paid/ unpaid apprentice	-	1.12
Others	-	0.86

#### 1.4.5 Youth Unemployment

Unemployment rate is higher among youth labour force compared to the rest. More alarming is the fact that unemployment rate is higher among educated youth than among those without education. This pattern to some extent reflects that the educated youth are from better-off families and can afford to remain unemployed. Nonetheless, it implies wastage of human capital which was created using nation's resources. Economic growth must create employment for this group. Educated unemployment tends to generate a vicious circle through its discouraging effect on future private investment in education.

Unemployment rate among youth has declined during 2000 and 2006, although rather slightly. Both male and female youth employment experienced improvement (Table 1.23).

TABLE 1.23  
UNEMPLOYMENT RATE BY SEX AMONG YOUTH LABOUR FORCE

Sex	(Per cent)	
	2006	2000
Male	7.2	9.5
Female	10.7	15.0
All	8.1	11.1

The decline of unemployment rate has been larger among those with school education (Table 1.24). However, the decline is associated with rise of self/family employment and one cannot be sure how far this is simply work sharing and what is the productivity of such employment.

TABLE 1.24  
UNEMPLOYMENT RATE AMONG EDUCATED YOUTH: 2000-2006

Level of education	2006		2000	
	Male	Female	Male	Female
No education	3.7	5.7	3.0	4.9
i-v	4.1	7.7	7.7	15.6
vi-vii	6.8	13.0	8.0	23.2
ix-x	9.7	16.7	25.6	39.0
SSC, HSC equivalent	16.9	21.3	23.0	39.8
Degree & above	18.6	21.4	20.8	28.5
All	7.2	10.7	9.5	15.0

#### **1.4.6 Policies for Youth Employment**

The employment generating strategies and policies have been narrated at various chapters of the PRSP document. However, it shows that awareness about entry process into the labour market and the consequent frictions are rather limited. The distinction between youth and older labour force has been hardly recognised. In the document there is a special focus on various special groups. In contrast, youth employment and responsiveness to their specific needs is lacking. The neglect is glaring as revealed by lack of reference to youth population even where vocational and technical education has been discussed. Section 1.9 will suggest some policies for youth labour force.

## 1.5 EMPLOYMENT PROJECTIONS

### 1.5.1 Labour Force Projections and Employment Growth Required

Labour force (15+) in Bangladesh increased from 40.7 million in 1999-2000 to 49.5 million in 2005-06, the latest available year of the Labour Force Survey (LFS), with a growth rate of 3.32 per cent annually. If this trend continues, labour force will grow to 56.41 million in 2009-10, 58.27 million in 2010-11 and 66.39 million in 2014-15.

The total number of people in employment reached a high of 47.4 million in 2005-06 from a low of 39 million in 1999-2000 with an employment growth rate of 3.3 percent. National economic growth of 5.64 per cent with employment-GDP elasticity at 0.59 did little to dent the jobless total. Only around 248,227 new jobs were created annually per percentage point of economic growth during 2000-06. If the prevailing employment growth trend continues, total employment will increase to 53.98 million in 2009-10, 55.77 million in 2010-11 and 63.51 million in 2014-15. Thus the incremental labour force over the five-year period from 2010-11 to 2014-15 works out at 13.44 million (Table 1.25). It means that given the existing trends of labour force and employment growth at the prevailing GDP growth rate of around 6 percent, 15.87 million additional jobs (including backlog of 2.43 million unemployed in 2009-10) will have to be created during 2011-15 requiring an employment growth rate of 5.4 per cent. Besides, if the existing trend of underemployment rate continues, underemployed persons will amount to 27.90 million during 2011-15. If we go for the creation of productive employment for at least 25 per cent of these underemployed (6.97 million), 22.84 million additional productive employments will have to be created during 2011-15. It is a great challenge.

TABLE 1.25  
ESTIMATED INCREMENTAL LABOUR FORCE DURING 2011-15

(In Million)

Year	Estimated Labour Force	Estimated Employment	Incremental Labour Force
2010-11	58.27	55.77	2.50
2011-12	60.20	57.61	2.59
2012-13	62.20	59.51	2.69
2013-14	64.26	61.48	2.78
2014-15	66.39	63.51	2.88
Total			13.44

Moreover, 34.95 per cent of the country's unemployed are aged 15-29 years who make up 40.6 per cent of the working-age population (2005-06). If we experience slower economic growth during 2011-15, this will have a negative impact on employment growth. As the population grows, the economy is not creating enough jobs as it is to keep up with the levels it has. What it needs is stronger growth that is more employment-creative or employment-intensive.

Another significant trend that comes to light is that all types of services, except electricity, gas & water and community and personal services which show a fall in employment, have seen a rise in total employment across all sectors. If this trend continues, services will soon overtake agriculture as the largest provider of employment. Given these trends, there is a need to reformulate development and growth strategies. Agricultural workers are increasingly migrating to the urban centres with the hope of finding better jobs. But they are ending up with worse-off position in the urban centres by engaging them in casual labouring jobs or petty trading.

### ***1.5.2 Estimates of Labour Productivity and Labour Intensity***

In making employment projections estimates of labour productivity and labour intensity (inverse of labour productivity) of different sectors are often used. Information available from the LFS 2005-06 can be used for estimating these indicators. One problem involved in making these estimates is that the LFS records employment according to principal occupation. A person principally employed in agriculture may be engaged in a variety of other economic activities. Counting such a person in agricultural occupation overstates employment in agriculture and underestimates employment in non-agricultural occupations. Given the existing state of information, virtually nothing can be done to resolve this problem. It may, however, be noted that agriculture is the only sector in which a substantial overstatement of employment on this account is likely. Employment in most other occupations is typically specific to those occupations. The second problem relates to the prevalence of part-time work which is widespread for the female workers in agriculture and ancillary activities and, to a small extent, in construction. For this a crude adjustment has been made by deflating female employment in these sectors by one-fortieth of weekly hours of work.

For the present exercise labour intensity is defined as the ratio of employment to value added (Table 1.26). Clearly, this is not a measure that can be defended as a criterion for employment expansion. A meaningful criterion must represent the cost of employment creation, rather than use the inverse of the benefit per unit of employment as the guideline. A useful measure would be the investment cost of



creating employment in different sectors, i.e. to divide the labour intensities by the respective sectoral capital-output ratios. It, however, appears that the sectoral ranks of capital-output ratios are highly inversely correlated with the sectoral ranks of labour intensities. Thus employment per unit of investment, were they possible to estimate, would generally strongly confirm labour intensities as indicators of sectoral contribution to employment.

The use of these coefficients in projecting employment must in any case be distinguished from their use in deciding the desirable pattern of sectoral growth. The latter decision must be based on a comprehensive accounting of costs and benefits of expanding different sectors. Employment projection based on the use of these coefficients makes sense only when the problem of relative rates of sectoral expansion has been solved by taking into account all important factors.

TABLE 1.26  
**SECTORAL LABOUR PRODUCTIVITY AND EMPLOYMENT INTENSITY: LFS  
 2005-06 (ALL VALUES ARE AT 1995-96 PRICES)**

Sector	Value Added per Worker in Taka	Employment per Million Taka of Value Added ( $\lambda$ )	Labour Intensity Index
Agriculture	26,367	38.04	2.29
Mining & quarrying	635,660	1.57	0.09
Manufacturing	89,693	11.16	0.67
Electricity, gas & water	564,113	1.77	0.11
Construction	163,672	6.11	0.37
Trade, hotel & restaurant	51,762	19.32	1.16
Transport, storage & communication	69,327	14.42	0.87
Finance & business services and real estate	350,340	2.85	0.17
Health, education, public administration & defence	80,233	12.46	0.75
Community & personal services	75,813	13.19	0.79
All sectors	60,108	16.64	1.00

Agriculture is the most labour intensive sector, a result that would almost certainly survive any correction for the overestimation of sectoral employment. The other labour intensive sectors are trade, hotel and restaurant, transport storage and communication, and community and personal services (Table 1.26). These are also the sectors for which the capital-output ratios are lower than average. Electricity, gas and water, finance, business services and real estate, and construction have low labour intensity. These sectors also have higher than average capital-output ratios.

### 1.5.3 Incremental Labour Intensity and Output Elasticity of Employment

At the overall level, the incremental labour intensity (employment per unit of GDP) was only just over three-fifths of the average labour intensity at the end of the period. A lower incremental labour intensity than average labour intensity is a widely observed phenomenon and is indeed an essential feature of the structural change in output and employment that economic growth brings about. The rate of decline, however, is far too rapid for the level of development of Bangladesh. The overall output elasticity of employment at 0.59 (Table 1.27) is rather low for enabling a rapid increase in income entitlement on the part of the poor.

Further insights into the nature of the employment problem can be had by looking at the sectoral labour intensities and employment elasticities. The rate of labour absorption in agriculture appears to have been reasonably healthy albeit the share of this sector in total employment declined from 50.77 per cent to 48.08 per cent over the six-year reference period. The employment performance of manufacturing has been quite encouraging. Over the six-year period under review, this sector's share in total employment increased from 9.54 per cent to 11.02 per cent.

TABLE 1.27  
INCREMENTAL LABOUR INTENSITY AND OUTPUT ELASTICITY OF  
EMPLOYMENT: 1999/2000- 2005/06 (ALL VALUES ARE AT 1995-96 PRICES)

Sector	Employment in Million		Value Added in Million Taka		Incremental Employment per Million Taka of VA	Output Elasticity of Employment ( $\eta$ )
	1999-2000	2005-06	1999-2000	2005-06		
Agriculture	19.79	22.77	504,270	598,532	31.61	0.82
Mining & quarrying	0.17	0.05	20,277	31,783	-10.43	-2.38
Manufacturing	3.72	5.22	303,679	468,197	9.12	0.78
Electricity, gas & water	0.13	0.08	28,258	45,129	-2.96	-0.01
Construction	1.10	1.53	154,590	250,418	4.49	0.68
Trade, hotel & restaurant	6.15	7.82	275,755	404,775	12.94	0.62
Transport, storage & communication	2.47	3.98	181,422	275,922	15.98	1.14
Finance & business services and real Estate	0.40	0.75	205,970	262,755	6.16	2.60
Health, education, public administration & defence	2.12	2.55	137,032	204,593	6.36	0.45
Community & personal services	2.92	2.62	160,332	198,630	-7.83	-0.01
All sectors	38.98	47.36	20,49,276	28,46,726	10.51	0.59

### 1.5.3.1 Employment Projections

The present exercise is based on the definition of employment with respect to a cut-off age of 15 years. The purpose of this section is to present key figures relating to the base year employment situation as well as the employment growth that will be required to absorb the addition to the labour force during the period of the Sixth Five Year Plan (SFYP) from 2010-11 to 2014-15. In addition to absorbing the new entrants of the labour force, provision will also have to be made to absorb at least a part of the backlog of the underemployed in higher productivity employment. So, the employment projection takes that into account.

In making employment projection for 2011-15, we have applied the method developed by the ILO (2002). Since the growth target for the period is not available at the moment of doing the present exercise, the projections remain illustrative. Two sets of projections, respectively for a moderate (assuming 7 per cent GDP growth) and a more ambitious growth scenario (assuming 8 per cent GDP growth), have been made.

There are two different ways of making projections of employment. The first is to use sectoral employment elasticities ( $\eta_i$ ) in conjunction with sectoral growth rates ( $g_i$ ) to obtain the increment in sectoral employment ( $\Delta E_i$ ) as follows:

$$\Delta E_i = (\eta_i) (g_i) E_{i0}$$

Where  $E_{i0}$  is the base-year employment in the  $i$ -th sector. The problem with this method is that it is necessary to have estimates of the base-year distribution of employment among sectors for which no information is available. The most recent year for which sectoral employment estimates are available is 2005-06, the latest year of LFS that is published. We, therefore, use the following method of projecting increases in sectoral employment:

$$\Delta E_i = (\eta_i) (\lambda_i) \Delta Y_i$$

Where  $\lambda_i$  is the average labour intensity (employment per unit of value added) in the  $i$ -th sector and  $\Delta Y_i$  is the change in value added in sector  $i$  over the period of projection. Employment projection by this method requires the estimate of sectoral value added for the base year of the projection period and sectoral growth rates over the period. But this sort of information is necessary even for the first method which additionally requires information on sectoral employment for the benchmark year that the present method does not require.

The results of the present exercise are presented in Tables 1.28 and 1.29. The incremental employment during the 2011-15 period is projected to be 13.98 million with a 7 per cent GDP growth (Table 1.28) and to be 15.44 million with an 8 per cent GDP growth (Table 1.29). These projections can be easily adapted once GDP

growth targets for the ensuing Sixth Five Year Plan are set. The projections of employment growth made in the present exercise, therefore, essentially remain illustrative.

The incremental labour intensity (ILI) in agriculture is projected to be 80 per cent (for the base case) and 75 per cent (for high growth case) of what was experienced during 2000-06 because of the opportunity of transferring a higher proportion of the increment in the labour supply to the more rapidly growing secondary and tertiary sectors. The ILI in transport, storage and communication sector and finance and business services and real estate sector is projected to be 70 per cent for the base case and 75 per cent for high growth case. While employment growth in traditional industries is likely to be slow, it is expected to be rapid in some of the newer industries. The ILI in manufacturing sector, construction sector, trade, hotel and restaurant sector and health, education, public administration and defence sector is projected to be 95 per cent for high growth case.

For mining and quarrying, electricity, gas and water, and community and personal services, employment elasticities were found to be negative during 2000-06 (Table 1.27). Appropriate public policy should be put in place to prevent a further decline in labour intensity in these sectors so that an employment elasticity of one is assumed in conjunction with the actual labour intensities in both scenarios.

TABLE 1.28  
**ILLUSTRATIVE EMPLOYMENT PROJECTIONS FOR THE 2010-11/ 2014-15 PERIOD**  
 (THE BASE CASE: 7% ANNUAL GDP GROWTH)  
 (All values in 1995-96 million taka; Employment in thousand workers; and Incremental Labour Intensity in workers per million taka)

Sector	GDP 2010-11	GDP 2014-15	$\Delta Y$	$\eta_{\Delta i}$	$\Delta E$ (000)
Agriculture	772,188	10,01,196	229,008	24.95	5,713.75
Mining & quarrying	48,381	63,917	15,536	1.6	24.86
Manufacturing	678,856	891,339	212,483	8.71	1,850.73
Electricity, gas & water	58,667	76,401	17,734	1.68	29.79
Construction	346,666	453,909	107,243	4.14	443.99
Trade, hotel & restaurant	590,475	783,979	193,504	11.98	2,318.18
Transport, storage & communication	415,237	549,285	134,048	11.50	1,541.55
Finance & business services and real estate	342,856	444,421	101,565	5.19	527.12
Health, education, public admin. & defence	300,952	399,480	98,528	5.61	552.74
Community & personal services	255,238	329,571	74,333	13.20	981.20
All sectors	38,09,516	49,93,498	11,83,982	...	13,983.91

**Source:** Based on Table 2 and Table 3.

TABLE 1.29  
**ILLUSTRATIVE EMPLOYMENT PROJECTIONS FOR THE 2010-11/ 2014-15**  
**PERIOD THE BASE CASE: 8% ANNUAL GDP GROWTH**  
 (All values in 1995-96 million taka; Employment in thousand workers; and  
 Incremental Labour Intensity in workers per million taka)

Sector	GDP 2010-11	GDP 2014- 15	ΔY	ηi/i	ΔE (000)
Agriculture	772188	1039152	266964	23.40	6246.96
Mining & quarrying	48,381	66,340	17,959	1.6	28.73
Manufacturing	678,856	925,131	246,275	8.27	2,036.69
Electricity, gas & water	58,667	79,297	20,630	1.68	34.66
construction	346,666	471,117	124,451	3.93	489.09
Trade,hotel & restaurant	590,475	813,700	223,225	11.38	2,540.30
Transport, storage & communication	415,237	570,109	154,872	10.68	1,654.03
Finance & business services and real Estate	342,856	461,270	118,414	5.56	658.38
Health, education, public admin. & defence	300,952	414,624	113,672	5.33	605.87
Community & personal services	255,238	342,065	86,827	13.20	1,146.12
All sectors	38,09,516	51,82,805	13,73,289	...	15,440.83

Source: Based on Table 2 and Table 3.

However, with a 7 per cent GDP growth projected increase in employment will account for only 88.09 per cent of projected increase in labour force, while with an 8 per cent GDP growth projected increase in employment will account for 97.29 per cent of projected increase in labour force making not so significant dent on the existing unemployment and underemployment in the economy. Obviously, even with a GDP growth of 8 per cent per annum, the number of jobs created would fall below that required to absorb the new addition to the labour force and the backlog of the unemployed. This scenario brings out a great challenge of employment generation. One way of filling the gap is to introduce policies for making growth more employment-friendly. This would require a substantial revisit of the overall development strategy and policies. A second and somewhat more practical and short-term measure to fill the gap is to increase overseas migration of workers. Even if the country can send out 0.7 million people abroad for jobs annually, this would help a great deal in achieving a balance between labour force and employment. This is achievable since overseas employment could increase from 0.83 million in 2007 to 0.88 million in 2008 with an incremental employment of 0.05 million in a single year. Another important measure would be special schemes for job creation and employment-based safety nets through public works programmes. Such programme

should aim at creating at least 0.25 million person-years of jobs annually under the social safety net programme in order to absorb incremental labour force over the Sixth Five Year Plan period.

By and large, looking at ways and means of raising the employment-intensity of growth (without of course compromising on productivity growth) is important. For all practical purposes, employment intensity needs to grow without resorting to the use of backward technology. The above analysis clearly points to the need for higher economic growth as well as greater employment intensity. In order to meet the employment challenge facing the country, not only the rate of economic growth will have to be substantially higher than what has been achieved recently, but also it has to be more employment-intensive.

## **1.6 SCOPE OF TARGETED EMPLOYMENT PROGRAMME DURING SFYP**

### ***1.6.1 Targeted Employment Programmes of Bangladesh: An Overview***

Apart from autonomous employment generation, a number of targeted employment generation programmes are in place in order to alleviate poverty in the country. To address the challenge of employment generation and poverty reduction, the government has adopted a strategy of seeking collaboration from the non-governmental organisations (NGOs) and the private sector, especially by providing necessary support to the activities of the NGOs. These programmes mainly include: (1) programmes of the Karmasangsthan Bank for generating employment for the enemployed youth, (2) programme of self-employment for the youth by the Department of Youth Development, (3) poverty reduction and employment generation activities under the Ministry of Women and Children Affairs, (4) training and self-employment programme for the insolvent freedom fighters and their dependants, (5) programmes under poultry and livestock sector for employment generation and poverty alleviation, (6) employment generation programmes of the Department of Cooperatives, (7) employment generation programmes of the Department of Social Welfare, (8) employment under Rural Infrastructure Development Programme, (9) employment generation programmes under Rural Development Academy (RDA), Bogra, (10) other micro-credit programmes for self-employment, and (11) employment generation programme for the hardcore poor.

In what follows, the discussion of the existing programmes has been made in two parts: First, we present a review of the programmes listed in 1 to 10 above. This is followed by a more elaborate discussion on the experience of 100-days employment programme for the hardcore poor. The second part of the discussion focuses on the need for special employment generation schemes for the coastal and disaster hit areas.

**a) Programmes of the Karmasangsthan Bank for Generating Employment for the Unemployed Youth**

Karmasangsthan Bank (KB) has undertaken special credit programmes to utilise the unemployed, especially the educated unemployed youth of the country, in different production-oriented and income-generating activities. In FY2007-08, KB distributed Tk.375.76 crore among 104,391 borrowers. Tk. 296.82 crore was recovered against recoverable loans of Tk. 345.71 indicating a recovery rate of 86 percent. Loan distributed by KB up to February 2009 amounted to Tk. 538.56 crore with recovery of Tk. 408.53 crore (recovery rate 85 per cent). Total number of beneficiaries in the 64 districts of the country currently stands at 1,35,276 and jobs have been created for 4,43,239 persons. Some special credit programmes of Karmasangsthan Bank are given below:

- Micro-Credit Support for Employment of Voluntarily Retired/Retrenched Labour/Employees of Mills and Industries

Under an agreement between the Ministry of Labour and Employment and KB, KB is implementing the programme for alleviation of poverty of voluntarily retired/retrenched industrial workers by creating employment opportunities and retraining activities. Under this programme, Tk. 60.49 crore has been disbursed and this fund is being used as revolving fund. Up to June 2008, Tk 55.13 crore has been distributed among 10,363 voluntarily retired/retrenched labour/ employees. Up to February 2009, a sum of Tk.55.57 crore has been disbursed in favour of 12,095 retired/retrenched labour/ employees.

- Assistance for Agro-based Industries

Under an agreement between the Ministry of Finance and KB, KB is implementing this programme. As of June 2008, Tk.17.91 crore has been distributed among 970 entrepreneurs against Tk. 30.00 crore disbursed to KB (being used as revolving fund) in FY2004-05 and FY2005-06. Up to February 2009, a sum of Tk. 34.46 crore has been disbursed in favour of 1,458 entrepreneurs (GoB 2009).

**b) Programme of Self-employment for the Youth by the Department of Youth Development**

The Department of Youth Development (DYD) under the Ministry of Youth and Sports organises training courses for employment generation for youths aged between 18 and 35 years. Around 1,200 youths are expected to benefit from the diploma courses of three months to one-year duration. The allocation of revenue budget is Tk. 28.94 crore and development budget Tk.24.88 crore for the DYD in the fiscal year 2008-2009.

Meanwhile, the government is to discontinue its six-month long steno-typing courses as typing posts have been cut down in both public and private sectors. The DYD plans to provide training on modern office management and computer applications instead. The DYD also conducts vocational and skill development training courses for the 4.50 crore youths of the country. The courses are designed to equip young people with skills to work efficiently both at home and abroad. Courses include training on livestock, poultry, fishery and agriculture, aquaculture (fresh and coastal water), basic computer skills, graphics and video editing, electronics, electrical wiring, refrigeration and air-conditioning, secretarial science, block, batik and screen printing and dress-making.

The DYD at present is also providing new courses for potential migrant workers. These include housekeeping and laundry operations, food and beverage service, pattern making, modern office management and computer application, poultry rearing, bird-flu control, bio-diversity management, mushroom production, hair dressing, sweater knitting, linking and sewing machine operating, English, Korean and Arabic languages, etc.

Currently, the DYD has one national youth centre, 70 technical training centres, 55 livestock, poultry and pisciculture training centres, 68 dress-making centres, nine block and batik training centres, five centres for secretarial science, 32 centres for steno-typing, one human resource development (HRD) centre and four zonal HRD centres across the country.

The government since 2005 is running three five-year projects for youth development. These include training programmes on electrical wiring in 41 districts and electronics, air-conditioning and refrigeration work in 55 districts. Only 7,619 persons have received training under these schemes till June 2008 though the target was to train 24,160 youths by June 2009.

The government also runs a project titled "Innovative Management of Resources for Poverty Alleviation through Comprehensive Technology (IMPACT) Project" which trains people to establish bio-gas plants through utilisation of solid waste and animal waste. Meanwhile, the government also runs a project, "Youth Empowerment through Life Skills Education and Livelihood Opportunities," to create awareness regarding reproductive rights, HIV/AIDS and gender among adolescent girls and boys. This project, which began in January 2006, targets training to 16,122 people by December 2010. However, till June 2008 only 9,917 youths were trained (DYD 2009).

Considering the importance of youth participation in the national development process, the DYD trained 30,94,949 male and female youths in different trades up to



December 2008. Out of the trained youths, 17,39,657 youths engaged themselves in self-employment activities and 7,29, 203 beneficiaries have been provided with an amount of Tk.834.30 crore (including revolving fund) as loan up to December 2008. For the advancement and expansion of information technology, the DYD trained 85,530 youths in computer basic courses and graphics design training courses including internet and networking. This training programme was conducted across the country through 70 centres of 64 districts. To accelerate self-employment opportunities for the youth of different regions of the country, the DYD leased out 13,024 ponds among youth cooperative societies till December 2008.

#### **Job-based Training Mulled for Youths**

The government is planning to introduce several new training courses for youths to turn them into skilled workers for job markets both at home and abroad. These new proposed training include courses on AutoCad, dairy product processing and marketing, meat processing and slaughter house management, salesmanship, housekeeping, plumbing, rod binding and tiles fixing. These training programmes look promising for future employment generation both at home and abroad.

#### **c) Poverty Reduction and Employment Generation Activities under the Ministry of Women and Children Affairs**

Under the Ministry of Women and Children Affairs, a total of 750,000 VGD cardholder women were given income generating training and food assistance through this project during FY2008-09. The beneficiaries are given 30 kg wheat/25 kg nutritious atta per month. Taka 839 crore had been allocated for this project in FY2008-09. Up to June 2008, under the “Development of Asset less Women (FSVGD-2nd Phase)” project, 109,379 VGD card-holder women were given financial assistance of Taka 150 each and income-generating training to VGD cardholders by 13 partner NGOs. Taka 266.00 lakh has been allocated in the revised ADP of FY2007-08. Under the Vulnerable Group Development for Ultra-poor project, 80,000 VGD card-holder women will receive subsistence allowance of Taka 400 each in 24 months cycle. Taka 350 will be paid to the beneficiary in cash (in their Bank Accounts) and the rest Taka 50 will be deposited and given back after completion of the programme. They will also be provided life skill training on income generating activities such as nutrition, primary health, human rights, AIDs, gender issues, etc. Under the project titled “Rural Women Employment Creation (2nd phase),” opportunity has been created for training, credit and other assistance to develop sustainable self-employment of 72,000 rural poor women. Through this project, Taka 54.70 crore was disbursed as credit among 97,641 beneficiaries. Besides, the establishment of hostel for employed women, day care centre for children, sales and display centres for marketing of women entrepreneurs’

commodities, training centres with training facilities (training related to handicrafts, agriculture and computer) in various places is creating self-employment opportunities for women. However, in the FY2008-09, no allocation was made to this end.

Under Jatiyo Mahila Sangstha (National Women Organisation), loan amounting to Tk. 5,000 to Tk. 20,000 is provided to support self-employment programme for women. For managing small credit for self-employment an allocation of Tk.13.5 crore (revolving) was made to National Women Organisation from 2003 to 2007; Tk. 5,000 to Tk. 15,000 per capita has been disbursed through 106 branch offices of National Women Organisation in 48 upazilas and 58 sadar upazilas. Besides, in different places opportunities are being created for self-employment of women by establishing handiwork, agriculture and computer centres and by providing training.

**d) Training and Self-Employment Programme for the Insolvent Freedom Fighters and their Dependants**

As many as 45,417 insolvent freedom fighters and their dependants from 64 districts have been identified, and included in the training and self-employment programmes. Up to March 2009, as many as 517 insolvent freedom fighters and their dependants have been provided with skill development training through Youth Development Training Centres (YDTC) on different trades, either individually or in groups, to make them capable of being self-employed. The trained members of the target group are being provided with micro-credit to finance their self-employment and income generating projects.

**e) Programmes under Poultry and Livestock Sector for Employment Generation and Poverty Alleviation**

Artificial insemination is an important and successful programme in livestock sector. Up to June 2008, 18.11 lakh cattle have been artificially inseminated through 2069 artificial insemination centres of the country. To bring positive change in milk sector, programme has been undertaken to patronise the non-government dairy farms and 6,311 dairy farms have been constructed up to June 2008. Besides, small farmers and peasants are given advice and training on poultry and livestock rearing for employment generation and poverty alleviation.

**f) Employment Generation Programmes of the Department of Cooperatives**

Along with helping the professionals to become self-reliant by organising co-operatives, the Department of Cooperatives also contributes to poverty alleviation through employment generation. Up to December 2008, the number of co-operative societies registered throughout the country was 162,112, of which 22 are national cooperatives, 1,098 are central cooperatives and 160,992 are primary cooperatives.

Number of individual members of these cooperatives is 84,58,305. These societies have accumulated a capital amounting to Tk. 1,800 crore as working capital through collection of shares, savings deposits and other profitable activities. Up to June 2008, these societies have created employment opportunity for 144,119 members of the cooperative societies.

#### **g) Employment Generation Programmes of the Department of Social Welfare**

Existing programmes for employment generation under the Department of Social Welfare are as follows:

- Programmes for social unity development and poverty alleviation: At present, the Department of Social Welfare is functioning at all upazilas and urban areas of the country. Some of its programmes are: Rural Social Service (RSS) programme, Urban Community Development (UCD) programme, poverty alleviation through Rural Maternal Centre (RMC), Rehabilitation programme for acid-burnt women and physically disabled, etc. To alleviate poverty through these four programmes, new investment and reinvestment opportunities are created under revolving fund. Up to June 2008, a total of 3,153,513 families derived benefits from these programmes. Besides, up to January 2009 as many as 27,36,286 persons have benefited from vocational (technical) education and training for employment and 22,69,716 from literacy programme. Moreover, the awareness building activities on primary health care have been extended to 29,04,257 persons and 28,97,763 persons were motivated on family planning.

#### **h) Employment under Rural Infrastructure Development Programme**

Local Government Engineering Department (LGED), under the Ministry of Local Government, Rural Development and Co-operatives, has been implementing various rural infrastructure development programmes, especially rural roads, bridges/culverts, growth centres, construction of embankments, etc. In FY2008-09, development programmes implemented by the LGED created employment of about 16,742 lakh person-days. Besides, the rural roads maintenance programme employs a large number of rural women.

#### **i) Employment Generation Programmes under Rural Development Academy (RDA), Bogra**

Rural Development Academy (RDA), Bogra, has arranged 225 training courses attended by 10,826 participants up to June 2008. Besides, to develop replicable model for rural development and poverty alleviation, RDA is implementing comprehensive rural development programme, employment generation through

irrigation and water management, Good Seed Initiative (GSI), etc. The cumulative disbursement and recovery of credit under the projects undertaken by RDA stood at Tk. 3.57 crore and Tk. 2.68 crore respectively up to June 2008 (the rate of recovery is 92 per cent).

**j) Other Micro-Credit Programmes for Self-Employment**

**PROSHIKA**

Established formally in 1976, PROSHIKA, for sustainable economic development, income and employment generation of its group members, imparts training arrangement for its beneficiaries under micro-credit programme in organic agriculture, irrigation, livestock, apiculture, sericulture, social forestry, homestead gardening, small business, etc. through 11,63,000 projects in 59 districts covering 24,206 villages and 2,110 slums. Taka 4,083 crore has been credited up to December 2008 creating income and employment opportunities for 1.13 crore poor people and contributing to poverty eradication of more than 12.36 lakh families.

**SHAKTI FOUNDATION**

Founded in 1992 this organisation is engaged in promoting credit facility for women living in the slums of Dhaka, Chittagong, Khulna, Comilla, Bogra, Rajshahi and other major towns and cities. Besides, it also provides help for health-care, business entrepreneurship and social development of women. Micro-credit advanced up to December 2008 amounted to Tk.1,157.4 crore and the rate of recovery was 99.7 per cent.

**GRAMEEN BANK**

Assetless people can also engage themselves in income generating activities if they are provided credit support without collateral. Under this assumption, Grameen Bank provides collateral-free credit to the landless poor people. Credited money is being paid in installment and all of the activities of the Bank are being disbursed by weekly meeting. Advanced micro-credit accumulated up to April 2009 amounted to Tk. 44,510.93 crore covering 78,40,583 male (3.06 per cent) and female (96.94 per cent) beneficiaries in 84,237 villages with average recovery rate of 97.94 per cent.

**BANGLADESH RURAL DEVELOPMENT BOARD (BRDB)**

BRDB as a pioneer of rural development in Bangladesh is working relentlessly for increasing agricultural production and poverty alleviation. Through Two-Tier Cooperative model, BRDB is working for agricultural development by organising and providing credit and other agricultural instruments to the small and marginal farmers. Besides, under its development projects and programmes, BRDB is

providing micro-credit, skill development training and other production-friendly instruments and services by organising poor men and women through formal and informal cooperative societies and organizations for alleviating poverty. Up to June 2008, the BRDB, through 169,764 cooperative societies, distributed Tk.796.06 crore among 5,244,232 members and recovered Taka 680.52 crore with 94 per cent rate of recovery. The ongoing poverty alleviating and employment generating programmes of BRDB include: (i) Rural Livelihood Project in 152 upazilas; (ii) Minor Crop Production, Preservation, Processing & Marketing Programme in 204 upazilas; (iii) Palli Progati Prakalpa in 477 unions under 465 upazilas; (iv) Integrated Poverty Alleviation Programme (IPAP) in 446 upazilas; and (v) Women Development Programme in 100 upazilas of Bangladesh. Up to December 2008, total accumulated micro-credit distributed amounted to Tk.8,300.44 crore with average rate of recovery at 93 per cent.

#### PALLI KARMA-SAHAYAK FOUNDATION (PKSF)

PKSF with its partner organisations plays a remarkable role in alleviating poverty through its micro-credit activities targeted to employment generation in the rural areas. As of March 2009, PKSF disbursed a cumulative amount of loan of Tk. 7,007.43 crore to its 257 partner organisations. The partner organizations have distributed Tk. 43,358.37 crore by revolving the loan. During this period, the number of borrowers at the field level was 84.16 lakh where the share of women was more than 91 per cent.

PKSF usually disburses loan facility only to rural micro-credit sector. Currently, six categories of micro-credit programmes are being implemented with mainstream micro-credit activities like (a) rural micro-credit, (b) urban micro-credit, (c) micro-credit for the poorest of the poor, (d) micro-enterprise credit, (e) seasonal credit, and (f) house building and rehabilitation credit for the *Sidr* affected people of the southern districts and credit for the ultra-poor in the distress period. Up to March 2009, Tk.7,007.43 crore (cumulative) was distributed under its micro-credit programme covering 84,15,972 male (8.35 per cent) and female (91.65 per cent) beneficiaries with average recovery rate at 97.98 per cent. Apart from mainstream programme, PKSF is implementing some other programmes for the poorest of the poor.

#### Micro-Credit Programmes of Commercial and Specialised Banks other than Scheduled Banks

Other commercial and specialised banks are also conducting micro-credit programmes to alleviate poverty and create self-employment alongside the nationalised commercial banks. Up to March 2009, the total number of male (23.84

per cent) and female (76.16 per cent) beneficiaries was 17,70,752 and the cumulative disbursement of credit was Tk. 4,182.6 crore.

#### MICRO-CREDIT PROGRAMMES OF ADMINISTRATIVE MINISTRIES/DIVISIONS

The government has been allocating funds through non-development budget for undertaking micro-credit programmes for poverty alleviation through employment generation by different administrative Ministries/Divisions/Departments. The cumulative credit disbursement and recovery, till December 2008, stood at Tk. 9,751.57 crore and Tk. 8,326.96 crore respectively. In order to sustain the micro-credit programme for poverty reduction, the government accords emphasis on developing small entrepreneurs. The Ministry of Finance in cooperation with other ministries is working together in this direction.

#### **K) Gender Focused Employment Programmes**

The female labour force, as a percentage of the total labour force, has grown in Bangladesh over the period 2000-06 when the share of women in the total labour force went up from 21.13 per cent in 1999-2000 to 24.44 per cent in 2005-06. Female labour force participation rate increased from 23.9 per cent in 1999-2000 to 29.2 per cent in 2005-06, but it remains quite low compared to the male participation rate of 84 per cent in 1999-2000 and 86.8 per cent in 2005-06. The employment gap between women and men has narrowed down from 20.24 per cent of women as against 79.76 per cent of men in 1999-2000 to 23.81 per cent of women as against 76.19 per cent of men in 2005-06. Nevertheless, it is still quite wide pointing to the need for aggressive employment policy in order to bring about gender parity in employment.

Gender-based employment programmes, up to December 2006, under the MWCA are: (i) asset less women development programme (FSVGD, 2<sup>nd</sup> Phase) in which Tk.162.52 million has been disbursed among 70,074 women; (ii) different income generating trainings imparted to 279,999 VGD cardholders; and (iii) opportunities being created for self-employment for women in terms of offering training, credit and other facilities to 72,000 rural poor women. Besides, opportunities of self-employment for women are being created in terms of establishing sales and display centres to facilitate marketing of products of the women entrepreneurs and setting up training centres in different places for creating handicrafts, agricultural and computer skills. In the same vein, DYD is providing ICT training to women along with men for their self-employment. Despite various promotional efforts, access of women to employment remains limited.

Women maintain a critical path to exit, in the face of an intransigent system. Women have the alternative of turning to home-based activities as a response to paltry (worthless, petty, contemptible) wages in agriculture. This trend can be reversed by gender focused employment programmes through gender-friendly education and training in employable trades.

For all practical purposes, quality of employment needs to be improved to make it more productive. Viewed thus, existing targeted employment programmes should gradually shift their emphasis from low-productivity and low-wage activities in the informal sector to high-productivity and high-wage activities in the formal sector. This requires an enabling business environment for robust investment in the formal private sector. All this points to the crucial need for a well-articulated employment policy.

### ***1.6.2 Special Employment Programme and Employment Generation in Coastal Disaster Hit Areas***

This section and section 1.6.3 will analyse the scope of policies and programmes for employment generation in specific contexts. Focus will be on

- (a) special employment schemes similar to 100 days employment generation programme (EGP) of 2008, and
- (b) need for policies and programmes for employment expansion in coastal disaster hit areas.

In-depth examination based on field observations of the situation in specific areas will be used to draw some general policy conclusions.

#### **1.6.2.1 Previous Studies on 100 Days EGP**

Two major studies (BRAC 2009, CPD 2009) have been conducted to find out the benefits, problems and the necessity of continuation of the 100 days EGP. Based on the field survey, they found that majority of the beneficiaries, especially women, have benefited from the 100 days EGP, in terms of food security, and it has generated positive effects on the long-term investment in productive assets. Bias in the beneficiary selection, lack of adequate preparation to implement the programme, relatively low outreach of extreme poor people, ad hoc work selection rather than integrated plan with the local development planning, lack of proper monitoring, and corruption in payments system have been mentioned as the weaknesses of 100 days programme in BRAC's study. According to the study of CPD (2009), the problems and inadequacies of the programme are: short time given for the planning stage of the programme, problem of implementation and monitoring, targeting of beneficiaries, selection of projects and leakage of resources. By and large, the study

revealed that the programme has benefited the vulnerable hardcore poor and moderate poor by providing employment and income during their hardship. In addition to these, it also helped empowerment of women and elderly poor people.

### **1.6.2.2 Experience of 100 Days Employment Generation Programme: Field Level Observations**

#### **A) Perception of Programme Impact**

After completing the first phase of the programme, the GoB planned to implement the second phase of the programme. The first phase of the programme created employment for people on average 60 to 70 days depending on the need for work in different regions of the country.

The programme impact perceived by beneficiaries is encouraging. Most of the beneficiaries of the programme were day labourer or farmer. Most of them said that they were significantly benefited because of 100 DEGP in terms of increase of income and food security. Participants of 100 DEGP were able to ensure three meals a day at least during the employed period.

During the programme those who had to usually leave their area or village for work were able to earn without leaving their village. People who have taken NGO loans previously mentioned that they were able to return that loan.

Permanent improvements resulting from the participation in the programme are the following:

- As a result of the programme, rural infrastructure of the respective region developed as most of the work was related to the reconstruction of the infrastructure.
- A second round of impact took place in the form of investment on household productive assets like goats, chicken, etc.
- In some cases, where the beneficiaries were the second earning person in the family, they were able to save a little and buy rickshaw/other productive resources. This will help them fight against their poverty in the coming months.

The perceptions of organisers of 100 DEGP was also similar to observations made by the beneficiaries. They said that with a few exception, the 100 DEGP was able to achieve its objective. It was helpful in providing food security to the poor people when they were facing severe problem because of the high food prices and virtually there were no alternative work opportunities at that time.



#### B) Challenges/Problems Faced by the 100 days Programme

Consultation with the beneficiaries and the key informants disclosed the following loopholes of 100 DEGP:

- a) Though there were many unemployed people in that particular month of the year, the 100 DEGP covered about 50 per cent people in each area/union. It failed to include a significant number of marginally poor people.
- b) Wage rate in the 100 DEGP was Tk. 100/person. But, in some areas, this was lower than the current market wage. For example, in Bagerhat district, wage rate was Tk. 120 to Tk. 150 and in Mymensingh it was Tk. 150.
- c) NGO officials claimed that local UP member did not ask them to participate while selecting participants for 100 DEGP.
- d) Selection was often carried out without consultation with relevant stakeholders. Many claimed that a bias to people who will vote the chairman or member in the next election was observed.
- e) In some study areas UP members were involved in corruption through lowering the number of days of work. But they showed up that all workers have worked full days.
- f) Most of the projects, e.g reconstruction of road, were incomplete at the end of the programme.
- g) People who were selected by the UNO to supervise the field work were not given any remuneration. So they were usually a bit reluctant.
- h) In most cases actual working days do not match with official records. For example, in Bhagerhat district, where officially the programme was recorded to run for 75 days, beneficiaries and key informants reported that it continued only for 60 days.

Though in some cases, the programme suffers problem in terms of monitoring, implementation and outreach to extreme poor, it was helpful in providing food security of the poor people. Now the question is whether this type of programme should continue or not. It is found that beneficiaries' universal perception was that the programme should continue, especially during August-October. During August-October of each year, a large number of the poor people do not have the employment opportunity. It is also found that rather than taking short-term programme, GoB should take long-term programme so that the problems of poor people are solved permanently.

### 1.6.2.3 Prospects of Employment Guarantee Schemes Similar to the 100- day Employment Programme

In September 2008, Government of Bangladesh initiated 100 days Employment Generation Programme (EGP). The EGP targeted the unemployed poor from all 64 districts of the country. The target was to create 200 million person days of employment per year. This was the largest safety net programme in the history of the Government of Bangladesh that focused on employment generation. The programme was planned to cover two lean periods: mid-September to end of November 2008 and beginning of March to end of April 2009. However, after completing the first phase, the programme was discontinued. There is no allocation for the 100 days EGP in the budget of FY2009-10, but a new scheme has been proposed. Against this backdrop, it is necessary to ask whether a modified programme similar to the 100 day EGP should be put in place.

Therefore, this section examines whether the participants of 100 days EGP benefited from it and prefer to have such a programme in future.

Keeping in view the need for more subtle and textured information that qualitative methods can provide, the analysis involves analysis of qualitative data. The analysis is mainly based on focus group discussions (FGDs), case studies, and interviews of key informants. The key informants include the UNO, UP member, and school teacher in order to get broader view on the programme.

TABLE 1.30  
AREAS COVERED BY FGD AND CASE STUDIES

District	Upazilla	Union	Number of beneficiaries covered	
			Male	Female
Bhagerhat	Sadar	Karapara	15	5
	Sadar	Satgombuj	7	5
	Sadar	Gussogram	10	8
Mymensingh	Sadar	habnkhali	12	8

The study team collected data from two districts, namely Bagerhat and Mymensingh. The selection of the districts was based on two criteria: Bagerhat is affected by natural disaster like cyclone, whereas Mymensingh is a relatively less advanced area near the Dhaka city. The study team collected data based on 8 FGDs

among the beneficiaries. The team also collected data from 2 UNOs, 3 UP members and 1 school teacher through indepth interviews. About 70 beneficiaries participated in the 8 FGDs and on average about 9 individuals participated in each FGD.

The themes of discussion included information regarding the 100 days EGP, especially the effectiveness of the programme, problems faced by 100 days EGP, reasons for the suspension of the programme, alternative ways to continue the programme, etc.

The government started the EGP in March-April 2010. The programme would be implemented in two phases—first during September-November 2009 and the second in March-April 2010. In around five months of these two seasons, usually more poor people become unemployed.

According to the policy, unemployed and unskilled poor of aged between 18 and 60 and landless and marginal farmers would be eligible for the programme. However, those already benefiting from other safety net programmes cannot be registered for EGP and at least one-third of the total beneficiaries should be female. For a seven-hour work day, each person under the programme would get Tk.100/day for a period of 30 days. The marginal farmers and the victims of river erosion, coastal surges and *Monga* were the main beneficiaries of the programme. They were employed in canal digging, dam and road construction, making the premises of educational and religious institutes and cyclone shelter higher, preparing organic fertiliser or in other projects recommended by the ministries concerned for rural development.

#### **1.6.2.4 Current Programme of Employment Generation for Hardcore Poor**

The EGP will be undertaken as a social safety net programme to feed the vulnerable group. At least 0.56 million beneficiaries will be selected under the programme from 80 upazilas of the *Monga*-prone northern districts and disaster-prone coastal areas where more than 40 per cent people are poor. Another 0.336 million people will be selected from 253 upazilas having 21 to 39 per cent poor and 0.224 million from the rest 147 upazilas with 1 to 20 per cent poor people.

If the programme continues only among the hardcore poor and is replicated in all 32 districts, about Tk. 23,520 million will be required in the next year (2010-11) and if it is replicated in 48 districts, about Tk. 42,883 million will be required in 2014-15 (assuming a 5 per cent increase in wage).

TABLE 1.31  
ALLOCATION AND DISTRIBUTION OF 100 DAYS EGP

Indicator	100- DEGP during Phase – I (2008-09)	2009-2010 (estimated) New programme	2010-2011 (estimated) New programme	2014-2015 (estimated) New programme
Total Population Coverage				
Estimated				
Male	Not Specified			
Female	Not Specified	At least one third		
Total	19,97,075	11,20,000	22,40,000	33,60,000
Actual Average (per day)				
Male	14,44,921			
Female	3,48,798			
Total	1793,719			
No. of district	64	16	32	48
Total allocation (Tk million)	12,000	11,200	23,520	42,883
Total disbursement ( Tk million)	9135.32			
No. of approved project	1,48,228			
No. of projects initiated	1,01,059			
No. of completed projects	51,207			

**Source:** Ministry of Food and Disaster Management, GoB.  
The Daily Star, September 26, 2009.

### 1.6.3 Natural Disaster and Employment Programme

In the context of employment generation programmes, disaster prone zones deserve special focus. During the last three years, natural disasters in the coastal districts have caused significant damage to economic activities in the area. *Sidr* caused devastating damage about three years ago and even before the area recovered fully, *aila* storm and tidal wave hit again in some of these areas.

Planning for expansion of employment opportunities and raising productivity of employment must take into account the productivity and employment impact of natural disasters. When such disaster takes place, very short-term relief oriented activities receive priority. However, productivity enhancing employment generation requires attention over 2-3 years in the following period. Detailed assessment of impact on employment is beyond the scope of this study. As part of this study we examined whether there is need for attention to “employment” in disaster hit coastal regions. More specifically, the following issues were examined:

- (1) Whether in the immediate aftermath of disaster, there is need for special employment programme;
- (2) How to create employment in the short run (3 to 6 months after disaster); and
- (3) How to generate employment with higher productivity in the medium term.

The answers to these questions were sought through FGD sessions and case studies in two areas: Bagerhat and Pirojpur. Bagerhat was hit by *sidr* as well as by the recent tidal wave, *aila*. Pirojpur was affected by *sidr* but not by *aila*. FGD covered wage labourer groups. Case studies included self-employment from various occupation groups.

The Bagerhat and Pirojpur areas' rural economy consists of three main activities:

- (a) shrimp production in "Gher" (either large or small);
- (b) crop cultivation, including aman paddy and vegetable; and
- (c) small trade of various types.

The impact of disasters comes through both direct and indirect routes. Tidal surge has destroyed the standing crop and investment in shops. The shrimp "Ghers" have been washed away. These destructions have significantly reduced productive employment.

Moreover, the loss of assets leads to loss of purchasing power resulting in decline of demand. This has resulted in decline of retail business during 3-4 weeks following the disaster.

The scope of self-employment continues to be lower than in normal years even during six months to one year following the disaster. This is because of downturn in both shrimp and crop production activities. The revival of employment in shrimp "Ghers" will depend on inflow of investment to resume normal production. Such investment will require credit support by government and NGOs (not the usual microcredit which involves fortnightly repayment and effective interest rate above 25 per cent). If such investment is not made, both self-employment and paid employment will decline in these sectors.

Crop sector recovery is also beset with special constraints and removal of such constraints requires public investment on repair and construction of infrastructure. *Sidr* has caused damages to the coastal embankment. These were repaired hurriedly, but the quality of construction work was poor and the embankment was weak in several places. As a result of these weak spots, the next cyclone and tidal wave

could cause extensive damage. Saline water has easily entered the protected areas. As a result, aman acreage of 2009 has been adversely affected. For next crops, such saline water has to be drained out. The breaches in the embankment must be repaired. These effects on crop will have, in turn, an adverse impact on labour demand (both self- and paid employment).

Immediately after the *aila*, all affected households were dependent on relief. But after one or two weeks, in *aila* hit regions there were abundant opportunities of wage employment for the landless casual labourers. Real wage was not lower than pre-cyclone months. Such employment demand came mostly from the needs of repair and construction of houses damaged by *aila*. In this phase many of the self-employed persons (who are not in the richest income group) resorted to wage employment which gave access to cash income. It was, nonetheless, a short duration shift of labour demand and has almost come to an end. During this initial period following *aila* safety-net employment might not have been conducive to reconstruction of the houses. Rather, an increased supply of construction materials could help. Provision of loans for shops and houses can help further revitalisation of the economy and will create both paid employment and self-employment.

From October, labour demand is usually at a low ebb. This year the decline of demand is likely to last even longer. Such prediction is linked to the fact that two major activities in the area have faced downturn due to destruction caused by *aila*. Both crop and shrimp production faced downturn as saline water entered the cropland and shrimp ponds were washed away by *aila*. As a result, labour demand for aman will be significantly lower. Demand for labour in shrimp “Gher” may or may not decline depending on how much investment can be made to replenish the loss by *aila*. If adequate investment can be made, labour demand may even rise. In contrast, if the fish producing households cannot make such investment, the owners as well as the paid workers may remain underemployed in the coming months.

To reverse this process, employment policy should consist of two elements:

- (a) Special employment programme for poor wage labourers who will work on the infrastructure repair.
- (b) Supply of inputs and farm credit to encourage crop and fisheries production. This will generate both self-employment and paid employment.

### **1.7 PROSPECTS OF OVERSEAS EMPLOYMENT AND REMITTANCE GROWTH**

In the era of recent global financial crisis (GFC), it was feared that the overseas employment flows and subsequently remittance earnings will decline in most of the

developing and least developed countries (LDC) as they are dependent for their overseas employment flows on the developed countries like USA, UK, Japan, Germany, etc., whose economy are the most severely affected by GFC. Bangladesh is one of those LDCs which was under the threat of decline in its remittance earnings and overseas employment because of GFC. Against this backdrop, it is necessary to suggest a comprehensive policy in the upcoming SFYP for improving the situation of overseas employment market so that the growth of remittance earnings maintains its positive trend. This section will also suggest how to explore the new avenues of overseas employment and to enhance the flow of remittances through banking channel.

#### ***1.7.1 Overview of Overseas Employment and Remittance Inflows to Bangladesh***

Among the top 10 remittance sending countries in the world, Bangladesh holds 9th position. In 2008, the remittance inflow was \$ 9 billion and the total number of overseas workers was more than 762 thousand. It is also one of the highest labour sending countries of the world.

In terms of origin of remittance, the major source is the Middle East from where about 64 per cent of our remittance earning come and the remaining 34 per cent come from the rest of the world mainly from USA and UK. The four major sources of remittance earning are K.S.A, U.A.E, USA, and Kuwait (Table 1.32). Among these countries the Kingdom of Saudi Arabia (K.S.A.) is the most important source of remittance for Bangladesh, which accounts for almost one third of the remittance earnings. From Table 1.32 it also appears that the remittance inflow from other countries like USA, Malaysia is increasing significantly.

In terms of the overseas employment flows by countries the same picture exhibits as the remittance inflows. Of the total migrants, at present 42.13 per cent are working in Saudi Arabia, 16.24 per cent in the United Arab Emirates and 10.02 per cent in Kuwait.<sup>8</sup> From the BMET sources, it is found that from 1976 to 2008 more than 6 million Bangladeshi workers migrated for working mainly to 22 countries. Figure 1.1 shows per cent share of migrant workers by profession from Bangladesh at different periods since 1976. The figure shows that more than 50 percent of the migrants' workers are unskilled. Though the proportion of the professional and skilled labour is small, the share of skilled labour is increasing in recent years, which is a positive factor for the growth of remittance earnings.

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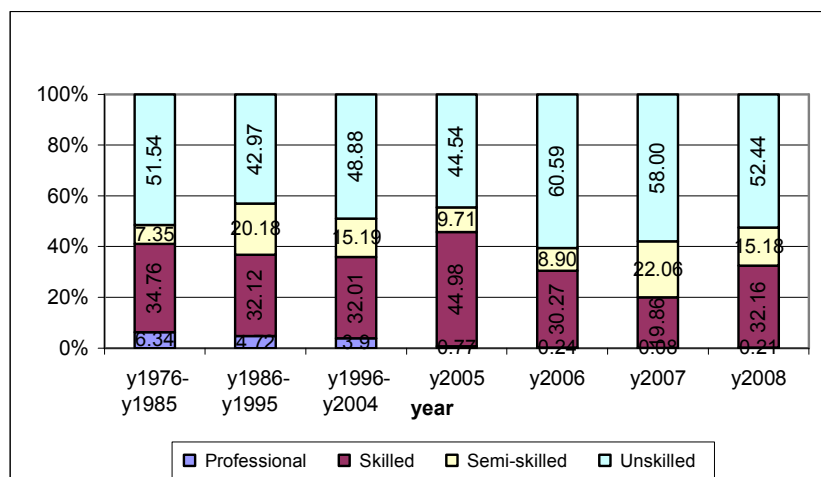
<sup>8</sup> World Bank Survey, June 2009.

TABLE 1.32  
**INFLOW OF REMITTANCE IN MILLION US \$ BY SENDING COUNTRY**

Country	Remittance inflow from major countries and total inflow				Percentage change (Year-on-Year) 2008 over 2007
	1987-88	1997-98	2007	2008	
U.S.A	61.44	202.90	1086.88	1582.49	45.6
U.K	88.40	65.64	889.74	823.42	-7.45
Kuwait	96.37	213.17	768	949.53	23.51
K.S.A	226.47	588.34	1788.28	2733.69	52.87
U.A.E	62.37	106.94	938.15	1379.54	47.04
Malaysia	0.00	77.72	29.71	165.03	455.47
Total	737.48	1501.65	6568.03	9019.6	37.33

Source: *Economic Trends*, different years, Bangladesh Bank.

Figure 1.1: Distribution of Overseas Employment by Different Profession



Source: Bureau of Manpower, Employment and Training (BMET), Bangladesh.

### 1.7.2 Prospects of Overseas Employment and Remittance

The prospect of remittance inflow depends on several key factors such as the world economic situation, economic condition of the overseas employment



destination countries, outflows of the labour, skill composition of the migrants, etc. When economic condition of remittance sender countries is considered, it appears that the economy of the major destination of our migrant workers will recover in 2010 as shown by the positive real GDP growth (Table 1.33). Moreover, the big giants of the world economy namely USA, UK, Japan, and Germany are bouncing back to the normal situation, they are now out of danger of the severe negative effect of the GFC. In this perspective, the future flows of remittance of Bangladesh are less likely to decline. From Figure 1.1, it appears that the proportion of skilled worker is increasing in recent years, which might be a reason for the positive growth of remittance earnings in the year 2009<sup>9</sup> even after declining outflows of the migrant workers. From Figure 1.2, it is clear that in the years 2008-09 and 2009-10, the outflows of migrants workers are declining as shown by the negative growth.

TABLE 1.33  
REAL GDP GROWTH (%) OF MAJOR REMITTANCE SENDING COUNTRIES  
OF BANGLADESH

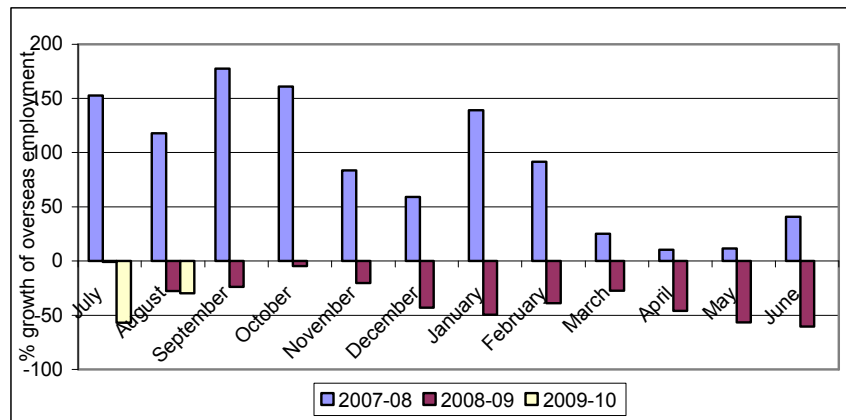
Country	2000-04 (average)	2005	2006	2007	2008	2009 (estimated)	2010 (estimated)
U.S.A		3.1	2.7	2.1	0.4	-2.7	1.5
U.K		2.2	2.9	2.6	0.7	-4.4	0.9
Kuwait	13.3	10.6	5.1	2.5	6.3	-1.6	3.2
K.S.A	3.7	5.6	3.2	3.3	4.4	-0.9	4.0
U.A.E	7.7	8.2	9.4	6.3	7.4	-0.2	2.4

Source: *World Economic Outlook*, October, 2009, IMF.

Another major factor that is crucial for the outflows of the migrants' worker is the global price of oil. If the oil price increases at a reasonable level, the Middle East economies will flourish as they are heavily dependent on petroleum prices and about two-thirds of Bangladeshi migrants work in that region.

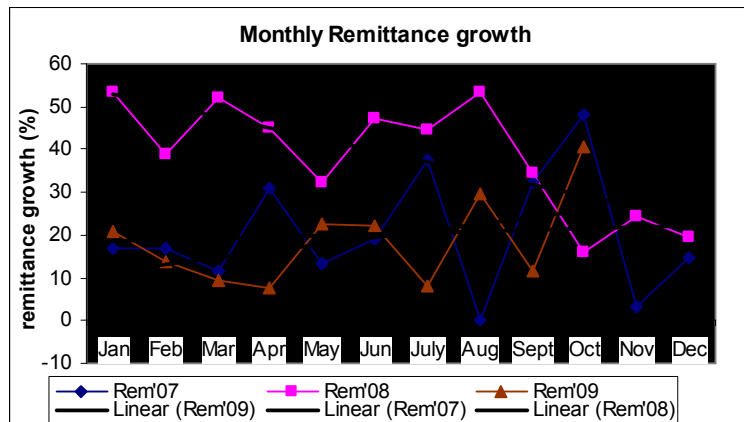
<sup>9</sup> Figure 1.3 exhibits that remittance is increasing over the year 2009 as compared to 2008.

**Figure 1.2: Growth of Migrants People (Year-on-Year)**



Source: *Economic Trends*, different years, Bangladesh Bank Website.

**Figure 1.3: Growth of Remittance Earnings (Year-on-Year)**



Source: *Economic Trends*, different years, Bangladesh Bank Website.

However, even the remittance is still growing at a positive growth and the above statistics show that we need not be worried about the future flow of remittance, but there are some reasons to be worried about.<sup>10</sup> One is the decline in the overseas

<sup>10</sup> Ministry of Finance made a revised projection on the future flows of the remittance, which is lower than the previous estimation (Table 1.34).

employment flows in the year 2009 as shown by Figure 1.2. The main reason for the decline of migrants people is the banning of issuing new visa by major destination countries of the Bangladeshi workers like Saudi Arabia, Kuwait and Bahrain accentuated by the GFC. Another reason is that if the oil price comes below the reasonable price,<sup>11</sup> the earnings of the oil exporting countries are expected to decline and the development work of those countries will be hampered, which works to reduce the demand for Bangladeshi workers as most of the Bangladeshi workers work in the different construction projects of that region.

TABLE 1.34  
REVISED PROJECTIONS FOR REAL GDP GROWTH AND REMITTANCE  
EARNINGS OF BANGLADESH

Indicators		2007	2008	2009	2010	2011
Real GDP growth (%)	After crisis			5.9	5.5	6.0
	Before crisis	6.4	6.2	6.5	7.0	7.2
Remittances (US \$ million)	After crisis			9400	10575	11632
	Before crisis	5979	7915	9500	12100	15500

**Source:** Ministry of Finance.

**Note:** Year refers to fiscal year.

### 1.7.3 Suggestions for the SFYP for Improving the Situation of Overseas Employment

In order to sustain the robust growth of remittance earnings and to increase the outflows of the migrant, the following issues should be considered in the upcoming SFYP:

*Firstly*, in order to develop skill of Bangladeshi workers the Government of Bangladesh should invest more money and other resources like improvement of education system. There are a large number of occupational areas, e.g. medical doctors, dentists, nurses and health technicians, IT persons, technical skill holders, craft workers, plant and machine operators, drivers, house keeping, etc., where huge global demand exists. In those areas, Bangladesh has an acute shortage of labour. In order to overcome this, Bangladesh should take appropriate steps like establishment of training academy on those areas, more emphasis on the vocational training, etc.

<sup>11</sup>World Bank study showed that if oil price comes below \$ 70 per barrel, major oil exporting countries (major destination of Bangladeshi workers) economy will not grow so much and it is expected that it will be difficult to maintain the past growth of remittance earnings for the Bangladesh. However, the oil price is still upwarding. In September 2009, it was \$67 per barrel and in November it was \$76 per barrel.

*Secondly*, The Government of Bangladesh should take appropriate and effective step in order to stop the illegal migration and ensure that all job-seeking people must go through BMET. Many of our workers go abroad through illegal channel<sup>12</sup> and most of the time they do not get any job after reaching their destination countries and they lose everything.

*Thirdly*, lack of available adequate information on the skills that are needed in the labour market of user countries is another cause of concern. The Government of Bangladesh should take initiative to provide training for meeting skill deficiencies in the labour market.

*Fourthly*, workers of Bangladesh are not aware of about the emigration procedures and about laws, language and culture of the destination country, mainly due to lack of knowledge. As a result, they face all kinds of difficulties, including financial and physical exploitation. The government should invest more for awareness development in regard to encourage migration with proper documentation. Massive information dissemination programme is needed in this context.

*Fifthly*, more investment is necessary for improvement of migration management, emigration clearance, etc. to ensure doorstep service to the potential aspirant migrant workers.

*Finally*, for improving the situation of the workers, the Government of Bangladesh should take necessary steps to stop the inflows of remittance through informal channel like Hundi systems in order to reap the maximum benefit from our overseas workers earnings.

By and large, in order to promote overseas employment it is necessary to annually conduct an integrated labour market survey of overseas demand by country and skill category, and accordingly existing training course curricula may be revised and updated and new training courses may be introduced in order to match new demand. It is equally important to create and manage institutional, technical and financial infrastructure for proper training and easily sending the trained people abroad at a higher rate with a focus on the people from the *Monga* affected areas of the country. In order to protect the rights and interests of the migrant workers, regular monitoring of the condition of the migrant workers and undertaking appropriate measures by the officers of the Bangladesh embassies abroad are necessary.

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<sup>12</sup> It is noted that the workers who are coming back from abroad are mainly illegal migrants.

### 1.8 PROMOTING DECENT WORK IN BANGLADESH

Decent work contributes to improvement in the quality and productivity of employment by introducing human face in the world of work. The objective of the present exercise is twofold: (i) to improve our understanding about how decent work affects the quality and productivity of employment, and (ii) to suggest policy measures for mainstreaming decent work into macroeconomic policies and programmes for development.

The definition of decent work as “opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity” (Anker *et al.* 2002) explicitly includes: (i) opportunities for work which refer to the need for all persons who want work to be able to find work; (ii) work in conditions of freedom which underscores that work should be freely chosen and not forced on individuals and that certain forms of work are not acceptable; (iii) productive work which is essential for workers to have acceptable livelihoods for themselves and their families, as well as to ensure sustainable development and competitiveness of enterprises and the country; (iv) equity in work which represents workers’ need to have fair and equitable treatment and opportunity in work; (v) security at work which is 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; and (vi) dignity at work which requires that workers be treated with respect at work, and be able to voice concerns and participate in decision-making about working conditions. The first two dimensions of decent work are concerned with the availability of work and the acceptable scope of work. The other four dimensions of decent work are concerned with the extent to which the work is decent, which is similar in many ways to what is deemed quality of employment. In addition to these six dimensions of decent work, the macro socio-economic context is important since this helps determine what constitutes decency in societies as well as the extent to which the achievement of decent work enhances national economic, social and labour market performance. The decent work agenda of the International Labour Organisation (ILO) brings together the goals of rights at work, employment, social protection and social dialogue in a consolidated, gender-sensitive vision which shapes economic and social policy choices across the board. The broad indicators for a measure of decent work include: (i) employment opportunities, (ii) unacceptable work, (iii) adequate earnings and productive work, (iv) decent hours, (v) stability and security of work, (vi) combining work and family life, (vii) fair treatment in employment, (viii) safe work environment, (ix) social protection, (x) social dialogue and workplace relations, and (xi) economic and social context of decent work.

An essential element of decent work is the extent to which a country's population is employed. Employment opportunities can be measured in a positive sense in terms of employment and labour force activity relative to the relevant population base. Employment opportunities can also be measured in a negative sense in terms of unemployment and underemployment and the lack of employment opportunities. The labour force participation rate is an overall indicator of the level of labour market activity, and its breakdown by sex and age gives a profile of the distribution of the economically active population within an industry.

