

# Education Watch 2008



## State of Primary Education in Bangladesh Progress Made, Challenges Remained



Campaign for Popular Education (CAMPE)  
Bangladesh

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Samir Ranjan Nath  
A Mushtaque R Chowdhury



**Campaign for Popular Education (CAMPE), Bangladesh**

**Campaign for Popular Education (CAMPE), Bangladesh**

5/14 Humayun Road, Mohammadpur,

Dhaka 1207, Bangladesh

Phone: 88 02 9130427, 8155031, 8155032

PABX: 88 02 8115769

Tele Fax: 88 02 8118342

Email: [info@campebd.org](mailto:info@campebd.org)

Website: [www.campebd.org](http://www.campebd.org)

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## *Contents*

<i>Foreword</i>	vii
<i>Preface</i>	ix
<i>The Contributors</i>	xi
<i>List of Tables, Figures and Annexes</i>	xv
<i>Acronyms</i>	xxiii
<i>Overview</i>	xxv
<b>Chapter 1 Introduction</b>	1
A. Why the theme of quality primary education	3
B. Quality assessment framework	4
C. Primary education provisions in Bangladesh	6
D. The major State initiatives	8
E. Financing primary education	9
F. Quality as revealed in studies and government statistics	10
G. Organization of this report	11
<b>Chapter 2 Research Design and Methodology</b>	13
A. Objectives	15
B. Methods	15
C. The instruments	15
D. Sampling strategies	17
E. Weighting	19
F. The field operations	19
G. Assessing test scripts and coding other data	20
H. Validity and reliability	20
I. Strengths and limitations	21
<b>Chapter 3 Educational Facilities and Learning Provisions</b>	23
A. Location and history of schools	25
B. Physical facilities	26
C. Learning facilities	31
D. Co-curricular activities	32
E. The primary teachers	33
F. Teachers attendance	37
G. Teaching load and student-teacher ratio	38
H. Progress over time	40
I. Salient findings	43
<b>Chapter 4 Management of Primary Institutions</b>	47
A. School managing committees	49
B. The heads of institutions	50
C. The SMC meetings	51

D.	Progress over time	53
E.	Salient findings	54
<b>Chapter 5 Participation in Primary Education</b>		<b>57</b>
A.	Gross enrolment	59
B.	Enrolment by school type	62
C.	Net enrolment	64
D.	Socioeconomic differentials of enrolment	66
E.	Enrolment outside primary classes	69
F.	The out-of-school children	70
G.	Multivariate analysis of enrolment	73
H.	Gross and net intake ratios	74
I.	Students' attendance	76
J.	Salient findings	77
<b>Chapter 6 Internal efficiency of Primary education</b>		<b>81</b>
A.	promotion, dropout and repetition	83
B.	Retention and cycle completion	84
C.	Changes in internal efficiency	88
D.	Salient findings	89
<b>Chapter 7 Students' Achievement of Competencies</b>		<b>91</b>
A.	Average achievement	93
B.	Analysis by taxonomic class level	95
C.	Classification of the competencies	96
D.	Progress in competencies achievement	98
E.	Factors affecting competencies achievement	99
F.	Salient findings	102
<b>Chapter 8 Education and Literacy Situation of Population</b>		<b>105</b>
A.	Schooling of the population	107
B.	Progress in years of schooling	109
C.	The literacy situation	110
D.	Changes in literacy rate	112
F.	Salient findings	113
<b>Chapter 9 Discussion, Conclusions and Policy Implications</b>		<b>115</b>
A.	Discussion and conclusions	117
B.	Key messages from the study	123
C.	Policy recommendations	124
<i>Bibliography</i>		127
<i>Annexes</i>		133
<i>Index</i>		195

## *Foreword*

**T**his ninth *Education Watch* revisited and reinvestigated the quality of primary education in Bangladesh through a framework called Input-Process-Output. Investigation of quality of primary and basic education is not new to us. We in *Education Watch* did similar studies during our early years. Thus, this year's attempt created an opportunity to see the progress over time in addition to knowing the current status. Investigation of quality is a difficult task because whatever happens in the education system has a link with its quality. Again, round the world, there is no upper limit of quality of education.

On achieving a certain level of primary enrolment of children with gender parity, quality of education has now emerged as major area of concern. Both the government and the non-government organizations are now involved in improving quality of education. A number of initiatives have already been taken from both sides in this regard. It is an urgent need to see the affects of these initiatives on the quality of our education system. This study allows us to see the current status of quality of primary education in Bangladesh as well as its progress during the past decade.

Findings of the study reveal improvement in terms of physical facilities in the educational institutions and learning achievement of the students; however, inequity was found by type of institution, stream and area. Inequity also exists in terms of curriculum, teachers education and their overall quality, and learning provisions. On the other hand, incidence of private supplementary tutoring increased over time. Investment in private tutor is positively linked with the learning achievement of the students. Reading all these findings in the report, one can easily assume that private tutoring has become a norm in our primary education system and again it could happen mostly due to the failure of the system in taking care of the learning needs of our young generation. An inequitable system cannot produce equitable output.

A stagnant situation in overall primary enrolment with a large number of out-of-school children among those aged 6-7 years is another striking finding of this study. It is evident that as much as we increase the enrolment rate the rate of increase would be slower than the previous one. But concern will always be there with regard to the stagnancy and much lower net intake rate. We had to be careful about these issues much earlier because the net intake rate is directly related to the time bound full completion rate that we are committed to achieve by 2015 which may not be possible in the long run.

This study rightly concluded that 'business as usual' approach would not help us much. The government is now in a process of preparing a new education policy. It is the time to look at all these issues carefully and put them rightly in the policy document with right strategies for action. This *Education Watch* report is thus a timely publication. We expect that the

concerned authorities of the government would take the findings seriously and take necessary actions so that the nation's foundation can be built strongly. A strong political commitment for human resource development is very much needed. We believe that the government will be able to give right direction to the nation in this regard.

Finally, I, on behalf of the Board (Council) of CAMPE, would like to thank all concerned individuals and institutions including the research team for their effort from start to the finishing of this research work, its publication and dissemination. Lets work together for achieving the goal of 'Education for All'.



**Kazi Rafiqul Alam**

Chairperson

Campaign for Popular Education

Dhaka  
November 2009

## *Preface*

**W**ith this Ninth Report of *Education Watch* we returned to primary and basic education. The theme is ‘Quality of Primary Education’. We did similar studies during first three years of the *Education Watch*. This study actually revisited and reinvestigated most of the issues that we explored in the first three studies. However, some new issues which emerged during the past decade were also incorporated in this study. The issues covered in this study can broadly be categorized as physical and learning facilities, management, participation, internal efficiency, learning achievement, and reported literacy. A number of parameters were included in each of these categories.

Such a study was wanted by many of us in the *Education Watch* group including various stakeholders of education. The main intention behind this demand was that statistics on quality that are used now are from the *Watch 2000* and this needs to be updated. This is because, apart from the time duration since the last study, during this period a number of new initiatives have been implemented under the Second Primary Education Development Programme (PEDP II) which could be expected to have positive influence on the quality of primary education. This study not only collected fresh data from the educational institutions and the households but also used previous *Education Watch* database. This allowed us to present the current state of primary education specially in respect of quality along with its progress over time. We expect that this report would contribute to informed dialogue on policy and actions at all level and to facilitate civil society participation in the development of education policies and strategies.

Our earnest request to the policy makers of Bangladesh is to carefully look at the findings of this study and to take advantage of such readily available information, their analyses and policy recommendations. Only adequate attention to the preparation of our children will not be prepare them adequately to contribute in nation building activities and enable them to perform well in future in the era of globalization.

I wish my sincere thanks to Mr. Fazle Hasan Abed, former Chairperson of CAMPE and Mr. Kazi Rafiqul Alam, current Chairperson for their continued interest in the *Education Watch* initiative. *Education Watch* is privileged to have the unstinted support of CAMPE. Its staff has all along played the key role in producing the annual watch reports and facilitating their dissemination. Our sincere appreciation goes to them for their tireless efforts.

Mr. Samir Ranjan Nath and Dr. A Mushtaque R Chowdhury together took the lead in carrying out the study and preparing the report. We are grateful to them. The panel of reviewers comprised of Professor Kazi Saleh Ahmed, Dr. Manzoor Ahmed, Ms. Jowshan Ara Rahman, and Professor M Nazmul Haq. We thank all of them for careful look at the report and their valuable comments on the draft. Our sincere gratitude to all those who participated in various sharing sessions on the draft report, provided valuable comments and suggestions

on the design, approach and findings of the study. Their contribution in preparing the key messages and policy recommendations of this study is highly acknowledged.

The record of our appreciation will remain incomplete if we do not acknowledge the contribution and willing cooperation of the authorities of the sampled educational institutions, their teachers, students and the parents, who provided all pertinent information for this study. The field survey was conducted by 120 research assistants, which was coordinated and supervised by Mr. Anwar Hossain of the Research and Evaluation Division of BRAC. Mr. Mirja M Shahjamal, Mr. Goutam Roy, Ms. Rifat Afroz, Mr. Notan Dutta of the same institution and Mr. K M Enamul Hoque and Mr. Ghiasuddin Ahmed of CAMPE played very important roles at various stages of the study. We acknowledge their contribution.

*Education Watch* and its reports have been possible due to the generous support received from the Embassy of the Kingdom of the Netherlands (EKN), Swiss Agency for Development and Cooperation (SDC), Bangladesh and Oxfam-Novib of Netherlands. We acknowledge their assistance and express our deep appreciation.

Finally, we would ask the readers and users of *Education Watch* reports to send us if they have any suggestions regarding issue selection, improvement of quality of research, presentation style and any other issue related to this. Our efforts will be worthwhile if this report could serve as a useful input in the key decision making process for improving the quality of primary education in Bangladesh.

Dhaka  
November 2009



**Kazi Fazlur Rahman**  
Chairperson  
Advisory Board, Education

## *The Contributors*

### **Advisory Board**

**Fazle Hasan Abed**

Advisor, CAMPE &  
Founder Chairperson, BRAC

**Dr. Qazi Kholiquzzaman Ahmad**

Chairman, Bangladesh Unnayan Parishad (BUP) &  
President, Bangladesh Economic Association (BEA)

**Brigadier General (Rtd) Aftab Uddin Ahmad**

Executive Director  
Underprivileged Children's Educational Program (UCEP)

**Dr. Manzoor Ahmed**

Senior Advisor  
Institute of Education and Development (IED)  
BRAC University

**Kazi Saleh Ahmed**

Former Vice Chancellor  
Jahangirnagar University

**Zahin Ahmed**

Executive Director  
Friends in Village Development Bangladesh (FIVDB)

**Kazi Rafiqul Alam**

Chairperson, CAMPE &  
President, Dhaka Ahsania Mission (DAM)

**Mahfuz Anam**

Editor, The Daily Star

**Dr. A. M. R. Chowdhury**

Associate Director, Rockefeller Foundation  
(Convenor, Education Watch)

**Dr. Nazma Chowdhury**

Former Chairperson  
Department of Women's Studies  
University of Dhaka

**Azizul Haq**

Director In-Charge, CAMPE  
(Member Secretary, Education Watch)

**Dr. M. Anwarul Huque**

Former Director General  
National Academy for Educational Management (NAEM)

**Dr. Muhammad Ibrahim**

Executive Director  
Center for Mass Education in Science (CMES)

**Roushan Jahan**

Former President  
Women for Women

**Dr. Abu Hamid Latif**

President  
Bangladesh Forum for Educational Development (BAFED)

**Jamal U. Mahmood**

Head, Social Infrastructure  
Asian Development Bank (ADB), Bangladesh

**Kazi Fazlur Rahman**

Former Advisor, Caretaker Government  
(Chairperson, Education Watch)

**Jowshan Ara Rahman**

Former Chief, Program Planning Section  
UNICEF, Bangladesh

**A. N. Rasheda**

Editor, Shikhabarta

**Taleya Rehman**

Executive Director, Democracy Watch

**Prof. Rehman Sobhan**

Chairman, Centre for Policy Dialogue (CPD)

**Dr. Qazi Shahabuddin**

Former Director General  
Bangladesh Institute of Development Studies (BIDS)

**Nabendra Dahal**

Chief, Education Section  
UNICEF, Bangladesh

## Working Group

### **Dr. Mahmudul Alam**

Professor & Head  
Department of Governance Studies  
Northern University of Bangladesh

### **Dr. Abbas Bhuiyan**

Social Scientist  
International Centre for Diarrhoeal  
Disease Research, Bangladesh (ICDDR,B)

### **Professor M. Nazmul Haq**

Institute of Education and Research (IER)  
University of Dhaka

### **K. M. Enamul Hoque**

Program Manager, CAMPE

### **Md. Mofazzal Hossain**

Former Systems Manager, BANBEIS

### **Nurul Islam Khan**

Former Official, UNHCR

### **Simeen Mahmood**

Senior Research Fellow  
Bangladesh Institute of Development Studies (BIDS)

### **Erum Mariam**

Director  
BRAC University - Institute of Education and  
Development (BU-IED)

### **Dr. Imran Matin**

Deputy Executive Director  
BRAC International

### **Dr. Ahmadullah Mia**

Dean, American World University, California, USA

### **Mohammad Mohsin**

Advisor, Plan - International

### **Samir Ranjan Nath**

Research Coordinator  
Research and Evaluation Division, BRAC

### **Fazle Rabbani**

Education Advisor  
DFID Bangladesh

### **M. Habibur Rahman**

Director, Education  
Save the Children-USA

### **Dr. Siddiqur Rahman**

Professor  
Institute of Education and Research (IER)  
University of Dhaka

### **Abdur Rafiq**

National Program Officer  
UNESCO, Bangladesh

### **Mohiuddin Ahmed Talukder**

Assistant Director (Planning and Development)  
Directorate of Primary Education (DPE)

### **Mohammad Muntasim Tanvir**

South Asia Advocacy and Campaign Coordinator  
Asian South Pacific Bureau of Adult Education  
(ASPBAE)

## Technical Team

### **Jasim Uddin Ahmed**

Principal  
Europa International School, Dhaka

### **Prof. Kafil Uddin Ahmed**

Consultant, PEDP II  
Directorate of Primary Education (DPE)

### **Syeda Tahmina Akhter**

Associate Professor  
Institute of Education and Research (IER)  
University of Dhaka

### **Prof. Md. Shafiul Alam**

Former Director, BANBEIS

### **Prof. Muhammad Ali**

Former Member, Curriculum  
National Curriculum and Textbook Board (NCTB)

### **Mohammad Elias Ali**

Former Director, BANBEIS

### **Ruhul Amin**

Former Research Specialist  
ROSC, Directorate of Primary Education (DPE)

### **Prof. Ali Azam**

Former Chairman  
National Curriculum and Textbook Board (NCTB)

### **Dr. Anwara Begum**

Research Fellow  
Bangladesh Institute of Development Studies (BIDS)

### **Hasina Habib**

Coordinator, Education Programme  
Gono Shahajjo Sangstha (GSS)

### **Dr. M. Shamsul Hoque**

Former ELT Advisor  
Bangladesh Open University

### **Prof. Md. Riazul Islam**

Former Member  
National Curriculum and Textbook Board (NCTB)

### **A. K. Mirza Shahidul Islam**

Former Director (Policy and Operations Division)  
Directorate of Primary Education (DPE)

### **Md. Wahiduzzaman Miah**

Acting President  
Bangladesh Primary Teachers Association

### **A. N. S. Habibur Rahman**

Consultant  
Management Development & Training  
ROSC, Directorate of Primary Education (DPE)

### **Dr. M. Matiur Rahman**

Former Chief Scientific Officer  
& Member, Physical Science  
Bangladesh Atomic Energy Commission

### **Goutam Roy**

Staff Researcher  
Research and Evaluation Division, BRAC

### **Dr. Md. Abdus Sattar**

Former Assistant Controller of Examinations  
Bangladesh Madrasa Education Board

### **A. M. M. Ahsan Ullah**

Ex-Chairman  
Board of Intermediate and Secondary Education (BISE)  
Chittagong



## *List of Tables, Figures and Annexes*

### *List of Tables*

Table 1.1	Number of educational institutions, teachers and students by type, 2007	7
Table 2.1	Number of competencies and question items by subjects	16
Table 2.2	Samples for school survey and competencies achievement test	17
Table 2.3	Sample for the household survey	18
Table 3.1	School structure and classroom conditions by school type	27
Table 3.2	Electricity in school and light, air and fan in the classrooms by school type	28
Table 3.3	Drinking water and sanitation facilities in schools by school type	29
Table 3.4	Cleanliness of school surroundings by school type	30
Table 3.5	Seating capacity in the schools by school type and area	30
Table 3.6	Percentage of classrooms by school type and quality of blackboards	31
Table 3.7	Percentage of schools offered additional tutorial support by school type	32
Table 3.8	Some general information about the teachers by school type	33
Table 3.9	Percentage distribution of teachers by school type, area, gender and highest level of education	35
Table 3.10	Percentage of teachers with various types of training by school type	36
Table 3.11	Percentage distribution of teachers by time of present in school, gender and area	38
Table 3.12	Mean number of classes offered daily by a teacher by school type, area and gender	39
Table 3.13	Percentage of teachers with highest level of education and year	42
Table 4.1	Some basic information about the school managing committees	49
Table 4.2	Some information about SMC meetings	51
Table 4.3	Percentage of schools by major issues discussed in SMC meeting and school type	52
Table 5.1	Gross enrolment ratio by stratum and gender	59
Table 5.2	Percentage distribution of primary students by class, gender and area	61
Table 5.3	Percentage distribution of students by the difference between age and class	62
Table 5.4	Percentage distribution of primary students by type of institution, gender and area	63
Table 5.5	Percentage distribution of primary school students by school type and year	64
Table 5.6	Net enrolment rate by strata and gender	65
Table 5.7	Progress in net enrolment rate by area, gender and year	65

Table 5.8	Background characteristics of the students by school type	69
Table 5.9	Percentage distribution of primary aged children by current level of education	70
Table 5.10	Percentage distribution of out-of-school children (6-10 years) by causes of non-enrolment, gender and area	71
Table 5.11	Percentage of out-of-school children by distance between home and school and gender	72
Table 5.12	Logistic regression model predicting primary enrolment	73
Table 5.13	Percentage distribution of children of age six by level of education and year	74
Table 5.14	Students' attendance rate by area and gender	76
Table 6.1	Promotion, dropout and repeater rates by class	83
Table 6.2	Promotion, dropout and repeater rates by school type	83
Table 6.3	Retention rates at various stages of primary education by area and gender, 2007-8	84
Table 6.4	Retention rates at various stages of primary education by school type, 2007-8	85
Table 6.5	Hypothetical cohort analysis of primary school students by area and gender, 2007-8	85
Table 6.6	Hypothetical cohort analysis of primary school students by school type, 2007-8	86
Table 6.7	Hypothetical cohort analysis of primary school students by school type and gender, 2007-8	86
Table 6.8	Hypothetical cohort analysis of primary school students by school type and area, 2007-8	87
Table 7.1	Mean number of competencies achieved by school type and gender	94
Table 7.2	Mean number of competencies achieved by school type and area	94
Table 7.3	Frequency distribution of number of competencies by level of achievement and school type	97
Table 7.4	Classification of the competencies according to the level of performance	97
Table 7.5	Mean and standard deviation of number of competencies achieved by different socioeconomic and school characteristics	100
Table 7.6	Multivariate regression models predicting number of competencies achieved	102
Table 8.1	Percentage of population (6y+) ever schooled by area, gender and year	109
Table 8.2	Percentage of population (11y+) completed primary education by area, gender and year	110
Table 8.3	Cumulative percentage distribution of adult population (15y+) by level of education and year	110
Table 8.4	Literacy rates of population by gender	111
Table 8.5	Literacy rates of population by area	111
Table 8.6	Literacy rate of population (7y+) by year and gender	112

**List of Figures**

Figure 1.1	Analytical framework for quality assessment	6
Figure 1.2	Average private expenditure (in Taka) per student by wealth status of households and area	9
Figure 1.3	Participation and pass rates in primary scholarship examinations, 1998-2007	11
Figure 2.1	Map showing sample locations for household survey	19
Figure 3.1	Percentage of female teachers by school and area	34
Figure 3.2	Percentage of teachers without training	36
Figure 3.3	Percentage of teachers having training in various subjects by gender	37
Figure 3.4	Percentage of teachers came to school late by school type	38
Figure 3.5	Student-teacher ratio by school type	39
Figure 3.6	Percentage of schools with fully brick build structures by school type and year	40
Figure 3.7	Percentage of admitted students who could seat with ease by school type and year	41
Figure 3.8	Percentage of female teachers by school type and year	41
Figure 3.9	Percentage of trained teachers by school type and year	42
Figure 3.10	Number of students per teacher by school type and year	42
Figure 3.11	Rural-urban gap in private tutoring by year	43
Figure 4.1	Percentage of females in the SMCs by school type and year	53
Figure 4.2	Percentage of female head teachers by school type and year	54
Figure 4.3	Percentage of trained teacher by school type and year	54
Figure 5.1	Trends in gross enrolment ratio by area and gender	60
Figure 5.2	Percentage distribution of primary students by age group and year	61
Figure 5.3	Percentage distribution of primary students by the difference between age and class of enrolment and year	62
Figure 5.4	Age specific net enrolment rate by year	66
Figure 5.5	Net enrolment rate by yearly food security status of household and year	67
Figure 5.6	Net enrolment rare by parental education and year	68
Figure 5.7	'Generally reported' and 'real' enrolment rates by year	70
Figure 5.8	Proportion of out-of-school children by stratum	71
Figure 5.9	The enrolment scenario at official age for primary school entry	75
Figure 5.10	Net and gross intake ratios by year	75
Figure 5.11	Attendance rate by school type and year	76
Figure 6.1	Retention rates at various stages of primary education, 2007-8	84
Figure 6.2	Changes in survival rate by gender and area	88

Figure 6.3	Changes in completion rate by gender and area	88
Figure 6.4	Changes in coefficient of efficiency by gender and area	89
Figure 7.1	Mean number of competencies by area and gender	93
Figure 7.2	Mean number of competencies	93
Figure 7.3	Average competencies achievement in percentage terms by subjects	95
Figure 7.4	Percentage of items correctly answering by the students by taxonomic class level and school	96
Figure 7.5	Mean number of competencies achieved by the students by area, gender and year	98
Figure 7.6	Mean number of competencies achieved by the students by school type and year	98
Figure 8.1	Percentage of population (6y+) ever enrolled in school	107
Figure 8.2	Percentage distribution of population (6y+) by years of schooling completed	107
Figure 8.3	Percentage of population at various levels of education by stratum	108
Figure 8.4	Percentage of population completed primary and secondary education	108
Figure 8.5	Percentage of population ever schooled, primary completed and secondary completed by year	109
Figure 8.6	Percentage of households with at least one literate person by stratum	111
Figure 8.7	Literacy rate of population 15-34y by age group and year	113
Figure 8.8	Percentage of households with at least one literate person by area and year	113

### ***List of Annexes***

Annex 1.1	Titles of previous <i>Education Watch</i> reports and main issues addressed	135
Annex 1.2	Objectives of primary education	136
Annex 1.3	The 50 attainable terminal competencies	137
Annex 1.4	Primary school quality levels (PSQL)	139
Annex 1.5	Key performance indicators (KPI)	140
Annex 2.1	Competencies addressed in the learning achievement test	141
Annex 2.2	Students' socioeconomic survey questionnaire	142
Annex 2.3	Educational institution survey questionnaire	144
Annex 2.4	Household survey questionnaire	154
Annex 2.5	Definitions of various indicators used in this report	156
Annex 2.6	Determination of sample size	157
Annex 2.7	Calculation of weighting factors	158
Annex 3.1	Percentage of schools by year of establishment and school type	161
Annex 3.2	Percentage of schools by distance from upazila and school type	161

Annex 3.3	Percentage of schools by level of difficulty to reach school and school type	161
Annex 3.4	Percentage of schools having annual sports and cub activities by school type and year	161
Annex 3.5	Percentage of schools having art classes by school type	162
Annex 3.6	Mean number of teachers per school by school type and area	162
Annex 3.7	Percentage of teachers from ethnic minorities, non-Muslims and their attendance rate by school type and area	162
Annex 3.8	Percentage of teachers at various activities on the day of visit	163
Annex 3.9	Percentage distribution of teachers by school type they are currently teaching and the type they received their highest level of education	163
Annex 3.10	Percentage of teachers by level of education and group of study	164
Annex 3.11	Percentage of teachers by school type and group of study at various levels of education	164
Annex 3.12	Percentage of teachers having subject based training	164
Annex 3.13	Percentage of teachers received no subject based training by school type and area	165
Annex 3.14	Percentage distribution of teachers by time of present in school and school type	165
Annex 3.15	Percentage distribution of head and other teachers by time of present in school	165
Annex 3.16	Mean number of students per teacher by school type and area	165
Annex 4.1	Mean years of schooling of the SMC members by school type and area	166
Annex 4.2	Mean years of schooling of the SMC members by school type and position	166
Annex 4.3	Percentage distribution of SMC members by school type and main occupation	166
Annex 4.4	Percentage distribution of SMC members by their main occupation, area and gender	167
Annex 5.1	Gross enrolment ratio at primary level by strata and year	167
Annex 5.2	Percentage distribution of primary students by class and stratum	167
Annex 5.3	Percentage distribution of primary students by class and year	168
Annex 5.4	Percentage distribution of primary level students by type of institution and strata, 2008	168
Annex 5.5	Net enrolment rate at primary level by stratum and year	168
Annex 5.6	Age specific net enrolment rate by gender	169
Annex 5.7	Age specific net enrolment rate by area	169
Annex 5.8	Net enrolment rate by household food security status and gender	169
Annex 5.9	Net enrolment rate by parental education and gender	170
Annex 5.10	Net enrolment rate by parental education	170
Annex 5.11	Net enrolment rate by religion and gender	170
Annex 5.12	Net enrolment rate by ethnicity and gender	171

Annex 5.13	Percentage distribution of primary school aged children by level of education they are currently enrolled and age	171
Annex 5.14	Percentage distribution of primary school aged children by level of education they are currently enrolled and strata	171
Annex 5.15	Percentage distribution of out of school children (6-10 years) by causes of non-enrolment and strata	172
Annex 5.16	Percentage distribution of out of school children by major causes of non-enrolment and age, 2008	172
Annex 5.17	Percentage distribution of out of school children by major causes of non-enrolment and age, 1998	172
Annex 5.18	Percentage distribution of out of school children by major causes of non-enrolment and age, 2000	173
Annex 5.19	Net and gross intake ratios by stratum	173
Annex 5.20	Percentage distribution of six years old children by strata and level of education	173
Annex 5.21	Students' attendance rate by school type and gender	174
Annex 5.22	Students' attendance rate by school type and area	174
Annex 7.1	Competencies, test items, and minimum levels for qualifying in Bangla	175
Annex 7.2	Competencies, test items, and minimum levels for qualifying in English	175
Annex 7.3	Competencies, test items, and minimum levels for qualifying in Mathematics	175
Annex 7.4	Competencies, test items, and minimum levels for qualifying in <i>Poribesh Porichiti</i> (society)	176
Annex 7.5	Competencies, test items, and minimum levels for qualifying in <i>Poribesh Porichiti</i> (science)	176
Annex 7.6	Competencies, test items, and minimum levels for qualifying in Religious Studies	177
Annex 7.7	Mean, median and standard deviation of number of competencies achieved by the students by gender and area	177
Annex 7.8	Mean, median and standard deviation of number of competencies achieved by the students by school type	177
Annex 7.9	Mean number of competencies and their percentages on number of competencies under test by subject and gender	177
Annex 7.10	Mean number of competencies and their percentages on number of competencies under test by subject and area	178
Annex 7.11	Mean number of competencies achieved by the students by subjects and school type	178
Annex 7.12	Percentage distribution of students by number of competencies achieved, gender and area	178
Annex 7.13	Percentage distribution of students by number of competencies achieved and type of educational institution	179

Annex 7.14	Mean number of correctly answering items by taxonomic class level, area and gender	179
Annex 7.15	Mean number of correctly answering items by taxonomic class level, school type	179
Annex 7.16	Mean number of correctly answering items by taxonomic class level, school type and gender	180
Annex 7.17	Mean number of correctly answering items by taxonomic class level, school type and area	180
Annex 7.18	Percentage of students satisfying minimum requirements for the competencies under test by school type	181
Annex 7.19	Percentage of students satisfying minimum requirements for the competencies under test by school type	182
Annex 7.20	Frequency distribution of number of competencies by level of achievement, area and gender	183
Annex 7.21	Mean, median and standard deviation of number of competencies achieved by the students by gender and area (government, non-government and non-formal only)	183
Annex 7.22	Socio-economic, school related and additional educational input variables considered as predictors of competencies achievement	183
Annex 7.23	Background of the students under test	184
Annex 7.24	Measurement of variables used in the multivariate analysis	189
Annex 7.25	Multivariate regression models (Beta coefficients) predicting number of competencies achieved	190
Annex 7.26	Multivariate regression models predicting number of competencies achieved	191
Annex 8.1	Percentage distribution of population six years and above by level of schooling completed, gender and area	191
Annex 8.2	Percentage of ever schooled population (among 6y+) by strata and gender	191
Annex 8.3	Percentage of primary completed population (among 11y+) by strata and gender	192
Annex 8.4	Percentage of secondary completed population (among 15y+) by strata and gender	192
Annex 8.5	Literacy rate among population of age 7 years and above by stratum and gender	192
Annex 8.6	Adult literacy rate (population of age 15 years and above) by stratum and gender	193
Annex 8.7	Age specific literacy rate by year	193
Annex 8.8	Percentage of households with at least one literate person by stratum and year	194
Annex 8.9	Adult (15y+) literacy rate by year and gender	194
Annex 8.10	Literacy rate (7y+ population) by year and area	194
Annex 8.11	Adult (15y+) literacy rate by year and area	194



## *Acronyms*

BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BBS	Bangladesh Bureau of Statistics
BEd	Bachelors of Education
BMEB	Bangladesh Madrasa Education Board
BPEd	Bachelors of Physical Education
BRAC	an NGO, formerly Bangladesh Rural Advancement Committee
CAMPE	Campaign for Popular Education
C-in-Ed	Certificate in Education
Dip-in-Ed	Diploma in Education
DPE	Directorate of Primary Education
DSHSE	Directorate of Secondary and Higher Secondary Education
EFA	Education for All
ESTEEM	Effective Schools Through Enhanced Education Management
GDP	Gross Domestic Product
GEP	General Education Project
GER	Gross Enrolment Ratio
GIR	Gross Intake Ratio
GoB	Government of Bangladesh
HSC	Higher Secondary School Certificate
IDEAL	Intensive District Approach to Education for All
IPO	Input-Process-Output
KPI	Key Performance Indicators
MCQ	Multiple Choice Question
MDG	Millennium Development Goal
MEd	Masters of Education
MoPME	Ministry of Primary and Mass Education
NCTB	National Curriculum and Textbook Board
NER	Net Enrolment Rate
NGO	Non Governmental Organization
NIR	Net Intake Rate
OLS	Ordinary Least Squares
PEDP I	First Primary Education Development Programme
PEDP II	Second Primary Education Development programme
PSQL	Primary School Quality Levels
PTI	Primary Teachers Training Institute
SMC	School Managing Committee
SSC	Secondary School Certificate
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
US	United States of America
WCEFA	World Conference on Education for All



## Overview

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## Introduction and Objectives

Bangladesh has done quite well in terms of improving the access and removing gender disparity at the primary level. The focus is now on how to improve the quality of education. The previous *Education Watch* reports and other findings pointed to a poor performance in terms of quality. It is now several years since the first three *Watch* reports documented the quality issue. Over the years since these reports were published, the government and NGOs carried out several quality improvement initiatives including the second Primary Education Development Programme (PEDP II). It was thus thought appropriate and timely to revisit the quality issue again. This would give an assessment of the quality improvement measures that have been taken during the past few years and provide an opportunity to revise the strategy, if necessary and plan for the future.