In the manufacturing sector of Bangladesh, readymade garment (RMG) industry is the largest employer (around 3 million) accounting for 75 per cent of total manufacturing employment. The proportion of female workers varies in the region of 75-80 per cent of total employment in the RMG. The leather industry currently employs an estimated 10,000 persons accounting for 2.86 per cent of total manufacturing employment in the formal sector. The share of male employees accounts for 63.32 per cent compared to 36.68 per cent female employees. All this suggests the existence of relatively low opportunities for female employment in the leather industry.

Productive work is essential for workers to have acceptable livelihoods for themselves and their families as well as to ensure sustainable development and competitiveness of enterprises. During dull season (May to August), employment in the leather sector shrinks, although during winter season it increases. So is the case with employment in agriculture and several other manufacturing sectors.

Decent work must be work that is acceptable to society. It is therefore necessary to know the incidence of unacceptable work, both to ensure that such work is excluded from indicators of employment opportunities and to measure progress towards its elimination. The 1998 ILO Declaration on Fundamental Principles and Rights at Work identifies two forms of unacceptable work: forced labour and child labour (especially hazardous and other worst forms of child labour). According to the Report on National Child Labour Survey 2002-03, the number of working children in Bangladesh is in the order of 39.68 million in the 5-17 age group and 32.63 million in the 5-14 age group. Child labour (CL), especially the worst form of child labour (WFCL), is one of the major problems in the country and is caused by a combination of factors. Measures for its prevention and elimination require a number of integrated programmes combined with strong commitment by the policy makers and practitioners. Such programmes include *inter alia* advocacy and awareness at all levels, poverty alleviation and socio-economic empowerment programmes for the families of child labourers and education programmes that are attractive to the working children.

A review of the implementation of various programmes for elimination of CL reveals that even though a good beginning has been made from 1994-95 onwards, in order to make a significant dent multi-pronged policy strategy coupled with massive mobilisation of resources is required. There is a crucial need to work aggressively to eliminate CL by addressing the root causes, the tangled pathology of poverty and hopelessness that lead to abusive CL. The government must also ensure that children then have access to schools and their parents have jobs. Encouragingly, National Child Labour Policy (NCLP), January 2008, Final Draft, aims at complete elimination of all kinds of CL in the country with priority of HCL and WFCL through time-bound and short-term programmes. NCLP should be finalised and put in place as early as possible.

Beyond wages/earnings and productivity, other aspects of job quality include types of labour contracts and availability of job protection measures. In Bangladesh, most of the labour contracts are informal in character leading to job and income insecurity inimical to productive and decent work environment. Only around 4 per cent of public sector employees and around 18 per cent of formal private sector employees have access to reasonably acceptable level of job protection. The rest of the workforce have very little or no access to job protection pointing to the need for improving employment relationships and greater job protection coverage.

Balancing work with family life has always been a gender equity issue. Many factors have led to the mounting pressure to address this aspect of decent work. The most important pressure for “family-friendly” work has probably come from women because of their increasing participation in the paid labour market. The balance between work and family life is particularly difficult for parents with young children. Social protection accorded to parents is a key foundation for establishing a work-life balance, not only because of the specific protections provided, but also because they create a climate in which accommodation becomes the expectation and the norm. In Bangladesh, government has made a provision for day care centre for the children of government female employees in the Secretariat. In other government offices and in the private sector such facilities are virtually non-existent. Maternity benefit is also virtually non-existent, especially in the RMG and the leather sectors. Besides, employers in general are averse to this concept, although it has far-reaching productivity implications.

Fair treatment in employment means equality of opportunity and treatment in employment and occupation, and equal pay for work of equal value. In Bangladesh, although female share of employment in managerial and administrative occupations in the public sector is increasing, in the private sector it is very few. Occupational segregation by sex is also prominent with predominance of female workers in low-paying jobs. Besides, female/male earnings ratio in selected occupations also differ

significantly. In the public sector, although male-female wage discrimination is non-existent, in the private sector, for regular jobs of equal value wages of the female workers are found to be generally 25-35 per cent less than those of the male workers. For temporary work, gender wage disparity is more pronounced reflecting unfair treatment of female employees at workplaces (Mondal 2007).

However, female workers (especially in RMG and leather) are not able to voice their concerns about workplace rights and participate in decision-making about working conditions partly because of their quiescence and partly because of their little or no representation in the collective bargaining. An essential ingredient of fair treatment in employment is female workers' freedom to represent their interests collectively.

According to BOSHEF (2008), from January to December 2007, a total of 3,550 workers, of which 70.76 per cent were male and 29.24 per cent were female, in different workplaces including transport sector were victimised due to various incidents. Notably, number of death of workers was 1,768, while incidence of injury was 1,782. Rate of occupational incidents was comparatively high in RMG sector. Besides, rate of road accident and victimisation among transport workers is very alarming. Among 3,550 victimised workers, 983 were workplace incidents, while 376 workers were killed and 607 workers were seriously injured. Safe work, thus, does not prevail in all sectors.

The Department of Inspection for Factories and Establishments (DIFE) is the key enforcing body of the GOB which is mainly responsible for enforcing the laws relating to occupational safety and health (OSH). Currently, there are only 63 inspectors, who maintain the inspection function, against total sanctioned posts of 85 in the DIFE. Only 63 inspectors have exclusive jurisdiction over 24,746 registered factories, about three million shops and establishments and two ports. It means that one inspector is responsible for inspecting about 48,011 factories and establishments which is incredible. Disappointingly, there are only 15 inspectors employed solely responsible for OSH issues. Understandably, number of inspectors is not adequate for OSH. Besides, inspectors are very poorly equipped with logistics.

Present labour law is not found effective in running the inspectorate more efficiently. Most of the provisions relating to power, functions, duties and even recruitment systems do not match the present need. Following steps may be taken to overcome the deficits in the DIFE: (i) maintain a system of sector-wise inspection and remove existing ambiguity regarding inspection in construction sector; (ii) secure enforcement of legal provisions including OSH to facilitate technical information and suggestions to both employers and workers concerning most



effective means of complying with legal provisions and to inform the government of any abuses not covered by existing legal provisions, (iii) recruit duly qualified technical experts and specialists having proficiency in medicine, engineering, electricity and chemistry and provide adequate training; (iv) increase the number of inspectors and the number of inspection; (v) equip the Inspectorate with more advanced technologies; (vi) empower the inspectors to take prompt legal action whenever extreme violation is observed; and (vii) put in place an internal monitoring body within DIFE responsible for monitoring activities of the inspectors.

Adequate social protection is a defining feature of decent work around the world. Exposure to risks and the type and level of protection available differ greatly among industries, even though the need for protection from life risks is felt by persons in many occupations. Social protection is a collection of measures to improve or protect human capital, ranging from labor market interventions, publicly mandated unemployment or old-age insurance to targeted income support. The ILO Social Security (Minimum Standards) Convention, 1952 (No.102) established nine classes of benefits: medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors' benefit. Social protection interventions assist individuals, households and communities to better manage the income risks that leave people vulnerable. Social protection interventions contribute to the solidarity, social cohesion and social stability of a country.

In Bangladesh, ordinarily, pension is granted to government employees on their retirement from public service at the age of 57 years on the basis of length of qualifying service (minimum of 10 years) rendered and amount of emoluments last drawn by an employee under the existing rules/Government orders. The rate of pension benefit varies between 32 per cent and 80 per cent of the last pay drawn. Depending upon the causal circumstances of retirement at the age of 57 years or earlier, five types of pension benefit are in practice. These are: (i) compensation pension, in the case of abolition of some permanent posts, (ii) invalidity pension, in the event of permanent physical or mental incapacity to work, (iii) superannuation pension, on account of compulsory retirement once prescribed pensionable age of 57 years is reached, (iv) retiring pension, in the case of premature retirement desired by the Government after the completion of 25 years of service, and (v) optional pension, granted on voluntary retirement after the completion of 25 years of service. In addition to pension scheme, government employees are socially protected by Benevolent Fund Scheme and Group Insurance Scheme. These types of social protection apply only to public sector employees who account for around 4 per cent of the total workforce.

Social protection schemes in the private sector are severely limited and rare in Bangladesh. This is particularly so in the informal sector, although multinational companies in general and a number of showcase national enterprises in particular present notable exceptions. In the formal private sector (representing around 18 per cent of the total workforce), they are taking shape, though not firmly established. In some bigger private industrial or commercial organisations, provision of gratuity, contributory provident fund (usually @ 10%) and pension schemes exist but these are not regularly practised by all of them. These facilities are achieved through collective agreements. Other than these schemes there is no safeguard for health, pensions and livelihoods, and provision for adequate financial and other protection in the event of health and other contingencies. Existing rules do not recognise workers' need to limit insecurity associated with the possible loss of work and livelihood. If any worker dies on duty an *ex gratia* is paid by the owner between Tk.1 lakh and Tk. 1.5 lakh to his/her family but if dead by sickness then nothing is paid. If any permanent worker is terminated due to any reason then 4 months basic salary plus gratuity is paid. But this applies only to the regular workers and other employees in the formal sector.

One reason for the relatively low prevalence of social protection schemes in the private sector is the existence of a large pool of surplus labour which reduces the need of the employers to offer such plans for attracting and retaining labour. Another reason could be the replacement levels provided by the voluntary social protection schemes (e.g. general insurance, life insurance, deposit pension schemes, etc. introduced by both public and private insurance companies and commercial banks) which reduce the perceived need for supplementation.

A new scheme may be undertaken by the MLE by providing insurance coverage to unorganised labourers working in construction industry, agriculture and forestry where the insurance coverage may be provided through the labour cooperatives on 50:50 basis through the national insurance coverage and labour cooperatives. A premium of Tk.5 per annum may be paid by the cooperatives. The insurance coverage may have the provision that in the case of death of a labourer, his/her family will be paid at least Tk.100,000.

An important dimension of decent work is the extent to which workers can express themselves on work-related matters and participate in defining their working conditions. This can be channelled through collectively chosen representatives or involve direct interaction between the workers and the employers. The ability of workers to organise freely to defend their interests collectively in negotiations with the employers is a pivotal element of democracy at the workplace

and the effectiveness of social dialogue. In Bangladesh, social dialogue is seldom practised.

The ILO with a view to improving the conditions of labour devised the forum of tripartite consultation through the convention No. 144 in 1976. The convention has been ratified by Bangladesh and the forum now exists in the name of Tripartite Consultative Council (TCC). TCC essentially remains dormant primarily because it lacks clear agenda and is convened very infrequently. Through TCC government could not succeed in achieving a broader consensus with social partners on economic and social policies. There is hardly any coordination between consultation at the industrial and enterprise levels and that at the national level. No attempt was ever made to represent workers from the rural and the informal sector in it. Therefore, TCC should be made more representative and active to impinge on harmonious industrial relations in the country. Existing four industrial relations institutes in the country conduct four weeks industrial relations course for 30 trade union leaders and management representatives in each batch, and one-week training course for workers. But these courses contribute very little to bringing about harmonious industrial relations in the workplaces primarily due to inadequate staff and limited number of batches trained annually owing to fund shortage.

Informal economy employment is often associated with the absence of various characteristics of decent work, such as low pay and absence of social protection. The characteristics of informal economy employment are not associated with decent work. This is the outcome of the general economic and social context of the country and the inadequacy of employment policy. It means that indecent work stemming from various structural economic and social rigidities and distortions can hardly be treated in isolation. In order to bring about decent work, there is a pressing need for a synergy of all the economic and social policies which would be mutually reinforcing.

By and large, according to available evidence, Bangladesh presents a very poor picture of decent work primarily due to inadequate political commitment and institutional shortcomings (Dunn and Mondal 2009). Productive efficiency and competitiveness of the country can be improved only by eliminating its decent work deficits. Decent work should become an integral part of national policy analysis and advice. This should involve, going beyond simply describing decent work, also improving our understanding of how different aspects of decent work interrelate, how development affects decent work, and how decent work affects poverty and economic growth. Strategies should be developed for using ILO decent work indicators in research, policy analysis, policy advice and communication with

constituents and the public. These efforts will be especially useful in helping to set priorities and realistic goals.

The challenge of creating the conditions for full and productive employment and decent work rests first and foremost with the government. This entails mustering the political will to make employment generation a key priority—not only of social development strategies, but also, and perhaps mainly, of economic strategies and policies at both the macroeconomic and sectoral levels. Two essential elements of such strategies are sound macroeconomic policies and an overall national development strategy conducive to dynamic employment generation. Economic growth is important, but even more so is its quality, measured particularly in terms of its capacity to generate quality jobs. In sum, for mainstreaming decent employment into economic and social policies, all ministries should routinely undertake *ex ante* and *ex post* decent employment impact analysis of projects and programmes.

The objectives of full, productive and decent employment should become central to macroeconomic policy agenda and development strategies. Pursuing such a strategy will require improved collaboration with international development partners in support of national development strategies. A three-pronged plan of action for mainstreaming decent employment generation across all sectors may include: (i) laying the foundation for sector-based analytical work for decent employment generation, (ii) selectively moving ahead with operational details, and (iii) building analytical capacity of the MLE, Ministry of Industries, Ministry of Agriculture and all other ministries in the sphere of decent employment generation.

## **1.9 EMPLOYMENT POLICY FOR SFYP**

### ***1.9.1 Suggestions for Mainstreaming Employment in Policies for Economic Growth***<sup>13</sup>

Employment generation needs to be taken into account while formulating macroeconomic policies and in making budgetary allocations. Mainstreaming employment into economic and social policy making requires that an environment conducive to the generation of full and productive employment is created.

Employment consideration can be factored into the works of different ministries formulating policies at the macro as well as sectoral levels in two ways. The Ministry of Finance may make it mandatory for the line ministries to do an analysis

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<sup>13</sup> This section draws upon Mondal (2008).

of employment impact before they submit budgetary proposals. All ministries should routinely undertake *ex ante* employment impact analysis before putting up funding proposals for inclusion in the budget. In the same vein, they should regularly undertake *ex post* employment impact analysis of programmes and projects in order to monitor and evaluate their successes and failures to effectively respond to the priority needs.

Suggestions of a pro-poor strategy for productive employment generation and poverty reduction include (i) increasing the access to productive assets (land and credit reform); (ii) raising the return on assets (removing the market distortions); (iii) improving employment opportunities (facilitating occupational and geographic mobility, possibly providing emergency employment); and (iv) ensuring access to education and health services. One may also turn to secondary income, supplementing resources with transfers to benefit those who are not economically active or who are in the non-tradable sector. The critical issue is that these aspects are not systematically taken into account in policy making. This can be done by making all macroeconomic and sectoral policies employment-targeted through extensive exercises of employment intensity of different programme options and through policy reforms.

An essential element of such strategy is an overall national development strategy conducive to dynamic employment generation. Economic growth is important, but even more so is its quality, measured particularly in terms of its capacity to generate quality jobs. This means that employment-targeted economic programmes should be a key objective of macroeconomic authorities.

For Bangladesh, the agricultural sector is still the main employer (48.1 per cent in 2005-06). Accordingly, a more intense focus is needed on rural development, with a view to expanding market access, employment and productivity. More broadly, the prevalence of the working poor in Bangladesh points to the importance of creating employment sufficiently productive to yield a decent income. For this reason, employment generation and productivity growth must be pursued jointly. A comprehensive strategy for achieving them together over the SFYP period involves investing in dynamically growing sectors of the economy, promoting micro and small enterprises where most employment is generated today, and building strong linkages between dynamic sectors and small firms. It is in this context that promoting entrepreneurship plays an essential role by making it easier to start and nurture small enterprises that provide more and better jobs to the labour force in the peri-urban areas. In the rural areas more job creation programmes outside

agriculture (e.g. by establishing or relocating RMG, textiles and other footloose as well as agro-based industrial units) are necessary to reverse or at least to reduce rural-to-urban migration.

### ***1.9.2 Employment Augmenting Policies at Sector Level***

During the last decade employment growth rates have been disappointing even in the scenario of high growth rates of output. This challenge is particularly acute in the formal or modern sectors where productivity and wages are relatively high. The share of formal employment, either total or outside of agriculture, has declined or stagnated in recent years. Job creation is constrained by a number of factors. Weaknesses in basic infrastructure, financial systems, property rights regimes, and regulatory barriers on businesses conspire to constrain investment and, ultimately, job growth. Government needs to develop and adopt sectoral growth-promoting policies that generate large number of productive jobs. By all counts, manufacturing constitutes strategically the most important sector to generate productive employment and at once to drive and propel economic growth. One can identify a number of key actions, including raising investments in employment-intensive and growth-promoting manufacturing and services, rural infrastructure, establishing property rights for entrepreneurs in informal enterprises, and providing these entrepreneurs with better access to credit and producer services. Technological progress makes it possible for firms to expand output with correspondingly smaller increases in employment. Capitalising on technological progress can be critical to a firm's growth, especially in the context of growing integration of Bangladesh with the rest of the world. However, a consequence is the reduced expansion of productive employment opportunities.

Most of Bangladesh's poor and underemployed live in rural areas or function in urban informal sectors. The most urgent labour challenge facing government is to increase opportunities for these people to engage in productive labour and earn a decent wage. At the same time, employment in the formal sector must expand in manufacturing with high value added. To make this happen, existing investment incentives are not sufficient. To this end, the public and the private sectors must work together more closely to identify and develop non-traditional, but relatively labour-intensive and productive activities throughout the entire economy. For the purpose of increasing productivity, dormant National Productivity Organization (NPO) under the Ministry of Industries and Tripartite Productivity Committee (TPC) under the MLE need to be activated with might and main.

It may be underlined that in almost all cases growth promoting policies and actions will only achieve their full potential if government implements measures to improve the quality of human capital in the economy. Achieving full and productive employment will take time. But unless the objectives of full, productive, and decent employment become central to policy-making, and the government implements time-bound, credible and measurable policies, Bangladesh could continue displaying high growth rates of output during the next two decades and still be plagued by huge unemployment, underemployment and poverty.

### ***1.9.3 Suggestions for “Special Employment Schemes”***

Employment generation scheme proposed in the budget 2009-10, which is similar to the “100 day employment generation programme of the previous year,” and can have significant positive impact in ensuring slack season employment for the underemployed poor. After the completion of one or two rounds of this programme, there should be an evaluation of the implementation problems and appropriateness of targeting. The experiences of the previous programme can be used to put forward the following suggestions.

- The problems of choice of work/projects are likely to be similar to the previous years programme and an adequate preparatory period must be allowed for proper participatory choice of project.
- Projects should not be confined to only earthwork. Innovative work may be chosen to suit local needs. Cleaning water hyacinth, cleaning ponds including privately owned ones, etc. may be considered since these will generate future rounds of paid employment if investment on fish-culture is made by pond owners. Construction/cleaning of school buildings/premises, etc. may also be considered.
- Priority should be placed on completing the incomplete projects of previous round.
- The programme for “hardcore poor” may be later expanded to include labour force from moderate poor households if sufficient number of “hardcore poor” are not available for completing the project or to justify administrative efforts for initiating the scheme in a particular area.
- All areas may not initiate work simultaneously. For example, in most areas, September is a slack month when employment scheme should take off. But the illustration of “employment impact of *aila*” shows that after an area is

hit by natural disaster, a careful evaluation of employment and investment needs must be done before choosing “projects” for employment scheme. Moreover, a sufficient time should be given to allow immediate private reconstruction activities.

- Whenever food price hike starts at an accelerated pace, special employment schemes may expand its scope in terms of period to be covered and targeting a larger group.

One priority for this group is being highlighted. Young persons with SSC and above education may be hired as apprentices with an allowance from government’s special fund. Each may be paid allowance at a rate equivalent to daily allowance in other safety net employment. At the end of the training period they will seek employment independently.

The other special need that has been focused is the reemployment and retraining needs for workers retrenched from existing industries. Over the SFYP period, employment programmes may be adopted for these groups. Retraining plus reemployment schemes may be organised through collaboration with NGO’s with subsequent follow-up schemes of microfinance. At each Division headquarters, a few centres for retraining can operate.

#### ***1.9.4 Employment Schemes to Improve Gender Equality***

Removal of discrimination in the labour market would increase the incentive to the household to invest in female education. Not only will education ease mobility overall, but education is likely to ease structural adjustment into export agriculture because it appears to accelerate the transition to the new efficient pattern of resource allocation when prices or technology change. In Bangladesh, high level of female school enrolment rates is not reflected in their labour force participation increases. Among other variables that hinder female participation is urban location. A look at the growth of the urban population confirms that Bangladesh has high rates of increase in urbanisation to match its increases in female labour force participation rates (LFPRs). As males migrate, women are granted a better opportunity to participate in the labour force of the rural areas.

Beyond any doubt, however, rural women do face a significant number of constraints that males do not. For one, they are expected to maintain a household and raise children in addition to their outside labour. This “second shift” places strains on the women and is detrimental to their health and well-being and their



children. Furthermore, the family ties of women make them considerably less geographically mobile than men and create segmentation in the labour market.

Women in agriculture face not only the distortions in the sector as a whole but a number of gender-based distortions. They may be denied access to inputs subsidised and supplied by the government. Illiteracy is generally higher among women and denies them access to technology and other information. Tradition often places a barrier between male extension agents and female farmers, denying them access to these resources too. Furthermore, there is also a gender bias in the private transfer of information with role. Women, therefore, should be provided with access to agricultural inputs and extension services. They need access to credit because they have both lower cash income and smaller assets.

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## Chapter 2

# A Study on Education and HRD: Quality and Management Issues in Bangladesh

Manzoor Ahmed\*

### 2.1 INTRODUCTION: COMMITMENT, OPPORTUNITIES AND CHALLENGES

Despite rhetoric since the colonial days, and the constitutional pledge of independent Bangladesh, effective participation in basic education, primary education for children and functional literacy and continuing education for youth and adults remains beyond the reach of a large proportion of the population. The number of institutions and enrolments have grown at all levels, but it is generally agreed that the quality of education has deteriorated and remain seriously deficient, especially so in institutions to which the children of the poor go in larger numbers. The education system has failed to make the grade in respect of access with quality and equity.

Poverty alleviation strategies that have emerged in the 1990s, based on national and international experience and assessment of lessons, have put human development at the centre stage. Empowering people with knowledge and skills is the most vital component of human development. Education and learning have thus become key elements of poverty alleviation. This overarching concern calls for appropriate strategic interventions to promoting *access with quality and equity, enhancing education resources and their effective use, and increasing accountability in education governance*. These issues have to be considered in relation to the main sub-sectors of education with the aim of identifying strategic choices and action priorities in the medium term time horizon of the Sixth Five-Year Plan.

The political coalition that swept the general election in December 2008, following a two-year interregnum of military-backed caretaker government, had presented a political manifesto containing a “vision for change.” It offered Vision 2021, which outlined goals envisaged for 2021—the 50<sup>th</sup> anniversary of independent Bangladesh.

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### **2.1.1 The Political Pledge**

The sketchy Vision 2021 has still to be fleshed out, but the headline items related to education and human resource development can be listed.

- Achievement of universal primary education, extending this stage to grade 8; elimination of illiteracy; creating a new generation skilled in and equipped with technical and scientific knowledge; better remunerations for teachers; and overall improvement of quality and equity in education. It also promised the formulation of an education policy fit for the contemporary age.
- There are other Vision 2021 goals pertinent for educational development – building Digital Bangladesh through extensive use and capacity development in digital technology; creating gainful employment opportunities for at least 90 million skilled workers; and ensuring equal status for women in all spheres of society and the state.
- A key item relevant for education governance and management is the idea that local government bodies would be at the centre of planning and management of development activities. With this end, local government authorities at the district and upazila levels would be empowered to become self-reliant and autonomous.
- In addition, the five-year election pledge undertook to continue stipends for girls, removing criminal violence and session-jam from education institutions, building new secondary schools and improving existing ones in the capital city, districts and upazilas in phases; and making IT instruction compulsory in secondary schools by 2013 and in primary schools by 2021.

An Education Policy Formulation Committee appointed by the Government in April 2009, charged to come out with policy recommendations in three months, had the challenge of taking the political promises into account and providing sensible policy guidelines.

### **2.1.2 The Education Policy (Draft)**

The 18-member National Education Policy Formulation Committee chaired by National Professor Kabir Chowdhury and co-chaired by Q.K. Ahmed, Chairman of Bangladesh Economic Association, presented their report to the Minister of Education on 2<sup>nd</sup> September 2009. The 97-page report divided into 29 chapters was put on the Ministry website in order to elicit public comments on the draft.

The Committee itself held consultations with professional and interest groups, but it saw its job as submitting its own views to the Ministry, leaving to the government the tasks of giving due consideration to the recommendations,

conducting further consultation as necessary, and determining the approval and adoption process of the new policy.

The highlights and key features of the education policy recommendations, (regarded as draft, until the government decides what it wants to do with it), are indicated below.

#### **2.1.2.1 Universal education up to grade 8**

One-year pre-primary education and primary education extended to grade 8 should become universal within the next decade. The historically evolved reality of the diversity of provisions in primary and secondary education—government, government-assisted, NGO and private sector schools, and the madrasa—is recognised. It is agreed that this diversity will continue, subject to following a common core curriculum and adopting minimum common standards regarding learning provisions. The English medium private schools following curricula for external certification and credentials should add “Bangladesh studies” in their course content.

#### **2.1.2.2 Multiple delivery modes in basic education with common core curriculum and standards**

The common core curriculum for all types of secondary level institutions (including madrasa) will include Bangla, English, mathematics, science, Bangladesh studies, and IT which will be complemented by additional subjects pertinent for each major stream—general, vocational and madrasa. In addition to the vocational stream in schools, there will be various forms of skill training activities according to graded national skill standards designed to meet skill needs in domestic and overseas employment markets. Instruction in science and IT should be given special attention.

#### **2.1.2.3 Literacy and non-formal education**

A literacy programme to eliminate adult illiteracy by 2014 is proposed. Non-formal education is seen as a means of providing a second chance to those who drop out of formal schools and appears to be separated from the “literacy campaign.”

#### **2.1.2.4 Quality improvement in tertiary education**

Tertiary education institutions, both public and private, should be encouraged to take responsibility to establish and maintain quality standards within agreed framework and to ensure effective use of resources. A four-year degree programme should be acceptable higher education qualification for most occupations except for those aiming for teaching, research and other jobs that call for specialised expertise.

A three credit English course should be compulsory for all degree students. Various quality enhancing investments in facilities and teacher upgrading are proposed. Pedagogic technology such as internet and education television channels should be supported. Specialised professional education in medicine, agriculture, engineering, law and business should be made more practical and their quality enhanced with closer involvement of the professional bodies.

#### **2.1.2.5 Student assessment to discourage rote learning**

Assessment of learners' achievement should be based on public examinations and continuous evaluation by teachers, which should aim at assessing cognitive, affective and reasoning domains. Major public examinations will be at the end of the 12<sup>th</sup> grade. Other examinations will be organised at the district/upazila levels at the end of 5<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> grades to award scholarships and (possibly) evaluate system performance. All exams should be aimed at discouraging rote learning.

#### **2.1.2.6 Teachers' status, incentives and training**

Teachers' recruitment, training, professional support and remuneration should be important elements of the strategy for improving quality in education. A Teacher Recruitment and Development Commission should be established to recruit teachers and support their professional development.

#### **2.1.2.7 Governance and management measures**

A consolidated education law should be enacted providing a legal framework for educational governance and management in line with the purposes of the new policy. A statutory and permanent education commission should be formed to guide implementation of policy objectives and consider adjustments in education policy over time. Primary, secondary and non-formal education should come under one Ministry; and a separate Ministry of Higher Education should look after tertiary education. Management of primary education should be decentralised with greater involvement of community and parents and greater authority for schools. Secondary education should be decentralised to upazila, district and division levels. The University Grants Commission (UGC) should have greater authority and be renamed as Higher Education Council. Accreditation Councils should be formed to encourage improvement and self-regulation in quality of tertiary institutions. Incentives should be given for faculty research. The National University's affiliating function should be decentralised to divisional levels by establishing branches.

### 2.1.2.8 Enhanced education resources

The Committee recommended that public expenditure for education should be increased from the present 2.27 per cent of GDP preferably to 6 per cent, but at least to 4.5 per cent in 10 years. In the Committee's view, if an economic growth rate of 6 to 7 per cent can be maintained, it should be possible to raise the additional funds (a total of Tk 361,000 crore or Tk 276,000 crore over 9 years at 6 or 4.5 per cent GDP share respectively.)

It can be seen that the policy recommendations are essentially in the form of normative goals or preferences often expressed in general terms. Implementation of the policy will require establishment of mechanisms and processes, preparation of phased operational plans, and reconciliation of differing views and making choices among options on certain issues.

The normative goals and preferences stated in the policy beg two interrelated questions:

- a. *How can the broad statements of purpose and some hints of strategy given be analysed, elaborated, possible points of controversy resolved and priorities in phasing and sequential steps transformed into an operational plan and programme?*
- b. *What should be the organisational and institutional mechanism for implementing the operational plan and programme with provisions for adequate resources, appropriate coordination and necessary monitoring and adjustments of plans as needed? This is where past education commission reports and their policy recommendations faltered.*

The decision of the government to move away from the *ad hoc* approach of PRSP (presumably at the end of the period for revised two-year second PRSP, 2009-11) and to go back to the five-year development planning mode provides *an institutional mechanism for resource provisions, coordination, monitoring and placing all reform and development efforts in education within the agreed policy framework*—always a challenge in a complex and multi-faceted endeavour which is the national education system.

This paper is intended to highlight the recent discourse on education among stakeholders, academics and researchers on education issues, which must be considered in formulating the Sixth Five-Year Plan. This paper attempts to:

- a. Present an overview of the status and developments in the education sub-sectors;



- b. Identify key issues in sub-sectors focusing on access with equity, quality transformation, governance and management in education, and education financing; and
- c. Offer propositions regarding priorities in strategic interventions in the light of political commitments, the perspective of Vision 2021, and the emerging consensus on policy objectives which should be reflected in the Sixth Plan.

Some other recent policy statements, either approved or under consideration by the government, also should be taken into account in considering the Sixth Plan priorities and programmes. These include:

- Non-formal Education Policy Framework 2006
- EFA National Plan of Action II – Learning for Change 2007
- Operational Framework for Pre-primary Education 2008
- National Skill Development Policy 2009 (Draft)
- Prog3 Paper on Primary Education Development 2009.

## **2.2 STATUS AND KEY ISSUES IN EDUCATION SUB-SECTORS**

This section highlights recent education sector developments and key issues in the sub-sectors of education which can be regarded as relevant to educational development in line with national development objectives and priorities. Main recommendations in the new education policy in different sub-sectors are also presented.

### ***2.2.1 Primary and Early Childhood Education***

#### **2.2.1.1 Overview**

##### *Advances in Primary Education*

Progress has been made in increasing equitable access, reduction of dropout, improvement in completion of the cycle, and implementation of a number of quality enhancement measures in primary education. Access to primary education has increased steadily over the past two decades. The contribution of government-run and government supported formal primary schools, which accounted for 85 per cent of the primary school children, was complemented by Ibtidayee madrasas, which also receive substantial government subventions, and non-formal primary schools managed by NGOs, largely funded by external donors.

The gross enrolment rate in primary education reached 97 per cent by 2002, though net enrolment is estimated at about 90 per cent. Growth of net and gross

enrolment appears to have slowed down in recent years. The rate of completion of the five-year primary stage by those enrolled is reported to be low, with about half of the students dropping out before completing the five year primary education course. Gender gap in enrolment has reached close to parity for boys and girls (DPE data).

A compulsory primary education law was adopted in 1990 and the compulsory primary education programme was extended nationwide in 1993. Incentives for all children to attend primary school have been introduced through distribution of textbooks and provision of a stipend of Taka 100 for a child and Taka 125 for more than one child in school per family, targeted at 40 per cent of the students in a school identified as poor. The cash stipend was introduced in 2002 which replaced “food for education,” initiated in 1993, in the form of a monthly grain ration targeted at poor children.

Quality improvement measures in primary education have been taken through various development programmes supported by external assistance. Curriculum and textbooks have been modified. Upazila resource centres have been established and school-clusters based in-service training for teachers have been initiated. Training for head teachers and Upazila primary education staff in management and academic supervision has been introduced.

#### *PEDP II—Progress and Constraints*

The Second Primary Education Development Programme (PEDP II) for the years 2003/4 to 2009/10 (now extended to June 2011) has been undertaken as a sub-sectoral programme to improve primary education quality and expand access to primary education. Initial targets were set for raising gross reenrolment rate to 107 per cent and net reenrolment rate to 88 per cent. The latter target appears to have been already achieved as noted above. Beneficiaries of PEDP II support were the government and registered non-government primary schools (RNGPS), with madrasas and non-formal primary education left out, although it was given the label of a sectorwide or programme approach. The programme, nonetheless, stated as its aim to introduce quality standards for primary education which all schools should meet and to make significant progress towards building a truly inclusive primary education system.

The Directorate of Primary Education (DPE) has summarised progress of PEDP II by enumerating objectives likely to be achieved by 2010 and those not likely to be achieved (Prog3 Concept Paper). Objectives likely to be achieved are as follows.

Both the gross and net enrolment rates will be achieved. It is noted that this is partly a function of a decrease in the projected population of the primary school age

group; geographical disparities, however, remain, and there is “some concern regarding the reliability of the basic demographic information.”

- The number of student receiving stipends is targeted to be at least maintained at or to rise above the 2005 baseline level (of 4,340,443 students).
- The target for reducing pupil absenteeism in the types of schools supported by PEDP II from 22 per cent in 2005 to 18 per cent in 2009 (with gender parity) would be achieved. This would still leave an unacceptable level of absenteeism even in PEDP II supported schools.
- The targeted transition rate from primary to secondary (from grade 5 to grade 6) is likely to be met, although about half of the children in primary school drop out by the time they reach grade 5.
- Planned additional teacher recruitment (a total of 35,000 under PEDP II) will be carried out. The impact on pupil teacher ratio will be small because of the number of teachers leaving the system during the same period.
- Target related to organisational development and capacity building, including producing the HRD plan and conducting institutional analyses, will be achieved, although necessary steps regarding government decisions and implementation will not be completed.
- Educational Management Information System (EMIS) will be “significantly enhanced.”
- DPE is hopeful of achieving universal coverage of School-Level Improvement Plans (SLIP) by the end of the Programme, and additional attention is being given to their scope and quality. The decentralisation of planning and management functions is proceeding—to the extent permitted by the pace of decision-making that lies beyond DPE and Ministry of Primary and Mass Education (MoPME). The question of sending Government funds directly to schools, which is essential for the sustainability of the Programme, is under negotiation with the Ministry of Finance (MoF).
- Textbooks are now being produced and distributed to all primary children on time. From the academic year 2010, all primary children have been receiving free textbooks (at present, 50 per cent of textbooks are recycled in grades 3-5). However, improving the quality of textbooks remains a major challenge. Preparing and distributing adequate teachers’ guide on time need a greater effort.

- Quantitative training targets (for Teachers, Head Teachers, and SMC members) are likely to be met. However, the quality and outcomes of training have not yet been “systematically documented.”
- Construction targets are likely to be met, as are the revised targets for better maintenance – although building sufficient classrooms to reduce class size to 46 will not be achieved during PEDP II. Ensuring that there are sufficient schools and classrooms to enable Education for All to be accomplished will require a more substantial and carefully-planned building programme—and “alternative construction and community involvement strategies will need to be considered.”
- The 2009 target regarding safe (arsenic-free) water sources in GPS is very likely to be achieved on schedule.
- The issue of Inclusive Education is being pursued with “much commitment” but the magnitude of the task was underestimated. The current programme addresses the needs of only those children with mild physical disabilities— meeting the needs of those with severe disabilities remains outside the scope of the primary education system. There are no specific targets for other excluded groups, such as linguistic minorities, children in extreme poverty or those in accessible areas. Primary education and social welfare authorities at the upazila level are expected to liaise with each other regarding services for children with disabilities. Stipends and school feeding, which is so far in operation on a small scale, are intended to serve the disadvantaged children.
- The target of 28 per cent of schools running in single shift by 2009 (among PEDP II schools) is likely to be met, which will leave three quarters of GPS and RNGPS running in double shifts.

The targets not likely to be met represent major systemic problems of primary education. These include:

- The rate for completion of primary education up to grade 5 will be well below target, although some children may complete grade 5 in schools outside PEDP II. Dropout rates remain far higher than those targeted.
- Expenditure on education as a percentage of GNP and for expenditure on primary education as a proportion of total education are not on track to achieve the anticipated increase.
- Repetition rates have yet to improve significantly and, despite stipends and quality enhancement, the coefficient of efficiency target is unlikely to be achieved.

- The revision of the C-in-Ed programme is underway. Even with the reform of the course and its change into Diploma in Education, it can be regarded as an interim measure to address major issues regarding teachers to transform the system of primary education in order to meet the criteria of quality and equity. These issues are about numbers of teachers required to be trained and deployed in next five to ten years, improving and enforcing quality and performance standards of teachers, and incentives to attract and retain bright and talented young people in teaching.
- Teachers' revised job descriptions with well-defined incentives, career paths and recruitment rules are not yet in place as government's policy consideration and decision-making (beyond the control of DPE and MoPME) remain slow.
- Filling of staff vacancies at all levels in PTIs, DPEOs, and UEOs has proved much more difficult and time-consuming than anticipated and remains a serious problem.
- Capacity development in NAPE (National Academy for Primary Education) and NCTB (National Curriculum and Textbook Board), two key institutions for improvement of quality in primary education, remains a challenge. Almost all the professional staff are "deputees" (seconded on a temporary basis) from other departments who stay for uncertain and often short periods. Many of those trained for specific roles within NCTB and NAPE are no longer with these institutions.

The PEDP II goals are broadly consistent with the Second National Plan of Action (NPAAII) for implementing the Education for All goals for 2015, derived from the Dakar Framework adopted in the World Education Forum in Dakar in 2000, to which Bangladesh is a party. This second NPA followed the first prepared after the World Conference on Education for All in 1990 (Jomtien, Thailand) and is intended to provide a longer term perspective of development priorities and objectives in basic and primary education, specifying intermediate targets and strategies for reaching the final destination. NPAAII also set goals for literacy and adult education as a part of the effort to create eventually lifelong learning opportunities for all citizens.

#### *Preschool and Early Childhood Education*

The Dakar Framework and NPAAII recognised that early childhood development and preschool education have a strong positive influence on preparedness for school and later performance and achievement of children in school. Children from poor families, especially the first generation learners, can benefit greatly from early

childhood programmes. There is also a social demand for preschool education as the large number of community initiated pre-schools attached to primary schools (known as baby classes) indicate. The government, recognising the value of pre-schools and the social demand for these, has encouraged NGOs and community organisations to set up and support pre-schools within the premises or near primary schools. One example is the agreement of the MoPME with BRAC Education Programme, which has resulted in the opening of some 26,000 preschools that BRAC has undertaken to support and supervise. Other NGOs have been providing preschool and community-based early learning activities known as Shishu Bikash Kendro for 3-5 years old children, though on a limited scale. Under the auspices of the Ministry of Women and Children Affairs (MoWCA), with overall management support from the Shishu Academy, preschools are run in Chittagong Hill Tracts as well as a small number in other districts.

The MoPME has adopted an operational framework for preschool education and has plan for adding preschool classes in government primary schools. The Mo CWA has become engaged in a process of developing a policy framework for early childhood development spanning conception to transition into primary education. Various stakeholders including government and non-government bodies and the Bangladesh ECD (Early Childhood Development) Network, a forum of ECD related organisations, are involved in this process.

A projection of the numbers in primary age group in the decade ahead and projection of reenrolment based on current trends are shown in Annex 1. The projection of children in the age group shows a slight decline in total numbers. The implication of this population trend is that resources and efforts can be directed more to quality improvement rather than expansion of the system to accommodate larger numbers. Since the reenrollment projections are based on extrapolation of current trends, these have to be taken as indicative and will be sensitive to policy decisions taken regarding development of primary education.

#### **2.2.1.2 Key Issues**

##### *Achievement Deficits*

As noted above, one of ten children of the primary school age does not enroll in school and almost one of two of those enrolled does not complete primary education of five grades. This adds up to more than half of the children not having the benefit of a full cycle of primary education. This does not take account of what is actually learned by those who complete primary education. Available studies suggest that a large proportion of children are virtually deprived of primary education, although they are enrolled in school. One-third of children after completing five years of

schooling are reported to be without functional skills of literacy and numeracy (Ahmed *et al.* 2003). Other studies have lent support to this type of disappointing findings. It is clear that in spite of advances made, more need to be done regarding low average attendance of class by enrolled students, many crowded classrooms, lack of adequate learning materials, still untrained and often unenthusiastic teachers and short contact hours in schools that mostly operate in two shifts. These deficits explain the poor learning outcomes.

#### *Inequity in Opportunities*

It is reasonable to conclude that children from poor families are the ones who either do not come to school or are very poor achievers, because their mostly illiterate parents cannot help or guide them at home. Household surveys that have related economic status of families (measured by their food security status) with their children's primary school participation have shown a strong correlation as presented in *Education Watch 2001* and later reports (see Chowdhury *et al.* 2001). The commonsense view is that spending in primary education is pro-poor and the expansion of primary education benefits the poor. This is not so unless primary education maintains acceptable quality and operates in an inclusive way, without effectively leaving out the very poor and other disadvantaged groups, enrolling some of them only nominally.

The progress made in bringing children into the educational system underscores the need now for attention to various aspects of effective participation of all children in education—going beyond nominal reenrolment to meaningful access and participation. Mere enrolment, or even completion of primary schooling, for instance, without acquiring a functional level of literacy and numeracy skills, which is not uncommon, is clearly not effective access or participation in education. The concept of effective access, therefore, must embrace three elements: (a) enrolment, (b) continuation and completion without dropout, and (c) and acquiring by students prescribed knowledge and competencies for the particular stage of education. Those who have their names on the school roll, but are disengaged from learning, thus failing to achieve a minimum level of competencies, are “virtually excluded” from education even if they stay on in school and receive a certificate of completion. (Lewin 2007).

#### *Access with Equity and Quality*

Access to and participation in primary education, especially of the poor, is not just a matter of making provisions for schools within physical reach. In fact, with close to 80,000 primary level institutions in the country, almost every village-

except in remote haor, *char* and hilly areas—has a primary school. Yet, as the demand for non-formal primary education and attendance in them of at least 1.3 million children show, the functioning of the school has to be responsive to the specific circumstances and needs of children in various ways. These include the daily time-table and annual calendar of the school, the learning materials and the pedagogic approach, how the teacher relates to the children, not burdening the family with the cash cost of exercise books and examination fees, rapport of the teacher with the parents, as well as the proximity of the school, especially for girls.

Above all is the assurance to parents and the children themselves that the teacher is present every day on time and that the children indeed learn. The poor parents have to be assured that their children will learn without a private tutor outside the school, which most of the parents cannot afford.

The quality of teaching-learning and school governance do influence effective access. Contrary to government expectations, parents usually have to bear unofficial payments of various kinds (for sports, transportation of government-supplied textbooks, terminal examination fees, etc.) in "free and compulsory" primary schools. The expenses parents have to incur for private tutoring outside the classroom are additional obstacles to the poor families. According to one estimate, on an average, families spend Taka 1,000 for a child in a year for private tutoring (Chowdhury *et al.* 2001, Ahmed *et al.* 2005). Parents find this expenditure necessary to ensure that their children will complete primary education and go on to the secondary school because of deficient instruction in school.

It is very likely that there is an overlap between non-enrollees and non-completers and some 7.3 million children estimated to be engaged in harmful child labour. Due to their especially difficult circumstances, working children can be helped only with a combination of interventions addressing both school and family-related factors, which regular primary schools are not equipped to provide.

A mid-day meal is considered essential to ensure that students in primary school can maintain attention span for learning for a full school day. This is particularly important for children from poor families in Bangladesh, many of whom may come to school without a proper breakfast. Trial distribution of snacks with World Food Programme (WFP) assistance in selected locations has been found to have significant learning and nutritional outcomes. It may be mentioned that in India, by Supreme Court ruling, a hot meal has been made a mandatory part of the "right to education" implementation process and is now a meal is provided in primary schools in all states.



### *Extending Compulsory Education up to Grade 8*

The government pledge reflected in the education policy is to extend primary education, and provide for universal access, up to grade 8 by 2018. With five grades of primary education seen as insufficient preparation for citizens of an aspiring middle-income country, there is a strong case for *extending the basic education stage to grade 8* with a pragmatic and time-bound plan to move toward this goal.

The policy seems to emphasise “extending primary education to grade 8” which directs the focus on *labeling education up to grade 8 as primary education*, rather than expanding access and improving quality beyond grade 5, regardless of where children are taught. The focus on changing the scope of primary education, rather than extending compulsory education, directs energy and resources to administrative reorganisation, shifting responsibility from one ministry to another and equipping present primary schools with additional classes and teachers. The suggested steps for implementing this recommendation and the indicated cost calculation in the draft policy also focus on extending *primary education* and seem to make the job unnecessarily difficult. In fact, the likely diversion of energy and resources away from quality and content of teaching-learning can be a serious distraction from expanding and improving access to education up to grade 8.

Expansion of educational opportunities up to grade 8 and making it universal in the next decade, along with universalisation of education up to grade 5, become much more achievable if it is recognised that (a) some 45 per cent of the children of the present junior school age get enrolled in school, (b) from the perspective of educational and learning objectives, it does not matter if classes 6-8 are in institutions some of which are under the authority of Ministry of Education (MoE) and some under MOPME, and (c) what is critical is a coordination and cooperation between agencies under the two ministries to ensure that there is a continuity in curriculum and that quality of teachers and teaching are given due attention.

### *Teachers*

The system cannot achieve its goals with the current numbers of teachers, methods of preparation and professional development and the level of salary and incentives. New ways of thinking about *teachers and pedagogy* are needed, e.g., enabling selected and properly equipped degree colleges to train primary teachers as part of the regular degree programme, turning PTIs into in-service training centres, and commensurate salaries and status for highly qualified teachers.

The quality and content of initial training in PTIs, continuing in-service training, the effectiveness of activities at Upazila Resource Centres (URCs) and the capacity of NAPE to support and lead teacher development—all need to be strengthened and in many cases redesigned, which are emphasised in the draft education policy. All of these measures, however, are actions for improvements within the current structure of teacher recruitment, remunerations, professional support and supervision. They do not address the basic problem of how teaching can be made an attractive and desired profession which can attract and hold on to intellectually bright, enthusiastic and motivated young women and men who would make life-time commitment to teaching as a vocation and avocation. Is this too idealistic a notion? Not necessarily so, if the vision is cast farther and the right initiatives are taken.

Out-of-the-box thinking is needed regarding initiating a genuine pre-service teacher development system, which does not exist now, to attract talented people into the teaching profession. An approach to induct academically competent people to teaching in primary schools (as well as extended compulsory grades and secondary schools) and to keep them in the profession would be to introduce education courses in the general education degree programme and offer education as a subject in at least one well-equipped degree college in each district. Candidates can be attracted competitively by offering stipends to selected ones with an undertaking from them that they would serve in a primary school for at least five years. To attract and keep the right people in the profession, these new teachers have to be placed at a salary level competitive with other civil servants of similar educational credentials.

Currently employed teachers may be offered this salary level if they meet specified criteria including the graduation requirements and with an academic career without any third division/class results. This combination of general education and pedagogy in the undergraduate college programme is used in many countries. It would be essential to support the selected degree colleges to meet appropriate infrastructure and academic standards. The PTIs in this scenario can gradually become in-service training institutions for the large teacher population anticipated in the next decade.

A primary education teacher service commission that regulates and manages registration and recruitment of qualified teachers, assessment of eligibility for levels in the career ladder, and awarding of incentives should be given consideration because of the large numbers involved and the complexity of the tasks. It would make more sense to have one such commission for government and government-assisted schools rather than separate commissions or mechanisms for the two, proposed in the draft education policy.

### *Effective Instructional Contact*

Effective instructional time for students, an essential condition for quality in instruction, is one of the lowest in Bangladesh by international standards. Official hours are 2.5 hours per day for classes 1 and 2 (444 hours in a year compared to 1100 hours in Indonesia and 1235 hours in China). With average low attendance of students and reported “irregular presence” of teachers, instructional time is further depleted and academic discipline and accountability are eroded. In reality, actual instruction time may be less than an hour a day (Karim 1992). NGO schools have addressed this problem by keeping class sizes around 33 students, enforcing instruction planning and routine, maintaining close supervision, and having parents keep in close contact with the small neighbourhood school.

### *Curriculum and learning materials development*

The official curriculum prepared by NCTB has detailed specification of content and textbooks are provided by the government to students of most types of school. PEDP II funding supports the provision of free textbooks, which is reported to have helped marginalised students. While there is some increased provision of supplementary materials under PEDP II, few schools are fully equipped. There are very few, if any, teachers’ guides in use in schools, though materials have been developed by NGOs and academic institutions, based on the official curriculum, and are available for immediate use (Ahmed *et al.* 2007).

Teacher’s guide and supplementary materials prepared in the form of “learning packages” by Institute of Educational Development (IED), Brac University on the basis of NCTB curriculum and textbooks for classes one to three and offered to DPE to be tried out in primary schools have so far not been accepted for trial, apparently because the necessary approval and review by authorities including NCTB for a trial could not be undertaken. A “turf mentality” and the reluctance to involve any non-government actor in these “official” tasks seem to have become an insurmountable barrier. Meanwhile, teachers and students were left without the essential tools for improving instruction—the central goal of PEDP II.

Producing millions of textbooks and distributing these throughout the country have become a major annual operational and logistical challenge (some would describe it as a nightmare) for NCTB. Expert views favour a separation of the functions of textbook production and distribution and development and approval of curriculum and learning materials. It is argued that the process of textbook preparation, production and distribution should not be the function of the curriculum board which should concentrate on the professionally demanding task of curriculum development including testing, trial and continuing development. The curriculum

development process also should be linked with assessment of learning so that the learning objectives are realised and defined competencies are acquired by learners.

There are various models in existence at the state level in India and in other countries of state corporations or private publishers or a combination handling the production and distribution of books, which can relieve NCTB of its burden and permit it to concentrate on the essential and critical task of curriculum and learning materials development and assessment of learning related to curriculum content and objectives.

#### *Physical Infrastructure*

A large share of external development assistance has gone to physical infrastructure development in primary education. This item will require major further investments to meet the minimum acceptable criteria for appropriate learning environment for achieving the quality with equity goals. Special attention has to be given to some 2000 villages identified by the Ministry of Primary and Mass Education as lacking a primary school. These villages are generally in areas with difficult communication and dispersed habitations such as *haors*, *chars*, coastal areas and hills where schools built according to standard criteria of population still leave these inaccessible to small children. The plan for extending universal education to grade 8 also will require an assessment of existing school facilities in each Upazila and need for making additional provisions.

#### *Effective Governance and Management*

This is an essential condition at both central and school level for ensuring quality improvement. Structural and procedural changes will be necessary to involve local government bodies, giving greater financial authorities to schools and the local level, and encouraging the involvement of the community.

As a national task, primary education should involve *participation* and consultation by all major stakeholders—parents, NGOs, academic institutions and other institutions of civil society—in developing the programme, maintaining an oversight over its implementation, and contributing to the provision of primary education. It is the obligation of the government to ensure that this multi-faceted participation of stakeholders happens.

#### *An Inclusive Approach*

It is generally agreed that the poor and certain groups such as those living in ecologically disadvantaged areas, and ethnic and linguistic minorities are the ones left out and the under-achievers. Children with disabilities of varying degree, as many as 10 per cent of the population, are another large deprived group. Not enough

is known about the characteristics and descriptions of those who are disproportionately deprived in a generally unsatisfactory system. What are the social, economic, cultural, geographical and other features of those who are left out, who dropout, are non-completers and those “virtually excluded” in mainstream primary education? The policies for quality improvement have not been directed at addressing the specific circumstances and obstacles faced by various deprived segments of the population, based on analysis and diagnosis of the particular situations and constraints. A general improvement of the system following conventional solutions (e.g., more textbooks, more teachers training and more supervision) has been pursued with the assumption that the benefits would accrue to all.

The principle of inclusion must lead to appropriate measures and strategy for opening the education system to learners with varying degrees of disability. The majority of them can join and benefit from regular education services, if schools follow essential principles of inclusive education. Others with more serious disabilities need specialised services. Education provisions for children with disability are very limited, either in the public or the private sector. Primary schools have to become more inclusive, with training of teachers, modification of facilities and preparation of materials to allow children with disabilities to participate in education.

#### *Second Chance through Flexible Approaches*

Studies have shown that, although educational quality across the board is poor, non-formal primary education programmes did significantly better than the regular primary schools in respect of achieving by students competencies specified in the curriculum as well as in student retention and completion rates (Ahmed *et al.* 2007). These programmes, by definition, are targeted at the poor. They offer an equivalent of primary education and follow the curricular objectives of primary education.

As noted earlier, family circumstances of children—a *combination* of factors including education of parents, parents' ability to spend on private tutoring, parents keeping in contact with teachers about their children's education, and the economic status of the family, as expected, correlate highly with children's learning performance and achievement. NGO's, targeting specifically disadvantaged groups, have designed school programmes and other ancillary measures to compensate for the family deficiencies that impede children's learning with good results.

There has been a reluctance to recognise the NGO-run non-formal primary education (NFPE) as “proper” primary education. MoPME statistics of primary education does not count the 1.3 million children in NFPE in some 40,000 centres where NFPE is offered.

### *Incentives for Students*

Incentives for participation in the form of food or cash for families to send their children to school are based on the premise that there is a major problem regarding households' demand for their children's education and that this is a greater problem than supply-side constraints such as sufficient numbers of schools within a reasonable distances which function at a reasonable level of effectiveness. While conditional cash transfer has raised enrolment, issues remain about how provisions for essential quality inputs can be supported so that children do not drop out and achieve acceptable learning outcomes.

Clearly, there are serious problems in primary education regarding essential quality inputs such as sufficient numbers of teachers, their training and supervision, and learning materials, which have claim on scarce resources. There are also problems of sufficient numbers of schools and classrooms and their rational distribution according to where the children live. Moreover, the primary education centres of NGOs, which serve the poor population—the dropouts from the regular school and the “never-enrolled”—have demonstrated that the problem often is not about demand but about adequate and appropriate supply of services. Whether the incentives are targeted and managed as they are intended to be and whether funds spent for incentives starve out spending for essential quality inputs are outstanding important questions.

### *Scope and Character of the Next Phase of Primary Education Development*

The range of issues presented above, the experience of PEDP II implementation and the imperatives of achieving universal primary education with quality and equity require nothing short of major reconsideration of the scope of primary education development and the features and character of the sub-sector programme beyond PEDP II. Prog3 concept paper prepared by DPE and a position paper submitted by CAMPE on behalf of civil society stakeholders are in agreement on the need for a broader and more inclusive approach than PEDP II, which will also have major implications for governance and management of primary education, management of the new programme itself, and for mobilisation of adequate resources and ensuring their effective utilisation. There is a general agreement that:

- The need is for an inclusive and responsive system, with special efforts to serve the highly deprived and poor groups and areas. *Low quality* that characterises much of the system, along with large variations in quality, and the consequent *serious inequity* must be reversed and significant improvement must be demonstrated.

- The diversity of the delivery mechanisms that has arisen historically will continue, but a *unified national system* (not necessarily uniform) with common core curriculum and core standards for provisions that allows a broadly common educational experience to all children has to be established.
- The system cannot achieve its goals with the current numbers of teachers, methods of preparation and professional development and the levels of salary and incentives. New ways of thinking about *teachers and pedagogy* are needed.
- The quality goals in primary education require major changes in *curriculum, teaching-learning materials and assessment*. These necessary changes underscore the need for higher quality textbooks, other learning support materials, teachers' guides and supplementary materials, and the importance of learning assessment in support of instruction. Greater professionalism is needed in preparation of curriculum and learning materials; ICT resources must be widely and creatively used for improving the quality of teaching-learning as well as to support teacher development and enhance accountability at all levels.
- *Physical infrastructure* will require major further investments to meet the minimum acceptable criteria for appropriate learning environment for achieving the quality with equity goals.
- *Preschool education* has to be a key component of the unified system, especially to ensure school readiness for first generation learners and children subject to other disadvantages. A systematic area-based planning and provisions will be needed for *children with special needs*.
- Substantially greater *resources* are needed to assure minimum necessary levels of quality with equity. Equally important is the effective use of resources. More resources are needed at the school level along with greater discretion with accountability in their use. The question of affordability must be turned around to ask—can we afford not to make the necessary investment in education with quality and equity?
- Moving beyond incremental change requires the system to build *learning and capacity-development* mechanisms, through which information, monitoring and evaluation, and targeted research are used, involving academic and research institutions and NGOs, to better reach system goals and to learn and use the lessons from experience.

- *Effective governance and management* are essential at both central and school levels. A result focused system requires meaningful decentralisation in planning and resource management, recognising the need for professionalism and capacity building, especially at school, upazila and district levels. Structural and legal changes for this purpose will require national political decisions at the top. Planning and implementation of the new programme itself need to be based on decentralisation and greater authority at school and community level.

The DPE concept paper has not mentioned the issue of extending compulsory education up to grade 8. The CAMPE position paper strongly endorsed “*extending the basic education stage to grade 8*” with a pragmatic and time-bound plan to move toward this goal. CAMPE also underscored that primary education should involve consultation and active *participation* by major stakeholders—parents, NGOs, academic institutions and other and civil society in designing the programme and maintaining an oversight over its implementation, and contributing to the provision of primary education.

In formulating the plan for primary education under the Sixth Plan, agreement needs to be reached on a government-led process to develop a programme with the participation of practitioners, academics, NGOs, and other key stakeholders. A consensus is needed on the longer-term vision and perspective. Agreement needs to be reached on the financial envelope, the principles of partnership mechanisms and strategies for finance, implementation and monitoring.

Decisions need to be made about the scope, goals, targets, and strategies for a 2010-15 programme; and the appropriate design of the programme or sector-wide approach in the specific context and experience of Bangladesh—mobilising political support and technical guidance for programme formulation and approval through a steering body to include government, NGOs, academics, and other key stakeholders. The civil society position paper submitted to the government by CAMPE provides a proposed schematic for an appropriate programme approach for primary education development in Bangladesh, as shown in Annex 2.

Annex 2 proposes an outline of components and an implementation structure for a pragmatic programme approach. It assumes that primary education development in the next phase would have at least 10 major components and would require a flexible implementation and financing mechanism in order to manage effectively the complex and large operation. The proposed components, which can be managed as projects within a common programme framework, are: government primary school development; RNGPS development; Ibtedayee madrasa; teacher development; curriculum, learning materials and assessment; basic education



extension to grade 8; infrastructure development; preschool education, educational information and statistics capacity, and second chance basic education. Obviously, common understanding has to be reached on the proposed structure and the underlying premises for it to become the basis for the primary education plan for the Sixth Plan.

### **2.2.1.3 Education Policy 2009 Recommendations**

Various recommendations regarding preschool and primary education are given in the draft education policy. These are a mixture of major policy re-orientation and specific operational provisions, which may be better considered in the process of implementing the policy. The highlights of recommendations are given below:

- Preschool for children of age 5+ should be introduced in phases in primary schools by adding a classroom and appointing teachers.
- Primary education of acceptable quality for all children is a state responsibility; it should be ensured that enrolment rate in primary education is raised to 100 per cent by 2011-12.
- Steps should be taken to remove disparities in facilities and provisions among different types of primary level institutions and all institutions (including quomi madrasas) should be registered with authorities.
- A common core curriculum should be followed in all primary level institutions.
- The duration of primary education should be extended to grade 8; appropriate steps should be taken to expand facilities, appoint and train teachers, curriculum and teachers' guides prepared to ensure access for all children up to grade 8 education by 2018.
- Pre-vocational courses should be introduced in grades 6 to 8.
- Compulsory enrolment at age 6 should be enforced and birth registration should be required.
- The student-teacher ratio at the primary stage should be reduced to 30:1
- A school meal programme should be introduced in phases.
- Special measures including residential schools should be introduced for children in remote areas and ethnic population in the hills.
- At the end of grade 5, "completion" examinations will be conducted "locally" which will be used to award scholarships. "Primary education certificate examination" will be conducted after grade 8 and scholarships will be awarded for students in each division.

- Local government and the local community should have an important role in improving primary education including the arrangement of public examinations and establishment of local primary education development funds. The headmaster's role as a leader in managing and ensuring quality should be recognised and enhanced.
- Measures to train teachers, provide professional support to them and offer appropriate incentives for performance are proposed. A *non-government teacher recruitment and development commission* is recommended for government-assisted institutions including madrasas. Strengthening the capacity of NAPE and PTIs is proposed.
- An annexure is included in the report with a curriculum structure indicating core and supplementary contents for mainstream primary schools and madrasas from grades 1 to 8.

A major task for the Sixth Plan would be to consider the overall goals as well as strategy and operational recommendations and incorporate these into an operational plan with appropriate phasing and prioritisation in the medium term.

## **2.2.2 Literacy and Non-formal Adult Education**

### **2.2.2.1 Overview**

The commitment to battling the high adult illiteracy rate in Bangladesh prompted the Government to launch a major non-formal education programme in the 1990s, focusing on basic literacy. Priority was given to achieving universal coverage of youth and young adults in the age range of 11 to 45 years. The literacy efforts as well as the expansion of primary education raised the level of literacy of the population, though the estimates of the literacy rates actually achieved remain a matter of debate. *Education Watch* and other independent surveys indicate this to be between 40 and 50 per cent (Ahmed *et al.* 2003). BBS, based on 2001 census data, reports the rate of literacy for population 15 years and above to be 47.4 per cent—a significant improvement over a rate of around 35 per cent in 1990 (BBS 2003). The draft education policy assumes this to be 49 per cent.

The political pledge of the government is to eliminate adult illiteracy by 2014. In the light of past experience in literacy programmes, such as the Total Literacy Movement, there is concern among education researchers and other stakeholders that a mass campaign approach may not enable participants to acquire functionally useful and sustainable literacy skills that would prevent learners from relapsing into illiteracy. International experience and lessons suggest that simplistic quantitative targets (leading to declaring districts as “free of illiteracy”) are not very useful.

The EFA Global Monitoring Report, for example, recommends that literacy programmes should be designed as an integral part of a systematic continuing learning opportunities within the framework of a lifelong learning approach. Recognising the need for post-literacy and continuing education programmes in order to help learners consolidate basic skills and use these in improving their lives, projects on post-literacy and continuing education have been under implementation by the Bureau of Non-formal Education of the Ministry of Primary and Mass Education, targeting some 3 million adults. These donor-supported projects have been implemented through contractual arrangements with NGOs, with indifferent outcomes regarding skills actually acquired and applied in a meaningful way. Moreover, there was little contribution from these to building a sustainable institutional structure for lifelong learning.

A degree of diversity in non-formal education serving diverse learning needs of the population, especially the poor unable to participate in formal education, has been maintained through NGO initiatives. Non-formal primary education on a substantial scale, offering a second chance to children and youth for basic education, has been carried out by NGOs. Other activities by NGOs include basic education combined with skill training for adolescents and youth who have dropped out from school or have never enrolled as well as early childhood education activities. These, other than non-formal primary education, have been on a small scale compared to the potential demand (BNFE 2009).

#### **2.2.2.2 Key Issues**

##### *Ensuring Quality and Meaningful Learning*

The history of literacy programmes initiated by the government including the mass literacy campaign in the 1980s and Total Literacy Movement (TLM) and its predecessors in the 1990s shows that poor quality adult literacy programmes discourage sustained participation of adults in literacy and ongoing adult education programmes. Adult educators are typically low paid and poorly trained. Limited staff development opportunities and low compensation provide no incentives for sustained, quality teaching. Cost-per-learner assumptions are often extremely low, dependent on “volunteers” and community contributions and on the logic that non-formal systems, particularly for adults, do not require infrastructure such as the buildings and other equipment and materials considered necessary for formal schooling. Literacy and post-literacy education curricula are often irrelevant to the highly diverse realities and contexts of learners, the contents are dull and the production quality is often very poor.

### *Ensuring Functional and Sustainable Skills*

In the 1990s, UNESCO distinguished between literacy as a skill and literacy as a set of culturally and socially determined practices, and later endorsed efforts to promote the acquisition of literacy—conceived as meeting “basic learning needs”—on a continuum including formal and non-formal education, extended to people of all ages (UNESCO 2006). While the value of lifelong learning gained momentum, especially in the developed countries, very few countries in the global South picked up this broader view of literacy integrated with continuing education. The Hamburg Declaration in 1997 (as an outcome of International Conference on Adult Education known as CONFINTEA V) posited literacy within the broader framework of lifelong learning.

The Sixth World Conference on Adult Education (CONFINTEA VI, Brazil, December 2009) aims again to place adult learning and literacy at the centre of lifelong learning. This attempt at breaking down insular compartmentalisation among literacy, numeracy, life skills and non-formal education leading to a holistic understanding of adult education is still to be taken as the framework for programme design in many developing countries, especially in South Asia. In fact, the concept and scope of literacy efforts in Bangladesh suggest that these are still tied to the 1950s and 1960s understanding of literacy—with the symbolism of “reading a sentence” and “signing one’s name” given prominence and taken as an acceptable definition of literacy.

This reductionist view of literacy seems to be reflected in the draft education policy. The target of eliminating illiteracy by 2014 needs to be conceptualised and defined in terms of achieving functional and meaningful skills and as the first step for lifelong learning and for engaging in a process of enhancing one’s life prospects. It is necessary to recognise how the concept of literacy has evolved tremendously in recent times; how the “alphabetization-centred,” limited and dichotomous definition of literacy has given way to one that emphasises effective participation to a wide spectrum of lifelong learning.

### *Link with Second Chance Primary Education*

As noted earlier, in spite of the efforts to expand and improve primary schooling, large numbers remain out-of-school, never enrolling at the right age or dropping out of school. “Second chance” non-formal primary education, pioneered and offered with a degree of success by NGOs, and lately by government through ROSC project (see below), has provided primary education services to almost 10 per cent of children eligible for primary education. While the overall development of primary education must continue with the aim of bringing all children into

mainstream primary education of quality, the need for a substantial provision of “second chance” primary education will continue. The planning and operational issue is: Should the NGOs which have demonstrated their capacity to run the “second chance” programme effectively continue to play this lead role? The government, in line with the education policy goals, can proactively establish a collaborative relationship to ensure that the core curricular objectives and quality criteria are applied. The government will also have a role in mobilising resources for this programme by facilitating external resource provisions and declaring it as a key component of the national strategy for achieving universal primary education.

A related issue is whether the institutional and administrative link of the second chance programme should be with the primary education authorities (DPE) or with the non-formal education authorities (BNFE). Given the aim of ensuring common core curricular standards and equality of opportunities in primary education through diverse delivery modes, and the need to maintain equivalency in learning achievements in all forms of primary education, it would make sense to place the administrative oversight responsibility of the second chance programme with the primary education authorities. The issue arises because the draft education policy appears to underplay the need for second chance primary education as a component of the universal primary education strategy and makes it a domain of the non-formal education authorities of the government.

#### *Basic Education for Working Children and Youth*

Basic education for working children and youth, engaged in paid work to supplement their families’ income or for their own subsistence, calls for a different approach than the prevailing “second chance” non-formal primary education. The working children, a significant proportion of who are engaged in “hazardous” occupations, are victims of severe vulnerabilities, and many are without the support of a family or home. Basic education opportunities for them need to be combined with social support, counseling and employment-related skill training, which is beyond the capacity of a regular primary education institution. To address the complex problem of child labour and their deprivation from education, a basic education project for “hard-to-reach urban children” has been undertaken with UNICEF support. The administrative home of this project appropriately lies with the BNFE. A second phase of the Hard-to-Reach project has been underway since 2003.

A project to serve 500,000 out-of school children in rural areas to be implemented with the help of NGOs and funded by IDA and SDC, called Reaching Out-of-school Children (ROSC) project, was launched in 2005. This is designed after NGO-operated NFPE projects and represents a first government initiative to

undertake a complementary non-formal primary education project for rural out-of-school children.

#### *Recent Initiatives*

Currently, the main public-sector NFE activity under the MoPME is the Post-Literacy and Continuing Education project funded by donors including World Bank and ADB. It aimed to serve 3 million adults who went through the TLM course, hence the label “post-literacy,” though most potential participants had not acquired functional literacy skills. The content focused on consolidating literacy skills and a short training to teach income-earning skills.

A comprehensive programme for non-formal education as a major component of the effort to build a learning society does not exist, although a policy framework adopted in 2006 to guide action anticipated such a programme.

A national task force on NFE and a working group under it worked for almost three years, resulting in the adoption of a forward-looking policy framework for non-formal education in 2006. The task force agreed that NFE has a critical role in offering learning opportunities, building skills and capacities and broadening life options for the poor, if the education programmes are designed and implemented effectively. It recognised that NFE must have an important place in a pro-poor education and human development strategy. The policy framework provided guidance regarding:

- Objectives and scope of NFE in the context of lifelong learning and making every community a learning community.
- Organisation and management structures including issues of decentralisation of and definition of responsibilities at different levels and of different actors, partnership-building, technical and professional support mechanism, and professionalisation of management.
- Establishing quality standards and measures and assuring quality in programmes.
- Sustainability and community ownership.

The BNFE was established with the responsibility to put into operation the policy framework. The Bureau, however, has been established as an office under the MoPME, staffed by seconded officials, rather than as an autonomous body with a core permanent staff of professional personnel and an appropriate remuneration structure to attract high level professionals, as recommended by the national working group. The Bureau lacks the mandate and the capacity to operationalise the broad vision of the NFE policy framework. This situation probably explains the

persistence of a narrow vision of NFE, concentrating on a literacy campaign approach based on a traditional and limited definition of literacy.

### **2.2.2.3 Education Policy 2009 Recommendations**

The draft education policy mentions that the literacy rate in the population over 15 years of age is 49 per cent and proposes that the goal of adult education should be to “make all adult citizens literate” by 2014.

Non-formal education is seen as complementary to formal education. Until 100 per cent of the children are enrolled in primary education, those not enrolled and those who drop out should receive basic education and “some practical education” through NFE. Those who complete NFE may join formal education.

Adult education will focus on literacy, “developing human qualities,” awareness raising, and improving occupational skills. Those between ages 15 and 45 will be given priority in literacy programmes. Continuing education opportunities will be created for maintaining competencies and skills acquired.

The age for enrolling in non-formal education will be 8 to 14 years. Primary education curriculum will be the basis for preparing learning materials for non-formal education.

A new organisation, known as Bangladesh Continuing Education and Skill Development Authority, is proposed to be established, which will combine the functions of the DPE and the BNFE. A legal framework for fulfilling the constitutional obligation regarding adult and non-formal education is recommended.

The draft education policy separates adult education and non-formal education activities, looking upon the former essentially as an adult literacy campaign and the latter as non-formal primary education for children. This is contrary to concepts and practices in adult learning and non-formal education and betrays a very limiting and restrictive view of adult and non-formal education and a disregard of the critical importance of the lifelong learning approach.

The practicalities and implications of the proposed authority for continuing education and skill development and transformation of the DPE and the BNFE clearly need further consideration.

## **2.2.3 Secondary and Madrasa Education**

### **2.2.3.1 Overview**

The 7-year phase of secondary education, from grades 6 to 12, is provided through a collaboration of government and non-government providers within a regulatory framework established by the government. Of over 30,000 secondary level institutions (including over 9,000 Dakhil and Alim madrasas offering

secondary level instruction), over 98 per cent are non-government; but they receive subvention for teachers' salary and occasional capital grants. In 2005, schools in the three stages of secondary education (junior, secondary and higher secondary) had 8.2 million students and 319,000 teachers. In addition, the madrasas had 1.7 million students and 152,000 teachers. A fifth of the teachers of the general stream institutions and 8.7 per cent of those of the madrasas were females in 2005 (BANBEIS 2006 Data).

Compared to the situation a decade earlier in 1995, student population increased by 51 per cent overall—38 per cent in the general stream and 180 per cent in the madrasas by 2005. This means that the proportion of students in the madrasas at the secondary stage was below 10 per cent in 1995, but went up to 17.3 per cent in 2005. Education Watch 2008 (Nath *et al.* 2009) reported that about a quarter of the dakhil graduates move to the general stream for higher secondary education. No reverse movement was found. (See annexes 3 and 4 for projections of student population at the secondary level and in the madrasa system).

**Madrasas.** Madrasas which operate at the secondary stage start with the ibtedayee section (equivalent to primary). Institutions ending at grade 10 are known as dakhil madrasa; others ending at grade 12 and grade 14 are known respectively as alim and kamil madrasa. Madrasa education is mostly managed privately. As the institutions in the secular streams, madrasas receive salary support from the government and come under the supervisory authority of the Madrasa Education Board.

In addition to the government assisted madrasas, collectively known as Alia Madrasas, there are quomi or “national” madrasas which have grown in number in recent years, follow a religion-based curriculum and are run with private contribution. Many of these institutions, mostly residential, offer programmes that include preschool to the tertiary stage. The quomi system so far has not been under any kind of government regulatory watch and reliable information about numbers of institutions and students and the character and quality of the educational programmes is not readily available.

**English medium schools.** The English medium schools generally start from kindergarten and end with secondary education. These are all privately managed and follow separate curriculum and prepare students for the British General Certificate of Secondary Education (GCSE; former O-level and A-level) or Senior Cambridge examination. Several of these schools also have introduced the International Baccalaureate (IB) course. Less than one per cent of completers of secondary education can take advantage of these elite private education



opportunities. They are so far not subject to government regulatory oversight and BANBEIS does not collect information on these schools.

**Access and participation.** The majority of children of the secondary school age group (11-17 years) remain out of school. The gross enrolment rate in general secondary education in 2005 was about 45 per cent, with substantial decline from the junior to the higher secondary level. The rate was estimated to be 54 per cent at the junior level, 39 per cent at the secondary level and 12 per cent at the higher secondary level. This situation indicates a high level of wastage at this level—an average of 14 per cent dropout out in each grade of junior secondary level, 37 per cent in each grade of secondary level and 17 per cent in each grade of higher secondary level (BANBEIS 2006). Roughly one in five students who enroll in grade 6 passes the Secondary School Certificate examination and one in ten obtains the Higher Secondary Certificate.

In the context of the education policy proposal to extend universal education to grade 8, it is significant that over half of the children in the 6-8 grade age-group (in gross terms) are at present enrolled in school.

The low completion and pass rate lead to labelling the vast majority of the young people in secondary education as “failures.” The number of students taking the SSC examination (after 10<sup>th</sup> grade) increased 1.8 times from 1990 to 2006 to 780,000. Of them, 43.8 per cent studied Humanities, 25.7 per cent Science and 30.4 per cent Business Studies. During the same period, the number of dakhil examinees increased 3.5 folds—from 47,000 to 162,000 (BANBEIS 2006).

The number of examinees in HSC examination (after 12<sup>th</sup> grade) increased from 290,000 in 1990 to 412,000 in 2006. For Alim examination, it increased from 25,000 in 1990 to 57,000 in 2006. Half of the HSC examinees in 2006 studied humanities, 20 per cent science and 30 per cent business studies. The passing rates for the madrasa examinations were consistently and significantly higher than in the general streams. For example, in 2008, the pass rate in SSC examinations was 70.8 per cent and in Dakhil it was 79.47 per cent.

The total number of those who complete secondary education (467,000 passed the SSC examination and 263,000 passed the HSC examination in 2006) is clearly very low for a population of 145 million.

**Recent developments.** Various projects for quality enhancement and increased participation in secondary education have been undertaken.

Secondary Education Sector Improvement Project (SESIP) was the main effort for secondary education development for the period 2000-2006. Equitable access of girls, textbook production, improvement of teacher education, examination system

development and strengthening ministry level capacity were the areas for intervention under this project.

The sub-sector support project also aimed to prepare the ground for future development and effective use of internal and external resources for this purpose. Particularly relevant from the perspective of poverty reduction is the project objective of equitable access to secondary education by building new schools and classrooms in underserved areas and providing stipends and tuition waivers to girls.

**Stipends.** A major boost to female participation in the secondary level was given by various stipend projects for girls. There are five of these projects underway at present which provide stipends to over 4 million girls in more than 21,000 institutions in all rural upazilas in the country. The girls were also exempted from tuition and the schools were compensated by the government for the loss of tuition.

#### *Teacher Development*

Teaching Quality Improvement (TQI) Project in Secondary Education was planned to follow SESIP for the period 2005-2010. Improving the quality of teaching is the overall goal of this project.

The project, at an estimated cost of US\$ 97 million, was funded by ADB and CIDA. The components of this project are : (a) Capacity Building: an improved teacher training system, strengthened capacity of DSHE and BANBEIS, creation of an incentive fund for teacher education institutions, and management training of personnel; (b) Improving in-service and pre-service training: School-cluster in-service training and teachers' resource centre, upgrading training institutions, accreditation of trainers, distance mode teacher training, preparation of teacher training materials, programme communication and mobilisation; (c) Improving Teacher Training Facilities: Renovation of training institutions and equipping Upazila Teacher Resource Centres; (d) Equitable access: access in remote rural areas, internships for teachers in under-served areas, support for schools in disadvantaged areas and increasing the number of women teachers.

A significant initiative for quality improvement was to set up a Registration, Certification and Training Authority (RCTA) for secondary school teachers. The aim is to have all teachers to acquire professional qualifications and be certified and registered as qualified for teaching by a certifying authority.

#### *Projections for the Future*

Projections of children in the secondary education age group and of enrolment in the decade ahead are shown in Annex 1. Growth in enrolment in the general

stream and in the madrasas is indicated on the basis of extrapolation of recent trends. These projections would be sensitive to policy decisions such as implementation of the policy to extend universal primary education up to grade 8 or decisions regarding balance between madrasa and the general stream in respect of government subvention. There is a trend of leveling off of the numbers in the age group of eligible population for junior, secondary and higher secondary education because of the decline in population growth.

### **2.2.3.2 Key Issues**

#### *Low Participation and High Wastage*

At the secondary education stage, the enrolment rate and high dropout rate result in a low net participation rate of young people in education. As noted earlier, of every hundred who enter class six, less than 20 received SSC and 10 received the higher secondary certificate. The transition rate of students who complete primary education and enroll in secondary school is estimated to be around 80 per cent. It should be noted that less than half of the primary school age group manage to complete primary education. When all those who do not complete primary education and do not qualify to seek a place in secondary school are counted, and account is taken of the transition rate from primary to secondary level, and the rate of failure in SSC and HSC public examinations, the result is the very low level of secondary education attainment of the population. In 2002, only 7 million people in the active labour force of 46.3 million or under 15 per cent had SSC or higher education qualifications (BBS 2003).

#### *Inequity*

A system that rules out entry to a very large number of potential participants and then allows a very small minority to reach the final destination is inherently inequitable. The elimination of the poor and the disadvantaged from the race to enter secondary school begins in the primary school. Poverty still remains a deterrent to secondary school access because, in addition to tuition, there are high additional costs for transportation, uniforms, books and materials and private tutoring.

#### *Vulnerabilities of Girls*

A positive development, in spite of overall inequities, is the closing of the gender gap in secondary school enrolment. Incentives such as stipends and elimination of tuition for girls in rural areas have made a difference. Although this is a desirable outcome in its own right, this does not compensate for the structure of inequity that characterises the system. More girls, in absolute numbers, are

benefiting from education, but girls from the poorest families, from remote rural areas, from urban slums, and from ethnic minorities remain deprived as do their male counterparts. Stipends again do not fully compensate for the vulnerabilities of girls from the poorest families.

#### *Relevance of Content and Balance among Streams*

Secondary education has come to be regarded as basic education that equips young people with essential communication skills and basic knowledge which are needed to function in today's "knowledge economy" and the global market. All developed countries and an increasing number of developing countries count at least ten years of education as the stage of compulsory education. Clearly, access and participation rates in secondary education in Bangladesh have to be increased in a major way to raise the basic level of education of the population. This has to be done by increasing access with quality and equity. An important strategic question in this respect is how to balance the increase among the different major streams of post-primary education: general secondary schools, madrasas, proprietary English medium schools and vocational-technical institutions.

The secondary schools now serve essentially as a screening device for disqualifying the large majority and selecting a small minority for tertiary education, rather than having a purpose of its own. The curriculum and teaching are geared to preparation for higher education, which only a fraction of students can now aspire for. They do not relate to prospects of gainful employment, entrepreneurship and practical skills—which need not be a disqualification for further education (ADB 1998).

A vocational-technical stream, recently introduced after grade 8, runs counter to the general international experience that shows that “vocationally” formal secondary schools raises the cost of the school without corresponding benefit in skill development or enhancing employment prospects of students. International experience also suggests that the most useful vocational /occupational preparation in the secondary school is building a sound foundation of communication skills, mathematics and basic science, which make young people trainable for the employment market (JBIC 2002).

#### *Deficits in Key Quality Inputs*

Recent expansion in enrolment has not been matched by increase in physical capacity and human resources. Schools typically lack sufficient classrooms, libraries, laboratories, sports grounds, teachers' offices and sanitary facilities. Students per class and per teacher have doubled in ten years since 1995 to the untenable level of around 60 (BANBEIS Data).

At least half of the teachers in the non-government schools, which are 98 per cent of all schools, have professional training. And academic supervision of secondary schools is largely non-existent to mitigate the problem.

### **2.2.3.3 Education Policy 2009 Recommendations**

The draft education policy addresses the issues of expanding the opportunities for basic education and equipping learners with essential competencies both at the primary and secondary levels. It proposes the extension of universal primary education to grade 8 and a common unified core curriculum for the diverse categories of institutions both at the primary and secondary levels.

The key recommendations of the draft education policy for secondary education are indicated below.

- Secondary education will consist of four years from grades 9 to 12. There will be three main streams—general, vocational-technical and madrasa.
- A core curriculum of Bangla, English, math, Bangladesh studies and IT will be compulsory for all streams. An indicative curriculum structure is provided in an annex of the policy draft.
- Madrasa students will be able to join the general stream in grade 9 after the Ibtedayee level, or in tertiary education after completing the Alim level.
- Medium of instruction will be Bangla, but the option of English would be available.
- Efforts should be made to bring all four years of secondary education into the same institutions by adding grades 11-12 in schools and grades 9-10 in colleges.
- Measures should be taken to reduce inequality of opportunities among geographical areas.
- Improvement in quality of instruction and facilities in subjects related to economic development, such as business and IT, will be given due attention.
- A non-government teacher selection and development commission should be established and appropriate pre-service and in-service training should be ensured. The teacher-student ratio should be raised to 1:30 in 6-7 years.
- The secondary education public examination will be held at the end of grade 12. Examination after grade 10 will be held locally; scholarships will be awarded based on this examination.
- Madrasas will keep their identity as institutions of Islamic education, but the core curriculum for secondary education will be followed in madrasas.

The Madrasa Education Board will be strengthened to maintain quality in Madrasas, and mobility between madrasa and general streams will be allowed applying equivalency criteria.

## **2.2.4 Vocational and Technical Education**

### **2.2.4.1 Overview**

Based on the 2002-2003 Labour Force Survey, it is reported that out of the working age population of some 77.3 million, age 15 years and over, about a half have any formal education at the primary level or beyond. A little over half of the educated work force (27 million) has an educational level beyond primary education (Labour Force Survey 2002-2003). These numbers encapsulate the nature of the education and skill development task for the country. Half of the work force without education and only one-third with education beyond primary level limit the possibility of skill development through training programmes and continuing upgrading and adaptation of workers to changing skill demands.

The working age population (15-64) has grown by about 18 million since the mid-1990s to 77 million by 2003, and the labour force has also grown by about 10 million over the same time period to over 46 million. Women's participation in labour force remains low, but it has been growing at a faster pace lately. Over five million women have joined the labour force since 1996, thus raising their total to 10 million.

Most workers in Bangladesh are employed in the informal sector, with agriculture as the major sector of employment. The informal sector provided 80 per cent of the employment out of some 46 million people employed in the total economy. Despite accounting for just 21 per cent of GDP, the agriculture sector provided employment to 52 per cent of the labour force in 2002-3. Overseas employment has also become a significant source of employment. Every year about 250,000 Bangladeshis migrated abroad and about three million people of Bangladeshi origin lived and worked abroad around 2005 (World Bank 2006). These numbers have been rising; the estimate of Bureau of Manpower, Employment and Training (BMET) is that the yearly migration of workers currently is around 400,000.

Primary responsibility for overseeing the pre-employment training rests with two agencies: the Directorate of Technical Education (DTE) and the Bangladesh Technical Education Board (BTEB). The vocational and technical education (VTE) programmes regulated by the BTEB attached to the Ministry of Education offer courses of one to four years duration after the junior secondary level (grade 8). The courses are offered by vocational training institutes, polytechnics, commercial

institutes, technical training centres and specialised institutes. Private sector institutions are increasing, especially in the IT sector, in response to opportunity for work abroad as skilled and semi-skilled workers.

Certificate level courses (post-class 8) in various trades and skills are offered in approximately 100 public sector institutions (under Ministry of Education and Ministry of Labour and Employment—MoLE) and some 1,500 non-government institutions, other than secondary schools with vocational courses. The introduction of vocational courses as part of SSC and HSC and business course at the HSC level by the DTE (so far in approximately 1,200 institutions at SSC level and 500 at both SSC and HSC levels) has helped to raise the share of post-primary student enrolment in VTE somewhat. But it is still only around 2 per cent of enrolment after grade 8. In 2005, about 130,000 students were enrolled in these courses. This number was double the enrolment in the same categories in 1997-98.

Diploma level courses (post-grade 10) were offered in some 600 institutions, the large majority of them in the private sector, including the higher secondary schools or colleges. The MoLE offers skill training in the Institute of Marine Technology and 13 Technical Training Centres. Another 22 Centres are in the process of being established. The trades offered in TTC's, after junior secondary general education, are taught through two yearly modules. The first module qualifies the trainee for the National Skill Standard III (Semi-skilled worker) and the second module meets the requirements for National Skill Standard II (skilled worker). The Centres also can offer tailor-made basic trade courses of 360 hours' duration in various trades for students of schools and madrasas or other interested groups. The TTCs produce 15,000 skilled persons per year through regular and special courses.

The Department of Youth Development (DYD) in the Ministry of Youth and Sports (MoYS) runs training of 1 to 6 months' duration on various trades with the aim of helping trainees engage in self-employment or paid employment. A 3-month long residential training course on livestock, poultry, and fish culture is offered in 47 training centres in 47 districts. Training of 6 months duration on computer, electronics, electric house wiring, and refrigeration and air conditioning is offered in some of the centres. The Department also provides training for women on dress-making and block and batik printing in all districts. In addition, short-duration mobile training courses are offered at the upazila level.

Ministry of Women's and Children's Affairs provides short courses for women in such areas as poultry, dairy, livestock, food processing, plumbing and electronics, which have local demand. Other providers of these kinds of courses are the Ministry of Social Welfare, the Directorate of Ansar and the Village Defence Party (VDP)

under the Home Ministry and the Bangladesh Small and Cottage Industries Corporation (BSCIC).

#### **2.2.4.2 Key Issues**

##### *Shortage and Mismatch*

The sub-sector is characterised by paradoxes. People with vocational/technical skills are in short supply, but there is evidence that there is a mismatch of jobs and skills; the difference in remuneration for skilled and unskilled workers has narrowed which is an indication that the training content and quality are not valued highly in the market. Those with training often remain unemployed or cannot find employment in their area of training—an evidence of mismatch and poor quality of training.

The 2002-03 Labour Force Survey estimated that for every single person in the labour force with a technical/vocational qualification there are more than 104 others who have completed SSC or HSC; and 34 others who have gone onto a university degree or higher. At the same time, employers' perception is that the products from the vocational system are not meeting their needs; that the system continues to produce graduates for old and marginal trades, which have no market demand, while skill needs for newer trades remain unmet (World Bank 2006).

##### *Informal Skill Development*

As noted, very limited opportunities for organised vocational and technical skill development (in contrast to informal skill development through on-the job experience and traditional apprenticeship) for the size of the population in Bangladesh is the defining characteristic of this sub-sector.

Informal and traditional apprenticeship and on-the-job experience are the means for creating most of the skills that keep the bulk of the economy and production of the country running. A master craftsman, himself inheriting the skill from his father or another “master,” training his assistants in exchange for free labour or a reduced wage, produces such skills as welding, turning, bricklaying, carpentry, furniture making, electrical maintenance, plumbing, bicycle repair, motor repair and so on. Not enough is known about the system and its strength and weaknesses. An attempt to bring the system under official regulation may not be a good idea. However, maintaining an overview of the system and considering how the more formal training programmes of the government and the private sector can complement and supplement the informal system can enhance the effectiveness of the total nationwide skill generation capacity.



*What Kind of Expansion?*

Stated government policies and goals are to increase substantially the proportion of post-primary students enrolling in VTE. The equity effect of this expansion is dependent on three interconnected questions: (a) the extent the clientele of the programmes is the disadvantaged and poor segments of the population, (b) how effective the programmes are in imparting sellable skills, and (c) whether there is an impact of the training programmes on increasing employment opportunities and raising income of the poor.

The impact of public sector VTE on poverty alleviation is undermined in two ways. It mainly serves young males who have completed at least the eighth grade. This rule outs those who do not survive in the education system up to grade 9, mostly the poor. Secondly, failure to diversify its clientele and to make the programme more flexible, adaptable and responsive to market needs and geared to the informal economy means that VTE is failing to help the poor improve their employment and income.

A wider clientele including the poor can be served to the extent that skill development activities adopt more non-formal, flexible and variable-duration approaches with eligibility criteria not strictly tied to formal education. There are many questions, as noted earlier, about internal efficiency and external effectiveness of programmes and their actual contribution to poverty alleviation.

*External Effectiveness*

This sub-sector, more than any other, is expected to prove its worth by enabling students to cash in on the benefits of education and training in the form of employment and income.

Poverty reduction is achieved when training results in employment and when poor people have greater access to the job market. However, the public sector VTE is regarded as disconnected from the formal and informal job market. “[T]he present training intake and training programmes are more admissions-oriented than based on real industrial demand” (ADB 1995). The centralised management of the institutions throughout the country is based on standard curricula, courses, and organisational arrangements that do not allow for interaction with local entrepreneurs and employers.

Poor job placement of graduates is the result of the lack of links with the job market. Placement rate for VTIs are 40 per cent, for TTCs 60-65 per cent, and “unemployment is also common among graduates of polytechnics” (World Bank 2000, p. 9).

*Need for Flexible and Market-responsive Approach*

Non-governmental organisations such as UCEP appear to be confronting the quality and effectiveness problems better than the public sector programme. UCEP in its training programme for primary and secondary school dropouts combines basic general education with skill training. The skill courses are of variable duration, based on market survey, contain plenty of hands-on experience, and have a high course completion and job placement rate. Per trainee cost in UCEP is 25 to 40 per cent lower than in public institutions (JBIC 2002). This pragmatic model has many useful lessons for viable skill development programmes.

Should there be increased investment in vocational/technical education and what form should it take? Given the quality and relevance problems, especially in the public institutions, and mismatch of skills and jobs, just expanding what exists today would be hardly justifiable.

On the other hand, there is shortage of appropriate skills and prospects for greater overseas employment opportunities. There is also a need to increase quality and opportunity for in-service training and apprenticeship as a part of a well designed VET system. However, investing in the system does not necessarily mean that all of it has to be public financing.

*The National Skill Development Council*

National Skill Development Council (NSDC) has been established as the apex body for policy formulation on skill development with representation from the government, employers, workers and civil society. A draft of a national skill development policy has been prepared in 2009 under the auspices of the Council. This policy attempts to address the issues raised above and proposes to strengthen the BTEB as a quality assurance mechanism. It would be important to ensure that the policy prescriptions are realistic and implementable and that necessary measures are taken to operationalise these.

The critical issues related to the management, quality and relevance of the vocational education and training point to the need for new strategies. These would include new forms of public-private alliance, greater flexibility and market-responsive approaches, better links between jobs and training, and government lead in creating the conditions for defining and implementing these strategies. The new Skill Development Council has to pay special attention to strategic approaches noted below.

*Re-thinking the Role of Public Sector Skill Training*

With an emphasis on the need to expand and improve quality and efficiency in skill development and, at the same time, contribute to generating employment and

income for the poor, the public sector policy and programmes need to find their spheres of comparative advantages. Experience in many developing countries has shown that the public sector finds it difficult to provide market-responsive and cost-effective skill training. A greater role has to be accorded to the private sector and various ways of public-private collaboration should be promoted. Direct public effort, in addition to overall policy-making and general system oversight, needs to be focused mainly on two areas: (a) support to collaborative programmes with the private sector and non-governmental organisations including development of new modes of collaboration based on relevant international experience, and (b) enhance quality and efficiency of public sector programmes and, through public-private collaboration, also of private sector programmes. The Education Policy proposal for establishing vocational training institutions should be designed applying these criteria, rather than just replication of the present inefficient model (See below regarding linking training and jobs).

#### *Improving the Link between Training and Job Markets*

More than in any other area, vocational and technical education and training has to be alert and responsive to signals from the job market. This responsiveness requires a change in mindset to move from essentially a focus on supply to attention to demand. Several interconnected measures are needed including: (a) opportunity for employers and entrepreneurs to influence policies and programmes, (b) capacity and authority of individual institutions to assess local job markets and adjust programmes including short and part-time courses, (c) possibility of public institutions to be at least partially self-supporting through providing appropriate commercial services and products that also offer hands-on experience to trainees, (d) cooperation with micro-credit providers to support self-employment of trainees, (e) special training courses, preferably in cooperation with the private sector, in response to overseas labour market opportunities, and (e) a strategy of skill development that promotes complementarity of public and private training activities including incentives for apprenticeship in service and production industries.

#### *Impact on Poverty Reduction by Targeting New Clientele*

Further diversification of clientele and programmes beyond the limited efforts made so far is necessary. Measures that need to be considered are: (a) more attention to underprivileged groups who do not make it to grade 8 or the SSC level by offering modular courses in income generating and self-employment skills linked to local market prospects, (b) exploring ways of supporting skill development in the informal sector through collaboration with NGOs and small entrepreneurs, and (c) more emphasis in technical education to upgrading of employed technicians and entrepreneurial training, information and advice to graduates.

### *Improving Efficiency and Quality of Programmes*

Improving efficiency of programmes and ensuring better value for money in the public sector would require: (a) recognising that maintaining quality and credibility of skill training must be a high priority; and necessary resources have to be provided for equipment, skilled staff and consumable items for this purpose; (b) each institution to be made accountable for use of the resources including mobilisation of at least some of the resources and for results based on agreed indicators; (c) providing government support to non-governmental institutions and organisations, (d) training of trainers and introduction of appropriate technologies and equipment, and (e) effective monitoring and assessment of performance of students, teachers and institutions and marketability of the trainees.

Collaboration with non-government training providers to widen opportunities for the poor can take the form of paying for training on per trainee basis in effective non-government programmes, training instructors and helping with teaching materials and equipment, and development of policies conducive to complementarity and cooperation of government and non-government providers.

#### **2.2.4.3 Education Policy 2009 Recommendations**

The draft education policy emphasises the overall goal of increasing numbers of skilled workers including those in information technology at different levels of skills to meet growing demands both in the domestic and international markets. Key strategies proposed include:

- In all institutions including madrasas, prevocational and IT education will be introduced in grades 6 to 8.
- Equivalencies will be established between formal vocational education after grade 8 and four grades of national skill standards. Tertiary technical education will be open to vocational graduates from formal courses as well as those who achieve required skill standards by other means.
- Apprenticeship programmes will be encouraged and the 1962 Act for this purpose will be updated.
- Teacher training will be improved and teachers will have attachment in industries as part of training. A Technical Education Teacher Recruitment and Development Commission is proposed.
- A vocational training institution will be established in each upazila. The range of courses offered in secondary and technical institutions will be expanded.

- All vocational and technical education and training institutions will be brought under the jurisdiction of the the Directorate of Technical Education. Consideration may be given to transforming the Directorate into an autonomous IT, Technical and Vocational Education Council.
- Public-private partnership will be encouraged in establishing and managing new institutions. Non-government institutions will be supported with MPO funds and grants for equipment.
- Part-time courses and use of facilities in second shifts will be encouraged.

The policy recommendations regarding equivalency and apprenticeship, if implemented, will promote flexibility in the system through establishing equivalencies between formal courses and skill standards and by encouraging apprenticeship. How other recommendations will significantly reform the system and address major issues noted above including skill-job mismatch, responsiveness to employment market at home and abroad, linking training with informal economy jobs, and making management of institutions and the system accountable for performance and outcomes are not clear and have to be systematically addressed. Major efforts and investments in pre-vocational education is proposed, but international experience in this respect signal caution, because such investments within formal general education have generally not paid off. These ideas need careful consideration before these are formulated into operational plans for implementation.

### ***2.2.5 Tertiary Education***

#### **2.2.5.1 Overview**

The major components of tertiary education network in 2007 were 26 public general and specialised universities, 51 private universities, 1,709 colleges of different kinds affiliated with the National University as well as the Bangladesh Open University (UGC 2007). The University Grants Commission (UGC) is the regulatory body for university level institutions.

Historically, the University of Dhaka, and degree colleges in the old district centres of the eastern part of Bengal had earned a reputation for academic standards and as centres of intellectual pursuit. A massive expansion of the system and the demands of time have altered the character of higher education over the last half century. In terms of number of institutions and enrolment, tertiary education has recorded over five-fold growth since the birth of Bangladesh in 1971. Yet, participation of only 7 out of every 1000 persons in higher education in today's "knowledge economy" and "information society" has to be considered meager.

Students and teachers in higher education, as reported by UGC in 2007, are shown below:

Enrolment in 26 general and specialised public universities	163,004
Enrolment in Open University	246,401
Enrolment in 1,700 degree colleges under the National University	990,438
Teaching staff in 26 general and specialised public universities	8,068*
Teaching staff in the Open University	112
Teaching staff in the National University campus	82
Teaching Staff in colleges under National University	32,000**
Enrolment in 51 private universities	170,410
Teaching Staff in 51 Private Universities (Full-time)	4,468
Teaching Staff in 51 Private Universities (Part-time)	3,630

Source: UGC Annual Report, 2007.

\*1,461 were in study leave or absent for other reasons

\*\* Estimated.

Bangladesh Open University (BOU), established in 1992, offers a variety of courses in the distance education mode including degree courses in business and education and diplomas and certificates in various fields. The Open University (as well as the Open School under BOU auspices that allows students to sit for SSC and HSC examinations) has contributed to broadening access to higher education and meet both social and market demand for it. BOU has six “schools” under it: Open School; School of Education; School of Social Science, Humanities and Language; School of Science and Technology; School of Agriculture and Rural Development; and School of Business. It operates from its main campus in Gazipur through 12 Regional Resource Centres, 80 Local Coordinating Centres and 700 Tutorial Centres. In 2007, registered participants in various BOU courses were reported to be about 250,000. Less than a quarter of those registered complete courses and take the examination and about half of them receive the diploma (Ministry of Education 2003).

In response to social as well as market demand, the tertiary education system has grown. An expansionist approach has been followed, particularly in the sphere of degree colleges under the National University and in approving liberally the charters for private universities.

Private universities have grown in number and enrolment rapidly since the Private Universities Act was adopted in 1992. Between 1998 and 2007, the number of students has increased more than 20 times from 8,700 to 170,000, surpassing enrolment in public universities other than National and Open Universities. The number of institutions has increased eight-fold to 51 by 2007. The relatively politics-free environment in contrast to public universities, assurance of completing

the courses of studies within the designated time, and programmes of studies that are responsive to market demands have attracted a growing number of students to private universities (NEC 2003, pp. 107-9). The rapid growth in number and size of private universities and the absence of effective self-regulation or regulation by the UGC have, however, raised concerns about their quality and protecting consumers from unscrupulous “entrepreneurship.” UGC has proposed a reformulation of the Private Universities Act, which would replace the 1992 Act and require stronger self-regulation, specify the responsibilities of various parties involved in establishing and managing the institutions, and the formation of an accreditation council for maintaining academic and instructional standards.

The number of students passing HSC examination, who then would be eligible for tertiary education, has varied considerably year to year. For example, about 231,000 or 48 per cent of those who took the examination passed in 2004, but the number jumped to 371, 000 or 75 per cent of the examinees in 2008 and fell again in 2009 to 344,000 or 70 per cent (BANBEIS Data). This indicates problems with both the examination system and how quality standards are applied in institutions and in the examination process.

The institutions under the National University have an intake capacity of about 300,000 students in affiliated degree colleges and a small number of specialised professional colleges. The public and private universities can admit about 40, 000 in each category. The Open University offers another avenue for tertiary education to those who do not want to or cannot be full-time students. There appears to be enough overall tertiary education intake capacity at present for students who are eligible and interested in pursuing higher education. There is, however, keen competition to enter institutions with good reputation, whereas places may remain unfilled in others. At the same time, under 5 per cent participation in the tertiary education age group is low by even developing country standards.

#### **2.2.5.2 Key issues**

##### *Dilemma of Expansion and Quality*

The dilemma in higher education is that the overall participation and outputs of graduates in higher education are low compared to other developing countries, although there has been a relatively rapid growth in recent years. But the low quality of education in most institutions and inadequacy of resources necessary to maintain quality put into question the value of the growth and further growth along the same line. A strategic planning exercise undertaken by UGC in 2006 projected that 12 new public universities have to be established by 2026 if 10 per cent of the

HSC graduates compared to 4 per cent at present are to be admitted to university (UGC 2006).

#### *Demand for Public University Access*

The problem regarding access to higher education arises from the fact that there is intense competition for the limited places in the public universities and a few prestigious colleges and for fields which are seen to have a high market value. While private universities have widened the door of higher education, high tuition charges to make them self-financing also make them out-of-reach of the poor or even the middle-class. Moreover, the quality of instruction in most of them is at best uncertain.

The main issues regarding access to tertiary education, therefore, are twofold: (a) equity of access to universities and prestigious institutions leading to potentially high private return from higher education, and (b) the balance of enrolment in different fields.

The culling-out process in secondary education that allows a very small proportion of students to complete the secondary stage and the diversion of a large majority of higher education aspirants, often the ones from poor and lower middle class families in rural areas, to generally low quality degree colleges, make for a highly inequitable system of higher education. Selectivity based on merit is not the issue; the problem arises when general colleges become an expedient way of meeting social and political pressures rather than offering a credible education programme.

#### *Inequity and Gender Disparity*

Inequity is compounded by high public subsidy for higher education. The ability to compete on the basis of equal opportunities at the basic education stage is not ensured; this inequality is multiplied progressively through higher stages of education, reflected in selectivity which favours urban residents and the wealthier strata of society.

Gender disparity in higher education persists despite progress at the primary and the secondary level. About a third of the students in degree colleges are girls and under a quarter are girls in universities. The ratio of girls is lower in most specialised professional institutions (JBIC 2002, pp. 53-54).

#### *Imbalance among Disciplines*

Balance among disciplines in tertiary education as a whole remains tilted towards humanities and social sciences at the cost of science, technology and applied subjects. In degree colleges, where over 80 per cent of higher education



students go, the balance is even more skewed than in universities, mainly because of the lower costs for the humanities subjects and difficulty in recruiting teaching staff in areas other than humanities. An analysis of BANBEIS data showed that over 80 per cent of the students in public universities were enrolled in general studies rather than in applied sciences and specialised professional courses. A hard formula cannot be prescribed for distribution among disciplines, but the present balance would be generally regarded as inappropriate (JBIC 2002, p. 54).

### **2.2.5.3 Education Policy 2009 Recommendations**

The draft of the education policy looks upon higher education as the means to use and disseminate knowledge, create new knowledge and build human capacities in autonomously managed centres of higher learning. Establishing and maintaining quality standards are emphasised. A four-year degree programme following 12 years of schooling is proposed as the standard terminal higher education qualification with post-graduate education required for those aspiring to be engaged in teaching at the tertiary level and research. At the degree level in colleges and universities, a 100 marks/3 credit English course is proposed to be made compulsory.

Standard of education, curriculum and syllabi and qualifications of faculty in private universities should be same as those specified for “general universities.” These must not engage in discrimination on the basis of “nationality, religion, race, socio-economic status, and physical disability.” These must not be run on a commercial basis and must not be against “national independence, spirit of the liberation war, and Bengali culture.”

Research in universities and incentives for involvement of faculty and students in research are to be encouraged. Libraries and IT facilities need to be enhanced.

Steps should be taken for the Open University to make better use of TV channels, radio transmission and “multi-information system.”

Adequate investments are recommended to maintain “international standards” in higher education.

The policy recommendations are presented as general propositions, which have to be elaborated further to serve as the basis for operational plans and investment guide. They do not address many of the critical tertiary education issues noted above. The recommendations regarding private universities betray a lack of understanding of the role and contribution of non-state providers in higher education and the need for mutual complementarity.

## **2.3 GOVERNANCE AND MANAGEMENT OF EDUCATION**

Governance and management issues can be said, in a sense, to bring out in sharp relief the problems of the education system. All of the main deficiencies and problems can be attributed, directly or indirectly, to governance and management of the system. The administration and management procedures and processes are ruled by regulations and practices based on tradition, custom and precedence rather than responsiveness to changing needs and conditions. The problems of governance and management are discussed under the headings of human resource management, decentralisation, coordination, partnership-building and the politicisation of education management. The discussion will focus selectively on questions which are pertinent to stated policy priorities including reaching the poor and the disadvantaged with quality education services. References to sub-sectors are made as appropriate.

### ***2.3.1 Human Resource Management***

Deficiencies in recruitment, training, incentives and performance of primary and secondary teachers have been noted earlier. All of the national education commission reports have lamented the lack of professional skills of teachers, absence of motivation and enthusiasm for work and failure of the system to attract competent people to teaching and to give them adequate incentives and remuneration. Teachers have to be supported by administrators, supervisors and various types of specialists. For these categories also, there are problems regarding recruitment, professional skills and rewards.

Recruitment of personnel in the public and non-government institutions is undertaken differently. A recruitment process with an effort to apply criteria and standards are followed for government institutions. Even though criteria and standards for personnel recruitment in non-government primary, secondary and tertiary institutions have been indicated, there is laxity in applying these standards by respective managing bodies. The bulk of the salary costs of these institutions are paid by the government. In the case of the government institutions, there were often complaints in the media and in various reports and studies about nepotism, corruption, mismanagement and politicisation based on partisan loyalty considerations.

Measures have been taken to improve transparency and fairness in primary education recruitment under the PEDP II programme. At the secondary level, teacher certification based on a qualifying examination introduced recently is an attempt to identify and recruit capable teachers. Various education commissions and committees have recommended measures for fair recruitment of education

personnel. These include: (a) an independent commission for testing and preparation of Upazila-based panels of qualified primary school teacher candidates, from which teachers should be recruited as vacancies arise; (b) a similar independent body for selection of qualified candidates for secondary school teachers, both for government and non-government institutions; (c) a special education service recruiting commission for colleges and administrative and specialised jobs for government and non-government institutions, separate from the public service commission which is unable to handle the large load of education recruitment. The draft of the new education policy (2009) has also recommended similar measures.

Professional development, professionalisation of specialised tasks in education and a career ladder for personnel within each sub-sector of education, which demand different skills and training, are recurrent topics for discussion. At present, although inadequate, there is a system of teacher training for primary and secondary level teachers, none for tertiary education, and only very *ad hoc* and limited professional skill development opportunities for other specialised tasks—such as curriculum and learning materials development, educational assessment, planning and management - under externally-assisted development projects. Alia madrasas, catering to a significant proportion of primary and secondary level learners, do not have a teacher training provisions at the primary level and there is only one teacher training institution with limited capacity at the secondary level.

At the level of specialised professional tasks in the education hierarchy, the present recruitment, placement and deployment rules and practices do not encourage or facilitate acquiring of professional skills, staying on the job in the same field and being promoted and rewarded for working in one's specialty. All senior education personnel are recruited as part of a common education cadre dominated by college teaching positions or the posts are filled by deputation of the administrative service cadre personnel. They are then considered interchangeable for any position in primary, secondary and higher education supervisory and management tasks as well as tertiary level education teaching positions.

Seniority is the basic criteria for placing people at higher levels of responsibility. As a result, there is a merry-go-round in personnel placement, with frequent transfers, as is the practice in the administrative cadre. There is no opportunity to develop specialised professional skills and use these in one's job. Moreover, only senior personnel on the verge of retirement are placed at the senior most leadership positions— not a winning formula for dynamism and continuity in leadership.

The need for professionalisation of specialised tasks and building a career path from primary school teaching to senior positions in the Directorate of Primary Education has been recognised in the PEDP II plan. A separate primary education cadre has been under discussion for a long time. PEDP II plan calls for its implementation. National Education Policy (NEP) 2000 and the draft of the new education policy have endorsed this idea. Similar career ladder and recruitment under common standards for both government and non-government schools, both at primary and secondary levels, have been recommended in NEP 2000 and the new policy.

Remuneration of teachers across the board is regarded as low, not commensurate with their responsibility and due status in society. Different education commissions, including the recent one, have recommended a major overhaul of the remuneration structure of teachers. Teacher's remuneration is a continuing source of dissatisfaction, agitation and unrest. Of course, personnel costs consume the bulk of the recurrent costs of the education system; even a small salary increase has a large impact on the budget. It is essential that additional salary spending pays off in better learning outcome. With this end in view, remuneration structure can be designed to allow for more differentiation in teaching positions (for example, assistant teachers, teachers, senior teachers, team leaders/master teachers, assistant headmaster and headmaster in the primary school system), with promotion and salary raise tied to clearly established and enforced performance criteria. Some special rewards or bonuses can be tied to group performance at the institution.

The reward and incentive structure for primary and secondary education teachers and the absence of a career path have become a serious obstacle to attracting and retaining academically and intellectually talented people to teaching. Shortage of teachers of science, mathematics and English has become a serious problem, especially in rural areas. Graduates of colleges under the National University, rather than the main universities, generally come into teaching. Academic standards, facilities and teaching-learning environment leave much to be desired in these institutions. It has therefore become a vicious cycle—poorly qualified teachers instructing students in primary and secondary education, who are in turn ill-prepared to enter higher education and then coming out as graduates poorly qualified for any occupation including teaching. Ways have to be found to break this cycle by action on improving the quality of the degree colleges and attracting capable people to teaching as a career with proper incentives.

### **2.3.2 Decentralisation**

A common organisation and management issue is decentralisation of education planning and management. Support to decentralisation has been expressed in various education policy recommendations including NEP 2000 and the new policy draft. But it has not been clear in these statements what form it should take and how it is to be achieved.

The centralised and bureaucratic management of public sector institutions, which has been identified as one of the main causes of poor performance of these institutions, has not changed over the years in spite of the rhetoric about decentralisation. In fact, in recent years increased politicisation of education management has led to greater centralisation with many small and large decisions, which should be disposed of at the Directorate, district or Upazila level, ending up at the highest level in the central Ministry. Non-government institutions are equally victims of centralised control and politicisation because of the salary subvention and *ad hoc* grants paid to them by the government.

At the primary education level, the PEDP II Macro Plan says, “Fundamental to the process of quality improvement in primary education is the principle of decentralization and devolution of authority and responsibility to middle and local levels of the education system....A distinctive thrust of the of PEDP II is to increase authority and accountability, and enhance resources at school level to achieve quality improvement in learning with equitable access. In line with this approach, key outreach support mechanisms will be developed at the upazila level... additional functions will be assigned to schools and upazilas, which will be strengthened in terms of infrastructure and staff.” It would be important to ensure that these promises are actually fulfilled (MoPME 2002, pp. 48-49).

Quality of education can be enhanced, schools can be held accountable for performance and the participants from poor families can benefit when individual institutions, especially at the secondary and tertiary level, take responsibility for managing their own learning programme. This is the only way vocational and technical training institutions can assess and respond to skill demands in the local economy and adapt to specific opportunities and circumstances.

Even in the current general bleak picture in education, exceptional institutions which have earned a good reputation actually take the responsibility for their own institution's management, usually through good leadership of a head of the institution and support of enlightened managing committee and community members. These can serve as the model for a gradual and selective move towards greater institutional responsibility and accountability.

The new policy proposes “total decentralisation” of primary education management with a stronger role for the school managing committees and a greater involvement of the community in school management. At the secondary level, “power, responsibility and authority” should be decentralised to division, district and upazila. The managing bodies of the institutions should be strengthened further.

At the university level, it is proposed that the UGC should play a pivotal role in coordinating, improving quality of research and teaching, and finding adequate resources. The National University functions should be decentralised to the divisional level; the divisional entities may themselves eventually become affiliating universities.

### **2.3.3 Coordination**

An important systemic concern is how the education system as a whole and its sub-sectors function to make their contribution to meeting key social goals, including fighting poverty. It is a question of vertical and horizontal linkages and articulation within and among sub-sectors of education and the possibility of taking a systemic view of the organisational structures and function of the system and sub-systems.

The overall organisation and management of education show critical disjunctions and discontinuities. For example, at the primary level, the four major streams—the government and non-government registered schools, the madrasas, non-formal primary schools run by NGOs, and the proprietary English medium schools—operate with differing learning objectives and academic standards, with little opportunity for horizontal movement of students, and no interaction among organisational authorities running these different streams. The same applies to the secondary level, in respect of the parallel streams in general secondary education, madrasas, proprietary schools and post-primary vocational and technical education. The education policy draft recommends a strategy of adopting core curriculum, learning objectives and learning materials which would be common to all streams, and would be implemented in all institutions by applying common quality standards.

At the tertiary level, a system-wide view—embracing colleges, universities, professional and specialised education under public and private management; the potential for specialised training by professional bodies; and how all these together match the demand for high level skills—does not exist.

Notwithstanding the good intentions behind the separation of primary and mass education from the Ministry of Education, various problems of articulation arise. Issues in primary education regarding curriculum development, training of teachers

and management personnel, and transition from primary to secondary education cannot be resolved in isolation.

All of the concerns about horizontal and vertical links among subsystems point to the need for rethinking about organisational structures, functions, and roles in the education system. A systemic approach has to contribute to overall education system goal defined by society's overarching priorities, such as poverty alleviation. The system view will have to address broader human resource development issues, going beyond the parochial concerns of education sub-sectors. India, for example, has opted for a super-ministry for human resource development which coordinates the work of different ministry and department level agencies and organisations involved in various aspects of human resource development. Thailand and Indonesia have permanent statutory commissions with similar functions.

The new education policy has three crucial recommendations regarding system governance and coordination: a) bringing all pre-university education under one Ministry by combining various functions of the present Ministry of Primary and Mass Education and the Ministry of Education, and creating a separate Ministry of Higher Education, b) establishing a permanent national education commission to review policy implementation and guide policy review and modification as needed, and c) adopting an overall education law to serve as the legal framework for fulfilling the constitutional obligations and state commitments regarding education and human resource development.

#### **2.3.4 Partnership Building**

Public-private partnership building for mobilising resources, but more importantly for improving performance of educational programmes and their responsiveness to specific conditions and circumstances, is much in discussion (Ahmed 2000).

Non-formal primary education of NGOs serves eight per cent of the children who are particularly disadvantaged and offer a second chance opportunity to those who have not enrolled in school or have dropped out. It is necessary to recognise the mutual complementarity of formal and non-formal primary education, make the latter a part of the national strategy for improving access and quality in primary education, and incorporate its flexibility and community involvement in formal education.

Need for collaboration with and contribution from private sector in public sector training is recognised; how this will happen and what incentives there may be for the private sector have to be specified. The evidence of effective programmes by NGOs such as UCEP and the private sector response to the demand for IT training

suggest new possibilities. How much of skill training should be public responsibility and how much non-government responsibility? How can the government maintain an overview, provide a regulatory framework, and facilitate and encourage private sector, NGO and community organisations' provisions? Similarly, an appreciation of the potential of private universities and a comprehensive strategy for higher education development with complementarity and cooperation between public and private provisions are needed.

### ***2.3.5 Politicisation of Education Management***

Concern was expressed in the Education Commission reports of 2000 and 2003 and in other review and assessment of the education system about rampant indiscipline, student unrest and other adverse influences of politicisation of education decision-making. The related problems of corruption and mismanagement, spawned and nurtured by partisan politics when disciplinary and remedial action cannot be taken, became the most serious obstacle to educational reform and change. Education system reforms proposed in the new education policy cannot succeed unless the political obstacles to change can be removed or at least mitigated. The poor mostly suffer from this failure of the system because the rich and the elite can opt out of the system and go to private institutions or abroad, as many of them have.

## **2.4 EDUCATION FINANCING**

Several important features of education financing in Bangladesh—mobilisation of resources and their use—deserve attention from the point of view of a strategy for education that serves the goal of quality with equity.

### ***2.4.1 A Low-cost and Low-yield System***

Bangladesh has one of the lowest cost education systems, even compared to other least developed countries. This is reflected in the fairly extensive coverage of basic education including primary education and literacy programmes achieved with the lowest ratio of GNP devoted to education in the South Asia region and one of the lowest among all developing countries (2.2 per cent in 2000). Per student primary education expenditure is about \$13. The same figure for non-government secondary education (which caters to 90 per cent of secondary students) is \$16. The low per capita and total cost is no reason for satisfaction, because educational quality—measured in terms of learning outcome, the pedagogic process and essential inputs—is clearly the victim of this situation.



#### **2.4.2 Dominance of Public Financing**

Educational financing, as expected, is dependent on public sector allocations. In primary education, which account for almost half of total education expenditure, the government has *de facto* stopped establishing new institutions for a decade and has relied on expansion in the non-government sector to meet the goal of universal access to primary education. However, 90 per cent of teachers' salary in registered non-government schools are paid by the government as are *ad hoc* grants for school building construction and repair. Students of these schools receive free textbooks, with the important exclusion of NGO non-formal programmes.

At the secondary school and degree college levels, the large majority of the institutions are non-government, but again these are beneficiaries of substantial government subventions for teachers' salary. Only in respect of private universities and private vocational-technical training institutions, the subvention system does not apply. In principle, the generous system of subvention should be an important leverage for maintaining and enforcing quality standards in the non-government institutions. In practice, it fails to work this way because of the weak capacity of the regulatory and supervisory organisations in the government, the way these bodies perceive their role, and intrusion of partisan politics in educational management. Nonetheless, the potential of the subvention system as a policy leverage exists; how this leverage can be used effectively for educational development remains an important challenge.

#### **2.4.3 Household Contribution and Financing Strategy**

Despite the heavy reliance on the government for educational financing, there is a substantial private direct cost borne by beneficiaries, which is not taken into account in considering educational finance policy options. *Education Watch* data indicate that per capita average annual household expenditure in rural primary schools was Taka 1,000, the largest item being private tutoring charge. Other data from household expenditure surveys show that primary education is far from free and access to other levels of education depends on how much the family can spend for their children's education (BBS 1996, Chowdhury *et al.* 2001).

Household expenditures amount to about the same as per student government recurring expenditure in primary education. At the secondary level, non-government expenditure is of the order of two-thirds of the total national expenditure. In the case of degree colleges, which mostly are privately managed with government salary subvention, non-government contributions surpass government expenditure. Only in the highly subsidised public universities, government expenditure exceeds private costs. In the case of private universities, which are financed fully from tuition and

fees, households cover the costs. In the case of relatively small sub-sector of public vocational and technical education, high government subsidy reduces private contribution to total costs. The picture, however, would change if the extensive informal apprenticeship and on-the-job training activities were taken into account and monetised, although reliable quantification of the size and costs of these efforts is not available (Ahmed 2000).

The size of household expenditures in different sub-sectors of education points to several policy implications regarding mobilisation and effective use of resources. These include: the potential of mobilising non-government resources, the need for developing resource mobilisation and utilisation strategies, keeping in view the potential of non-government sources; combining public and other resources to promote equity in education; and promoting public-private partnerships on policy and programme development and in providing educational services.

#### ***2.4.4 Mismatch of Financing and Objectives***

Total national education expenditure, especially public budget allocation, has to increase substantially in the medium term to meet national goals and priorities regarding expansion and quality improvement in education. World Bank estimates (based on assumptions about likely scenarios for GDP growth and revenue share of GDP) indicated that achieving universal elementary education up to eighth grade and participation of 50 per cent of the eligible age-group in secondary education by 2008 will require public allocation to education to be raised to 4 per cent of GDP (World Bank 2000, pp. 58-108.).

Quality improvement, desperately needed at all levels of education, will require additional resources. The share of government budget for the education sector would rise under this scenario from under 15 per cent in 2000 to 26 per cent in 2008. It is in this context that professional circles raised the demand to increase the share of GDP for education allocated in the government budget to 5 per cent in the next five to six years, with commensurate increase in the education share of the government budget.

#### ***2.4.5 Budget Planning and Management***

*Increased expenditure is not enough.* A truism that needs to be underscored is that the availability of additional resources alone will not yield the expected gains, especially in respect of quality, unless existing weaknesses both in educational management and the teaching-learning process are seriously addressed and remedied. While chronic under-resourcing of the system is a generic problem that spawns many other problems, everything cannot be solved with additional funds.

Along with effective management of resources, decision-making and implementation of decisions regarding learning objectives and priorities, the pedagogic process and establishing accountability and performance standards at all levels have to be improved.

*Incremental budgeting based on precedence.* The standard practice of making financial allocations in the recurrent budget is to do it on an incremental basis, i.e., taking the current status as the baseline and adding annual increments in the budget. At the university, for example, allocation of the preceding year and the bargaining power of an institution based on political links and personalities are the most important determinant of what budget increase an institution will get. The rule of thumb appears to be to grant 70 per cent of what is requested. Given widespread inefficiencies and questions about external effectiveness of programmes and institutions, it is necessary to require justification of what exists and assess alternatives and options in budget decisions. It is necessary to establish performance criteria and apply them so that managers have incentives to perform and prevent wastes and inefficiency.

*Dominance of staff compensation.* Staff compensation accounted for 97 per cent of the recurrent budget in FY1998 for primary education, which represents the normal pattern. This included salary in government schools and salary subvention for non-government primary schools. Government grant, available for salary subvention, to non-government institutions has the effect of maintaining the pattern of school costs dominated heavily by staff salaries with little funding for other quality inputs. In vocational and technical institutions, 74 per cent of the recurrent budget was for salaries—a high proportion for this type of institutions which need to have consumable items for effective training. At the university level, 67 per cent of the recurrent expenditures were for staff costs in 1997 (World Bank 2000).

At the vocational-technical and tertiary stages of education, these ratios are high by international standards. This pattern in the operating budget of all levels of institutions, leaving little resources for non-salary inputs in educational programmes, has a serious adverse effect on the quality of education and learning outcomes. In contrast, NFPE, offering primary education to the disadvantaged, uses 40 per cent of the budget for teachers' salary—the rest is divided between learning materials and supervision and training of teachers, resulting in better performance by students.

*Medium-term budgetary framework.* As a part of overall budget management improvement, development and application of a medium-term (three-year) budgetary framework has been initiated in some of the sectors including education. This has been considered particularly important in the absence of an overall medium

term (five-year) planning process. A medium-term budgetary framework combining both development and recurring expenditure with year-to-year rolling adjustments would be a useful mechanism for budgetary discipline and optimising utilisation of resources even after reinstating the five-year development planning process.

#### ***2.4.6 High Incentive Expenditures***

Development expenditure in primary education is dominated by the incentive payment in the form of stipends both at the primary and secondary levels. In both cases, it is offered only in rural areas; at the primary level, it is paid to 40 per cent of the students in the school; in the latter case, stipends are paid only to girls and are complemented by a tuition waiver. Stipends at the primary level amount to two thirds of the estimated development budget from the government's own resources for the recent five years and half of the total primary sector development programme (PEDP II) other than stipends. Similarly, expenditures for stipends in both primary schools and for girls in secondary schools and free tuition for girls add up to one-third of total development expenditure in the education sector (World Bank 2000, pp.64 and 86).

A number of questions arise about the large share of the development expenditure in primary and secondary education being spent on stipends. Clearly, a key question is whether this starves out essential quality inputs for education programmes. Questions have been raised (in ADB and World Bank supported public expenditure review and by others) about the efficacy of the incentive expenditures on three counts: (a) whether they are sustainable as the claim on them rises backed by political pressures, (b) whether they can be administered efficiently and without being distorted by corruption, and (c) whether the benefits in terms of participation, equity and quality improvement would not be better achieved by spending directly on improving inputs and performance in school (Knowles 2001).

#### ***2.4.7 Equity and Educational Financing***

Education finance arrangements reinforce the pattern of inequity in the education system. A World Bank public expenditure review in the education sector undertaken in 1996 concluded that the share of benefits for households from public spending in education rises with income levels of households at all stages of education, but especially in secondary and tertiary education (World Bank 1998). The same review found that poor households, 54 per cent of total households, received 15 per cent of public spending on higher education, while 85 per cent went to non-poor households (World Bank 1998, p.63). In primary education, the benefits roughly corresponded with income distribution of the population. But even this means that primary education is not able to contribute to tackling existing economic

disparities and disadvantages. Actually, effective spending, counting who actually complete the primary stage, is far from equitable.

Inequality arising from the present pattern of higher education participation and benefits is exacerbated by very low cost recovery in the highly subsidised public university system. Tuition fees in public universities cover less than 1 per cent of the university budget. Cost-sharing and cost recovery as approaches for promoting equity in the system have to be considered in programmes where both private benefits and public subsidies are relatively high, such as in most tertiary level institutions and some vocational and technical education programmes.

Making education financing mechanisms and decisions effective vehicles for serving educational objectives and priorities will require clear articulation and delineation of the objectives in both qualitative and quantitative terms. Equally important is better understanding of the strategies and instruments, including the ones concerned with provisions for resources and their use, to be applied to achieving the objectives.

Paucity of systematic research and analysis in education finance, including tracking of expenditures, is a major obstacle to effective educational planning and management. There is a need for research, particularly in the form of micro-economic studies at the level of households, schools and communities; tracking expenditure from central level to institutions and learners; analysis of private costs and expenditures; and probing internal efficiency of different types of institutions in the same sub-sector.

## **2.5 SIXTH PLAN: OPPORTUNITY FOR REALISTIC ACTION**

Propositions for priorities in respect of objectives and strategies for the education sector in the Sixth Plan are suggested, based on the above analysis, recent professional and stakeholders' discourse, and in the context of the draft education policy. These are discussed in relation to key recommendations in the education policy, rather than making an attempt to be comprehensive at this stage.

### ***2.5.1 Universalisation up to Grade 8***

This idea has been under discussion at least since Kudrat-e-Khuda Commission report of 1974. Implementation of this goal will require an area-based planning for each Union and Upazila, taking stock of current and projected population and student numbers in the eligible age-groups, different types of institutions and facilities (primary, junior, secondary, madrasa, private, NGO, etc.), and teaching personnel, and working out, on the basis of this stock-taking, an area-based coordinated 10-year plan.

There is a misunderstanding that extending primary or elementary stage up to grade 8 means that all the students at this level have to be served only in primary school and every primary school must have classrooms and teachers for eight grades plus preschool. It should be remembered that almost half of the eligible children are already enrolled in secondary level schools.

The majority of primary schools can remain and perhaps should remain only up to class 5 in the foreseeable future and serve as feeder to eight-year primary school or 5 to 7-year secondary school. The extended primary education stage can be offered in different types of institutions as long as the required curriculum is followed and necessary standards are maintained through appropriate coordination. The main concern should be that the present poor quality of primary education is not extended up to grade 8 under the new arrangement.

*Eight-year UPE is achievable and must be achieved in a decade. A coordinated upazila-wise assessment and planning is essential for this purpose. A majority of primary schools may continue as 5-grade feeders to selected 8-grade schools or to 5 or 7 year middle-cum-secondary schools operating through necessary local coordination. The key concern is to ensure that the present quality deficits of primary education are not extended to grade 8.*

### **2.5.2 Equity with Quality in Primary and Secondary Education**

A major challenge and a key plank of the education policy is to ensure a common core curriculum, facilities and teaching personnel standards in the various types of primary and secondary institutions, including madrasas, recognising that multiple provisioning is a reality that cannot be and need not be wished away. Each type serves a constituency and has both its strengths and weaknesses. The Sixth Plan has to identify and promote the strengths and help overcome the deficiencies in each type within an agreed framework of common standards.

Area- based coordinated planning and financing criteria and process will be critical in overcoming inequities that are related to geography, socio-economic category, and type of institutions. (See below)

*Historically evolved multiple provisions in primary and secondary education have served specific needs. Enforcement of common quality standards and core curricula across the diverse provisions can best serve the quality-with-equity principle, which should be the focus of the Sixth Plan. Governance and financing strategies must support this principle. Upazila-wise systematic planning and financing with local government and community involvement, and mid-day meals for primary level children, should be part of these strategies.*

### 2.5.3 Teachers as Key to Quality

Various proposals have been made regarding training, recruitment, remuneration and management of teaching personnel in the education policy which deserve support through specific actions to be included in the Sixth Plan. However, missing in the policy is any bold and creative move to persuade academically capable and talented young people to take up teaching as a profession. It remains now the last choice of college/university graduates.

The fact is that teachers for primary and secondary education are drawn mainly from colleges under the National University. Quality of instruction in these colleges and the products from them becoming the source of teaching personnel, who then prepare students unfit for tertiary education or the world of work, have created a vicious cycle.

An approach that could have found a place in the policy draft is to offer education as a subject in the four-year general college degree programme as pre-service preparation and attract bright students with a promise of stipend, subject to condition that they would serve at least five years in primary or secondary school. The concurrent model of teacher preparation (combining it with general college education) is followed in many countries. The potential teachers can be promised a higher level of remuneration in recognition of their superior capability and may be inducted into a prestigious national teaching service corps. One condition for success of this initiative would be to ensure that the selected colleges for this project are supported to maintain acceptable quality in facilities and instruction. A hundred college under such a project producing at least 10,000 teacher candidates each year (after the initial four years) over a decade would create a nucleus of high quality and enthusiastic teachers in primary and secondary schools in the country. Eventually, the existing primary and secondary teacher training institutions can concentrate on much needed continuous in-service training of teachers.

The success of other quality initiatives such as transforming pedagogy, making continuous and summative learning assessment and examinations more meaningful and turning teachers into role models for young people will depend on attracting talented and motivated people into teaching.