The concept of quality is an encompassing one; anything that happens in the education system will have some bearing on its quality. On the other hand, there is no upper limit of the level of quality that one can expect from the education system. Not only in low income countries, the question of quality is often a matter of intense discourse in high income OECD<sup>1</sup> countries as well. The question of quality of primary and basic education has been flagged as a matter of concern in every initiative taken internationally including those at the Jomtien conference and the Dakar Forum. Over a decade ago, an UNESCO Commission headed by France Statesman Jacques Delors saw education as a process of lifelong learning based on four pillars such as *learning to know, learning to do, learning to live together and learning to be*. There are a number of frameworks for quality assessment. A most widely used one is the Input-Process-Output framework and the *Watch* study decided to use this as a point of departure. Each of the three components of the frame has many indicators. It may be mentioned that the Government of Bangladesh has assigned two sets of frameworks for monitoring the quality, viz., Primary School Quality Levels (PSQL) and Key Performance Indicators (KPI) and all of these could be placed in one or the other of the three components of the Input-Process-Output framework.

Keeping in mind the indicators of the analytical framework, the following four objectives formed the basis of the *Education Watch 2008*:

1. To measure progress in achievement of the national goals of primary and basic education in terms of various quality indicators including competencies and those mentioned in the two sets of progress monitoring indicators, viz., PSQL and KPI.
2. To explore the relationship of the learning achievements of the students with other quality indicators (both input and process) including students socioeconomic backgrounds.
3. To investigate the progress made in the status of children's participation in primary education, and correlates and constraints of participation.
4. To know the current education and literacy levels of the population and their progress over time as a result of the expansion of primary education in the country.

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<sup>1</sup> Organization for Economic Cooperation and Development

## Data and Methodology

This study collected new field-level data to explore the present status of quality education. Previous *Education Watch* databases (created in 1998, 2000 and 2005) were used to see the progress over time. Surveys of educational institutions and households were required for the fulfillment of first two objectives and household survey for the third and fourth objectives. Competency based learning achievement test was also required for the second objective. The test instrument developed for the *Education Watch 2000* was used once again in 2008. It contains 27 of the 50 terminal competencies set for primary education. Tests were administered on the students of class V, just before completion of their primary education.

For the survey of educational institutions, six of the 10 types of primary schools were considered: the government primary schools, non-government primary schools, ebteyee madrasas, non-formal primary schools, primary-attached high schools, and ebteyee-attached high madrasas. With rural and urban schools being considered independently the total strata considered for school survey was thus 12. A total of 440 educational institutions were surveyed, from which 7,093 students were tested for competency achievements. Data on the socioeconomic status were collected from 7,070 of the selected students.

The household survey was done to investigate participation and information on out-of-schooled children and their socioeconomic status. For this, similar to the previous *Education Watch* studies, the country was divided into eight strata- six rural and two urban. The strata are: rural Dhaka division, rural Chittagong division, rural Rajshahi division, rural Khulna division, rural Sylhet division, rural Barisal division, city corporations and the municipalities. Twenty-four thousand households from 1,003 villages/mahallahs were surveyed. The total population in these households was 1,13,320. Of them, 14,688 were primary school aged children (6-10 years) and 15,189 currently enrolled in primary schools.

School lists prepared by the Directorate of Primary Education (DPE) and the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) were used as sampling frame for the school survey. On the other hand, district-wise village/mahallah list produced by the Bangladesh Bureau of Statistics (BBS) was used as sampling frame for the household survey. All field work was done from mid October to mid December 2008.

## Major Findings

### *Educational facilities and learning provisions*

The first step of any education system is to create appropriate facilities and provisions at the institution level.

- Overall, the physical facilities of the primary educational institutions improved during the past decade. The improvement can be noticed in terms of number of classrooms, quality of construction materials, water and sanitation facilities and seating capacity in the schools.
- Although the government primary schools were ahead of the others in terms of increasing the number of classrooms, it was the non-government schools which improved more than others in

terms of quality of construction materials. On an average, the government schools had 3.8 classrooms in 1998, which increased to 4.6 in 2008. Overall, a third of the school structures were fully brick-built in 1998 which increased to 60% in 2008. The government and the non-government schools had respectively 44.5% and 47.9% fully brick-build structures in 1998. These figures increased respectively to 67.6% and 90% in 2008. Most of the classrooms were in good condition, others at various levels of dilapidation.

- Forty-seven percent of the primary schools had pipe water or tube wells as the source of drinking water in 1998 which increased to 53.8% in 2008. Such improvement was highest in the government schools (18.7 percentage points), followed by the non-government schools (13 percentage points). Overall, a third of the schools used drinking water facility of the neighbouring households or educational institutions and others stored water in jar or had no facility.
- In 1998, less than a quarter of the government and non-government primary schools had separate toilet facilities for boys and girls which increased to respectively 50.7% and 42.9% in 2008. Overall, 70% of the schools had toilet facility for the students, half of which had separate arrangement for boys and girls. A fifth of the school toilets were hygienic and 35.7% *moderately hygienic*.
- In 2008, only 16% of the school structures had provision for the physically challenged students' entry with the government schools much ahead of the others with 34.2% structures friendly for them. Toilet facility for such students was extremely negligible in all types of primary schools.
- Overall, two-thirds of the students were able to seat with ease in the classrooms in 1998 which increased to about 90% in 2008. Two reasons could be identified for this; class size reduced from 48 in 1998 to 41 in 2008 and seating facility increased from 32 students per class in 1998 to 37 in 2008. Improvement of seating capacity was found in each type of primary schools except for the ebteedayee madrasas.
- Although about 80% of the primary schools had playgrounds in 2008, only 8.5% had flower garden within the school premises. Primary-attached high schools and high madrasas were top two types of institutions having these facilities. The non-formal schools had scarcity of both.
- Nearly 40% of the schools had electricity connection with substantial variation by school type but only a quarter of the classrooms had electric lights and fans. The primary attached high schools were much better-off in this respect. The madrasas and the non-formal schools were way behind. However, irrespective of school type, almost all the classrooms had a good flow of natural light and air on a normal day.
- Floors and corridors of over three-fifths of the primary schools were found to be clean on the survey day of 2008. Dusts were found in the floors and corridors of nearly a fifth of the schools and rests had dust and waste papers on the floors. Walls of over three-quarters of the classrooms were clean. In terms of cleanliness, the non-formal schools and the primary-attached to high schools were ahead of the others.

- Blackboards of nearly 80% of the classrooms were in very good condition, meaning that legible writing was possible. Ninety percent of the blackboards of the non-formal schools and about 80% of those in the high schools and madrasas and government and non-government primary schools were in very good condition. This was only 44% for the ebtedayee madrasas.
- Over 16% of the schools organized general coaching for quality improvement of the students in different classes, 52% organized coaching only for the primary scholarship examinees. The non-formal schools were more likely to arrange general coaching and the others arranged coaching for the scholarship examinees. Nearly 90% of the government and non-government schools arranged coaching for the scholarship examinees. Overall, 18.4% of the schools, majority of which are high schools, charged money for such extra tutoring.
- Paid private tutoring increased during the past decade irrespective of class, sex area and school type. In 1998 and 2000, over a fifth of the primary school students had private tutors which increased to 31% in 2005 and 38% in 2008. The girls and the rural students lagged behind their counterparts in getting such support. Students of the English medium and the primary-attached high schools were far ahead of the others with over two-thirds availing this and the non-formal school students had the lowest incidence (12%). Nearly 53% of the students of class V had private tutor in 2008.
- Fine arts, singing and dancing are integral parts of non-formal school education. A half of the other schools had arrangement for art classes. Annual sports were arranged in 53.4% of the schools in 2008. Less than a half of the schools had Cub activities. Very few madrasas arranged annual sports, Cub activities or art classes. Non-formal schools did not have any Cub activities or annual sports.
- Average number of teachers per government primary school increased from 4.4 in 1998 to 5.2 in 2008. No change was observed in the non-government or the non-formal schools. Overall, less than a third of all primary school teachers were female in 1998 which increased to 39.3% in 2008. Non-formal schools traditionally recruit female teachers; thus, the highest proportion of female teachers was found in them. Lowest proportion of female teachers was found in the madrasas (10.5%). Impressive improvement in the recruitment of female teachers was observed in the government schools and the primary-attached high schools. Female teachers were concentrated more in the urban schools than in the rural schools (57.4% vs. 36.6%).
- Educational qualification of the teachers also improved during the past decade. Nearly a quarter of the non-formal school teachers and few others in other types of schools had incomplete secondary education in 1998, no such teacher was found in 2008. Teachers with masters degree increased from 14.4% in 1998 to 18.9% in 2008. The female teachers were less educated compared to their male counterparts.
- More than 85% of the teachers of the government, non-government and non-formal schools had professional training, which was below 11% for the madrasas and 56% for the high schools. Impressive improvement in trained teachers was observed in the non-government primary schools (25.9% in 1998 to 86.8% in 2008).

- Less than a half of the teachers received one or more subject-based training. Subject-wise, 19.2% of the teachers received training in Bangla, 22.1% in English, 23.4% in mathematics, 13.1% in *Poribesh Porichiti* (society) and 14.3% in *Poribesh Porichiti* (science). Nearly 40% of the female teachers and 58.5% of the male teachers had no subject-based training.
- No change was observed in teachers' absenteeism; it was about 12-13% in both 1998 and 2008. About half of them were on leave. Teachers' late attendance in schools was observed as a serious problem. On an average, 42.5% of the primary teachers came to school late on the survey day. Mean amount of late time was half an hour. About half of the females and 38.3% of the male teachers were late. This was 44.2% among the rural school teachers and 31.9% in urban areas. Nearly half of the teachers of the government and non-government schools and ebteyayee madrasas, 35.8% of those in high madrasas, 23.8% in the high schools and 12.7% of the non-formal school teachers were late on the survey day.
- On an average, the teachers had to conduct 5.2 classes per day; this was highest in the non-government and non-formal schools (six classes each) and lowest in the high schools (3.4 classes each). The female teachers had to take a class more per day than the male teachers and the rural teachers had to take 1.2 more class than their urban counterparts.
- Student-teacher ratio at primary level improved over time. Overall, the ratio was found 39:1 in 2008. It reduced from 73:1 in 1998 to 49:1 in 2008 in the government schools and from 55:1 in 1998 to 50:1 in 2008 in the non-government schools. Very small change was noticed in the non-formal schools and the madrasas.

### *Management of primary institutions*

School management is a very important issue. Composition of management committees differs by school type. This section explores various issues related to school managing committees.

- All non-formal schools, 97% of the government schools, 93-94% of the non-government schools and ebteyayee madrasas and about 83% of the high schools and madrasas had school managing committees. Average size of the committee was 9.8- highest in the high madrasas (12.1) and lowest in the non-formal schools (7.1).
- Participation of females in the committees increased over time - from 19.2% in 1998 to 25.9% in 2008. The increase of females' share in the SMCs was noticed in all types of schools except the non-government primary schools. Females' participation was highest in the non-formal schools (76.3%) and lowest in the madrasas (3%). A fifth of the SMC members of the government schools were females.
- The SMC members, on an average, had nine years of schooling - highest in the high schools (13 years) and lowest in the non-formal schools (5.2 years). The male members were more educated than the female members (9.6 years vs. 7.3 years) and the SMC members of the urban schools had more schooling than those in rural schools (9.9 years vs. 8.9 years). Overall, a quarter of the SMC members were living on agriculture, 18.9% on business, 19.9% on teaching, 13.1% on service and 16.5% on housekeeping. Agriculture, teaching and housekeeping were the major occupations of the SMC members of non-formal schools.

- The heads of the institutions play very important role in managing the schools as ex-officio member secretary of the committees. Of them, 21.6% were females. The highest proportion of female heads was found in the government primary schools (38.4%) and lowest in the madrasas (less than 2%).
- Highest level of education of 35.2% of the institution heads was a masters degree, 34.7% a bachelor degree, 22.9% completed higher secondary education and 7.3% completed secondary education.
- About half of the heads of institutions received training on school management. Two-thirds of the government, 61.3% of the high school, 45.2% of the non-government, a third of the high madrasa and 7.9% of the ebte dayee madrasa heads/superintendents received management training.
- In 2008, the SMCs had 8.1 meetings, of which 94% had recorded meeting minutes. On an average, 79.2% of the members attended in the meetings. Government, non-government and non-formal primary schools were ahead of the others in all three indicators. The situation of the ebte dayee madrasas was the poorest.
- 'Examination affairs' was the most discussed issue of the meetings, followed by student absenteeism, teaching-learning provision, construction issues, tree plantation and *upabritti*. The government and the non-government schools gave mostly a similar level of emphasis on the issues. High schools and both types of madrasas placed no emphasis on tree plantation. Non-formal schools had nothing to do with *upabritti* or construction activities.

### *Participation in primary education*

Access to education is the most important issue after setting up a school. Attendance of students in the classrooms is a next step. This section analyses both enrolment and attendance of the students using household and school survey data.

- The gross enrolment ratio increased during the first two years of the past decade and then declined and stood at 103% in 2008. Smooth decline among the girls and the rural children was observed. In 2008, the ratio was highest among the rural girls (107%) and lowest among the urban boys (97%).
- During 1998-2000, about a third of the primary school students were out of officially determined age range (6-10 years) which decreased during 2005-8. This gives the impression that majority of the primary students were within the official age range. A critical look at the age issue gave a different scenario. Ideally the difference between age and grade should be five; for instance, the children of age six should enrol in class I, age seven in class II and so on. However, this was not the case. In 2008, only a fifth of the primary students enrolled in the classes suitable for their ages but this never went beyond 25%. A slight improvement could be noticed over time, if a difference of six is considered acceptable between age and class.
- The highest proportion of the primary students was found enrolled in the government primary schools in all the surveys. But the share of the government schools gradually decreased over time.

A static situation was observed for non-government primary schools with about 20% share and for the primary attached to secondary schools with less than 2% share. Share of the English medium schools also increased over time. Rural Chittagong and Sylhet had the highest proportion of government school students (66-67%) and lowest proportion of non-government and non-formal school students. Sylhet was the top in terms of madrasa students followed by Chittagong.

- The net enrolment rate at primary level increased from 77% in 1998 to 86.8% in 2005, an increase at the rate of 1.4 percentage points per year. The rate got stagnant afterwards. The net rate was found to be 86.4% in 2008. The girls outnumbering the boys in net enrolment was first documented in 1998 (78.5% vs. 75.5%;  $p < 0.001$ ) and continued till 2008 (87.1% vs. 85.6%;  $p < 0.01$ ). The rural children lagged behind their urban counterparts in net enrolment throughout the decade. None of the differences (by gender or by area) between 2005 and 2008, however, were found statistically significant.
- Age specific net enrolment rate gradually increased from age six to nine and then declined at age 10 in three of the four surveys except 2005. Decline in the rate started from age nine in 2005. Between 2005 and 2008, the net rate declined much for those of age six; it was mostly equal for ages seven and eight but increased for ages nine and ten.
- Of the eight strata, steady improvement in net enrolment was observed in three, viz., rural Rajshahi and Khulna divisions and the metropolitan cities. Significant fall between 2005 and 2008 was found in rural Sylhet division and the municipalities. Both gross and net enrolment ratios in Sylhet were significantly lower in 2000 and 2008 than the past years.
- In terms of correlates with economic status, the net rate between 2005 and 2008 declined in upper three of the four categories of self rated household food security status, but not in the poorest group where the rate increased two percentage points (from 76.1% to 78.1%).
- Positive correlation between net enrolment and parental education was also observed throughout the decade. The proportion of never schooled parents decreased over time - from 47.7% in 1998 to 45.4% in 2000, 35.4% in 2005 and 33.3% in 2008. The net enrolment rate increased for the children of both never and ever schooled parents during 1998-2005 which became stagnant in 2008 for both the groups.
- In terms of admitting children from the poorest households and the first generation learners, the non-formal schools did better than others. Few children with such characteristics admitted in the kindergartens or the primary attached high schools. Mean age of the students of government, non-government and non-formal schools were mostly equal (average 9 years) but it was higher for the madrasas and lower for kindergartens and primary attached high schools. No non-Muslim students were admitted in the madrasas.
- Not only the older students enrolled in the primary classes, some primary aged children also got enrolled in the pre-primary and secondary classes and the non-graded madrasas. The proportion of primary aged children in primary classes increased from 70.9% in 1998 to 77% in 2005 and then decreased to 75.7% in 2008. On the other hand, proportion of primary students enrolled in pre-primary and non-graded madrasas increased throughout the decade.

- Situation of out-of-schooling improved during the past decade - 23% in 1998 to 13.6% in 2008. Major improvement was observed in the poorest households. The parents were asked to mention the most important reason for their children's non-enrolment in school. In about a half of the out-of-school cases the parents thought that their children were not enough grown up to enrol in school although they were 6-8 years old. The other reason for younger children being out-of-school was the refusal by the schools. Reasons like 'scarcity of money' and 'losing interest in school' were mostly prominent for the older children. Five to six percent of the children could not enrol due to distance between home and school and about 4% could not do so due to disability. More than half of the children were out-of-school if there was no school within two kilometers radius of home.
- The gross intake ratio drastically decreased over time - from a very high of 204% in 1998 to 196% in 2000, 166% in 2005 and 159% in 2008. On the other hand, the net intake rate improved from 41.9% in 1998 to 44.5% in 2000 and then decreased to 41% in 2005 and 38.6% in 2008.
- The six years old children are supposed to enrol in class I but a large proportion did not. These children's enrolment in pre-primary class significantly increased over time - from 9.5% in 1998 to 10.8% in 2000, 16.5% in 2005 and 18.8% in 2008. Again for a good portion of them, the parents thought that age six was too young to enrol in school. They were about a fifth of all six years old children in 2000, 25% in 2005 and 27% in 2008. These two clearly shows that Bangladesh is going behind in terms of achieving the second MDG.
- Attendance in school is an important indicator for measuring participation in education. Although the respondents of household survey reported 90% attendance rate in 2008 the head count in the schools showed that it was only 67.7%. The school attendance rate was higher for the girls than the boys (69.8% vs. 65.4%) and the rural students than urban (68% vs. 66.6%). Overall, the attendance rate increased from about 60% during 1998-2000 to 67.7% in 2008. Increase in enrolment occurred in all types of primary schools; however, the highest rate was found for non-formal schools.

### *Internal efficiency of primary education*

A reconstructed cohort analysis was done to estimate promotion, dropout and repetition rates and hence calculating retention and cycle completion rates and coefficient of efficiency of the system. Extracting from school level data, this section provides national as well as area, school type and gender-wise analysis of internal efficiency.

- During the past decade, the promotion rates at different classes of primary educational institutions decreased. This means an increase in the dropout and repetition rates which have negative implications for other efficiency indicators. Whereas the average dropout and repetition rates in each class were respectively 5.6% and 8% in 1998, these increased to 11.5% and 10.9% in 2008 respectively.
- Of the children enrolled in class I, 77.4% reached at class III, 58.4% survived up to class V and 50.1% completed the full cycle of primary education. The survival and completion rates were higher for the girls than the boys. These were much higher for the urban students than their rural

counterparts. The cycle completion rate was highest in the primary-attached high schools (83.7%), followed by ebtedayee-attached high madrasas (65.5%). It was lowest in the ebtedayee madrasas (31.5%), followed by non-government (39.7%) and government schools (53.1%).

- Survival and completion rates and the coefficient of efficiency decreased during the past decade. Between 1998 and 2008, the survival rate decreased from 80.6% to 58.4% and the completion rate from 75.7% to 50.1%. The coefficient of efficiency was 76.3% in 1998 which reduced to 57.2% in 2008. All these clearly show a drastic fall in the efficiency of the primary education system in Bangladesh.

### *Students' achievement of competencies*

The first and most rigorous outcome indicator of education provisions is the learning achievement of the students.

- Of the 27 competencies tested the students, on an average, attained 16.1 competencies in 1998 which went up to 18.7 in 2008. Overall, increase was 2.6 competencies. Although the girls significantly lagged behind the boys in both the time and the rural students compared to their urban counterparts, improvements were noticed in all four groups of students. An equal rate of improvement was noticed in all three common types of schools covered in both the years (government, non-government and non-formal).
- In 2008, the students of the primary-attached high schools did the best in the test. The non-formal schools were the second, government schools third and the non-government schools fourth. The two types of madrasas were least successful. Gender difference disfavouring the girls was observed in the government and non-government schools and the high schools. Except for the non-government schools, urban educational institutions of the other five types were significantly ahead of their rural counterparts.
- The students in both the years, in general, did better in *Poribesh Porichiti* (both society and science) followed respectively by Bangla and Mathematics. The worst performance was in English. The students of each type of schools performed better in the knowledge level items compared to those needing skills of higher order. Overall, improvement was more in the knowledge level items than the understanding level items. The students in both the years (2000 and 2008) found three competencies very difficult: writing in English, word problem solving in Mathematics and life sketch of Prophet Mohammad (SM) or the preachers of own religion. There was a big jump in 'excellent' performance: in 2000, the students showed such performance in three competencies and 'satisfactory' in 12 but this went up to 12 and seven in 2008.
- Like the previous studies, this study confirms positive correlation between the students learning achievement with their socioeconomic characteristics, school related inputs and process factors. Of the three sets of variables, socioeconomic characteristics had the highest predictive power in order to explain variations in students learning achievement, followed respectively by additional educational inputs and school related input and process factors. Fathers' education came out as the most important predictor of learning achievement followed by length of private tutoring.

### Education and literacy situation of population

Due to continuous efforts for primary and secondary education and progress made at school enrolment, a positive impact of these is expected in the overall education and literacy situation of the country.

- Three measures were taken to understand the level of education of the population. Population ever schooled was estimated for among those six years and above, primary completers among those 11 years and above, and secondary completers among those 15 years and above. During the decade, mostly an equal amount of improvement was observed in the rates of ever schooled and primary education completed population. These were respectively 13.4 and 13.7 percentage points. The improvement in the population completing secondary education was much lower than the above - only 2.8 percentage points. In 2008, over two-thirds of the country's population was found to be ever schooled, more than a half completed primary education and 14.3% completed secondary education.
- During the decade, the females lagged behind the males and urban population surpassed their rural counterparts in all three indicators mentioned above but the rate of improvement was more among the females than the males and in the rural areas compared to the urban areas.
- Literacy rate of the population seven years and older increased from 37% in 2000 to 49.7% in 2005 and then slightly decreased to 48.5% in 2008. The adult (15 years and above) literacy rate was 41.6% in 2000 which increased to 52.6% in 2005 and then slightly decreased to 52.1% in 2008. None of the difference between 2005 and 2008 was statistically significant. Improvement in literacy rate from 2000 to 2005 was observed irrespective of gender and area. However, from 2005 to 2008, decrease was noticed only among the males. Age specific analysis shows a steady improvement only in four age-cohorts between 15-34 years.
- A consistent 20-22 percentage points gap between urban and rural areas was observed in the literacy rates throughout the decade. On the other hand, gender gap reduced over time. For population seven years and older, the gender gap reduced from 7.3 percentage points in 2000 to 3.9 percentage points in 2008. In case of adult literacy, it reduced from 11.5 percentage points in 2000 to 7.1 percentage points in 2008.
- Household with at least one literate person is often called as literate household. Sixty-one percent of the households had at least one literate person in 2000 which increased to 78% in 2005 and to 78.5% in 2008. Proportion of non-literate households reduced 17.5 percentage points during the last eight years - over two percentage points per year. In 2008, 89.4% of the urban and 76.5% of the rural households had at least one literate person.

### Conclusions and Recommendations

Primary education in Bangladesh is compulsory by law and according to the constitution the government is responsible to provide such education to all. Again, Bangladesh is committed to its people and the international community to provide quality primary education equally to all children so that they can complete the full cycle of primary education by 2015. A number of initiatives have been taken since Jomtien conference by both the government and the non-government agencies so that the aims can be achieved. Introduction of competency based curriculum, provision of free textbook and stipend (*upabritti*)

for the poorer students, recruitment of new teachers and providing them training and improvement of physical facilities under PEDP II are the initiatives taken by the government. In addition, setting up of non-formal schools offered a second chance to the poor and disadvantaged. Ten types of primary schools under various management bodies and curriculum, centralized government functionaries, overseeing only four types of schools by the key government authority (DPE) and having no coordination at the central or *upazila* level are some of the characteristics of primary education provision in Bangladesh. The country is proud of its high enrolment rate with gender parity but the literacy situation and overall quality of education are far below the expectations. A few years back, UNESCO warned through an annual 'EFA Global Monitoring Report' that Bangladesh would not be able to reach its EFA/MDG goals for 2015 with a "business as usual" approach. How much of this have been taken into cognizance is a pressing question. With this short introduction and the findings and analyses that have been presented the following key messages and policy recommendations are made.