*The teacher has to be seen as central in the strategy to improve educational quality. Bold and creative measures are needed to attract talented and inspired young people to teaching, keep them in the profession and create a critical mass of talented teachers in the education system. A ten-year plan involving a hundred degree colleges for enrolling bright young people in a degree programme with education as a subject can be a key pre-service programme for future teachers. A national education service corps can thus be created with stipends and promise of better remunerations on condition of at least five-years of service in the public system. Quality of provisions and pedagogy in the selected colleges also has to be ensured.*

#### **2.5.4 Common Quality Standards for Core Competencies in Primary and Secondary Education**

It is not enough to prescribe a core content of Bangla and English, math and science, “Bangladesh studies” and IT for the diverse providers in primary and secondary education. This is only the first step towards promoting a common learning experience for all children, equipping them with essential skills and competencies for a fair start in life, and helping overcome the inequalities and divisions in society. Capable and motivated teachers, appropriate learning materials, and necessary learning environment and learning activities in schools are the indispensable ingredients for turning the core content into learning experience and outcomes. Two of the designated content areas deserve special attention—language and information technology.

Russian educator and psychologist Lev Vygotsky made the obvious but important point that we encode and represent our world through language. Our thoughts and reasoning are based on language, what he called “inner speech.” Language development enables one to regulate one’s cognitive processes, e.g., thoughts, memory, and reasoning. The frequent complaint that our university graduates cannot express themselves with logic and clarity in either Bangla or English is the symptom of a deep crisis in our education, which condemns whole generations to failure and mediocrity.

Functional computer literacy for young people cannot be achieved by declaring the subject as compulsory in primary and secondary schools. The prevailing education management resources and culture are unlikely to provide the continuous operational support necessary for hardware, software and instructional capacity for effective IT skill development. Promoting public-private partnership and corporate social responsibility principles can be an approach to deal with impediments in this area (See Annex 5).

*A qualitative transformation in teaching the identified core skills and competencies in all categories of primary and secondary institutions should be a priority. Short-term measures such as contractual appointments and extra incentives for capable instructors in math science, English and IT should be introduced; longer-term measures would include special pre-service programmes (as mentioned above). Strong bilingual competency in Bangla and English for all students completing the secondary stage should be a core objective—building the foundation of Bangla competency by fifth grade and similar English skills in the secondary stage. Mobile phone operators, IT multi-nationals, Internet service providers and other businesses should be persuaded and given incentives to “adopt” schools to support IT instruction and IT-based improvement in pedagogy.*



### **2.5.5 Transforming Vocational and Technical Education**

Solving the paradox of shortage of skilled workers and unused places in vocational/technical institutions and unemployed graduates (or not employed in the field of training) calls for major reform initiatives in the medium term within a longer-term perspective. The following key considerations should guide priority action during the Sixth Plan.

*a) Re-thinking the role of public sector skill training in developing a strategy to expand and modernise VTE to meet market demands and extend greater benefits to the poor.* A greater role has to be accorded to the private sector and various ways of public-private collaboration should be promoted; *b) Improving the link between training and job markets.* This responsiveness requires a change in mindset to move from essentially a focus on supply to attention to demand. Several interconnected measures are needed; *c) Aiming for a greater impact on poverty reduction by targeting new clientele.* Further diversification of clientele and programmes beyond the limited efforts made so far through formal institutions and training programmes is necessary; *d) Improving efficiency and quality of programmes, especially in the public sector,* recognising that maintaining quality and credibility of skill training must be a high priority—providing for necessary resources for equipment, skilled staff and consumable items.

It is essential that the draft policy for skill development formulated under the auspices of the newly established National Skill Development Council addresses the above issues and is realistic and implementable and that necessary conditions prevail to enable the Council to operate effectively.

*Addressing the paradox—employers' complaint about shortage of skilled workers and unfilled places in vocational institutions and sometimes unemployed graduates – have to be addressed by redesigning the role of the public sector in vocational/technical education and training through new modes of collaboration that involves employers and NGOs in public institutions' operation and management, and government encouragement and incentives for private sector training institutions, apprenticeship and on-the job training. Particular attention is needed to making training responsive to market demands, locally and overseas; skill development for the informal economy where the large majority of workers are employed; and overall attention to quality of training by applying "external efficiency" criteria. It should be ensured that the draft skill development policy prepared under the aegis of the Council address the issues raised above and steps are taken to implement it.*

### **2.5.6 Two Aspects of Decentralisation**

Two key aspects of management in education are: (a) authority and responsibility with accountability including budget and resource management at the

level of institutions and (b) devolution of planning, management, and monitoring at district and upazila levels. In both respects educational governance and management remain extremely centralised, which impedes efficiency, responsiveness of programmes to specific circumstances, and promotes a culture of “passing the buck.”

There is clearly a dichotomy between political rhetoric, as seen in the manifesto and the general and ambiguous ideas in the policy draft regarding decentralisation. The problem is compounded by the reluctance of the bureaucratic and political decision-makers to act in this respect. At the same time, the cautionary message that decentralisation is no panacea cannot be ignored in the context of the political culture of patronage, partisanship and corruption. There is, however, no alternative to moving towards genuine institutional and system decentralisation in education.

The contribution of the Sixth Plan can be to support R&D in this respect by designing and trying out the formation of education authorities with substantial autonomy and control of resources at the district level for secondary education and upazila level for primary education (up to grade 8) including literacy and non-formal education respectively—possibly in six districts in six divisions, and a selected number of upazilas. Similarly, selected institutions at tertiary and lower levels can be given special dispensation to exercise autonomy in their own affairs, based on a contract with them for educational outcomes. The assessment of and lessons from these experiences can be the basis for eventual nationwide reform in education governance and management.

*Decentralisation through empowered local government is a key political commitment of the government. But decentralisation is no panacea in a corrosive political culture of patronage and corruption. A substantial pilot programme should be launched under the Sixth Plan at selected districts, upazilas and institutions to create effective local education authorities and institutional models with greater academic, management and budgetary responsibility with accountability. The goal will be to learn about decentralisation that works and that can be widely applied.*

### **2.5.7 Literacy and NFE in a Life-long Learning Perspective**

The policy draft has not reflected the knowledge and accumulated international wisdom regarding literacy, non-formal education and lifelong learning. It is necessary to ensure that the proposal to “eliminate adult illiteracy” by 2014 does not lead to an approach that focuses on nominal literacy at a rudimentary level which may not enable learners to acquire functional skills or prevent a relapse into illiteracy. There is an absence of the concept of and provisions for lifelong learning according to needs and motivation of citizens and skill and knowledge requirements

of society, even though the national NFE policy statement of the government emphasises the importance of a lifelong learning perspective. The Sixth Plan's focus should be to promote a network of community learning centres across the country with the active involvement of community organisations, NGOs and the private sector under the auspices of the local government bodies. The capacity of the Bureau of Non-Formal Education (BNFE) and its district level branches should be developed to provide technical support to this effort.

*Literacy and non-formal education must be conceptualised as integral components of widely available life-long learning opportunities. A nationwide network of community learning centres under local government auspices with active involvement of NGOs and community organisations should be the vehicle for life-long learning, complementing formal education. Promoting functional skills and meeting genuine learning needs, rather than mechanistic literacy targets, should be the aim, and programmes should be designed and objectives defined accordingly.*

### **2.5.8 Consolidating Quality in Tertiary Education**

Only five per cent of young people at the post secondary stage participate now in tertiary education—a low ratio by any measure. Some general propositions have been presented regarding improving quality and making tertiary education more responsive to development requirements of the country, most of which are unexceptionable. What is needed in the Sixth Plan is a firm stand that there will be no expansion of tertiary institutions (universities, colleges and professional institutions) until and unless physical facilities and teaching-learning provisions and personnel in existing institutions reach established minimum acceptable standards. *There should be a moratorium in principle regarding establishment of new institutions until acceptable standards are achieved in existing institutions.*

The government needs to go slow on already made pledges about a dozen public universities, making further investment in them subject to ensuring acceptable standards in already established institutions and guaranteeing required financial and human resources for the new ones. Similarly, UGC, supported by the governmental authorities, must ensure that quality standards are applied to private universities.

National University colleges, some 1,800 in total, serve 80 per cent of the tertiary education students and supply almost all teachers to primary and secondary institutions. The Sixth Plan's focus should be to apply rigorously to them the existing quality standards and consolidate and rationalise existing institutions where they cannot be justified in terms of effective demand. The same principle should apply to madrasas at the tertiary level.

*Although participation in tertiary education remains low, more harm than good will result from expanding tertiary education, unless acceptable quality can be ensured. A moratorium in principle should be applied on establishment of new institutions until acceptable standards are achieved in existing ones. The Sixth Plan's focus should be on applying rigorously already established quality standards and consolidating and rationalising existing institutions before investment is made on expansion and new institutions.*

### **2.5.9 Financing Strategy to Support Quality with Equity**

The draft policy appears to be optimistic about mobilising resources for the proposed reforms and development. The target of a six per cent share of GDP as public expenditure in education in a decade is by no means ambitious by international standards. To reach this target in 10 years, a 4.0 to 4.5 per cent target needs to be attained by the end of the Sixth Plan. This would call for increasing the very low revenue base at present by international comparison. Whether even six per cent share of GDP will generate sufficient resources for quality enhancement and expansion of education will depend on whether the growth of the economy can be kept consistently at a trajectory of 7 per cent or more. The macroeconomic prospects and resource envelope issues will no doubt be a key concern in the plan document and will provide a framework for educational reform planning.

Missing in the policy draft are criteria and strategy for education financing to support the key policy objective of *ensuring educational development based on quality with equity*. The strategic considerations for this purpose would include: possibilities of area-based capitation grants for population and number of eligible children as practiced in many countries; criteria and determination of per student amount for supporting different types of institutions at the primary and secondary levels; the desired ratios, say, between madrasas and general schools, and vocational and general schools; the relative priorities in public financing among stages of education; and how public funds can complement or compensate for private expenditure to promote equity criteria. The resource planning allocation in the Sixth Plan needs to take a stab at these thorny issues, even if adequate answers may not be provided readily.

*A goal of 4 to 4.5 per cent of GDP as public education expenditure should be the target by the end of the Sixth Plan. Financing criteria and principles should be established and applied to support the objectives of quality-with-equity, such as capitation formula and institutional control of resources. Substantial new resources should be directed to teacher incentives and raising status of teaching as a profession and other quality improvement inputs.*

Unfortunately, there are no magic bullets for improving educational systems. There is no alternative to patient and system-based work simultaneously on several fronts. The critical concern is that these efforts should result in cumulative progress rather than periodic regression.

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## Annex 1

### Projection of School-Age Population and Enrolment Trends in Primary and Secondary Education

(This annex has been prepared by Kazi Saleh Ahmed)

#### The Population of Bangladesh, Its Growth and Projection

##### 1.1 Size and Growth

The main sources of information on population size are censuses, vital registration systems and surveys. Census information of Bangladesh is available from the 1951, 1961 censuses of Pakistan and then the 1974, 1971, 1991, 2001 censuses of Bangladesh. The following table shows the population size and its average annual growth rate over the period 1951-2001.

TABLE 1  
POPULATION SIZE AND GROWTH RATES, 1951-2001

Census Year	1951	1961	1974	1981	1991	2001
Population size (Million)	44.1	55.2	76.3	89.9	111.5	130.0
Annual Growth rate in Per cent		2.27	2.52	2.37	2.18	1.54

Source: Bangladesh Bureau of Statistics.

It is evident that the pace of growth has been sharply decreasing consequent upon the rapidly decreasing total fertility rate (TER) from 4.24 in 1991 to 2.56 in 2002 (BBS). The age sex composition of total population of 2001 by broad age group gives the then demographic scenario of Bangladesh.

TABLE 2  
AGE SEX COMPOSITION OF POPULATION BY AGE GROUP, 2001

Age group	0-4	5-9	10-14	15-19	20-24	25-29	30+	100.0
Male (%)	13.1	13.8	13.2	9.9	7.6	7.7	34.7	100.0
Female (%)	12.9	13.3	12.4	9.5	10.1	9.8	32.0	100.0
Both	13.0	13.5	12.7	9.7	9.7	8.7	32.7	100.0

Source: Bangladesh Bureau of Statistics.



## 1.2 Population Projection

Population projection is based on specific assumptions about future changes in birth, death and migration rates. Future changes of the above vital rates determine the size and growth of population over time. Assumptions about the changes are derived from evidences from the time series analysis of trends. Population projection thus shows the prospects of the future size, composition and structure and gives the present size and future changes in the vital rates.

There are different methods used for population projection. BBS adopted the cohort component method, considered as the standard method, used by international organisations such as UNESCO and UN. Table 3 provides the projection of population for the period 2006-2051, under 2 different assumptions.

### Two assumptions are:

A: Assumption 1: Net Reproduction Rate would be 1 (TFR=2.1) by 2011.

B: Assumption 2: Net Reproduction Rate would be 1 (TFR=2.1) by 2016.

TABLE 3  
POPULATION PROJECTION OF BANGLADESH, 2006-2051

Year	A			B		
	Male	Female	Total	Male	Female	Total
2006	73.0	68.8	141.8	73.1	68.9	142.0
2011	77.9	73.6	151.4	78.7	74.4	153.1
2016	82.7	78.3	161.0	84.0	79.6	163.6
2021	88.1	83.7	171.7	89.4	84.9	174.3
2026	93.4	88.9	182.2	94.7	90.2	184.9
2031	98.1	93.5	191.6	99.7	95.0	194.7
2036	102.1	97.5	199.5	104.0	99.3	203.3
2041	105.6	100.9	206.5	107.9	103.1	211.0
2046	108.9	104.0	212.9	111.5	106.3	217.8
2051	112	106.7	218.6	114.7	109.2	223.9

**Source:** Foundation for Research on Educational Planning and Development (FREPD), 2008.

The current declining trend reveals that TFR would be 2.1 around 2011. In that case, the population would be 149.4 million in 2010 and 151.4 million in 2011.

**TABLE 4**  
**POPULATION PROJECTION OF BANGLADESH BY 5 YEAR AGE GROUP**  
**2006-2021 (MILLION)**

Age group	2006			2010			2015			2020		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	8.02	7.53	15.55	7.27	6.82	14.09	7.33	6.86	14.19	7.65	7.18	14.83
5-9	8.60	7.91	16.51	8.01	7.50	15.51	7.12	6.66	13.78	7.07	6.61	13.68
10-14	9.21	8.30	17.51	8.67	7.97	16.64	7.97	7.44	15.41	7.16	6.69	13.85
15-19	8.80	7.76	16.56	9.08	8.18	17.26	8.45	7.76	16.21	7.98	7.43	15.41
20-24	6.57	5.91	12.48	8.24	7.35	15.59	8.61	8.16	16.77	8.64	7.92	16.56
25-29	5.07	6.31	11.38	6.42	5.78	12.20	8.22	7.29	15.51	9.04	8.10	17.14
30+	26.76	25.07	51.83	29.18	28.73	57.91	33.97	33.19	67.16	39.40	38.64	78.04
Total	73.03	68.77	141.8	76.87	72.33	149.20	81.67	77.36	159.03	86.44	82.57	163.51

**Source:** Based on Table 19, FREPD, 2009.

#### **1.21. Population Projection for the age groups: 4-5, 6-8, 6-10, 11-13, 11-15, 14-15, 16-17, 18-21 and 22-24**

Bangladesh has been offering formal education at four levels: early childhood, primary, secondary and higher secondary and tertiary education from bachelor's onward. It is anticipated that there will be a major change in the structure. Pre-primary education for the age group 4-5 years, primary for 6-13 years, secondary 14-17 years and higher education for 18-24 years. For future planning of pre-primary, primary, secondary and higher education and also monitoring the achievement, we need population for corresponding age group mentioned above.

Census data are given for the age group 0-4, 5-9, 74 and 75 +. The projection is also made for the above age groups (Table 4). For projection of data for the education relevant age group, we need to convert first five yearly populations into single year figures and then add up to suit the figure for corresponding age group. In education, Sprague's fifth difference equation is used. Details are given in CPD (2003).

The following tables give the projected population for pre-primary (4-5), primary (6-10), lower secondary (11-13), secondary (11-15) and tertiary (16-24) age groups.

**TABLE 5**  
**PROJECTED PRE-PRIMARY AGE- (4-5) POPULATION 2005-2020 (In MILLION)**

Year	2005	2006	2010	2015	2020
Boys	3.25	3.32	3.06	2.89	2.94
Girls	3.15	3.09	2.86	2.70	2.76
Both	6.40	6.41	5.92	5.59	5.70

**Source:** Table 4.

**TABLE 6**  
**PROJECTION PRIMARY AGE POPULATION (6-10) OF BANGLADESH**  
**FOR 2006-2020 (IN MILLION)**

Year	2005	2006	2010	2015	2020
Boys	8.4	8.73	8.05	7.71	7.63
Girls	7.82	8.03	7.83	7.50	7.42
Both	15.86	16.76	15.88	15.21	15.05

Source: CPD (2003).

**TABLE 7**  
**PROJECTED 11-13 YEAR AGE GROUP POPULATION FOR 2005-2020**  
**(IN MILLION)**

Year	2005	2006	2010	2015	2020
Boys	4.72	4.74	4.823	4.802	4.549
Girls	4.59	4.61	4.660	4.670	4.423
Both	9.31	9.35	9.483	9.472	8.97

Source: CPD (2003).

**TABLE 8**  
**PROJECTION 14-15 YEARS AGE GROUP AND 11-15 YEAR AGE GROUP**  
**POPULATION FOR 2006-2020 (IN MILLION)**

Year	14-15 years, Population					11-15 years age group population				
	2005	2006	2010	2015	2020	2005	2006	2010	2015	2020
Boys	3.15	3.16	3.20	3.21	3.11	7.87	7.90	8.02	8.01	7.66
Girls	3.03	3.03	3.09	3.08	2.99	7.62	7.64	7.75	7.75	7.41
Both	6.18	6.19	6.29	6.29	6.10	15.49	15.54	15.77	15.76	15.07

TABLE 9  
**PROJECTION POPULATION FOR THE 16-17 YEARS AGE GROUP FOR 2005-2020 (IN MILLION)**

Year	2005	2006	2010	2015	2020
Boys	3.158	3.151	3.123	3.20	3.17
Girls	3.00	2.995	2.973	3.04	3.02
Both	6.158	6.15	6.10	6.24	6.19

Source: CPD (2003).

TABLE 10  
**PROJECTED 18-21 AND 22-24 AGE GROUP POPULATION FOR 2005-2020 (IN MILLION)**

Year	18-21 Age Group				22-24 Age Group			
	2005	2010	2015	2020	2005	2010	2015	2020
Boys	6.33	6.23	6.24	6.22	4.75	4.68	4.62	4.71
Girls	5.99	5.95	6.00	6.06	4.51	4.54	4.54	4.59
Both	12.32	12.18	12.24	12.28	9.26	9.22	9.16	9.30

Source: CPD (2003).

### Pre-Primary Education

Learning begins at birth. The period since birth to the entry to primary education is an important formative stage for the growth and development of children.

Both the World Declaration on Education for All (JOMTEIN 1990) and the Dakar Framework of Action (DFA 2000) have underscored the importance of Early Childhood Care and Education (ECCE) as a part of comprehensive approach to achieving EFA.

Considering the importance of ECCE and also impelled by international consensus, the government of Bangladesh has come forward to undertake activities in ECCE. The bulk of ECCE activities at present consist of pre-primary education programmes of NGOs and government supported by funding from development partners.

In order to have a better understanding about ECCE provision, MoPME appointed ECDRC at BRAC University to prepare mapping of Pre-Primary facilities.

The population of 4-5 year children for different years is given in Table 5. The table shows that 5-6 years population was 6.41 million in 2006 and would be 5.92 million in 2010. The reduction is due to the decline of fertility in Bangladesh.

TABLE 11  
TIME SERIES DATA OF PRE PRIMARY STUDENTS (2001-2004)

Sch_type	2001			2002			2003			2004		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Govt. Primary Schools	348,606	340,529	689,135	383,750	375,811	759,561	287,150	283,970	571,120	269,516	269,123	538,639
Regd. NGPS	339,958	319,895	659,853	341,568	322,604	664,172	306,237	290,084	596,321	137,740	136,833	274,573
Non-regd. NGPS										10,479	10,410	20,889
Experimental Schools										0	0	0
Ebtadaee Madrasahs										32,940	31,958	64,898
Kindergarten										47,639	36,159	83,798
NGO Schools										3,722	3,768	7,490
Community Schools										16,455	16,886	33,341
Primary Sections of High Madrasahs										33,015	30,620	63,635
Primary Sections of High Schools										14,163	14,450	28,613
Total:	688,564	660,424	13,48,988	725,318	698,415	14,23,733	593,387	574,054	11,67,441	565,669	550,207	11,15,876

(Cont. Table 11)

Sch_type	2001			2002			2003			2004		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Govt. Primary Schools	257,421	260,517	517,938	174,240	175,599	349,839	158,626	159,906	318,532	153,272	155,766	309,038
Regd. NGPS	132,081	131,768	263,849	82,824	81,980	164,804	71,500	71,181	142,681	73,943	73,936	147,879
Non-regd. NGPS	10,669	10,494	21,163	11,113	10,753	21,866	6,414	6,175	12,589	5,005	4,648	9,653
Experimental Schools	0	0	0	0	0	0	0	0	0	12	8	20
Ebtadaee Madrasa	32116	30967	63083			0			0			0
Kindergarten	56,055	42,973	99,028	6,4328	49,836	114,164	58,581	44,946	103,527	77,269	61,159	138,428
NGO Schools	4,053	4,212	8,265	4,519	4,717	9,236	2,941	2,961	5,902	3,075	3,018	6,093
Community Schools	16,086	16,767	32,853	11,079	11,559	22,638	9,272	9,538	18,810	8,471	10,297	18,768
Primary Sections of High Madrasa	33,228	31,500	64,728			0			0			0
Primary Sections of High Schools	15,128	15,360	30,488			0			0	13,139	13,198	26,337
Total:	556,837	544,558	110,1395	348,103	334,444	682,547	307,334	294,707	602,041	334,186	322,030	656,216

**Source:** DPE.

The Directorate of Primary Education provided enrolment data of pre-primary students (Presented in Table 11) for the years 2001-2008. The total students enrolled at this stage were 650,000 in 2008, according to DPE data, which may not have captured fully the services provided by NGOs. The reported figures represent only about 10 per cent of the age group. The share of different types of schools is readily seen in Table 11. The erratic behaviour of the trend is also observed.

Table 12 gives the projection of enrolment under two assumptions:

Assumptions 1: Using the annual growth rate of 9.00 per cent, this was the growth rate between 2007 and 2008.

Assumption 2: The enrolment ratios projected for the age group are 25 per cent in 2010, 50 per cent in 2015, and 90 per cent in 2020.

TABLE 12  
PROJECTION OF PRE-PRIMARY EDUCATION ENROLMENT, 2010, 2015, 2020

Year	Assumption 1			Assumption 2		
	2010	2015	2020	2010	2015	2020
Boys	397,046	610,904	939,952	765,000	14,45,000	26,46,000
Girls	382,604	588,684	905,763	715,000	13,50,000	24,84,000
Total	779,650	11,99,588	18,45,715	14,80,000	279,000	57,30,000

## Primary Education

### 3.1 Introduction

In Bangladesh primary education is of five years duration. The official entry age for grade 1 has been fixed at age 6. The children of age 6-10 are supposed to be the students of primary schools. But this is not rigidly followed. According to MoPME, the gross enrolment rate (GER) is higher than the net enrolment rate (NER) by more than 10 per cent. Children of age 5 and 11 o 13 are also found in primary school. However, with sharp rise of enrolment at age 6, the difference has been decreasing.

### Enrolment of Primary Education in 2008

The institutions which impart primary education are many (Table 13). Table 13 shows the number of institutions, teachers and enrolment by sex for 2008.

**TABLE 13**  
**PRIMARY EDUCATION STATISTICS OF SCHOOLS, TEACHERS, STUDENT**  
**BY TYPE OF SCHOOL AND GENDER: 2008**

School Type	No. of Schools	Working Teachers		Class 1		Class 2	
		Total	Female	Total	Girls	Total	Girls
Govt. Primary Schools	37,672	182,899	96,543	24,59,076	12,25,076	21,37,612	10,87,888
Regd. NGPS	20,083	76,875	25,299	10,11,770	499,422	798,687	401,355
Non-regd. NGPS	966	2,460	1,579	29,333	14,236	22,823	11,189
Experimental Schools	54	221	91	2,112	1,067	2,170	1,134
Ebtadaee Madrasas	6,726	28,227	2,987	278,469	134,581	228,520	112,664
Kindergarten	2,987	16,980	9,937	63,670	27,697	53,992	23,440
NGO Schools	408	763	503	6,776	3,359	5,885	2,971
Community Schools	3,263	8,772	6,513	130,250	64,624	98,326	49,418
Primary Sections of High Madrasahs	8,920	35,707	3,734	256,280	114,786	240,003	109,791
Primary Sections of High Schools	1,139	13,021	5,855	45,358	24,256	47,049	24,709
<b>Total:</b>	<b>82,218</b>	<b>365,925</b>	<b>153,041</b>	<b>42,83,094</b>	<b>21,09,104</b>	<b>36,35,067</b>	<b>18,24,559</b>



School Type	Class 3		Class 4		Class 5		All class 1-5	
	Total	Girls	Total	Girls	Total	Girls	Total	Girls
Govt. Primary Schools	19,95,109	10,31,280	17,40,566	913,859	12,05,208	635,112	95,37,571	48,93,215
Regd. NGPS	680,570	346,654	595,155	305,012	386,617	201,108	34,72,799	17,53,551
Non-regd. NGPS	19,543	9,685	16,157	8,031	11,708	5,905	99,564	49,046
Experimental Schools	2,263	1,145	2,031	994	1,770	828	10,346	5,168
Ebtadaee Madrasahs	185,463	90,352	131,663	63,665	94,950	46,141	919,065	447,403
Kindergarten	44,574	19,163	36,541	15,735	27,410	11,516	226,187	97,551
NGO Schools	5,116	2,634	4,471	2,300	3,624	1,912	25,872	13,176
Community Schools	68,337	35,310	54,504	28,530	36,634	19,906	388,051	197,788
Primary Sections of High Madrasahs	200,759	97,385	189,931	85,505	164,387	75,296	10,51,360	482,763
Primary Sections of High Schools	56,109	29,004	60,456	31,722	61,818	32,416	270,790	142,107
<b>Total</b>	<b>32,57,843</b>	<b>16,62,612</b>	<b>28,31,475</b>	<b>14,55,353</b>	<b>19,94,126</b>	<b>10,30,140</b>	<b>16,001,605</b>	<b>80,81,768</b>

**Source:** School census 2008 of Directorate of Primary Education (DPE).

The total enrolment was 16.00 million in 2008. Among them 8.08 million (50.5 per cent) were girls. The share of government primary schools (GPS), registered NGP, Ebtadaee madrasa was respectively 59.6, 21.7 and 5.7 per cent. NGO schools account for only 0.2.2 per cent of all enrolment, according to official statistics which did not count a significant non-formal primary education programme offered by NGOs.

### 3.2 Growth of Primary Education

In 1947, there were about 19,000 primary schools in the region of Bangladesh. The number rose steadily to 29,000 in 1971. After emergence of Bangladesh, the growth was faster, grew at a yearly growth rate of 7.7 per cent during 1972-76. The growth declined in

subsequent years; the growth of enrolment was faster compared to the growth of institutions and teachers. The growth rate was 4.6 per cent during 1981-91, 2.5 per cent during 2000-3003 and started decreasing since 2004. The decrease is attributed to reduction of school age population, thanks to the continuing decrease of TFR.

The growth of girls' enrolment was spectacular. Currently, girls surpass the number of boys in primary education.

TABLE 14  
CLASS 1-5, ENROLMENT OF STUDENTS IN ABSOLUTE NUMBERS

Year	Boys	Girls	Total
1980	49,22,401	32,96,022	82,18,423
1981	49,52,625	33,39,796	82,92,421
1982	49,83,000	34,17,000	84,00,000
1983	50,22,500	34,46,500	84,69,000
1984	50,88,339	34,87,468	85,75,807
1985	53,52,160	35,68,112	89,20,272
1986	56,27,424	41,84,725	98,12,149
1987	61,11,415	47,31,092	108,42,507
1988	63,42,326	49,43,119	112,85,445
1989	64,24,758	51,36,572	115,61,330
1990	65,74,633	53,59,316	119,33,949
1991	69,10,092	57,25,327	126,35,419
1992	70,48,542	59,68,725	130,17,270
1993	75,25,862	65,41,470	140,67,332
1994	80,48,117	71,32,563	151,80,680
1995	90,94,489	81,89,668	172,80,416
1996	92,19,358	83,61,058	175,80,416
1997	93,64,899	86,66,774	180,31,673
1998	95,76,942	87,83,700	183,60,642
1999	90,65,019	85,56,712	176,21,731
2000	90,32,698	86,35,287	176,67,985
2001	89,89,795	86,69,425	176,59,220
2002	88,41,648	87,20,180	175,61,828
2003	92,52,523	91,78,797	184,31,320
2004	89,58,697	89,94,603	179,53,300
2005	80,91,221	81,34,437	162,25,658
2006	81,29,314	82,56,533	163,85,847
2007	80,35,353	82,77,554	163,12,907
2008	79,19,837	80,81,768	160,01,605

### 3.3 Projection of Primary School Enrolment

Projections of the future enrolment at pre-primary and primary level constitute the starting point of primary educational planning, as they provide the basis of estimating the future needs of primary education. Enrolment projections inform us about how many would be enrolled at some future time assuming the changes in trend of boys and girls' participation and government and community policies in removing the barriers standing on the participation of children, particularly of socially disadvantaged groups.

The foundation for Research on Educational Planning and Development (FREPD 2008) made projection of enrolment of the year 2006-2050. The total enrolment projections seem to be consistent with the actual achievement so far, but minor difference was observed between boys and girls enrolment. The projected enrolment figures based on current trends up to 2020 are given in Table 15.

TABLE 15  
PROJECTION OF PRIMARY SCHOOL ENROLMENT FOR 2008, 2010, 2015, 2020  
(IN MILLION)

Year	Boys	Girls	Total
2008	7.92	8.08	16.00
2010	7.73	7.91	15.46
2015	6.89	7.12	14.01
2020	6.86	7.10	13.96

**Source:** FREPD 2008 (Table 22).

Assumptions: 1. Projected population for 2001-2051 under the assumption that TFR = 2.1 by 2011.

2. Girls participation will continue to be higher than the boys.

## Junior Secondary Education

### 4.1 Introduction

The secondary level education consists of grades 6-10, generally divided into two sub sectors, viz., junior secondary consisting of grades 6-8, and secondary consisting of grades 9-10. Junior secondary level education is offered in junior high schools and high schools in the case of school education and in Dakhil, Alim, Fazil and Kamil in the case of Madrasa education.

The Education Commission set up for reforms of education sector recommended that primary education should consist of grades 1-8 and secondary education should consist of grades 9-12.

In this section we provide information for Junior Secondary and Secondary covering grades 6-8 and grades 9-10.

#### 4.2 Enrolment in Junior Secondary Levels (Grades 6-8)

The National Education Survey (Post-Primary) 2008 provided the number of students in 2008. The total students were 5,786,382, among them girls were 3,118,543, nearly 53.9 per cent of total students. The distribution of enrolment by school and Madrasa is given in Table 16.

TABLE 16  
NUMBER OF STUDENTS IN JUNIOR SECONDARY EDUCATION IN  
MADRASHA AND SCHOOLS, 2008, (IN LAKH)

Year	Junior Secondary schools			Madrasa			All		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2008	21.6	24.9	46.5	5.2	6.2	11.4	26.8	31.1	57.9

**Source:** National Education Survey (Post-Primary), 2008, BANBEIS (2009).

The share of girls in the total enrolment was higher compared to boys in both primary and secondary schools and madrasas—53.5 per cent in school and 54.4 per cent in madrasa.

#### 4.3 Growth of Junior Secondary Education Enrolment

Enrolment in junior secondary education was 2,395,626 in 1990, which increased to 6,258,664 in 2006 and decreased to 5,786,382 in 2008. Enrolment in junior secondary education depends on school age population, transition rates from primary education and continuation rate in junior secondary. The overall trend is shown in Table 17.

TABLE 17  
**NUMBER OF STUDENTS IN POST PRIMARY EDUCATION (1990-2008)**

Level of Education	Type	1990		1995		2000		2005	
		Total	Girls	Total	Girls	Total	Girls	Total	Girls
Junior	School	21,27,851	761,419	36,45,339	17,67,153	50,04,753	27,80,838	51,42,895	26,90,780
Secondary	Madrasa	267,775	18,119	524,375	150,102	926,750	421,035	10,89,539	547,185
	Total	23,95,626	779,538	41,69,714	19,17,255	59,31,503	32,01,873	62,32,434	32,37,965
Secondary Level	School	865,882	254,326	14,13,271	605,689	26,42,132	12,39,399	22,55,657	11,77,234
	Madrasa	105,508	5,909	206,612	48,961	452,092	182,381	507,816	248,773
	Total	971,390	260,235	16,19,883	654,650	30,94,224	14,21,780	27,63,473	14,26,007
Higher	College	568,461	160,397	910,873	319,763	10,32,083	437,259	833,777	327,512
Secondary	Madrasa	37,859	489	54,959	5,540	166,298	44,498	120,580	39,382
	Total	606,320	160,886	965,832	325,303	11,98,381	481,757	954,357	366,894
Bachelor Degree Level		283,112	49,344	378,130	106,882	718,958	248,903	481,703	159,913
Masters' Level		24,114	3,101	45,164	11,254	85,216	27,414	111,759	34,858
Fazil		21,929	83	33,822	3,823	37,220	5,382	40,320	7,912
Kamil		11,733	26	18,903	811	21,532	1,255	16,875	1,985
Tech- Voc Education		22,382	1,210	38,346	3,711	116,055	28,126	241,336	62,562
Professional Education		46,525	12,066	54,930	15,885	60,547	20,329	59,536	20,925
Teacher Education		9,393	3,793	11,170	4,397	20,911	7,619	36,265	13,525

*Cont. Table 17*

Level of Education	Type	2006		2007		2008	
		Total	Girls	Total	Girls	Total	Girls
Junior	School	51,62,703	27,00,316	46,00,755	24,83,907	46,48,842	24,94,760
Secondary	Madrasa	10,95,961	551,254	11,05,960	598,002	11,37,540	623,783
	Total	62,58,664	32,51,570	57,06,715	30,81,909	57,86,382	31,18,543
Secondary Level	School	22,56,476	11,76,673	20,33,802	10,79,853	21,91,699	11,53,429
	Madrasa	511,315	250,674	498,915	253,614	527,763	272,965
	Total	27,67,791	14,27,347	25,32,717	13,33,467	27,19,462	14,26,394
Higher	College	10,01,669	443,423	942,122	443,283	10,59,526	494,217
Secondary	Madrasa	121,126	39,876	126,999	49,749	143,710	59,661
	Total	1122795	483299	1069121	493032	1203236	553878
Bachelor Degree Level		812,534	293,768	953,760	338,270	11,78,397	433,540
Masters' Level		122,175	41,443	153,815	49,896	133,735	44,321
Fazil		53,821	12,728	55,111	15,258	57,577	16,711
Kamil		21,319	3,214	24,175	4,446	25,579	4,611
Tech- Voc Education		268,184	66,918	283,522	75,854	314,142	84,505
Professional Education		61,097	21,227	69,988	22,436	74,327	23,224
Teacher Education		37,558	13,807	40,189	15,916	42,363	17,278

Source: BANBEIS, Ministry of Education.

Enrolment in schools grew steadily up to 2006 and then decreased during 2006-2007 and then slightly increased in 2008. Enrolment in madrasa showed a steady growth since 2005.

#### 4.4 Projection of Junior Secondary Enrolment

Due to erratic behaviour of growth over the period 2000-2008, the projection was based on projection of gross enrolment rate (GER) in Junior Secondary Education. \* In the case of schools, the GER was between 52 per cent (2005) and 45 per cent (2008) in the case of boys and 58 per cent (2005) and 53 per cent (2008) in the case of girls.

In the case of madrasa, the GER was very close to 12 per cent for boys and 13 per cent for girls. For projection, we assumed the following GER for 2010, 2015, 2020, shown in Table 18.

TABLE 18  
PROJECTED GER IN JUNIOR SECONDARY EDUCATION (IN PER CENT)

Type	Sex	2008	2010	2015	2020
School	Boys	45	48	50	52
	Girls	53	55	57	59
Madrasa	Boys	10.7	12	14	16
	Girls	13	15	17	19

The projection of enrolment was obtained by using age group population and the projected GER given in Table 19.

TABLE 19  
PROJECTION OF ENROLMENT IN JUNIOR  
EDUCATION, 2010-2020, (IN LAKHS)

Type	Benchmark 2008			2010			2015			2020		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
School	21.6	24.9	46.5	23.2	25.6	48.8	24.01	26.6	50.7	23.6	26.1	49.7
Madrasa	5.2	6.2	11.4	5.8	6.99	12.8	6.72	7.9	14.5	7.3	8.4	15.7
Total	26.8	31.1	57.9	29.0	32.6	61.6	30.7	34.5	65.2	30.9	34.5	65.4

The decrease is due to reduction in the school age population.

## Secondary Education

### 5.1 Introduction

The secondary education covers grades 9-10 of education system in Bangladesh. All secondary schools, some schools and colleges, Dakhil, Kamil, Fazil and Alim madrasa offer secondary education.

The total enrolment in secondary education was 2,719,462 in 2008. Among them, 52.45 per cent were girls and 47.55 per cent were boys. Madrasa student comprised 19.4 per cent of all students. The details are given in Table 16.

### 5.2 Growth in Enrolment

Table 16 shows that enrolment increased rapidly during 1990-2000 in both schools and madrasa. In subsequent years, growth of school enrolment had an erratic trend. However, madrasa enrolment grew rapidly in the 1990s and slowed down somewhat during 2005-2008.

### 5.3 Projection of Secondary Education Enrolment

The trend of enrolment was so erratic that it leaves no possibility to make projection by using trend analysis. Again, the relevant age group population has also shown decreasing trend. Given these complex situation, we resort to using gross enrolment rates, which are more stable.

The projection of GER is assumed to be as follows:

TABLE 20  
PROJECTED GER FOR 2008 TO 2020 FOR THE AGE GROUP 14-15 YRS

Years		2008	2020	2015	2020
Schools	Boys	33	35	40	45
	Girls	36	38	43	48
Madrasa	Boys	8	11	18	25
	Girls	9	12	19	26

The above assumptions are conservative in view of different programmes being implemented to improve participation of children in education. Based on the above assumptions, the following enrolment projections are obtained.

TABLE 21  
PROJECTED SECONDARY ENROLMENT FOR 2008-2020 (IN MILLION)

Year	2008			2020			2015			2020		
	Boy	Girl	Total	Boy	Girl	Total	Boy	Girl	Total	Boy	Girl	Total
Secondary School	1.04	1.15	2.19	1.12	1.17	2.29	1.28	1.32	2.60	1.40	1.44	2.84
Secondary Madrasa	.2548	.2729	.5277	.35	.37	.72	0.58	.59	1.17	0.78	.78	1.56
Secondary	1.30	1.42	2.72	1.47	1.54	3.01	1.86	1.91	3.77	2.18	2.12	4.30



## Higher Secondary Education in Bangladesh

### 6.1 Introduction

Higher secondary education is an important subsector of education, serving as the preparation stage for higher education. Boys and girls of age 16 and 17 are deemed to be students of HSE. In reality, boys and girls of age 15, 18, 19 and 20 years also study in HSE. As a consequence, GER is substantially higher than NER. Higher secondary education is offered at school and colleges, intermediate colleges, degree colleges, and Alim, Fazil and Kamil madrasas.

The total enrolment in this sub-sector was 1,203,236 in 2008, nearly 19.6 per cent of age group population. Among all students, girls constitute 46 per cent and boys 54 per cent (Table 16). The madrasa enrolment comprises 11.9 per cent.

### 6.2 Growth of Enrolment in Higher Secondary Education

Table 16 presents enrolment statistics from 1990 to 2008. In 1990, the total enrolment was 606,000; it grew at very fast rate up to 2000, and then it gradually decreased and again increased between 2007 and 2008. Many factors are responsible for erratic behaviour. But pass rate in SSC is the determining one.

### 6.3 Projection of Enrolment

The up and down trend pose a major challenge for the projection. In our projection, we resort to using average annual growth rate during 1990-2008. The annual growth rates were (in per cent) presented below.

	Boys	Girls	Total
College	1.8	6.4	3.5
Madrasa	4.6	30.1 (3.7)	7.6

The growth rate of girls in madrasa was high because the base year population was very small. The growth rate for girls for 2000 to 2008 was 3.7. The projection for the two types of institution was worked out and presented in Table 22.

TABLE 22  
PROJECTED HIGHER SECONDARY ENROLMENT FOR 2008 - 2020  
(IN MILLION)

Year	2008			2020			2015			2020		
	Boy	Girl	Total	Boy	Girl	Total	Boy	Girl	Total	Boy	Girl	Total
College/ schools	.565	.494	1.059	.586	.559	1.145	.641	.762	1.403	.701	1.039	1.740
Madrasa	.0843	0.0597	.144	.0922	.064	.157	.115	.0769	.192	.144	.0922	.236
Total	.649	.554	1.203	.678	.623	1.302	0.756	.839	1.595	.845	1.131	1.976

In 2020, the GER will be 32 per cent of 16-17 years.

## Annex 2

### Suggested Schematic of the National Primary Education Development (NPED) Programme (2010-15)

Outline of Components and Implementation Structure for a Pragmatic Programme Approach

NPED Programme and Components	Implementation mechanisms	Financial mechanisms
<u>Programme Framework</u> : National Primary education development Programme (2010-15) with Multiple Components (Projects), and Multiple Delivery Mechanisms and Core Common Standards for Provisions, Curriculum and Learning Objectives	A National Steering Committee with Technical Sub-Committees for one or more components to adopt policy decisions, guide programme design and implementation and ensure resources <sup>1</sup>	A budget framework and financing principles established for total programme within the Sixth Plan financing framework, with flexible mechanisms for each project, overseen by the Steering Committee. <sup>5</sup>
<u>Project 1</u> Govt. Primary School Development (Ensuring all project inputs brought together to serve government schools with the programme framework and based on upazila-based primary education plan	DPE Directorates (with redesigned functions and capacity to serve upazila-based planning and management) <sup>2</sup>	Government budget allocations within a medium term budget framework (MTBF) with deficits made up by external assistance as sector support.
<u>Project 2</u> RNGPS Development – same objective as Project 1	DPE Directorates (with similar change in function and capacity as Project 1) <sup>2</sup>	Same as above
<u>Project 3</u> Ibtidayi Madrasa Development.	Madrasa Education Board (with major professional capacity enhancement)	Same as above
<u>Project 4</u> Curriculum, Learning Materials and Learning Assessment	Redesigned National Curriculum Board (with enhanced professional capacity and divesting from it textbook production/distribution) working closely with academic and research institutions	Same as above
<u>Project 5</u> Teacher Development and Support	Project management support unit designed and established at DPE (in close collaboration with Directorate of Secondary and Higher Secondary	Same as above

	Education for work with degree colleges)	
<u>Project 6</u> Basic Education Extension to Grade 8	Grade 8 basic education extension project designed and project management support unit set up at DPE (with Directorate of Secondary & higher education collaboration)	Same as above
<u>Project 7</u> Basic Education Infrastructure Development	Project Management support unit designed and set up at LGED. <sup>3</sup>	Same as above
<u>Project 8</u> Preschool Development	Project Management Support Unit designed and set up at DPE (implemented through NGOs)	Same as above
<u>Project 9</u> Educational Information and Statistics Capacity	A redesigned BANBEIS with independent statistics and data collection analysis and reporting capacity for all levels of education <sup>4</sup>	Same as above
<u>Project 10</u> Second Chance Basic Education (NFPE), primary/basic education for extremely vulnerable, hard-to-reach groups (linked with poverty reduction projects, e.g. CFPR)	NGOs and/or NGO Consortia working with local government.	External funding by Donor Consortium/ individual donor to NGOs –recorded and included within the national programme and subject to guidance /oversight of National Steering Committee .

### Notes:

1. The Steering body will guide National level management and implementation support units which will facilitate and support the work of district level technical teams and upazila education plans with the goal of empowering schools to assume and exercise greater authority and responsibility with accountability to the community (see note 5 below).
2. The projects for GPS, RNGPS and Madrasa development will essentially ensure that all activities are carried out within the framework of upazila-based planning for overall primary education development, bringing the inputs from different projects, such as curriculum development, infrastructure and teacher development, together to support the upazial's and individual school's development plan. A district level technical

capacity will be needed to support upazila primary education planning and to carry out the activities in a responsive and accountable manner with the goal of moving towards genuine decentralisation of primary education planning and management (See note 5 below).

3. It is expected that the project support unit at LGED will coordinate planning with different projects and upazila plans, provide technical support and set standards, but progressively the maintenance, repair and new school infrastructure building will be handed over to school managing committees.
4. An independent national capacity for educational statistics and information collection, analysis and reporting was the original rationale for BANBEIS. This need has been underscored repeatedly. In addition to the role of the independent statistics agency of BANBEIS, each project will still need its own monitoring mechanism. In the context of decentralisation, statistical capacities will be needed at the upazila and district levels. Development of these capacities and promoting their use in planning and management will also be tasks of BANBEIS, for which its own capacity has to be developed. A professionally enhanced BANBEIS can be the secretariat of a permanent statutory national education commission – an idea being advocated by education stakeholders.
5. One Ministry of Education for the education sector will bring all the projects under one sectoral MTBF (including the activities for extending basic education to grade 8, curriculum development and teacher development, which will go beyond the purview of present MOPME), but this is not an absolute prerequisite.

District technical teams will have to be formed to guide and assist coordinated planning including financial planning of the upazila-wise primary/basic education development. This will help transform the present highly top-down budget planning and management process. The different projects under the programme will depend on the district technical teams and the upazila planning process to ensure that their inputs serve the coordinated upazila plans and plans of individual schools.

### Annex 3

#### Selected Statistics on Secondary Education

(Tables have been compiled and contributed by Samir R. Nath)

TABLE 1

#### NUMBER OF SECONDARY EDUCATIONAL INSTITUTIONS IN GENERAL STREAM BY YEAR AND LEVEL OF EDUCATION

Year	Level of education				Total
	Junior secondary	Secondary <sup>1</sup>	Higher secondary		
			School & College <sup>2</sup> / intermediate college	Degree college <sup>3</sup>	
1995	2,349	9,663	603	671	13,286
1996	2,687	10,291	652	717	14,347
1997	3,002	10,776	901	664	15,343
1998	2,985	11,533	1,041	739	16,298
1999	2,846	12,614	1,422	785	17,667
2000	3,063	12,657	1,466	826	18,012
2001	3,245	12,921	1,485	868	18,519
2002	3,287	13,275	1,559	911	19,031
2003	3,982	13,404	1,579	1,069	20,034
2004	4,157	14,110	1,538	1,144	20,949
2005	4,322	14,178	1,813	1,187	21,500

Source: BANBEIS (2006).

Notes: 1. All of these institutions have junior secondary section and few have primary section. 2 A third of these institutions have junior secondary and secondary sections. 3 These institutions do not have junior secondary and secondary sections but have tertiary section.

TABLE 2

#### NUMBER OF SECONDARY EDUCATIONAL INSTITUTIONS IN MADRASA STREAM BY YEAR AND LEVEL OF EDUCATION

Year	Level of education		Total
	Dakhil	Alim and others	
1995	4,121	1,856	5,977
1996	4,687	1,968	6,655
1997	4,795	2,056	6,851
1998	4,868	2,088	6,956
1999	4,890	2,232	7,122
2000	5,015	2,264	7,279
2001	5,391	2,260	7,651
2002	5,536	2,284	7,820
2003	5,995	2,415	8,410
2004	6,315	2,504	8,819
2005	6,685	2,529	9,214

Source: BANBEIS (2006).

TABLE 3  
NUMBER OF SECONDARY STUDENTS IN GENERAL STREAM BY YEAR AND LEVEL OF EDUCATION

Year	Level of education			Total
	Junior secondary (Grades 6-8)	Secondary (Grades 9-10)	Higher secondary (Grades 11-12)	
1995	36,45,339 (61.1)	14,13,270 (23.7)	9,10,873 (15.2)	59,69,482 (100.0)
1996	40,25,340 (63.1)	15,60,466 (24.5)	7,93,049 (12.4)	63,78,855 (100.0)
1997	44,13,416 (63.0)	17,10,909 (24.4)	8,82,526 (12.6)	70,06,851 (100.0)
1998	47,09,540 (61.4)	20,59,538 (26.8)	9,02,384 (11.8)	76,71,462 (100.0)
1999	50,47,183 (61.6)	21,89,756 (26.8)	9,52,850 (11.6)	81,89,789 (100.0)
2000	52,04,753 (60.0)	24,42,132 (28.1)	10,32,083 (11.9)	86,78,968 (100.0)
2001	53,40,818 (60.4)	25,46,192 (28.8)	9,51,747 (10.8)	88,38,757 (100.0)
2002	55,30,209 (60.6)	26,31,925 (28.8)	9,70,379 (10.6)	91,32,513 (100.0)
2003	55,01,195 (60.2)	26,25,167 (28.7)	10,09,272 (11.1)	91,35,634 (100.0)
2004	51,44,193 (62.2)	23,59,054 (28.5)	7,67,789 (9.3)	82,71,036 (100.0)
2005	51,42,895 (62.5)	22,55,657 (27.4)	8,33,777 (10.1)	82,32,329 (100.0)

Source: BANBEIS (2006).

Note: Numbers in parentheses represent percentages of total enrolment in the secondary stream.

TABLE 4  
NUMBER OF SECONDARY STUDENTS IN MADRASA STREAM BY YEAR AND LEVEL OF EDUCATION

Year	Level of education			Total
	Junior secondary (Grades 6-8)	Secondary (Grades 9-10)	Higher secondary (Grades 11-12)	
1995	5,24,375 (66.7)	2,06,612 (26.3)	54,959 (7.0)	7,85,946 (100.0)
1996	5,76,620 (66.7)	2,27,197 (26.3)	60,435 (7.0)	8,64,252 (100.0)
1997	6,00,358 (66.5)	2,40,065 (26.6)	61,927 (6.9)	9,02,350 (100.0)
1998	8,22,054 (62.8)	3,60,780 (27.6)	1,25,743 (9.6)	13,08,577 (100.0)
1999	9,05,874 (60.0)	4,41,910 (29.3)	1,62,566 (10.8)	15,10,350 (100.0)
2000	9,26,750 (60.0)	4,52,092 (29.3)	1,66,298 (10.8)	15,45,140 (100.0)
2001	10,52,304 (60.8)	5,35,057 (30.9)	1,43,289 (8.3)	17,30,650 (100.0)
2002	10,73,968 (61.3)	5,45,518 (30.9)	1,45,972 (8.3)	17,65,458 (100.0)
2003	10,95,728 (63.5)	5,68,907 (31.8)	1,23,437 (6.9)	17,88,072 (100.0)
2004	10,37,799 (63.4)	4,83,704 (29.6)	1,13,731 (7.0)	16,35,234 (100.0)
2005	10,89,537 (63.4)	5,07,818 (29.6)	1,20,580 (7.0)	17,17,935 (100.0)

Source: BANBEIS (2006)

Note: Numbers in parentheses represent percentages of total enrolment in the madrasa stream.

TABLE 5  
PASS RATES IN THE SSC/DAKHIL EXAMINATIONS BY YEAR

Year	Secondary School Certificate (SSC)				Dakhil examination
	Humanities	Science	Business studies	Total	
1990	22.8	43.6	-	31.7	46.9
1991	55.9	76.5	-	64.9	55.2
1992	52.7	77.1	-	61.6	60.7
1993	54.2	78.5	-	61.1	57.4
1994	65.9	86.3	-	71.5	75.4
1995	67.9	87.5	-	73.2	68.4
1996	29.8	63.4	-	42.6	69.8
1997	40.7	70.9	-	51.5	68.2
1998	39.7	63.9	43.6	48.0	46.9
1999	47.3	66.8	58.7	54.6	71.9
2000	33.2	58.0	41.1	41.6	54.9
2001	23.9	47.8	43.9	35.2	48.0
2002	30.9	55.6	42.8	40.7	52.5
2003	26.1	46.5	40.1	35.9	41.9
2004	38.4	57.7	50.6	48.0	59.7
2005	40.1	66.6	55.4	52.6	62.1
2006	46.9	76.3	63.3	59.5	75.8

Source: BANBEIS (2006).

TABLE 6  
PASS RATES IN THE HSC/ALIM EXAMINATIONS BY YEAR

Year	Higher Secondary School Certificate (HSC)				Alim examination
	Humanities	Science	Business studies	Total	
1990	23.3	37.4	31.6	29.7	45.0
1991	45.6	57.7	85.8	50.8	49.2
1992	58.5	73.0	81.5	65.5	70.5
1993	39.8	64.8	58.9	46.3	56.0
1994	35.3	54.5	44.1	40.4	63.9
1995	41.9	61.8	49.9	46.4	63.6
1996	17.5	51.4	31.5	24.8	62.7
1997	34.5	52.3	44.4	39.3	56.0
1998	40.6	63.0	48.4	46.1	52.9
1999	51.1	67.1	72.1	56.1	56.9
2000	32.5	47.8	49.5	38.6	41.3
2001	23.7	32.7	37.8	28.4	35.8
2002	22.6	29.6	36.3	27.1	26.8
2003	33.0	38.7	49.6	38.4	39.9
2004	40.6	51.4	58.0	47.7	40.6
2005	51.8	66.9	65.7	59.2	63.6
2006	55.9	68.0	74.7	63.9	74.6

Source: BANBEIS (2006).

TABLE 7  
**NUMBER OF INSTITUTIONS AND TEACHERS BY MANAGEMENT AND  
 TYPE OF SECONDARY EDUCATIONAL INSTITUTION**

Type of secondary institutions	Number of institutions	Number of teachers
Government institutions		
Secondary school	317	7,306
Intermediate college	10	143
Degree college	125	3,023
Degree honours college	50	2,027
Masters college	66	4,905
Total	568	17,404
Non-government institutions		
Junior secondary school	3,461	24,751
Secondary school	14,352	1,66,999
Intermediate college	1,154	21,189
School and College	640	23,393
Degree college	1,141	41,331
Degree honours college	45	2,557
Masters college	24	1,161
Total	20,817	2,81,381

Source: BANBEIS.

TABLE 8  
**GOVERNMENT EXPENDITURE ON SECONDARY EDUCATION  
 (GRADES VI-X) AS % OF GNI**

Financial year	Revenue	Development	Total
1999-2000	0.80	0.45	1.25
2000-2001	0.83	0.44	1.27
2001-2002	0.82	0.44	1.26
2002-2003	0.84	0.45	1.29
2003-2004	0.84	0.42	1.26
2004-2005	0.91	0.42	1.33
2005-2006	1.01	0.28	1.29
2006-2007	1.02	0.29	1.31

Source: Al-Samarrai (2007). Financing Basic Education in Bangladesh.



TABLE 9  
**AVERAGE PRIVATE EXPENDITURE FOR SECONDARY EDUCATION, COST  
 FOR PRIVATE TUTORING AND ITS SHARE IN TOTAL PRIVATE COST BY  
 HOUSEHOLDS' WEALTH STATUS AND AREA**

Wealth status (Quintiles)	Total expenditure		Expenditure for private tutoring		% share for private tutoring in total cost	
	Rural	Urban	Rural	Urban	Rural	Urban
Poorest (bottom 20%)	4,049	5,295	663	1,327	16.4	25.1
Poor (next 20%)	5,115	7,562	1,071	2,417	20.9	32.0
Middle (next 20%)	6,024	10,312	1,452	3,563	24.1	34.6
Rich (next 20%)	7,330	13,676	2,154	5,091	29.4	37.2
Richest (top 20%)	9,426	17,135	3,116	7,140	33.1	41.7

**Source:** CAMPE (2007).

## Annex 4

### Selected Statistics on Vocational Education and Training

(Tables are drawn from World Bank 2006).

TABLE 1  
TRAINING CAPACITIES IN PUBLIC AND ACCREDITED PRIVATE  
INSTITUTIONS, 1998 AND 2005

Level/course	1998					
	Number of Institution		Intake Capacity <sup>1</sup>		Private Share (%)	
	Public	Private	Public	Private	Institutions	Students
<i>Vocational Education</i>						
Basic Skill Level	64	3	23,500	1,500	4	6
	Certificate Level...					
- SSC (Voc)	62	510	5,380	25,800	89	83
- HSC (BM)	-	220	-	8,800	100	100
- HSC (Voc)	51	-	1,520	-	0	0
<i>Vocational Training</i>						
Diploma Level	36	7	13,155	1,160	16	8
Total	213	520	43,555	28,460	71	40
Level/course	2005					
	Number of Institution		Intake Capacity		Private Share	
	Public	Private	Public	Private	Institutions	Students
<i>Vocational Education</i>						
Basic Skill Level	76	414	12,370	13,300	84	52
	Certificate Level...					
- SSC (Voc)	110	1,303	23,570	63,450	92	73
- HSC (BM)	-	955	-	50,000	100	100
- HSC (Voc)	64	-	5,560	-	0	0
<i>Vocational Training</i>						
Diploma Level	54	143	15,020	13,230	73	47
Total	304	1,860	56,520	89,980	86	61

**Source:** DTE, BTEB.

<sup>1</sup> This number is the total number of seats available for the first year of the course. The enrolment numbers will be higher as some of these courses (e.g. SSC/HSC) are 2 years courses).

TABLE 2  
CAPACITY UTILISATION IN THE VET SYSTEM

	Vocational Education			Vocational Training		
	Public	Private	Total	Public	Private	Total
No. of Institutes	48	252	300	9	17	26
Total Student Capacity	20,416	38,146	58,562	7,020	3,800	10,820
Total Registered Students	9,617	17,990	27,607	4,451	1,991	6,442
% Unutilised	52.9	52.8	52.9	36.6	47.6	40.5

**Source:** Author's calculations based on Institutional Survey conducted by team.

TABLE 3  
STATUS OF VET STUDENTS AFTER GRADUATION

	Employed (%)			Self-Employed (%)			Higher Ed. (%)			Unemployed (%)		
	Gov.	Pvt.	Total	Gov.	Pvt.	Total	Gov.	Pvt.	Total	Gov.	Pvt.	Total
<i>Vocational Education</i>												
Basic trades	9.80	15.60	14.10	2.00	4.80	4.00	21.60	24.50	23.70	66.70	55.10	58.10
SSC (Voc)	2.80	3.30	3.10	1.10	0.70	0.90	46.70	47.90	47.40	49.30	48.10	48.70
HSC (Voc)	28.60	NA	28.60	1.10	NA	1.10	20.90	NA	20.90	49.50	NA	49.50
HSC (BM)	NA	4.70	4.70	NA	0.70	0.70	NA	53.50	53.50	NA	41.10	41.10
<i>Vocational Training</i>												
Diploma and Others	28.55	15.32	18.25	1.79	2.53	2.39	21.41	36.24	32.92	48.22	45.89	46.41
Total	9.10	6.50	7.26	1.23	1.29	1.28	39.03	46.91	44.66	50.58	45.29	46.84

**Source:** Author's calculations based on tracer study conducted by team.

## **Annex 5**

### **Policy Considerations for ICT in Education**

(This annex has been contributed by Anir Chowdhury, 3 July 2009)

#### **Global Move from Quantity to Quality**

Since the 1990 World Conference on Education for All in Jomtien, Thailand, which urged all nations of the world to adopt policies that would ensure universal basic education by the year 2000, considerable progress has been made in expanding the capacity of the school systems in all regions of the world. Net enrolment has increased steadily in all developing regions, while the number of out-of-school children has decreased everywhere. Once pupils find seats in a classroom, they need quality instruction; otherwise, there will be little motivation to persist in school. In affirming the goal of quality education for all, participants in the Jomtien conference emphasised that reform efforts must focus on “actual learning acquisition and outcome rather than exclusively upon enrolment (UNESCO 1990).” To ensure quality of education, educators in Dakar World Education Conference urged countries to set specific qualitative targets. Learning achievement and teaching processes, they suggested, should be improved to the point that “an agreed percentage of an appropriate age cohort attains or surpasses a defined level of necessary achievement (UNESCO 2008).”

#### **The Need of ICT in Education to Improve Quality**

##### *The Need of ICT in Education*

One important parameter of quality in education today must focus on inclusion of Information and Communication Technology (ICT) in the curriculum. All aspects of society today are becoming more and more knowledge dependent. Everyday living that includes agricultural practices, manufacturing, banking, trade, health services, transportation, utilities, communication, and media are all increasingly assimilating and leveraging the flexibility and power of ICTs. Even in an underdeveloped country such as Bangladesh, electronic governance and electronic commerce initiatives are being increasingly planned and deployed to make the services provided by the government to the citizens and by the private sector to the consumers more timely, responsive and cost-effective. To create communities who can take advantage of these services and be citizens of the globalised world, primary and secondary education must play the most crucial role. This underscores the necessity to incorporate ICT education in primary and secondary levels in our country. “Without the ability to find the essential knowledge and acquire the skills for a constantly changing world, people will find themselves—in a very short time—“disadvantaged (Haddad and Draxler 2002).”

### *The Need of ICT in General Education*

The Education policymakers of our country and similar developing countries have recently woken up to the need for ICT Education to keep up with the demands of the information and knowledge dependent world. However, they have not thought deeply about how ICTs can also greatly help with the technology of education, namely the systematic approach to the teaching-learning process. The ICT tools have not been properly leveraged to enhance the teaching-learning process for the students, nor have they been utilised to improve the continuous upgrading or professional development of the teachers. In fact, ICT tools can provide the biggest boost—qualitatively and quantitatively—to the teaching-learning process of the students and professional development of the teachers.

Education should not only be seen as using technology for the sake of technology use but should be able to define technology uses which reinforce creativity, empowerment and quality and produce efficient learners and problem solvers. The Information Age should be seen as triumph of knowledge, not just triumph of technology. It is for this very reason that in many countries—both developed such as UK, and developing such as Costa Rica—ICTs have been successfully intertwined with pedagogy, and science, math and language lessons are provided by using ICTs as teaching and learning aid.

In this new paradigm, ICT-assisted teaching and learning are not a substitute for schooling. They constitute one integral element of this education model—supplementing and enriching traditional institutions, delivery systems, and instructional materials. In this sense, ICT-assisted learning contributes to the whole system of knowledge dissemination and learning. There are at least five hierarchical levels, at which computer as an educational tool can be used: presentation, demonstration, drill and practice, interaction, and collaboration. Research and experience show that computers used in the classrooms enhance the learning process in many ways (Haddad and Draxler 2002):

- allow materials to be presented in multiple media for effective learning;
- motivate and engage students in the learning process;
- bring abstract concepts to life through use of multimedia. For example, a Physics experiment involving abstract concepts in electromagnetism can be visually animated to explain the concepts and link to real life;
- enhance critical thinking and other higher levels of cognitive skills and processes;
- provide opportunities for students to practice basic skills on their own time and at their own pace;
- bring the world into the classroom.

ICT-assisted learning thus has tremendous potential that can animate, simulate, capture reality, add movement to static concepts, and extend our touch to whole universe.

### **Wrong Focus in Bangladesh: ICT Education, and NOT ICT for Education**

In Bangladesh, although enormous amount of resources are being spent on providing computers to schools, ICT is being seen as an end in itself and not as a tool for enhancing quality of non-computing Education such as the Sciences, Mathematics and English. A lack of realisation on the part of our education policy makers about the pedagogical aspects of leveraging ICTs creates the following misconceptions:

- providing ICT tools such as computers to schools will turn students into information workers
- providing internet connectivity to these computers will bring the world into the classroom, thus making the students globalised citizens
- teaching students and teachers basic word processing and spreadsheet, and, in cases, simple programming language that have no relevance to the subjects that the students are supposed to learn such as the Sciences, Mathematics and English will improve the quality of our Education system.
- one-shot training to teachers will prepare them adequately to plan what they need to teach, figure out how they need to integrate the newly acquired tools in their teaching process, and impart their newly gained knowledge to the students effectively.

Research has revealed that in reality what happens is the following, in sharp contrast to the popular objectives of the education planners stated above:

- computers are used at best to turn students into typists, and hardly information workers who have the capacity to leverage ICT tools to explore, learn and apply knowledge to solving life's problems.
- internet connectivity is extremely rare at school levels in Bangladesh, but the lucky few who have it use it for email and unproductive chat sessions, without really exploring the world of information out there.
- features of ICT technologies that are taught have no relationship to what the students really need to learn, i.e. the Sciences, Mathematics and English—subjects where the poorest results are seen—and the whole pedagogical aspect of utilising ICT for improving quality of education is missing.
- lack of a continuous learning process for the teachers, that is, the lack of a continuous teacher training process, does not really prepare the teachers to effectively utilise the one-shot learning during a compressed teachers' training session. This is true for all

subjects of teacher training, be it ICT or non-ICT subjects such as the Sciences, Mathematics and English.

The result is a woefully inadequate educational return on the costly investment of bringing these technologies to the school.

### **Teacher's Empowerment: ICT is Not Teacher's Replacement, but Teacher's Aid**

Experience around the world in developing and industrialised countries has shown that teacher training in the use and application of technology is the key determining factor for improved student performance (in terms of both knowledge acquisition and skills development enabled by technology). Educational technology is not, and never will be, transformative on its own—it requires teachers who can integrate technology into the curriculum and use it to improve student learning. In other words, computers cannot replace teachers—teachers are the key to whether technology is used appropriately and effectively (Carlson 2002).

Knowledge is expanding rapidly, and much of it is available to teachers and students at the same time. This puts an unavoidable burden on teachers to continue updating their knowledge and exposing themselves to modern channels of information. The social environment in many countries is making it more difficult for teachers to manage classrooms and learning processes. Teachers' authority is challenged and their knowledge questioned continually. Students, in many instances, are becoming less respectful and more belligerent, and in some extreme cases, teachers are functioning in the face of physical threats and psychological duress (Haddad and Draxler 2002).

Obviously, teachers cannot be prepared for these unfolding challenges once and for all. One-shot training, no matter how effective and successful, will not suffice. A new paradigm must emerge that replaces training with lifelong professional preparedness and development of teachers along the following three dimensions (Carlson and Gadio 2002):

- Initial preparation/training that provides teachers with a solid foundation of knowledge; proficiency in pedagogical, social, and organisation skills; deep understanding of the teaching/learning policies and materials they will be dealing with; and broad familiarity with sources of educational materials and support. It is equally crucial that candidates have a sophisticated grasp of the continuous exploration, assessment, and acquisition of new knowledge and competencies, according to future demands.
- Structured opportunities for retraining, upgrading, and acquisition of new knowledge and skills. Many professions have such requirements to renew certification for practice. It is only logical for the critical profession of teaching to demand recertification every two or three years based on evidence of professional upgrading, and it is equally

imperative for education authorities to ensure that opportunities and facilities for such upgrading are provided systematically.

- Continuous support for teachers as they tackle their day-to-day responsibilities and challenges.

ICTs can support the teacher in all these three areas by providing best practices of pedagogy and subject knowledge. Also, internet connectivity can provide the teacher with a universe of exercises for the students to build their knowledge, collaboration skills and analytical ability.

*Possible Policy Clauses in the National Education Policy regarding ICT in Education*

To think about how ICTs should be weaved into the education policy, it would be useful to keep in mind the relevant goals and objectives of the education system in Bangladesh.

- Education system must be designed based on an analysis of demands of skilled and semi-skilled human resources to meet the country's internal needs and to meet global opportunities where the country can position itself as a producer of adequate quality human resources (Example: China).
- It is important to develop niches for the country keeping an eye towards the future (at least 10-years) to make the country reach its stated middle-income status and be globally competitive in some skills. These skills need to be identified and incorporated in the implementation plan for the policy.
- Elimination of rote memorisation and attaining *21<sup>st</sup> century skills* must be a stated goal of modern education system. These skills include critical thinking, problem solving, communication and collaboration, creativity and innovation, media and ICT literacy and entrepreneurship. The education system must be designed to develop these skills and the assessment mechanism must measure these.
- Focus on mathematics, science, technology---not just বিজ্ঞানমনস্কতা ---must be emphasised in the goals and objectives (Example: China, other countries).
- Empowering the teachers and keeping them constantly inspired and motivated should be seen as a stated goal of the education system. Motivated teachers are the single-most important linchpin for educational success. Reforming the status and capacity of teachers can overcome most other educational hurdles.

In light of the above desirable objectives for our education system, the use of ICTs in the education sector should be seen from four different perspectives:

1. Empowering teachers with pedagogy best practices and content knowledge in an anywhere, anytime manner to reduce disruption of school calendar.



2. Improving the quality of education in pre-primary, primary, secondary, vocational, non-formal and tertiary education and in lifelong learning through the use of supplemental digital learning material.
3. Aligning the curriculum at different stages, including vocational, towards the need of ICT-enabled jobs.
4. Use of ICTs to make management and administration of education more effective, efficient and transparent.

Below are some specific recommendations that may be suitable for inclusion in National Education Policy.

#### *Empowering Teachers*

- ICTs can be very effectively and cost effectively used to impart teacher training to teach best practices of classroom management and teaching styles. For example, use of video, animation to capture good practices in pedagogy from model schools and best teachers from around the country and conducting teacher training using these ICT materials. This is a significant improvement over the current practice of lecture-method style of teacher training.
- In-service training including refresher training may be given using various ICT means. For example, use of Interactive Radio Instruction for in-service real-time teacher training and guidance in primary school classrooms.
- Content knowledge can be imparted to teachers much more effectively than blackboards by using video and animation, and presentation slides. For example, abstract concepts are much more easily communicable using visual methods; languages can be much more easily taught using audio materials on inexpensive MP3 players and mobile phones.
- The digital material in the form of CDs/VCDs/MP3 audio files, among other formats, must be supplied to teachers so that they can replay these materials anytime, anywhere for repeated learning and ready reference.
- Refresher training must be encouraged around the country using ICT materials to reduce disruption of class calendars by teachers having to travel to great distances for training.
- Lesson plan must incorporate project-based learning going beyond rote memorisation. ICTs may be a tool to develop such lesson plans and projects (e.g. INTEL Teach programme).
- Massive efforts must be mobilised through public private partnerships to develop digital material (video, animation, audio, etc.) by the government, private sector including mobile phone operators and development partners.

- A central repository for e-Learning content for teacher training may be created.
- Incentives to teachers may be provided for e-Learning content development.
- For primary education, Upazilla Resource Centres (URCs) need to be strengthened and for secondary education, URCs need to be created, with ICT infrastructure, digital teacher training material and skilled human resources (instructors) to support ICT-enabled teacher training.
- All teacher training institutions must have reliable, high-speed internet connectivity.
- The seven educational boards have ICT capacity that is currently under-utilised. They may be used as teacher training centres for ICTs.

#### *Improving Educational Quality*

- One needs “21<sup>st</sup> century skills” to survive and thrive in the 21<sup>st</sup> century. This is true for individuals who now compete in the globalised world and also true for countries whose progress depends more on the quality of human resources than on the natural resources. Beyond basic knowledge which is what our current educational effort focuses on, new focus needs to weave critical thinking, analytical ability creation, collaboration skills, etc. into the education process. ICTs have proven to be effective and cost-effective in creating these skills (e.g. INTEL Teach and Learn programmes).
- Every school (secondary by a certain date and primary by a later date) must be equipped with internet-enabled computer laboratories with low cost and low power equipment for access by all students.
- The teaching-learning process and school calendar must be very clearly adjusted to make use of ICTs in schools. Otherwise, the ultimate result will be basic ICT literacy which will have marginal impact in the quality of education.
- Textbooks may be placed in the internet so that chronic delays in textbook distribution at the beginning of the year may be addressed to some extent by local printing of early pages of the textbooks.
- Use of TV in imparting lessons in all levels of education including teacher training, literacy, and vocational and technical education must be encouraged (e.g. Malaysian TV Pendidikan). The second terrestrial channel of BTV may be used very cost effectively for this. A project has been developed by the Ministry of Information in this regard.
- Use of digital materials on radio, MP3 players, CD/VCD/DVD, etc., especially for science, mathematics and English, must be introduced and expanded. Online encyclopedia and other materials for geography, history and other subjects may be used.
- The telecentres could function as community literacy centres. Digital materials featured on TV, radio and CD/VCDs may be helpful in this regard (e.g. Egypt which has lowered the 11-month literacy course to 4 months using digital materials).

- Internet access (Wifi or similar mechanism) must be ensured to all students in universities.
- Loan facilities need to be developed for students and teachers to buy computers, laptops, and other electronic accessories.
- Bangladesh Education and Research Network needs to be established across all tertiary educational institutions and research organisations. This network must be connected to appropriate international counterparts.
- Access to international digital publications and online journals to departments and then to students must be ensured as soon as possible.
- Liaison may be developed with online universities and courses may be offered online. Local universities should be encouraged to offer courses online (e.g. African Virtual University).
- Research tied to solving relevant national problems should be encouraged. Irrelevant research initiatives should be discouraged (e.g. lessons from agriculture research from Bangladesh which has the best track record in the country of producing country-relevant research in higher education.) All university level research must be featured online for free access or low-cost subscription.
- Establish ICT Centres of Excellence with necessary long-term funding to teach and conduct research in advanced ICTs.
- Organise regular national (including at grassroots level), regional and international competitions on ICT related topics and support participation of national teams in international events.

#### *Creating Workforce for ICT-enabled Employment*

- ICT literacy must be a part of all post-secondary educational programmes.
- A worker from Bangladesh now competes with Sri Lanka for a construction job in Malaysia. Basic ICT literacy has been included in the '21<sup>st</sup> century skills' already, and will be an increasing sought-after requirement in all foreign jobs. Thus, ICT literacy programmes need to be incorporated in primary, secondary education and vocational education in phases.
- Technical and vocational curriculum may be set based on forecasting demand, both internal and foreign. Such demand forecasting capacity must be developed within the government. This must see coordination across Ministry of Primary and Mass Education, Ministry of Education, Ministry of Youth and Sports, Ministry of Labour and Employment, Ministry of Expatriate Welfare and Ministry of Foreign Affairs to research and identify emerging areas of domestic and foreign needs for skilled and semi-skilled human resources, implement a continuum of skills development and market them.

- Specific emphasis must be placed in IT-enabled services such as graphic design services, multimedia, animation, CAD/CAM, call centres, etc. (Source: 2008 ITC funded study “Strategy for Developing ITES in Bangladesh,” ILO-funded “TVET Reform Project 2007-2012”).
- Assess skills of ICT professionals and meet gaps with targeted training programmes to overcome the short-term skills shortage in the ICT industry and adopt continuing education and professional skills assessment and enhancement programmes.
- Open University must be aligned to develop appropriate material for market-driven TVET programmes, especially focused on ICTs.
- Institutionalisation of indigenous skills development, such as the likes of Jinjira, Dholai Khal, Syedpur, Geneva Camp light engineering workers, by capturing videos of skills development practices.

#### *Improving Educational Management and Administration*

- Sensitisation and awareness building workshops must be conducted for educational planners, policymakers and leaders on the use of ICTs in education.
- Educational MIS and GIS that consolidate and interoperate across various efforts across Ministry of Education, Ministry of Primary and Mass Education, DPE, DSHE, BANBEIS, and other relevant agencies. The resulting decision support system must be able to answer various policy decision questions.
- Technical interoperability across various policy databases must be ensured.
- Decentralised databases need to be developed at the upazilla level with connectivity and synchronisation capacity to central databases. This will help in local level planning and is already being piloted at the Directorate of Primary Education (DPE).
- All educational administrative offices upto the upazilla level must have reliable, high-speed internet connectivity.
- Evaluation of ICT literacy should be ensured as part of public service entrance exams.
- All education officers will be encouraged to develop an educational improvement plan for their respective areas which will include an “ICT in Education” plan.

#### *Policy Issues for ICT Infrastructure*

- Low cost internet access to educational institutions.
- Low cost equipment (computers, laptops, MP3/MP4 players, mobile phones, other digital devices) for educational use.
- All public libraries should be equipped with cybercafé facilities with reliable, high-speed internet access and subscription to online journals and publications.
- Special loans for students and teachers for ICT equipment acquisition.

- National “One laptop per teacher” programme supported by government through loans, subsidies, public-private partnerships, etc.
- Local manufacturing of ICT equipment such as laptops by offering incentives to international players.
- Ensuring reliable power to all educational institutions.
- Research and development of alternative power sources for ICT equipment.
- National power consumption standards for ICT equipment considering the exponential rise in the use of these equipment all around the country, especially in education.
- Public-private partnerships for introducing ICT in education. The model for this partnership may vary for primary, secondary, vocational and tertiary levels. This must include ICT equipment, connectivity, digital material and ICT skills development.

## Chapter 3

# A Study on Health, Nutrition and Population Planning in Bangladesh

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### 3.1 BACKGROUND AND OVERVIEW

#### 3.1.1 Background

Health is now universally regarded as an important index of human development. Ill health is both the cause and effect of poverty, illiteracy and ignorance. Policies of human development not only raise the income of the people but also improve other components of their standard of living, such as life expectancy, health, literacy, knowledge and control over their destiny. Health is both a major pathway to human development and an end product of it. Health and development converge and contribute to each other. While it is true that health is not everything, it is also true that without health, everything else is nothing.

Alma Ata conference in 1978 heralded the vision of a new and better future for all of the human family: Health for all by the year 2000. But for most villages and towns in Bangladesh, not much has changed for the better since 1978. It may be mentioned here that better health is one of the prime objectives of development. And we think that it is very important to realise this when we look at development at large. Whenever the health component is forgotten, we forget, at the same time, the vital factor in development, namely the human being, his creative energy, his physical energy. The interrelationship between health and general economic development is complex and poorly understood. The social components of a better quality of life are benefits in themselves, but, more importantly, they can be used as instruments of change or as means of increasing productivity. Better health is both an objective of and an instrument for development. Poverty leads to hunger and malnutrition and resultant diseases—low birth-weight (LBW) babies, malnourished adolescents and malnourished mothers.

The ultimate focus of economic development is human development. That is we are ultimately concerned with what people are capable of doing or being. Can they live long? Can they be well nourished? Can they escape avoidable illness? Human

fulfillment is about whether people live or die, whether people eat well, are malnourished or starve, whether women lead healthy and tolerable lives or are burdened with annual child bearing, a high risk of maternal mortality; whether people have easy access to modern medicare. These are all aspects of standard of living. But in spite of sustained efforts to reduce poverty and high rates of morbidity and mortality and to improve nutritional status, a great deal remains to be done, especially for the poor in general and women and children in particular.

The goal of the health, nutrition and population (HNP) sector is to achieve sustainable improvement in the health, nutrition, and reproductive health, including family planning, for the people, particularly of vulnerable groups, including women, children, the elderly, and the poor.

Within the context of the MDG/PRSP and SFYP, the HNP sector emphasises reducing severe malnutrition, high mortality and fertility, promoting healthy life styles, and reducing risk factors to human health from environmental, economic, social and behavioural causes with a sharp focus on improving the health of the poor. More specifically, with regard to MDG/PRSP in the health sector, the main emphasis is on the human dimension of poverty, i.e. deprivation in health, deprivation in nutrition including water and sanitation, as well as related gender gaps. The major MDG/PRSP targets include the following: (i) reducing infant and under-five mortality by 65 per cent and eliminate gender disparity in child mortality; (ii) reducing the proportion of malnourished children by 50 per cent and eliminate gender disparity in child malnutrition; (iii) reducing MMR by 75 per cent and ensure availability of reproductive health services to all; and (iv) reducing the burden of TB and other diseases.

### ***3.1.2 Health Poverty Interface***

Health has importance in three distinct ways: (a) intrinsic importance, (b) instrumental importance at personal and social levels, and (c) empowerment importance. In intrinsic sense, health is important because it is a direct measure of human well-being. It is fulfillment of life and a valuable achievement in itself. In the instrumental sense, better health is important in many ways. For example, good health has an economic rationale. Better health reduces medical costs, both of the government and of the households. In the case of children, better health leads to better attendance in school and higher levels of knowledge attainment. Better education and knowledge leads to better paid jobs and larger benefits to the future generation. For women, better health status is achieved through empowerment. But, it also empowers them to participate in economic and public life.

### **3.1.3 Factors Affecting Health Status**

In developing countries such as Bangladesh, there are a number of factors that affect people's health status. There are demand-side factors, such as income, assets, social practices as a result of ethnicity and religion, lifestyle, and supply-side factors, such as the health care system, health expenditure, etc. There are also environmental factors and gender inequality related factors that influence health status. These factors include, among others, (i) poverty, food security, food pricing and malnutrition; (ii) environmental pollution and degradation; (iii) reproductive health problems; (iv) social development, especially literacy rates; and (v) public health care delivery system.

Evidence from Bangladesh and elsewhere suggests that the pattern of diseases experienced by the poor differs significantly from that of the rich. There are primarily two broad categories of diseases, that of poverty and that of affluence. Poverty leads to malnutrition and resultant diseases, which are common in the developing countries. Lack of food security is another major problem that leads to malnutrition. Other factors related to malnutrition are production and availability of food-grains, level of nutrition knowledge, level of illiteracy and ignorance, consumption patterns, distribution of income and food, level of employment, unsafe drinking water and poor sanitation facilities and non-availability of health services. Good nutrition not only gives adequate calories for functioning but also increases the immunity to diseases and infections. The poor tend to live in unhygienic environmental conditions and are at high risk of infections and diseases.

The poor are trapped in the vicious cycle of malnutrition, low birth weight babies, malnourished adolescents and malnourished pregnant mothers. The specific burdens of malnutrition are (a) protein energy malnutrition (PEM), and (b) disorders resulting from deficiency of iron (anaemia), vitamin A (keratomalacia or nutritional blindness), iodine (goiter) and vitamin B (angular stomatis, gossitis). Groups that are most vulnerable to malnutrition are infants, pre-school children, especially girls, pregnant and lactating mothers, landless labourers, urban slum dwellers and tribal communities.

Most health problems of women are related to their reproductive system or are caused by their reproductive function. Other health problems, such as that of malnourishment or environmental pollution, etc., get aggravated due to their reproductive function. Starting from anaemia to complications of the gynecological system, women are constantly under health stress. Women's health problems are broadly affected by two factors, biological (natural) and socio-economic and cultural (human-made), besides individual attributes and availability of health and nutritional



services. Even access of women to health and nutritional services is partly determined by socio-cultural factors. Each of these factors influences her health in varying proportions over her life cycle. But, more than others, socio-cultural factors determine the major part of a woman's physical and mental health status. Thus, improvement in women's health requires change in socio-cultural dimensions of a society and overall improvement in women's situation. In short, improvement in overall health situation in any society is also related to socio-cultural dimensions of the particular society.

### **3.1.4 Gender Dimension in Health and Nutrition**

Findings from various studies indicate that women and girl children are more vulnerable to death and disease compared to their male counterparts. The disadvantages faced by girls start from early childhood which continues throughout their entire life span. With regard to access to food, nutrition and health care women and girls are much more disadvantaged compared to men and boys. The situation is more precarious for women in the reproductive age group and the status of reproductive health is really very poor in Bangladesh.

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and its functions and processes. Reproductive health therefore implies that (a) people have the ability to reproduce as well as to regulate their fertility; (b) women are able to go through pregnancy and child-birth safely; (c) the outcome of pregnancy is successful in terms of maternal and infant survival and well-being; and (d) couples should be able to have sexual relationships free of the fear of unwanted pregnancy and of contracting diseases.

While reproductive health programmes should also address the needs, roles and responsibilities of men and young persons, the real thrust of reproductive health strategies and programmes must ensure that women are able to fulfill their reproductive roles safely because, to a great extent, the burden of reproductive ill health is borne by women:

- Women assume most of the responsibility of contraception;
- Women face the risk of child bearing;
- Women are biologically and socially more vulnerable to sexually transmitted diseases including HIV/AIDS and cancers;
- Women are exposed to gender-based violence and abuse;
- Women can suffer from complications of unsafe abortions.

Implicit in these conditions are the rights of men and women to be informed of and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, and the right of access to appropriate health care services that will enable women to go safely through pregnancy and child birth and provide couples with the best chance of having a healthy infant.

The reproductive health status of Bangladesh women is very poor, poorer than that found in many developing countries in South Asia. Every year millions of women in Bangladesh experience life threatening high risk, chronic or other serious health problems related to pregnancy or childbirth. About 12,000 women of reproductive age group die each year in Bangladesh due to maternal causes.

Many of these deaths associated with pregnancy and childbirth are, however, needless and avoidable. Pregnancy is not a disease, and pregnancy related mortality and morbidity are preventable with attainable, simple and cost-effective interventions. Making motherhood safe requires action on three fronts simultaneously: (a) reducing the numbers of high-risk and unwanted pregnancies, (b) reducing the numbers of obstetric complications, and (c) reducing case fatality rates in women with complications.

### ***3.1.5 Poverty and Reproductive Health***

Poverty affects both preventive and curative aspects of health. At the preventive level, the poor have inadequate ability to acquire a nutritious diet, better living and working conditions and other attendant factors that would prevent ill-health. The result is endemic occurrence of communicable diseases and diseases related to deficient nutrition. At the same time, health care services available to the poor in terms of physical accessibility, monetary cost and effectiveness are minimal. The negative effect of poverty on women's health is even more acute because of the existing gender bias against women. Gender bias in nutrition and health care in childhood, early marriage and conception, lack of voluntary check on the family size and poor state of pre-natal and maternal health care services only intensify women's health problems.

Further, women's poor health status through various intervening variables affects their reproductive choice. Poor health leads, for example, to a high incidence of wasted pregnancies and secondary infertility. This is an important reason why women do not want to voluntarily limit their family size. Also, poor living conditions and other factors increase infant mortality rate (IMR), and wherever IMR is high, couples are reluctant to limit their family size. Poverty also leads to the belief that more mouths to feed also mean twice the number of hands to work. Thus,

children are considered as economic assets and the greater the number of children greater the sense of security. Environmental degradation makes fuel wood gathering, livestock pasturing and water fetching more difficult (World Bank 1993). As these are tasks that children can do, the value of children increases for parents. And these links are strongest where female fertility is already high.

Poverty also indirectly denies access to contraceptive knowledge and methods to an impoverished woman even if she is inclined to limit her family. The limited income of the household does not allow her to take a day off in order to access information on contraceptive methods from the local primary health care centre or undergo sterilisation.

### ***3.1.6 The PRSP and Millennium Development Goals***

Poverty reduction (with special focus on the removal of hunger and chronic poverty) and accelerating the pace of social development (with particular emphasis on empowering the poor and achieving gender equality) have been made the overarching strategic goals in the light of MDGs. Bangladesh would try to achieve the following targets in the HNP sector by 2015:

- i. To reduce infant and under five mortality rates by 65 per cent, and eliminate gender disparity in child mortality;
- ii. To reduce the proportion of malnourished children under five by 50 per cent and eliminate gender disparity in child malnutrition;
- iii. To reduce maternal mortality rate by 75 per cent and ensure access of reproductive health services to all;
- iv. To reduce substantially, if not eliminate totally, social violence against the poor and the disadvantaged groups, especially violence against women and children; and
- v. To reduce the burden of TB and other diseases.

The concern for health is of particular interest because the health-related goals and targets (such as reducing child mortality by two-thirds and maternal mortality by three-quarters) depend on health status of the people and health care services which are available, accessible and affordable.

### ***3.1.7 The HNP Strategies and Government's Vision for the Health Sector***

Within the broader context of MDG, the Government of Bangladesh's vision for health, nutrition and population sector is as follows:

*The Government seeks to create conditions whereby the people of Bangladesh have the opportunity to reach and maintain the highest attainable level of health. It is a vision that recognizes health as a fundamental human right and, therefore, the need to promote health and to alleviate ill health and suffering in the spirit of social justice. This vision derives from a value framework that is based on the core values of access, equity, gender equality and ethical conduct.*

### **3.1.7.1 Bangladesh Awami League's Vision 2021: Targets for the Health Sector**

Bangladesh Awami League is committed to freeing Bangladesh from hunger and malnutrition and building a country where citizens will be able to live a prosperous and happy life. The year 2021 will mark the golden jubilee of Bangladesh's independence, while the year 2020 will be the hundredth birth anniversary of the Father of the Nation, Bangabandhu Sheikh Mujibur Rahman.

The ruling party, Bangladesh Awami League, envisions a Bangladesh which by 2020/2021 will be a middle-income country where poverty will be drastically reduced, where citizens will be able to meet every basic need and where development will be on fast track, with ever-increasing rates of growth. Towards that goal, Bangladesh Awami League has prepared some strategic goals and milestones for the health sector.

#### ***Proposed Milestones for Vision 2021***

To achieve their goals of vision 2021, the present government has set some milestone in health sector (mentioned in the election manifesto of Bangladesh Awami League) as follows:

- 2011: Supply of pure drinking water for the entire population.
- 2012: Self-sufficiency in food.
- 2013: Each house brought under hygienic sanitation.
- 2021: Poverty rate comes down to 15 per cent from 45 per cent at present.
- 2021: 85 per cent of the population have standard nutritional food.
- 2021: Poor people ensured a minimum of 2122 kilo calories of food.
- 2021: All kinds of contagious diseases eliminated.
- 2021: Longevity increases to 70 years.
- 2021: Infant mortality comes down to 15 from 54 per 1,000 at present
- 2021: Maternal death rate reduced to 1.5 per cent from 3.8 per cent.
- 2021: Use of birth control methods increased to 80 per cent.

The HNP sector emphasises reducing severe malnutrition, high mortality (of children and women) and fertility, promoting healthy life styles, and reducing risk

factors to human health from environmental, economic, social and behavioural causes with a sharp focus on improving the health of the poor. The main emphasis is on the human dimension of poverty, i.e. deprivation in health, deprivation in nutrition including water and sanitation, as well as related gender gaps.

While preparing the Sixth Five Year Plan for the Health Sector, the following questions need to be addressed:

- Are resources flowing to address diseases of the poor?
- Are resources flowing to services that benefit the poor to a larger extent?
- Are resources flowing to benefit mothers and children to a larger extent?
- Are resources flowing to appropriate levels of health care delivery (i.e. Upazila and Union level facilities)?
- Are resources flowing to regions with the most in need?
- Are resources flowing to rural areas or to urban slums?
- Are the benefits from health spending flowing directly to low-income households?

### **3.2 THE STATUS OF MATERNAL AND CHILD HEALTH AND NUTRITION**

#### ***3.2.1 Mother and Child Health in Bangladesh***

##### **3.2.1.1 Infant and Under-five Mortality**

One of the MDG and PRSP health targets is to reduce infant and under-five mortality and eliminate gender disparity in child mortality and nutrition. The mortality of children is an important indicator of well-being in its own right, as recognised by its inclusion among the MDGs. The mortality of children not only represents an enormous waste of human resources, but also a major cause of suffering of the population. The millennium development goal for Bangladesh is to reduce the under-five mortality rate from about 150 in 1990 to 50 by 2015.

Bangladesh has made significant progress in health indicators over the last 30 years and has also achieved substantial progress in reducing death rates, especially mortality of under-five children. During this period infant and child mortality has declined substantially. The IMR declined from 125 per 1,000 live births during the 1984-85 to 66 in 1999-2000 and further to 52 during 2007. Similarly, the under-five mortality rate declined from 250 per 1,000 live births during the early 1970s to 83 per 1,000 in 1999-2000 and further to 65 during 2007. The crude death rate (CDR) declined from 12 per 1,000 population in 1985 to 4.8 during 1999-2000 and slightly increased again to 6.2 during 2007.

TABLE 3.1  
TRENDS IN EARLY CHILDHOOD MORTALITY RATES  
FROM 1993-1994 TO 2007 BDHS

Data source	Approximate Reference period	Neonatal Mortality (NN)	Post neonatal Mortality (PNN)	Infant Mortality (1q0)	Child Mortality (4q1)	Under-five Mortality (5q0)
BDHS 2007	2002-2006	37	15	52	14	65
BDHS 2004	1999-2003	41	24	65	24	88
BDHS 1999-2000	1995-1999	42	24	66	30	94
BDHS 1996-1997	1992-1996	48	34	82	37	116
BDHS 1993-1994	1989-1993	52	35	87	50	133

However, even though there has been substantial reduction in child mortality, there is little room for complacency. There has not been desired progress in improving nutritional situation of children. Moreover, there exists significant variation in child mortality by gender of children, by socio-economic status of households, and also by regions. Hence, the challenge for government as well as private sector would be to reach the marginalised groups and deprived regions (i.e. providing health care to deprived locations/ people) and overcome the regional and gender disparity.

There has been a remarkable convergence in IMR across rural and urban areas. The IMR in rural areas was 27 per cent higher than in urban areas in 1993-94, but it was only 9 per cent higher in 2007. Similarly, the urban-rural differential in under-five mortality declined from 34 per cent to 14 per cent during the same period. There are also significant regional variations in under five mortality rates; against the national child mortality rate (CMR) of 65, Sylhet region has an under five mortality with 107 deaths per 1,000 live births, which is much higher than other regions, while Khulna region (58 deaths per 1,000 live births) has got tremendous success in reducing under five deaths compared to other regions, which is also lower than national CMR of 65.

### 3.2.1.2 Socio-economic and Gender Differential in Childhood Mortality

There is apparently no gender differential in IMR in Bangladesh. In fact, IMR is observed to be slightly higher for males than females. According to DHS data, while in 1993-94 female IMR was 87 per cent of male IMR (93 vs. 107), it has risen to 94 per cent by 1999-2000 (77 vs. 82), and the proportion remained the same during 2007 (72 vs. 77). However, survival advantage enjoyed by females is lost and even reversed as they grow beyond infancy. The child mortality rate, which measures the probability of death between the ages of one and five (1-4) years, is actually

significantly greater (by about a third) for females than males. The gender disparity in child mortality rates increased slightly between 1993-94 and 1999-2000. Female mortality was higher than for males by 32 per cent in 1993-94, which increased to 36 per cent in 1999-2003. Due to parental neglect towards girls—reflecting son preference and low status of women, girls do not receive adequate food allocation and medical treatment during illness compared to boys. A study, examining data on nearly 12,000 births during 1973-74 from ICDDR, B area of Matlab region, has shown that mortality risks for females exceed that for males around the age of 8 months—typically the age when an infant cannot survive on breastfeeding alone and needs nutritional supplementation. The available evidence clearly suggests that excess female mortality is attributable, in large part, to conscious and selective parental neglect of girls.

There also exist considerable socio-economic differentials in infant and child mortality by wealth status of households. According to 1996-97 DHS data, the bottom quintile has an under-five mortality rate that is nearly two times that of the top quintile (141 vs. 76) and surprisingly this differential continues to reign double even during 2007 DHS (86 Vs 43). Similarly, the bottom quintile experiences an IMR that is 83 per cent higher than that experienced by the top quintile (66 vs. 36). The disparity in mortality across asset groups reflects differences in parental education, levels of child nutrition and access to health and medical services, across the poor and the non-poor.

### **3.2.1.3 Child Malnutrition**

Malnutrition is a major contributor to the total global disease burden. More than one third of child deaths worldwide are attributed to under-nutrition. Poverty is a central cause of under-nutrition. Reducing child malnutrition is one of the surest ways of reducing income poverty. A high degree of child malnutrition is one of the most important factors constraining the future productivity of a country. Child malnutrition leads to poor physical growth, poor schooling and cognitive outcomes, which shapes occupational choice, which, in turn, has implications for future productivity as well as intergenerational mobility. Child malnutrition also has a direct adverse impact on labour productivity during adulthood. In addition to pursuing better child nutrition for its impact on future labour productivity and income potential, improved child nutrition is also an important human development goal in and of itself, since malnutrition significantly reduces the quality of life of children. In addition, child malnutrition is an important contributing factor to the high rates of infant mortality in developing countries: by some estimates, as many as

half of all the infant deaths in poor countries are, directly or indirectly related to child malnutrition.

Like other countries in the South Asia region, the levels of child under-nutrition in Bangladesh are among the highest in the world. While the country has made some progress in reducing under-nutrition in the 1990s, stunting, underweight and wasting, still continue to remain major problems. Child malnutrition rates in Bangladesh are very high: the two most recent surveys—the Child Nutrition Survey (CNS) of 2005 shows the following: 46.2 per cent are stunted and 39.7 per cent are underweight; while Demographic and Health Survey 2007 gives the following figures: 43.2 per cent stunted and 41 per cent underweight. The findings indicate that more than two-fifths of children below the age of 5 years are underweight or stunted. About 12 per cent of children are severely underweight and 16 per cent of children are severely stunted in terms of being more than three standard deviations below the relevant (NCHS) standards (Table 3.2). This suggests that children in Bangladesh suffer, both from chronic and short-term, acute food deficits (as manifested in high rates of stunting).<sup>1</sup>

The findings from Demographic and Health Surveys during 2004 and 2007 show that nearly half (more than 40 per cent) of the children in Bangladesh consistently failed to receive proper nutrition and among them about 12 per cent children were severely underweight. Similarly, 43 per cent of children were stunted (short for age) and 17 per cent suffer from wasting. Rural children are more likely to be underweight, stunted or wasted compared to their urban counterparts. The percentage also increases sharply with decrease in the level of mother's education.

The findings from Table 3.2 show that risk of malnutrition is higher in rural than in urban areas. Again, the risk of both severe and moderate malnutrition, measured by weight for age, height for age, and weight for height, increases with decreasing level of household wealth quintile. Decreasing income as well as wealth status of a family has a negative correlation with literacy levels of parents. Thus, low income and illiteracy coupled with poor hygienic and feeding practices are responsible for infectious diseases, and infectious diseases have been clearly shown to relate to malnutrition.

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<sup>1</sup> A child is considered underweight when his or her weight-for-age is more than two standard deviations below the NCHS reference weight. A child is stunted when his or her height-for-age is more than two standard deviations below the NCHS reference. Severe underweight and stunting occur when the relevant nutrition indicator is more than three standard deviations below the NCHS reference.



TABLE 3.2  
NUTRITIONAL STATUS OF CHILDREN IN BANGLADESH: 1999 TO 2007

Nutritional status (Births in five years preceding the survey )							
Anthropometric indices							
	Height- for-age below -3 SD	Height- for-age below -2 SD	Weight- for-height below -3 SD	Weight-for- height below -2 SD	Weight- for-age below -3 SD	Weight-for- age below - 2 SD	Number of children
Bangladesh 2007							
Household wealth index							
Lowest	23.2	54.0	3.8	20.8	15.1	50.5	1,200
Second	20.4	50.7	2.8	17.8	15.8	45.9	1,145
Middle	15.2	42	2.6	16.9	11.2	41.0	1,036
Fourth	11.8	38.7	2.8	17.6	8.9	38.1	989
Highest	7.6	26.3	2.0	13.2	6.5	26.0	943
Residence							
Urban	12.5	36.4	2.7	14.4	8.5	33.4	1,109
Rural	17.1	45	2.9	18.2	12.7	43.0	4,203
Sex							
Male	16.5	43.7	3.3	18.4	11.4	39.9	2,627
Female	15.8	42.7	2.5	16.5	12.1	42.1	2,685
Total	16.1	43.2	2.9	17.4	11.8	41.0	5,312
Bangladesh 2004							
Household wealth index							
Lowest	25.7	54.4	1.3	15.5	18.2	59.3	1,512
Second	19.4	46.7	1.9	13.5	14.7	52.9	1,237
Middle	15.2	42.4	1.2	13.5	12.1	45.1	1,179
Fourth	13.3	39.9	1.1	10.8	10.2	43.4	1,091
Highest	6.5	25	0.7	9.4	5.9	30.2	987
Residence							
Urban	13.6	37.6	1.2	11.5	12.0	42.2	1,174
Rural	17.7	44.3	1.3	13.2	13.0	48.8	4,832
Sex							
Male	16.6	42.5	1.4	13.2	11.9	46.4	3,041
Female	17.2	43.5	1.2	12.5	13.7	48.7	2,964
Total	16.9	43.0	1.3	12.8	12.8	47.5	6,005
Bangladesh 1999-2000							
Household wealth index							
Lowest	26.7	55.5	1.6	12.6	20.8	59.5	1,361
Second	20.3	49.5	1.3	11.9	14.2	51.2	1,191
Middle	17.5	46.4	0.8	10.2	11.6	49.4	1,039
Fourth	14.1	38.6	0.2	8.9	8.8	40.8	937
Highest	7.5	25.4		6.6	4.6	29.4	878
Residence							
Urban	13.0	35.0	1.2	9.3	9.1	39.8	891
Rural	19.3	46.5	1.0	10.6	13.6	49.2	4,514
Sex							
Male	16.9	43.6	1.0	10.6	11.4	45.8	2,751
Female	19.6	45.8	1.1	10.1	14.4	49.6	2,670
Total	18.2	44.6	1.0	10.3	12.9	47.6	5,405

Source: BDHS (various years).

#### **3.2.1.4 Micro-nutrient Intake**

The human diet requires both macronutrients, which are the main source of calories, and micronutrients (40 essential minerals, vitamins, and other biochemical), which are required for virtually all metabolic and developmental processes. About 2 billion people are affected by iodine deficiencies worldwide; and vitamin A is associated with more than half a million deaths of under-five children globally each year (WHO 2009).

While 78 per cent of youngest children aged 6-35 months living with the mother consumed foods rich in vitamin A in the day or night preceding the survey for DHS 2007, it was 69.4 per cent in 2004 (BDHS 2004). During 2004 to 2007, consumption of vitamin A-rich foods increased by about 10 per cent. The rate of increase was 10 per cent for males and 8.8 per cent for females.

The proportion of children consuming vitamin A-rich foods was the highest in Rajshahi (84.6 in 2007 and 74.2 in 2004), closely followed by Khulna and Dhaka divisions (in 2007), and the lowest in Sylhet (69.4 in 2007) and Chittagong (69.6). About 10 per cent improvement in vitamin A-rich food consumed by the children under-five is evident in 2007. But there is no significant difference between different wealth quintiles in the same survey year.

According to BDHS, the proportion of children aged 9-59 months receiving a recent vitamin A supplement has increased more than six per cent from 81.8 per cent in 2004 to 88.3 per cent in 2007. Overall status of receiving vitamin A supplement has improved about 6.5 per cent during the survey years (i.e. 2004 to 2007), and it is not significant by wealth quintile and region. The BDHS 2007 findings show that vitamin A supplement has increased by 11.4 per cent in lower wealth quintile, which is the highest growth compared to other quintile groups. Like consumption of vitamin A-rich fruits and vegetables, children living in the Sylhet division are also disadvantaged in terms of receiving vitamin A supplementation. The proportion of children receiving vitamin A supplement in the past six months is the highest in Khulna (90.7 per cent) and lowest in Barisal (84.9 per cent).

#### **3.2.1.5 Anaemia Prevalence**

Nutritional problems in adolescents start during childhood and continue into adult life. Anaemia is a key nutritional problem in adolescent girls. Preventing early pregnancies and fortifying the nutritional status of growing girls can reduce maternal and child deaths later, and stop cycles of malnutrition from one generation to the next. For both girls and boys, adolescence is an ideal time to shape good eating and physical activity habits (WHO 2009). A recent study by the Institute of Public Health

and Nutrition (IPHN) reported a high prevalence of anaemia across all vulnerable groups—46 per cent among pregnant women, 64 per cent among 6-23 months old children, and 42 per cent among 24-59 months old children. Of concern is that location specific studies indicate that iron deficiency anaemia showed no improvement from 1996/97 to 2006/07 despite reductions in poverty (Bangladesh Iodine Deficiency Disorder/Universal Salt Iodization Survey 2005).

Iodine deficiency is also of public health concern throughout the country, with about 34 per cent of children 6-12 years old and 39 per cent among the 15-44 years age group suffering from sub clinical Iodine Deficiency Disorders according to a national nutrition intervention. To reduce iodine deficiency, government has taken steps for salt iodization and hence 84 per cent of all edible salt is now iodized and the consumption of iodized salt is 51 per cent. As a result, the prevalence of goiter in school-aged children decreased from 50 per cent in 1993 to 6 per cent in 2004/05. Prevalence of severe iodine deficiencies in school-aged children decreased from 23.4 per cent in 1993 to 4 per cent in 2004/05 (Bangladesh Iodine Deficiency Disorder/ Universal Salt Iodization Survey, 1993 and 2005).

### **3.2.2 Public Nutrition Programmes and Its Impact**

The Government of Bangladesh (GoB) finalised and endorsed the National Plan of Action for Nutrition (NPAN) in 1995. However, the country lacks a comprehensive National Nutrition Policy that puts nutrition firmly on the national development agenda, articulating the roles of the various ministries. A National Food Policy was launched in the mid-2009, by the Ministry of Food and Disaster Management, with the primary focus on food security and food based approaches to nutritional improvement. The Ministry of Health and Family Welfare (MOHFW) as yet has no nutrition policy to articulate its goals and strategies related to nutrition. However, it has committed to form a high level steering committee to ensure the restoration of nutrition services as part of primary health care provision and develop policy. The Bangladesh Government with the assistance of Donors and UN bodies implement National Nutrition Programme which currently covers only 109 sub-districts (upazilas) out of 482, covering approximately 20 per cent of the population of the country with plans to scale that up to over one-third in 2009.

Depending upon their geographical reach and programmatic effectiveness, the recently introduced in-kind (food) transfer programmes are likely to influence child nutritional levels. The Government of Bangladesh has introduced several nutritional intervention programmes since the 1970s. These include, among others, Food-for-Works (FFW), Test Relief, Food-for-Education, Gratuitous Relief (GR), and Vulnerable Group Development (VGD). In addition, in response to the devastating

floods of 1998, the Government started the Vulnerable Group Feeding (VGF) programme, which provides some four million vulnerable households in the country with 16 kg of wheat and rice per household per month.

The CNS data of 2000 and 2005 indicate that, while public food transfer programmes, such as Food-for-Works, VGF and VGD, are weakly associated with overall prevalence rates of child malnutrition, they appear to have large (inverse) associations with child malnutrition rate among the poorest quintile of children. For instance, the Food-for-Work programme is associated with a reduction of 9 percentage points in underweight rates among the bottom quintile of children aged 6-71 months old. Likewise, underweight rates among children in the bottom quintile are 7 percentage points lower in villages having a VGF programme than in those not having a VGF programme.

A recent study on Nutrition Baseline and Outcome Survey of Country Programme Activities of the World Food Programme shows that children under two years and non-pregnant and non-lactating women benefited from the VGD programme. In fact, according to all the indices of nutritional status of children, i.e. stunting, underweight and wasting the percentage of normal children in the VGD beneficiaries group was higher than that of the non-participant group and the percentage of stunted, underweight and wasted was lower than that of non-participant group.

In view of the still very high rates of child malnutrition in Bangladesh, the Government's Poverty Reduction Strategy includes among its goals to reduce by half, by the year 2015, the rates of child malnutrition. Reductions of this order of magnitude require fairly far-reaching changes in the household-level feeding and care of young children. In addition, Bangladesh's rates of low birth-weight (LBW)—which are also among the highest in the world—should be reduced so that children are off to a better start from birth. This requires, likewise, far-reaching behaviour changes, such as increased food intake, increased rest, infection control and adequate supplementation with micro-nutrients, all of which must be supported by the husband and other family decision-makers of the household. Survey findings prepared for the mid-term review of the Bangladesh Integrated Nutrition Project (BINP) suggest that the BINP approach was effective in lowering the rates of severe child malnutrition. Supplementation of pregnant women, if started early enough and consumed regularly, has been shown to increase birth-weights.

It may be mentioned here that poverty is massive in Bangladesh, both in terms of absolute numbers and as proportions of total and rural populations. The country

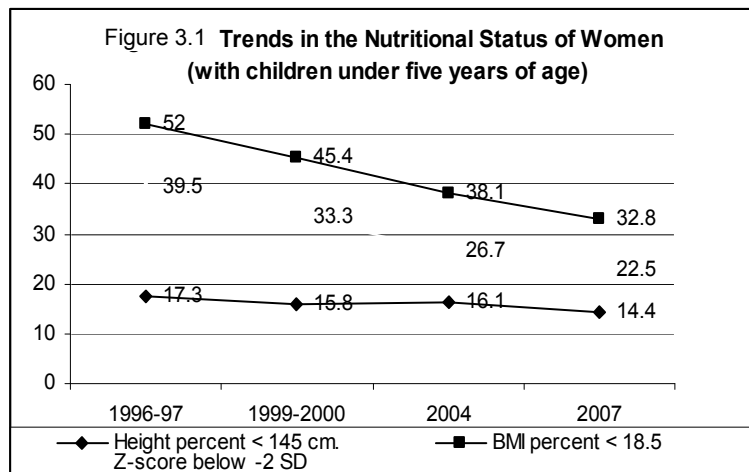
represents a profile of desperate poverty of a huge and vast expanding population. Bangladesh has the fourth largest rural population in the world; only China, India and Indonesia have larger absolute population but none of these has such a high proportion living in rural areas and depending on agriculture for its livelihood. About a third of its 140 million people suffer from moderate to severe starvation during much of the year. Another one-third of the populations perhaps have an inadequate intake of calories during significant parts of the year. With nearly half of its 140 million people living below the poverty line, Bangladesh still has the highest incidence of poverty in South Asia and the third highest number of poor people living in a single country—after India and China.

Since poverty is a condition characterised by hunger and malnutrition, lack of education, unemployment and underemployment, inadequate health care, poor sanitation and overall low levels of living, a significant proportion of population in Bangladesh are on starvation diet and about 90 per cent of the rural populations have some kind of deficiency in food. A high and increasing density of population further aggravates the problem of malnutrition, and health status of its people is in many respects considerably lower than that in many developing countries.

It may be mentioned here that more than 50 per cent of Bangladesh's population are landless and they depend exclusively for their sustenance on wages they earn usually from unskilled labour. These families walk on the edge of a precipice, ready to plunge down to severe malnutrition when any imbalance between their daily wages and the prices of cereals occur.

### **3.2.2.1 Maternal Nutrition Status**

Figure 3.1 shows the trends of maternal nutrition status. The mean height of Bangladeshi mothers with children under five has not significantly changed since the 1996-1997 BDHS. Although the proportion of women with height under 145 cm decreased between the 1996-1997 BDHS and the 1999-2000 BDHS, the proportion of mothers who were short in the 2007 BDHS is the same as in the 2004 BDHS and 1999-2000 BDHS. However, the data indicate a substantial improvement in mother's nutritional status as measured by the BMI. Since 1996-1997, the mean BMI has increased steadily, from 18.8 to 20.6 in 2007; consequently, the proportion of mothers below the BMI cutoff point of 18.5 has shown a declining trend from 52 per cent in 1996-97 to 29.7 per cent in 2007.



Source: BDHS (various years).

### 3.2.2.2 Malnutrition and the Challenges

Malnutrition, communicable diseases and maternal and child health are major health issues in the context of Bangladesh. Malnutrition is perceived at two levels: individual and societal. At the individual level, malnutrition refers to nutritional disorders arising from four major causes:

- i. Insufficient food intake causing hunger and consequent under nutrition through calories as well as protein deficiency.
- ii. Qualitatively insufficient food intake causing nutrient specific disorders such as protein deficiency, iron deficiency anaemia, iodine deficiency disorders, and xerophthalmia caused by lack of vitamin A.
- iii. Malabsorption, under use and improper use of nutrients or breaking down of body tissues due to illness or genetic or environmental conditions, leading to secondary malnutrition. Typical examples are intestinal disorders and infectious diseases.
- iv. Over-nutrition leading to obesity, diabetes, hypertension and heart ailments.

While the first three are associated with poverty, the fourth is related to affluence. The commonly noted effects of malnutrition on the individual are:

- Reduced activity (saving on energy consumption);
- Reduced growth of children; that is, reduced height for age (stunting) and reduced weight for height (wasting);

- Increased susceptibility to, and more serious effects from, some infections like measles, and disorder due to non-absorption of micro-nutrients like iron causing anaemia; poor use of vitamin A, because of low energy intake, leading to eye impairment and consequent blindness;
- Death in the case of severe and prolonged malnutrition.

Depending on the degree of malnutrition, the effects are particularly serious for infants and young children who need an adequate quantity and quality of food for their physical and mental growth, and for realising their full genetic potential.

Malnutrition at the societal level is a consequence of the relation of people with food. Food as a means of people's health is linked to many factors like distribution of income, "entitlement" to food, production and commercial distribution of food, family knowledge and behaviour about the use of food, epidemic and environmental diseases affecting bodily needs and government and community policies and services such as food subsidy to poor families. In countries like Bangladesh, the availability of food at the aggregated national level has very limited bearing on the access to an adequate diet by the landless and poor families (who are the majority of the country's population) who lack the purchasing power to obtain that food.

### **3.2.2.3 Maternal Mortality**

#### *Basic Facts*

The government has put high priority on reducing high maternal mortality and achieving MDG by 2015. Bangladesh has already achieved significant gains in reducing MMR from 574 per 100,000 live births in 1991 to 320 in 2001. In 2006, the estimated MMR was 290 (UNFPA), but according to BBS, the MMR is 315 for 2007 estimated from the Sample Vital Registration System (BBS 2008).

With regard to maternal mortality, the MDG target is to reduce MMR by 75 per cent. But the available evidence shows that MMR is still very high in Bangladesh (at 315 per 100,000 live births in 2007, according to BBS). The question may be raised why has the level of maternal mortality registered barely any change globally, despite nearly 25 years since the Safe Motherhood Initiative was launched? Why have child mortality rates steadily declined, while maternal mortality rates have stayed unchanged? Why is there such a dramatic difference in death rates between rich and poor countries when it comes to death in pregnancy and childbirth (where child mortality shows a twenty-fold difference, maternal mortality ratios show nearly a hundred-fold difference)? Why does one in every 16 women in sub-Saharan Africa die in pregnancy and childbirth, compared to one in every 5,000 women in southern Europe?

To understand the importance of an efficient health care system towards reducing maternal mortality, it is crucial to recognise several basic facts about how maternal mortality happens. Eighty per cent of maternal deaths are caused by five direct obstetric complications: hemorrhage, infection, hypertensive disorders (pre-eclampsia and eclampsia), obstructed labour, and unsafe abortion. The vast majority of these obstetric complications cannot be predicted or prevented (the exception is deaths due to complications of abortion, which could be almost totally eliminated by access to safe abortion services). Most non-abortion-related obstetric complications happen suddenly and unexpectedly in women with no known risk factors, and even in women who seem otherwise in good health. Yet these can be treated by well-known, relatively simple techniques, blood transfusion for hemorrhage, antibiotics for infections, anti-convulsant drugs for eclampsia. Caesarian section for obstructed labour, together, these health interventions to treat complications are called emergency obstetric care (EmOC).

The fact that most life-threatening complications cannot be predicted or prevented means that many of the actions and interventions that we commonly associate with women's health care that is effective—for example, antenatal care programmes and nutrition programmes—will not substantially reduce maternal death. To make a dramatic change in maternal mortality—certainly to meet the MDG target of reducing MMR by 75 per cent—all women must have access to EmOC, in case they experience complications. But in rural Bangladesh, most babies are delivered at home and an overwhelming proportion of births are not professionally attended (i.e. delivered by unskilled *dais* or traditional birth attendants), and they have virtually no access to EmOC.

### *Safe Motherhood*

Initially, Safe Motherhood Initiatives were based on two key interventions; antenatal care (ANC) and trained birth attendants. ANC was promoted in anticipation that routine monitoring and improved health practices during pregnancy would prevent or enable early recognition of complication. Early programmes also focused on training traditional birth attendants in safe and hygienic practices since most women deliver at home. However, it became apparent that these interventions could do little to prevent maternal mortality from complications which arose from factors beyond the purview of antenatal care. In addition, screening for risk factors and identifying high-risk women, being a small fraction of potential complications, had little impact on overall maternal mortality levels. Even for women from high socio-economic status and good health care, a substantial proportion of pregnant women (15 per cent) are likely to experience potentially fatal complications.



However, most obstetric complications can be treated effectively with timely and appropriate care.

For MMR to be reduced at the desired level, all women must have access to high quality delivery care, which includes three key elements:

- i. A skilled attendant at delivery;
- ii. Access to emergency obstetric care (EmOC) in case of complications;
- iii. A referral system to ensure that women receive EmOC in time in case of complications.

The first job of the skilled attendant is to conduct routine deliveries by using safe and hygienic techniques. Another responsibility of skilled attendant is to manage third stage of labour, i.e. the period after the baby is born in which the placenta is being expelled, the time when most post-partum hemorrhages (PPH) occur. PPH is a leading cause of maternal death, which can be averted by the competence of the skilled attendant.

#### *Emergency Obstetric Care (EmOC)*

Roughly 80 per cent of maternal deaths are due to direct obstetric complications: hemorrhage, sepsis, unsafe abortion, pre-eclampsia and eclampsia and prolonged/obstructed labour. The remaining 20 per cent are due to existing medical conditions, aggravated by pregnancy or delivery. In the case of obstetric complication, the skilled attendant must have the back-up of a functioning health care system in order to save the woman's life. When EmOC in a functioning health care system is universally accessible and appropriately utilised, MMR declines to a low level.

EmOC is generally categorised as basic EmOC and comprehensive EmOC. The latter performs basic EmOC services plus blood transfusion and caesarean section. One input vital to these functions is the presence of a culturally acceptable skilled health personnel who can perform them. Availability of EmOC is necessary, but there should also be adequate demand. Once a complication occurs, the key to saving a woman's life is to get her adequate care in time. The three delays that generally occur are:

- i. delay in deciding to seek care
- ii. delay in reaching care
- iii. delay in getting treatment at the facility

One important element in reducing delays is the strengthening of the referral system. Decision to seek care hinges upon empowerment of women and economic

well-being of the family. Once decision is made, adequate information is to be communicated to the skilled attendant and to the comprehensive EmOC facility. It also requires the existence of a transportation system and EmOC facilities close enough to be reached in time. Finally, the facilities will have trained providers, equipment and support system to provide the appropriate services.

### 3.2.3 Maternal Care in Bangladesh: Levels and Trends

#### 3.2.3.1 Antenatal Care

WHO recommends a minimum of four antenatal visits during pregnancy with care provided by skilled health personnel. In Bangladesh, skilled health personnel include doctors, nurses/midwives, FWV, community skilled birth attendants (CSBA), medical assistants/SACMO and paramedic. Prenatal care should include immunization against tetanus, iron and foliate tablets supplementation, hookworm treatment and management of STIs and RTIs. Besides, educating women on danger signs of pregnancy complications, performing screening tests including urine and blood tests, and measuring weight gain, height and blood pressure are essential components of ANC. It can be inferred that ANC visits to skilled health personnel prevent complications that would arise due to anaemia, infection and other preventable causes.

TABLE 3.3  
TRENDS IN PERCENTAGE OF WOMEN WHO RECEIVED ANC FROM A  
MEDICALLY TRAINED PROVIDER: 1999 TO 2007

Characteristics	BDHS 1999-00* (1995-99)	BDHS 2004 (1999-03)	BDHS 2007 (2002-06)
Residence			
Urban	58.6	71.0	71.3
Rural	28.0	43.0	46.4
Division			
Barisal	33.8	39.5	43.7
Chittagong	30.6	47.4	52.4
Dhaka	32.5	48.7	48.2
Khulna	43.7	54.8	62.6
Rajshahi	33.5	51.2	55.0
Sylhet	27.0	43.8	46.9
Wealth Quintile			
Lowest		24.9	30.8
Second		38.6	36.3
Middle		48.8	48.0
Fourth		60.6	65.5
Highest		81.1	83.6
All	33.3	48.4	51.7

Source: BDHS (various years).

\* Wealth Quintile data of 1999-2000 are not available.

The proportion of pregnant mothers seeking at least one antenatal care visit by skilled health personnel has increased from 26 per cent in 1991-93 to 52 per cent in 2002-06 (Table 2.3). Only 21 per cent of women made four or more antenatal visits in 2007, far below the target of universal coverage. The UN Joint Maternal and Neonatal Health (MNH) Programme has set a target of 60 per cent ANC coverage (four visits) for 2011. ANC coverage from a medically trained provider increased by 18 per cent between 1999-2000 and 2007 BDHS. The increase in coverage was significantly higher in rural areas than in urban areas. The urban-rural divide in ANC coverage is also large: 71 per cent among urban mothers versus 46 per cent among rural mothers. By division, Khulna (63 per cent) has the highest coverage, and Barisal has the lowest coverage (44 per cent). The sharpest differential in ANC coverage is by wealth quintile; the richest has highest coverage (84 per cent), while the poorest has the lowest (31 per cent). Those who did not seek ANC, about 72 per cent reported that the check-up was not needed and for another 25 per cent the service is too expensive.

### **3.2.3.2 Institutional Deliveries**

The proportion of births delivered at a health facility increased from 4 per cent in 1989-93 to 15 per cent in 2002-06. The recent increase in institutional deliveries is mainly due to increase in deliveries at private facilities. However, there are high rural-urban, regional, educational, and wealth status disparities. Women in urban areas are three times as likely as women in rural areas to give birth in a health facility. Institutional deliveries of uneducated mothers is 3 per cent compared to 43 per cent for secondary and higher educated mothers. Similarly, women from the top wealth quintile are nearly ten times more likely to deliver at a health facility than women in the bottom quintile. Institutional deliveries are the highest in Khulna division (22 per cent), while Sylhet division has the lowest percentage (8 per cent) of institutional deliveries.

Facility deliveries increased moderately from 9 per cent in 2004 to 15 per cent in 2007 (BDHS 2007). The introduction of Maternal Voucher Scheme in 33 selected upazilas with a view to increasing access to poor women to maternal health services has been a timely and appropriate step in this regard. Under this scheme, eligible pregnant women are entitled to receive 3 ANC, safe delivery including C-section, complication management and one post-natal care (PNC). In addition, cash benefits are provided for transport, nutritious food and other items and for referral. With the increase in facility deliveries, deliveries in NGO and private sector facilities increased from 3 per cent in 2004 to 8 per cent in 2007. NGO and private sectors are performing double the number of C-sections as the public sector.

### **3.2.3.3 Births Attended by Skilled Health Personnel**

Assistance by medically trained personnel during delivery is a key intervention for reducing both maternal and neonatal mortality. Assistance during delivery by medically trained providers was only 5 per cent in 1990, which increased to 18 per cent in 2007. Additionally, trained traditional birth attendants (TBAs) assist 11 per cent of deliveries. However, more than 60 per cent of births in Bangladesh are assisted by dais or untrained traditional birth attendants. Medically assisted births have increased from 12 per cent in 1999-2000 to 13 per cent in 2004 and further to 18 per cent in 2007. Births in Khulna (27 per cent) are more likely to be assisted by medically trained personnel than births occurring in other divisions. However, the highest differential in delivery assisted by a medically trained provider was by wealth quintile: the proportion of medically assisted births in 2007 among women from the richest quintile was 51 per cent, while the poorest quintile had the lowest proportion (4.8 per cent) (BDHS 1999-2000, 2004, 2007).

### **3.2.3.4 Progress in Achieving MDG5**

According to MDG-5, the MMR should be reduced by three quarters between 1990 and 2015. In Bangladesh, MMR has been reduced from 574 per 100,000 live births in 1991 to 320 in 2001. There are two indicators for monitoring the reduction of maternal mortality—MMR and proportion of births attended by skilled health personnel. To achieve the MDG-5, Bangladesh will need to meet the target of MMR at 143 per 100,000 live births by 2015. It will also need to increase proportion of births attended by skilled health personnel from the level of 5 per cent in 1990 to 50 per cent by 2015. Due to lack of data, the current level of MMR is not accurately known. Available evidence from the various performance indicators reveals that there are significant barriers in attaining MDG-5 in time. The following challenges in achieving MDG in time are of concern:

1. Assistance during delivery by medically trained providers increased from 5 per cent in 1990 to 18 per cent in 2002-06, at an average annual rate of 16.25 per cent. To achieve the MDG target of 50 per cent skilled delivery, the required average annual growth rate is 19.75 per cent.
2. Facility/institutional deliveries have not increased to the desired level in response to obstetric emergencies. Most of the increase in facility delivery has occurred in the private and NGO sectors. One approach to be implemented is to develop a strong referral system with the help of trained field workers backed up by a functioning health care and transportation system to increase facility delivery.

3. The scarcity of health personnel is a key challenge in the health sector. The ratio of qualified health care providers, including doctors, dentist and nurses, is 7.7 per 10,000 population, which indicates severe shortage of health workforce. There is acute shortage as well as absenteeism of obstetricians and anesthetists to perform C-sections, particularly in rural areas.
4. Misperceptions regarding the need for care and social barriers contribute to low levels of demand for maternal health care. Effective health education programme is required to increase the demand from medically trained providers and facility delivery.
5. As the cost of accessing maternal care is high especially for the poor, demand side-financing needs to be extended throughout the country, especially in the poor backward areas, with a view to increasing facility delivery and to increase skilled attendants during delivery.
6. Improved training for management of third stage labour is required for the paramedics and skilled birth attendants to reduce the incidence of postpartum hemorrhage.
7. Adequate supply and use of clean delivery kits by trained TBAs can save mothers from infections during delivery.
8. Timely treatment with magnesium sulfate can stabilise an eclampsia patient to give time to get her to a facility for emergency care.
9. Management of obstructed labour by use of Partograph to track the progress of labour can potentially save the maternal and prenatal deaths due to obstructed labour.
10. FP and menstrual regulation services should be readily available to prevent unwanted pregnancies and related abortion deaths.

### **3.3 ACCESS TO AND UTILISATION OF PUBLIC HEALTH SERVICES**

#### ***3.3.1 Structure of Health Care Delivery in Bangladesh***

Theoretically, Bangladesh seems to have a health system of some sophistication. There is a network of hospitals, health centres and dispensaries, thousands of staffs and extensive training centres. This network, now in its advanced stage of development, comprises of 418 health complexes at the upazila level (UHCs), about 4,000 health and family welfare centres (UFWCs) at the union level and several thousand community clinics (11,000-13,000) at the ward level.

The roles of the UHCs and the UFWCs are of key importance to the delivery of primary health care in rural areas. It has been recognised that proper and effective curative care greatly influences the process of the people's acceptance of preventive

and promotive health care. Without active support of the former, the latter cannot be geared up to a significant extent, particularly in the existing socio-economic conditions of rural Bangladesh. What is primarily needed is effective curative care with adequate provision of preventive, promotive services with health education.

A ward is the lowest administrative sub-unit of the government and has an average population of 2,500-3,000; typically distributed over 2 to 3 villages. There are 9 wards in a union with an average population of 25,000 to 30,000 and approximately 9 unions make up an Upazila with an average population of 2, 50,000. UHC is in charge of administering all health and family planning programmes in the upazila. UHCs function as the first referral at the Upazila.

The UHC basically provides three types of services: (1) One 31-50 beds inpatient facility, of which six beds are reserved for MCH and family planning services; (2) outpatient general health services as well as MCH services; and (3) domiciliary services by HAs in the health sector and by the FWAs in the family planning sector. The UHCs provide promotive, preventive and curative services.

The secondary referral level of PHC consists of 59 district hospitals. A civil surgeon is the head of the administration of health related issues and district hospital. The district is responsible for channeling the programmes of Upazila level health and family planning offices and coordinating with other government and non-governmental organisations at the district level. Each district hospital has a 50 to 375 bedded facility.

The tertiary referral level of PHC network at the national level consists of 13 medical colleges and 6 post-graduate institutes. It also includes one dental college, one (post basic) nursing college and 38 nurses' training centres. There are 8 medical assistant training schools, of which 5 are functional and 3 are non-operational because the campuses are being used by the newly established medical colleges.

There are two Institutes of Health Technology (previously known as paramedical institute). One is at Mohakhali, Dhaka, and the other is at Rajshahi. These two institutes are producing health technologists on laboratory, pharmacy, dentistry, radiology, sanitary, etc.

The country's health system is hierarchically structured and can be compared to a five layer pyramid. First, at the base of the pyramid, there is the ward level health facility (community clinic-CC), consisting of a health assistant and a family welfare assistant. At the next level is the union health and family welfare centre (HFWC) staffed by a medical assistant, one family welfare visitor and one pharmacist, which concentrates on the provision of maternal and child health care and provides only limited curative care. Third, there is the UHC with nine doctors, two medical

assistants, one pharmacist and one radiographer and EPI technician and having provision of theatre facilities. The UHC is responsible for inpatient and outpatient care, maternal and child health services and disease control. Fourth, the district hospital is the first layer of the health care pyramid to have theatre facilities, but some selected UHCs have got EOC facilities. Finally, the medical colleges and post-graduate institutes form the top of the health services pyramid offering a wide range of specialty services.

### **3.3.1.1 Community Clinic**

The government led by Awami League during the period of 1996-2001 recognised that primary health care (PHC) could not be successful without extending health facilities at the village level. Under the recently introduced Health Sector Program (HNPS), efforts are being made to achieve “health for all” within the shortest possible time and to ensure equity of access for all Bangladeshi citizens, especially those who live in rural areas and in urban slums. The government planned to establish one community clinic (CC) for every 6,000 people owned and managed by the communities at the ward/community level; 10,624 CCs were constructed and 8,000 of them were started in 2001. After the change of the government, activities related to CC were stopped from 2001 till 2008. The present government has undertaken a five year (July 2009 to June 2014) project namely “Revitalization of Community Health Care Initiatives in Bangladesh.” Estimated cost of the project is Taka 2,677.49 crore, where government of Bangladesh (GoB) will contribute Taka 2,177.49 crore.

So far, about 10,000 CCs have been restarted. Medicine and contraceptives are available there. These clinics remain open for six days a week except only Friday. National Nutrition Project (NNP) will also work there. The workers of the CCs are very familiar and closely connected with their respective community people. So it is easy for them to provide services to the recipients.

In the future, government can introduce micro health insurance programme for those below the official poverty line issuing cards at low premium covering essential as well as catastrophic illness and providing services at the ward level with appropriate referral up to the district level government health facilities. Here the intermediate or nodal agencies will be government facilities and the government or private insurance companies will act as insurers.