### Key messages from the study

*Following are the key messages emanating from the findings of the present study:*

The first message is that there is a huge wastage taking place in our primary education system. Half of the enrolled children drop out before completing the full five-year cycle. Owing to increase in dropout and repetition rates across all the primary classes, there is a visible drop in the retention and survival rates in recent years, which resulted in the shrinking of primary completion rate. Such high dropout indicates lack of quality provisions, loss of secure resources and thus inefficiency in the system.

The second message is that there is an indication of stagnation in enrolment since 2005. Improvement in primary enrolment was evident up to 2005 which stagnated afterwards due to a significant fall in enrolment in some areas and among the children aged six years. Parents of half of such children thought that their wards were too young to enrol in school. Refusal of admission by the school authority, children losing interest in education, scarcity of money to meet the private cost of education, and disability were some of the major reasons for such a stagnant situation. Distance between home and school in some areas is another reason for the stagnation. This low net intake rate is a serious obstacle to achieving the second MDG.

The third message is that students' achievement of nationally determined competencies improved but it is far from expectation. Low achievements in the 'understanding level' items and inequities in terms of gender, school type and residence are some related issues linked to the quality of the system. Students' learning achievement depended much on their background characteristics and private tutoring than on the school related factors, which should be a wake-up call for the schools.

The fourth message is that the girls are ahead of the boys in terms of enrolment, attendance, survival up to class V and completion of the full cycle of primary education but are significantly behind when the question of learning achievement comes. This is true irrespective of school type. Females' participation in teaching profession increased significantly but their numbers are still low in the leadership of the institutions and participation in school managing committees.

The fifth message is that the madrasas are lagging behind in most of the quality indicators. Poor educational provision in these institutions is partly to blame for this. The ebteyee madrasas which

are basically independent institutions providing primary education is at the bottom of the league table. These institutions use separate textbooks and a majority do not have basic minimum infrastructure and learning facilities. Lack of trained teachers is a serious problem in the madrasas. Women's participation in teaching, school leadership and SMC is the lowest in madrasas.

The sixth message is that owing to continuous push for school enrolment, level of education and literacy status of the population increased over time. However, increase of ever schooled population and those who completed primary education was modest with a rate of 1.4 percentage points per year. Although the literacy situation made important strides in recent times, it is yet to cross the 50% mark.

The seventh message is that the non-formal primary schools have been contributing significantly to achieving EFA. As supplementary and complementary to the mainstream education provision, it caters for 9.6% of total primary enrolments in 2008. Although these schools do not have enough physical facilities like the mainstream schools they are sometimes better endowed than other types in terms of educational software such as teacher training, teaching-learning provisions, child-friendly environment, teacher attendance and parental participation leading to better outcomes such as student attendance, cycle completion and learning achievements.

The eighth message is that physical facilities, teachers' education and training and learning provisions for the primary education system in Bangladesh have improved as a whole during the past decade. However, the improvement has been uneven. Madrasas and the non-government primary schools often lack basic minimum standards of enabling condition. There are shortcomings in the teachers' subject based training, management training of the heads of the institutions and effective functioning of the school managing committees. Dependence on private tutoring has increased over time.

### Policy recommendations

The findings and the main messages of the *Education Watch 2008* study on the quality of primary education raise the following policy issues:

1. Primary education, wherever provided should, in principle, be linked with the Directorate of Primary Education (DPE) - the government's key authority to implement primary education. *Upazila* Education Offices, on behalf of DPE should play the principal role in coordinating primary education, of all types, at the *upazila* level. This implies decentralization of authority to the *upazila* level and making them accountable for access, equity and quality of education to the people of the respective *upazilas* and the Ministry of Primary and Mass Education.
2. There should be a 'minimum' provision of physical and learning facilities, qualified and trained teachers, co-curricular activities and functioning school managing committee. All existing formal educational institutions including the madrasas should be judged on the basis of this standard and those not meeting the standards should receive direct support through government subvention. A yearly survey (like the *Education Watch*) should be carried out by DPE to monitor improvements over time. Phase-wise five-year development plans may be considered. The learning process should take place in classrooms not private tutors' homes.
3. Pre-primary education should be confined for the children below age six. To ensure admission of children of age six in class I, campaigns of various forms should be considered, which, at the

school level, can include school-catchment area based survey, meeting with the parents of non-enrolled children and community level campaigns. National and district level campaigns through all types of media such as radio, television, newspapers, mobile phones, bill boards, Internet as well as folk media may be utilized. Some of these are already being used in some places; however, these need to be strengthened throughout the country for immediate action. The civil society should be utilized more in such campaigns.

4. In order to reduce distance/communication related barriers to school enrolment, non-formal primary schools should be promoted in the short run. Such provisions should be continued for those who missed primary education at age six and for the dropouts. The quality assuring mechanisms as practiced in non-formal schools, such as continuous training of teachers, supportive academic supervision, provision of co-curricular activities, community monitoring and special support to the disadvantaged and disabled students, can be adapted in the formal schools. Collaboration between DPE and the agencies implementing non-formal programmes through a task force could be considered as a public-private partnership (PPP) which is being promoted by the newly elected government.
5. We have reasons to be happy about the achievement of gender parity at participation level but there is no need to be complacent about it. Gender related issues should be addressed in teacher training, school management and day-to-day school operation. Additional care, attention and encouragement can improve girls' competency achievements. More policy action is needed through affirmative actions to put more females as heads of the educational institutions including the madrasas and in the school managing committees.
6. Recognizing the contribution of madrasas in enhancing access to education, necessary facilities including unified and common set of standards for learning provisions, teaching personnel and core curriculum objectives and contents is a need of the hour. Additional support is needed for their improvement with adequate supervision and monitoring for the best use of the support.
7. The Compulsory Primary Education Act 1990 need to be revisited as it is inadequate to meeting modern day requirements. The Act is faulty as there is scope for the heads of the educational institutions to refuse admission without showing any reason; especially the disabled could be subjected to discriminations due to this. It is necessary to amend the Act towards achieving 'quality primary education for all' and vesting greater role, responsibility and authority to the upazila education offices.
8. In order to come out of the 'business as usual' approach, strong political commitment for a major overhaul in the education sector is required. 'Vision 2021' or the 'Digital Bangladesh' or any other developmental goals would be difficult to achieve without proper development of our human resources.
9. A large portion of the provision of 'block allocation' in the national budget 2009-10 can be utilized for education in addition to its usual allocation. Massive change in teacher education capable of impacting in classroom culture and school discipline, subvention to the schools and madrasas to create minimum standard of educational facilities towards reducing inequity among the educational institutions and establishing a strong monitoring mechanism should be the priority activities with this allocation.





## Chapter 1

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### Introduction

Primary education is the foundation for human development in any country. Bangladesh is committed to provide full five years of primary education to all of its children aged 6-10 years. This introductory chapter narrates briefly the evolution of primary education provision in Bangladesh and its achievements since the Jomtien Conference of 1990. As assessment of quality of education is the main theme of this *Watch*, a quality assessment framework is also presented. More specifically, this chapter creates a background and the context for the whole study.



People are the most important resources for any nation. But they cannot be resourceful without support from the society they live in. Social process and education provisions together are the means of producing resourceful human beings. These are, however, very much linked with the overall nation building process which is manifested in the Constitution as the fundamental principles of State policy. In case of Bangladesh, the State is committed to the provision of basic necessities including adoption of uniform, mass-oriented, free and compulsory education through which an equitable society can be created so that all kinds of exploitation can be removed (Articles 15, 17, 19 of the Constitution).

Primary and basic education is the foundation on which the nation is built. For the fulfilment of human life's potential and individual's pursuit of education, the ground is laid through primary education. A strong and broad foundation is necessary for creating a capable and meaningful human resource. Higher levels of education (secondary and tertiary) flourish and strengthen through a solid basic and primary education.

#### A. Why the theme of quality primary education

The *Education Watch* was launched in 1998 aiming to contribute to attaining 'education for all' through independent monitoring and evidence based policy recommendations. For the first few years of its inception, the *Watch* was engaged in investigating primary and basic education and literacy status of the population. However, it moved its attention to secondary education in the subsequent years. A full list of the titles of *Education Watch* reports and issues addressed in the studies are provided in Annex 1.1. As part of broader interest in quality of primary and basic education, the following themes were examined (Chowdhury *et al.* 1999 and 2002, Nath and Chowdhury 2001, Alam and Haq 2001):

- internal efficiency,
- achievement of basic competencies,
- acquisition of terminal competencies,
- teacher education, and
- private expenditure of education.

Findings of the studies and their analyses and relevant policy recommendations created much interest and enthusiasm among various stakeholders of education. It may be mentioned that the *Education Watch* was the first to investigate competency based learning achievement of the students at the completion of primary education in Bangladesh and established its relationship with various input and process variables (Nath and Chowdhury 2001). The other important study conducted at the same time was the Primary Schools Performance Monitoring Project (PSPMP) funded by the Asian Development Bank (PSPMP 2000). Some qualitative investigations have done afterwards which include Nath and Shahjamal (2004), Nath *et al.* (2005), and Nath and Mahbub (2008).

Recently, the concerned stakeholders of educational development in the country including the *Education Watch* members felt that the issue of quality of primary education should be revisited. It was opined that the information from the first three *Watch* need to be updated. Apart from the time that elapsed since the last study, a number of new initiatives at improving quality of education have been implemented, especially under the Second Primary Education Development Programme (PEDP II).

The NGOs also initiated some quality improvement measures in their programmes. It may be mentioned that after achieving a 'satisfactory' level of access to education with gender parity (Chowdhury *et al.* 2003, DPE 2006, 2007 and 2009, Nath *et al.* 2005), quality of education for all is now the main concern. The issue of quality was thus chosen for this year's *Watch*.

## B. Quality assessment framework<sup>2</sup>

The economic and social health of any nation depends on the quality of its education system. According to the US Department of Education, schools can be called as successful in their mission if the students are taught values and social skills necessary to become good citizens, and learn adequate skills and competencies necessary to be economically productive (Mayer *et al.* 2000). The concept of quality is an encompassing one. Anything that happens in the education system has a relation with its quality. What happens and how these happen are thus very important. Again, quality has no bound and no upper limit. In the low and middle income countries as well as in the high income countries the question of quality of education is often raised. Parents and educationists irrespectively raise their dissatisfaction about what goes on in the system if the quality falters. The main concern here is the deviation from the expectations and its immediate and long term effects. This is often done comparing the present with the past or extrapolating the present to the future. It may be mentioned that peoples expectation from education also rise over time. All these have an obvious connection with the vision of the education system.

The question of quality has been raised in every international initiative, from the Jomtien Conference to the Dakar Forum (WCEFA 1990, UNESCO 2000). For instance, the Dakar goals of EFA emphasized early childhood care and education, free and compulsory primary education with good quality and improving all aspects of quality of education. Putting quality at the heart of education, the issues like healthy and motivated students, competent teachers, relevant curriculum, good governance and equitable resource allocation were set as characteristics of quality education. Just over a decade ago, the Delors Commission<sup>3</sup> of UNESCO saw education as process of lifelong learning based on the following four pillars:

- *Learning to know* acknowledges that learners build their own knowledge daily, combining indigenous and external elements.
- *Learning to do* focuses on the practical application of what is learned.
- *Learning to live together* addresses the critical skills for a life free from discrimination, where all have equal opportunity to develop themselves, their families and their communities.
- *Learning to be* emphasises the skills needed for individuals to develop their full potential.

This conceptualization of education provided an integrated and comprehensive view of learning and therefore, of what constitutes education quality (Delors *et al.* 1996).

A number of approaches are available to understand quality of education. It can be assessed qualitatively or quantitatively or both. The approach of UNICEF recognizes five dimensions of quality,

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2. This section is mostly taken from Nath (2006a); however, some modifications are made for the interest of this specific study

3. International Commission on Education for the Twenty-first Century, chaired by French statesman Jacques Delors (Delors *et al.* 1996)

viz., learners, environment, content, processes and outcomes founded on the rights of children to survival, protection, development and participation (UNICEF 2000). Education traditions and associated notions of quality include the following approaches: humanistic, behaviourist, critical, indigenous and adult education (UNESCO 2005).

In Bangladesh, the government's policy documents on education like the education related laws, education commissions and committees reports, national plan of action on education for all, national action plan for children, and national primary curriculum did not put any clear definition of quality of education. Based on the basic principles of the State as mentioned in the Constitution, the aim of primary education was set in the curriculum documents of the National Curriculum and Textbook Board (NCTB) as follows:

Development of physical, mental, social, spiritual, ethical, humanistic and esthetical faculties of the children of Bangladesh and inspire them to dream for a prosperous life (NCTB 2003, NCTB and UNICEF 1988, NCTB undated).

Twenty-two general objectives were set in order to attain the aim, which were followed by 50 attainable terminal competencies (Annexes 1.2 and 1.3). However, various quality improvement projects and programmes of the government (viz., IDEAL<sup>4</sup>, ESTEEM<sup>5</sup> and PEDP II<sup>6</sup>) mentioned a number of activities as parameters of quality of education at primary level. These included infrastructure development, training of teachers and other staff in the education department, improvement of teaching-learning approach, school management, community participation, local level planning, academic supervision of schools, and monitoring (DPE-MoPME 2003, UNICEF 2004).

Under PEDP II, the Directorate of Primary Education (DPE) has developed two sets of indicators to understand progress in terms of quality. These are Primary School Quality Levels (PSQL) and Key Performance Indicators (KPI). PSQL is a set of 20 indicators related to minimal physical facilities that the government has committed to provide to each primary school. It is targeted that 40% of all primary schools would have this minimum standard during the timeframe of PEDP II (2004-09). On the other hand, the KPI is a set of 24 indicators to assess basically the performance of the system. Access, participation, internal efficiency and some process indicators are included in KPI. Annexes 1.4 and 1.5 provide the lists.

For a comprehensive analysis of quality of primary education in Bangladesh, a popularly used framework called Input-Process-Output (IPO) was chosen. Earlier studies on quality of education also followed a variant which is modified from others including UNESCO's EFA global monitoring report 2005, School quality monitoring report of the US department of education, Chowdhury *et al.* (1997) and Nath (2006a). The indicators set in PSQL and KPI were also consulted. Figure 1.1 provides the analytical framework used in this study.

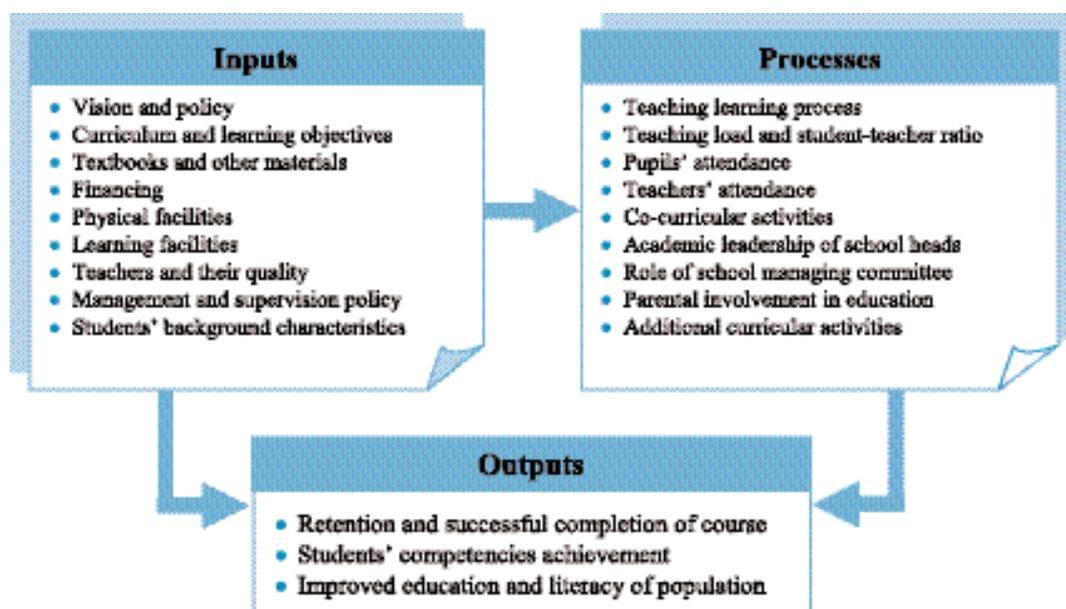
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4. IDEAL = Intensive District Approach to Education for All

5. ESTEEM = Effective Schools Through Enhanced Education Management

6. PEDP II = Second Primary Education Development Programme

Figure 1.1

*Analytical framework for quality assessment*

### C. Primary education provisions in Bangladesh

Duration of primary education in Bangladesh is five years: from class I to class V. There is also a provision of a year-long pre-primary education which is availed by only a minority of children (Nath and Sylva 2007). Primary education is compulsory by law but not the pre-primary (GoB 1990). Children aged 6-10 years are the targeted population for compulsory primary education. Of the 145 million population in the country, about 16.32 million fall in this age group (Ahmed *et al.* 2005, UNFPA and CPD 2003).

There are 10 different types of primary educational institutions in the country which follow three different curricula. The government schools, non-government schools (registered and unregistered), community schools, experimental schools, non-formal schools, and primary-attached to high schools follow the curriculum of the National Curriculum and Textbook Board (NCTB). The ebte dayee madrasas and the ebte dayee-attached to high madrasas follow the curriculum of the Bangladesh Madrasa Education Board (BMEB). The English medium schools follow the British curriculum (London and Cambridge). There are some similarities in the curriculum of NCTB and BMED. However, the English medium curriculum is much different from the other two.

The educational institutions also differ by management responsibilities. For instance, the Directorate of Primary Education (DPE) - the main State functionary to implement primary education in the country, looks after the first four categories of institutions. The experimental schools are under the responsibility of the Primary Training Institutions (PTIs), non-formal schools are under the management of various implementing non-governmental organizations (NGOs), and the Directorate of Secondary and Higher Secondary Education (DSHSE) looks after the primary-attached high schools. The madrasas follow the rules and regulations of BMEB and the English medium schools have no common authority.

The primary educational institutions also vary by number and student size (Table 1.1). Except the non-formal primary schools all other nine operate all five classes at a time in each institution. The non-formal schools are single teacher, single classroom schools, which do not admit new students until the existing cohort completes the full course of primary education. These are stop-gap arrangement to supplement the formal sector in achieving Education for All (EFA). The government runs the largest number of primary schools. The non-formal schools were in the second position in terms of number of institutions but way behind in terms of number of teachers and students. The registered non-government primary schools had the second position in terms of number of teachers and students (Table 1.1).

**Table 1.1**  
*Number of educational institutions, teachers and students by type, 2007*

Type of educational institution	Number of institutions	Number of teachers		Number of students	
		Total	Females	Total	Females
Government primary school <sup>1</sup>	37,672	182,374	91,521	9,377,814	4,829,793
Registered non-govt. primary school <sup>1</sup>	20,107	79,085	25,482	3,538,708	1,791,500
Non-regd. non-govt. primary school <sup>1</sup>	973	3,914	2,532	164,535	81,041
Experimental school <sup>1</sup>	54	210	82	10,097	4,974
Community school <sup>1</sup>	3,186	10,060	7,403	436,072	223,258
Kindergarten <sup>1</sup>	2,253	20,874	11,520	254,982	108,520
Non-formal primary school <sup>2</sup>	35,314	35,314	33,054	1,118,224	687,708
Ebtedayee madrasa <sup>3</sup>	6,726	28,227	2,987	947,744	455,761
Primary-attached high school <sup>3</sup>	1,314	13,075	5,740	295,333	156,098
Ebtedayee-attached high madrasa <sup>3</sup>	8,920	35,707	3,734	1,099,463	512,867
Total	116,519	408,840	184,055	17,242,972	8,851,520

Sources: 1 DPE, 2 CAMPE, 3 BANBEIS

Overall, the number of government school did not change much since 1990. It was 37,655 in 1990, 37,763 during 1994-97 and 37,672 in 2005 and onwards (Ahmed *et al.* 2007, DPE 2008). On the other hand, the number of registered and un-registered non-government (private) schools was 8,262 in 1990 which gradually increased to 43,762 in 2007. In terms of number of students, the government schools had 10.1 million in 1990, 11.8 million in 1997 and 9.4 million in 2007. In the non-government schools, the number of students increased from 1.8 million in 1990 to 6.2 million in 1997 and 7.9 million in 2007. The non-formal primary schools run by the NGOs are not included in the government statistics. During the past one-and-a-half decade, the number of schools run by NGOs varied between 35 to 40 thousands with 1.1 to 1.5 million students (CAMPE database created in 2006 and updated afterwards).

Curriculum is crucial for any education provision. National Curriculum and Textbook Board (NCTB) is the key authority for preparation of curriculum and textbooks. The Madrasa Education Board is responsible for these in case of madrasa education. The non-formal schools use NCTB

textbooks and those produced by established NGOs. In general, the curriculum and the textbooks used in the mainstream schools and the non-formal schools are largely similar. However, there are some similarities and dissimilarities between the curriculum of general and madrasa education. Bangla, English and Mathematics are common in both general and madrasa education as three full units in all the five classes and *Poribesh Porichiti* - society and science are taught as two full units in classes III-V. *Poribesh Porichiti* and fine arts and music are taught as two half units in the first two classes of general education and physical education and music and fine arts are two half units in the remaining three classes. On the other hand, in madrasa stream, Qur'an and *Akaid* and *Fikkah* are taught as two full units in all five classes, Arabic as a full unit in first four classes and as a double unit in class V. It is to be noted that an attempt was made in 1994 to review the textbooks used in the madrasas in line of the then 53 competencies. Giving emphasis on Islam and Arabic language, a new set of 53 competencies were adopted with slight modification of the original competencies (NCTB 1994). However, majority of the competencies were similar.

#### **D. The major State initiatives**

Soon after the Independence, the new Constitution of the State obliged the government to take the responsibility of primary and mass education of all the citizens. The government repealed all existing laws related to primary education through an ordinance and took over the responsibility of all existing primary schools (GoB 1973, 1974). These were the parts of the commitments of the national political leadership to the people before the Independence. The first National Education Commission headed by Dr. Kudrat-e-Khuda raised the expectation of the nation at a high level through their report in line of the national Constitution. A total of eight committees or commissions were formed afterwards and reports produced; however, none of them were fully implemented. In reality, it was not possible for the State to take the full responsibility of primary education of the people; many private schools were established afterwards.

The government started to put much emphasis on the development of primary education in Bangladesh since 1990 through a number of multi-donor-funded projects. In 1990, for the first time in Bangladesh, the Compulsory Primary Education Act was passed in the Parliament (GoB 1990). A General Education Project (GEP) was implemented during 1990-1995. Twenty-seven independent projects were implemented during 1997-2004, which was later collectively called as the first Primary Education Development Programme (PEDP I). Both GEP and PEDP I aimed to enhance educational planning and management capacity, increase equitable access to schooling and improvement of the quality of education. The experiences of the major projects helped evolving the second Primary Education Development Programme (PEDP II). It is a US\$ 1,815 million (about Tk. 12,525 Crore) programme with 64% share of the government of Bangladesh and the rest by eleven donors led by the Asian Development Bank. PEDP II has following five broad components.

- Component 1. Quality improvement through organizational development and capacity building
- Component 2. Quality improvement in schools and classrooms
- Component 3. Quality improvement through infrastructure development
- Component 4. Improving and supporting equitable access to quality schooling
- Component 5. PEDP II implementing, management and monitoring

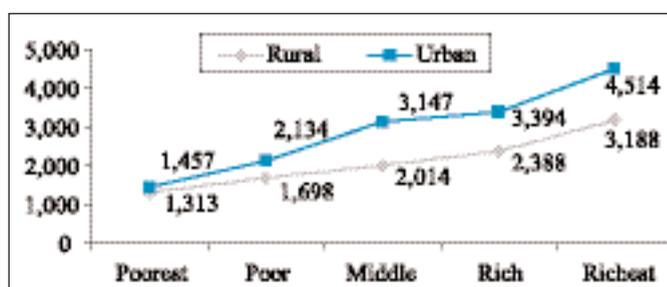
The middle three components had the highest financial allocation (around 85% in total). The second component is a combination of three sub-components closer to the children who are the target of such development initiative. The sub-components include learning environment, teachers and teaching, and community awareness and support. PEDP II was designed to improve quality at all levels of primary education in the country. At the inception of the programme, two sets of indicators were adopted to measure the improvement of primary education sub-sector; these are known as Key Performance Indicators (KPIs) and Primary School Quality Levels (PSQLs) (Annexes 1.4 and 1.5). A number of initiatives like construction and reconstruction of school structures, recruitment of new teachers with priority to females, professional training of teachers, development of *Upazila* Resource Centres, etc. were taken as part of the programme. The government expects that due to these activities measurable improvements will happen in the above mentioned indicators. However, note that PEDP II is concentrated only on the government, registered non-government and community schools. The students of other seven types of schools and madrasas and the out-of-school children are outside the reach of this mega-programme of the State.

### E. Financing primary education

Financial allocation for education is an important issue. It has two parts: revenue and development. The first one is to meet the salary and benefits of the teachers and the support staff and the second one for construction and purchase of supplies and books. Of the total amount allocated to education sector, around 40% (ranged from 37% to 43%) was allocated to primary and mass education during the past few years. In terms of proportionate allocation of Gross Domestic Product (GDP), the primary education received less than one percent during this decade. Allocation for primary education from the revenue budget gradually increased from Tk. 146,863 lakh in 2002-3 to Tk. 246,000 lakh in 2006-7. No such trend was observed for the allocation from the development budget. On the other hand, revenue budget was always higher than the development budget. Year-wise detail of this is available in the seventh *Education Watch* report on financing in education (Ahmad *et al.* 2007). In 2005-6, on an average, the government expenditure per student from the revenue budget was Tk 1,783 for the government primary school students and Tk. 772 for the registered non-government primary school students (BANBEIS 2006).

There is also private expenditure for education. The seventh *Education Watch* report estimated that the households, on an average, had to pay Tk. 2,359 for a primary level student; Tk. 2,120 for a rural student and Tk. 2,930 for an urban student. School type-wise estimate showed that it was about Tk. 2.5 thousands for government, registered non-government and the madrasa students, about two thousands for non-registered schools and madrasas and Tk. 1,600 for a community school

**Figure 1.2**  
Average private expenditure (in Tk.) per student by wealth status of households and area, 2005



Source: Ahmad *et al.* (2007). *Financing primary and secondary education in Bangladesh. Education Watch 2006*. Dhaka: Campaign for Popular Education.

student. In rural areas, per student expenditure for the richest quintile (top 20%) of households was 2.4 times that of the poorest quintile (bottom 20%). The corresponding figure in urban areas was 3.1 (Ahmad *et al.* 2007). Figure 1.2 shows this in detail. All these clearly show that private expenditure for primary schooling was higher than that of the government expenditure from the revenue budget and a high degree of inequity exists in the private expenditure.

#### **F. Quality as revealed in studies and government statistics**

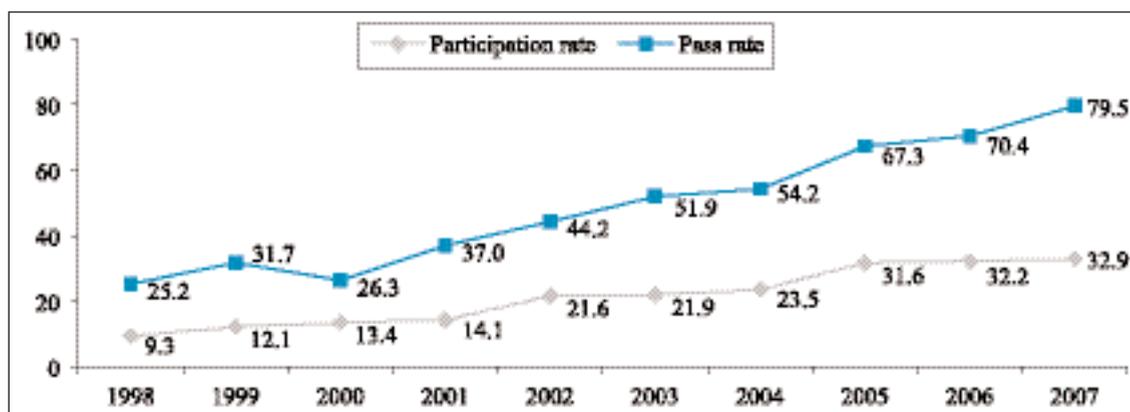
Bangladesh is committed to achieving the two MDGs related to education by 2015. It has done quite well in terms of improving access and removing gender disparity at the primary level. For instance, the net enrolment rate among primary school age children (6-10 years) was about 60% at the beginning of the 1990s which gradually increased to about 80% within a decade (BBS and UNICEF 2000, Chowdhury *et al.* 2002). A recent government estimate claimed that it increased to 91.1% in 2007; boys 87.8% and girls 94.7% (DPE 2008). District-wise analysis showed a gap of about 25 percentage points between the lowest and the highest performing districts. Most depressing situation lies with high dropout rate and hence low retention and completion rates. The DPE estimates from government and registered non-government primary school data show that a half of the enrolled students dropped out before completing primary education (DPE 2008). However, the primary education completion rate was 43% in 1990 and 70% in 1998 (BBS and UNICEF 2000).