Primary health care services can be characterised by their availability, accessibility, utilisation, coverage, quality, and impact. Of particular concern in a country like Bangladesh is ensuring that high-quality primary health care services reach those most in need, namely the poorest, least educated, and geographically

most isolated members of Bangladeshi society. As Gwatkin, Wray and Wilcox pointed out almost three decades ago (1980):

*Unless the services reach those in needs, even the best-conceived primary health and nutrition programmes can obviously have little impact on mortality (or fertility). Thus ... the development of plans for getting services to the people (in real need) is as important as are decisions concerning which services should be offered.*

### 3.3.1.2 Traditional Medical Systems in Bangladesh

A wide range of health care facilities are available in Bangladesh—from those provided by practitioners of traditional medicine to those provided by highly qualified practitioners of modern western type of medicine.

#### *Prevalent Traditional Systems of Medicine*

Bangladesh has a rich heritage of traditional systems of medicine. The Unani and Ayurvedic Systems of traditional medicine are the two systems which are widely practiced throughout the country. The role of such traditional practitioners is also well appreciated by the people. The homeopathic system of medicine is also popular. All the three systems of medicine are recognised by the government for providing medicine services to the people.

#### *Types of Traditional Systems of Medicine*

Traditional systems of medicine, known as indigenous systems of medicine in Bangladesh, comprise Unani-Tibb and Ayurvedic systems. Some basic introductory points of these systems of medicine are explained below.

**Ayurveda:** The term Ayurveda means science of life. This is perhaps the earliest medical science that laid stress on positive health, a blending of physical, mental, social, moral and spiritual welfare. The Ayurvedic science is based on its own fundamental principles rooted into the oldest scriptures of Hindu Vedas, which are known to be the earliest classics of the world. In spite of its antiquity.... say, more than 3000 years old-it is practiced even today throughout India, Bangladesh and other South-East Asian countries. Ayurvedic system manufactures drugs out of leaves, plants, herbs and minerals. The practitioners of Ayurvedic system in Bangladesh are known as *Kabiraj* or *Vaidya*.

**Unani-Tibb:** The Unani system of medicine owes its origin to Unan i.e. Greece and its theoretical framework is based on the teaching of Bograt (Hippocrates: 460 B.C.) and Jalinus (Galen). It was developed into an elaborate medical system by the Arabs who gave it a scientific base. This system also got enriched by absorbing what was best in the contemporary systems of traditional medicine in Syria, Egypt, Iraq,



Persia, India, China and other countries of Middle and Far-East-Asia region. It also benefited from the native medical systems in practice at the time in various parts of Central Asia. In this subcontinent Unani system was introduced by the Arabs and soon it took firm roots in this soil and has ever since been serving sections of our people. It may be added that the Unani System as practiced today is vastly different from the original Greek medicine. Because the Unani system, wherever it went, absorbed what was best in the native systems already in practice, thereby adding to its vast repertory. This process of enrichment continues even today. In Bangladesh the practitioners of Unani system are known as *Hakims*.

#### *Classification*

The traditional practitioners may be classified into three groups: (i) institutionally trained practitioners, (ii) non-institutionally trained practitioners, and (iii) untrained healers. At present, there are more than 5000 registered practitioners in traditional medicine in the country, out of which only an insignificant proportion is of qualified. The remaining non-institutionally qualified practitioners are Hakim, and Ayurvedic practitioners.

#### *Homeopathic System of Medicine*

There are thirty-eight homeopathic medical colleges and hospitals in Bangladesh legislated under (a government organisation) Bangladesh Homeopathy Board, Dhaka. One of them is government the rests are private. Over 4,000 students are currently studying in the colleges. The number of students is increasing day by day. The minimum qualification for admission to the college is SSC or its equivalent. Most of the colleges also run D.H.M.S. course in night-shift for the service-holders/professional people. The D.H.M.S. course is of four and a half years duration; on the contrary, the B.H.M.S. course is of five and a half years duration. The students who passed from the government recognised homeopathic institutions are also in practice.

It is not out of place to mention here that the homeopaths scattered throughout Bangladesh are treating great number of diseased people in their respective areas in private capacity. It is believed that the adoption of the homeopathic system of treatment side by side with allopathy in the National Health Services will pave the way to materialise the policy of mass medical aid to the people of both urban and rural areas at a minimum possible cost.

Both indigenous and homeopathic systems of medicine are very popular and widely practiced in this country. These systems are practiced mostly in the private sector. Both indigenous and homeopathic drugs are also found to be quite cheap in

comparison with allopathic drugs which are getting costlier day by day and beyond the reach of the mass people.

#### *The Role of Traditional Medicine*

Curative services are available to the rural masses through the numerous traditional practitioners and healers. In every corner of the country, there are traditional practitioners. Ninety per cent of them are practicing in rural areas. They are practicing on their own, and no support or assistance is received by them from official agencies. They treat all types of diseases, especially the common ailments and certain chronic diseases. At present these practitioners are not being asked by the government for implementing the primary health care programme. The Government had introduced a scheme called “Palli Chikitshaks” (village doctors). The main functions of the “Palli Chikitshaks” were to treat the common and simple ailments, conduct minor surgery, provide immunisation, give instructions in health condition, personal hygiene, environmental sanitation and nutrition, motivate family planning workers, supply contraceptive materials and provide referral services, etc.

The government may consider introducing a cadre of community/village health workers like the erstwhile “Palli Chikitshaks” schemes so that at least one trained Chikitshak will be available for each of the 68,000 villages.

The minimum academic qualification for eligibility for admission to this course should be SSC or equivalent. At present, there is no provision for imparting training in traditional medicine to “Palli Chikitshaks.” It is recommended that, as far as possible, traditional medical practitioners may be given preference over others for participation in this course. The medical kit may also contain traditional preparations. A separate manual for traditional medicine or a chapter in the existing manual, devoted exclusively to traditional medicine, giving detailed instructions on the use of traditional drugs in treating common ailments, may be developed and made available to the trainees/“Palli Chikitshaks.”

Considering the popularity of these systems of medicine, more dispensaries and hospitals may be used in various parts of the country, especially in rural and remote areas where medical facilities are not available either by the government or by local bodies, so that the services of the traditional practitioners could be fully utilised in the Primary Health Care Programme.

#### **3.3.2 Access to and Utilisation of Public Health Services**

The three aspects of health, viz. status, access and utilization, are distinct though interrelated. Indicators of health status (e.g. mortality and morbidity rates) can reflect whether health services have had any impact on the health of the population. A

greater availability of health services is obviously intended to improve health status and to reduce inequity in the distribution of health services. However, it is important to consider the actual utilisation of available health facilities since equity and access are likely to have an impact on health status only if these facilities are actually utilised.

Access to health services can be defined in terms of (a) access of rural and urban areas and social classes to available health facilities and (b) their actual utilisation, which would determine the level of satisfaction of health needs (Mooney 1986, Mooney and McGuire 1987). The factors determining access and utilisation are diverse. Income is only one factor that might explain access to health services in developing countries. It is necessary but not sufficient—other factors such as the nature of government policies and their effectiveness, income distribution and institutional and non-economic factors (such as cultural and social constraints) play an equally important role in determining access to health services and their utilisation.

To be effective, health services should be available, accessible and affordable. But mere availability of health facilities does not result in their utilisation. Accessibility has a number of dimensions, which include:

- (i) Physical Accessibility (distance, travel time and travel costs);
- (ii) Economic Accessibility (cost of medicine, cost of consultation, cost of hospitalisation, cost incurred with respect to tests/investigations);
- (iii) Social and cultural context (Gender) affecting accessibility;
- (iv) Perceived quality of services:
  - availability of doctors
  - availability of medicine
  - attitudes of doctors/nurses.

### **3.3.2.1 Physical Accessibility**

The three main aspects of physical accessibility are distance from the health facility, travel time and travel cost to arrive at the facility. Numerous studies have shown that physical access to health services is an important determinant of utilisation of public health facilities in Bangladesh. Location is one of the most important factors to determine the access to health services in Bangladesh as documented in the CIET baseline survey (CIET Canada and MOHFW 1999). Geographic access at least partially explains why consumption rates are higher in urban areas compared to rural areas (NIPORT, Mitra & associates and Macro 2001).

The findings from a recent study (HEU/BIDS 2003) show that physical accessibility is not a major barrier in the sense that patients do not have to travel a long distance to reach health facilities at the upazila level and below (the average distance traveled by patients attending district hospitals (DHs) was 8 km, compared to 3.2 and 1.8 km for patients at the UHC and HFWC respectively). And once patients arrive at the facilities, they do not have to wait for a long time to get to the services (the average waiting time was 25 minutes for patients in the DHs, followed by 17 and 13 minutes in the UHC and HFWC respectively). However, patients visiting higher-level facilities have to wait much longer to see the doctor. According to the World Bank study (WB, Euro Health Study 2004) waiting time was the highest (92 minutes) for patients attending specialised hospital (i.e. ICMH) and second highest (65 minutes) for teaching (medical college) hospitals. However, physical access is a barrier to maternal and child health services in particular. In the 1999-2000 DHS, 79 per cent of women reported that the lack of a health facility nearby was a constraint to consumption (Streatfield *et al.* 2001). In the same survey, 50 per cent of women responded that getting to the health facility was a problem to them. Levin and colleagues (2001) confirmed the significant negative association between both distance to the provider and travel time and the use of health services. A child was less likely to be taken to a qualified allopathic provider or a traditional practitioner than a village doctor if the travel time was 40 minutes or greater compared with travel time of 15 minutes or less. Other research has shown that a majority (74 per cent) of sick children in a rural area of Bangladesh were taken less than two miles for treatment; and that a majority of those children were seen by private practitioners. In contrast, children who were taken more than two miles for treatment received health care from qualified allopathic providers (Bhardwaj and Paul 1986).

### 3.3.2.2 Social and Cultural Context—Utilisation by Age and Gender

The social and cultural context has an important impact on the utilisation of health services in Bangladesh. Social and cultural factors particularly affect the role of gender and the participation of women in household decision-making. Women are less likely to utilise health services; the DHS (Demographic and Health Survey) data show that 44 per cent of women reported difficulty in getting permission to go to a health provider as a constraint to health service consumption (Streatfield *et al.* 2001). In addition, 49 per cent of women reported that finding someone to accompany them was a problem. Amin and Colleagues (1989) found that men who were sick were more likely than women to utilise modern qualified providers in rural Bangladesh. The gender bias may reflect beliefs that it may not be appropriate for women to be seen by a male provider. In addition to the long-standing cultural biases against

women, the fact that the health providers available in rural Bangladesh are predominantly male suggests that the problem of women's access to care will not be easily solved.

Findings from various studies show that in Bangladesh females generally do not get proper treatment during their childhood as well as during their reproductive age span. There is considerable evidence that in rural Bangladesh females have less access to food, health care and other resources than males within the same household (D'Souza and Chen 1980, Chen *et al.* 1981, Khan 1994). Though latest figures in this regard are not available, evidence available from the public Health Services Utilization study conducted by BIDS for the Ministry of Health (BIDS/HEU 2003) shows that there have not been major changes in this respect. The distribution of facility users by age sex is shown in Table 3.4.

TABLE 3.4  
UTILISATION OF SERVICES BY AGE OF PATIENTS AND BY GENDER:  
OUTPATIENTS AND INPATIENTS

Characteristics	Per cent Distribution by Gender						All (No.)
	Outpatient			Inpatient			
	Male (%)	Female (%)	Both (No.)	Male (%)	Female (%)	Both (No.)	
Age group (years)							
<1	55.9	44.1	247	61.7	38.3	60	307
1-4	57.6	42.4	698	58.6	41.4	70	768
5-9	55.4	44.6	361	51.0	49.0	49	410
10-14	57.7	42.3	338	56.9	43.1	51	389
15-19	48.3	51.7	418	43.8	56.3	80	498
20-49	28.4	71.6	2001	48.3	51.7	497	2498
50-65	49.8	50.2	482	67.0	33.0	218	700
65+	71.1	28.9	121	67.2	32.8	61	182

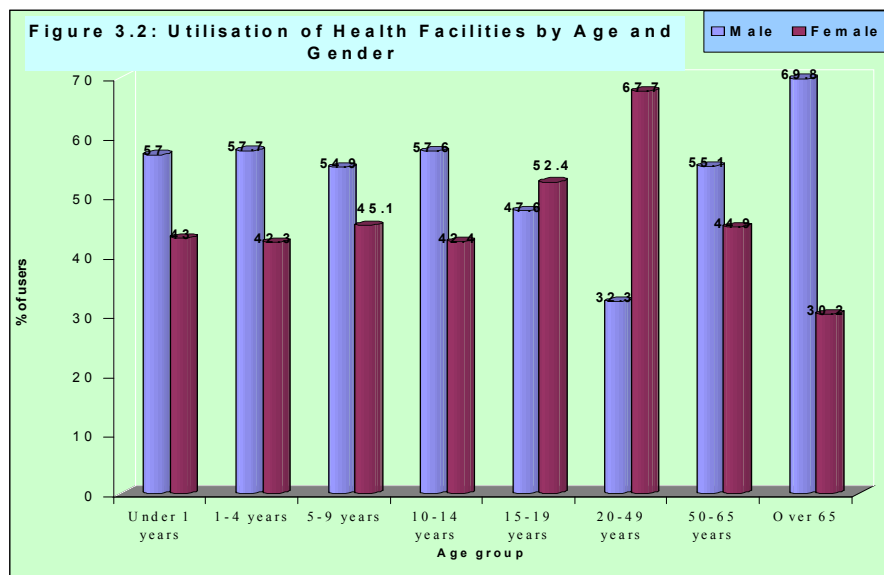
Source: BIDS/HEU (2003).

The evidence from HEU/BIDS study (2003) shows how the gender bias affects the utilisation pattern of health facilities (at the district level and below). The data indicate that younger boys (<15 years) and older males (65 years and over) are more likely than their female counterparts to utilise public health facilities.

The HEU/BIDS study shows that utilisation patterns of health facilities for females are inversely related to the levels of care i.e. female utilisation decreases as one goes up along the levels of care (from HFWC to UHC to DH). The findings suggest that males dominate utilisation of government facilities, at all age groups except for the reproductive one. The gender differential in utilisation rate was particularly striking for under-five children and also for women in the age group 65 years and above.

- For young infants, utilisation of inpatient facilities was 62 per cent for males compared to 38 per cent for females, indicating that the younger the child, the higher the disparity.
- For older persons aged 65 years and above, utilisation of outpatient facilities was only 30 per cent for females as against 70 per cent for males. This indicates that in terms of receiving care and treatment during old age females are much more disadvantaged compared to their male counterparts.

These findings imply that despite nearly comparable incidence of diseases for males and females, male children are brought to the health facilities by their guardians far more frequently than female children. While less is known about the incidence of diseases by gender, findings from Matlab (ICDDR, B) data do not show any sex differential up to 5 years of age in terms of exposure to infections (Chen *et al.* 1981). Thus, one can assume that the probability of being sick is more or less the same for male and female children. But the frequency of hospitalisation of male children (< 5 years) has been found to be much higher than among cases involving females (60 per cent males as against 40 per cent females), which clearly indicates that in terms of receiving health care, female children are especially disadvantaged compared to their male counterparts.



Source: HEU/BIDS (2003).

Reproductive age bracket (15-49 years) is the only age group where female utilisation exceeds that of males. This can be explained by the fact that compared to their male counterparts, females in the age group 15-49 years are more vulnerable to death and disease because of pregnancy and associated health risks during and after delivery.

### **3.3.2.3 Economic Accessibility**

From an economic perspective, healthcare utilisation decisions depend on the relative magnitude of costs and benefits involved from the standpoint of persons who make these decisions to use healthcare for themselves or for others. The costs of seeking care typically include financial expenses and income losses that may be incurred as a result. Income losses can be high if considerable time is spent in commuting or standing in queues to obtain medical care.

For the same reason, the amounts paid for healthcare services, such as consultancy fees and hospital charges, are also likely to be an important determinant of health care utilisation. There are other factors that influence healthcare utilisation behaviour. For people with higher education, the perceived benefits from effective treatment and/or preventive care may be higher than for the rest of the population. Benefits could be higher for individuals whose health is considered intrinsically more important in certain cultural settings, as for people belonging to higher socio-economic classes and for males. The findings from the HEU/BIDS study show that the chance of an ill person seeking treatment in a district hospital is greater among males, among members of households where the head is literate and among households having monthly income above Tk. 5,000. This implies that economic status of the household plays an important role in the health seeking behaviour. The perceived need for medical care would depend both on the availability of healthcare facilities and the capacity to pay for health services.

The cost of health care can be a strong determining factor of health care utilisation, as well as a cause of poverty. Ability to pay is a particularly important determinant of access when a high proportion of health care is financed privately, and without any type of financial risk protection from health insurance. In Bangladesh, 60 per cent of total health expenditure in 2000 was in the form of out-of-pocket payments by individuals (64 per cent of total health expenditure was from private sources), so that households' ability to pay for care is important (WHO 2003). There is essentially no social security or private health insurance, although public hospitals are intended to provide a form of insurance in the case of serious illness. To ensure health security, health insurance system should be incorporated both in public and private sectors, which should be considered in the health policy and action plan also.

Different types of cost items can be barriers to the use of health care. Health care costs can be divided among direct medical costs (e.g. medicines and service fees), direct non-medical costs (e.g. transportation costs) and indirect costs (e.g. traveling and waiting time, lost earnings). The available evidence shows that the cost of medicines is the most important cost element that prevents people from using health services, (CIET Canada and MOHFW 2001, HEU/BIDS 2003).

### 3.3.3 Impact of Treatment Cost on Household Consumption

Expenditure incurred for health care has some adverse impact on household consumption. The data from BIDS/HEU survey (2003), as presented in Tables 3.5 and 3.6, speak about the kind of inconvenience households' face in meeting their outpatient and inpatient needs. Findings show that expenditure on health resulted in withholding of other subsistence resources. Treatment costs have had adverse effect on other household consumption items for 70 per cent of inpatients and 12 per cent of outpatients. Among the inpatients who were adversely affected because of hospitalisation, food consumption was reduced or there was inadequate food in 68 per cent of the households; expenditure had to be curtailed on other essential household items for another 64 per cent cases because of treatment cost, while 13 per cent households had to face problems in financing their children's education. It may be pointed out that, as already mentioned, a vast majority of the respondents belong to households who fall below the poverty line and food expenditure alone accounts for a very large proportion of household budget for these households. Thus, illness requiring treatment and hospitalisation has significant adverse implications for the economic well-being of affected households and individuals, particularly for poor households.

TABLE 3.5  
WHETHER ANY PROBLEMS FACED BY HOUSEHOLDS DUE TO  
HEALTH EXPENDITURE: BY INCOME GROUPS

Monthly Income (Tk)	Outpatients			Inpatients		
	All Cases	Cases having problem		All Cases	Cases having problem	
		No.	%		No.	%
up to 1000	354	51	14.40	105	81	77.14
1001-1500	639	92	14.40	148	116	78.37
1501-2000	642	92	14.33	143	119	83.21
2001-3000	1,030	137	13.30	236	186	78.21
3001-5000	1,104	136	12.31	235	152	64.68
5001-7500	487	33	6.78	123	72	58.53
7501-10,000	214	18	8.41	43	19	44.18
10001+	196	7	3.57	53	15	28.30
All	4,666	566	12.13	1,086	760	69.98

Source: BIDS/HEU (2003).



Table 3.6  
**Type of Problems Faced by Households due to Expenditures  
 Incurred for Treatment Purposes**

Type of Problems Faced	Outpatients		Inpatients	
	No.	%	No.	%
Insufficient food for the family	272	48.06	516	67.89
Children's education affected	29	5.12	98	12.89
Essential purchases affected	311	54.95	488	64.21
Others	15	2.65	24	3.16
All	566	-	760	-

**Source:** BIDS/HEU (2003).

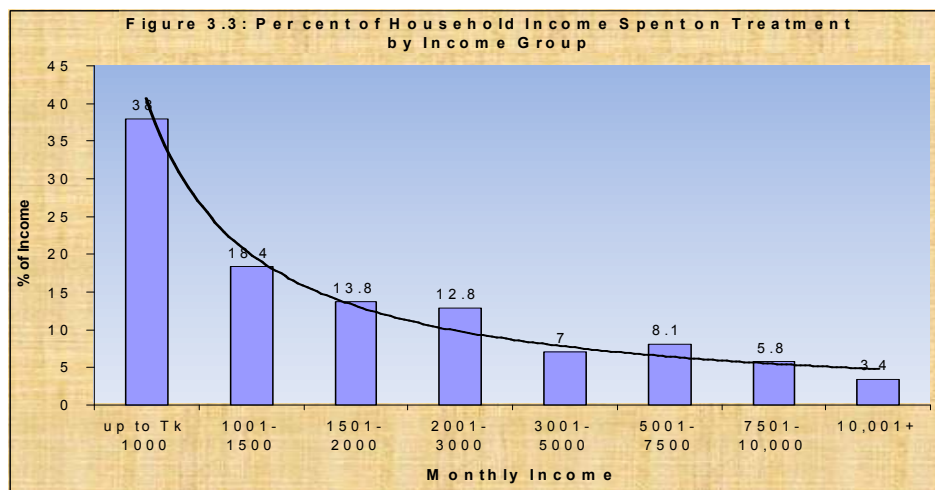
One way by which this occurs is in the form of out-of-pocket health expenditures for diseases that are relatively expensive to treat or require hospitalisation. Another way in which illness can influence the economic well-being of affected households arises from incomes foregone on account of the morbidity of affected members, or taking time off from work to care for the sick. A single episode of hospitalisation can account for 30 to 50 per cent of annual per capita income, with the proportion being even higher for poorer groups. This can lead to tremendous financial burden on poor households and indebtedness, sometimes resulting in liquidation of their assets/property. This would certainly indicate that episodes of illness affect the economic position of the households rather badly.

### 3.3.3.1 Disease Burden on the Poor

The findings from BIDS/HEU survey (2003) show that the poor bear a disproportionate share of the burden of ill health and suffering. On the whole, 8.8 per cent of monthly household income was spent on illness treatment. But the poorest households had to spend about 38 per cent of household income to meet the treatment cost of illness episodes, which is a heavy burden by any reckoning. On the other hand, the richest households spent only 3.4 per cent of household income for treatment of illness episode. Again, the poorest households spent much less in absolute sense for treatment purposes compared to the richest households (Tk.283 vs. Tk.572). This is primarily because of the fact that due to very low income of the poorest group, most of their income is spent on purchasing food and other daily necessities of life leaving, very little scope for spending on health care. The findings clearly indicate that members from the poorer households have less access to resources available for health care and that they undergo a lot of economic pressure

to finance their treatment cost/medical needs. Thus, for low-income households there is a real risk of indebtedness in times of illness requiring treatment.

The situation becomes really precarious for patients who need hospitalisation. In the case of inpatient treatment in a government facility, especially if surgical intervention is required, the households have to incur a huge amount as out-of-pocket expenditures on medicines, diagnostic tests and other related items. To meet the hospitalisation expenses, many households have to borrow money and even liquidate their assets.



Source: BIDS/HEU (2003).

Any hospitalisation in the household involves huge expenditure, both medical and non-medical expenses, and this can very badly affect the household budget. This brings us to the question of providing financial protection to the poor households against such contingencies. Insurance schemes to cover the poor and/or low-income households who are mostly in the informal or unorganised sector can be devised. Also, even if the government hospitals want to levy user charges, people below a certain income level should be exempt from paying such charges and this could be achieved through proper targeting.

### 3.3.4 Health Sector Management/Governance

An effective health care system must meet the needs that the people see as immediate and urgent- relieve hurt, ease suffering, save lives. At the same time, the health services must reach into the communities and homes, and influence pattern of

life- the construction of dwellings, the protection of water, the delivery of babies, the feeding of the children and the care of the sick. This range of health care must necessarily be based on severely limited governmental resources, often around 5 dollar (about Tk. 350) per person per year and one doctor, one nurse and a group of lesser-trained persons must suffice for thousands of people. To be effective within such constraints requires a carefully designed system that makes optimum use of resources and achieves a reasonable distribution across the nation. And no matter how well designed the system, its actual effectiveness will depend heavily on the education and use of health personnel. Unfortunately, in Bangladesh, health care is seriously inadequate which reflects not only on poverty of resources but also on both the design of the system and the education and training of health personnel.

Governance is an important element of health system performance linked with improved quality of care and efficient utilisation of scarce human, infrastructural and financial resources. Without good governance health system fail to produce optimum output resulting in underutilisation of services, ineffective and inequitable health care, and ultimately reflected in lower health outcomes. World Bank has proposed six dimensions of governance to assess the quality of governance. Of the six dimensions, three dimensions, government effectiveness, control of corruption and voice and accountability, are of direct relevance to assess the strengths and weaknesses of a functioning health care system.

There are a number of problems in the public health service provision, which contribute to poor governance. These include inefficiency in service delivery, (medicine, logistics), inefficiency in managing health personnel, poor quality of services and negative perception about type of services available. The poor quality of services is indicated by staff absenteeism, inadequate attention given by doctors, non-availability of medicines and supplies, long waiting time, poor maintenance of equipment and unhygienic conditions. For example, patients do not receive the prescribed diagnostic tests even though the equipment remains unutilised for lack of technicians and patients resort to private clinics for diagnostic tests. Control of corruption remains unchecked when patients pay unofficial fees to gain access to health services, to reduce waiting time, receive drugs or to ensure improved quality of care. Pilferage of drugs and medical supplies, illegal use of public facilities for private practice and referral of patients to private clinics, all help flourish corruption in the health sector.

There are several governance issues that hinder smooth functioning of health care system. Critical issues that impact on health system performance are such things as staff availability and output, state of physical infrastructure, functionality of diagnostic equipment, availability of drug and medical supply, maintaining clinical protocols-factors pertaining to meeting minimal efficiency and quality standards.

Economic accessibility' means that health facilities, goods and services (drugs and other treatment related items) must be affordable by all. But the World Bank study (WB/Euro Health 2004) findings suggest that out of pocket expenses have major consequences in the process of seeking care. Only 12 per cent of the outpatients and 1 per cent of inpatients received the full course of medicine from the hospital. By contrast, 36 per cent of the outpatients and 34 per cent of inpatients did not receive any medicine from the hospitals. People from the poorer strata have to undergo a lot of economic pressure to buy medicine and meet other expenses. Government facilities are the last resort for the hapless poor who cannot afford to consult a private qualified doctor. But the findings from the same study show that doctors do not pay adequate attention to the patients who visit hospitals for obtaining services. The average consultation time given to each outpatient was less than three minutes; while for 35 per cent of the patients the average consultation was only one minute, for another 30 per cent the duration varied between 1 and 2 minutes. By contrast, the average consultation was more than 5 minutes for an insignificant proportion of patients (6 per cent).

According to the CIET survey, only 10 per cent of households in 2003 compared to 38 per cent in 1999 rated government health and family planning services as "good." This is a significant decline during the last four years. Inadequate and poor quality medicines were cited as the problem affecting the quality of services provided at government facilities by 55 per cent of households. Though more recent data is not available, there is no reason to believe that significant change has taken place in this regard.

#### **3.3.4.1 Staff Absenteeism**

The World Bank/Euro Health Study (2004) and other surveys (e.g. Ghost Doctors, Absenteeism in Bangladesh Health Facilities, WB 2003) indicate a widespread absenteeism either in the form of staff actually not being present or mental absenteeism in the form of indifference with the clientele or strong preferential treatment of patients. There seems to be no ways of disciplining staff for absenteeism, rude behaviour or non-attendance to patient needs.

Whether reflecting actual or only perceptions, there is a large majority (61.7 per cent) of the outpatients who find that doctors are not available and (54 per cent) that support staff is showing a hostile attitude. A significant number of inpatients (44 per cent) find that doctors are not available, that (32.2 per cent) nurses are not available, and that (36.8 per cent) they behave unkindly. These numbers leave one with a picture of a hospital system which is incapable of managing its staff's behaviour or presence. The hospitals' recording of presence is either absent or inaccurate. The

combination of this lack of recording, the absence of managerial reaction, the absence of reaction possibilities (extremely hard to transfer or fire staff), strong economical interests in the present extortion of patients makes it next to impossible to manage human resources. There is no doubt that this state of affairs negatively affects the quality of services rendered to patients.

Regarding staff absenteeism, there are two problems to confront. One problem is that many posts at the public hospitals do not get filled at all, that is these posts are lying vacant. The other important problem is that even when filled, the doctor may not be there to attend to the patients, i.e. the doctor is “absent” from duty. These absent personnel receive their salaries (and other allowances) but are not regular in attendance. If doctors and other service providers are not on the job, the expenditures embodied on them also do not reach the (intended) beneficiaries.

Since medical skills are marketable and greatly in demand, there is usually a ready opportunity to make money as a private provider (i.e. through private practice) outside (and sometimes inside the facility). The senior doctors are more likely to practice it because they have the skills and experience that are highly marketable and lucrative. Due to widespread prevalence of absenteeism and private practice, public health care delivery is being severely hampered.

The World Bank study (WB/Euro Health 2004) found that hospital doctors, especially senior doctors (Professors/Associate Professors), spend most of their time attending private patients either in the facility when they are present in the hospital or in their private chambers/clinics during afternoon. Most of the doctors leave hospital before lunch break and they use the afternoons to see private patients. Thus, the “effective” number of public doctors in hospitals is much less than the filled in positions (or government norms) would imply.

The findings from a recent survey (HEU/IHE 2004) show that of the total time spent by doctors at the district hospitals, patient care accounts for 49 per cent as against 45 per cent of unproductive/idle time, while administrative works (5.2 per cent) and time spent in meeting/health promotion activities are a very small proportion of doctor’s time at the district hospital.

Similar picture also emerges for UHCs where 48 per cent of the service providers’ time is spent on non-productive activities, while 42 per cent is spent on patient care, 6.5 per cent is spent on meeting/health promotion activities and about 4 per cent is spent in administrative work. The situation is even worse at the HFWCs where about 58 per cent of the providers’ time is spent on non-productive activities, only a quarter (26 per cent) is spent on direct patient care, about 8 per cent of the

provider's time is spent on meeting/health promotion activities, and another 8 per cent is spent on administrative works.

The data give a clear idea of how doctors apportion their time, and a picture emerges of the division of labour and tasks within a health facility. It appears from the figures that there is little variation in the proportion of doctors' time spent on direct patient care both at the DHs and UHCs, with the bulk of time being taken up by unproductive activities.

The findings suggest that many health centres are not fully utilised and most staff have slack time. It is clear that available resources can be used more efficiently freeing up resources for expanding activities. There is an urgent need to take appropriate steps to ensure more efficient use of time by service providers. To ensure efficiency, incentive and punishment system should be activated for the health service.

Some of the results are surprising and show a wide discrepancy between the expected and observed activities. For example, the fact that about 60 per cent of HFWC staff time is spent on "unproductive" activities is clearly an unacceptable use of health care personnel at a time when all health care resources are scarce. The findings suggest that health facilities were paying for labour, which they did not obtain.

The findings from the same survey show that staffing costs comprise a significant share of total costs of a health facility. The HEU/IHE data show that personnel costs account for as much as 76 per cent of total recurrent costs at the UHC, followed by 70 per cent at the HFWC and 62 per cent at the district hospital. Again, the spending on drugs and MSR accounts for 29 per cent of total costs at the HFWC, which decreases to 19 per cent at the DH and only 10 per cent at the UHC.

Results from an exit survey indicate that the majority of the service users are dissatisfied with the existing level of quality of care of public health care institutions. They are found to be dissatisfied with such aspects of care as waiting time, cleanliness and privacy of treatment, and expressed serious concern about the quality of inpatient food, availability of prescribed drugs and medical supplies at the health centres. Outdoor patients were found to be relatively more satisfied than the indoor patients on almost all dimensions of care. Further, females appeared to be disadvantaged than males in receiving inpatient care (Sohail 2005).

About 75 per cent of the inpatients reported that they bought medicines for their treatment in hospitals. This figure was lowest in the case of UHC (64 per cent) and was highest for district hospitals (78 per cent). Poor governance in the management of drugs becomes apparent as there seems to be higher levels of supply to facilities

than to patients. Main drawbacks identified in the current system of procurement of drugs and medical supplies were:

- Inadequate skills in the relevant areas of logistics planning and management;
- Inadequate space and equipment for storage and distribution;
- Poor planning of procurement and allocation leading to inappropriate goods being delivered and a mismatch between demand and supply;
- Slow and complicated delivery process;
- Inadequate supervision and leakage.

#### **3.3.4.2 Unofficial Payments at the Public Health Facilities**

Though health services at the public hospitals are supposed to be free of cost, it has been reported that doctors and other health workers demand payment. The 1987 BIDS survey shows that 36 per cent of the outpatients in rural health centres and 32 per cent in urban hospitals had to pay money for treatment from the government health centres (BIDS 1988). This gloomy story is not growing brighter as more doctors, nurses and health workers pour out of medical schools. More recent findings from a survey of selected district and teaching hospitals in Bangladesh suggest that there has not been any significant improvement in this respect over the years (WB/Euro Health 2004). According to the World Bank study, 24 per cent of outpatients and 65 per cent of inpatients paid unofficial fees. At district hospitals, as high as 94 per cent of inpatients made unofficial payments.

Of those inpatients that made unofficial payments, 61 per cent paid once, 32 per cent had paid twice and 6 per cent had to make extra payments at least three times. Inpatients were also asked to whom they made unofficial payments for obtaining services. About three-fifths (59.5 per cent) of the patients who made extra payments paid the 3rd and 4th class workers (clerks/administrative staff), while another three-fifths (57 per cent) made unofficial payments to the ward boys/peons. Only a small minority of patients made extra payments either to the doctors (13 per cent) or to the nurses (14 per cent).

The study found that people from poorer households have at least the same risk of making extra/unofficial payments as those from richer households. Since the poor are less likely to have friends/connections at the hospital and they are even less likely to obtain recommendation from influential people (bureaucrats, politicians), they are likely required more frequently to make unofficial payments for receiving treatment from public health facilities (WB/Euro Health 2004). To improve the health care facilities, all types of unofficial and unfair demand of extra payment should be stopped.

### **3.3.4.3 Human Resources Development**

Reform initiatives in the health sector of Bangladesh indicate that the period from 1975 to 1990 witnessed a significant progress in institutional development, both in respect of education and training and for service delivery. Female field workers have improved doorstep services, which was introduced in the mid-1970s, together with follow up and referrals. Besides, in order to meet the growing needs of the female population of reproductive age, large numbers of female paramedics were trained. Both basic and refresher training for all categories of field workers, paramedics and supervisors have been strengthened. There has been little progress in human resources development in key areas like doctors, nurses, medical assistants, lab technicians, sanitary inspectors, etc. Several teaching institutions for public health education, nursing education and in-service and pre-service training in family planning and health workers were established. With the assistance from Canada, The MoHFW had implemented a project to identify strategies for human resources development in the health sector under the World Bank's fourth health and population project. According to the report, there is an urgent need for establishment of a separate unit in the MoHFW to oversee and monitor human resources development components of HPSP and also to formulate a long-term human resources development policy in the health sector.

The amount of money available for health care is an important determinant of the style, design and action of a health service. Resources are likely to vary in the years to come, but it is clear that they are and will continue to be desperately short considering the size of the need and the rising costs of health care. The reality is that most rural people will receive health care under conditions in which one physician and one nurse together with a team of lesser trained personnel will care for several thousand people.

Therefore, we must literally develop a technology around effective use of resources and that the dual problems of services to all the people and of rational use of limited resources will condition our thinking at every step of planning. Indeed, what emerges from these issues is that entirely new systems for health care are called for with new approaches to educating the personnel who will implement those systems.

In view of the importance of quality reproductive health service delivery, population and development linkages and behaviour change communication at all level of policies and programmes, adequate number of skilled workers needs to be created to sustain population activities within the framework of the population



policy. Hence, the following education and training strategies need to be pursued for human resources development:

- (a) Introduce population, public health and health science in all levels of education with due importance and initiative to incorporate these issues, particularly in the curriculum of secondary school education.
- (b) Design and implement appropriate training and learning programmes for managers and service providers from different disciplines, covering the necessary mix of skills required for family planning, maternal, child and reproductive health services. To this end, existing HRD institutions need to be strengthened in terms of faculty and curricula development.
- (c) Expose policy makers, planners, programme managers of various ministries to population and development linkages so that they can prepare and implement sectoral plans and programmes with more focus on population.
- (d) Expand training programme for the doctors, nurses, medical technologists, birth attendants, midwives and other health service providers.
- (e) Instead of establishing medical college at each district head quarters, emphasis should be given to establish medical schools, say one for every district. This will help in achieving the target of serving all the people with minimum possible resources.

#### **3.3.4.4 Quality and Acceptability**

The right to health care emphasised that not only the quality of services should be adequate, but also that the quality of service is good and that it is provided in a socially and culturally acceptable manner (Osmani 2003). The quality of public service is generally low in Bangladesh, and health services are no exception in this regard.

An evaluation of the health sector programme reveals that public health service ranks the lowest among all types of service providers in terms of satisfaction to the users. The proportion of users satisfied with the overall public services was found to be 62 per cent as against 88 per cent for both qualified private practitioners and unqualified service providers (CIET 2001). Among public health services, the greatest concern for the users remains the non-availability of drugs and medical supplies and quality of inpatient food (BIDS 2003). The other important aspects of client dissatisfaction are cleanliness and hygienic conditions in the facilities, privacy of treatment and waiting time for treatment. Indoor patients are relatively more dissatisfied than the outdoor patients. Quality of services provided by the district hospitals on many counts such as attitudes of doctors/services providers, cleanliness and hygiene, availability of drugs etc. are found to be of poorer quality than the

services of upazila health complexes. There are no variations in the levels of satisfaction derived between males and females. Findings suggest that the service users from higher socio-economic status are likely to receive better responsiveness from doctors/service providers as well as better quality of treatment (BIDS 2003).

Apart from non-availability of medicines, poor maintenance of the facilities in terms of cleanliness and hygiene and lack of privacy, especially for female patients, have a direct bearing on the acceptability of services. Besides, behaviour of service providers also has an impact on utilisation. CIET study revealed that while 90 per cent of users of qualified private service as well as of unqualified practitioners were satisfied with the behaviour of service providers, only 66 per cent of users were satisfied with public health service providers. Bad behaviour of government service providers especially to poor patients tentamounts to discrimination and violation of right to health. The right to health care implies that the service providers will not only be responsive to the needs of the clients, but they will also treat them with respect and dignity.

#### **3.3.4.5 Strengthening Voice and Accountability**

The government and NGOs have undertaken various initiatives for strengthening voice and accountability initiatives since the introduction of HPSP for strengthening governance and accountability in the health sector. Citizen's voice has been recognised as an important instrument for improving responsiveness and accountability. Voice empowers citizens with relevant information, makes service providers accountable, demands better and effective services and ensures equity.

During HPSP it was emphasised that participation of stakeholders was critical to ensure client oriented services, improving quality of care and gender and social equity. The major voice and accountability initiatives undertaken during the HPSP were: community clinic, local level planning and national stakeholder committee. The government established about 11,000 community clinics during HPSP at the ward level in rural areas. For the management of community clinics, community groups were formed composed of government field workers, members of local government and primary stakeholders. But most of the clinics were not functioning in a participatory manner and also lack of supply of essential drugs made most of the CCs non-functional.

Local level planning (LLP) was introduced aimed at building capacity on planning based on community participation, effective utilisation of available resources and reflecting local needs in the national plans. The LLP was meant to act as monitoring tool for upazila and district managers. However, the programme faced many obstacles during implementation. There was limited understanding of overall objectives of LLP among programme managers, limited capacity of programme

managers for planning, and supervision was weak. Recently an upazila tool kit has been developed and LLP is expected to be implemented.

National Stakeholder committee launched in 1999 hardly ever met. Moreover, community based stakeholder committees formed in pilot unions and upazilas, though contributed to raising awareness and improving availability and quality of services, did not receive much official support. Strategy on stakeholder participation was not pursued due to low prioritisation placed on consultative process.

Under HNPS, government embarked on a number of voice and accountability initiatives including: National Health Users Forum (NHUF), Health Advisory Committee (HAC) and Clients Charter of Rights (CCR). NHUF is designed to promote government and civil society initiatives including patients' charter of rights and health watch groups. However, there was no progress in implementation of this initiative.

Another intervention launched by the MOHFW to promote voice is the HAC, chaired by a member of parliament and composed of local government officials, service providers and NGOs. The objective of the committee is to oversee service provision in a health facility and to provide recommendations at the higher level about the deficiencies of services. However, HAC remained largely inactive as committee meetings are not held regularly.

Government took initiative to institutionalise CCR which emphasised individuals' right to health. Both Health and FP directorates have participated in specifying the rights, developed training modules and formed committees to institutionalise the CCR. But till now it is limited to mere display of information, and awareness level remains low.

Future tasks to implement and institutionalise voice initiatives will be to make health committees function; translate policy into action, e.g. LLP and NHUF; institutionalising CCR; and ensuring accountability at the upazila level. Good governance in the health sector encompasses compliance with service standards, reduced absenteeism of service providers, proper dispensation of medicines, proper utilisation of equipment and reduction/elimination of exploitation of clients, e.g. charging unofficial fees at the government health facilities, selling medicine to clients, and forcing clients to go to private clinics and diagnostic centres. If voice of the people is heard and taken into account, then accountability of services can be ensured.

Effective involvement of primary stakeholders is of critical importance. Primary stakeholders are those who are ultimately affected by the service provision: the poor, women and other disadvantaged groups. They are of critical importance to ensure

access, quality and accountability of services. Stakeholder participation is crucial for improving performance and sustainability of health programmes. It is necessary to develop indicators to measure voice, accountability and good governance which should be determined at the programme design phase. Furthermore, monitoring, evaluation and feedback from different levels, particularly from the local level, are essential to address problems that may arise during programme implementation. Local level managers need to be empowered for taking necessary measures towards ensuring accountability.

The three top management problems in the public health sector are management control and supervision, coordination among various organisations, and adherence to established rules and regulations. These problems relate, in particular, to capacity of health information system to provide routine data for decision making. Other effects relate to certain important components of the health delivery services i.e. drug quality; efficiency of supply system; maintenance of equipment and transport; production of vaccines, essential drugs and intravenous fluids; training and utilisation of manpower; and adequacy of laboratory services. These infrastructure problems deserve adequate attention by the planners and policymakers.

### **3.4 Health Services Delivery: Public-Private Provision**

#### ***3.4.1 The Public Health Care Delivery System***

Compared to most other developing countries, Bangladesh has a relatively extensive government infrastructure of health facilities as well as a relatively extensive human resource base for the delivery of health and family planning services. But despite these, large segments of the population of Bangladesh have limited or no access to the health services at all and for many of the rest, the care they receive does not answer the problem they have. The national health resources, built and administered for all, are being consumed by the selective few who are favoured by geography, social class, wealth or position. The underserved majority is largely rural but also includes the urban poor (Khan 1988, 1994).

Despite the large expenditures on health, and the technical feasibility of dealing with many of the most common health problems, efforts to improve health have had modest impact on the health of the vast majority of the population in Bangladesh. This is commonly attributed to two main reasons. First, health activities have typically overemphasised sophisticated, hospital based care, while neglecting preventive public health programme and simple primary care provided at conveniently located facilities. Second, even where health facilities have been geographically and economically accessible to the poor, deficiencies in logistics,

inadequate training of staff, poor supervision, inappropriate services and lack of social acceptability have often compromised the quality of the care they offer and limited their usefulness.

#### **3.4.1.1 HNP Strategies for Service Delivery**

To achieve the HNP goals in the light of PRSP and MDGs, the government of Bangladesh has adopted the Health, Nutrition and Population Sector Programme (HNPSPP). HNPSPP has proposed to continue with the earlier sector-wide approach, the Essential Services Package (ESP) and the client-centered focus for service delivery system while bringing in some modifications in its policies.

The main strategy for HNP service delivery is to deliver a revised ESP of prioritised HNP services at the upazila level and below with appropriate domiciliary services and a functioning referral system. It comprises elements critical to the survival and well being of socially disadvantaged groups such as women, children and the poor. The main elements of ESP are reproductive health services including family planning and maternal and adolescent nutrition, child health care and nutrition, communicable disease control, limited curative care and behavioural change communication (BCC). The first four are directly related to service provision, while BCC has a pivotal role in influencing health seeking behaviour, including increased demand for and utilisation of the services of the ESP.

The main strategies and interventions for the delivery of effective ESP services are as follows:

HNPSPP has emphasised on antenatal care for all pregnant women, skilled birth attendance for safe delivery and phased expansion of Emergency Obstetric Care (EmOC) to all upazilas. UHFWCs are also being strengthened to provide safe delivery.

Government has recently undertaken a pilot programme of voucher scheme in 21 upazilas for providing free antenatal and postnatal services among the poor women through public and private hospitals.

Government introduced a National Nutrition Program (BINP) to address the malnutrition of children under two years of age, as well as pregnant and lactating mothers through the provision of food supplements, nutrition and health counseling.

Control of respiratory infection, diarrhea and malnutrition through Integrated Management of Childhood Illness (IMCI) and essential newborn care are given priority to reduce infant and neonatal mortality.

For reducing the burden of TB, increased accessibility and quality of National Tuberculosis Program (NTP) services, supply of quality drugs and expanded collaboration of Directly Observed Treatments (DOTs) with other providers will be ensured.

It will increase accessibility to treatment of malaria and kala-azar particularly in endemic areas through Early Diagnosis and Prompt Treatment (EDPT).

UHCs and UHFWCs will continue to provide curative care for a much broader range of conditions and diseases including road traffic accidents.

It will improve access to and quality of care of secondary and tertiary hospitals for effective referral linkages.

Staffing patterns at both UHCs and UHFWCs will be reviewed to ensure an appropriate skill mix of doctors, nurses and paramedics. Government has already recruited a substantial number of doctors who have been posted at the district hospitals and below.

#### **3.4.2 Demand-side Constraints**

Demand for health services is influenced by a multiplicity of factors, which have implications for service utilisation. A right-based approach to demand for health services has several components including availability, accessibility as well as acceptability of the services (Osmani 2003). For utilisation, services must be available in the first place.

##### **3.4.2.1 Availability**

Bangladesh has seen considerable improvement in health care facilities in the recent past. Over the last two decades, the number of hospital beds has almost doubled. Although the country is witnessing many lavish and sophisticated private hospitals in big cities meant for only rich and privileged people. Poor people have little access to quality health services. In terms of human resources, per capita availability of doctors and registered nurses has increased by two and a half times and four times respectively. But unlike other South Asian nations, Bangladesh has only 1 physician per 3,800 population in comparison to 1,700 in India and 1,400 in Pakistan. Moreover, there are only 14 nurse per 100,000 populations compared to 94 in India and 103 in Sri Lanka. There have been some improvements in this regard in recent years; however, the number of persons per hospital bed is still 2,736 and number of persons per physician is 3,317. But the real scenario is worse than the statistics because more than 50 per cent posts of doctors are vacant in rural health centres. Moreover, 40 per cent of doctors and 55 per cent of nurses remain absent in their duty stations at rural health facilities. They prefer to be in urban areas, which

causes severe deprivation of minimum health services to the rural people in general and poor people in particular.

Remarkably, Pakistan leads the South Asian countries in the context of patients per doctor ratio, followed by India (1,700) and Sri Lanka (1,800). Although Bangladesh is ranked four in this list, a large number of people, especially from the poorest households, remain beyond the reach of modern medical care.

TABLE 3.7  
POPULATION PER DOCTOR OF SOUTH ASIAN COUNTRIES

Country	Population Per Doctor
Bhutan	20,000
Afghanistan	5,300
Nepal	4,800
Bangladesh	3,800
Sri Lanka	1,800
India	1,700
Pakistan	1,400

**Source:** Adopted from the <http://strangemaps.wordpress.com/2007/10/17/185-the-doctors-patients-map-of-the-world/> at 5/5/2010 11.16am

TABLE 3.8  
MANPOWER SITUATION IN THE HEALTH SECTOR OF BANGLADESH

Health Sector	Total
Total number of registered doctors	50,004
Estimated total number of doctors now available in the country	38,537
Total number of registered nurses in the country	23,732
Estimated total number of nurses currently available	15,023
Total number of dental surgeons	3,484
Ratio of health service providers	
Doctor–density per one thousand population	0.26
Nurse–density per one thousand population	0.14
Dentist–density per one thousand population	0.02
Doctor–nurse ratio	1: 0.54

**Source:** HRD Data Sheet-2009, Human Resources Development Unit, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh.

Though private hospitals and clinics have grown rapidly in Bangladesh, government services still occupy an important place in the health system since it provides services either free or at heavily subsidised prices. Upazila health complexes and union health and family welfare centres are the key facilities for the

delivery of primary health care in rural areas. Besides, basic services are also provided through the Community Clinics (CCs) meant to serve roughly 6,000 population at the ward level, which has remained mostly non-functional over the last few years. Recently, government has contracted out several hundred CCs to NGOs for their functioning under NGO partnership.

### **3.4.3 Resource Mobilisation and Investing in Health**

The trend of public sector outlays and per capita expenditure on health has shown a rising trend over the years. The proposed budget for the fiscal year 2003/04 was higher than the revised budget of 2002/03, but per capita health expenditure remained almost the same in these two years (DORP 2003). Health expenditure as a percentage of total public expenditure dropped to 5.6 per cent in the year 2003/04 from 7.1 per cent in 2001/02. The share of health spending to GDP also declined slightly from 1.03 per cent of GDP in 1999/2000 to 0.93 per cent in 2002/03. However, the budget for the fiscal year 2008/09 shows that health budget has been substantially increased. As a result, per capita public expenditure on health rose from taka 220 in 2003/04 to taka 279 in 2004/05, and further to taka 430 in 2008/09.

In the HNP sector, health services are delivered through an ESP at the upazila level and below. It may be mentioned that this excludes ESP services being delivered in hospitals. It is also assumed that all spending at upazila level and below is on essential services. If overhead expenditure is not allocated, direct ESP expenditure is 63 per cent. But if overhead expenditure is allocated in the same proportion as direct service expenditure, ESP expenditure stands at around 65 per cent.

In terms of resource use it appears that child health care received the highest share of ESP expenditure since child mortality accounts for the highest number of deaths per year. Of all the categories of health expenditure, ESP allocations to child health reduce inequality the most (World Bank 2003). The second priority in resource allocation has been received by family planning which is accorded high priority both for the purpose of rapid reduction of fertility level and its impact on infant and maternal mortality. MMR is unacceptably high in Bangladesh and further resources need to be allocated in reducing the MRR with the increase in overall health expenditure. Government has already pledged to extend, in a phased manner, EOC services up to upazila level and safe delivery services up to union level. In addition, voucher scheme has been introduced for poor pregnant mothers in selected upazilas for providing free maternal services through public and private hospitals. Maternal services are also provided through existing domiciliary, outreach and fixed site services and through imparting training on increasing the number of skilled birth attendants to provide antenatal, delivery and post-delivery care. In addition, greater



involvement of NGOs may be ensured in promoting maternal care services. The scope of limited curative care has expanded for a much broader range of conditions and diseases including road accidents, which is on the rise in recent years. With the increase in national health expenditure, more resources need to be allocated in the area of limited curative care.

Although increases in total public spending will generate from higher national income, it may be possible to channel some of the existing private spending in a more effective manner. Key additional sources of funding that may be tapped for the delivery of more effective health care services are user charges, social health insurance and community health insurance. User charges, if retained by health facilities, may lead to significant improvements in quality of services through better maintenance of the facilities.

User fees are not likely to generate substantial revenues for the sector. However, with the increase of household income in rural areas, increase of user fees from the present level may be suggested with safety net for the poor. Nominal registration fees for outdoor and indoor patients and nominal charges for the use of diagnostic facilities at UHCs may be introduced.

Similarly, community health insurance is unlikely to yield considerable revenue, as it will be generated from poor households. However, it has potential as a means of extending social protection and channeling high but largely ineffective private spending. Insurance can also provide a means of protecting households from catastrophic illness. Additionally, introduction of social health insurance for government employees and formal sector workers though gradual coverage may provide significant additional funding. What is needed is a combination of approaches for different socio-economic groups. This should aim at community insurance for the poor, employment-related social insurance for the organised sector employees and voluntary insurance for those who can afford to pay. The experience of developed countries also shows the presence of public-private mix in health care system.

#### **3.4.3.1 Applicability of Telemedicine: Potential for Digitalisation of Health Services**

To provide and support health care, telemedicine refers to the use of information and communication technology. It is also a way to provide medical procedures and examinations to remote locations to access high quality central diagnosis for grass roots people. It has the potential to improve the accessing to quality health care services and timely delivery as well as lowering the costs even in places with scarcity of resources.

With the doctor-population ratio one of the worst in the South Asia region, for providing adequate health facilities to the people of Bangladesh, especially in the rural areas, there are two options: (1) building hospitals in rural areas and improving the infrastructure so that doctors and other staffs feel convenient to stay in these places, and (2) taking initiatives so that it is easier to access quality health care services by people in rural areas.

To implement the first one, huge investment will be needed, which is not feasible given the resource constraint (GDP share in health sector allocation of Bangladesh is insignificant). Hence, the second one seems to be the most feasible option. To implement the second option, telemedicine is the appropriate option to provide better health care by using maximum utilisation of limited resources.

#### ***3.4.4 Expenditures on Health***

The present government is pledge-bound to take the health services to the doorsteps of the people and also to improve its quality. In order to protect this constitutional right, the government is taking a number of steps. Remarkable among them is the Health, Nutrition and Population Sector Program (HNPSPP). The main purpose of this programme is to ensure sustainable development of health, nutrition, reproductive health and family planning for the people, in particular women, children, elderly people and the poor. For the FY2008-09, the cost of this programme has been estimated at Taka 2,416 crore, while the budget for Health and Family Welfare for FY2008/09 was Taka 6,196 crore.

There exist considerable out-of-pocket payments in obtaining public health services for purchase of drugs, transport and diagnostic tests. Private expenditures vary considerably by gender, type of service and socio-economic status. While the Government of Bangladesh spends about US\$5 on HNPSPP services, private out-of-pocket expenditure is to the tune of US\$7. This level of spending falls far short of the level required for providing even a basic service package. According to the WHO, the optimum suggested expenditure for the least developed countries is US\$ 24 per capita per year, including public expenditure of US\$ 13 per capita.

Since independence, there has been a gradual increase in public spending on health. The present level of government allocation to the health sector is only 1 per cent of GDP, against a WHO target of 5 per cent of GDP. This is barely adequate to meet the demands of an expanding health sector. Thus, public spending on health services is grossly inadequate. Low levels of public spending for health and low utilisation of public health services are intimately linked. A serious problem in public health spending is the large and increasing proportion of the expenditure on salaries. This explains in part clients' dissatisfaction with services because non-

salary components like medicines, equipment and proper maintenance are inadequately funded. Table 3.9 shows that Bangladesh and Pakistan spend a smaller share of GDP (around 3 per cent) for health sector. But when per capita expenditure on health is considered, Bangladesh spends \$15 as against \$23 by Pakistan; the corresponding figures are \$20, \$40, and \$42 in Nepal, India and Afghanistan respectively.

TABLE 3.9  
THE GDP SHARE AND EXPENDITURE SCENARIO OF SOUTH  
ASIAN COUNTRIES

Country	Total expenditure on health as % of gross domestic product					Per capita total expenditure on health at average exchange rate (US\$)				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Afghanistan	8.4	8.7	8.8	7.9	7.6	25	30	33	35	42
Bangladesh	3.0	3.1	3.1	3.3	3.4	10	11	12	13	15
Bhutan	4.2	3.8	3.7	3.6	4.1	43	42	47	48	75
India	4.4	4.2	4.2	4.1	4.1	24	27	30	33	40
Maldives	8.6	8.8	10.6	10.4	9.8	209	238	273	320	343
Nepal	5.4	6.2	6.0	5.6	5.1	13	17	18	18	20
Pakistan	2.9	2.9	2.8	2.7	2.7	16	17	18	20	23
Sri Lanka	3.8	4.1	4.0	4.2	4.2	38	44	50	61	68

**Source:** Data generated from <http://www.who.int/entity/whosis/whostat/2009/en/index.html>  
Data accessed on 18th April 2010, at 11.30am.

#### 3.4.4.1 Allocation of Resources

If overall spending and public spending on health remain low, it limits the scope for improving health as well as reducing inequalities. It is, therefore, sensible to ensure that both existing and additional resources are used efficiently that will help achieve maximum health status improvements. Resources are currently allocated to districts and upazilas largely on the basis of size of inpatient facilities, i.e. beds and number of staffs in the facilities. This leads to wide variation in per capita allocations among districts and does not take into account health needs of particular areas. For overall health objectives to be achieved as well as poverty objectives, allocation practices need to be reoriented to better reflect such factors as:

- a) Population size and structure of the locality;
- b) Disease burden and prevalence in the locality;
- c) Socio-economic status in the locality;
- d) Geographical variation in the allocation of resources (more resources to poorer areas or districts);
- e) Size of the health facilities (e.g. beds).

Apart from substantially enhancing resources for the health sector, there is also an urgent need to reorient spending and remove allocative inefficiencies since overall programme impact depends on efficient utilisation of resources as well as cost-effectiveness of the delivery mechanism. Allocation to priority services for the women, children and poor can be achieved through increased proportion of public spending devoted to ESP. In fact, public spending on ESP increased from a level of 60 per cent in 1997 to 65 per cent at the current level of total health sector spending. Secondly, proportion of non-salary components (e.g. medicine, maintenance) compared to salary component has to be increased. Latest evidence suggests that non-salary components as a proportion of total recurrent expenditure are 38 per cent in district hospitals, 25 per cent in UHCs and 30 per cent in UHFWCs, which need to be rationalised for efficient utilisation of resources (IHE 2004).

Within allocation, appropriate balance of funding will be ensured to reach the poor and to improve quality. It may require some time to develop an effective mechanism of allocation procedure and ensure appropriate balance. The broad-based allocation of funding should be as follows:

- a) Ministry of Finance will allocate fund once in a year and similarly Ministry of Health and Family Welfare will allocate funds to its organisations and programmes once in a year.
- b) ESP is a major area where at least 65 per cent resources will be allocated, followed by secondary and tertiary level care.
- c) Measures to improve cost-effectiveness of intra-sectoral allocations within the programme to ensure long-term sustenance.
- d) Non-salary inputs are to be maintained at an adequate level, especially stocks of essential drugs, maintenance of equipment and facilities.
- e) Rationalise the use of hospitals through a referral system.
- f) Improve drug management and assuring that only rational and essential generic drugs are purchased.
- g) Sufficient allocation for human resource development to ensure appropriate skill-mix at the facilities.
- h) At least 50 per cent resource should go to the poor (distributional objectives).
- i) At least 50 per cent resource should go to women (distributional objectives).
- j) NGOs working for outreach programmes should get sufficient support.
- k) Subsidising public health, preventive and promotive services as much as possible and avoiding financial barriers for the poor to other services when fees are necessary (e.g. by exemptions from fees, credit, etc.).

#### **3.4.4.2 Priority Areas of Public Spending**

Spending public resources better is the key to Bangladesh HNP services. It is not possible to do everything as desired and there will be trade-offs between competing claims for scarce resources. The main categories of services that lay most claims to public funding are:

- a) Public good type services such as policy, information, regulation, governance, and environmental improvements;
- b) Services/activities with spill over benefits (externalities), such as HIV/AIDS, immunisation;
- c) Health needs of poor people or targeted to the poor, thus reducing inequalities in health outcomes;
- d) Catastrophic service costs such as major trauma, cardio-vascular diseases, and emergencies;
- e) “Merit” type services such as family planning and other reproductive health services, nutrition interventions, diarrhoea disease control, screening for other communicable diseases.

#### **3.4.4.3 Role of Private Sector and Public-Private Provision**

The private health care sector constitutes an important part of health care delivery system. Through a wide network of health care facilities, providing services in different systems of medicine, this sector caters to the growing demand for health care in both urban and rural areas.

In 1999, there were 626 private hospitals having 11,371 hospital beds as opposed to 663 government hospitals having 31,772 beds (BBS 2001). The latest figure shows that the number of hospital beds in the public sector is 38,171 (December 2008) as against 36,244 hospital beds in the private sector (2009). The private sector generally provides the overwhelming majority of outpatient curative care, while the public sector serves the larger proportion of inpatient curative care, preventive and promotive care. There is a high dependence on the private sector for curative care, especially among the poor.

In the private sector, providers can be grouped into three main categories: first, the organised private sector which includes qualified practitioners of different systems of medicine; second, the not-for-profit NGOs; and third, the private informal sector which consists of providers not having any formal qualifications, such as untrained allopaths, homeopaths and kabiraj, etc. known as Alternative Private Providers (APPs).

Data shows that most of the private hospital facilities are concentrated in urban areas and small in size in terms of hospital beds. However, private clinics show lower lengths of stay and higher occupancy rates than public facilities of comparable size. This indicates a greater degree of resource efficiency in the private sector (HEU 1998). There is a lack of sensitivity to local needs in providing service-mix, which is mostly guided by profit motive.

Although people's perception about quality of private care is high, in practice, the situation portrays a dismal picture. Evidence shows that the doctors practicing in private sector prescribe excessive, expensive and more risky drugs and often excessive diagnostic tests. One study shows that half of the clinics registered either barely meet or fall below the standard inputs defined by the 1982 Ordinance as necessary to obtain registration. The situation among the vast number of unregistered clinics is ever worse (Khan 1998).

Private health providers operate in non-competitive market conditions that tend to exhibit oligopolistic behaviour. This allows them to maintain high prices and gaining higher profits. They have been found to charge high consultation fees as well as high charges for other services. Private health care affects both the cost and quality of services available. Therefore, efforts need to be undertaken to regulate the provision of private health services in an appropriate manner through regulation of service charges, quality of care, location and distribution.

#### **3.4.4.4 Public Private Partnership (PPP)**

The health system in Bangladesh is composed of a wide range of public and private health care providers. The location and service mix offered by public and private providers varies by the level of urbanisation. The tertiary and advanced services are offered by providers, both public and private, in the major metropolitan areas. The secondary level services are offered at the district headquarter level. Finally, the first level is offered at the administrative levels of *upazilas*. There are generally no inpatient and specialised services below the *upazila* level. A large majority of the services at the village level are offered by private individuals, trained and untrained health practitioners and pharmacists.

Private providers are more diverse in terms of the services offered, training level of the medical staff, legal organisational status, system for medicine use and whether or not the doctors have public sector employment. Private providers range from NGOs, mainly offering promotional and family planning services, for-profit providers (both very small practices and large modern health facilities) to traditional healers and homeopathic providers as well as licensed pharmacists and unlicensed drug sellers.

In order for PPPs to succeed in the Bangladesh experience, one needs to take the following factors into consideration:

- The question whether the state is seen primarily as a provider of services or as a regulator of service provision. One must reconcile this question in an objective way with government policy with the realisation that one cannot do everything to everyone. One needs to be clear as government where the strength lies in terms of skills, capacity and strategic position to design the optimal mix of provision and funder/regulator of essential services.
- The most important priority is to meet the health needs of all Bangladeshis, and in particular, the vulnerable groups.
- Hand in hand goes the need to enhance the scope for increasing access to health services and for providing services of a higher quality.
- In achieving this, the major challenges faced are in the delivery of health services and provision of infrastructure and the elimination of backlogs.
- The benefits of PPP are not in an increase of funds, but in improved management of scarce resources.

If PPPs are processed correctly, a wide-ranging benefits may be derived for all stakeholders. Benefits include efficiency gains; output focus; economies generated from integrating the design, building, financing and operation of assets; innovative use of assets; managerial expertise; and better project identification.

The following factors are important to consider as one proceeds along the challenging road of PPP.

- For government departments, PPPs must be an accessible, relevant, viable and beneficial service delivery option.
- The government's focus should shift from managing the inputs to managing the outcomes, i.e. becoming a contract manager rather than a resource manager.
- There should be coherence and consistency in government policy and legislation when introducing legislation and policies pertaining to PPPs.
- For the users of public services, PPPs must result in accessible, affordable and safe health services that meet acceptable quality standards leading to improved efficiency and accountability to the public.
- For private parties, PPPs should be sufficiently rewarding in relation to the investment required and the risks undertaken.

- Private sector bidders should be allowed and prompted to respond with imagination and innovation.
- For society, PPPs must promote goals such as social equity, economic empowerment, efficient utilisation of scarce resources and protection of the environment.

### **3.4.5 PPP for ESP in Bangladesh**

With the introduction of ESP, the Government of Bangladesh has laid down the range of promotive, preventive and curative health services to be made available to all. As already mentioned, the ESP includes established services for reproductive and child health services and control of communicable diseases as well as services for prevention and management of non-communicable diseases and injuries.

Promotive health services are integrated in all ESP components as a cross-cutting element. They incorporate the approaches of IEC (Information, Education and Communication) and BCC (Behavioural Change Communication), but reach towards the more comprehensive vision of Health Promotion. Essential promotive services are defined at three levels: (a) healthy lifestyles/self-management of health problems, (b) health and health-related service seeking behaviour and equity of access, and (c) advocacy for relevant regulatory and voluntary standards regarding environmental and occupational health and product safety.