The students are assessed at the end of each class by the school authorities to determine their promotion to the next class. In addition, half-yearly and mid-term examinations are also held in each class. However, there is question of quality and standard of these assessments at the school level including malpractices in the examinations (Nath *et al.* 2005, Nath and Mahbub 2008). There is also a provision of primary scholarship examination for a proportion of best students in each school at the end of primary education. Earlier, a fifth of the class V students were asked to participate in the primary scholarship examination which is now increased to two-fifths (DPE 2008). In addition, primary course ending examination was initiated a few years back for all students. Primary scholarship examination is conducted centrally from DPE but the course ending examination is conducted by the district primary education office. Proportion of students of class V participating in the scholarship examination and the pass rate increased over time; however, the participation target could never be achieved (Figure 1.3). The boys were always ahead of the girls in both participation and pass rates.

Assuming that only the high performers were sent for the scholarship examinations, those did not appear in the examinations would not have passed. In 2007, a third of the students of class V appeared in the examination and 80% passed. This means that a little more than a quarter of the students of class V (26.4%) could pass in the scholarship examination if all of them had appeared. Some years back the Ministry of Education started taking a simple test on the students admitting in class VI. Compilation of the 2005 assessment results of all 64 districts shows that the pass rate was only 30% (Nath 2006b). All these indicate poor quality of students' learning performance at the end of primary education.

Let us take a look at the students learning achievement found in various independent studies. A few years ago, the *Education Watch*, for the first time in Bangladesh, developed a competency based test instrument covering 27 of the 50 terminal competencies. The study found that on completion of primary education less than 2% of the students achieved all the 27 competencies addressed in the

Figure 1.3  
Participation and pass rates in primary scholarship examinations, 1998-2007



Note : The figures for this graph was calculated from the information found in MOPME, DPE and BANBEIS websites:  
<http://www.mopme.gov.bd>, <http://www.dpe.gov.bd>, <http://www.banbeis.gov.bd> [accessed on 06/08/2009]

test (Nath and Chowdhury 2001). The literacy assessment study of *Education Watch* found that a third of the students completing primary education did not acquire basic literacy level (Ahmed, Nath and Ahmed 2003). A national assessment of the pupils of classes III and V was held recently under PEDP II. The students of class III got 54.6% score in Bangla and 51.5% in Mathematics. On the other hand, the students of class V got over 60% score in *Poribesh Porichiti*, 56.2% in Bangla, 47.9% in English and 46.7% in Mathematics (Nanayakkara *et al.* 2007). The study, however, concluded the students' learning achievement as 'satisfactory'.

## G. Organization of this report

This report has nine chapters, in addition to the overview. This introductory chapter provides background on the main theme of the study - quality of education. Formulation of a framework for assessing quality of education and exploring primary educational development initiatives are two important sections of this chapter. The second chapter gives details of objectives, methodologies and research techniques used including the strengths, weaknesses, reliability and validity of the study.

Chapters 3 to 8 provide details of the major findings of this *Watch* and compares with findings from previous *Watch* studies to show the progress over time. Educational facilities and learning provisions, management of institutions, participation, internal efficiency, students' achievement of competencies and related factors, and education and literacy situation of population are explored in these chapters.

Chapter 9 is the final chapter. This discusses the findings presented in the previous chapters to find out the linkages among them. Findings of other studies and related policy issues are also brought in for discussion. Key messages emanating from this investigation and a few policy recommendations are placed. The Annexes provide additional tables as well as the instruments and methodological notes.





## Chapter 2

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### Research Design and Methodology

Objectives, methodology and research design are the main issues covered in this chapter. A quantitative approach was taken for investigating the theme issue. Survey of six types of 440 educational institutions, a learning achievement test for over seven thousand students of class V and a survey of 24,000 households provided primary data for this study. Besides, previous *Education Watch* database was also used for comparison and analysis of trends. The study process, reliability and validity, and strengths and weaknesses are also presented.



This chapter provides brief description of the methodology used in this study, which includes study objectives, research methods adopted, instruments used, sampling strategies followed, field level data collection procedures, analysis techniques and reliability and validity of the study. Strengths and weaknesses of the study are also discussed here.

### A. Objectives

As already mentioned in the previous chapter there was an urge from the members of the *Education Watch* and the other stakeholders of education to revisit the issue of quality in primary education. Keeping the quality of education as the central focus an analytical framework was developed and presented in the previous chapter. This study tried to explore the issues identified in the framework. The following four objectives formed the basis of the *Education Watch* 2008:

1. To measure progress in achievement of the national goals of primary and basic education in terms of selected quality indicators including competencies and those mentioned in the two sets of progress monitoring indicators, viz., PSQL and KPI, as used by the government.
2. To explore the relationship of the learning achievements of the students with other quality indicators (both input and process) including students socioeconomic backgrounds.
3. To investigate the progress made in the status of children's participation in primary education, and correlates and constraints of participation.
4. To know the current education and literacy levels of the population and their progress over time as a result of the expansion of primary education in the country.

### B. Methods

Recognizing the importance and relevance of both qualitative and quantitative methods and techniques used in education quality investigation research, this study aimed for a methodology that combined the two. However, owing to some practical problems related to political transition in the country during the end of 2008 and early 2009, no qualitative exploration was possible. Thus, quantitative surveys were the main tools of investigation. Three surveys were implemented: educational institution survey, household survey and survey of competency achievement. The instruments used for these surveys were used in previous studies of *Education Watch*. Sampling strategies for the surveys were also similar to the previous studies. Similarity of both the instruments and the sampling strategies facilitated examination of progress in various quality indicators over time.

### C. The instruments

In order to gather information for achieving the objectives of this *Watch*, following four instruments were used.

- Competency-based test instrument;
- Students socioeconomic survey questionnaire;
- Educational institution survey questionnaire; and
- Household survey questionnaire.

*Competency-based test instrument:* This instrument was originally developed for the second *Education Watch* in 2000. Detailed description of development of the test and its validity and reliability are available in Nath and Chowdhury (2001). At that time the number of attainable competencies at the end of primary education was 53; of which 27 were taken for assessment, considering their suitability for paper-pencil based test. Although, some modifications were done later and the number of terminal competencies was reduced to 50; very small changes have been noticed in those 27 competencies under assessment. No modification of the instrument was necessary for two reasons. First, it was assumed that the small change that was done in the list of competencies would not affect much of the test instrument. Second, no change in the test instrument would let the comparison of students learning achievement between 2000 and 2008 possible.

Of the 27 competencies under test, three belonged to Bangla, three to English, five to Mathematics, six to *Poribesh Porichiti* (Society), nine to *Poribesh Porichiti* (Science) and one to Religious Studies (Annex 2.1). The total number of items to represent these competencies was 64. Table 2.1 provides number of competencies and the test items against the subjects.

*Students' socioeconomic survey questionnaire:* This was used to collect background information of the students under test. Information on age and sex of the students and access to mass media such as radio, television and daily newspapers were collected through this instrument. Educational information included guardians' involvement in mentoring their children, their participation in school management, use of private tutors, private costs of education, and students' participation in co-curricular activities. Level of parental education was also collected. Household level information included self-perceived food security status as an indicator of economic status, religious belief and ethnicity. (Annex 2.2)

*Educational institution survey questionnaire:* This instrument had a number of sections including basic information of educational institutions, physical facilities, seating arrangement and attendance, learning facilities, additional arrangement for learning, promotion, dropout and repetition of students, teachers and their various information, school managing committee, and information on the members of the committees. A good number of quality monitoring indicators developed by DPE and placed in two lists called PSQL and KPI were incorporated in this questionnaire. (Annex 2.3)

*Household survey questionnaire:* The major thrust of this instrument was to capture children's participation in primary education and its socioeconomic differentials. However, some basic information like age, sex, years of schooling completed, and literacy status of all members of the households were also included in this. The children's section included all children of age 4-20 years in the households. Provision of separate information of those currently enrolled, dropped out and never schooled and their parental education were the most important parts of this instrument. Some more

**Table 2.1**  
*Number of competencies and question items by subjects*

Subjects	Number of competencies	Number of items
Bangla	3	10
English	3	7
Mathematics	5	15
<i>Poribesh Porichiti</i> (society)	6	13
<i>Poribesh Porichiti</i> (science)	9	18
Religious Studies	1	1
All	27	64

information on the currently enrolled children and some basic information on the households were also captured through this questionnaire. The household level information included self-perceived food security status, religious belief, and ethnicity. The other information collected was the distance between home and various types of primary schools (Annex 2.4).

Definitions of various parameters used in this report are provided in Annex 2.5.

#### D. Sampling strategies

Two variables were considered as key to determining sample size for this study. These were enrolment status of the children aged 6-10 years for household survey and attainment in terminal competencies of the students of class V for competency achievement survey. An individual (a child or a student) was considered as unit of analysis. Both the variables were considered as dichotomous: currently enrolled or not and attained a particular competency or not. Two different sample sizes were calculated with two different levels of precision. Details of the statistical procedures for this are provided in Annex 2.6. It was calculated that to have a valid estimate for primary school participation 578 samples (children aged 6-10 years) would be required for household survey and 294 for the competency achievement test.

Of the 10 types of primary schools in the country, six were considered for competency achievement test and educational institution survey. They were: the government primary schools, non-government primary schools, ebtedayee madrasas, non-formal primary schools, primary-attached high schools, and ebtedayee-attached high madrasas. Separate estimates for rural and urban schools were also envisaged. Thus, a total of 12 strata were considered. Thirty randomly picked educational institutions for each stratum were selected and 20 students of class V from each institution were administered a test. Thus, 360 educational institutions and 7,200 students were primarily sampled under the surveys. However, due to smaller number of ebtedayee madrasas in the urban areas it was not possible to administer test on the intended number of students of this category. In some cases, due to smaller number of students in class V, the number of schools had to be increased. Finally, the survey was carried out in 440 educational institutions. The competency test was administered on 7,093 students of class V of these institutions and socioeconomic survey was done on 7,070 of them (Table 2.2). Socioeconomic information of 23 students could not be collected due to time constraints or unavailability of respondents in the households.

**Table 2.2**  
*Samples for school survey and competencies achievement test*

Type of educational institution	Number of schools			Number of students		
	Rural	Urban	All	Rural	Urban	All
Government primary	38	33	71	626	649	1,275
Non-government primary	42	38	80	621	599	1,220
Ebtedayee madrasa	58	16	74	664	164	828
Non-formal primary	33	36	69	645	646	1,291
High school	31	35	66	536	631	1,167
High madrasa	44	36	80	705	607	1,312
All	246	194	440	3,797	3,296	7,093

Household survey was done to investigate participation in education and out-of-schooling and their socioeconomic differentials. Like the previous *Education Watch* household surveys, the country was divided into eight strata - six rural and two urban. The strata were: rural Dhaka division, rural Chittagong division, rural Rajshahi division, rural Khulna division, rural Sylhet division, rural Barisal division, metropolitan cities and the municipalities. A four stage sampling strategy was adopted separately for each stratum. At the first stage, 30 *upazilas* (*thanas* for urban areas) were randomly selected from each stratum. The second stage was to randomly select one union (ward for urban areas) from each selected *upazila/thana*. The third stage was to randomly select four villages/*mahallahs* from each selected union/ward. In the fourth stage, 25 households were selected from each selected village/*mahallah* following a systematic random sampling procedure. All persons in the selected households were brought under the survey. It was calculated that survey of 3,000 households from 120 villages/*mahallahs* in each stratum will allow having adequate samples for valid estimates. Number of villages/*mahallahs* had to be increased due to shortage of adequate number of households in some selected villages/*mahallahs*. Finally, 24,007 households from 1,003 villages/*mahallahs* were surveyed. The total population in these households was 1,13,320. Of them, 14,688 were primary school aged children (6-10 years) and 15,189 currently enrolled in primary schools (Table 2.3). Figure 2.1 shows the sample sports for household survey.

**Table 2.3**  
*Sample for the household survey*

Strata	No. of villages	No. of HHs	Population in the HHs	Children aged 6-10 years	Primary school students
Rural Dhaka division	127	3,003	13,972	1,855	1,848
Rural Chittagong division	121	3,003	15,220	2,245	2,259
Rural Rajshahi division	127	2,998	13,551	1,748	1,952
Rural Khulna division	128	2,998	13,592	1,661	1,851
Rural Barisal division	128	3,008	14,525	1,974	2,104
Rural Sylhet division	129	3,002	15,451	2,142	2,123
Metropolitan cities	120	2,999	13,199	1,517	1,495
Municipalities	123	2,996	13,810	1,546	1,557
Total	1,003	24,007	1,13,320	14,688	15,189

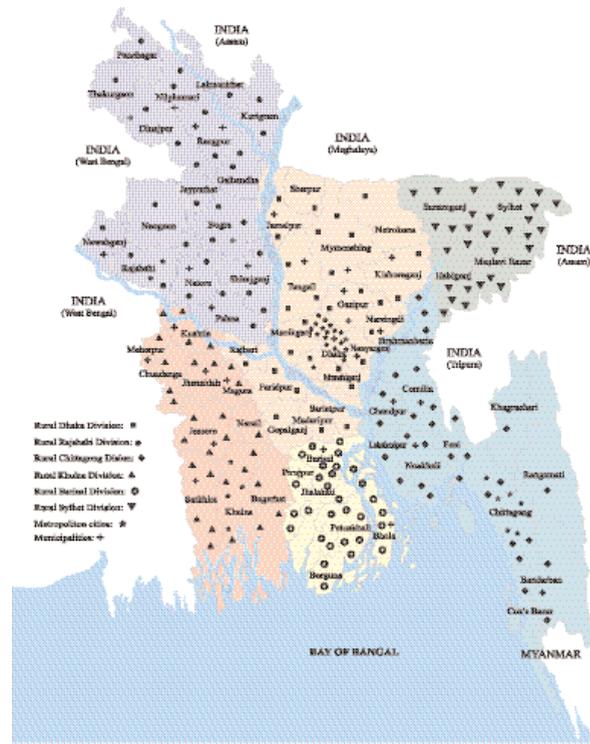
School lists prepared by the Directorate of Primary Education (DPE) and the Bangladesh Bureau of Educational Information and Statistics (BANBEIS) were used as sampling frame for the school survey. On the other hand, district-wise village/*mahallah* list produced by the Bangladesh Bureau of Statistics (BBS) was used as sampling frame for the household survey. Note that originally selected 960 villages/*mahallahs* for the household survey of *Education Watch* 2005 were primarily selected for this *Watch* also. Of the 1,003 villages/*mahallahs* covered in this survey 947 were the same to that of 2005 survey (94.4%) and 56 were new.

### E. Weighting

Since the number of schools varied substantially by type and area, number of students of class V by school type, area of residence and sex and the number of children aged 6-10 years by stratum, weights had to be used in pooling estimates for different types of schools, for rural and urban Bangladesh and for the national level. Weights were calculated using proportion of schools by type and area, proportion of students of class V by school type, area and sex and proportion of children by stratum. Information for estimating weights was found from various sources like BANBEIS, DPE and previous *Education Watch* databases. Standard statistical procedures were used in calculating the weights (Cochran 1977). Annex 2.7 gives details on the procedure followed.

Figure 2.1

Map showing sample locations for household survey



### F. The field operations

Preparation for the research was started in mid-September 2008 and the actual fieldwork was done between mid-October to mid-December 2008. A total of 120 research assistants and field supervisors worked for data collection. On recruitment, a week-long training was provided to them in batches. The training included classroom lectures followed by one-to-one and group discussions and role playing, and field practice. A manual describing all details of the questions in the instruments and strategies for asking questions were provided to the research assistants and the field supervisors.

The entire fieldwork was divided into two; one group did the household survey and another group did all activities related to schools which included school survey, administering test on the students and socioeconomic survey of the students. The first group had 48 research assistants divided into 24 teams and the second group had 60 research assistants divided into 30 teams. Each household survey team was given responsibility for 10 unions and each team spent five days in a union. Each team under the second group spent three days doing all activities centering a school. There were 12 supervisors to monitor and supervise the fieldwork, each of them were given responsibility of a number of teams. Moreover, six education researchers from the Research and Evaluation Division of BRAC oversaw the fieldwork.

The principal respondents for the household survey were the heads of households. Spouses were considered in their absence and any adult person as the third option. Interviews for the household

survey were held at the premises of the households, preferably at the courtyards, corridors or in the drawing/living rooms. The heads of the educational institutions were the principal respondents for the school survey. However, in most cases, a group of 2/3 teachers collectively provided all necessary information including the school registers and other documents. Major data on the schools were collected in the office rooms or the teachers rooms of the respective schools and the tests were administered in the respective classrooms. However, observation method was used to collect selected data on schools. Students' socioeconomic information was collected at their homes. The respondents were similar to that of the household survey; however, the students sometimes helped the respondents to provide some specific information.

### G. Assessing test script and coding other data

On completion of fieldwork, assessment of the answer scripts of the competency test was a huge task. The Multiple Choice Question (MCQ) part of the test was coded by the research assistants in the field. Eight competent research assistants were engaged in assessing the other part of the test, which was done under the guidance of the research team in Dhaka. Coding of answers to some open ended questions in other instruments was also done at the same time. Computerization, checking and cleaning of all data completed at the end of April 2009.

### H. Validity and reliability

The analytical framework adopted for this study is not entirely new. Previous studies on this issue done at home and abroad were consulted in the development of the framework (UNESCO 2005, Mayer *et al.* 2000, Chowdhury *et al.* 1997, Nath and Chowdhury 2001, Nath 2006a). Moreover, most of the recently adopted two sets of quality monitoring indicators (PSQL and KPI) by DPE were also incorporated in the framework. All these initiatives helped framing a standard analytical framework for investigating quality of education, which is as well grounded for the context of Bangladesh. The major output variable, viz., competency achievement of the students was also an important component. The competencies were adopted by NCTB, based on which the textbooks were developed. The other two are the national priorities for educational development. Thus the study may be validated with respect to the various thoughts available on education quality assessment, the national competencies and national priorities of primary education.

The instruments used for this study were used in previous *Education Watch* studies. Some of these were used in multiple times. The test instrument was drafted by a group of experts including teachers of various types of primary schools. Pilot tests were done and appropriate statistical procedures were used in developing the final version of the test. This ensured internal validity of the test instrument. External validity of the instrument was ensured through administering the test in some best schools and comparing the results with the national average. Details of validity assessment are available in Nath and Chowdhury (2001).

The other instruments were developed taking experiences of various quality assessment studies mentioned above and administered in previous *Education Watch* studies. Consistent results of the *Education Watch* studies and their similarity with the other studies validates the instruments used in this study.

Reliability of test and other data is also an important issue. Item selection procedure during development of the test ensured reliability of each of the questions individually. Reliability of the whole test was assessed twice, once based on the field trial data and again with the data generated through national survey in 2000. Both the assessment gave mostly an equal result. It was observed that the test as a whole, as well as by school type was more than 90% reliable (Nath and Chowdhury 2001).

Reliability of test data generated for this study was also assessed by using the same technique called Kuder-Richardson formula number 20 or KR 20 (Ferguson and Takane 1989, Carmines and Zeller 1979). Reliability coefficient of the whole data set as well as for each of the school types were calculated separately. The coefficients were found between 0.90 and 0.92. This means that similar to the previous year, the test data of 2008 was highly reliable.

## I. Strengths and limitations

All necessary measures were taken in order to conduct a scientific inquiry so that the strengths of the study increase and limitations reduce. However, like any other sample survey based research, this study bears both strengths and limitations. The following provide some strengths and limitations as identified.

Before going to the specific strengths and limitations of the study, let us have a discussion on the issues related to comparability. Comparison is a difficult task because it is sometimes blamed as comparison between two or more uneven components. Along with national estimates of various indicators most part of this study compared various sub-systems of primary education in Bangladesh. The comparison included inputs, processes and outputs. Although the management of the sub-systems are different and they also differ in facilities and education provisions, all of them are supposed to follow the national curriculum. The madrasas and the non-formal schools to some extent use different textbooks. These textbooks are supposed to be prepared following the national curriculum reflecting the attainable competencies. The NGOs often claim that they follow the national curriculum and their textbooks are competency based. BRAC-published textbooks were examined about 10 years back and found that the competencies were well-covered in them (Ghosh 1999). Thus, the basis for comparison among six different types of primary education provision is the national curriculum and the attainable terminal competencies, which the sub-systems are supposed to follow. Valuing the importance of comparison among the sub-systems to understand the whole system better, these were relatively the best elements to make a basis for comparison.

The following are some specific strengths of this study:

1. Studies on learning achievement specifically done under the auspices of DPE, covered only the government and registered non-government primary schools. In addition, this study considered four other types of primary schools. Of these, non-formal schools were also considered in *Watch 2000* but the ebtedayee and the high madrasas and the high schools were the new addition for the *Education Watch 2008*. Such an expansion of types of schools strengthened the national estimate. This not only provided estimates of competency achievement of the students of six different types of schools but also created opportunity in their comparison.

2. The 2000 study on quality of primary education considered only three types of schools which enrolled 86.5% of the total primary school students of that time. The six types of schools considered in this study collectively enrolled 93.5% of total students at primary level of present time.
3. Use of the same test instrument in two different years following the same sampling procedure provided opportunity to see the progress over time not only at the national level but also by school type and for urban and rural schools.
4. Use of the same instrument, definition, sampling procedure and analytical technique regarding the estimates from household surveys for the fourth time under *Education Watch* is unique. This not only provided recent statistics on participation in primary education and its correlates but also made opportunity to analyze trends over time. Trends analyses for various sub-groups of population in-terms of geographical locations, gender, socioeconomic status and parental education are other significant dimensions of this *Watch*.
5. National databases created by BBS, DPE and BANBEIS were used as sampling frame. Although the school lists were not complete and the field investigators faced some difficulties due to this. However, the databases made the tasks easier in respect to sampling of educational institutions and having national estimates and generalization of the findings.

The following are some specific limitations of the study:

1. Although the coverage of the competency achievement part of the study improved over time, comparison for four types of schools, viz., community schools, experimental schools, English medium schools and the un-registered primary schools were still not possible. Except for the English medium schools, other three types follow the national curriculum. Inclusion of the English medium schools might cause problem in terms of basic equivalency for comparison. Whatever the case is, absence of 6.5% of the total primary school population is a reality and introduced some errors for the national estimate.
2. The students under test were not informed earlier. This, however, did not create any limitation in statistical sense but might have influenced their performance. If the students got prior notice, they could have done better with due preparations. Taking the test just before the annual examination, however, reduced such error at least to a certain level. More importantly, it might not be ethically sound to take learning achievement test of the students without allowing adequate preparation.
3. The test of the students assessed only the cognitive aspect of the competencies. Other domains of education such as affective and psychomotor were not included in the test instrument. This hampered discovery of full potentials of the students. One can not ignore errors due to partial assessment of students' skills and competencies gained through primary education.
4. Correctness of all estimates based on the household surveys depended on correct reporting of age by the respondents. However, it was the most difficult and time consuming part in the survey. Although all measures were taken to collect the 'best' estimated age (following the procedures developed by the demographers) some errors can not be ruled out.



## Chapter 3

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### Educational Facilities and Learning Provisions

Setting up of schools and creating enable conditions for learning are the basics of any education provision. Physical facilities, curricular and co-curricular activities, teachers and their education and training, and teaching-learning provisions are the major issues discussed in this chapter. Improvements in these parameters are evident over the past decade. However, inequity exists between various types/streams of educational institutions, schools within a type and by location of institution. Late attendance of teachers in schools and increase in private tutoring are two of the key challenges. Reduction of inequities in facilities is a key to further improvement in quality.



Starting with the location and history, this chapter explores the educational provisions and learning facilities that are available in different types of primary level institutions. The teachers, their education and training, attendance and teaching loads captured a significant portion of this chapter.

### A. Location and history of schools

The educational institutions under this study were established in different times. The history of a few (less than 2%) of the schools went back to over a century. The government primary schools were older than others. The non-formal primary schools are the most recent entrants. However, it should be mentioned that the government schools were originally established by communities but later they were taken over by the State in 1974 through an ordinance (GoB 1974). The oldest school under this study was established 139 years ago, in 1870. Over 28.6% of the schools were established on or before 1974, nearly a quarter during Pakistan period (1948-1971), 37% during 1972-1990 and 10% after 1990 (Annex 3.1). On an average, the schools were established about 44 years ago. School-type wise this average were as follows: government primary schools 63.5 years, primary-attached high schools 49.8 years, ebtedayee-attached high madrasas 33.6 years, non-government primary and the ebtedayee madrasas about 25 years and the non-formal schools four years. It is to be noted that in case of the madrasas, the institutions first started with ebtedayee section and soon moved to the secondary and higher levels. Thus, all the high madrasas in the country had ebtedayee section attached to those. It may be pointed out that nearly 93% of the non-government primary schools, 82.7% of the ebtedayee madrasas, 64% of the high madrasas, and about half of the high schools were established after the Independence of Bangladesh. This indicates a major expansion of primary education in recent years.

The average distance of the schools from the *upazila* centres provides an indication of the concentration or dispersion of different types of educational institutions in the *upazilas*. The average distance of the study schools from the respective *upazila* centres was 11 kilometres. About a quarter of the schools were within five kilometres of the *upazila* centres, 38% between 5-10 kilometres, about a fifth between 10-15 kilometres and 17.7% beyond 15 kilometres (Annex 3.2). The primary-attached high schools were relatively closer to the *upazila* towns, 72.7% being within five kilometres. This was not the case for any other types of educational institutions. This means that the high schools having primary section attached to them were mostly concentrated to the *upazila* towns. In terms of average distance between the schools and the *upazila* towns, no difference was found between the government schools, ebtedayee madrasas and the ebtedayee attached to high madrasas. Non-formal primary schools were expected to be far away of the *upazila* centres but this was not the case.

Apart from the distance the extent of difficulty to reach the schools was also assessed. A three point scale was used: *easy to reach*, *moderately difficult to reach* and *hard to reach*. If the school could be reached by road most of the times of a normal year it was considered as *easy to reach*. If there were some obstacles like agricultural fields or small water body in between the school and the *upazila* town it was considered as *moderately difficult*, and if the way was under water for major parts of the year or big water bodies or hilly areas in between it was considered as *hard* to reach. Note that difficulty to reach school from home of the students was not assessed. Anyways, it was found that nearly three-fifths of the schools under the study fell in *easy to reach* category, a quarter *moderately difficult to reach* and 15% *hard to reach* (Annex 3.3). A fifth or more of the non-government schools, ebtedayee

madrasas and the ebtedayee-attached to high madrasas were *hard to reach*. This was 16.4% in case of the non-formal primary schools. Around 8% of the government primary schools and the primary attached to high schools fell in this category. Eighty-five percent of the primary-attached to high schools was *easy to reach* from the *upazila* towns. Most of the primary educational institutions were co-educational except for ebtedayee-attached high madrasas where three-quarters of them were co-educational.

## B. Physical facilities

Physical facilities provide necessary environment for carrying out the functions of the schools. School structure, classrooms, play ground, garden, electricity, water and sanitation, etc. are some of those which create such an environment. Except for the non-formal primary schools most of the other schools were established in their own lands (Table 3.1).

*School structure and classrooms:* On an average, the surveyed schools had 1.6 structures (Table 3.1). The primary-attached high schools and the high madrasas had respectively 2.8 and 2.7 structures. The number of the structures in the government schools was two and it was 1.2 in the non-government schools. The non-formal schools had single structure with only one room each. The average number of classrooms in the study schools was 3.4. More than five classrooms were used for primary level education in the high schools and the madrasas. The government primary schools, on an average, had 4.6 classrooms, ebtedayee madrasas 3.7 and the non-government primary schools had 3.2 classrooms. Only 16.1% of the school structures were friendly to the physically disabled students, with highest proportion in the government schools (34.2%) and none in the non-formal and ebtedayee attached to high madrasas.