Four areas may be identified for private sector involvement in ESP services: (1) Inclusion of private providers in capacity assessment and capacity development; (2) Contractual arrangements for defined services e.g., ambulance services, laboratory services, out-contracting of sub-centres and primary health care centres; (3) Joint initiatives and contributions—e.g. government (project) support to improve health and sanitation services for vulnerable groups; and (4) Promotion and support of social responsibility in business and corporate activities; e.g. concerning food safety, pollution control, occupational health and work place policies.

Despite some achievements in the health and population sector, the strategies to achieve universal health coverage to remove rural-urban, rich-poor and other form of inequities, and to create provisions for essential services for vast majority of the population, especially rural poor, continue to remain as the major challenge for the health sector. More specifically, issues such as poverty related infectious diseases, most mothers suffering from nutritional deficiency, most children having some degree of malnutrition, most pregnant women not receiving delivery assistance by trained providers, poor maternal and child health and nutrition, unmet need for family planning and rise in STD infections constitute major current challenges.



### *Informal Private Sector*

It is well known for long that APPs provide the majority of health care in Bangladesh, particularly in rural areas. The majority of the APPs do not have any formal education in their system of medicine, though a significant proportion has received some semi-formal training. They charge a very small consultation fees, and a greater share of their income comes from selling medicines. Poor people at a large proportion seek medical care from the APPs. The results indicate a very low quality of care among the APPs. However, the allopathic drug vendors usually perform better than the homeopaths and traditional providers in the case of common ailments.

Private informal sector, therefore, mobilises a considerable portion of out-of-pocket expenditure from households, which is largely ineffective. It is estimated that 40 per cent bottom poorest households contribute 40 per cent of total health expenditure, which may otherwise be mobilised through community health insurance programme for the poor.

### *Health Care Services through NGOs*

In health care delivery, many NGOs have displayed innovativeness and cost-effectiveness. Developing partnership between the government, NGOs and the community can bring fruitful results. The collaborations between the MOHFW and NGOs in strengthening family planning, EPI, TB and leprosy activities have been effective through active involvement of the communities. Community health workers can also motivate communities to better utilise government health services. These workers through increasing contacts with the local population could expand the coverage of health and family planning services while reducing the dependence on government employees. Therefore, such contacts should continue to play an important role in the provision of services to under-served and disadvantaged sections of the community.

Recently, the government has been increasing NGO involvement in providing primary and community-based health care and nutrition services. There has been noteworthy collaboration with NGOs in BINP, social marketing of contraceptives and urban primary health care. These initiatives require further scaling up and lessons from these experiences may be replicated in other areas of concern. The community-based organisations can be involved in monitoring the quality and coverage of services.

NGO services in the health sector have largely been confined to consultations and raising awareness, as major treatments need huge investment. Collaboration between government and the private sector is observed in health care delivery. However, collaboration of the public sector with private sector has not been

satisfactory. The range and extent of public sector collaboration with the private sector in the area of health, nutrition and population (HNP) is incongruent with their importance. The major interactions were in terms of regulations of private clinics and hospitals. Informal (or less formal) providers such as non-allopathic practitioners, traditional birth attendants, drug vendors have had very little interaction with government. Thus, the public-private collaboration failed to include agents who are most important for the poor. Appropriate public policies are needed to raise the effectiveness of the private sector's contribution to public health goals.

In health and family welfare sectors NGOs have been contributing significantly. NGOs were given the responsibility to run family welfare centres, in terms of reaching the eligible couple at door steps, which saw increase in contraceptive usages. NGOs are playing a significant role in providing urban primary health care in four largest cities in Bangladesh—Dhaka, Chittagong, Khulna and Rajshahi. In addition, some hospitals are run by NGOs and these also provide highly subsidised curative care to urban poor and others.

#### ***3.4.6 Micro Health Insurance: Experiences from Bangladesh***

Access to health services is still inadequate and poses as a major challenge in the health sector. Among 49 per cent of clients who have access to qualified care, only around nine per cent seek health care from public health services. The level of health care spending in Bangladesh is 3.5 per cent of its GDP, of which 34 per cent is financed by the government, 64 per cent by the public and 2 per cent by the NGOs. The poor are more likely to seek health care from private, and more often from unqualified sources.

The poor households are exposed to various health hazards including minor diseases to major health risks such as accidents and prolonged illness. Risk perception by the poor differs widely depending on household security, both financial and physical, livelihood pattern and awareness about risk. Bangladesh has one of the highest rates of out-of-pocket health expenses in Asia; around 5 per cent of household expenditure goes to out-of-pocket health costs. Out-of-pocket health expenses have negative consequences in the use of health services and overall living standards. In Bangladesh, catastrophic out-of-pocket health payments account for as much as one third of the monthly household expenditure for the poorest quintile. To meet such health expenses, households often sell assets or borrow money from friends, relatives or money lenders.

Recognising the vulnerability of poor to unforeseen health risks and consequent catastrophic financial loss, innovative approaches are necessary for ensuring quality and affordable health care for them. One way to address this problem is micro health

insurance, accessible to individuals and families through affordable premiums. Micro insurance encompasses a range of different insurance services aimed at poor populations. Insurance can be even more important for low-income groups as they are more vulnerable to ill health or death, unexpected expenses and natural disasters. It is estimated that currently 6.5 million lives are covered by micro insurance in Bangladesh, 94 per cent of the poor without micro insurance coverage.

Micro-insurance is an emerging sector, strongly linked to the micro credit movement in Bangladesh. The three leading micro health insurance schemes in Bangladesh are those run by BRAC, Grameen Kalyan (GK) and the Society for Social Services (SSS). The BRAC Micro Health Insurance for Poor Rural Women in Bangladesh (BRAC MHIB) started as a pilot project at Madhabdi in Narshingdi district in July 2001. It was formally launched in November 2001 when a 3-year financial and technical assistance agreement was signed with the ILO's Women's Empowerment through Employment and Health (WEEH). At that time, the project was extended to include Phulbari in Dinajpur District. The project falls under the administration of BRAC, but operates as an independent entity. Membership is open to all poor families living in its two areas of operation. The project has not yet expanded its operations outside these two areas.

GK was launched in November 1996 when Grameen Trust handed over 10 of its clinics to the newly registered NGO. Membership of its health scheme is open to all Grameen Bank borrowers and their families, as well as to poor villagers living within an 8 km radius of a GK health centre. Grameen Kalyan now operates 28 clinics in eight districts in the country. With a premium of 150 Bangladesh Taka (about US\$ 2.16) for Grameen Bank members, and 250 Taka (about US\$ 3.61) for non-members, this health insurance scheme provides concessions on consultation fees, diagnostic charges, and drug prices. The policy provides coverage for up to six members of a household.

The SSS's health programme began in January 1996 when the organisation established a 20-bed hospital in a rented two-story house in the town of Tangail with donations from SSS staff and other Bangladeshi philanthropists. Membership of its health card scheme is open to all families living in the urban and rural areas of SSS's operation. Today SSS operates one urban hospital and 16 rural clinics in 6 Upazilas of Tangail district.

There are other notable MHI schemes in Bangladesh like Dhaka Community Hospital, Dushtha Shasthya Kendra, Nari Uddug Kendra, etc. that run different types of programmes. All these programmes typically involve low premiums and modest benefit packages of basic and preventive health services, including immunisation,

family planning, consultation and normal deliveries. Only SSS scheme covers certain types of surgeries. Discounts are provided on medicines and pathological tests. Hospitalisation cost is generally covered up to Tk.1,000. However, only SSS scheme covers certain types of surgeries, for a co-payment of Tk. 3,000. Most MHI schemes have provision for cross subsidisation for the poorest to receive benefits without premium of co-payments. The MHI schemes target women and the poor, and cover only a limited number of districts in Bangladesh.

None of the organisations considers itself a health micro insurance provider in the strict sense of the term, as each model contains a mixture of social equity, service provision and financing (Ahmed *et. al.* 2005). However, all three organisations pool risks over their target populations and provide health care services in exchange for membership or cardholder fees, which can be considered premiums. All three employ a co-payment system and/or a limitation on the amount reimbursed. None are associated with any insurance companies or outside service providers. There are no reinsurance arrangements.

The target population initially had a poor understanding of MHI and, as a result, all three organisations faced difficulties in convincing them of the benefits of their services. In addition, poor people in rural Bangladesh are not willing to pay for health services until they face illness or accident, and they look at premiums as expenditures rather than payments for protection against future risks.

These organisations have deliberately overlooked the risks of adverse selection and have enrolled members without any restrictions. They accept that their organisations are the only hope for these people to receive treatment for their illnesses. Fraud is not a major problem. Their staffs frequently interact with members and get to know their families personally. The organisations feel that this works as a moral deterrent against fraud and false claims.

The MHI organisations received funding from donors and/or their parent NGO to set up their initial health care facilities, and they still require ongoing support. Operational results of BRAC MHIB and SSS show that without subsidy they are not financially viable, which is a direct consequence of prioritising their social agendas over financial sustainability.

GK has an operating loss, but a net surplus after investment income. GK received an endowment fund from its parent organisation that generated a substantial investment income. The endowment fund was returned to the parent organisation in 2002. The income generated by investment of the endowment fund and reserves has strengthened the financial position of GK significantly, and has contributed to the financial viability of the programme. However, high health care costs, low re-

enrolment rates, and a limited number of subscribers have, with a few exceptions, prevented the MHI schemes from achieving financial viability.

Micro insurance products are designed to increase the use of and access to basic and preventive health care, but do not cover high-cost, low frequency health services. For instance, only one scheme covers surgeries, and none explicitly covers chronic diseases and emergency obstetric care or caesarean delivery.

#### ***3.4.7 Financing Extended Coverage***

Restricting the use of government funds for construction of new urban hospitals or expansion of existing ones is the easiest method of freeing resources for expansion of coverage. Furthermore, if hospital services in Bangladesh were subjected to a thorough cost effectiveness analysis, substantial savings could be generated. This is because, firstly, too much is spent on inpatient services compared with outpatient services. The former is extremely expensive. Though accurate figures are not available, evidence shows that a large part of recurring inpatient costs are essentially “hotel” costs—laundry, catering, heating—which have a remote relation to treatment or care. There are reasons to believe that the bulk of serious illness typical of Bangladesh—diarrhoeal diseases, malnutrition condition, tuberculosis—can be treated effectively on an outpatient basis.

The system of pricing of governments health services is critically important, not only for mobilising funds but also for resource allocation in the health sector. It is important to devise methods for discouraging malingerers and those inclined to use sophisticated medical facilities irrespective of need. Policy of full cost pricing of health services would create substantial financial incentives for people to avoid hospitals (particularly inpatient services) and to rely instead on less expensive visits to outpatient facilities and local health centres.

In health care today it is not money alone that matters. What is more needed for our rural population is the spread of basic knowledge about sanitation, hygiene, nutrition, disease causation and family planning. Malnutrition and many disease conditions, which are endemic in rural areas, are not basically medical problems, nor can they be effectively resolved through the medical approach. The health care problems throughout Bangladesh, except among middle and upper income urban groups, are locally transmitted diseases, airborne diseases and malnutrition. These three elements interact cumulatively and synergistically. This is particularly true of those below the age of five but also applies to the older age groups.

Sophisticated health approaches are inappropriate unless backed up by outreach and preventive services. Modern drugs, in some instances, bring immediate relief or even eventual cure, but may have no lasting effect on the health of a person who

must return to a disease ridden environment. Treatment for parasitic infection may mitigate the clinical symptoms, but is not likely to keep a person from becoming re-infected. Improvement of agriculture, housing, sanitation, environmental and personal hygiene and planning with reasonable spacing of births are the prerequisites for improvement of health, and to each of them must be added effective health education. A college/university-educated doctor is not required for this purpose. The paramedics—with some basic training in health—are sufficient to handle most of the problems of rural Bangladesh. These aspects should be given due emphasis in designing policies and programmes for the HNP sector in Bangladesh.

### **3.5 POPULATION GROWTH, URBANISATION AND ENVIRONMENTAL CHALLENGES**

#### **3.5.1 Population: A Brief Review**

According to latest Population Census of 2001,<sup>2</sup> Bangladesh has a population size of 130 million. This produces a population density of 881 per sq. km,<sup>3</sup> which is highest in the world except for few island countries. More importantly, while Bangladesh has already reached the “plimsoll level” of its carrying capacity, population still has great potential to increase in size. This growth while will come from genuine population growth that will emerge as a balance between birth and death would also arise from “population momentum” built into the population age structure for past high fertility. The population growth rate is estimated at 1.48 per cent per annum in 2000. At this rate population grow by an additional 1.9 million each year and estimated to have reached 136 million by 2004. It is likely to be 139 million in 2006, 149 million in 2011 and 169 million in 2021 (Islam 2003). According to another projection, the figure may rise up to 172 million by 2020 (population projection done by the Population Wing, Planning Commission, Dhaka, 1995).

Of total population, 39 per cent is young viz., aged less than 15 years, 18.5 per cent is youth falling in the age range of 15-24 years, 36 per cent is in the prime working age of 25-59 and 6.2 per cent elderly (aged 60+). Of total population, 51.6 per cent is male and 48.4 per cent female; thus, there are 106.6 male in the country for 100 women.

Among different administrative divisions, the largest number of population live in the Dhaka Division (31.5), followed by Rajshahi (24.3), Chittagong (19.5) and Khulna divisions (11.8). The newly created two divisions i.e. Barisal and Sylhet have

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<sup>2</sup> Census results are prepared using 5 per cent sample of the census schedules.

<sup>3</sup> Area of the country is 147570 sq km.

lowest share. The proportion population living in the former division is 6.6 per cent and in the latter division 6.4 per cent.

### **3.5.2 Fertility and Family Planning: an Update**

Bangladesh is now passing through the third phase of demographic transition, that is, it is experiencing declining birth and death rates. But fertility decline began a few decades later than the mortality decline. As a result, population size increased to about 149 million in 2009 more than three times the size in 1951. Population growth rate marked a gradual decline during the last few decades, but the cycle of demographic transition is yet to be completed. Population projection based on achieving NRR=1 by the year 2016 shows that Bangladesh population would rise to 172 million by 2020 and 223 million by 2050. If the attainment of replacement level fertility is delayed, the size of the population will be even bigger. Sustainable population of Bangladesh has been estimated at 172 million, implying that beyond that population it will face serious challenges in maintaining ecological balance, biodiversity and of rising environmental pollution.

Bangladesh's fertility decline began at a low level of socio-economic development. It can be assumed that the demand for children already started to decline at that stage. But due to lack of modernisation and traditional beliefs and culture, costs of fertility regulation were high that hindered wide acceptance of contraception coupled with lack of adequate availability and access to contraception. Reproductive change spread as diffusion and social interaction processes became stronger and costs of contraception reduced. In addition, strengthening of the family planning programme also addressed many of the economic, social and health costs of contraception, and contraceptive prevalence rose among all segments of the society.

The level of fertility started to decline since the mid-1970s, which accelerated during the 1980s, and then stalled during the 1990s. The total fertility rate (TFR) was 6.3 in 1975 and decreased to 3.4 in 1991-93, and then stalled for about a decade, which finally dropped to 3 in 2001-03 and to 2.7 in 2002-06. According to the BDHS 2007, fertility level is still half a child above replacement level of 2.1 children with wide variation by region and socio-economic status.

#### **3.5.2.1 Success Stories**

Although population has been declared as the number one problem in the country, particularly that facing the country's development, there are some noteworthy successes in this area. The country has achieved impressive successes in controlling the population in recent decades. The total fertility rate (TFR) has declined from over 7 children in the mid-1970s to 2.7 children in 2007 marking a decline of more than half in the fertility level. Indeed, among world's 20 poorest

countries, Bangladesh has experienced a significant, sustained fertility decline over the past two and a half decades. The contraceptive prevalence rate (CPR) too has increased substantially during this period, which served as the conduit for fertility decline. The contraception use rate was around 8 per cent in the early 1970s and rose to 55.8 per cent in 2007.

Bangladesh also achieved considerable success in improving the health status particularly that of the infants and children, over the recent decades. The infant mortality in the mid-1970s was 150 per 1,000 live births and dropped to 66 in 2000. The child mortality (1-4) declined by more than two-thirds during this period with rate being 6-7 per 1,000 children in 2000. People's life expectancy consequently has increased substantially in the country. It rose from around 45 years in the mid-1970s to 60 years in 2000.

Due to faster decline in fertility compared to mortality, the population growth rate declined significantly during that period. It was around 3 per cent per annum in the 1970s and declined to 1.48 per cent in 2000.

### 3.5.2.2 Recent Trends in Fertility

An examination of trend of fertility by looking at the estimates of TFR over the past three decades shows that it declined by 57 per cent during the period 1975-2004 at the rate of 1.8 per cent per year (Table 3.10). The pace of decline was steeper during the 1980s and the early 1990s and since then it remained stalled until 1999. But the decline started again in 2001 and continued till 2006.

TABLE 3.10  
TRENDS IN CURRENT FERTILITY RATES

Age group	Survey and approximate time period						
	1995 BFS	1993-1994 BDHS	1999-2000 BDHS	2004 BDHS	2007 BDHS	1975- 2007	1999-2000- 2007
	1971- 1975	1991-1993	1994-1996	2001- 2003	2004-2006		
15-19	109	140	144	135	126	15.6%	-12.5%
20-24	289	196	188	192	173	-40.1%	-8.0%
25-29	291	158	165	135	127	-56.4%	-23.0%
30-34	250	105	99	83	70	-72.0%	-29.3%
35-39	185	56	44	41	34	-81.6%	-22.7%
40-44	107	19	18	16	10	-90.7%	-44.4%
45-49	35	14	3	3	1	-97.1%	-66.7%
TFR 15-49	6.3	3.4	3.3	3.0	2.7	-57.1%	-18.2%

Source: BDHS (various years).



A comparison between age-specific fertility rates of 1975 and 2007 indicates that compared to 1975 age-specific fertility rates in 2007 fell steeply in all age-groups, particularly among older age groups, with the exception of the 15-19 age group which increased by 16 per cent. The age pattern of fertility has shifted towards early childbearing and fertility of older women has reduced sharply over the years.

If we examine the decline in ASFR from 1999-2000 to 2007, we find that the decline was slower for the younger age group (15-24), somewhat higher for the middle age group (25-39) and greater for the older age group.

An examination of the decline in cumulative fertility by age cohort for selected survey years shows a consistent pattern of declining trend in fertility, which fell from a mean number of ever born children of 3.8 in 1975 to 2.3 in 2007, a decline of 40 per cent. The cumulative fertility declined in all age groups including 15-19 age group. The reduction of fertility is steeper with the increase in age of women, it declined by nearly three children in the 35-39 age groups. A comparison of completed cohort fertility (4.9) with current fertility (2.7) demonstrates that fertility level has fallen substantially during the recent past. A comparison of completed fertility between 1975 and 2007 shows that it declined by less than two children or 27 per cent between this period. A drawback of the cohort measure is that it is primarily affected by childbearing levels in the past. However, completed fertility level has the advantage that it is the real measure of fertility, while TFR is a hypothetical measure and is subject to various biases.

TABLE 3.11  
TRENDS IN CHILDREN EVER BORN

Age group	Mean number of children ever born by age group, selected sources, Bangladesh, 1975-2007						
	1975 BFS	1981 CPS	1989 BFS	1996-1997 BDHS	1999-2000 BDHS	2004 BDHS	2007 BDHS
15-19	0.6	0.5	0.4	0.4	0.4	0.4	0.3
20-24	2.3	2.0	1.7	1.5	1.4	1.4	1.3
25-29	4.2	3.7	3.1	2.8	2.6	2.6	2.3
30-34	5.7	5.4	4.7	3.9	3.6	3.4	3.2
35-39	6.7	6.4	5.9	4.8	4.3	4.1	3.8
40-44	7.1	7.3	6.6	5.6	5.1	4.7	4.3
45-49	6.7	7.6	7.3	6.4	6.1	5.6	4.9
Total	3.8	3.6	3.1	2.8	2.6	2.5	2.3

Source: BDHS, BFS, CPS (various years).

### 3.5.2.3 Effects of Population Momentum

Achieving faster reduction of population growth will require attaining replacement level fertility as well as addressing the effects of population momentum. Even if replacement level fertility is achieved in the near future, the population of

Bangladesh will continue to grow due to the effects of population momentum as the proportion of women in the reproductive age group will continue to grow until the population stabilises. However, the eventual size of the stable population hinges on the time of attaining replacement level.

The age composition of the population undergoes changes with the progress in demographic transition. The proportion of population under age 15 has declined from 46.7 per cent in 1981 to 39.4 per cent in 2001 due to reduction in fertility. On the other hand, the proportion of population in the economically active age group has marked an increase from 47.7 per cent in 1981 to 54.4 per cent in 2001, while there is a slight increase in the proportion of older population (>60).

TABLE 3.12  
DISTRIBUTION OF POPULATION BY AGE GROUP

Census	Age groups		
	0-14	15-59	60+
1981	46.7	47.7	5.6
1991	45.3	49.4	5.3
2001	39.4	54.4	6.2

Source: BBS, Population Census (various years).

The changes in the age distribution of the population have many socio-economic implications. First, the age-dependency ratio of the population has declined from 109 in 1981 to 83 in 2001. Second, it has resulted in an increase in the young and working age population which can create a virtual cycle of growth, known as demographic dividend. Third, the higher size of women in the reproductive age group will mean that the population will continue to grow until population stabilisation takes place, say by the year 2050. The level of fertility will remain high at the initial stage due to tempo effect caused by the downward shift in mean age at childbearing. Hence, the effect of momentum can be reduced by delaying the first birth as well as widening birth spacing.

#### 3.5.2.4 Determinants of Fertility Behaviour

Childbearing by women is determined by a complex set of socio-economic, biological, behavioural and cultural factors. Classical demographic transition theories mainly dealt with the demand aspects of fertility. Sociologists then came up with the supply-side approach claiming that the demand factors only indirectly affected fertility through the supply factors. The relative importance of biological and behavioural factors, also known as the proximate determinants, depends on the stage of fertility transition. In pre-transitional societies, the differences in marriage pattern and the duration of breastfeeding dominate, while during the transitional

phase the importance of contraception gradually increases. Evidence from the 1989 BFS showed that the contribution of breastfeeding and postpartum amenorrhea to fertility decline was 42 per cent compared to 33 per cent from contraception (Huq and Cledand 1990). But as transition proceeds, the importance of contraception increase. Bongaarts (1982) found that only four variables, viz. marriage, contraception, breastfeeding and induced abortion, explained 96 per cent of the variance in total fertility.

#### **3.5.2.5 Socio-economic Determinants of Fertility**

A successful family planning programme and diffusion of contraceptive information may not be enough for reducing the level of fertility to attain population stabilisation. The prevalent high demand for children may resist a downward shift in the demand for children. Socio-economic development plays a critical role, both at the initial and final stages, in demographic transition. However, the pattern of socio-economic development associated with reproductive change varies from country to country. The main driving force is a rise in the cost of children and a decline in their value to parents. In the context of a traditional society, a large family is needed to balance against potential infant and child deaths, to assist in family enterprise, to have sons to maintain family lineage, and to support family members during crises and old age.

Parental education and employment especially of mother increase expenditure as well as opportunity cost of childbearing and caring, and, therefore, parents want quality children rather than larger number of children by investing more on education and health of children. Female entry into labour force also implies additional income for the family raising female power at the household level, which exerts considerable influence in the household decision-making process including adoption of contraception and desired family size. It is also an expression of modern attitude of the family allowing women increased mobility outside home.

Reduction in the level of mortality, especially infant and child mortality, is considered a crucial precondition for fertility transition in all societies. When a couple become reasonably assured of the intended number of surviving children, they are more likely to pursue a small family norm. In addition, survival of children prolongs the period of breastfeeding, thus reducing the probability of conception.

In a patriarchal society, couples want to maintain family lineage as well as inheritance of family property through sons. They are also valued to assist in family enterprise and to support parents and other family members during economic insecurity. Due to pressure from extended family members and parents, couples want to have a child, preferably a son, soon after marriage.

### 3.5.2.6 Fertility Differential

There is wide variation in fertility level by residence, female education, and household economic status and by region. The TFR for rural woman is 0.4 children higher than the urban woman, uneducated women have 0.7 children higher than the secondary or higher educated women, women in the lowest wealth quintile have on average 1.0 child greater than women in the highest wealth quintile. However, the largest differential is observed across regions. Khulna division already appears to have attained below replacement level fertility with TFR of 2.0, and Rajshahi division (2.4) is close to achieving it, while Sylhet division indicates highest fertility rate (3.7) and Chittagong (3.2) follows the suit. Both Dhaka and Barisal indicate a TFR of 2.8. Thus, clearly, in the western part of the country fertility level is low, whereas in the eastern part it is high, and the middle part falls in between. But, paradoxically, eastern part is known to be economically more advanced than the western part. In view of this, government should pay more attention, design appropriate policies and take special measures to reduce TFR in Sylhet and Chittagong divisions.

### 3.5.2.7 Proximate Determinants

Biological and behavioural factors that affect human reproduction directly are known as proximate determinants and socio-economic factors indirectly affect fertility through one or more of these proximate determinants. The major proximate determinants are marriage, contraception, breastfeeding and induced abortion.

#### *Marriage*

The age at which women marry and proportion who remain single are potentially important factors influencing fertility levels. There has been a slow but steady increase in the age at which women first marry, from a median age of 14.1 years for women in their late forties to 16.4 years for those in their early twenties. The increase is less pronounced among men; the median age at marriage rises from 22.9 years for men in their early fifties to 24.5 years for men in their late twenties. Overall, men marry more than eight years later than women.

A dramatic decline in the proportion of women marrying in their early teens has been observed. The proportion of woman marrying by age 15 has declined by over two-thirds over time, from 65 per cent among women in the oldest cohort to 21 per cent among women in the youngest cohort. Similarly, the proportion of women marrying by ages 18 and 20 decreases substantially from the oldest to the youngest cohort. The legal age of marriage is 18 years for women, but around two-thirds of women aged 20-24 were married before age 18. Women aged 20-24 who have

completed secondary or higher education marry about three years later than those with no education.

Teenage fertility is still high and a major social and health concern. Twenty seven per cent of young women aged 15-19 have given birth and another 6 per cent are pregnant with their first child. Early marriage and childbearing and the close spacing of births pose serious health risks to adolescent girls and young woman, and create hindrances in their education and livelihood opportunities. The median age at first birth has gradually increased from 17.6 years for older women aged 45-49 to 19 years for younger women aged 20-24.

#### *Contraception*

Bangladesh's family planning programme was a success story and a model programme for many countries. The success of the programme owes to a large extent to the deployment of a large contingent of government and NGO field workers, who made door-to-door visits to motivate couples and distribute contraceptives, coupled with mass media campaigns, resulted in a remarkable rise in contraceptive prevalence within a very short span of time.

Contraceptive prevalence rose from 7 per cent in 1975 to 49 per cent in 1996-97 and to 56 per cent in 2007. However, contraceptive use declined from a high of 58 per cent in 2004 to 56 per cent in 2007, mainly attributed to a decline of traditional methods. Although CPR has increased over time, method-mix of use shows that effectiveness of contraception has decreased due to higher use of less effective methods. Trends in contraceptive method-mix indicate that short-term methods, especially the pill, have gained in popularity against long-term methods, such as IUD, Norplant and sterilisation, which is also posing a serious strain on the sustainability of the programme as women in the reproductive age has substantially increased over time. In neighbouring countries such as India, contraceptive prevalence is heavily dominated by female sterilisation, roughly accounting for 85 per cent of all modern methods, which is cost-effective and ensure contraceptive security. Male responsibility in contraceptive protection is low, only 5.2 per cent of males use any modern method of contraception.

#### *Ensuring Contraceptive Security*

In 1975, the population of Bangladesh was approximately 80 million with only 7 per cent of eligible couples using modern contraception. But in 2007 population was around 144 million with 56 per cent of eligible couples using modern contraception. The significant increase in the number of eligible couples has led to a corresponding increase in the demand for contraceptives. Before 1998, most

contraceptives were supplied by the donors. The supply system changed in 1998 when under HPSP the Directorate of Family Planning was given the responsibility for procuring contraceptives. As it was not familiar with international competitive bidding, it resulted in significant delays in processing and procurement of commodities. During the transition to HNPSF in the latter half of 2005, funding arrangement and allocations were delayed, which resulted in stock outs of contraceptives such as condoms, IUDs and injectables. As a result, it turned out that use of injectables declined from 10 per cent in 2004 to 7 per cent in 2007. In order to ensure contraceptive security, government should take steps to streamline the procurement system, to improve capacity building and also to encourage local production of contraceptives.

#### *Meeting Unmet Need for Contraception*

The efficiency of a family planning programme depends, to a large extent, on the elimination/reduction of unmet need for contraception or unwanted pregnancy. In Bangladesh, 17 per cent of currently married women have an unmet need for contraception, 7 per cent for spacing and 11 per cent for limiting births. Therefore, total demand for family planning is 73 per cent, leaving 23 per cent of demand remaining unsatisfied. If the total demand for family planning services could be satisfied, replacement level fertility could be achieved that requires a prevalence rate of 72 per cent.

Unmet need could arise from socio-economic and health related reasons, such as economic and non-economic costs of contraception. The purchase cost of contraception, due to non-availability from public services, or if the health centre is far way, is a significant barrier to use, especially among the poor. Husband or other family members' opposition to use is a major social cost of contraception. Most importantly, concern for health-related side-effects is a predominant cause of non-use. The coverage and quality of family planning services has remained less than satisfactory, particularly in Sylhet and Chittagong divisions and among poor and young couples and hard-to-reach populations.

The current family planning programme suffers from the following bottlenecks:

1. Seventeen per cent of married women have an unmet need for contraception, an increase from 11 per cent in the 2004 BDHS.
2. The overall discontinuation rate within 12 months of starting use has increased from 49 per cent in 2004 to 57 per cent in 2007.
3. Heavy reliance on reversible methods often leading to stock outs and lacking contraceptive security.

4. Some areas are lagging behind than others such as Sylhet and Chittagong divisions, and also hard-to-reach and remote areas.

The efficiency and quality of the programme can be improved by extending services to underserved populations, broadening the choice of methods available, managing health-related side effects, increasing field level and professional staff and increasing awareness about and availability of family planning services. In addition, unmet need of contraceptive materials should be resolved by increasing supply and availability of contraceptive materials and also by intensifying the monitoring system and mass media campaign.

#### **3.5.2.8 Future Challenges**

It appears that increased use of contraception is the principal driving force behind reduction of fertility in high performing regions. Increased contraceptive use also led to longer birth intervals despite the prevalence of younger age at marriage and age at first birth in the high performing regions. In order to reduce population growth in the low performing regions, particularly in Sylhet and Chittagong divisions, increased availability, access and quality of care of the family planning programme has to be ensured along with reduction of costs of contraception.

The regional dimension of fertility decline suggests that diffusion of a new reproductive idea and information about various methods of contraception has played a critical role in fertility transition. Research has shown that contraceptive use increases in closely-knit communities, through inter-personal communication, from group to group, and from region to region. Satisfied users can serve as active agents in this process in low performing areas. The knowledge and idea spread through satisfied adopters in every group and community. However, at a later stage in transition, fertility level is closely associated with development indicators.

The process of fertility reduction towards the replacement level has already begun in Bangladesh. With a view to expediting the process, and achieving replacement fertility by the year 2011, the following policy options may deserve careful consideration:

- i. In order to reduce population growth and offset the potential effect of population momentum, steps should be taken to delay first marriage through strict adherence to the age at first marriage, delay first birth and widen birth spacing.
- ii. Delay in marriage can be ensured through improving educational opportunities for women up to the secondary level, creating employment

opportunities for them and strengthening advocacy programme at the community level.

- iii. Greater efforts are needed to reduce neonatal, infant and child mortality to ensure survival of desired number of children. The possible causes of high under 5 mortality such as birth asphyxia, ARI, diarrhoea, infection, malnutrition and other causes are to be addressed to reduce under mortality.

The method-mix of contraception can be made sustainable and more effective through increased adoption of longer-acting and permanent methods. Management of health related side effects can substantially reduce high discontinuation of contraceptive methods. Furthermore, elimination of unmet need and unwanted pregnancy can be addressed through improved availability, access and quality of care of family planning services, especially in the low performing, remote and hard-to-reach areas.

#### **3.5.2.9 Future Prospect of Fertility Decline**

Looking at the unchanging fertility level produced by the recent BDHS studies few have argued that for continued poverty, low educational status of the adult population, son preference, relatively high childhood mortality, insecurity for women and lack of good earning opportunities for them further radical decline in childbearing, which is unlikely in Bangladesh. They also are of the opinion that small decline in poverty, significant increase in the schooling of girls, the appreciable number of young women employed in the garment industry and expansion of micro-credit schemes represent only an insufficient structural change to induce further decline in fertility.

Despite above arguments, available evidence tends to suggest that further decline in fertility may be possible in the country and such reduction in large part is achievable through increased use of effective contraception. In other words, for further fertility reduction no more fundamental or structural changes in the society would be required. According to recent evidence, among couples with three living children or two living children and wife currently pregnant, proportion who 'want no more children' is 90 per cent in the country. Of them, only 56 per cent use contraception. Thus, there is huge unmet need for contraception among couples with three or more children, with whom 30 per cent of the births in a year take place. Hence, if these births which are mostly unwanted can be avoided, a significant reduction in TFR would be possible although such reduction may not be sufficient to reach replacement level fertility in the immediate future. The optimism in this regard is put forward primarily based on the following evidence:



- Fifteen per cent of couples still have an unmet need for family planning, mainly for spacing among younger couples and for limitation among older one.
- About one-tenth of recent births are reported as unwanted and a similar proportion as mistimed.
- Thirty per cent of the births take place among the couples with three or more children, and 90 per cent of these couples with three or more living children do not want any additional children and the CPR among these couples is around 50 per cent. Thus there is a great potential to increase CPR among high parity couples not wanting any more children, which may easily cut down TFR by 20-25 per cent.
- In some districts of Bangladesh, particularly in western side of the country, higher decline in fertility was possible reaching a level close to replacement-level fertility. While these areas may be economically more advanced and socially progressive than most other districts, nevertheless, the populations are largely poor and illiterate. The historical record of other countries suggests that more backward districts/regions—sooner or later—follow the trend set by advanced districts/regions.
- Small family size norm has taken root in the society.
- The impressive achievement in secondary school enrolment of females is expected to have favourable impact on age at marriage and fertility.

For achieving desired level of fertility reduction, actions on different fronts are needed, such as:

- (a) Provision for maternal, child and family planning services through a comprehensive client centred approach. These services should be provided along with health services at upazila and union levels, through a one-stop service and home delivery system;
- (b) Concentrate resources in low-performing areas where unmet need is greatest;
- (c) Target the high parity couples with long term methods;
- (d) Improve the ability of couples to use reversible methods effectively both for birth spacing and limitation purposes;
- (e) Re-popularise permanent methods;
- (f) Ensure full coverage of safe delivery through skilled birth attendance;
- (g) Special attention to young, low parity and newly married couples and those with unmet need for RH information and services. Freedom and right to

choose contraceptive methods according to individual needs and preferences will be emphasised;

- (h) Uninterrupted supply of required medicines, equipment for all the service centres and strengthening of the contraceptive security system so that supplies are available wherever and whenever they are needed;
- (i) Ensure access to essential information and services, especially amongst high risk behaviour groups, for prevention of STD, RTI and HIV/AIDS infection.
- (j) Ensure supply of Vitamin A and other micronutrients and prevention of malnutrition among children and pregnant women;
- (k) Support and ensure full coverage of child immunisation.

### **3.5.3 Population Growth, Urbanisation and Environmental Degradation**

Economic development and population growth in the poor areas of the world is a subject of real concern for the environmental economists. Bangladesh, like other developing countries, is suffering from serious problem of high population growth which is causing environmental degradation. A rapidly growing population exerts pressure on agricultural land and raises demand for food and shelter; the growing population is a major cause of air, water, and waste pollution.

Urbanisation has traditionally been considered as an inevitable process to go through for the development of a country. But unplanned and unequal development of urbanisation, especially in third world countries like Bangladesh, could, in turn, emerge as a major obstacle. Since an urban condition widens the horizon of multifarious economic activities, a huge number of, both skilled and unskilled, employees come together to live and work in a particular area. People from the wide spectrum of the society regardless of the distance from the city have been pulled by the new opportunities in urban areas and this process, widely known as migration, occurs in response to the increasing pace of urbanisation.

The relationship between urbanisation and development has not been linear; often it emerges as a reciprocal manner. Sometimes urbanisation can be a cause of migration, again, migration could also lead to urbanisation. Migration led urbanisation or vice versa, both represent an antinomy in countries like Bangladesh. People from different social ranks and mores seek urban destination, voluntarily or involuntarily, in order to obtain better livelihoods, shelter, education, and also choose migration as a stepping stone to change their fortune. Consequently, huge influx of migrants makes the cities densely populated; they reside mostly in the urban squatters and suffer from the severe scarcity of urban utility services. These newly created demands for utility services, employment, health, education, etc. pose serious threats to the sustainability of the urban attractions.

The proportion of urban population is rising at an increasing rate and in the future the rate of increase will be even higher, while in rural area population is increasing at a slower rate. This phenomenon implies that urbanisation is occurring at an accelerating rate. It is clear from Table 5.4 that until 1960 only 5 per cent of the population of Bangladesh was living in urban areas. During the last four decades, however, the urban population has grown from 5 million in 1970 to 22 million in 1990 and to nearly 34 million in 2000. According to UN projection, it is expected to grow to 52 million by 2010 and to 74 million by 2020 (Table 3.13).

TABLE 3.13  
SHARE OF INCREMENTAL POPULATION BY RURAL AND URBAN AREAS

Year	Population (millions)		Share of incremental Population (millions)		Percentage of the total	
	Rural	Urban	Rural	Urban	Rural	Urban
1950	40.0	1.8	-	-	95.7	4.3
1960	48.8	2.7	8.9	0.9	94.8	5.2
1970	61.4	5.1	12.5	2.4	92.3	7.7
1980	72.7	12.7	11.3	7.6	85.1	14.9
1990	88.3	21.8	10.6	9.1	80.3	19.8
2000	103.1	34.4	14.8	12.6	75.0	25.0
2010	115.7	52.2	12.6	17.8	68.9	31.1
2020	123.2	74.4	7.5	22.2	62.3	37.7
2030	124.1	98.6	0.9	24.2	55.8	44.3

**Source:** Computed from UN 2002: Tables 3 and 4. Cited in ESCAP 2003:25.

Bangladesh is a rapidly urbanising country where the urban base has expanded dramatically from less than a tenth to a quarter between 1970 and 2000. United Nations estimates suggest that the relative share of incremental population by rural areas is likely to decline gradually after 2010, the relative share of incremental population by urban area is likely to increase beginning in 2010 (Table 3.14).

TABLE 3.14  
URBAN POPULATION PROJECTION IN BANGLADESH, 2000-2015

Census year	Total national Population (millions)	Total urban Population (millions)	Urban population as percentage of total population (i.e. level of urbanisation)	Annual urban growth (per cent)
2000	141.1	37.3	26.4	4.8
2005	155.8	46.4	29.8	4.4
2010	170.5	56.8	33.3	4.0
2015	184.6	67.9	36.8	3.6

**Source:** World Bank, Bangladesh Economic and Social Development Prospects, Vol. III (Report No. 5407), April 1985, p. 126, Table 9.8.

### 3.5.3.1 Urbanisation and Health

It is clear from the foregoing analysis that Bangladesh, as the rest of the developing world, is urbanising rapidly, and more than 25 per cent of the country's population live in urban areas. Population projections by the United Nations indicate that by 2030, Bangladesh's urban population will grow to 98.6 million, with more than two-fifths (44.3 per cent) of the total population living in urban areas.

Accompanying this rapid pace of urbanisation, there has been a faster growth in the population residing in slums and squatters. It is estimated that slums represent the fastest growing segments of the urban population, which is almost double the growth of overall urban population.

Slums and squatters are characterised by crowded living conditions, unhygienic surroundings and lack of basic amenities such as garbage disposal facilities, water and sanitation. The near total absence of civic amenities coupled with lack of primary health care services in most of the urban poor settlements has an adverse impact on the health status of its residents. The health of the urban poor is significantly worse off than the rest of the urban population and is even worse than the health conditions in rural areas.

Slum residents are especially vulnerable to health risks. "Vulnerability" can be defined as a situation where the people are more prone to face negative situations and when there is a higher likelihood of succumbing to the adverse situations. With reference to health, it implies a situation leading to increased morbidity and mortality.

### 3.5.3.2 Worsening Health Status of the Urban Poor

Urban population growth in Bangladesh is fuelled by a shortage of land and other means of earning a livelihood in the rural areas, particularly during periods of impoverishment and landlessness brought about by natural calamities. Forty to 70 per cent of urban population growth in Bangladesh has been attributed to rural-to-urban migration, while the remainder is due to the natural increases in the urban population and the territorial expansion of urban areas into contiguous areas that were previously considered rural (Islam *et al.* 1997). Sixty-one per cent of the urban population in Bangladesh is living in households in which the monthly household income is less than the minimum required for food and essential non-food items (defined as Tk. 3,500, or about US\$ 88). Forty per cent of the urban population is classified as living below the level for "hard core" poverty, meaning that their monthly household income is only Tk. 2,500 (about US\$ 63) (Islam *e. al.* 1997).

Three-fourths of these urban poor live in flimsy shacks, most of which are located in slum neighborhoods characterised by extremely high population densities

and by an absence of sanitary latrines, municipal garbage disposal and electricity. One-quarter of all urban households in Bangladesh are located in slums, and another 12 per cent of urban families are squatters (living at a site temporarily or in a small cluster of 3-10 households) or are homeless (ADB 1998, World Bank and BCAS 1998).

For slum households, water sources are often distant, and access to them is only possible by waiting in line for hours and by paying informal private sources or intermediary brokers for access, even though the water sources themselves are usually public (Islam *et al.* 1997, Baqui 1998). Slums are generally located in low-lying areas that are otherwise unsuitable for housing. Most of these areas, on which slum households are located, are flooded each year during the rainy season, forcing their inhabitants to live on the streets for a month or more.

By far, the most common cause for a “crisis event” for a slum household (in which a major unanticipated expense occurs or a financial reversal occurs such as loss of employment, theft, or damage to the home due to a disaster) is illness within the household. Two-thirds of the crisis events in slum households are caused by illness (HKI 1997).

The rhetoric of urban bias in development and better conditions in urban areas vis-à-vis rural areas has masked the real picture of the health conditions of the urban poor. A disaggregation of data by economic status reveals the sharp disparities which exist between the urban poor and the better-off sections in urban areas. In fact, slum dwellers in cities suffer from adverse health conditions which are sometimes worse than those living in rural areas.

#### **3.5.4 Effects of Climate Change on Health**

Global climate change and associated risks have come under increasing focus though the intricacies of the climate system are not yet fully understood. For Bangladesh, it poses significant risks because of potential sea level rise, increase in temperature and changing pattern of precipitation. According to UN Environment Programme, the global temperature would increase up to one degree centigrade in summer and 1.5 degree in winter by 2050, resulting in sea-level rise by around half a meter that will engulf 11 per cent of the land in Bangladesh affecting nearly 60 lakh people along the coastal belt.

Climate variability has increased notably in recent times. Prolonged summer and shorter rainy and winter season will increase the trend of droughts and desertification, including damage to ecosystem and agriculture. Increased air and water temperatures and changes in the salinity of habitats could reduce the biodiversity of plant and fish species.

Climate change affects human health, both directly and indirectly. People are exposed directly to changing weather conditions and indirectly through changes in the quality of air, water and food, and changes in ecosystems, agriculture, industry, human settlements and the economy. These direct and indirect exposures can cause death, disability and suffering. Health problems increase vulnerability and reduce the capacity of individuals and groups to adapt to climate change.

The emerging evidence of climate change on health shows that it has:

- changed the pattern of some vector borne diseases;
- altered the seasonal distribution of some allergenic pollen species;
- increased heat wave related deaths.

Climate change also plays an important role in the seasonal pattern of malaria, dengue, cholera and other diarrhoeal diseases. In addition, heat waves and flooding can have severe and long lasting effects. Those at greater risk include the urban poor, the children and elderly, subsistence farmers and coastal populations.

The following are some of the policy options that Bangladesh may pursue to reduce the adverse health impacts from climate change:

1. Government should initiate surveillance measures for climate sensitive diseases and build institutional capacity to handle adverse consequences of climate change.
2. Health professionals need to be trained on climate change and its impacts on human health.
3. Government in collaboration with NGOs should undertake programmes for raising awareness about climate change impacts on human health.

### **3.6 IMPLEMENTATION STRATEGIES AND CROSS CUTTING ISSUES IN THE HNP SECTOR**

#### **3.6.1 Introduction**

As defined by the WHO, “Health is a state of complete physical, mental and social well-being.” It is accordingly a function of several factors including nutrition, personal hygiene, environmental sanitation and access to social services including health and medical care. Health care services designed to improve health status of population should embrace almost all aspects of life, since the health of a population in the ultimate analysis is a consequence of their way of life.

The health sector of Bangladesh has evolved over the last four decades through various reform initiatives, which could broadly be divided into two eras: the period prior to 1990 and the post 1990 period. In 1986, the government decentralised

development and health activities by introducing *upazila* system. A significant reform was attempted in 1998 with the introduction of the HPSP, both the population and health programme were merged into one sector. This reform can be explained as abrupt shifts from project approach to programme approach, multi-sectoral to sectoral approach, doorstep to one-stop service delivery, Family Welfare Centres to community clinics, and independent structure of services to unified services under one unified command at *upazila* level. As HPSP could not achieve the expected results, the government launched HNPSF in July 2003. It was decided that both the directorates—Health and Family Planning—would be under their respective administrative and organisational structure and provide services to the people as they were functioning prior to HPSP.

A realistic health policy cannot be formulated without considerable information about the nature and causes of morbidity and mortality. The most important health problems in Bangladesh are high prevalence of preventable and communicable diseases, high maternal and child mortality, poor environmental sanitation and widespread malnutrition. Hundreds of thousands of women and children in rural areas and people from the poorer strata, including those living in urban slums, have neither the “goods” to maintain health, nor access to services that could decrease the severity of their illness. For achieving the MDG goals in the HNP sector, appropriate policies are required with regard to food and nutrition, family planning, environmental protection, water supply and sanitation, restructuring of medical and paramedical education, referral services, health education and access to public health services, especially for women, children and the poor. Hence, programme should be strengthened to reduce morbidity and mortality and to improve access to public health facilities, especially for the poor, women and children.

Determining which health problems are most important for Bangladesh is difficult because different measures of need can produce different conclusions. The three principal problems of Bangladesh in the HNP sector are: over-population, malnutrition and communicable diseases. Children, women and the poor constitute the high-risk groups. Most illness and deaths occur in the pediatric and female portion of the population. Maternal and child deaths and illnesses considered in terms of both absolute numbers and rates have not been appreciably diminished by modern medical technology, at least in rural Bangladesh. In view of the targets set in the Vision 2021 goals of the present government, the following issues should be given special attention by the HNP sector:

- (1) ensure fair access to water, sanitation, preventive and curative care for the most common illness;
- (2) focus on the health problems of high-risk groups, the children, women and the poor.

A major objective of policies and programmes in the HNP sector should be to reduce morbidity and mortality and to improve nutritional status, especially of women and children, with fair access to water, food and sanitation. In order to make health planning realistic, health has to be viewed in its totality, as a part of the strategy for human resource development. The health of a population or any group within a population is a function of several factors, which include, among others, nutrition, personal hygiene and habits, including access to pure drinking water, protection from exigencies of whether through clothing and shelter, immediate surroundings of living and work, and access to promotive, preventive and curative services. Individual health has an interacting relationship with income, which ensures nutrition, clothing, shelter, etc. Good health, on the other hand, ensures work participation, and, therefore, also income; and a sufficient level of income ensures access to nutrition, clothing, shelter, etc. for the individual and his family. Viewed in this light, economic development, through raising levels of income, contributes to improvement in health conditions.

In the spirit of Vision 2021 of the ruling party, the Sixth Five-Year Plan (SFYP) should adopt a comprehensive approach for the HNP sector recognising the commitment to MDGs, and towards achieving ten well-defined targets by 2015. Out of these ten targets set out by the present government, four are in the field of health and population, such as:

- ❑ Reduce infant and under five mortality rates by 65 per cent and eliminate gender disparity in child mortality;
- ❑ Reduce the proportion of malnourished children under five by 50 per cent and eliminate gender disparity in child malnutrition;
- ❑ Reduce maternal mortality rate by 75 per cent;
- ❑ Ensure access to reproductive health services for all.

### **3.6.2 HNP Strategies and Major Interventions**

Within the broader context of Millennium Development Goals (MDG) and Vision 2021, the Government of Bangladesh's strategies for health, nutrition and population sector should be to reach and maintain the highest attainable level of health. The vision 2021 recognises health as a fundamental human right and, as such, there is an urgent need to promote health and to alleviate ill health and suffering in the spirit of social justice. In order to effectively address the relevant issues, strategies for the HNP sector should be based on the core values of access, equity and gender equality. In particular, the following are of core concern:

- Viewing health as a basic human right and placing it as central to socio-economic development.



- Developing a sustainable health system to meet the needs of the people, especially the poor and other vulnerable groups.
- Adopting a broader approach to HNP within the context of human development, equity and focusing particularly on links between HNP and poverty reduction.

In designing policies and programmes for the HNP sector, priorities should be given to the following:

- Strategies and interventions should be based on epidemiological data and evidence as well as socio-cultural context. There is an urgent need to address emerging issues and take into account the changing pattern of diseases, including those arising out of environmental concerns.
- More emphasis needs to be given to geographical targeting to benefit high-poverty areas, starting of social insurance, public-private partnership, improving the quality of traditional and herbal medicine and EPI, all of which will make health services more accessible to the poor.
- Generation and application of evidence-based data through appropriate need-based research should be promoted, and efforts should be made to ensure that both the generation and the application are appropriate to the needs of the community.
- To ensure good governance for the health sector, transparency, accountability and participation should be emphasised at all levels. As per standard good governance practice, the criteria used for decision making from priority setting to allocation of resources should be made public, including the results of monitoring, implementation and evaluation.

In the context of Sixth Five-Year Plan, health sector interventions should include the following:

#### **A. Essential Services Delivery**

- i). Reproductive health, including maternal and adolescent nutrition (EOC at upazila level)
- ii). Child health and nutrition (including EPI, ARI, school health programme, etc.)
- iii). Communicable disease control
- iv). Limited curative care
- v). Behaviour Change Communications (BCC)

- vi). ESP support services, including technical training and performance improvement
- vii). Urban health services, with special emphasis on the health of the urban poor.

**B. Strengthening all Systems**

- i) Quality of services at the district, upazila and union level facilities
- ii) Research and Development
- iii) Access to essential drugs, and traditional and indigenous medicines
- iv) Procurement and logistics management.
- v) Strengthen the existing health facilities for the poor and take some special programme for reducing disparity
- vi) Construction, repair and maintenance.
- vii) Addressing population momentum.
- viii) Reactivate population control programme.

**C. Addressing health of specific groups/areas**

- i) School health
- ii) Adolescents and young people's health
- iii) Senior citizens/old people
- iv) Victims (women and children) of violence
- v) Hard to reach area
- vi) Disabled people
- vii) Waste management of hospitals and other medical centers.

**Cross Cutting Issues in the HNP Sector**

A list of cross cutting issues in the HNP sector may be summarised as follows:

***Sector Governance and Policy Reform***

- i). Decentralisation with proper administrative and financial authorities
- ii). Addressing staff absenteeism through timely availability of service providers and managers at all levels
- iii). Ensure filling up of all vacant positions, especially at the upazila and union level facilities
- iv). Availability of essential drugs
- v). Effective and efficient use of all resources
- vi). Incorporation of nutrition, water and sanitation with health and FP

- vii) Government-NGO collaboration
- viii) Establish special unit for take action against adulteration of food
- ix) APP networking and capacity development
- x) Supportive supervision
- xi) Involvement of professional bodies, civil society, local government and HNP related networking organisation in supervision and monitoring and also develop a plan of action
- xii) Promote herbal medicine and research
- xiii) Activate all management and coordination committees
- xiv) Develop telemedicine system for health service delivery.

#### ***Growth and Pro-poor Dimension***

- i) Identifying and then serving the poorest of the poor
- ii) Safety net for the poor wherever there is a pricing for services
- iii) Ways and means to reach the poor/encouraging the poor to utilise public health services
- iv) Gradual lessening of the burden on the public sector
- v) More involvement of the private sector
- vi) Increasing the proportion of GDP spent on HNP sector
- vii) Resource mobilisation for the HNP sector
- viii) Retention and utilisation of locally generated revenues/user fees.

#### ***Gender and Equity***

- i) Reaching and serving women, especially strengthening maternal care services
- ii) Making the services gender specific and need based
- iii) Equal emphasis on curative care, and preventive and promotive services
- iv) All adolescent specific issues need to be addressed
- v) Special emphasis on children with regard to malnutrition

The main purpose of the Sixth Plan for the HNP sector should be to improve the health status of the poor, women, girls and infants. Major efforts should be directed to (i) expanding health interventions to under-served populations, (ii) providing quality health care from the community to the first-referral level, (iii) strengthening the capacity of institutional and human resources to improve women's health, and (iv) ensure responsibility, transparency and accountability of the health service.

### **3.6.3 Major Challenges**

Bangladesh has made significant progress in health indicators over the last 30 years. The total fertility rate (TFR) declined from 7 live births per woman in the mid-1970s to about 3 children per woman in 2007, while the contraceptive use rate has increased from less than 8 per cent to more than 50 per cent during the same period. Bangladesh has also achieved substantial progress in reducing death rates, especially mortality of under-five children. During this period infant and child mortality has declined substantially. The infant mortality rate (IMR) declined from 125 per 1,000 live births during the 1984-85 to 80 in 1994-95 and further to 52 during 2007. Similarly, the under-five mortality rate declined from 250 per 1,000 live births during the early 1970s to 83 per 1,000 during 1999-2000 and further to 65 during 2007. The crude death rate (CDR) declined from 12 per 1,000 population in 1985 to 6.2 during 2007. Bangladesh has also achieved remarkable success in EPI, vitamin A coverage and improvement in maternal nutrition.

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 per cent 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.

Though remarkable improvements have been made in reducing infant and child mortality, the others, especially reducing maternal mortality and proportion of malnourished children, are much below targets. Again, there exists significant variation in mortality and nutritional status by gender of children and by socio-economic status of households.

Again, there is urban-rural difference in under-five mortality rates. In 2001, the rate in urban areas was 52 per cent, 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 per cent and for girls 81 per cent.

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, 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 and exploring interventions required to address the contemporary causes of mortality, i.e., accidents

and injuries, especially drowning. Efforts should be made to strengthening partnerships between the government, NGOs, specialised agencies and local government institutions, integrating vertical programmes for reduction of childhood mortality such as ARI and CDD, 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/*Char* areas and strengthening the management information system through establishing a database for informed decision.

Bangladesh has a high maternal mortality ratio, with 320 deaths per 100,000 live births. This means there are about 11,000 to 12,000 women dying from pregnancy or childbirth complications every year in Bangladesh. And because maternal and newborn health is inextricably linked, of those women who die, only one in four of their babies will survive their first week of life. Moreover, a malnourished mother is very likely to give birth to a low birth weight (LBW) baby.

Bangladesh has one of the world's highest rates of adolescent motherhood, based on the proportion of women younger than 20 giving birth every year. One in three teenage girls in Bangladesh is already a mother and among the rest, a substantial proportion of girls are pregnant with their first child. Maternal mortality for adolescents is double the national figure.

These high mortality rates are underpinned by the fact that almost nine out of every 10 deliveries take place at home, mostly with unskilled attendants or relatives assisting. The low status of women, poor quality and low uptake of services all add to this problem.

In spite of the fact that maternal mortality has declined from nearly 574 per 100,000 live births in the 1990s to 320 in 2001, the maternal mortality ratio (MMR) in Bangladesh remains one of the highest in the world. It is estimated that 14 per cent of maternal deaths are caused by violence against women, while 12,000 to 15,000 women die every year from maternal health complications. To make matters worse, some 45 per cent of all mothers are malnourished.

The major causes of maternal deaths are hemorrhage, 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 where 70 per cent of the populations are rural based, and the third delay arises from the lack of adequate human resources and trained personnel at the service centres. Several measures have been taken to address these problems. A 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 Programme (HPSP 1998-2003) and into its follow-up the Health, Nutrition and Population Sector Programme (HNPSP 2004-2006).

More emphasis needs to be given at developing the skills of traditional birth attendant (TBA) including other grassroots level workers. But there is acute shortage of family welfare assistants (FWA) and family welfare visitors (FWV), the main workforce at grassroots level in the health sector. One FWA was supposed to work for 600 eligible couples in a locality in the 1980s. Today the population has almost doubled in the locality, but the number of FWAs remains the same. At present, some several hundred posts of FWVs are lying vacant and some of them are retiring from job every year. There are many NGOs working on safe motherhood issues. But very few NGOs are working in remote *char* areas. The government aims to reduce maternal mortality rate to 143 from 320 per 1,000 live births by 2015 to attain the MDG 5, but it would not be possible to do so without ensuring health care services for a large number of people living in *char* and other remote areas.

In recent days, the country is witnessing many lavish and sophisticated private hospitals in big cities meant for only rich and privileged people. Poor people have little access to quality health services. The number of persons per hospital bed is still 2,736 and number of persons per physician is 3,317.

But the real scenario is worse than the statistics because more than 50 per cent posts of doctors are vacant in rural health centres. Moreover, 40 per cent of doctors and 55 per cent of nurses remain absent in their duty stations at rural health facilities. They prefer to be in urban areas, which causes severe deprivation of minimum health service among rural poor people.

Poverty, ignorance and illiteracy are the root causes of the problem of high rates of mortality and morbidity of mothers and children. Nevertheless, the lack of proper service is a major cause linked to underlying and immediate causes of death. If we do not pay adequate attention and care in terms of human resources and budgetary allocations for health care, particularly for mothers and children, MMR will continue to remain around 300.

Many of the actions and interventions that are commonly associated with women's health care—for example, antenatal care programmes and nutrition programmes—will not substantially reduce maternal deaths. To make a dramatic change in maternal mortality—certainly to meet the PRSP/MDG target of 75 per cent reduction—all women must have access to EmOC in case they experience complications.

EmOC should, therefore, be seen as a core element of essential health care services for women. This does not mean that all women must give birth in a health facility, nor does it imply a focus on urban, high-tech hospitals. But it does mean that every woman must have access to a facility that can provide EmOC, so that if she experiences a life-threatening complication, she can get there and be treated in time. However, EmOC will only be accessible to all women, rich and poor alike, when Bangladesh has a functioning, equitable health care system. Until then, whatever else is done to improve their overall health, women will continue to die in pregnancy and childbirth in unacceptably high numbers.

Maternal mortality reduction programmes should be based on the principle that every pregnant woman is at risk for life-threatening complications. Thus, all women must have access to high-quality delivery care. That care has three key elements:

- a skilled attendant at delivery;
- access to EmOC in case of a complication;
- a referral system to ensure that those women who experience complications can reach life-saving EmOC in time.

Essential services package (ESP) needs to be clearly defined. The ESP should include: immunisation services against vaccine preventable diseases; maternity services for safe pregnancy, safe abortion, safe delivery and post-natal care; family planning services; pharmaceutical services—supply of only rational and essential drugs as per accepted standards; epidemiological services including laboratory services, surveillance and control of major diseases with the aid of continuous surveys; information management and public health measures; ambulance services; and health education.

While much more resources need to be allocated for the public health sector, it is also important that allocative efficiency has to be looked into. Thus, merely raising the overall proportion of expenditure is not adequate, equal importance has to be given to the way resources are allocated. Adding more resources without reorganising the way they are allocated will not serve any purpose.

The present level of government allocation to the health sector of little more than 1 per cent of the GDP, against a WHO target of 5 per cent of GDP, is barely adequate to meet the demands of an expanding health sector. Low levels of public spending for health and low utilisation of public health services are intimately linked. A serious problem in spending is the large and increasing proportion of the expenditure on salaries. This explains, in part, clients' dissatisfaction with services

because non-salary components like medicine, equipment and proper maintenance are inadequately funded.

Reorganising resource allocations in a meaningful way is only the first step. The restructuring of the health care system through a regulatory mechanism, which also organises the entire health care system, should follow. The private sector cannot be left to its own means and ways. It needs to be integrated under a common umbrella along with the public health care system. Worldwide the experience shows that if near universal access has to be achieved, an organised public-private mix health care system has to evolve.

Although increases in total public spending will generate from higher national income, it may be possible to channel some of the existing private spending in a more effective manner. Key additional sources of funding that may be tapped for the delivery of more effective health care services are user charges, social health insurance and community health insurance. User charges, if retained by health facilities, may lead to significant improvements in the quality of services through better maintenance of the facilities. What is needed is a combination of approaches for different socio-economic groups. This should aim at community insurance for the poor, employment-related social insurance for the organised sector employees and voluntary insurance for those who can afford to pay. The experience of developed countries also shows the presence of public-private mix in the health care system.

The three top management problems in the public health sector are management control and supervision, coordination among various organisations, and adherence to established rules and regulations. These problems relate, in particular, to capacity of health information system to provide routine data for decision making. Other effects relate to certain important components of the health delivery services i.e. drug quality, efficiency of supply system, maintenance of equipment and transport, production of vaccines, essential drugs and intravenous fluids, training and utilisation of manpower, and adequacy of laboratory services. These infrastructure problems deserve adequate attention by the planners and policymakers.

Health care provision involves a complex series of transactions between health service providers and consumers. In the case of the health sector, good governance and management of these transactions are essential to ensure that the right services are delivered to the right people at the right time and at the lowest possible price. Essentially, it is the poor and vulnerable members of society who are particularly prone to the largest burden of cost and deficient service delivery. The symptoms are staff absenteeism, pilferage of drugs and other supplies, and unauthorised or



informal payments collected from consumers of health care at the public health facility.

Rebuilding hope among people requires that urgent governance issues be addressed to ensure that service providers are available at the facilities, minimum amount of drugs reach the patients and unofficial payments are at the lowest possible levels.

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## Chapter 4

# Universal Social Protection Strategy: Hard Core Poverty and Safety Nets Programmes in Bangladesh

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### 4.1 INTRODUCTION

The most urgent challenge confronting Bangladesh is to eliminate widespread poverty and raise the standard of living of the masses. While in proportionate terms poverty has been declining quickly, absolute poverty has continued to be high. Thus of around 40 per cent of the people who are estimated to be below the head count poverty level, between 20 and 25 per cent, are believed to lie in “extreme poverty” (BBS 2007a). Poverty has been declining significantly. A World Bank (2008) study reveals that if real GDP were to grow at 5.3 per cent between 2005 and 2015, the incidence of poverty would decline from 40 per cent to 27 per cent, other things remaining constant.

The notion of hardcore poverty is used widely, especially by NGOs; however, its definition has tended to be uneven and subjective. Nevertheless, it can be assumed that around 78 per cent of the extreme poor could be considered hardcore (Appendix tables 4.1A and 4.1B)—a group that is in dire poverty and which is difficult to reach through standard development programmes.

The challenge of poverty is not only compounded by hardcore/extreme poverty but also by numerous other challenges confronting Bangladesh that adds to the problem. These include the impact of periodic shocks like cyclones and floods, world food and fuel market disruptions that stoke inflation and high food prices, other global shocks such as the current recession, climate change, as well as domestic disruptions caused by poor crops or inadequate energy. These events have the potential of aggravating the condition of the poor and generating huge demands on the public sector for support. Thus, the target of social protection and safety nets (SPSN) would ideally include the following:

- The chronic poor (poor even in good or normal times)
- The transient poor who hover precariously just above the poverty line

- Those in special circumstances (vulnerability may stem from disability, discrimination, displacement, "social pathologies" of drug and alcohol abuse, domestic violence or crime).

However, given resource constraints, it is unrealistic for Bangladesh to try and cover all of the above categories of people. It is suggested that the hardcore poor, defined as the bottom 78 per cent of the population described as "extreme poor" by BBS (Appendix tables 1A and 1B), be adopted as our operational definition for purposes of coverage under social protection. Assuming a population of 150 million, this would imply a total of 29 million people (19.5 per cent) eligible for protection. This number is unlikely to grow very much over the Sixth Five Year Plan period due to high growth rates in gross domestic product (GDP) and a high growth-poverty elasticity.

#### **4.1.1 Global Experience**

The global experience with SPSN reveals the following types of interventions and practices:

##### *Cash Transfers*

Cash transfers are defined as the provision of assistance in the form of cash to the poor or to those who face a probable risk of falling into poverty. These have become increasingly popular in recent years, including in Bangladesh.

Different types of Cash Transfers include:

**Needs-based assistance programmes:** These are mostly means-tested benefits;

**Family allowances:** categorical or means-tested benefit—regular or occasional—paid to families with children under a certain age. Transfers can be in the form of subsidies on school uniforms or children's goods.

##### *Conditional Cash Transfers*

Conditional Cash Transfer (CCT) programmes provide cash payments to poor households that meet certain behavioural requirements generally related to children's health care and education.

##### **Food-Based Programmes**

Food-based safety net programmes support adequate consumption and contribute to improving nutrition and securing livelihoods. They differ from other safety net programmes in that they are tied to the provision of food, either directly or through cash-like instruments (food stamps, coupons) that may be used to purchase food.

The debate on the use of cash rather than food has been receiving renewed attention in recent years, in part, because of changing donor practices. In parallel there has been growing attention to the appropriateness of food transfers, taking into account a number of concerns e.g. impacts on food markets, transaction costs, type and size of transfers, and preferences of beneficiaries.

**Supplementary feeding programmes** provide a direct transfer of food to target households or individuals. The food may be prepared and eaten on-site (e.g., in child feeding centres or at schools), or given as a dry ration to take home. Supplementary feeding is often provided as an incentive for participation in public services such as primary health care (pre- and post-natal and well-baby care) and education. The most common forms are maternal and child feeding and school feeding.

**School feeding programmes** encourage children's enrolment and improve their ability to pay attention in class. They vary from the provision of breakfast, lunch or a midmorning snack, to a combination of these. School feeding programmes are often integrated with health and nutrition education, parasite treatment, health screening, and provision of water and sanitation.

**Food for work (FFW) programmes** provide food rations in exchange for a given amount of work done. FFW programmes have long been used to protect households against the decline in purchasing power that often accompanies seasonal unemployment, drought and other periodic disruptions.

**Emergency food distribution** includes direct provision of food, supplementary feeding for vulnerable groups, and therapeutic feeding during crises, emergencies and situations in which people are displaced. These last-resort programmes save lives by preventing malnutrition and morbidity.

**Food stamps, vouchers, and coupons** are paper slips used to purchase food at authorised retail locations. The transfer is often based on the gap between the amount of resources spent on food and the amount needed to acquire a minimum food basket. Such instruments restrict households to buying only a few specific foods, while others allow them to purchase any.

## 4.2 APPROACHING UNIVERSAL SOCIAL PROTECTION

### 4.2.1 Principles and Concepts

Should Bangladesh go for a universal social protection regime along the lines of some developed countries? From a humanitarian and equity perspective, such a regime is highly desirable. The constraint stems from resource availability, which,



in turn, depends on benefits and coverage. It is also important to identify clear principles of such a regime.

In the Bangladesh context, the broad aim of universal social protection should be to cover all of the hardcore poor along with specific groups and communities thought to be at special risk. The definition of hardcore as a subset of the extreme poor has been suggested above. In addition, it is important to identify priority groups (including those residing in vulnerable geographic locations) for inclusion in the social protection scheme.

The basic principle should be one of graduation support to be provided to the hardcore poor so that capacities are built and there is a gradual movement out of hardcore status. Experiments conducted by different NGOs, especially by BRAC, suggest that graduation is a feasible approach. It is also now well known that direct livelihood support with no graduation requirement, while needed by some, can be a relatively small component of social protection. From discussions with practitioners at BRAC, it would seem that direct livelihood support would be needed by 5-10 per cent of all hardcore poor, with the vast majority in a position to graduate, provided sufficient capacities are built up.

The Government of Bangladesh (GoB) now needs to articulate a clear plan for universal social protection for all hardcore poor (HCP). The thrust should be to cover 90 per cent of the HCP through suitable capacity development and skill generation programmes, interest free or subsidised micro-credit and income-generation activities. The remaining 10 per cent should be addressed through a well-targeted programme to address the needs of specific disadvantaged groups in society, such as the disabled or the old. It is likely that there will be a substantial overlap between the two categories so that only those belonging to a specific target group but not receiving assistance from the general programme would be eligible for monetary benefits. Inputs like training, capacity building, micro-credit and so on cannot be received from dual sources.

#### ***4.2.2 Implementation Mechanism***

The current proliferation of safety net and social protection schemes and the number of agencies/departments/ministries involved are far too many. The question is, how do we institutionalise universal social protection and how do we make it operational? The first task is to bring all the different projects, including the relevant personnel, experts and MIS, under one roof, keeping the original schemes intact, in order to avoid dislocation. A new top management structure will need to be instituted with the mandate to integrate the various projects under one, overarching scheme, to be known as the Social Protection Programme. The objective of

integration will be to merge similar types of programmes, weed out those that are inefficient, redundant or poorly targeted, and consolidate and expand the better ones. The new agency should also clearly identify the method for beneficiary identification under each programme component. It is suggested that the experience of the NGOs like BRAC is taken into account in order to deliver an effective programme.

At the ground level, the role of local government should be emphasised. The local government system can play a very effective role in identifying beneficiaries and helping to channel benefits. The new agency will need to forge organic links with the local government.

By the end of the five year plan period, the objective should be to arrive at a streamlined, efficient social protection programme that has addressed all of the hardcore poor and specific disadvantaged groups.

The recently announced intention of the Government to set up a monitoring and evaluation agency to oversee the performance and efficiency of all safety net programmes needs to be commended. It would be necessary to integrate this entity within the framework of the new single implementation agency envisaged.

A review of existing social protection/safety net programmes is provided in the next section. The resource implications arising from the main programmes that are likely to be retained are discussed thereafter.

#### **4.3 SAFETY NET SCHEMES**

There are three types of constraints to expanding safety nets in low-income countries. These are as follows:

- The Information Constraint
- The Administrative Constraint
- The Fiscal Constraint

##### *The Information Constraint*

Basic information that can aid in identification, location and targeting of eligible households is a big challenge, often requiring the use of proxy indicators (e.g. dwelling or demographic characteristics) or linkage to another (e.g. nutrition). There are three approaches around this problem: Self-targeting, Community targeting and Universal programmes.

Two excellent examples of self-targeting are public works programmes or food for works programmes with a wage rate slightly below the market wage, and food

subsidies where the programme is restricted to types of food consumed only by the poor.

Community targeting is also very popular, especially with NGOs who tend to work closely at the grassroots level in a few locations. In this approach, communities, or representatives identify beneficiaries (subject to some criteria) to deliver benefits. This allows information costs to be reduced but may risk favoritism, exclusion and local level disputes.

#### *Administrative Constraint*

The administrative constraint refers to weak capacity, excessive labour-intensity in implementation, weak supervision capacity and lack of good outreach. This suggests that greater reliance be placed on simple programme design that requires simple, clear repetitive steps that can easily be carried out over a long period. It also suggests that instead of going for a large number of small programmes, it is better to choose a few programmes that can be scaled up quickly to cover the whole country. To the extent possible, existing administrative systems should be strengthened to be able to take charge of implementation.

#### *The Fiscal Constraint*

The fiscal constraint is severe, especially if all of the poor in a country like Bangladesh is to be covered. A typical public expenditure level for a low-income country is around \$50-75 per capita per annum (e.g. for Bangladesh it was \$63 in 2007-08). If safety net coverage is extended to 40 per cent of the total population (160 million) who are below the poverty line and provided with \$20 per capita per annum (or \$1.67 per month), this would amount to almost 13 per cent of public expenditures. Clearly, a meaningful programme intended to cover all of the poor is unaffordable. A more modest coverage, targeted to the most needy population groups is, therefore, required.

#### **4.3.1 Programme Choices**

Cash Transfers: Selected, Universal (e.g. pensions, unemployment)

Public Works: self-targeting, create assets, counter-cyclical or counter-seasonal but is expensive (costs \$2 to transfer \$1). It is critical that the wage rate is right, and that good assets are created.

Food Programmes: These include free food distribution, Food-for-Work programmes, Food Stamps and School Feeding.

Agricultural Inputs: Fertiliser subsidies, subsidised credit aimed at marginal farmers or sharecroppers.

Nutrition Programmes: Child nutrition, micro-nutrient/vitamin A supplementation.

The first Poverty Reduction Strategy Paper (PRSP) fell short of articulating a well-defined and acceptable concept of Safety Net. However, a generic definition was used which stated that Social Safety Net includes “actions, policies and programmes that attempt to reduce poverty through direct transfer of resources (in cash or kind) to the poor.”

Social protection programmes undertaken in Bangladesh can broadly be divided into five groups:

1. Cash transfer directly targeting the poor;
2. Income transfer to supplement consumption of the poor households;
3. Cash/food transfer to poor households on the condition that these households will send their children to school;
4. Measures to provide ultra-poor (subset of hardcore poor: Appendix table 1) with access to or ownership of income-generating assets and house;
5. Creation of employment opportunities for the ultra-poor through providing collateral free credit, public works programmes and various rural development programmes.

#### 4.4 EFFICIENCY AND EFFECTIVENESS

The available evidence demonstrates that for Bangladesh, the targeting criteria are good at targeting the poorest, and that SNPs are perceived by the beneficiaries as helpful, especially by the poorest, but that there remains relatively high leakage from food based programmes, despite the popular notion that these are not better targeted.

There is an additional concern that programmes have significant administrative leakages, that there are too many programmes run by too many government departments resulting in a huge administrative overheads cost, there are too many layers of decision making in beneficiary selection, and that programmes are almost entirely rural in a context of rapid urbanisation.

It is reported that 13 per cent of households in the country receive benefits from one of the social protection programmes (BBS 2007a, 2007b). Ninety per cent of total safety net programme is directed towards the rural areas (BBS 2007a). Three programmes—VGF, VGD and old age allowance—together cover more than two-thirds of all beneficiary households. Of all social protection programmes, VGF covers the largest percentage, 34 per cent of beneficiary households, followed by

the old age allowance scheme with 18 per cent and VGD recipients with 17.6 per cent of beneficiary households (BBS 2007a). A BIDS study (Majumder and Begum 2008) reports that two-thirds of all poor, old age people (both male and female) are covered by the old age allowance programme. But in BBS (2007b), four programmes, primary education stipend programme, the old age allowance programme, vulnerable group development programme and vulnerable group feeding programme, together are reported to cover more than two-thirds of the sample beneficiary households with the primary education programme being the largest.

At division level, social protection programmes are thought to have been most successful in Sylhet, followed by Chittagong and Khulna. At the district level, the proportion of population below the lower poverty line is high in some areas like Nilphamari, Satkhira, Kurigram, Sherpur and Naogaon. In addition, backward areas like the coastal and char areas pose a special challenge due to high poverty rates (BBS 2009).

#### **4.4.1 A Review of Safety Net Interventions in Bangladesh**

As already noted, 13 per cent of households receive some type of benefit from official social protection programmes against an estimated 19.5 per cent that we defined as our target population. Thus, the problem is both with increasing coverage and with quality, quantity, type of benefits provided, leakages, effectiveness and efficiency, targeting and so on.

There are some well recognised SSNPs which have been implemented by different ministries or agencies, and these have been considered for this review.

TABLE 4.1  
**SOCIAL PROTECTION PROGRAMMES IN BANGLADESH, 2009/10**

Sl. No.	Number of total beneficiaries	93.84 million persons
1.	Beneficiaries in terms of man-month	28.71 million
2.	Total employment creation	2.385 million
3.	Estimated budget for Social Protection	1732.73 billion
4.	Estimated National Budget	11381.9 billion
5.	SP budget as percentage of total budget	15.22 per cent
6.	Total GDP	68673.00 billion
7.	SP budget as percentage of GDP	2.52 per cent

**Source:** Ministry of Finance, Budget Documents.

#### 4.4.1.1 Cash Transfers

##### *Old-Age Allowance Scheme (OAAS)*

Policy concern for the elderly has been limited to pension schemes and retirement benefits for public sector employees. However, the proportion of government and public sector employees is very small compared to the country's elderly population. The Third (1985-90) and Fourth Five-Year Plan (1990-95) of Bangladesh acknowledged the issue of elderly people. However, in terms of concrete actions no significant steps were taken. The problem of the elderly was not acknowledged in any of these plan documents. In the Fifth Five-Year Plan (1997-2002), perhaps for the first time, special problems of destitute and abandoned women and women with disability were acknowledged. With this acknowledgement, the government of Bangladesh is trying to establish a safety net for the hardcore elderly poor. Under this scheme, initially 10 very poor elderly persons (5 males and 5 females) from each ward of a union throughout the country were given a monthly pension of Tk. 100 each. In 2006-2007, a total of 40,311 persons were covered under this scheme in 4,479 unions from all over the country.

The Old Age Allowance scheme was initiated by the Ministry of Social Welfare in 2003-04 with a budget of BDT 1,800 million. It increased to BDT 2,600 million in 2004-2005, BDT 3,150 million in 2005-2006, BDT 4,488 million (revised) in 2007-2008 and BDT 6,000 million (proposed) in 2008-09. The target group coverage was 1.7 million in 2007-2008 going up to 2.0 million in 2008-2009, showing an increase of 17.7 per cent. The criteria for targeting was a minimum of 65 years, with an income of Tk. 2,000 or less, with a work record in the formal sector, and a 50-50 breakdown among male and female beneficiaries. This programme has been widely acclaimed in the context of a complete absence of social security for the elderly. It has given emphasis to the rights of the aged especially among the poorer families, where those who have contributed to family welfare throughout their lives are felt to be redundant once their prime working age is over.

The old age allowance programme is thought to be largely successful in improving food security of the elderly vulnerable. The impact is pronounced in the case of the female beneficiaries. The programme is also well targeted. It is observed that most of the allowance received was spent on food and more than half of the recipients use some of their allowance money for health care. Around one-fifth of recipients build up assets such as poultry and livestock to generate income for the household. Most of the recipients feel happy and relieved when they receive allowance money as it gives them some economic security (Paul-Majumdar and

Begum 2008). A BRAC evaluation study (2008) provides similar observations in that a beneficiary allowance is significantly associated with households' increased expenditure on protein consumption and health related quality of life.

#### *Allowance Scheme for Widowed and Deserted Women*

The programme for destitute, divorced, separated or abandoned women is popularly known as "Destitute Women's Allowance" (DWA) programme. The beneficiaries are defined as aged 60 and above, landless, sick, disabled and with an annual income of less than Tk.3,000. The ineligible ones are those who have regular employment or enjoy family support or belong to another safety net programme. Those who work as a day labourer, domestic help or lead the life of a vagabond are also not eligible.

Widowed/divorced/abandoned women constitute about 7.7 per cent of all women in the age group 15 years and above, but elderly destitute women (60 years and above) represent only 0.5 per cent of the population (BBS 2008). The programme was introduced in September 1999 and has been expanded throughout the country. It has increased food consumption and generally improved the socio-economic and health status of the beneficiaries. The programme is well-targeted with about 54 per cent of destitute women covered under the programme (Begum and Paul-Majumder 2008). There is evidence to suggest that there is a positive impact on nutrition and health. One-third of beneficiaries acquired some assets (such as goat, cow, poultry, and duck) with this money.

Under this programme, 5 persons identified as hardcore poor widow or deserted women in a ward are given an allowance of Tk. 100 each per month. In 2002, over 2 million poor widows/deserted women from 40,311 wards of 4,479 unions received this benefit.

In general, status of women in Bangladesh is very low, socially, economically and culturally. Studies show that the burden of poverty falls disproportionately on women since there is socially entrenched gender discrimination. Under these circumstances, women's suffering is acute when they become widowed, divorced and abandoned. Moreover, they are economically and educationally powerless and unable to seek legal assistance. In most cases, familial supports have been withdrawn from them as traditional joint family structure has broken down. Statistics show that widowed/divorced/abandoned women constitute about 16 per cent of the total ever married women, whereas men in this group constitute only a little more than one per cent of total ever married men (BBS 1998). The same source shows that about 57 per cent of elderly women (60 years and above) compared to only a little more than 4 per cent of their male counterparts are widowed/divorced/ abandoned. In the prevailing socio-economic context of

Bangladesh, women without a male partner are often left in a highly vulnerable situation. This is aggravated by poverty and their socio-economic status.

#### *Allowance for the Distressed Disabled Persons (ADDP)*

At present 200,000 disabled persons have been covered under this programme where each person is given Tk. 220 per month. Thus, roughly 40 per cent of this group has been covered. Given the very acute distress that confronts the disabled in a country like Bangladesh, coverage should be much higher. There is severe discrimination against the disabled and very little access to basic services like health and skill training.

#### **4.4.1.2 Conditional Cash Transfer**

##### *Stipend for Primary Education*

Food for Education (FFE) has been renamed as Stipend for Primary Education (PESP). FFE programme was first introduced in 1993/94 and present PESP was launched in July 2002. It is designed to support poor families so that they send their children to school by providing cash support. The programme has four objectives: (a) increased school enrolment, (b) better school attendance, (c) lower drop-out rates, and (d) higher quality of primary education. Children of households headed by destitute and widowed women, daily labourers, low-income tradesmen (potter, carpenter, cobbler, fisherman, etc.) and landless families owning less than 0.5 acre of land are eligible for cash for education programme.

There is a high dropout of children within the 5-year cycle of primary education due to poverty. More than one-fifth of female children are employed either in wage or non-wage work. The programme has increased enrolment rates, reduced drop out and increased primary education cycle completion rate. An evaluation conducted by the Directorate of Primary Education (DPE) in 2008 shows (DPE 2008) that gross enrolment at primary level is 97 per cent and net enrolment is 84 per cent; the attendance rate is 72 per cent, drop-out rate 19 per cent and pass rate is 77 per cent. The study observes that 38 per cent of all enrolled students are covered under this programme though the target is 40 per cent. The strict criteria, i.e. 85 per cent attendance and 40 per cent marks in the final examination, may have led to some slippage in coverage. The study reveals that benefits are reaching the target students.

##### *Food Assisted Programmes*

Food assistance programmes in Bangladesh are targeted to the poor. The programmes have both a development and a support objective, usually combining rural infrastructure development and maintenance, maternal and child nutrition and human capital development with provision of benefits in cash or kind. Food/cash for



work, Test relief (TR) and food assistance (Chittagong Hill Tracts) have work requirements for the participants, while VGD has both work and training requirements, and Vulnerable Group Feeding (VGF) and Gratuitous Relief (GR) have no work requirements for programme participants.

FFW is mainly carried out between January and April, Test relief programme during the rainy season between July and November and VGF/VGD during the pre-harvest period of Aman season. The utilisation of food grains in March, June, October and November is higher than other months of the year. The demand for benefits under these programmes can go up sharply during periods of disaster or shocks.

Table 4.2 provides damage figures arising from floods in various years. VGD is targeted to destitute women, while VGF is carried out immediately after a natural disaster such as floods, and also aimed at a selected number of households headed by destitute women. Different studies indicate that participating women earn a higher income compared to their previous income and are able to increase their asset position and consumption.

TABLE 4.2  
SERIOUS FLOODS AND DAMAGES IN THE LAST 25 YEARS

Year	Inundated Area (sq.km)	Damages	
		(Million US\$)	Deaths (no.)
1984	50,000	380	0
1987	50,000	1,000	2050
1988	85,000	1,200	2,000-6,500
1998	100,000	2,800	1,100
2004	55,000	2,000	700
2007	32,000	1,000	650

Source: Ali (2009).

In FY2009-10, one-third of the food security budget (excluding OMS) is allocated to VGF, followed by TR with 23 per cent and FFW with 22 per cent. In total, VGD, TR, GR, FFW and Food Assistance (CHT) will generate 223.16 lakh person-months of work in 2009/10. A Disaster Relief programme has been introduced in FY2009-10 with an allocation of Tk. 100 crore in 2008/09. The 100-day employment programme with an allocation of Tk.926 crore has now been renamed as Employment for the Extreme Poor with an increased allocation of Tk. 1,176 crore, and expected to create 49 lakh person-months of work. The nation wide survey on household income and expenditure (BBS 2007a) shows that in 2005, 13.02 per cent of households received benefits from the social protection programmes. Of them, only 11 per cent households benefited from FFW, TR and GR.

#### **4.4.1.3 Micro-Credit for the Ultra Poor**

Bangladesh's micro-credit programme is the largest in the world. The government has been providing micro-credit with a plan for halving the number of people living in poverty by 2021. In spite of many limitations, the sector has been able to reach millions of people in the rural and suburban areas. The programme will provide financial services amounting to 4,950 million taka to 6.5 million people in 2009/10 to help them become self-employed. In 2008/09, Tk.3,007 million was available to 6 million people. Another new programme is the "one house one farm" programme begun in 2009/10 with an allocation of Tk. 150 million.

The standard micro-credit programmes have not done very well in targeting the poor, although reaching the hardcore poor has remained a challenge. Indeed, many NGOs (e.g. BRAC) have defined the hardcore poor as those who are not able to take part in micro-credit programmes, thus requiring a series of capacity development interventions to first raise that capacity. The lesson from this experience seems to be that the hardcore poor cannot be addressed by conventional anti-poverty programmes but could graduate to a level where they can become mainstreamed, and able to participate in conventional programmes. However, the precondition for this is substantial investment in building human capacity and access to resources at a subsidised cost.

#### **4.4.1.4 NGOs and GO-NGO Partnerships**

The government allocated Tk.3,000 million to PKSF during 2004-07 to distribute to the ultra poor through its partner organisations. More than 7.34 lakhs poor have already been brought under the programme. BRAC micro-credit programme for the ultra poor is limited to 5,000 households selected from the poorest three districts in Bangladesh—Rangpur, Nilphamari and Kurigram. Impact studies show that beneficiaries increased their household consumption due to the programme. As already noted above, the thrust of these programmes is to build capacity to mainstream the hardcore poor.

#### **4.4.1.5 Rural Maintenance Programme (RMP)—A Successful Experiment**

Rural Maintenance Programme (RMP) is one of the oldest safety net programmes in Bangladesh. In 1983, CARE Bangladesh initiated this programme with a small pilot scheme covering only seven unions. Now RMP is a countrywide programme working in 4,140 unions out of 4,479 unions of Bangladesh. The project is jointly funded by the Canadian International Development Agency (CIDA) and the Government of Bangladesh (GoB). Both the central and local government (Union Parishad) of the GoB are responsible for funding a part of the costs of the RMP. The GoB has decided to continue with the RMP programme even after donor

withdrawal. It has now been renamed as REOPA (Rural Employment Opportunities for Public Asset).

An independent evaluation by EU (EU 2008) observes that the RMP was a relevant development programme and the target beneficiaries made up of ultra poor women is still a considerable population in rural Bangladesh. The standard model of 20 kilometre of earthen road to be maintained in every union was inflexible and out-dated however, because it did not always address actual local needs.

The evaluation further notes that destitute women increased their financial capital as a direct result of RMP. However, the result of up to four years of guaranteed wage employment in addition to significant amounts of mandatory savings possibly had more impact than the activities of the Income Diversification Component. The limited amount of skills training and literacy and numeracy training did not transform ultra poor women into self-employed business women.

The factors that have hampered the effectiveness of RMP have been the lack of success in transferring the management of the programme to GoB; a series of natural disasters from 2002 onwards which limited the extent of potential socio-economic and food security improvements sustained by beneficiaries; and the termination of earthen road maintenance work in 2006 which caused local traffic flow to be interrupted. These factors have negatively affected overall achievements.

Survey results show (EU 2008) that, unfortunately, RMP graduates remain vulnerable to external shocks, such as family illness, and natural disasters, such as severe flooding. Many women reported that they had used their savings to cope with crises. Savings had also been used to improve houses, purchase livestock and land, and pay medical bills and dowry, but the majority of RMP women reported that they were once more working as domestic helpers or casual labourers, and approximately 70 per cent of the RMP sample surveyed reported being food insecure for most of the previous 12 months.

RMP has been a transforming experience for all of the women who participated in the programme and they report improved social status, increased self-confidence and greater awareness of their rights. The guaranteed wage employment, however, was the real platform on which they built a better life, and could offer their families better health and nutrition, and regular schooling for their children.

However, RMP women did not graduate to self-employment status in any significant numbers. It is difficult for women to replicate the cash flow that comes from guaranteed wages, even though the drop in income is offset by the accumulation of assets such as some land and better housing.

#### **4.4.1.6 Miscellaneous Programmes**

##### *Maternity Allowance for the Poor Mothers*

Cash allowance is being made available to poor pregnant mothers after three months of pregnancy for the duration of two years in order to improve their nutrition levels. This was a comparatively new programme, introduced in 2007/8, designed to address another important challenge facing poor mothers of the country. On perceiving the positive impacts of the programme, the number of beneficiaries was increased to 60,000 poor women (mothers). The enhanced numbers were accommodated (given the positive impact) in 2008-2009 budget. From the time of conception (about three months) of the child in the mother's womb, up to 24 months, mothers receive Tk. 300 every month. Mothers with maximum of two children are eligible. This has had an impact upon child marriage, divorce, dowry, fertility control, birth registration, nutrition of mother and child, empowerment of women, and so on. This is being administered via the Ministry of Women and Children Affairs (MoWCA), under the auspices of a National Steering Committee.

The programme was initially planned to cover 45,000 women (later increased to 60,000) in 3,000 unions, covering 15 mothers from each Union Parishad. The programme is expected to cover all the unions of the country within 2011 and by 2016 it could be benefiting all pregnant women.

##### *Fund for Garment Workers Training and Support*

A new programme was introduced in 2007-8 for garment workers. Total budget for this programme is Tk. 200 million (GoB financed). This is for retrenched workers of the garment sector.

##### *Temporary Unemployment Removal (SDF)*

Poor people who face temporary unemployment are given this fund, for example, in Monga areas, to wage labourers facing unemployment during the lean agricultural seasons in March-April and September-October. In FY2007-8, the budget allocation was Tk. 500 million.

##### *Small Entrepreneurs Development Programme*

The programme was introduced by PKSF with an allocation of Tk. 1,000 million. This is operated through PKSF with the aim of transforming poor entrepreneurs into small entrepreneurs.

##### *Employment Programme for Hardcore Poor*

Taka 1,000 million was allocated in FY2007/08 to create employment for the hardcore poor. Not enough is known about this project to assess its impact.

*Disaster Affected Farmers Fund*

Since the country is disaster prone, it needs to have a mitigation fund to help marginal and small farmers. GoB has kept a provision of Tk. 1,000 million in FY 2007-08 for this purpose. Over time, this fund should be further expanded as the incidence of natural hazards is likely to rise in the face of global warming.

*Workers Welfare Fund*

A new programme has been initiated aimed at creation of a welfare fund for workers. The money is mainly for workers of mills and factories, with an initial budget of Tk.250 million in FY2007-08.

*Maternal Health Voucher Scheme*

This is another programme implemented by the Ministry of Health and Family Welfare. Total budget for the FY2007-08 was Tk. 1,260 million. Effectiveness of the programme is unknown.

**4.4.1.7 Problems and Limitations of SSNPs**

Despite all the positive implications of safety net programmes that have been piloted in the country, there are some weaknesses which include the following:

**Coverage:** Not a single SSNP has nationwide coverage although the problem prevails across the country. Indeed, social safety net programme should have nationwide coverage. Considering the resource constraints of the government, a phased approach for expansion of coverage may be considered.

**Inappropriate targeting:** Inclusion of the wrong person or exclusion of the right person in the programme is to be avoided. This is a major concern with most SSNPs.

**Leakage:** Leakage is commonly reported but seems more prevalent in kind-mediated programmes compared to cash-mediated ones. On account of this, some recommendations are for pursuing more cash programmes.

**Weak institutions:** Programme delivery remains weak due to weak institutions, especially government institutions at the local level.

The above observations are generic and need to be much more specific and much more detailed. There is a dearth of good quality programme evaluations that can inform on policy much more forcefully than has been attempted here. In other words, the design and impact of individual programmes need to be carefully considered before scaling them up or even retaining them. This would be particularly true for the newer, smaller programmes that do not yet have a track record of performance. The way forward for these programmes would be to initiate pilot programmes, conduct rigorous evaluations based on suitably generated baseline surveys, and then scale up, redesign or close down as warranted.

#### **4.5 ESTIMATION OF RESOURCE NEEDS FOR THE MAIN SOCIAL PROGRAMMES DURING SIXTH FIVE YEAR PLAN (2011-15)**

This section attempts to estimate the resources that will be needed in order to cover all the target groups identified by the government under the different SSNPs, pertaining to the Sixth Five-Year Plan period. The basic approach is to make an estimate of hardcore poverty at a given point in time and allocate this under the different programmes. In this study, old age allowance and destitute women allowance programmes cover the extreme poor (25.1 per cent of the population), which is more than the hardcore poor. Primary education stipend scheme covers 100 per cent of the absolute poor. Only the “employment generation for the poor” programme covers all hardcore poor under the daily wage workers category. The stipend scheme for secondary and higher students covers rural hardcore pupils. The cost is based on unit expenditures per beneficiary in existing programmes held constant/adjusted for inflation, with some scope for increasing real benefits when this is felt to be too low to be of much value.

The average inflation during 2007/08 was 9.9 per cent and it was 10.8 per cent in FY2008-09. After the assumption of office by the present government, inflation declined to 5.0 per cent in March 2009 and food inflation further declined to 4.33 per cent for rural area (Ministry of Finance 2009). The Medium Term Macroeconomic Framework (MTMF) of the GoB forecasts inflation (consumer price index) to be 6.0 per cent during 2010/11 and 2011/12. In this study, budget allocation is adjusted assuming 6.0 per cent inflation rate during the SFYP period (2011-15).

The budget 2009-10 of Government of Bangladesh proposes 2.52 per cent of GDP on the social protection programmes, which comprises almost 15.2 per cent of development and 19.2 per cent of non-development budget. The budget has been on the rise in recent years, but allocations under SSNP remain well below regional standards. For example, in Pakistan, the SSNP outlay increased sharply, resulting in an increase in coverage from 10 per cent of the poor in 2004 to 24 per cent by 2010, or from 2.6 million households to 6.2 million households.

Table 4.3 provides resource requirements of the social protection programmes for the terminal year (2014/15) of the Sixth Five-Year Plan compared to the proposed budget allocation for FY2009-10. The resource need for each social protection program at each year of the sixth five year plan period is provided in the subsequent sections below. It is noticeable that the resource requirements to generate 100 days employment for daily workers is much higher even without 6 per cent inflation adjustment and assuming a wage that is well below market wages.

**TABLE 4.3**  
**ESTIMATED RESOURCE NEEDS AND COVERAGE OF SOCIAL PROTECTION**  
**PROGRAMMES FOR 2009/10 AND 2014/15**

Programme	2009/10			2014/15			Beneficiary
	Target (million No.)	Coverage (%)	Budget (Tk. million.)	Target (million. no.)	Coverage (%)	Budget (Tk. million.)	
Cash support programme							
Old age allowance	2.25	100	8,100	2.61	100	11,619.72	Extreme poor
Destitute women	1.03	89	3,312	1.21	100	5,386.92	Extreme poor
Conditional cash transfer							
Primary education programme	5.32	89	5,804	5.51	100	6,372.20	Absolute poor
Secondary & higher S. programme	4.44	81	5,277	4.82	100	75,109.00	Hardcore poor
Food assistance programme							
100 days programme	390.4	78	57,873	628.74	100	90,783.00	Hardcore poor
Maternity allowances poor mother	-	-	336	-	-	500.00	-
Disaster programme	-	-	3,257	-	-	5,000.00	-
Climatic change	-	-	7,000	-	-	10,000.00	-
Char livelihood	0.25	6.7	9.66	0.94	25.00	3,632.10	-
Vulnerable people in monga areas	-	-	-	0.35	100.00	350.00	-
Total social protection excluding pension for govt. employee			13,6952			208,752.94	152 % increase

Source: Budget Documents of Ministry of Finance and Own estimates.

In *char* lands (island chars are those which are surrounded by water for most of the year), population is estimated to be more than five million. More than three-fourths of Char people belong to extreme poverty. The Char livelihood programme proposal for FY2009-10 covers only 6.7 per cent of vulnerable poor in Char lands. If the government wishes to cover 25 per cent of extreme poverty in Char areas, the budget will increase by 3.76 times the FY2009-10 level, at the prevailing per capita rate.

In the Monga prone areas of three districts—Kurigram, Gaibandha and Lalmonirhat—approximately 3.5 lakh people are believed to be in extreme poverty. It has been reported from field surveys that the VGF programme is “over-covered” by 240 per cent, while VGD is under-covered by 40 per cent. It may be possible to bring all these programmes (with a similar target group) under one programme like the employment generation programme.

There is an allocation of fund for the impact of climate change on the poor (Tk.700 crore) in FY2009-10 and this is assumed to increase at 8.6 per cent per annum to reach Tk. 1000 crore in FY2014-15. The FY2009-10 budget has proposed Tk. 325.7 crore for disaster management, to be increased to Tk. 500 crore in FY 2014-15 on the assumption that disaster risks are likely to increase over time (Appendix tables 4.5A-4.7A).

Urban poverty is not addressed in social protection programmes but, in our study, we have considered extreme poverty of the population including both rural and urban areas except in the secondary and higher secondary school stipend programme. Overall, the SSNP budget allocation needs to increase about four times that of FY2009-10 level during the Plan period in absolute terms (Table 4.5).

#### **4.5.1 Resources for Major Programmes**

##### **4.5.1.1 The Old Age Allowance Programme**

The number of elderly people in the country was estimated at 7.68 million in 2001. In future, due to changing demographics and increasing life expectancy, the population of the elderly will rise at a faster rate than the rest of the population. This is unlikely to be a problem during the SFYP. Table 4.4 provides a rough estimate of the elderly poor is provided on the assumption that the incidence of poverty amongst the elderly is similar to that of the general proportion—clearly a conservative assumption. The resource need is estimated on the basis of 100 per cent coverage of the hardcore poor and a per capita allowance of Tk. 300 per month, which is increased to Tk. 350 by the end of the Plan period. In FY2009-10, 2.25 million elderly poor are likely to participate in the programme which has an allocation of Tk. 810 crore based on a per capita allowance of Tk. 300 per month.



TABLE 4.4  
ESTIMATED OLD AGE PERSONS AND RESOURCE NEED

Year	Poor using upper poverty (No. in Million) (40%)	Extreme poverty (No. in million) (25%)	Extreme poverty coverage (%)	Budget (Tk. in Million)	Increase Over FY 09/10	Inflation adjusted Budget Tk. Million (6%)	Increase Over FY 09/10
2009/10 (In budget)	3.53	2.21 (2.25)	100.0	8100	100.0	8100	100.0
2011	3.81	2.38	100.0	8568	106.0	8586	106.0
2012	3.9	2.43	100.0	9477	117.0	9101.16	112.0
2013	3.99	2.49	100.0	9711	120.0	9647.27	119.0
2014	4.09	2.55	100.0	10710	132.0	10226.1	126.0
2015	4.18	2.61	100.0	10962	135.0	10839.7	134.0

**Note:** For 2009/10 & 2011: Tk.300 per month per person.

For 2012 & 2013 : Tk.325 per month per person.

For 2014 & 2015: Tk. 350 per month per person.

#### 4.5.1.2 Resource Needs for Widowed/Separated Destitute Women

This target group increased at a rate of 3.29 per cent per annum during 1991-2001 and declined by -4.41 per cent over 1981-91. We choose destitute women population growth rate as 3.29 per cent as it is the immediate past growth rate. Given the resource constraints of the country, the government may desire to cover only those who live in hardcore poverty rather than trying to cover all of the poor. The estimated number of hardcore poor in this category in 2011 is estimated at 1.06 million, rising to 1.21 million in 2015 (Table 4.5). Female destitute receiving benefits from the old age programme would be excluded.

Full coverage of all the poor widowed, divorced, separated and abandoned women under the monthly allowance programme will cause the budget to increase from 10.5 per cent to 12.5 per cent per year from 2009/10, depending on the monthly allowances. This requirement will further be increased if the destitute women population increases at a higher rate than anticipated. The monthly allowance rate is increased from Tk. 300 to Tk. 325 for FY2012 and FY2013, and Tk. 350 for FY2014 and FY2015. If the incidence of hardcore poverty declines sharply over the Plan period, the resource need will come down or the benefits could be scaled up. This is not being factored in because the growth-hardcore poverty elasticity may not be very large.

TABLE 4.5  
ESTIMATION OF RESOURCES REQUIRED FOR DESTITUTE  
WOMEN DURING 2011-15

Year	(10 yrs ) Female Widowed (Million)	Female Dest (60 +) (44%) (Million)	Extreme Poor (female) 0.4 (Million)	Coverage		Budget Tk. m	Increase Over FY 2009/10	Inflation adjusted Budget Tk. mill 0.06	Increase Over FY 2009/10
				million	%				
2001*	3.57	1.5708	0.79968	-	-	-	-	-	-
2009/10	4.62	2.0328	1.03488	0.92	89	3312	100	3312	100
2011	4.74	2.0856	1.06176	1.06176	100	3816	115.2174	4045	122.1316
2012	4.90	2.156	1.0976	1.0976	100	4290	129.529	4547.4	137.3007
2013	5.06	2.2264	1.13344	1.13344	100	440	133.0616	4671.42	141.0447
2014	5.23	2.3012	1.17152	1.17152	100	4914	148.3696	5208.84	157.3656
2015	5.40	2.376	1.2096	1.2096	100	5082	153.442	5386.92	162.6479

**Note:** For 2009/10 and 2011: Tk. 300 per month per person. For 2012 and 2013: Tk. 325 per month per person. For 2014 and 2015: Tk. 350 per month per person.

\* In 2001, female destitute (60+) as per cent of total female destitute (10+) is 44 per cent

#### 4.5.1.3 Resource Needs for Primary and Secondary Stipend Scheme

The present elected government wants to ensure enrolment of all children (6-10 years) in school by 2011. The school survey report 2007 shows a net enrollment rate of 91.1 per cent (GoB 2009). Primary education stipend project (PESP) is targeted to cover 40 per cent of the gross enrolled students under stipend facilities. There is a need to extend its coverage to increase enrolment rate. Apart from this, the government started a school-feeding programme, under which a child is provided with 75 grams of fortified biscuits, in eight poverty-stricken upazilas of three selected districts of greater Rangpur district.

The children 5-9 years of age declined by 1.51 per cent over the period 2002/03 to 2005/06 (BBS, LFS 2005/06), and the projection is made for 2011-15 using this latest available estimate. Without changing the amount of stipend over the next five years, and with 100 per cent enrolment, budget allocation will increase by 21 per cent in FY2010-11 and then decline to 11.4 per cent in the terminal year (2014-15) over 2009-10 (Table 4.6). Resource needs are little higher (20 per cent in 2014-15 over 2009-10) when inflation of 6 per cent per year is considered.

For secondary and higher secondary education stipend programme, we have considered only rural students. The rural children population aged 11-15 years increased by 1.67 per cent per year over the period 2000/05 (LFS). The target beneficiaries under the programme are assumed to increase at 10 per cent per year, and as a result, the coverage of extreme poor students would stand at 91 per cent in FY2014/15. The inflation-adjusted budget will then increase by 13.3 per cent per year on average from 2009/10 to 2014/15 (Table 4.7).

TABLE 4.6  
ESTIMATION OF RESOURCE NEED FOR PRIMARY EDUCATION STIPEND PROGRAMME

Year	Population (5-9 yrs) (million)	Population (5-9 yrs) (million)	Net Enrolled (million)	(40%) Coverage		Budget Tk. in Million	Increase Over FY 09/10	Inflation (6%)' adj. Budget Tk. Million	Budget (NE100%) Tk. in Million	Increase Over FY 09/10	Inflation budget (Col. 10)' Million Tk
				No. in million	%						
2005/06	17.348	17.348	-	-	-	-	-	-	-	-	-
2009/10	17.328	16.300	14.849	5.9397 (5.315)*	89.5	5804.1	100.0	5,804.1	5804.1	100	5,804.1
2011	17.323	16.054	14.625	5.8501	100.0	6,388.2	110.0	6,771.49	7,012.4	121.0	7,433.1
2012	17.318	15.812	14.405	5.7619	100.0	6,292.1	108.0	6,669.63	6,906.7	119.0	7,321.1
2013	17.313	15.573	14.187	5.6748	100.0	6,197.1	107.0	6,568.93	6,802.3	117.0	7,210.4
2014	17.308	15.338	13.973	5.5892	100.0	6,103.2	105.0	6,469.39	6,699.6	115.0	7,101.6
2015	17.303	15.106	13.762	5.5046	100.0	6,011.5	104.0	6,372.19	6,598.3	114.0	6,994.2

**Note:** Col 2: 17348 is from LFS 2005/06.

For column 2: Based on LFS 1995/96-2005/06, growth rate for 5-9 years is: -0.0288%.

For Column 3: Based on LFS 2002/03-2005/06, growth rate for 5-9 years is: -1.51%.

For Column4: Net enrolled 91.1% (GOB August 2009).

For Column 5: Coverage: Including drop-out students. \* 53.15 in FY 09/10.

For Column 6: Budget is estimated based on 09/10 allocation.

For Column 10: Based on 09/10 budget with net enrolment 100% = Column 3\* .40 \* Tk. 1,092.

TABLE 4.7  
**ESTIMATION OF RESOURCES FOR STIPEND PROGRAMME OF SECONDARY AND HIGHER  
 SECONDARY HARD CORE RURAL PUPILS**

Year	Rural Popn (10-19 yrs) No. million	Rural Popn (10-19 yrs) No. million	Net Enrolment (69.75%)' No. million	Hard Core poverty (19.5%)'	Beneficiary		Budget Tk. in million Increase	Increase over 09/10	Inflation Budget (6%) Tk. in million	Incre ase over 09/10
					No. million (10%)'	Coverage				
2005/06	23.859*	23.859	-	-	-	-	-	-	-	-
2009/10	24.88	25.453	17.75	3.46	2.80	80.88	52,770	100.0	52,770	100.0
2011	25.146	25.878	18.05	3.52	3.10	88.07	58,404	111.0	61,908	117.0
2012	25.415	26.31	18.35	3.58	3.40	95.03	64,056	121.0	67,899	129.0
2013	25.687	26.749	18.66	3.64	3.64	100.00	68,540	130.0	72,652	138.0
2014	25.962	27.196	18.97	3.70	3.70	100.00	69,689	132.0	73,871	140.0
2015	26.24	27.65	19.29	3.76	3.76	100.00	70,857	134.0	75,109	142.0

**Note:** For Column 2: Based on LFS 1995/96-2005/06, growth rate (10-19 yrs) is 1.07%.

For Column 3: Based on (LFS 2002/03-2005/06), growth rate (10-19 yrs) is 1.67%.

For Column 4: Enrolment: 69.75 % in rural areas for children (11-15 yrs). But the rate declined for 15-19 yrs group.

Here we have taken higher side (HIES, Table 7.6, p. 85)

For Column 7: Budget is estimated based on 09/10 allocation.

\*23.859 million in Col. 2 is from LFS 2005/06.

#### 4.5.1.4 Resource Needs for Food Assisted Programmes for Employment Generation during SFYP

Given the political sensitivity of food, allocation for open market sales of food grain in 2009/10 has been increased by 1.5 times over the preceding period (Table 4.8). It is expected that three crore low-income people will participate in the OMS programme in 2009/10. The increased OMS allocation is accompanied by lower allocation in other food assistance programmes (FFW, VGD, VGF, TR and GR). In these programmes, the number of beneficiaries increased to 3.85 crore in 2009/10 from 3.55 crore in 2008/09 but the budget allocation actually declined by 6.7 per cent over the same period. Table 4.8 shows allocation of food assisted employment programmes for the years 2009/10 and 2008/09, which shows that, on average, earning per person is Tk. 1,482 which is equivalent to 20 days work for each of 3.9 crore persons.

TABLE 4.8  
FOOD ASSISTED PROGRAMMES AND RESOURCE ALLOCATION,  
2009/10 AND 2008/09

Programme	2009/10 Person months No. (lakh)	Budget Tk. (crore)	2008/09 Person No. (lakh)	Budget Tk. (crore)
VGD	7.4	658.07	7.40	730.85
VGF	366.67	1410.23	336.67	1487.53
TR	2.8	993.19	2.54	1020.48
GR	5.33	164.09	5.33	188.34
Food-CHT	0.52	188.41	0.52	220.71
FFW	2.6	938.82	3.29	1033.93
Employment for the Extreme Poor/100 days Emp. Rural Employment	4.08	1176.00	2.5725	926.00
Road Maintenance Employment	0.52	170	0.52	192
Northern Districts Rural Employment	0.24	12.85	0.18	9.86
Public Assets	0.24	75.6	0.24	62.58
Total	390.4	5787.26	359.262	5872.28
			5	
OMS	300	1525.00	130.50	600.47

Source: Budget Documents, Ministry of Finance.

The new employment generation programme (previously the 100-days programme) is expected to create 49 lakh man-months of employment for the hardcore poor. Employment for hardcore programme assumes only one month work with Tk. 2,400 per person in 2009/10 i.e. 24 days work with 100 Tk. per day. Resource needs are estimated with number of beneficiary increase by 10 per cent from 2009/10 and each worker gets at least 100 days with an average amount of Tk. 1,482 per month. Requirements for resources are adjusted with 6 per cent inflation.

Table 4.9 provides estimation for projected number of hardcore poor day workers for the country and rural areas as well as resource needs over the Sixth Five-Year Plan period based on 2009/10 allocation. In fact, resources are to be increased by 1.5 times of allocation in FY2009-10 to generate employment of 100 days for hardcore rural poor day workers and this will cover all the hardcore rural poor in the SFYP period. The resource requirements will be higher if it is adjusted with 6 per cent inflation. This may not be unaffordable. It may be mentioned that other than day labourers, students and housewives participate in the FFW and other employment programmes in large numbers (HIES 2005).

TABLE 4.9  
**EMPLOYMENT GENERATION AND RESOURCE NEEDS FOR HARDCORE  
POVERTY**

Year	Rural Labour force of net Int. migration No. million	Hardcore Poverty (19.5%) No. million	Coverage 100 days Tk. 100 / person/day (%)	Budget		Inflation (6%)	
				Tk. million	Increase (%)	Adjusted budget (million)	Increase (%)
2005/06	34.37	6.7	-	-	-	-	-
2009/10	38.23	7.5	78	57870	100	57870	100
2011	39.31	7.7	100	76655	132	81254	140
2012	40.41	7.9	100	78800	136	83527	144
2013	41.55	8.1	100	81023	140	85884	148
2014	42.72	8.3	100	83304	144	88302	153
2015	43.92	8.6	100	85644	148	90783	157

Col 4: In FY2009-10, target beneficiary is 390 lakh for 20 days work with an average earning Tk. 1,482 per person.

#### 4.6 PROPOSED SUGGESTIONS FOR FUTURE ACTIONS

- Rationalise programmes by using the one player that gets involved in all programmes i.e. union parishads.
- Expand the better safety net programmes such as old age pensions, public works and widow/disability payments using union parishads (UPs) to select beneficiaries and distribute benefits.

The country must move steadily towards a universal social protection regime. This would require a phasing out of the numerous SSNPs initially to refocus on the most important ones, while, at the same time, opening up a general window to provide access to all persons falling below a clearly defined income or consumption norm. This journey is difficult to initiate in the absence of a single, over-arching agency to take charge of policy and programmes. It is, therefore, strongly recommended that all SSNPs are put directly under the control of a single agency both for reasons of operational efficacy and to reduce costs. It should not be located within a particular ministry since the current programmes cut across many ministries but it could be placed under the Prime Minister's Secretariat. This should normally fall under the jurisdiction of the Ministry of Social Welfare—this may not be wise because traditionally it has been one of the weaker ministries. This supra agency would then be responsible for generating a comprehensive design that would define eligibility criteria, benefits, target groups, and prioritise programmes and programme areas. The main policy should be to universalise social protection, reduce the number of programmes, raise efficiency and effectiveness, and create sound implementation procedures and structures.

An important role of the agency would be to conduct high quality monitoring and evaluation on a continuous basis so that programmes can be redesigned and fine-tuned in the light of changing conditions. Increasingly, the challenge of climate change and frequent disasters are likely to be faced so that we would need to be prepared to meet these in a planned manner. Bangladesh already spends 2.5 per cent of its GDP on social protection. If account is taken of other quasi protection programmes embedded in health and education programme interventions, this figure could go up to 4 per cent. This is a sizeable amount of money and needs to be deployed with greater care to achieve the best results. The current proliferation of programmes and agencies is a recipe for disaster. For the interim period, however, the following have been suggested:

#### ***4.6.1 Special Programmes aimed at Livelihood Support***

In the next 7 years (2009 to 2016) the following projects should attain national coverage: Old Age Allowance, Allowance for Widow and Distressed Women and Maternity Allowance for Poor Mothers. In addition, the projects indicated below would also need to be carried on.

##### **4.6.1.1 Special Programmes for Monga**

The problem appears to be specific to certain backward, environmentally unfavourable, mono-cropped regions of Bangladesh. A short-term approach is to provide employment during the seasonal slack in the labour market—the traditional

approach adopted by public works programme in Bangladesh. A long-term approach would need to be in terms of capacity development of the labour force and education that will allow people to seek employment outside the area. In addition, opportunities for non-agricultural employment need to be created locally, requiring investment in physical infrastructure and energy.

#### **4.6.1.2 Char Areas**

People living in remote char areas should be brought under SSNPs. The coverage of the Char Livelihood Project should be expanded to all Char Areas by 2016.

#### **4.6.2 General Programme for Universal Protection of Hardcore**

All other programmes, especially those that are capacity building or conditional in nature, should be subsumed under the general programme and managed under one roof. Initially, these may be run as separate projects to be gradually integrated over a number of years. These would include all food assisted programmes, primary and secondary school programmes, programme for freedom fighters, the micro-credit programme for the ultra poor and the employment generation schemes, including the RMP programme. The target of the general programme would be to reach 100 per cent coverage. It would also be entrusted with the responsibility of designing disaster relief schemes following floods or cyclones.

An indication of resource needs has been provided. As pointed out, existing outlays on social protection already account for a significant share of GDP. The focus now should be on reducing waste and raising efficiency and effectiveness. Given current trends in GDP, it may be assumed that poverty, including hardcore poverty, will decline proportionately, although, in absolute terms, there may still be a small increase in poverty. It is felt that if social protection is provided with a 5 per cent share of GDP, and that leakages and overhead costs can be significantly reduced, the total resources so generated would be able to cover the hardcore poor as defined in this paper.



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**Appendix Tables**

Appendix Table 4.1A  
**INCIDENCE OF POVERTY IN 2005**

Head Count Rate of Poverty by Cost of Basic Needs Method (CBN)				
	Upper Poverty Line (Moderate Poor: food expenditure equal to food poverty line)		Lower Poverty Line(Extreme Poor: total expenditure equal to food poverty line)	
	%	No. in million	%	No. in million
% of HH	40.0	11.46	25.1	7.19
% of Pop.	40.0	55.53	25.1	34.84

Appendix Table 4.1B  
**INCIDENCE OF POVERTY IN 2005**

Incidence of Poverty By Direct Calorie Method (DCI)						
	Poverty Line-1 Absolute Poverty <=2122 KCal per person per day		Poverty line-2 Hardcore Poverty <=1805 KCal per capita per day		Poverty line-3 Ultra Poverty <=1600 KCal per capita per day	
	%	No. in million	%	No. in million	%	No. in million
% of HH	37.95	10.87	18.29	5.24	Na	Na
% of Popn	40.40	56.00	19.50	27.00	7.80	10.80

Appendix Table 4.2A  
**PUBLIC DISTRIBUTION OF FOODGRAINS, 2009/10 & 2008/09**

Programme	Rice	Budget 2009/10 000' metric ton		Rice	Actual 2008/09 000' m.ton	
		Wheat	Total		Wheat	Total
Monetised						
EP	157	122	279	133.34	85.81	219.15
OMS	500	100	600	194.45	0	194.45
Others	-	-	-	-	-	-
Subtotal	695	251	946	354.9	90.41	445.31
Non-Monetised						
FFW	200	175	375	362.28	32.6	394.88
TR	150	250	400	257.63	110.18	367.82
VGf	550	0	550	6507.17	0.29	507.46
VGD	100	165	265	140.86	138.07	278.93
Others	-	-	-	-	-	-
Subtotal	1109	620	1729	1402.15	281.2	1683.35
PFDS total	1804	871	2675	1757.06	371.61	2128.66
VGf Relief	-	-	-	31.29	-	31.29
All total	-	-	-	1788.35	371.61	2159.95

Appendix Table 4.3A  
**LABOUR FORCE AND POPULATION ESTIMATION**

Year	Total Population (15-59) (000)'	Rural Population (15-59) (000)'	Labour Force (15-59) (000)'	Rural Labour Force(15-59) (000)'
2005/06	76,687	57,074	45,904	34,719
2009/10	83,037	61,252	50,770	38,621
2011	84,756	62,373	52,115	39,706
2012	86,510	63,514	53,496	40,822
2013	88,301	64,676	54,914	41,969
2014	90,129	65,860	56,369	43,148
2015	91,994	67,065	57,862	44,360

**Source:** SYB 2007, page 43 (population).

Rural population (Census 1991, p. 25 and Census 2001, p. 135).

**Note:** For Total population (15-59) based on LFS (2002/03-2005/06) Growth rate is 2.07%.  
 For Total Rural population (15-59) based on LFS (2002/03-2005/06), growth rate is 1.83%.  
 For Labour force (15-59) based on LFS (2002/03-2005/06), growth rate is 2.65%.  
 For Labour force (15-59) based on LFS (2002/03-2005/06), growth rate is 2.65%.  
 For Labour force (15-59) based on LFS (2002/03-2005/06), growth rate is 2.65%.  
 For Labour force (15-59) based on LFS (2002/03-2005/06), growth rate is 2.65%.

Appendix Table 4.4A  
**NET LABOUR FORCE AND NET MIGRATION**

Year	International Migrant as % labour Force	Total Labour Force (15-59) (000)'	Labour Force net International Migration 1.50%	Unskilled of	
				Net migrant labour Force 51%	Labour Force decline 5%
2005/06	0.63	45,904	689	351	351
2006/07	1.20	47,120	707	360	342
2007/08	2.02	48,369	726	370	352
2008/09	1.76	49,650	745	380	361
2009/10		50,770	762	388	369
2011		52,115	782	399	379
2012		53,496	802	409	389
2013		54,914	824	420	399
2014		56,369	846	431	410
2015		57,862	868	443	421

**Note:** Unemployment rate: 4.3% in the LFS 2005/06.

Appendix Table 4.5A  
**PERCENTAGE OF EXTREME POOR BY DISTRICTS IN 2005/06**

% of Extreme Poor	No. of Districts	% of extreme Poor
Barisal Division	6	37.41
less than or =30%	2	21.93
35-50%	4	-
Chittagong Division	11	14.53
< =20%	9	-
21-50%	2	-
Dhaka Division	17	23.38
<= 25%	9	-
26- 50%	8	-
Khulna Division	10	31.18
<= 25%	5	-
26- 50%	5	-
Rajshahi Division	16	36.42
25-35%	8	-
36-50%	6	-
51% & above	2	-
Sylhet Division	4	18.55
< 20%	2	-
25-30%	2	-

Source: BBS.

Appendix Table 4.6A  
**MAJOR CYCLONES THAT BANGLADESH COST**

Date	Death Toll	Storm surge height (meter)
11 May 1965	19,279	3.7-7.6
15 December, 1965	873	2.4-3.6
01 October 1966	850	6.0-6.7
12 November 1970	300,000	6.0-10.0
25 May 1985	11,069	3.0-4.6
25 April 1991	138,882	6.0-7.6
19 May 1997	155	3.1-4.6
15 November 2007	3,363	6.1-9.1

Source: Huq (2009); Ali (2009).

Appendix Table 4.7A  
**POVERTY AND CLIMATE HAZARDS IN THE REGIONS**

Regions	Poverty	Climate Hazards
North-West	High	Flood, Drought, River Erosion
Coastal	High	Cyclone, storm surge, salinity
North-East	Low	Flash Flood
Central/Dhaka	very low	Drainage Congestion

Appendix Table 4.8A  
**SERIOUS FLOODS IN THE LAST 25 YEARS**

Year	Inundated area (sq. km)	Damages (million US \$)	Deaths
1984	50000	380	0
1987	50000	1000	2050
1988	85000	1200	2000-6500
1998	100000	2800	1100
2004	55000	2000	700
2007	32000	1000	650

**Source:** Zulfikar (2009).

Appendix Table 4.9A  
**HARD CORE POVERTY**

Year	Rural labour force of net Int. migration (million)	Hardcore poverty (19.5%)' in million
2005/06	34.37	6.70
2009/10	38.23	7.46
2011	39.31	7.66
2012	40.41	7.88
2013	41.55	8.10
2014	42.72	8.33
2015	43.92	8.56

Appendix Table 4.10A

**ESTIMATION OF RESOURCES FOR STIPEND PROGRAM OF SECONDARY AND HIGHER SECONDARY  
RURAL PUPILS OVER SFYP**

Year	Rural Popn (10-19) yrs No.million	Rural Popn (10-19) yrs No.million	Net Enrollment (69.75%)' No.million	Extreme Poverty (25%)' No.million	Beneficiary No.million		Budget Tk.in milli	Increase Over 09/10	Inflation Budget (6%)' Tk.in milli	Increase Over 09/10
					(10%)' Increase	Coverage %				
2005/06	23.859*	23.859	-	-	-	-	-	-	-	-
2009/10	24.88	25.453	17.75	4.44	2.80	63	5277	100	5277	100
2011	25.146	25.878	18.05	4.51	3.10	69	5840	111	6191	117
2012	25.415	26.31	18.35	4.59	3.40	74	6406	121	6790	129
2013	25.687	26.749	18.66	4.66	3.70	79	6971	132	7389	140
2014	25.962	27.196	18.97	4.74	4.00	84	7536	143	7988	151
2015	26.24	27.65	19.29	4.82	4.40	91	8290	157	8787	166

**Note:** For Column 2: Based on LFS 1995/96-2005/06, Growth rate (10-19 yrs) is 1.07 per cent.

For Column 3: Based on (LFS 2002/03-2005/06), Growth rate (10-19 yrs) is 1.67 per cent.

For Column 4: Enrollment: 69.75 % in rural areas for children 11-15 yrs. But the rate declines for (15-19) yrs group.

Here we have taken higher one of 1.67% (HIES, Table 7.6, p. 85).

For Column 7: Budget is estimated based on 09/10 allocation.

\*23.859 million in Col. 2 is from LFS 2005/06.

Appendix Table 4.11A  
**ESTIMATED LABOUR DEMAND AND RESOURCE NEED**

Year	Total Population (15-59) No. million	Total Labour Force (15-59) No. million	Rural Population (15-59) No. million	Total Labour Force of net Int.migration No. million	Rural Labour Force(15-59) No. million	Rural Labour force of net Int. migration No. million	Day worker rural (40%)' No. million	Target Beneficiary No.in lac (20 days)	Budget Tk. In core	Coverage with 100 days work %	Budget Tk. Crore	of Col 10 Inflation adj.budget 6% Tk.In core
2005/06	76.687	45.904	57.074	45	34.719	34.37	0.14					
2009/10	83.037	50.77	61.252	50	38.621	38.23	0.15	390.4	57873	51	289363	5787
								Ave. Tk. 1482/person				
2011	84.756	52.115	62.373	51	39.706	39.31	0.16	429.44	63643	54	318215	337308
2012	86.51	53.496	63.514	53	40.822	40.41	0.16	472.38	70007	58	350034	371036
2013	88.301	54.914	64.676	54	41.969	41.55	0.17	519.62	77008	63	385038	408141
2014	90.129	56.369	65.86	56	43.148	42.72	0.17	571.58	84708	69	423541	448953
2015	91.994	57.862	67.065	57	44.36	43.92	0.18	628.74	93179	72	465896	493850

Note: Unemployed rate: 4.3 % in LFS 2005/06.

(It has been assumed that all unskilled migrants are from rural areas).

Col 5: From appendix table 3: (Col 3-Col 4).

Col 7: Rural labour force -Unskilled of net migrant labour force (Using Appendix 2 & 3).

Col 9: Target beneficiary is increased by 10 per cent.

## Appendix 1

## 1. Food based Social Safety Net Programmes

Name of programme	Implemented agency	Cash/kind transfer	Benefits	Objectives	Remarks
Food for Works (FFW) Program	Department of Local Government Engg. Dept.; Department of Social Services; Other Dept.	Food	a. No specific entitlement	1. Employment generation for the poor, mainly in the dry season through infrastructure creation and maintenance 2. Developing and maintaining rural infrastructure	The food-for-work (FFW) program plays an important role in the reduction of rural poverty, primarily through creation of employment opportunities. The FFW program has been operating in Bangladesh since 1975.
Gratuitous Relief (GR) Program	Ministry of Food and Disaster Management	Food	No specific entitlement	1. Provides in calamity related emergency needs 2. Short term relief to disaster victims – in terms of food and basic necessities	Relief based
Vulnerable Group Development (VGD) Program	Ministry of Women and Children Affairs, Directorate of Relief and Rehabilitations	Food	a. 30 Kilograms of wheat per month b. Training (totaling about 150 hours) c. Per cycle of 24 months	1. Increasing the marketable efficiency of women through training, motivating savings for initial capital accumulation and providing scope for availing credit 2. Building social awareness on disaster management and nutrition through training in groups	
Vulnerable Group Feeding (VGF) Program	Ministry of Food and Disaster Management	Food	No specific entitlement	1. Provides calamity related emergency needs 2. Short term relief to disaster victims – in terms of food and basic necessities.	
Rural Infrastructure Maintenance Program (RIMP)/ Test Relief	Ministry of Food and Disaster Management	Food	5-6 kg. of wheat/day of work	1. Employment for the poor in the rainy season 2. Developing and maintaining rural infrastructure 3. Compared to FFW, lighter labor requirement	



## 2. Employment Generation Programmes

Name of programme	Implemented agency	Cash/kind transfer	Benefits	Objectives	Remarks
'Ekti Bari Ekti Khamar' (one homestead, one farm) project.					The total amount of 'Ekti Bari Ekti Khamar' is Taka 1,197 crore funded by the government of Bangladesh. The five-year term project started from July, 2009 and it will end by June, 2014. total of 5,78,400 households across the country would be selected under the project
Gharey Phera (return home)				The rural migrants to urban centers are given credits to enable them to go back to their villages and earn their livelihood there	
Employment Generation Programme for Hardcore poor	Ministry of Food and Disaster Management	Cash	Taka 100/- per day per labour.	-To create employment for extreme rural poor unemployed people. _ To increase purchasing power of the extreme poor people affected by price hike. _ To create wealth for the people and the nation. _ To develop and maintain small scale rural infrastructure and communication system which will have impact on national economy	This program will be implemented throughout the rural area of the country with special priority to 81 high poverty-prone (40% and above) upazillas. In this regard,

### 3. Shelter Programme

Name of programme	Implemented agency	Cash/kind transfer	Benefits	Objectives	Remarks
Asrayan /Abashan Programme	Prime Minister's Office in a coordinating role with the District and Upazila Administration and other Government Department.		<ul style="list-style-type: none"> <li>- Rehabilitate landless, homeless, distressed, rootless family through identifying suitable khas land/ resume land/donated land and if necessary purchased land.</li> <li>- Rehabilitation of the selected family by providing room in Barrack house according to the estimate and design of the ABASHAN .</li> <li>- Providing two months VGF facilities to the rehabilitated family members</li> <li>- Imparting practical &amp; technical training and credit facilities to the rehabilitated family for implementing</li> <li>- ensure education for the 6 - 11 years old age boys and girls</li> <li>- Providing healthcare facilities to all beneficiaries</li> </ul>	Alleviate poverty of the landless and homeless people through providing shelters and human resource development activities.	It s a shelter programme which aims at providing poor with ownership of a house.

#### 4. Involvement of the Extreme Poor to Social Forestry Programmes should be Reflected in the Paper

Name of programme	Implemented agency	Cash/kind transfer	Benefits	Objectives	Remarks
Forest Sector Project (FSP)	Ministry of Environment and Forest		-	(i) to enhance forest conservation in selected areas; (ii) to increase overall wood production; and (iii) to institute sustainable management of forest resources through local community participation, institutional capacity building, and policy reforms.	Completed.(ADB Loan No. 1468-BAN[SF]; Duration: 1998-2004, EA: FD).
Reedland Integrated Social Forestry Project	Ministry of Environment and Forest		-		2005-06 to 2009-10

**5. Other Programmes**

Name of programme	Implemented agency	Cash/kind transfer	Benefits	Objectives	Remarks
Rural Social Services (RSS)	The Department of Social Service	Cash	Interest free micro-credit at the rate of 2000 to 5000 BDT.	<p>Creating self-employment and increase income by giving interest free micro-credit at the rate of 2000 to 5000 BDT, motivation savings and income generating and economically profitable activities.</p> <p>-Providing informal education on health, nutrition, mother and child care, sanitation, use of safe drinking water, motivation on family planning, social aforestation, literacy etc. for the improvement of the living standard of the people.</p> <p>- Providing skill training for increasing the income capabilities and productivity of unemployed and underemployed persons</p>	Micro credit based
Urban Social Services (USS) / Urban Community Development Programme (UCD)	The Department of Social Service	Cash	Provide vocational training facilities and interest free micro-credit at the rate of 2000 to 5000 BDT for self employment of the poor for the slum dwellers	<p>-Identify the problems and needs through survey and improve the environmental condition of the slum dwellers.</p> <p>-Organize programme for children in difficult circumstances for their education, health, training and socio-economic development</p>	Micro credit based