Majority of the schools (87.3%) had one room each to use for the head of the institution and the other teachers. Nearly eight percent of the institutions had independent rooms for the heads and the teachers and 5.15% had none. The non-formal schools were not considered in this. Independent rooms for the heads of the institutions were found mostly in the primary-attached secondary educational institutions. For instance, 52.2% of the high schools and 23% of the high madrasas had independent arrangement for the heads. In cases where there was no separate space for the teachers, the situation of the ebtedayee madrasas was the worst.

Information on construction materials of the classrooms was collected. On an average, 60% of the primary classrooms were fully made of brick, 28.4% partially of brick and 11.2% were built with other materials such as corrugated iron sheets and hemp. School type-wise analysis shows that majority of the government and non-government primary schools and the high schools were fully made of brick or a combination of brick and corrugated sheets. On the other hand, majority of the madrasas and the non-formal schools were made of materials other than brick (Table 3.1).

Whatever the construction materials were, assessment of the classrooms in terms of their condition was done on a five point scale. The points in the scale were *fully satisfactory*, *major portion satisfactory*, *half satisfactory*, *major portion dilapidated* and *fully dilapidated*. On an average, 58.7% of the classrooms were *fully satisfactory*, majority of which were government primary, non-government primary and the high schools. Among others, major portions of 23.5% of the classrooms,

**Table 3.1**  
*School structure and classroom conditions by school type*

Indicators	School type						All
	Government	Non-govt.	Ebte-dayee	Non-formal	High school	High madrasa	
Having own land (% of schools)	97.3	97.6	100.0	0.0	98.5	100.0	98.1
<b>Structure and classrooms</b>							
Mean no. of structure	2.0	1.2	1.4	1.0	2.8	2.7	1.6
Disable friendly structures (%)	34.2	2.4	1.9	0.0	3.0	0.0	16.1
Mean no. of classrooms	4.6	3.2	3.7	1.0	5.3	5.7	3.4
Teachers room (% of schools)	97.3	97.6	73.4	0.0	100.0	100.0	95.1
<b>Classroom construction materials (% of classrooms)</b>							
Fully brick	67.6	90.0	14.0	13.0	59.9	23.2	60.0
Brick and tin-coated iron sheet	31.5	6.3	39.4	13.0	29.6	38.4	28.4
Tin-coated iron sheet and others	0.9	3.7	46.6	73.9	10.5	38.4	11.2
<b>Conditions of classrooms (% of classrooms)</b>							
Fully all right	70.1	65.9	17.8	38.6	63.3	25.8	58.7
Major parts all right	20.3	22.2	20.8	31.4	19.3	33.5	23.5
Half part all right	5.8	9.6	27.5	21.4	11.9	29.0	12.0
Major part dilapidated	1.7	2.2	31.4	5.7	5.5	10.3	4.2
Fully dilapidated	2.0	0.0	2.5	2.9	0.0	1.4	1.5
<b>Having play ground and flower garden (% of schools)</b>							
Having play ground	78.7	80.7	64.8	0.0	92.5	95.4	79.8
Having flower garden	8.0	9.5	3.8	0.0	23.9	9.2	8.5

Source: Education Watch Educational Institution Survey, 2008

half of the 12% of the classrooms were *satisfactory*; however, major portions of the 4.2% of the classrooms and full of 1.5% of them were dilapidated.

*Natural light and air and electricity facility:* Close observation of the classrooms gave a sense that almost all had good flow of natural air and light in normal weather (Table 3.2). However, these were not enough in a cloudy or rainy day. Nearly 40% of the schools under survey had electricity in the school. The primary-attached high schools were more privileged with 88% of them having electricity facility. The ebte-dayee-attached high madrasas followed them with 64.4% having such facility. Among others, 44.7% of the government primary, a quarter of the non-government primary and below a fifth of the ebte-dayee madrasas had electricity in the school premises (Table 3.2).

Having electricity in the school premises did not necessarily mean that the classrooms had electric lights and fans. Only 25.5% of the classrooms had electric lights and 24% had fans (Table 3.2).

**Table 3.2**  
*Electricity in school and light, air and fan in the classrooms by school type*

Indicators	School type						All
	Government	Non-govt.	Ebte-dayee	Non-formal	High school	High madrasa	
Electricity connection in school (%)	44.7	25.0	19.0	0.0	88.1	64.4	39.3
<i>Natural light and air in classrooms (% of classrooms)</i>							
Light	96.3	99.6	99.2	93.0	97.8	99.8	97.6
Air	96.0	99.6	99.2	88.6	98.9	99.6	97.3
<i>Electric light and fan in classrooms (% of classrooms)</i>							
Light	29.7	19.3	21.2	0.0	63.4	15.7	25.4
Fan	27.7	15.1	18.6	0.0	71.5	17.1	24.1

Source: Education Watch Educational Institution Survey, 2008

The primary-attached high schools were most fortunate in terms of having electric lights and fans in the classrooms, followed by the government primary schools. As none of the non-formal schools had electricity, there was no question of having lights and fans.

*Water and sanitation:* Pure drinking water and hygienic sanitation system are very much important for the schools. Most of the high schools and the high madrasas had their own tube wells or pipe water facility. Over three-quarters of the government schools, 54.8% of the non-government schools and 55.8% of the ebte-dayee madrasas had such facilities (Table 3.3). Only 6% of the non-formal primary schools had this facility but 75.8% had access to tube wells or pipe water facilities through the neighbouring households. A third of the ebte-dayee madrasas used water facility of the neighbouring schools or households. In some schools, water was stored in jars for use. On an average, 53.8% of the study schools had their own tube wells or pipe water facilities, 32.5% used such facilities of the neighbours, 7.9% stored water in jars and 5.8% schools had no facility.

Nearly 35% of the primary schools had toilet facilities separately for girls and boys (Table 3.3). In 35.6% of the schools they had to share the same toilet. Over a quarter of the schools had no toilet facility. Thirty-eight percent of the ebte-dayee madrasas and 83.6% of the non-formal schools fell in this category. The girl students of high schools and the high madrasas were more fortunate as many had separate toilet facility for them. Only a fifth of the school toilets were found to be hygienic, over a third moderately hygienic and a fifth unhygienic. The toilets of the high schools, high madrasas and the government primary schools were relatively cleaner and hygienic than others.

Separate toilet facility for the teachers was found in 94% of the high schools, 75.9% of the high madrasas, 60% of the government primary schools, 29.8% of the non-government primary schools and 21% of the ebte-dayee madrasas. Only 6% of the primary-attached high schools and 2.7% of the government primary schools had toilet facility for the disabled. This means that only an insignificant number of primary schools had toilet facility for the disabled.

*Play ground and garden:* These two facilities are essential for physical and mental development of the children. Having a flower garden in the premises of the government and non-government

**Table 3.3**  
*Drinking water and sanitation facilities in schools by school type*

Facilities	School type						All
	Government	Non-govt.	Ebte-dayee	Non-formal	High school	High madrasa	
<i>Drinking water facilities (% of schools)</i>							
Own tube well or pipe water	78.7	54.8	55.8	6.1	91.0	97.7	53.8
Neighbours tube well/pipe water	13.3	21.4	34.6	75.8	7.5	2.3	32.5
Water stored in jar	8.0	11.9	2.9	9.1	1.5	0.0	7.9
No facility	0.0	11.9	6.7	9.1	0.0	0.0	5.8
<i>Toilet facility for the students (% of schools)</i>							
Separate by gender	50.7	42.9	13.3	3.0	53.7	73.6	34.8
Same for both	46.7	50.0	46.7	13.4	14.9	21.8	35.6
Only for boys	0.0	0.0	1.9	0.0	7.5	0.0	0.3
Only for girls	2.7	0.0	0.0	0.0	22.4	4.6	1.5
No facility	0.0	7.1	38.1	83.6	1.5	0.0	27.8
<i>Cleanliness of toilet (% of schools)</i>							
Hygienic	32.0	19.3	8.6	3.0	44.8	35.6	20.0
Moderately hygienic	46.7	49.4	28.6	6.0	46.3	57.5	35.7
Unhygienic	21.3	24.2	24.7	7.4	7.4	6.9	19.0
No facility	0.0	7.1	38.1	83.6	1.5	0.0	25.3
<i>Separate toilet for teachers</i>	60.0	29.8	21.0	0.0	94.0	75.9	
<i>Toilet facility for the disables</i>	2.7	0.0	0.0	0.0	6.0	0.0	

Source: Education Watch Educational Institution Survey, 2008

primary schools is mandatory but only 8% had these. Nearly 80% of the schools had play ground (Table 3.1). School type-wise, over 90% of the high schools and the high madrasas, around 80% of the government and non-government primary schools and nearly two-thirds of the ebte-dayee madrasas had play ground. Flower garden was found in the premises of 23.9% of the high schools and less than 10% of the other schools. None of the non-formal primary schools had play ground or flower garden.

*Cleanliness of school surroundings:* Two things were used as indicators for this: floors of classrooms and corridors and walls of school structures. Floors of 62% of the schools were found to be clean, dusts on floors were found in 19% of the schools and both dusts and waste papers on the floors in another 19% of the schools (Table 3.4). Walls of nearly two-thirds of the schools were painted and clean. The walls were painted but not clean in case of 19.6% of the schools. In about 12% of the schools, the walls were not painted but clean.

The non-formal schools were much ahead in keeping the floors clean. Clean floors were found in mostly all the schools of this type. The high schools, government primary schools and the high madrasas were mostly equally behind the non-formal schools with more than half of the floors clean. In keeping the walls clean, the government schools, non-formal schools and the high schools were equally ahead of the others with more than 80% having clean walls.

**Table 3.4**  
*Cleanliness of school surroundings by school type*

Indicators	School type						All
	Government	Non-govt.	Ebte-dayee	Non-formal	High school	High madrasa	
<i>Floors of classrooms/corridor (% of schools)</i>							
Dust and waste papers on floors	22.7	32.5	41.0	0.0	10.4	10.3	19.0
Dust on floors	24.0	21.7	24.8	3.0	34.3	37.9	19.0
Clean floors	53.3	45.8	34.3	97.0	55.2	51.7	61.8
<i>Walls of classrooms/corridors (% of schools)</i>							
Clean and painted wall	76.0	67.1	32.4	62.1	71.6	63.2	65.6
Painted but unclean wall	18.7	30.1	30.4	9.1	16.4	20.7	19.6
Not painted but clean wall	5.3	2.4	21.9	25.8	7.5	6.9	11.9
Not painted and unclean wall	0.0	0.0	15.2	3.0	4.5	9.2	2.9

Source: Education Watch Educational Institution Survey, 2008

*Classroom space:* Classroom capacity was assessed by the field research assistants on the basis of a modest criterion of 18 inches of space per student on a bench or a mat. On an average, each classroom under survey had capacity of 37 of the 41.2 students found in the school registers. This means that 90% of the admitted students could seat with ease if all of them attended. This rate was 92% in the rural schools and 83% in the urban schools (Table 3.5). Classroom space of the government and the non-government schools was very close to the national average. Two-thirds of the admitted students in the madrasas, all of them in the high schools and 78.7% in the high madrasas could seat with ease. Classroom space in the non-formal schools was better than any other system. Note that the average number of students admitted in the non-formal schools was the lowest (only 28.3).

**Table 3.5**  
*Seating capacity in the schools by school type and area*

School type and area	Number of classrooms surveyed	Mean number of students		Percent of students can seat with ease
		Enrolled	Can seat with ease	
<i>School type</i>				
Government school	415	43.7	39.7	90.7
Non-govt. school	399	37.0	33.5	90.5
Ebtedayee madrasa	357	34.5	23.0	66.6
Non-formal school	72	28.3	30.9	109.1
High school	309	44.3	44.3	99.9
High madrasa	397	35.4	27.9	78.7
<i>Area</i>				
Rural	1,075	38.9	35.8	92.0
Urban	874	51.2	42.5	83.0
All	1,949	41.2	37.0	89.9

Source: Education Watch Educational Institution Survey, 2008

### C. Learning facilities

Learning facilities and provisions examined included library, materials display room, quality of blackboards and additional tutorial support provided to the students.

*School libraries:* Only 2% of the surveyed schools had a library. School library was found in 5.3% of the government primary schools and 13.2% of the primary-attached high schools. The non-formal schools had no library but all of them had some supplementary books and other reading materials kept in a box. Separate room furnished with materials displayed was found in only 7.4% of the primary attached to high schools. The other types of schools had no such display.

*Quality of blackboards:* Blackboards with varying quality were found in each classroom under survey. On an average, nearly 80% of the classrooms had good quality blackboards, meaning that legible writing was possible in all parts of these blackboards. More than half portion of the blackboards were with good quality in 12% of the classrooms, less than half portion of the blackboards in 3% of the classrooms was of good quality and mostly dilapidated or no blackboard was found in 5.3% of the classrooms (Table 3.6).

**Table 3.6**

*Percentage of classrooms by school type and quality of blackboards*

School type	No. of classrooms	Quality of blackboards			
		Can write all parts of the board brightly	Can write more than half of the boards brightly	Can write less than half of the boards brightly	Mostly damaged or no board in the classroom
Government primary	368	80.2	10.3	2.9	6.6
Non-govt. primary	273	79.3	14.8	3.7	2.2
Ebtedayee madrasa	272	44.1	16.9	9.3	29.6
Non-formal primary	71	90.0	10.0	0.0	0.0
High school	341	78.2	12.2	3.6	6.1
High madrasa	441	79.2	14.5	2.8	3.4
All	1,766	79.6	12.1	3.0	5.3

Source: Education Watch Educational Institution Survey, 2008

School type-wise analysis shows that 90% of the blackboards of the non-formal schools and only 44.1% of the blackboards in the ebtedayee madrasas were with good quality. Mostly equal proportions of the blackboards of other types of schools were with good quality. Nearly 30% of the classrooms in the ebtedayee madrasas had dilapidated or no blackboards.

*Additional tutoring:* Considering the need of the first generation learners in the primary classes, it is required to arrange additional tutoring for them; mostly after the school hour. Owing to increased competition in primary scholarship examinations, schools also arranged special tutorial support to the scholarship examinees. Such support was provided during or after the school hours. Of the schools under survey, 16.4% had additional tutorial to all children in general, in which the non-formal schools were much ahead of the others. Special tutoring for the scholarship examinees was arranged in over 52% of the schools and both types of support were provided in a fifth of the schools. The government

and the non-government primary schools were ahead of the others in providing special tutorial support for the scholarship examinees followed by the high schools and the high madrasas (Table 3.7).

**Table 3.7**  
*Percentage of schools offered additional tutorial support by school type*

Type of school	Number of schools	Types of additional tutorial support			
		General coaching	Coaching for scholarship examinees	Both	None
Government primary	71	10.5	63.2	26.3	0.0
Non-govt. primary	80	4.8	71.4	16.7	7.1
Ebtedayee madrasa	74	1.9	45.7	4.8	47.6
Non-formal primary	69	43.3	20.9	23.9	11.9
High school	66	4.5	65.7	9.0	20.9
High madrasa	80	0.0	65.5	9.2	25.3
All	440	16.4	52.0	20.2	11.3

Source: Education Watch Educational Institution Survey, 2008

Very few schools charged for additional tutoring for the weak or first generation learners but 18.4% of the schools charged for tutoring for scholarship examinees. Nine percent of the government primary schools, 13.5% of the non-government primary schools, 16.7% of the ebtedayee madrasas, half of the non-formal primary schools, 40% of the primary-attached high schools, and 15.4% of the ebtedayee-attached high madrasas charged money of varying amount to the scholarship examinees.

*Private tutoring:* In addition to the schools' efforts, the parents also arranged paid private tutoring for their wards. In 2008, 38% of the primary school students availed such tutoring at home or the private tutors' homes or in the coaching centres. This rate was 40.3% among the boys and 35.8% among the girls ( $p < 0.001$ ). Fifty-six percent of the urban students and 35.5% of their rural counterparts availed private tutoring ( $p < 0.001$ ). Gender difference with a higher rate for the boys than the girls was observed among the rural students (37.8% vs. 33.2%;  $p < 0.001$ ). However, no such difference was found among the urban students. An increased trend was observed in the incident of private tutoring when data were analyzed by class. About a quarter of the students of class I had private tutor, which was 42.1% among the students of class III and 52.7% for those of class V.

School type-wise analysis shows that the incidence of paid private tutoring was highest among the students of the English medium schools (71.1%) and lowest among non-formal primary schools (12.3%). Nearly 65% of the primary-attached high school students, 41.3% of those in government primary schools, 35.7% of those in non-government primary schools and 28.2% madrasa students had private tutors.

#### **D. Co-curricular activities**

*Annual sports and Cub activities:* Information on annual sports in the schools was collected for the last five years 2004-8. The non-formal schools were less likely to arrange such activities for the students.

Although a majority of the other types of schools arranged annual sports it tended to decrease over time. For instance, on an average, over 70% of the schools arranged annual sports during 2004-6, which was 69.6% in 2007 and 53.4% in 2008 (Annex 3.4). One plausible reason for such drastic reduction in 2008 is that the teachers and the schools remained busy with the countrywide voter list preparation for the general elections held at the end of 2008.

Less than half of the primary educational institutions had Cub activities. The non-formal schools unfortunately had no such activity. The ebteyadee madrasas also had very little. Nearly two-thirds of the government schools, 52.4% of the non-government schools, 47% of the primary-attached to high schools, 22.7% of the ebteyadee-attached to high madrasas had Cub activities (Annex 3.4).

*Fine arts classes:* Drawing and paintings are among the special features and strengths of non-formal education provision. However, the heads of the other educational institutions also reported that fine arts classes were arranged in their schools. On an average, 47.3% of the educational institutions had fine arts classes for the students of grades I and II, this was 49.8% for the students of classes III to V (Annex 3.5). Over 80% of the government and non-government schools, two-thirds of the primary attached high schools, 13.4% of the ebteyadee madrasas and 6.9% of the high madrasas were reported as having provision for fine arts classes for the primary students.

### E. The primary teachers

The teachers play the main role in enhancement of learning provisions in school setting. It is not possible to achieve quality education without the teachers committed to it. Committed teachers can bring all concerned- individuals and institutions, in the journey of quality education. It is thus important to understand them, their education and training, teaching load, teacher-student ratio, etc.

*General information:* On an average, each educational institution under survey had 5.1 teachers, the mean number ranged from one in non-formal schools to 9.1 in the primary-attached high schools (Table 3.8). The government primary schools had, on an average, 5.2 teachers, non-government

**Table 3.8**  
*Some general information about the teachers by school type and gender*

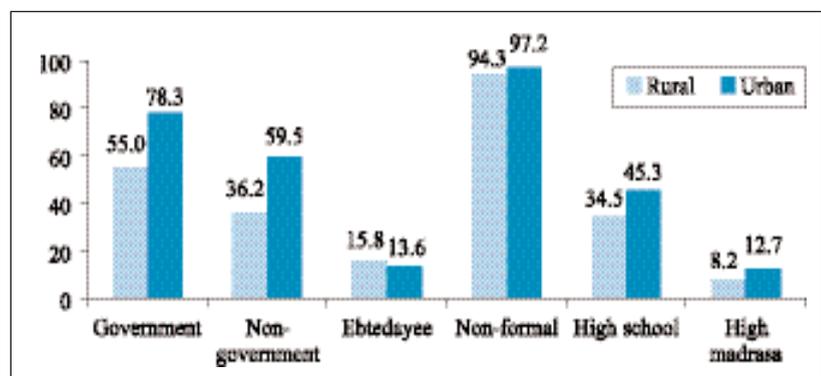
School type and gender	No. of teachers	Mean per school	% Females	% Ethnic minority	% Non-Muslim	% present in school
<i>School type</i>						
Government school	429	5.2	58.1	3.3	20.6	85.9
Non-government school	321	3.9	37.2	0.0	18.4	89.6
Ebteyadee madrasa	347	4.7	15.6	0.0	1.5	80.8
Non-formal school	71	1.0	94.4	5.7	19.7	97.1
High school	612	9.1	40.6	1.7	20.5	93.0
High madrasa	601	7.3	8.4	0.3	1.3	93.2
<i>Gender</i>						
Female	881	-	-	2.8	20.6	84.8
Male	1,500	-	-	0.9	9.7	90.7
All	2,381	5.1	39.3	1.7	14.0	88.4

Source: Education Watch Educational Institution Survey, 2008

schools 3.9 and the ebtedayee madrasas 4.7. Except the non-formal schools, all categories of urban schools had more teachers than their rural counterparts (Annex 3.6). Note that, only those teachers who were teaching at the primary level of the high schools and madrasas were considered in this calculation.

Nearly two-fifths of the primary school teachers were females (Table 3.8). The proportion of female teachers was highest in the non-formal schools (94.4%) and lowest in the ebtedayee-attached high madrasas (8.4%). The female teachers catered 58.1% of the government school teaching staff, 37.2% of the non-government school staff and 15.6% of the ebtedayee madrasa staff. A big difference between urban and rural schools was found. On an average, 57.4% of the urban school teachers and 36.6% of those in rural areas were females. After the non-formal schools, urban government schools had the highest proportion on female teachers (78.3%), followed by the non-government schools in the same area (59.5%) (Figure 3.1).

**Figure 3.1**  
*Percentage of female teachers by school type and area*



Source: Education Watch Educational Institution Survey, 2008

Fourteen percent of all primary teachers were non-Muslims and 1.7% ethnic minorities (Table 3.8). The proportion of non-Muslims was 20.6% among the female teachers and 9.7% among the males. Around a fifth of the teachers of government, non-formal and high schools were non-Muslims. Less than 2% of the madrasa teachers were non-Muslims. The proportion of ethnic minority teachers was highest in the non-formal schools (5.7%) followed by the government schools (3.3%). Area-wise such analysis is provided in Annex 3.7.

*Educational qualifications:* Teachers educational qualifications in terms of years of schooling completed were collected. In this analysis, dakhil, alim, fazil and kamil were considered as equivalent respectively to SSC, HSC, bachelors and masters. On an average, the highest level of education of a fifth of the primary teachers was completion of secondary education, 29.9% higher secondary education, 31.2% bachelors, and 18.9% masters (Table 3.9). In other words, all teachers under survey had at least completed secondary education (SSC), 80% completed higher secondary education (HSC), 50.1% had bachelors degree and 18.9% had masters degree. The urban school teachers were more educated than their rural counterparts and the males were ahead of the females. The mean years of schooling of the primary teachers was 13 years. It was 13.7 years among the teachers of high schools and the high madrasas, around 13 years among the teachers of government schools and the ebtedayee madrasas, over 11 years among the teachers of no-government and non-formal primary schools.

Over 22% of the teachers received their highest level of education from the madrasas (Annex 3.9). This proportion was 24% among the rural teachers and 9.8% among the urban teachers. A third

**Table 3.9**  
*Percentage distribution of teachers by school type, area, gender and highest level of education*

School type, area and gender	Number of teachers	Highest level of education				Total
		Secondary	Higher secondary	Bachelors	Masters	
<b>School type</b>						
Government school	429	17.0	29.0	35.2	18.8	100.0
Non-government school	321	47.4	36.3	14.5	1.8	100.0
Ebtedayee madrasa	347	17.4	39.2	24.5	18.9	100.0
Non-formal school	71	54.9	33.8	11.3	0.0	100.0
High school	612	11.4	19.5	43.6	25.5	100.0
High madrasa	601	9.7	26.6	35.1	28.6	100.0
<b>Area</b>						
Rural	1,203	20.7	31.0	30.4	17.9	100.0
Urban	1,178	15.3	22.6	36.7	25.3	100.0
<b>Gender</b>						
Female	881	20.1	34.2	32.5	13.2	100.0
Male	1,500	19.9	27.1	30.4	22.6	100.0
All	2,381	20.0	29.9	31.2	18.9	100.0

Source: Education Watch Educational Institution Survey, 2008

of the male teachers and less than 5% of the female teachers received their highest education from the madrasas. School type-wise analysis shows that receiving highest degree from the madrasas was concentrated in the madrasa - both ebtedayee and higher. Little less than two-thirds of the teachers of these two types of institutions received madrasa education. None of the non-formal school teachers, 2.1% of the government school teachers, 5.2% of those of non-government schools and 6.4% of those of high schools received madrasa education.

There was a scarcity of science educated teachers in the primary schools. Twenty-eight percent of all teachers studied science at secondary level, 16.6% studied science at higher secondary level, 6.7% at bachelors level and 2.5% at masters level (Annex 3.10). Proportion of teachers educated in science was highest in the government primary schools, followed respectively by primary-attached high schools and non-government schools (Annex 3.11). Least proportion of such teachers was found in the non-formal schools; however, the madrasas were also closer to them.

*Training:* Teacher training varied from system to system. For instance, it is a 10 months long course for the government and non-government school teachers, but much shorter (2/3 weeks) for the non-formal school teachers. There was no obligation of training and thus no provision of it for the madrasa teachers. It was reported that the teachers received various different types of training; such as, certificate-in-education (C-in-Ed), bachelors of education (BEd), masters of education (MEd), diploma in education (Dip-in-Ed), and bachelors in physical education (BPED). Some teachers received more than one training and many received no training.

On an average, 38.7% of the teachers had no training, 58.4% received one training, 2.9% received two or three trainings. Half of the teachers received C-in-Ed and 7.9% received BEd (Table 3.10). Although C-in-Ed training was mandatory for formal school teaching, 81% of the government and 83.1% of the non-government school teachers had this training. Some teachers of these schools

**Table 3.10**  
*Percentage of teachers with various types of training by school type*

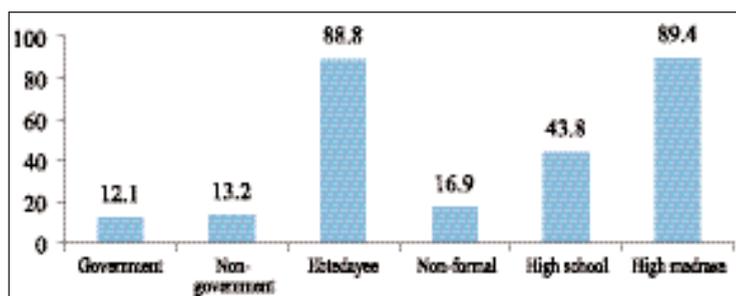
School type	Various types of training					
	C-in-Ed	BEd	MEd	Dip-in-Ed	Bp-Ed	Others
Government school	81.0	7.7	-	-	-	3.9
Non-government school	83.1	1.5	-	-	-	4.3
Ebtedayee madrasa	0.4	8.8	-	-	-	2.1
Non-formal school	0.0	2.9	-	-	-	82.9
High school	11.4	37.9	4.7	0.3	2.0	4.7
High madrasa	1.7	3.8	0.3	0.3	2.2	2.7
All	50.4	7.9	0.5	0.1	0.7	4.7

Source: Education Watch Educational Institution Survey, 2008

had BEd level training. Nearly 38% of the high school teachers had BEd training, 4.7% had MEd and 11.4% had C-in-Ed. Eighty-three percent of the non-formal school teachers had short courses arranged by the respective NGOs. Very few madrasa teachers had any training.

Let us take a look at the distribution of those who had no training. School type-wise, 12.1% of the government, 13.2% of the non-government, 16.9% of the non-formal, 43.8% of the primary-attached high school, 88.8% of the ebtedayee madrasa and 89.4% of the ebtedayee-attached high madrasa teachers received no training (Figure 3.2). Teachers' with no training was 40.3% in the rural schools and 28.4% in the urban schools. Twenty-four percent of the female teachers and 48% of the males had no training. Most of them were concentrated in the madrasas.

**Figure 3.2**  
*Percentage of teachers without training*



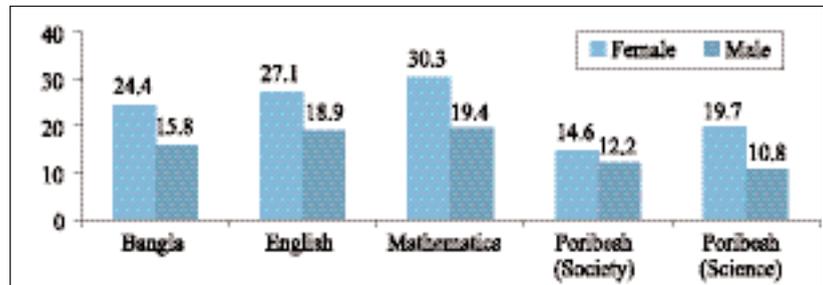
Source: Education Watch Educational Institution Survey, 2008

In addition to the basic teacher training discussed above, subject-based short trainings are also arranged for the teachers. Subject based training helps teachers to increase their skills in specific subjects. At the national level, 20.9% of the teachers received one subject based training, 16.1% received two, 8.7% received three, 1.9% received four, 1.2% received five and 51.2% none. 39.5% of the females and 58.5% of the males received no subject based training. Subject-wise analysis shows that 19.2% of the teachers received training in Bangla, 22.1% in English, 23.4% in Mathematics, 13.1% in *Poribesh Porichiti* (Society) and 14.3% in *Poribesh Porichiti* (Science). The female teachers

were ahead of their male counterparts in all subjects (Figure 3.3). The teachers of the government, non-government and non-formal schools were ahead of those of other three types in receiving subject based training (Annex 3.12).

There was no difference between the teachers of rural and urban schools in receiving subject-based training. However, school type-wise analysis shows some differences in a number of school types (Annex 3.13).

**Figure 3.3**  
*Percentage of teachers having training in various subjects by gender*



Source: Education Watch Educational Institution Survey, 2008

## F. Teachers' attendance

On an average, 88.4% of the primary school teachers were found to be present in school on the survey day; 84.8% for females and 90.7% for males (Table 3.8). The rate was 87.8% among the rural teachers and 92.3% among the urban teachers. The teachers' attendance rate was highest in the non-formal schools (97.1%) and lowest in the ebte dayee madrasas (80.8%). Among others, 14.1% of the government school teachers and 10.4% of those in the non-government schools were absent in school on the survey day. Rural-urban difference in teacher attendance for each type of school is given in Annex 3.7.

Various reasons behind teachers absenteeism was reported by the heads of the institutions. Of the primary teachers, 5.6% was on leave on the survey day, 2.7% was on training, 0.4% did not come to school as they were on official duty and 2.9% was absent un-noticed (Annex 3.8). Unannounced absenteeism was highest in the ebte dayee madrasas (10.6%) and absenteeism due to training was highest among the government primary school teachers (5.1%).

Actual time of attendance was collected for those teachers' who were present in the school on the survey day; it was then matched with the schools' official start time. It was observed that the schools' start time varied from 7 am to 12 noon; however, some non-formal schools started in the afternoon. Majority of the schools started in between 9-10 am - 28% at 9 am, 30.6% at 9.30 am and 17.4% at 10 am. Over 12% of the schools started at 8 am.

The deviation between the schools' start time and the teachers' time of presence was categorized into four: before school started, on exact time, within 10 minutes of school started and after 10 minutes of school started. Overall, irrespective of school type, 40% of the primary teachers came to school before the school started, 17.5% came on the exact time, 15.7% came within 10 minutes of school started and 26.9% came after 10 minutes of school started. Other way, 57.5% of the teachers' came to school on or before the schools started and 42.5% were late. About half of the female teachers and 38.3% of the male teachers were late on the survey day. This rate was 44.2% among the teachers of the rural schools and 31.9% among those in the urban schools. The late teachers, on an average, came to schools about half an hour after the schools started. This estimate was higher for the male teachers

than their female counterparts (31.4 minutes vs. 27.8 minutes) and for the rural teachers than those in urban schools (30.1 minutes vs. 28 minutes).

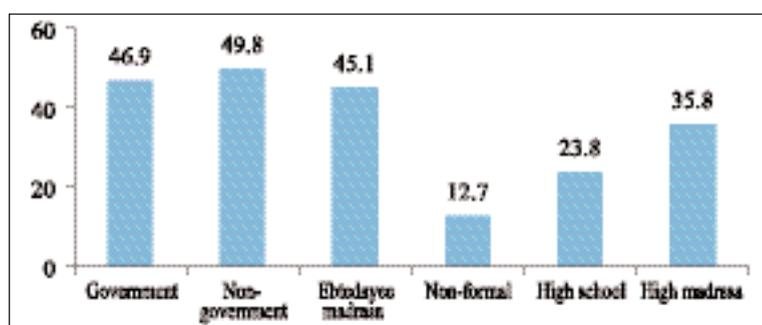
**Table 3.11**  
*Percentage distribution of teachers by time of presence in school, gender and area*

Time of teachers presence in school	Gender		Area		All
	Females	Males	Rural	Urban	
Before the school started	36.7	41.8	38.0	52.5	40.0
On exact time	13.4	19.8	17.8	15.6	17.5
Within 10 minutes of school started	19.6	13.4	16.6	9.7	15.7
After 10 minutes of school started	30.3	24.9	27.6	22.2	26.9

Source: Education Watch Educational Institution Survey, 2008

The non-government primary schools were at the top with about half of its teachers' late attendance; followed respectively by the government primary schools (46.9%) and the ebteyee madrasas (45.1%). The non-formal schools were the best in this regard; only 12.7% of the teachers of these schools came late on the survey day. The high schools had the second best situation and the high madrasas the third (Figure 3.4). More analysis on this is provided in Annex 3.14. The average amount of time that the teachers were absent from school was highest for the ebteyee madrasas (36.9 minutes), followed respectively by the non-government schools (35.3 minutes) and the government schools (30.4 minutes). This amount for the teachers of the non-formal schools and the primary-attached high schools was mostly the same (27-28 minutes) and it was least among the teachers of the ebteyee-attached high madrasas (21.3 minutes).

**Figure 3.4**  
*Percentage of teachers came to school late by school type*



Source: Education Watch Educational Institution Survey, 2008

An attempt was made to see whether there is any difference between the heads of the institutions and the other teachers. As there was no head teacher in the non-formal schools, they were excluded from this analysis. The heads of the institutions were more likely to attend in school late than their colleagues. On an average, 56.5% of the heads of the institutions and 42.2% of the other teachers came late (Annex 3.15). The average amount of time that the heads were absent was 39.8 minutes and it was 27.3 minutes for the other teachers.

## G. Teaching load and student-teacher ratio

Number of students per teacher and teachers work load affect teachers' overall performance in the classrooms. Information on number of students and teachers in each school and the number of classes taught by the teachers were used in preparing this section.

The teachers under the survey had to take varied number of classes ranging from zero to twelve. Such variation occurred more in urban schools than rural and in all types of educational institutions except the non-formal schools. It was found that some teachers who were powerful (socially or politically) did not take any class. Otherwise, some teachers had to attain more than one class at a time due to lack of teachers in the schools or the above mentioned reason. This increased the upper limit of the range. At the national level, the primary teachers had responsibility for 5.2 classes daily (Table 3.12). The female teachers were responsible for more classes than their male colleagues (5.8 vs. 4.8) and the rural teachers took more classes than their urban counterparts (5.4 vs. 4.2). School type-wise analysis shows that on an average, the non-formal school teachers were responsible for six classes daily and the teachers of government and non-government schools and the ebtedayee madrasas between five and six. The teachers of the primary-attached to secondary educational institutions had less work load than those in the independent primary educational institutions.

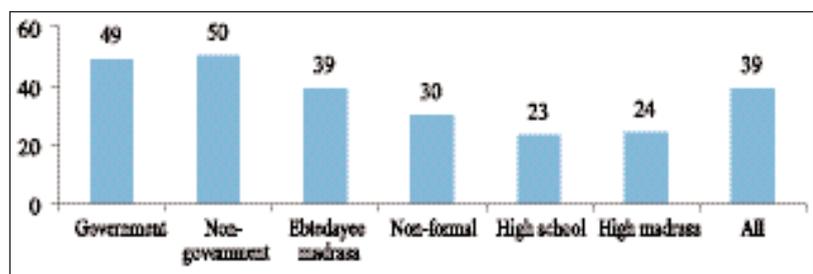
**Table 3.12**  
*Mean number of classes offered daily by a teacher by school type, gender and area*

School type	Gender		Area		All
	Females	Males	Rural	Urban	
Government	6.0	5.3	5.8	4.8	5.7
Non-government	6.6	5.6	6.0	5.4	5.9
Ebtedayee madrasa	6.3	5.4	5.3	5.2	5.5
Non-formal	6.0	6.0	6.0	6.0	6.0
High school	3.6	3.3	3.6	3.3	3.4
High madrasa	4.0	4.2	4.2	3.8	4.2
All	5.8	4.8	5.4	4.2	5.2

Source: Education Watch Educational Institution Survey, 2008

A favourable student-teacher ratio is important for any education system. From the current high number of students per teacher Bangladesh aims to make it 40 in all formal primary level educational institutions. However, the non-formal primary schools have been maintaining 30-33 students per teacher since inception. On an average, there were 39 students per teacher in the primary schools in the country with a variation of 23 in the ebtedayee-attached high madrasas to 50 in the non-government primary schools (Figure 3.5). The government primary schools had 49 students per teacher. It was 39 in the ebtedayee madrasas, 30 in the non-formal schools and 24 in the primary-attached to high schools. The student-teacher ratio was higher in rural schools than those in urban areas (40:1 vs. 36:1). Annex 3.16 provides urban-rural variation in student-teacher ratio by types of educational institutions.

**Figure 3.5**  
*Student-teacher ratio by school type*



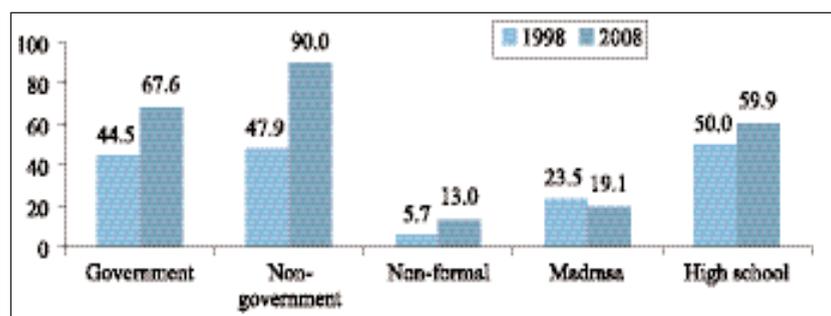
Source: Education Watch Educational Institution Survey, 2008

## H. Progress over time

It is not possible to examine changes over time in all the indicators presented above due to unavailability of data in the past primary educational institution surveys under *Education Watch*. Earlier, such surveys were done twice- in 1998 and 2000. Again, the types of institutions were fewer in earlier surveys. This section is thus limited to some common indicators for which information was collected in both 1998 and 2008.

Overall, the physical facilities in the primary educational institutions improved during the past ten years. The improvement can be seen in terms of number of classrooms, materials used for construction of school structures, water and sanitation facilities in schools, and seating capacity in the classrooms. Of the three common types of schools, the number of classrooms increased in two of them. The government primary schools had, on an average, 3.8 classrooms in 1998 which increased to 4.6 in 2008. The non-government schools had 3.0 classrooms in 1998 and 3.2 in 2008. No change was observed in the non-formal primary schools, which were always single room schools. On an average, construction materials of a third of the school structures were fully made of brick in 1998, which improved to 60% in 2008. Such improvement was found in government, non-government, non-formal and primary-attached high schools (Figure 3.6). Proportion of brick built structures down sized in the madrasas.

**Figure 3.6**  
*Percentage of schools with fully brick build structures by school type and year*



Sources: Education Watch Educational Institution Surveys, 1998, 2008

Improvement was also noticed in terms of source of drinking water in the schools. In 1998, whether it was pipe water or tube well, 47% of the schools had its own source of drinking water, which increased to 53.8% in 2008. Such improvement was highest in the government primary schools (18.7 percentage points), followed by the non-government schools (13 percentage points). Improvement was also noticed in separate provision of toilet facilities for boys and girls. In 1998, about a fifth of the primary schools had separate toilet facilities which increased to 34.8% in 2008. Proportion of schools with no toilet facilities also reduced over time. In 1998, less than a quarter of the government and non-government schools had separate toilet facilities for boys and girls which increased to respectively 50.7% and 42.9% in 2008. Improvement was also observed in the madrasas and the primary-attached to high schools.

In 1998, two-thirds of the students enrolled in school registers could seat with ease in the primary classrooms which increased to 89.9% in 2008. This happened due to two reasons. First, the size of the class reduced from 48.2 in 1998 to 41.2 in 2008 and second, seating facilities in schools increased - whereas, on an average, the classrooms had capacity to provide space to 32 students in 1998 which increased to 37 in 2008. However, the average number of students attending the

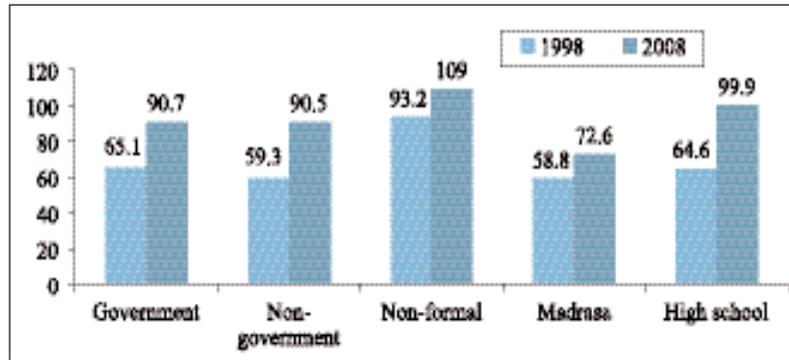
classrooms remained the same. School type-wise analysis shows that seating capacity increased in each type of primary schools during the past 10 years (Figure 3.7).

Average number of teachers per school increased slightly over time; however, a significant increase was observed in terms of proportion of female teachers, teachers' educational qualifications and professional training. On an average, there were 4.4 teachers in the government schools in 1998 which increased to 5.2 in 2008. No change was observed in the non-government or the non-formal schools. Proportion of female teachers in the primary education sector was 32% in 1998 which increased to 39.3% in 2008. Non-formal schools traditionally recruit female teachers, thus the highest proportion of female teachers was found in these schools in both time periods (Figure 3.8). On the other hand, the madrasas were conservative in this regard. Impressive improvement in recruiting female teachers was observed in the government primary schools (42.8% in 1998 to 58.1% in 2008) and the primary-attached to secondary schools (22.2% in 1998 to 40.6% in 2008).

Educational qualification of the teachers in all types of primary schools increased during the past 10 years. Nearly 24% of the non-formal school teachers and few in other types of schools had incomplete secondary education in 1998. However, in 2008 no such teacher was found in any of the schools. Proportion of teachers with master degrees increased in other types of schools. For instance, from 5.1% in 1998 to 18.8% in 2008 in the government primary schools and from 20% in 1998 to 25.5% in 2008 in the primary-attached high schools. National scenario of this is available in Table 3.13.

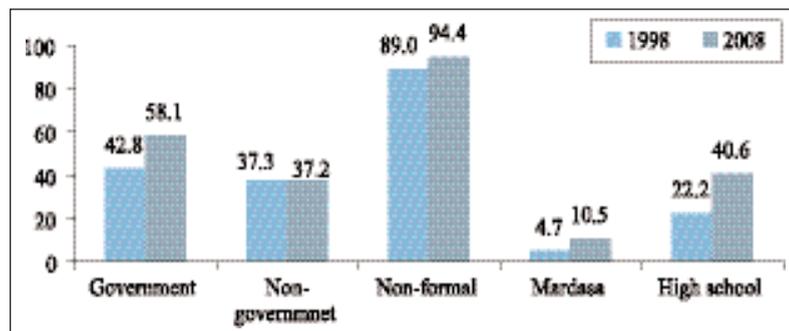
Overall, the proportion of trained teachers did not change much during the past 10 years probably because of retirement of many teachers and thereby entrance of new teachers. At the national level, 62.3% of the primary school teachers were trained in 1998 which marginally increased to 64.7%

**Figure 3.7**  
*Percentage of admitted students who could seat with ease by school type and year*



Sources: Education Watch Educational Institution Surveys, 1998, 2008

**Figure 3.8**  
*Percentage of female teachers by school type and year*



Sources: Education Watch Educational Institution Surveys, 1998, 2008

in 2008. However, school type-wise analysis shows much improvement in two types of schools, viz., the non-government primary schools and the primary-attached high schools (Figure 3.9). Improvement in the non-government primary schools was very impressive - from 25.9% in 1998 to 86.8% in 2008. Although the situation in the high schools improved but still there was lots of demand for teacher training. The madrasas were found in real crisis with about 90% teachers without any professional training. This sub-system could improve very little during the past 10 years in terms of training of the teachers.

The last issue is the student-teacher ratio. The number of students per teacher reduced significantly especially in the government primary schools (Figure 3.10). Whereas there were 73 students per teacher in 1998 in the government primary schools, it reduced to 49 in 2008. Reduction in student-teacher ratio was also noticed in the non-government primary schools. On the other hand, the number of students per teacher remained the same in the madrasas and the non-formal primary schools. Reduction in student-teacher ratio was due to three reasons: increase of teachers per school, reduction of students in schools and high dropout of students.

Private tutoring increased during the past decade irrespective of class, sex, area and school type. On an average, over a fifth of the primary students had private

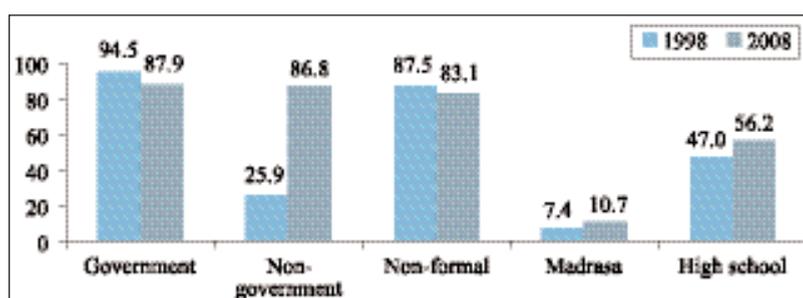
tutors during 1998-2000, which increased to 33% in 2005 and 38% in 2008. Incidence of private tutor was more among urban students than rural students and more among boys than girls throughout the

**Table 3.13**  
Percentage of teachers with highest level of education and year

Level of education	Year	
	1998	2008
Incomplete secondary	1.5	-
Secondary completed	20.5	10.0
Higher secondary completed	22.4	29.9
Bachelors completed	40.9	31.2
Masters completed	14.4	18.9
All	100.0	100.0

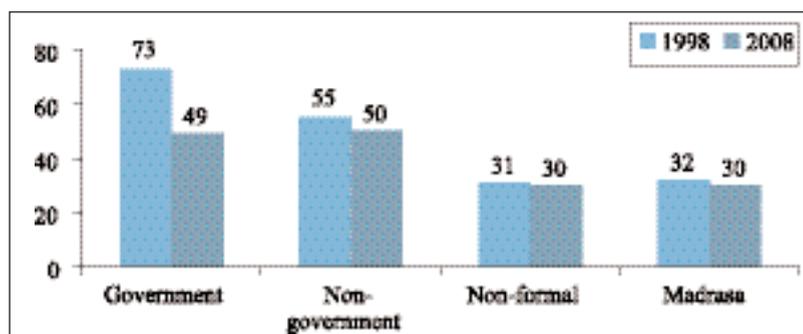
Sources: Education Watch Educational Institution Surveys, 1998, 2008

**Figure 3.9**  
Percentage of trained teachers by school type and year



Sources: Education Watch Educational Institution Surveys, 1998, 2008

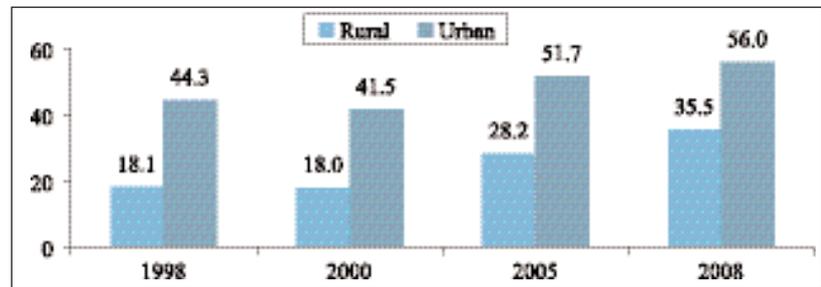
**Figure 3.10**  
Number of students per teacher by school type and year



Sources: Education Watch Educational Institution Surveys, 1998, 2008

decade. The urban-rural gap in availing private tutors reduced over time - 26.2 percentage points in 1998 to 20.5 percentage points in 2008 (Figure 3.11). This was due to faster growth of private tutoring in the rural areas than in the urban areas.

Figure 3.11  
Rural-urban gap in private tutoring by year



Sources: Education Watch Educational Institution Surveys, 1998, 2000, 2005, 2008

## I. Salient findings

The first step of any education system is to create appropriate facilities and provisions at the institution level. Following are the salient findings on educational facilities and learning provisions in the primary educational institutions.

- Overall, the physical facilities of the primary educational institutions improved during the past decade. The improvement can be noticed in terms of number of classrooms, quality of construction materials, water and sanitation facilities and seating capacity in the schools.
- Although the government primary schools were ahead of the others in terms of increasing the number of classrooms, it was the non-government schools which improved more than others in terms of quality of construction materials. On an average, the government schools had 3.8 classrooms in 1998, which increased to 4.6 in 2008. Overall, a third of the school structures were fully brick-built in 1998 which increased to 60% in 2008. The government and the non-government schools had respectively 44.5% and 47.9% fully brick-built structures in 1998. These figures increased respectively to 67.6% and 90% in 2008. Most of the classrooms were in good condition, others at various levels of dilapidation.
- Forty-seven percent of the primary schools had pipe water or tube wells as the source of drinking water in 1998 which increased to 53.8% in 2008. Such improvement was highest in the government schools (18.7 percentage points), followed by the non-government schools (13 percentage points). Overall, a third of the schools used drinking water facility of the neighbouring households or educational institutions and others stored water in jar or had no facility.
- In 1998, less than a quarter of the government and non-government primary schools had separate toilet facilities for boys and girls which increased to respectively 50.7% and 42.9% in 2008. Overall, 70% of the schools had toilet facility for the students, half of which had separate arrangement for boys and girls. A fifth of the school toilets were *hygienic* and 35.7% *moderately hygienic*.
- In 2008, only 16% of the school structures had provision for the physically challenged students' entry with the government schools much ahead of the others with 34.2% structures friendly for them. Toilet facility for such students was extremely negligible in all types of primary schools.

- Overall, two-thirds of the admitted students were able to seat with ease in the classrooms in 1998 which increased to about 90% in 2008. Two reasons could be identified for this; class size reduced from 48 in 1998 to 41 in 2008 and seating facility increased from 32 students per class in 1998 to 37 in 2008. Improvement of seating capacity was found in each type of primary schools except for the ebtedayee madrasas.
- Although about 80% of the primary schools had playgrounds in 2008, only 8.5% had flower garden within the school premises. Primary-attached high schools and high madrasas were top two types of institutions having these facilities. The non-formal schools had scarcity of both.
- Nearly 40% of the schools had electricity connection with substantial variation by school type but only a quarter of the classrooms had electric lights and fans. The primary-attached high schools were much better-off in this respect. The madrasas and the non-formal schools were way behind. However, irrespective of school type, almost all the classrooms had a good flow of natural light and air on a normal day.
- Floors and corridors of over three-fifths of the primary schools were found to be clean on the survey day of 2008. Dusts were found in the floors and corridors of nearly a fifth of the schools and rests had dust and waste papers on the floors. Walls of over three-quarters of the classrooms were clean. In terms of cleanliness, the non-formal schools and the primary-attached to high schools were ahead of the others.
- Blackboards of nearly 80% of the classrooms were in very good condition, meaning that legible writing was possible. Ninety percent of the blackboards of the non-formal schools and about 80% of those in the high schools and madrasas and government and non-government primary schools were in very good condition. This was only 44% for the ebtedayee madrasas.
- Over 16% of the schools organized general coaching for quality improvement of the students in different classes, 52% organized coaching only for the primary scholarship examinees. The non-formal schools were more likely to arrange general coaching and the others arranged coaching for the scholarship examinees. Nearly 90% of the government and non-government schools arranged coaching for the scholarship examinees. Overall, 18.4% of the schools, majority of which are high schools, charged money for such extra tutoring.
- Paid private tutoring increased during the past decade irrespective of class, sex area and school type. In 1998 and 2000, over a fifth of the primary school students had private tutors which increased to 31% in 2005 and 38% in 2008. The girls and the rural students lagged behind their counterparts in getting such support. Students of the English medium and the primary-attached high schools were far ahead of the others with over two-thirds availing this and the non-formal school students had the lowest incidence (12%). Nearly 53% of the students of class V had private tutor in 2008.
- Fine arts, singing and dancing are integral parts of non-formal school education. A half of the other schools had arrangement for art classes. Annual sports were arranged in 53.4% of the schools in 2008. Less than a half of the schools had Cub activities. Very few madrasas arranged

annual sports, Cub activities or art classes. Non-formal schools did not have any Cub activities or annual sports.

- Average number of teachers per government primary school increased from 4.4 in 1998 to 5.2 in 2008. No change was observed in the non-government or the non-formal schools. Overall, less than a third of all primary school teachers were female in 1998 which increased to 39.3% in 2008. Non-formal schools traditionally recruit female teachers; thus, the highest proportion of female teachers was found in them. Lowest proportion of female teachers was found in the madrasas (10.5%). Impressive improvement in the recruitment of female teachers was observed in the government schools and the primary-attached high schools. Female teachers were concentrated more in the urban schools than in the rural schools (57.4% vs. 36.6%).
- Educational qualification of the teachers also improved during the past decade. Nearly a quarter of the non-formal school teachers and few others in other types of schools had incomplete secondary education in 1998, no such teacher was found in 2008. Teachers with masters degree increased from 14.4% in 1998 to 18.9% in 2008. The female teachers were less educated compared to their male counterparts.
- More than 85% of the teachers of the government, non-government and non-formal schools had professional training, which was below 11% for the madrasas and 56% for the high schools. Impressive improvement in trained teachers was observed in the non-government primary schools (25.9% in 1998 to 86.8% in 2008).
- Less than a half of the teachers received one or more subject-based training. Subject-wise, 19.2% of the teachers received training in Bangla, 22.1% in English, 23.4% in mathematics, 13.1% in *Poribesh Porichiti* (society) and 14.3% in *Poribesh Porichiti* (science). Nearly 40% of the female teachers and 58.5% of the male teachers had no subject-based training.
- No change was observed in teachers' absenteeism; it was about 12-13% in both 1998 and 2008. About half of them were on leave. Teachers' late *attendance in schools* was observed as a serious problem. On an average, 42.5% of the primary teachers came to school late on the survey day. Mean amount of late time was half an hour. About half of the females and 38.3% of the male teachers were late. This was 44.2% among the rural school teachers and 31.9% in urban areas. Nearly half of the teachers of the government and non-government schools and ebte dayee madrasas, 35.8% of those in high madrasas, 23.8% in the high schools and 12.7% of the non-formal school teachers were late on the survey day.
- On an average, the teachers had to conduct 5.2 classes per day; this was highest in the non-government and non-formal schools (six classes each) and lowest in the high schools (3.4 classes each). The female teachers had to take a class more per day than the male teachers and the rural teachers had to take 1.2 more class than their urban counterparts.
- Student-teacher ratio at primary level improved over time. Overall, the ratio was found 39:1 in 2008. It reduced from 73:1 in 1998 to 49:1 in 2008 in the government schools and from 55:1 in 1998 to 50:1 in 2008 in the non-government schools. Very small change was noticed in the non-formal schools and the madrasas.





## Chapter 4

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### Management of Primary Institutions

Schools can be made successful if they are managed well. Management of educational institutions differs by type, composition and role of the managing committees. Although the role of the managing committees did not change much during the past decade but some improvements were evident, particularly in terms of proportion of females in the committees and training of the heads of the institutions. The committee members are often less educated than the teachers. Making school managing committees more functional for quality improvement is a challenge.



**M**anagement of educational institutions is vital for better functioning of any education provision. There are rules and regulations on how the managing committees should be formed and function (DPE 2008). This chapter examines management at the institution level, especially the composition, activities, participation of women, issues for discussion in the committee meetings and the profile and roles of the heads of the institutions.

### A. School managing committee

The school managing committees (SMC) play a very important role in managing the schools at the institution level. As the members of the committees are taken from the communities the SMCs also bridge the schools to the communities. Majority of the surveyed schools had managing committees; however, the size of the committees varied by school type. According to the concerned authorities, the government and non-government schools and the ebtedayee madrasas supposed to form managing committees of 11 members, the non-formal schools are of seven members and it is 12 members for the high schools and the high madrasas.

The 11 member committee comprised of two teachers from the school including the head, two local persons interested in education, land donor, a teacher from the nearest high school and five parents. If required, at most seven females can be included in the committee. The Ministry of Primary and Mass Education chalked out clear direction for formulation of the committee and its roles and responsibilities. If, for any reason, the full committee cannot be formed there is a provision of a four-member ad-hoc committee. The two major responsibilities of the committee are to mobilize resources at the local level and monitoring and supervision of school activities. The SMC has lots of potential opportunity to contribute in school development and its performance.

Our investigation shows that over 97% of the government primary schools, more than 90% of the non-government primary schools and the ebtedayee madrasas, all the non-formal schools and over 80% of the high schools and high madrasas had managing committees (Table 4.1). Except for a few government and non-government schools and the ebtedayee madrasas, all had the full committee in operation. All the non-formal schools and the high madrasas under survey also had full managing committees. However, some of the high schools could not form the full committee due to various reasons.

Nearly 26% of all SMC members were females. Traditionally the non-formal schools consider more females in the committees than males. Over three-quarters of the SMC members in the non-formal schools were females. On the other hand, an opposite scenario was observed in the madrasas.

**Table 4.1**  
*Some basic information about the school managing committees*

School type	% of schools having SMC	Average size of committee	% females	Mean years of schooling
Government school	97.3	10.8	19.8	10.1
Non-govt. school	92.9	11.0	13.5	8.8
Ebtedayee madrasa	94.3	10.2	3.0	9.9
Non-formal school	100.0	7.1	76.3	5.2
High school	83.6	9.1	8.1	13.0
High madrasa	83.0	12.1	2.2	11.8
All	95.3	9.8	25.9	9.0

*Source: Education Watch Educational Institution Survey, 2008*

Only 2.2% of the high madrasa SMC members and 3% of those in the ebte dayee madrasas were females. The females share was 19.8% in the government primary schools, 13.5% in the non-government primary schools and 8.1% in the primary-attached to high schools (Table 4.1).

*Educational qualifications:* The mean years-of-schooling of the SMC members was nine years. This was lower than the teachers' average which was 13 years. School type-wise analysis proved it true for each type of schools under study. The SMC members of the high schools had the highest educational qualifications and the non-formal schools the lowest. The heads of all five types of institutions and the teachers of the non-formal schools were ex-officio secretary of the school managing committees. It was evident that the presidents, vice-presidents and the executive members of the committees were less educated compared to the secretaries (i.e., the head teachers). On an average, the committee secretaries had 13 years of schooling, the presidents and the vice-presidents had 9.2 years of schooling and the executive members had 8.4 years of schooling (Annex 4.1). The male SMC members were more educated than the female members - the mean years of schooling being 9.6 and 7.3 respectively. Again, the SMC members of the urban schools were more educated than those of the rural schools (9.9 years vs. 8.9 years) (Annex 4.2).

*Occupations:* The main occupations of the SMC members were collected. Overall, a quarter of them were living on agriculture, 18.9% on business, 19.9% on teaching and 13.1% on service (Annex 4.3). The main occupation of 16.5% of the SMC members was housekeeping. Agriculture, service, business and teaching were the main occupations of the majority SMC members of the government and non-government schools and both types of madrasas. Service, business and teaching were the major occupations of the SMC members of the high schools. A fifth or more of the SMC members were involved in teaching. A different scenario was observed in the non-formal primary schools. Housekeeping was the main occupation of nearly three-fifths of the SMC members of these schools, teachers occupied 12.3% of the membership and 15.9% lived on agriculture. More analysis on this is available in Annex 4.4.

## **B. The heads of institutions**

In a formal setting, the roles of the heads of the institutions are significant. As the heads of the institutions they are responsible to distribute activities among the teachers and supervise the activities. In other words, day to day management of the educational institutions are the jurisdiction of the heads of the institutions. The other important role the heads play in the school managing committees as the ex-officio secretary of the SMCs. This section analyses some characteristics of the institution heads. As the non-formal schools were single teacher schools, they were excluded from this analysis. Note that the designation of the heads of the madrasas is superintendent.

Two percent of the study schools had no head; this was 2.7% of the government and 7% of the primary-attached high schools, and 2.9% of the ebte dayee madrasas. Among the institution heads, 21.6% were females, 10.6% non-Muslims and 1.2% ethnic minorities. Proportion of female head was highest in the government primary schools (38.4%), followed by the primary-attached high schools (16.1%) and the non-government schools (13.1%). Only 2% of the heads in ebte dayee madrasas and none in the ebte dayee-attached to high madrasas were females. Highest proportion of non-Muslim

heads was found in the non-government primary schools (19%) followed by the primary-attached high schools (18.7%) and the government primary schools (15.5%).

Highest level of education of 35.2% of the institution heads was a masters degree, 34.7% a bachelor degree, 22.9% completed higher secondary education and 7.3% secondary education. None of the heads of the high schools and the high madrasas had lower than a bachelor degree. Three-quarters of the heads of the government primary schools and 83% of those in the ebtedayee madrasas had such education. Only 22.6% of the non-government school heads had this level of education. Twenty-six percent of the heads were educated in the madrasas, most of who taught in the madrasas. Proportion of science educated heads/superintendents was similar to that of the whole group of teachers.

Seventy percent of the heads of the institutions were trained. Eighty-eight percent of the madrasa superintendents, 14.3% of the heads of the non-government primary schools, 6.5% of those in primary-attached high schools and 2.7% of the government primary school heads had no formal training. The heads/superintendents of the institutions also received subject based training; however, their proportion was higher than that of all teachers. Of the heads, 27% got training in Bangla, 31.2% in English, 32.5% in Mathematics, 17% in *Poribesh Porichiti* (society) and 18.7% in *Poribesh Porichiti* (science). Sixty percent of the heads had at least one subject based training. About half of the heads of the institutions also received training on school management. School type-wise, two-thirds of the government, 61.3% of the high school, 45.2% of the non-government, a third of the high madrasas and only 7.9% of the ebtedayee madrasa heads/superintendents had such training.

### C. The SMC meetings

On an average, 8.1 SMC meetings per educational institution were held in 2008 with a wide variation by type of institution. For instance, 8.8 meetings were held in the government and the non-formal schools, 7.8 in the non-government schools, 6.1 in the high madrasas, 5.4 in the high schools and 5.2 in the ebtedayee madrasas (Table 4.2). Meeting minutes were kept in majority of the schools.

It was not possible to observe any SMC meetings. However, scanning of the meeting minutes provided some information which could be interesting for having an understanding of the meetings. Meeting minutes were found in case of 94.1% of the school managing committees. The non-formal and the government primary schools were ahead of the other educational institutions in keeping meeting

**Table 4.2**  
*Some information about SMC meetings*

School type	Average number of meetings in 2008	Having meeting minutes (%)	Attendance rate (%) in last meeting
Government school	8.8	97.3	76.6
Non-government school	7.8	92.9	78.4
Ebtedayee madrasa	5.2	85.7	78.8
Non-formal school	8.8	98.5	85.0
High school	5.4	82.1	83.6
High madrasa	6.1	80.7	80.4
All	8.1	94.1	79.2

Source: Education Watch Educational Institution Survey, 2008

minutes. The high schools and the high madrasas were less likely in keeping meeting minutes compared to the other types of educational institutions.

Over 79% of the SMC members were present in the most recent meeting held prior to the school survey. The schools could be divided into two by their type in terms of members' attendance rate in the meetings. The attendance rates in the government and the non-government schools and the ebteyayee madrasas were below the national average. It was higher than the national average in other three types of educational institutions. The attendance rate of the SMC members was found to be highest in the non-formal schools followed by those in the primary attached to secondary schools - the rates were respectively 85% and 83.6%. The attendance rate was lowest in the government schools (76.6%). On an average, the female members were more likely to be present in the meetings compared to their male counterparts (85.2% vs. 76.8%). Attendance rate also varied by the positions of the SMC members. The member secretaries (i.e., the head teachers in most cases and the teachers of non-formal schools) of the committees were at the top with 97.6% attendance rate. The rate was 83.2% among the Presidents and 85.9% among the Vice-Presidents of the committees. Three-quarters of the committee members were found to be present in the meetings.

Let us now take a look at the issues discussed in the meetings. Many different issues were discussed in the SMC meetings; however, six of them could be considered as frequently discussed. In terms of proportion of SMCs, the most discussed issues were examinations, students' attendance, teaching-learning provision, construction and maintenance, tree plantation, and *upabritti* (Table 4.3). Discussion on examinations included in-school examination like half yearly and annual, primary course ending examination and scholarship examination. Examinee selection and model test as part of preparation for the external examinations were also parts of this. Examination related matters were discussed in over 60% of the SMC meetings. Discussions on the ways of increasing students' attendance in the classrooms, involving parents and guardians with the schools and other strategies were discussed in about 45% of the SMC meetings. Teaching-learning provisions in the schools and how to improve it in classroom situation including identification of weak/challenged students and remedial strategies for them were discussed in 37.8% of the meetings. Construction, reconstruction and maintenance of the school structures related issues including their financial implications were

**Table 4.3**  
*Percentage of schools by major issues discussed in SMC meeting and school type*

Major issues discussed in SMC meetings	Types of school						All
	Government	Non-govt.	Ebteyayee madrasa	Non-formal	High school	High madrasa	
Students' absenteeism	45.6	38.5	21.4	67.9	6.2	13.5	44.9
Teaching-learning issues	32.1	39.5	30.3	53.1	30.4	16.1	37.8
Tree plantation	25.2	16.6	1.9	11.0	0.0	4.5	15.5
Examination affairs	62.2	49.9	21.1	97.7	26.8	13.4	61.1
Construction activities	42.8	42.5	74.6	3.0	53.6	60.3	36.2
<i>Upabritti</i>	14.9	25.3	36.9	0.0	2.1	2.2	13.6

Note: Multiple responses counted

Source: Education Watch Educational Institution Survey, 2008

discussed in 36.2% of the meetings. These included school buildings, toilet facilities, boundary wall, earth work for play ground and roads, etc. Participation in various events like observance of tree plantation by the students were issues for discussion of 15.5% of the SMCs. *Upabritti* related issues were discussed in 13.6% of the SMC meetings. This included selection of students for *upabritti* and parents and guardians complaints on the selection process.

Issues discussed in the SMC meetings varied substantially by school type. The above national scenario was very much similar to that of the government and non-government schools. Tree plantation was a very insignificant issue for the SMC meetings of the high schools and both types of the madrasas. *Upabritti* was never discussed in the SMC meetings of the non-formal schools because these schools were out of this programme. Very small portion of the high schools and the high madrasas had *upabritti* on the agenda for discussion. Construction and reconstruction activities were most discussed issue for the madrasas - nearly three-quarters of the SMCs of the *ebtedayee* madrasas and three-fifths of those of high schools discussed this issue. This issue was not a matter for the SMCs of the non-formal schools. Rather students' attendance, teaching-learning provisions and students assessment related issues were mostly considered for discussion at the SMC meetings of the non-formal primary schools.

#### D. Progress over time

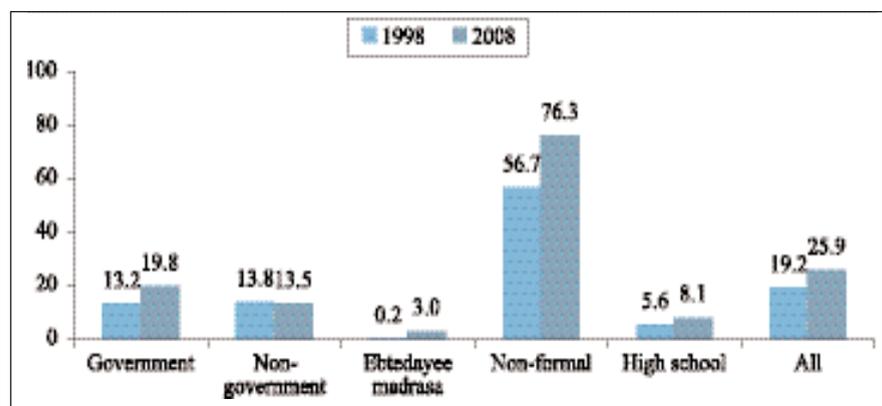
Unfortunately not enough comparative information on school management in the previous school survey was collected. This section presents only those which were common in the surveys of 1998 and 2008.

Not much variation was observed between 1998 and 2008 in three indicators, viz., percentage of schools having SMC, average size of committee and average number of meetings held during the survey year. However, percentage of females in the committees and attendance of the committee members in the meetings increased over time. In 2000, the proportion of females in the SMCs of all types of schools was 19.2% which increased to 25.9% in 2008 (Figure 4.1). School type-wise, females' presence was highest in the SMCs of the non-formal schools and lowest in the madrasas in both the periods. Increase in females' share was also highest in the non-formal category of primary schools. The non-government schools and the madrasas could not improve that much in this regards.

Attendance rate of SMC members in the meetings also increased over time - 74.7% in

Figure 4.1

Percentage of females in the SMCs by school type and year

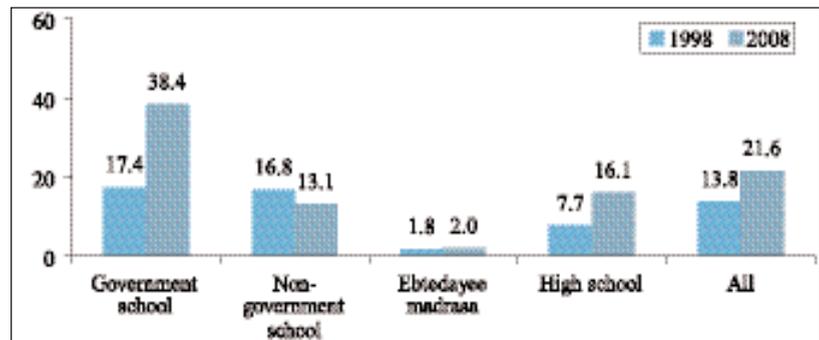


Sources: Education Watch Educational Institution Surveys, 1998, 2008

1998 to 79.2% in 2008. Mostly identical rate of increase was observed in all five types of schools when attendance rate was segregated by school type.

Proportion of female heads in the primary educational institutions increased from 13.8% in 1998 to 21.6% in 2008 (Figure 4.2). A big jump in this case was observed in the government primary schools. Whereas 17.4% of the government primary school head teachers were females in 1998, this increased to 38.4% in 2008. No change was observed for the ebtedayee madrasas. On the other hand, the rate decreased in the non-government primary schools.

**Figure 4.2**  
*Percentage of female head teachers by school type and year*

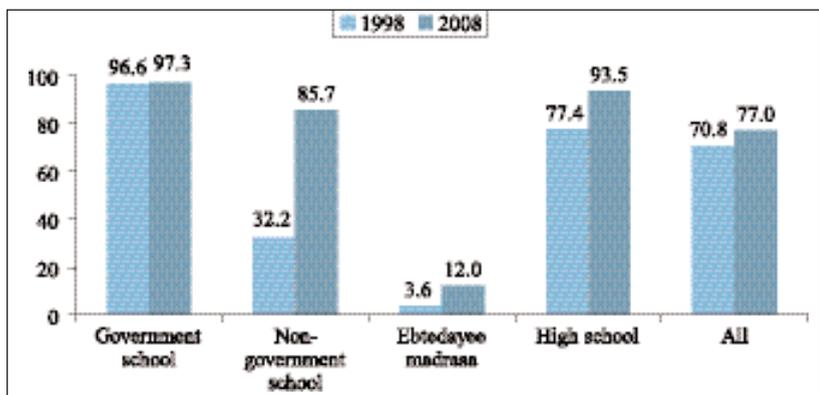


Sources: Education Watch Educational Institution Surveys, 1998, 2008

Educational qualification of the heads/superintendents of institutions also increased over time. In 1998, the highest level of education of 38.2% of the heads was bachelors degree and 15.8% was with a masters degree. These rates were increased respectively to 34.7% and 35.2% in 2008. This means that about 70% of the heads of the primary schools was at least with a bachelors degree which was 54% a decade ago.

More heads of the educational institutions are now trained than before. The proportion of trained head teachers increased from 70.8% in 1998 to 77% in 2008 (Figure 4.3). Although the heads of the government schools were ahead of the others in terms of receiving formal training in both the years but an impressive improvement

**Figure 4.3**  
*Percentage of trained head teachers by school type and year*



Sources: Education Watch Educational Institution Surveys, 2000, 2008

was observed among those in the non-government primary schools. Whereas a third of the head teachers of the non-government primary schools were trained in 1998, it increased to 85.7% in 2008.

## E. Salient findings

School management is a very important issue. Composition of management committees differs by school type. This section summarizes various issues related to school managing committees.

- All non-formal schools, 97% of the government schools, 93-94% of the non-government schools and ebtedayee madrasas and about 83% of the high schools and madrasas had school managing committees. Average size of the committee was 9.8- highest in the high madrasas (12.1) and lowest in the non-formal schools (7.1).
- Participation of females in the committees increased over time - from 19.2% in 1998 to 25.9% in 2008. The increase of females' share in the SMCs was noticed in all types of schools except the non-government primary schools. Females' participation was highest in the non-formal schools (76.3%) and lowest in the madrasas (3%). A fifth of the SMC members of the government schools were females.
- The SMC members, on an average, had nine years of schooling - highest in the high schools (13 years) and lowest in the non-formal schools (5.2 years). The male members were more educated than the female members (9.6 years vs. 7.3 years) and the SMC members of the urban schools had more schooling than those in rural schools (9.9 years vs. 8.9 years). Overall, a quarter of the SMC members were living on agriculture, 18.9% on business, 19.9% on teaching, 13.1% on service and 16.5% on housekeeping. Agriculture, teaching and housekeeping were the major occupations of the SMC members of non-formal schools.
- The heads of the institutions play very important role in managing the schools as ex-officio member secretary of the committees. Of them, 21.6% were females. The highest proportion of female heads was found in the government primary schools (38.4%) and lowest in the madrasas (less than 2%).
- Highest level of education of 35.2% of the institution heads was a masters degree, 34.7% a bachelor degree, 22.9% completed higher secondary education and 7.3% completed secondary education.
- About half of the heads of institutions received training on school management. Two-thirds of the government, 61.3% of the high school, 45.2% of the non-government, a third of the high madrasa and 7.9% of the ebtedayee madrasa heads/superintendents received management training.
- In 2008, the SMCs had 8.1 meetings, of which 94% had recorded meeting minutes. On an average, 79.2% of the members attended in the meetings. Government, non-government and non-formal primary schools were ahead of the others in all three indicators. The situation of the ebtedayee madrasas was the poorest.
- 'Examination affairs' was the most discussed issue of the meetings, followed by student absenteeism, teaching-learning provision, construction issues, tree plantation and *upabritti*. The government and the non-government schools gave mostly a similar level of emphasis on the issues. High schools and both types of madrasas placed no emphasis on tree plantation. Non-formal schools had nothing to do with *upabritti* or construction activities.





## Chapter 5

### Participation in Primary Education

Access to educational institutions and attendance in classes are two issues related to participation in education. Bangladesh has done reasonably well in terms of children's enrolment and gender parity has been attained. However, the regions such as rural Sylhet and Chittagong lag behind the national average in enrolment. The enrolment situation has been stagnant since 2005. Poor enrolment among socio-economically disadvantaged groups, lower net intake rate, lack of parental willingness to admit children in school at age six and enrolment of primary aged children in pre-primary classes are the challenges of the time. Fortunately, students' attendance in classes improved over time.



Access to school is the first step of participation in education and attendance in class is the second. Two popular measures of access to school are gross enrolment ratio and net enrolment rate. However, *intake* in education is another measure that is becoming popular day by day, especially due to its relationship with full completion of primary education within a certain time period. Participation in education is the subject of this chapter. Along with the overall scenario at the national level, gender and geographical dimensions, socioeconomic patterns, distribution of participated students by school type are presented in this chapter. Reasons behind non-participation are also discussed. More importantly, the trends in these indicators and related issues during the past decade are also presented here.

### A. Gross enrolment

According to the Compulsory Primary Education Act 1990, the official duration of primary education is five years starting from class I and ending in class V (GoB 1990). The official primary school age is 6-10 years. However, it was seen in all the household surveys of *Education Watch* and the other surveys that the children beyond this age range also enrolled in primary education. Such a situation happened at both the ends of age range. Children younger than age six can enroll in primary classes. Late start of education or being unsuccessful in getting promotion to the next classes lead older children to studying at the primary level. This is the significance of measuring gross enrolment ratio as part of understanding access to school.

*Gross enrolment ratio:* The gross enrolment ratio (GER) at primary level refers to the *number of children currently enrolled at the primary level (classes I to V) for every 100 children of age 6-10 years*. This includes all children currently enrolled in any type of school, such as formal or non-formal, secular or non-secular, and Bangla or English medium. Table 5.1 shows that the gross enrolment ratio was found to be 103 in 2008. It was 106 for the girls and 101 for the boys; 104 for the children of rural areas and 100 for those in urban areas. Stratum-wise analysis shows that the ratio was estimated at under 100 in two areas, viz., rural Sylhet division and metropolitan cities. The highest GER was found in rural Rajshahi division (112), followed respectively by two rural divisions, viz., Khulna (111) and Barisal (107). The boys lagged behind the girls in most of the cases except rural Rajshahi. The GER for the girls did not go

**Table 5.1**  
*Gross enrolment ratio by stratum and gender*

Strata	Gender		
	Girls	Boys	Both
Rural Dhaka division	102 (916)	96 (939)	100 (1,855)
Rural Chittagong division	104 (1,115)	97 (1,130)	101 (2,245)
Rural Rajshahi division	110 (872)	113 (876)	112 (1,748)
Rural Khulna division	114 (809)	109 (852)	111 (1,661)
Rural Barisal division	110 (981)	104 (993)	107 (1,974)
Rural Sylhet division	103 (1,055)	95 (1,087)	99 (2,142)
Metropolitan cities	101 (758)	97 (759)	99 (1,517)
Municipalities	105 (745)	97 (801)	101 (1,546)
Rural Bangladesh	107 (5,748)	102 (5,877)	104 (11,625)
Urban Bangladesh	103 (1,503)	97 (1,560)	100 (3,063)
All Bangladesh	106 (7,251)	101 (7,437)	103 (14,688)

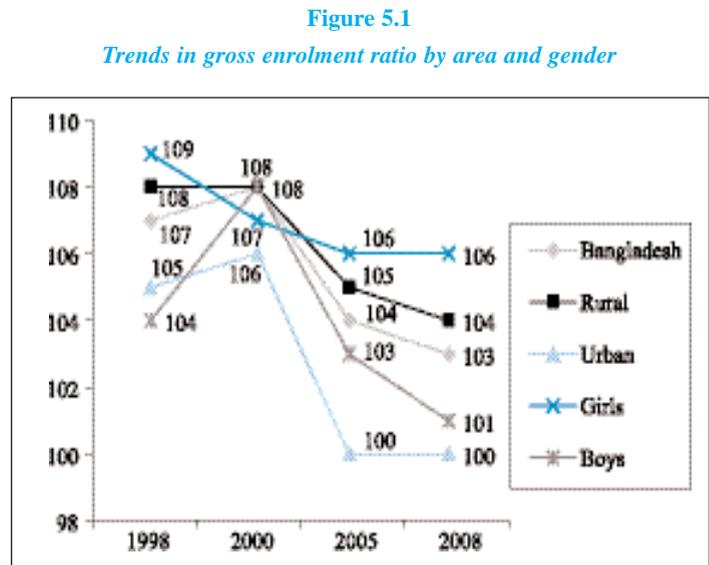
*Figures in the parentheses indicate number of children aged 6-10 years*

*Source: Education Watch Household Survey, 2008*

below 100 in any of the strata considered in this study but for the boys, such case was observed in three rural divisions and both the urban areas. The rural divisions were Dhaka, Chittagong and Sylhet.

Trends in GER over the past decade showing gender and area dimensions are provided in Figure 5.1. Followings are the major observations.

- Overall, the GER declined over time, specifically after 2000. Smooth decline of the girls and rural children is noticeable.
- The enrolment of rural children surpassed their urban counterparts throughout the decade.
- The boys lagged behind the girls in all three surveys except in 2000, where it was opposite.
- During 2005-08, no change was observed among the girls and the urban children; the ratio for the boys declined two percentage points and the rural children one percentage point.



Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

Stratum-wise trend analyses of gross enrolment were done and presented in Annex 5.1. Following are some of the salient features from the analyses.

- In 2000 and afterwards, the GER declined over time in three rural divisions, viz., Dhaka, Chittagong and Khulna, increased in rural Barisal and kept stagnant in rural Sylhet division.
- In Rajshahi, it increased up to 2005 and declined afterwards.
- No clear pattern was observed for the two urban strata.
- Rural Khulna division topped in 1998 and 2000 and along with Rajshahi in 2005. The rural Rajshahi division secured the top position in 2008.
- The lowest position was bagged by the metropolitan cities in 1998 and 2005 and with Sylhet division in 2008. Barisal division scored the lowest position in 2000.

*Class-wise distribution of students:* The percentage distribution of primary level students shows that the highest proportion of them was found in class I (28.3%), which gradually decreased and was lowest in class V (14.2%) (Table 5.2). Separate analyses for girls and boys and for the rural and urban students also showed a similar trend. However, there were variations too. The difference between the proportions against the lowest and the highest classes at the national level was 14.1 percentage points. The former was almost double of the later. Similar type of relationship was observed in the cases of boys and the rural students, not for the girls and the urban students. The difference between the proportions in classes I and V was found to be 12.9 percentage points for the girls and 9.7 percentage points for the urban students. Again, the proportions of girls and urban students in class V was more

than half of the respective group of students studying in class I. All these mean that the concentration of students in the lower classes occurred more among the boys than the girls and among the rural students than their urban counterparts. Stratum-wise similar analysis is provided in Annex 5.2.

The highest concentration of primary students in class I was observed in all the household surveys conducted under *Education Watch* (Annex 5.3). This was obvious because of a number of reasons. First, due to over attention in

school enrolment many over-aged children also enrolled in class I. Second, there is a tendency among some of the parents to start schooling of their children at later age, say at seven or eight. Third, due to high dropout at later classes number of students reduced. Although, a third of the total students were seen to be concentrated in class I during 1998-2000, this reduced to about 28% in later two surveys. Proportion of students in class II has slightly increased over time. But it was mostly constant in class III. The proportion of students in class V was more than that in class IV in 2000 and 2005, which reversed in 2008. Overall, it seems that the proportions of students in various classes are being closer over time. The difference between the proportions of classes I and V were 19.7 percentage points in 1998, 16.6 percentage points in 2000, 8.5 percentage points in 2005 and 14.1 percentage points in 2008.

*The age issue:* Although the official primary schooling age is 6-10 years, both under and over-aged children enrolled in primary classes. A gross estimate shows that 71.9% of the primary level students were within the official age range for primary schooling (6-10 years), 25.5% more than 10 years and 2.6% less than six years. The proportion of students in the primary age group increased over time from 67% in 1998 to 72.8% in 2005 and 72% in 2008. On the other hand, proportion of children below six years enrolled in primary classes also reduced over time. Increased provisions for pre-primary education might be a reason for reduction of children below six years of age at primary level. Enrolment of five years old children in class I is violation of the Act of 1990.

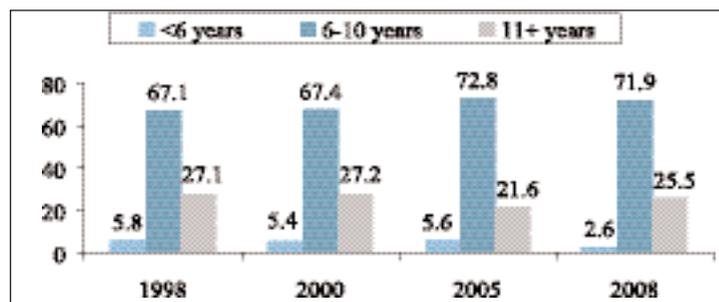
Let us take a look at the age issue more critically. What does the above mentioned official primary school age means? A simple explanation of this is that the children of age six are supposed to

**Table 5.2**  
*Percentage distribution of primary students by class, gender and area*

Class	Gender		Area		All
	Girls	Boys	Rural	Urban	
I	27.7	29.0	28.8	25.4	28.3
II	20.4	22.8	21.6	21.4	21.6
III	20.1	18.9	19.3	20.7	19.5
IV	16.9	15.8	16.3	16.8	16.3
V	14.8	13.6	14.0	15.7	14.2
Total	100.0	100.0	100.0	100.0	100.0
n	7,695	7,494	12,137	3,052	15,189

Source: *Education Watch Household Survey, 2008*

**Figure 5.2**  
*Percentage distribution of primary students by age group and year*



Sources: *Education Watch Household Surveys, 1998, 2000, 2005, 2008*

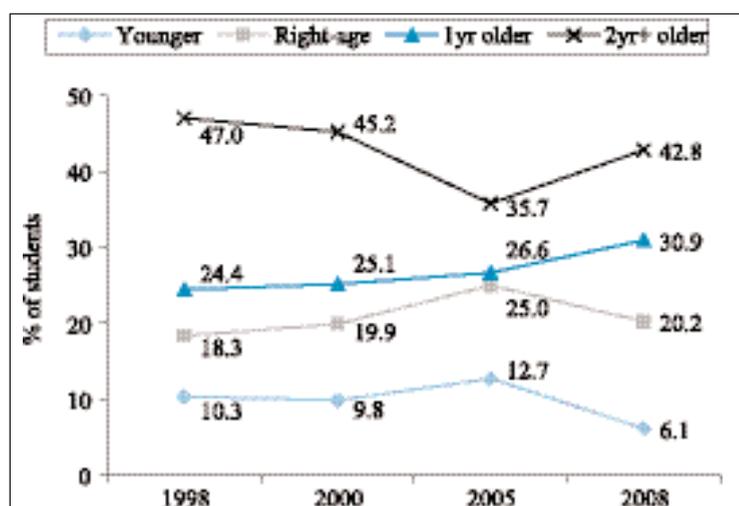
enroll in class I, age seven in class II, age eight in class III and so on. This means that the right match between age and class is five years. Students with a difference of five between age and class of enrolment are in right class at the right age. If the difference is lower than five, the students can be considered as under-aged and over-aged if more than five. With this understanding it was estimated that a fifth of the primary students of 2008 were in the classes appropriately matched with their ages, 6.1% were under-aged, 31% one year behind, 22.4% two years behind 10.8% three years behind, 5.8% four years and 3.6% five or more years (Table 5.3). This means that nearly three-quarters (73.7%) of the primary school students were actually over aged. They would complete (if they continue till the end) primary education after their age of 10 years. Proportion of students in right class at right age was more among the girls than boys (21.3% vs. 19.1%) and among urban students than rural students (23.7% vs. 19.7%).

**Table 5.3**  
*Percentage distribution of students by the difference between age and class*

Difference (age-class)	Gender		Area		All
	Girls	Boys	Rural	Urban	
Younger	6.3	5.9	6.2	5.6	6.1
Right age	21.3	19.1	19.7	23.7	20.2
One year older	32.6	29.2	30.4	34.6	30.9
Two years older	21.2	23.7	22.6	21.3	22.4
Three years older	9.6	12.1	11.1	8.9	10.8
Four years older	5.7	6.0	6.1	4.0	5.8
Five years+ older	3.2	4.0	3.9	1.9	3.6

Source: Education Watch Household Survey, 2008

**Figure 5.3**  
*Percentage distribution of primary students by the difference between age and class of enrolment and year*



Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

Analysis of all four household survey data shows that the proportion of students in classes rightly matched with their age increased over time from 1998 to 2005 and then decreased in 2008 (Figure 5.3). Similar trend was observed in case of the under-aged students. This clearly shows that the proportion of over-aged students was decreasing till 2005, which increased afterwards.

## B. Enrolment by school type

Currently, children enroll in primary classes in 10 different types of educational institutions. Table 5.4 presents the share of different types of primary schools in enrolment. As found in all other previous *Education Watch*, the government operated primary schools enrolled the highest portion of students (56.9%), followed by the registered non-government primary schools (18.7%), non-formal schools (9.6%), madrasas (7%) and the English medium schools (4.7%). Note that only 2.2% of the total

enrolment was shared by the ebtedayee madrasas and 4.8% by the ebtedayee section of the higher madrasas (dakhil, alim, fazil or kamil).

A somewhat different scenario emerged when the data were separately analyzed for rural and urban areas (Table 5.4). Although mostly an equal share of the government schools was found in both the areas, the share of the rural registered non-government schools was more than double in urban areas (20.1% vs. 9.3%). The rural non-formal schools also catered twice of

the share compared to the similar schools established in urban locations (10.3% vs. 5.2%). The madrasas collectively enrolled 3% of the urban enrolment, whereas it was 7.6% in case of the rural madrasas. On the other hand, the English medium schools shared 15.6% of urban and 3.2% of the rural enrolment. Again, the primary section attached to high schools catered 7.3% of the total urban enrolments which was only 0.4% in rural areas. The above findings clearly show that more than 40% of the total enrolment at primary level was the contribution of various initiatives other than the government. Outside the government, the registered non-government schools, the non-formal schools and the madrasas were the major contributors in primary school participation in rural areas. For the urban areas, English medium schools, primary section attached to high schools, registered non-government schools and the non-formal schools played important role.

Not much variation was found in case of school choice of the girls and the boys. Following the tradition, the non-formal schools enrolled more girls than the boys (10.8% vs. 8.4%). Proportionately more boys were found in the madrasas and the kindergartens.

Stratum-wise analysis of distribution of students by school type is provided in Annex 5.4. Some significant differences were noticed among the strata. The share of the government schools was more than that of the national average in four rural divisions and in one urban stratum. These are Sylhet (66.9%), Chittagong (65.6%), Barisal (63.7%), Dhaka (63.1%) and the municipalities (64.9%). Lowest share of the government schools was found in rural Rajshahi division. Out of the government domain, a much higher contribution of the registered non-government and the non-formal schools was found in rural Rajshahi division followed by rural Khulna division. The registered non-government schools shared a third of the total enrolment in Rajshahi and a quarter of that in Khulna. The share of the non-formal schools was respectively 16.5% and 11.3% in these two areas. The madrasas contributed more in Barisal, Chittagong and Sylhet compared to the other divisions. Contribution of the English medium

**Table 5.4**  
*Percentage distribution of primary students by type of institution, gender and area*

Type of institution	Gender		Area		All (15,186)
	Girls (7,693)	Boys (7,493)	Rural (12,135)	Urban (3,051)	
Government primary	57.3	56.5	56.8	58.1	56.9
Non-govt. primary (reg.)	18.8	18.6	20.1	9.3	18.7
Non-govt. primary (un-reg.)	0.9	0.8	0.8	1.3	0.9
Community primary	0.9	1.0	1.0	0.3	0.9
Non-formal primary	10.8	8.4	10.3	5.2	9.6
Ebtedayee madrasa	2.0	2.4	2.3	1.5	2.2
High madrasa	4.4	5.2	5.3	1.5	4.8
Kindergarten	3.7	5.7	3.2	15.6	4.7
High school	1.2	1.3	0.4	7.3	1.3
All students	100.0	100.0	100.0	100.0	100.0

*Figures in the parentheses indicate number of children aged 6-10 years*

*Source: Education Watch Household Survey, 2008*

schools in both the urban areas and that of the high schools in the metropolitan cities were incomparable to the rural divisions.

The share of the government schools in total primary enrolment has decreased significantly during the last decade. For instance, the government schools catered over 68% of the primary enrolment in 1998, which decreased to 61% in 2000, 59% in 2005 and about 57% in 2008 (Table 5.5). The non-government schools (registered, unregistered and community/satellite together) collectively shared around 15% of enrolment in 1998 which increased over time and became stable afterwards at 20-21%. The rise of the madrasas occurred up to 2005 and then fell. The same table shows that the madrasas share increased from 4.6% in 1998 to 7% in 2000 and 9.5% in 2005 and then decreased to 7% in 2008. Otherwise, the share of the non-formal schools decreased from 8.8% in 1998 to 7.1% in 2000 and 6.1% in 2005 and then increased to 9.6% in 2008. Starting with only 1.5% in 1998 the English medium schools tripled their contribution in 2008 with a smooth progress rate. Interestingly, the contribution of the primary-attached high schools was mostly the same throughout the decade.

**Table 5.5**  
*Percentage distribution of primary school students by school type and year*

School type	Year			
	1998	2000	2005	2008
Government	68.3	61.0	59.2	56.9
Non-government	15.2	21.1	19.4	20.5
Non-formal	8.8	7.1	6.1	9.6
Madrassa	4.6	7.0	9.5	7.0
Kindergarten	1.5	2.1	4.3	4.7
Primary-attached high school	1.6	1.6	1.6	1.3

*Note: Non-government includes registered, un-registered, community and satellite schools*

*Sources: Education Watch Household Surveys 1998, 2000, 2005, 2008*

### C. Net enrolment

The net enrolment rate (NER) is defined as the *number of children aged 6-10 years currently enrolled in any class in any school for every 100 children of the same age*. The national estimate for net enrolment rate was found to be 86.4% in 2008 (Table 5.6). This rate is slightly lower than the rate found three years back. The girls were significantly ahead of the boys in NER (87.1% vs. 85.6%;  $p < 0.01$ ) and the urban children compared to their rural counterparts (87.6% vs. 86.2%;  $p < 0.05$ ). Although there was no gender difference among urban children, the rural girls significantly surpassed the boys.

A wide variation in NER by stratum was found (Table 5.6). Following the tradition, rural Khulna division scored the top position in the league table with 92.5% NER in 2008 (Annex 5.5 and Table 5.6). Rural Rajshahi division followed them with 90% NER. The lowest rate was encountered from rural Sylhet division (80.5%). Three rural divisions, viz., Dhaka, Chittagong and Sylhet and the metropolitan cities had an NER lower than the national average. Impressive NER was found among the girls of Khulna division (94.2%) and the boys of Barisal division (93.6%). These two groups significantly surpassed their counterparts ( $p < 0.01$ ). No gender difference was observed in any of the other six strata.

**Table 5.6**  
*Net enrolment rate by strata and gender*

Strata	Gender			Level of significance
	Girls	Boys	Both	
Rural Dhaka division	86.4 (916)	84.8 (939)	85.6 (1,855)	ns
Rural Chittagong division	82.5 (1,115)	81.6 (1,130)	82.0 (2,245)	ns
Rural Rajshahi division	89.6 (872)	90.4 (876)	90.0 (1,748)	ns
Rural Khulna division	94.2 (809)	90.8 (852)	92.5 (1,661)	p<0.01
Rural Barisal division	89.6 (981)	93.6 (993)	86.6 (1,974)	p<0.001
Rural Sylhet division	81.9 (1,055)	79.2 (1,087)	80.5 (2,142)	ns
Metropolitan cities	86.5 (758)	85.6 (759)	86.1 (1,517)	ns
Municipalities	90.3 (745)	87.4 (801)	88.8 (1,546)	ns
Level of significance	p<0.001	p<0.001	p<0.001	
Rural Bangladesh	86.9 (5,748)	85.5 (5,877)	86.2 (11,625)	p<0.05
Urban Bangladesh	88.6 (1,503)	86.6 (1,560)	87.6 (3,063)	ns
Level of significance	ns	ns	p<0.05	
All Bangladesh	87.1 (7,251)	85.6 (7,437)	86.4 (14,688)	p<0.01

ns = not significant at  $p = 0.05$

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

During the past decade (1998-2008), the NER steadily increased up to 2005 with a rate of 1.4 percentage points per year and became stagnant afterwards. As reported in the earlier *Education Watch* reports including this, the net enrolment rate was 77% in 1998, 79.8% in 2000, 86.8% in 2005 and 86.4% in 2008 (Table 5.7). Although the enrolment rates were different for the girls and the boys and for the children of rural and urban areas, a similar trend was found for all four groups of children. The girls enrolment rate was found significantly higher than the boys in three surveys except 2000. The urban children were significantly ahead of the rural children throughout the decade. Although in urban areas, both the boys and the girls enrolled in schools with an equal rate, the rural girls were significantly ahead of the rural boys.

Stratum-wise trend analysis shows that the NER increased significantly in all the eight strata during 1998-2005. The rate of increase was not equal in all the cases. It was faster (higher than national average) in three areas, viz., rural Dhaka and Rajshahi divisions and the municipalities. A moderate (nearer to national average)

**Table 5.7**  
*Progress in net enrolment rate by area, gender and year*

Strata	Year				Level of significance
	1998	2000	2005	2008	
All Bangladesh	77.0	79.8	86.8	86.4	p<0.001
All Girls	78.5	79.9	88.0	87.1	p<0.001
All Boys	75.5	79.8	85.6	85.6	p<0.001
Level of significance	p<0.001	ns	p<0.001	p<0.01	
Rural areas	76.7	79.6	86.6	86.2	p<0.001
Urban areas	79.0	81.5	88.1	87.6	p<0.001
Level of significance	p<0.05	p<0.01	p<0.05	p<0.05	

ns = not significant at  $p = 0.05$

Sources: Education Watch Household Surveys 1998, 2000, 2005, 2008

improvement occurred in rural Chittagong and Khulna divisions. Relatively slower improvement was observed in three cases, viz., rural Barisal and Sylhet divisions and in the metropolitan cities. Now the question is whether the stagnant in net enrolment that we have seen in Table 5.7 affected all the eight strata? The answer is no. Rural Rajshahi and Khulna divisions and the metropolitan cities kept their upward trends till 2008 but the other five could not. Of the three who continued improvement till 2008, two had faster progress rate already and the other had a moderate progress rate. Among those who could not keep an upward trend, rural Sylhet is one. The net enrolment rate in Sylhet significantly dropped between 1998 and 2000, which made much progress during 2000-2005, however significantly fell down once again between 2005 and 2008. A rigorous analysis of the situation of Sylhet is urgently needed.

#### D. Socioeconomic differentials of enrolment

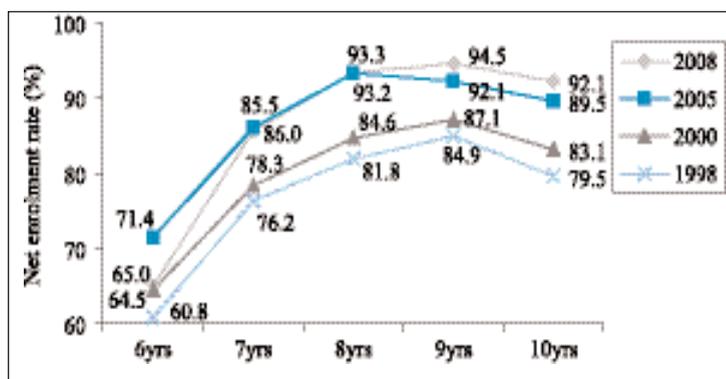
Similar to the previous *Education Watch* studies on both primary and secondary education, this study confirms that school participation is still associated with the socioeconomic characteristics of the children. To show this, as in the past, the case of net enrolment was utilized. Age of children, parental education, household food security status, religion and ethnicity were considered as background characteristics.

Age specific NER by gender is provided in Annex 5.6 and by area in Annex 5.7. The enrolment rate gradually increased with the increase of age of the children and touched its peak at age nine and then declined. For instance, at the national level, it was 65% at age six, 85.5% at age seven, 93.3% at age eight, 94.5% at age nine and 92.1% at age ten. Such a trend was observed irrespective of gender and area of residence of the children. Statistically significant gender difference in NER was observed among those of age nine and 10 years. The girls were ahead of the boys in both ages. On the other hand, urban-rural difference was observed among those of age six and seven. The urban children of both the ages surpassed their rural counterparts.

Figure 5.4 provides age specific NERs from all four household surveys. The NER increased in every age during 1998-2005; however, it decreased for age six in 2008, kept mostly equal for ages seven and eight and increased for ages nine and ten. In 1998 and 2000, starting from age six, the rate gradually increased up to age nine and then decreased. Otherwise, in 2005 and 2008, the NER increased up to age eight and then decreased. This means that the children belonging to the two ends of primary school age range were responsible for reduced or stagnant net enrolment rate at primary level.

As a proxy to economic strength of the households, yearly food security status of the

Figure 5.4  
Age specific net enrolment rate by year

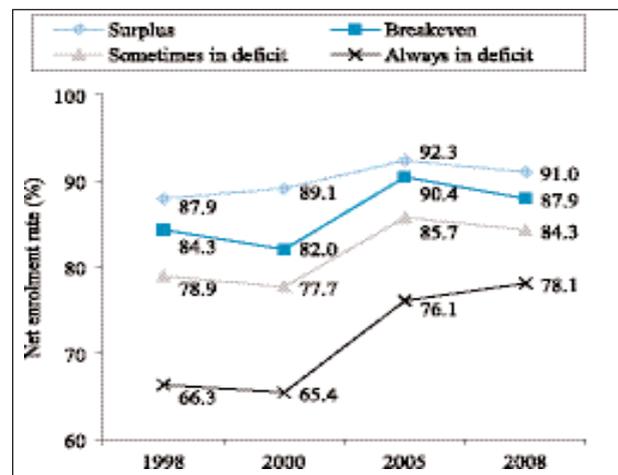


Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

households was collected. Information was collected by asking the respondents to rate their households in a four point scale considering the immediate past year's total income and expenditure. Time was given to the respondents to take account of all sources of income and the items of expenditure. The respondents were asked to place their households in any of the four categories: *always in deficit*, *sometimes in deficit*, *breakeven* and *surplus*. Of the total households under study, 10.7% rated themselves as *always in deficit*, 25.5% *sometimes in deficit*, 33.7% *breakeven* and 30.1% *surplus*. These figures changed a bit when calculated among children of age 6-10 years.

The NER of the primary aged children significantly increased with the increase in household food security status (Annex 5.8). For instance, 78.1% of the children of *always in deficit* households, 84.3% of the children of *sometimes in deficit* households, 87.9% of the children of *breakeven* households and 91% of the children of *surplus* households were currently enrolled ( $p < 0.001$ ). Similar trends were found when data were separately analyzed for the girls and the boys. However, gender difference was found only among the children of *sometimes in deficit* households, where the girls surpassed the boys ( $p < 0.05$ ).

Figure 5.5  
Net enrolment rate by yearly food security status of household and year



Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

Figure 5.5 presents NER by yearly food security status of household estimated in different *Education Watch* surveys. Following are the observations in brief.

- On an average, the enrolment situation has improved during the last decade for all four categories of households. Major improvement was noticed in the *always in deficit* households.
- Minor difference was noticed between the rates in 2005 and 2008 in the *surplus* and *sometimes in deficit* households.
- Statistically significant decline in enrolment during the same period was found in the *breakeven* households.
- The enrolment rate significantly increased among the children of *always in deficit* households.

Years of schooling completed by both the parents were collected to see how the parental education affected their children's school enrolment. Similar to the previous studies under *Education Watch*, this study also confirms that children's school enrolment was positively correlated to their parental education (Annex 5.9). For instance, mothers with secondary or more education were more likely to send their children to school compared to the primary educated or never schooled mothers. The NER was 80.8% for those children with never schooled mothers, 89.2% for those with primary educated mothers and 93.2% for those with secondary or more educated mothers ( $p < 0.001$ ). Similar

results were found when data were analyzed by fathers' education. The net enrolment rate was 81.4% among those children with never schooled fathers, 88.1% among those children with primary educated fathers, 92.5% among those children with secondary educated fathers and 95.7% among those with higher secondary or more educated fathers ( $p < 0.001$ ). Gender difference in enrolment was found among those with primary educated mothers or never schooled or primary educated fathers.

Let us now consider education of both the parents together and see how it affected their children's school participation. Considering them together we can create three groups of parents: none of them had schooling, either of them had schooling and both had schooling. As education has been expanding rapidly in Bangladesh, at least since 1990, the proportion of parents without schooling decreased over time. For instance, it was 47.7% in 1998, 45.4% in 2000, 35.4% in 2005 and 33.3% in 2008.

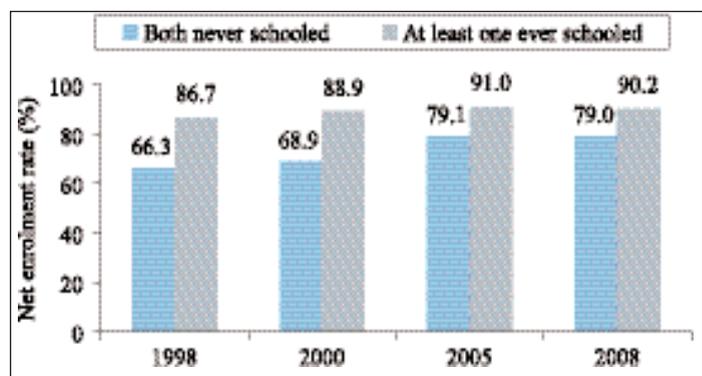
Annex 5.10 shows that in 2008, the NER was 79% if none of the parents had schooling, it was 86.2% if any of them had schooling and 91.6% if both had schooling ( $p < 0.001$ ). Similar trends were found when data were analyzed by gender and area of residence. Among the children with never schooled parents, the net enrolment rate of the girls was higher than that of the boys (80% vs. 78%) and it was higher in rural areas than the urban areas (79.4% vs. 74.3%).

Trend analysis shows that enrolment of the children of never schooled parents increased faster compared to those of the others (Figure 5.6). For instance, two-thirds of the never schooled parents sent their children to school in 1998, which increased to 79% in 2008 - an improvement of about 23 percentage points. On the other hand, 86.7% of the children of ever schooled parents were enrolled in school in 1998, which increased to 90.2% in 2008 - an improvement of about 14 percentage points. Whereas, the rate of increase per year was 2.3 percentage points for the former group, it was 1.4 percentage points for the later group. No difference between 2005 and 2008 was noticed for any of the groups.

In 2008, the Muslim children lagged behind the non-Muslims in school participation at primary level (86.2% vs. 87.8%;  $p < 0.05$ ) and the Bangalis were ahead of the ethnic minorities (86.6% vs. 77.9%;  $p < 0.001$ ). No gender difference was observed among the non-Muslims and the ethnic minorities but the girls of the Muslims and the Bangalis surpassed the boys of the same communities (Annexes 5.11 and 5.12).

Table 5.8 provides background socio-economic characteristics of the students of various types of primary schools gathered from the household survey of 2008. Proportion of girls was higher than the boys only in the non-formal schools and a reverse scenario was observed in the madrasas, English

Figure 5.6  
Net enrolment rate by parental education and year



Sources: Education Watch Household Surveys 1998, 2000, 2005, 2008

medium schools and the primary attached to high schools. Smallest proportion of girls was found in the English medium schools. Boys and girls were found equally frequently in the government and the non-government schools. Older students, compared to their class, was highest in the madrasas (52%), followed by the non-formal schools (45%) and least in the high schools (29%). It was 40-43% in other three types of schools. In terms of mean age of the students, no difference was observed among the government, non-government and the non-formal primary schools.

**Table 5.8**  
*Background characteristics of the students by school type*

Characteristics	School type					
	Government primary (8,922)	Non-govt. primary (2,850)	Non-formal (1,259)	Madrassa (1,038)	Kinder-garten (822)	High school (243)
Girls (%)	50.9	50.8	56.8	45.9	39.4	46.7
Older aged students <sup>1</sup> (%)	41.6	43.2	45.0	52.0	39.7	29.1
Mean age of students (in years)	9.1	9.0	9.0	9.7	8.6	8.4
Mothers without schooling (%)	44.6	51.4	55.9	48.2	19.1	15.9
Fathers without schooling (%)	45.6	51.4	59.3	46.3	18.6	9.2
First generation learners (%)	31.4	37.2	43.5	34.4	12.3	7.9
Deficit households (%)	42.2	45.9	45.8	40.1	13.9	13.8
Non-Muslims (%)	13.3	16.1	14.2	0.0	9.0	12.5
Ethnic minorities (%)	1.9	3.3	6.3	0.2	1.0	0.0

<sup>1</sup> Students two or more years older than the official age for various primary classes

Figures in the parentheses indicate number of students currently enrolled in primary classes of the respective school type

Source: Education Watch Household Survey, 2008

The schools varied by parental education of the students. Highest proportion of first generation learners were admitted in the non-formal schools (43.5%), followed by the non-government schools (37.2%). Over 12% of the students of the English medium schools and 7.9% of those in the high schools were first generation learners. The first generation learners catered 31.4% of the students of the government schools. The schools also varied by *food security status* of the students. Nearly 46% of the students of non-government and non-formal schools came from deficit (always or sometimes) households; this was 42.2% in the government schools, 40.1% in the madrasas and about 14% in the kindergartens and the primary attached high schools. In terms of enrolment of the ethnic minority children the non-formal schools were at the top and there was no non-Muslim student in the madrasas.

## **E. Enrolment outside primary classes**

Children of age 6-10 years are supposed to enroll in classes I to V. Like previous years it did not happen so smoothly in 2008. In 2008, 6.8% of the primary school aged children enrolled in pre-primary class, three quarters in any class of primary schools, 0.6% in secondary classes and 3.3% in the non-recognized Islamic educational institutions like hafezia, kowmi or kharizi madrasas (Table 5.9). Age-wise, 18.8% of the six-year old children, 9.6% of seven-year old, below five percent of eight or more years old children were found to be enrolled in pre-primary class (Annex 5.13). Few students of age 9-10 years were found in secondary schools.

Annex 5.14 shows that the primary school aged children studying in pre-primary classes were highest in rural Rajshahi division (8.4%) and lowest in rural Sylhet division (2.6%). This rate was above the national average of 6.8% in four areas. The areas are two rural and two urban areas: Dhaka and Rajshahi divisions, and metropolitan cities and municipalities. Proportion of primary aged children in pre-primary class was more than eight percent in rural Rajshahi and two urban strata.

Percentage distribution of primary school aged children by level

of education in various survey years is provided in Table 5.9. It shows that the tendency of the 6-10 years old children to enroll in pre-primary class or in the non-recognized madrasas increased over time. However, the rate of the primary school aged children in primary classes is also increased up to 2005 and then decreased in 2008.

Note that the 'real net enrolment' rate is different from the net enrolment rate reported earlier. The net enrolment rate reported earlier included (as numerator) any students aged 6-10 years attended any class but the 'real net enrolment' rate at primary level should include only those enrolled in primary classes. In both the cases, the denominator is the same - children aged 6-10 years. With this consideration, the 'real net enrolment rate' stood at 75.7% in 2008 - 10.7 percentage points below the figure reported as NER earlier. Figure 5.7 shows that similar to the already reported net enrolment rate the 'real' net enrolment rate also increased during 1998-2005 and then decreased in 2008. One interesting feature is the increasing gap between the two sets of net rates. This happened mostly

because of increased trend of primary school aged children's enrolment in the pre-primary class and in the non-recognized madrasas. Stratum-wise difference between the two net enrolment rates could be found in Table 5.6 and Annex 5.14. The differences varied from 9-12 percentage points.

## F. The out-of-school children

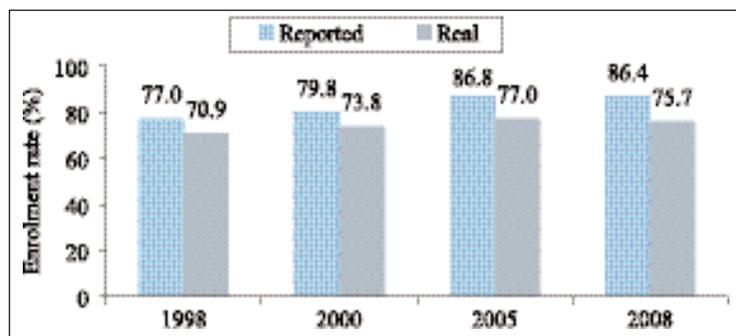
Table 5.6 had showed that 86.4% of the children of age 6-10 years were currently enrolled in school. Of the remaining 13.6% out-of-school children, 12.1% never enrolled in school and 1.5% enrolled but dropped out after some time. The same table showed that the rate of out-of-school children was higher

**Table 5.9**  
*Percentage distribution of primary aged children by current level of education*

Level of education	Year			
	1998	2000	2005	2008
Pre-primary	4.1	4.4	6.4	6.8
Primary	70.9	73.8	77.0	75.7
Secondary	0.5	0.8	1.5	0.6
Non-graded madrasas	1.4	0.9	1.9	3.3
Out-of-school	23.0	20.2	13.2	13.6

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

**Figure 5.7**  
*Generally reported and 'real' net enrolment rates by year*



Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

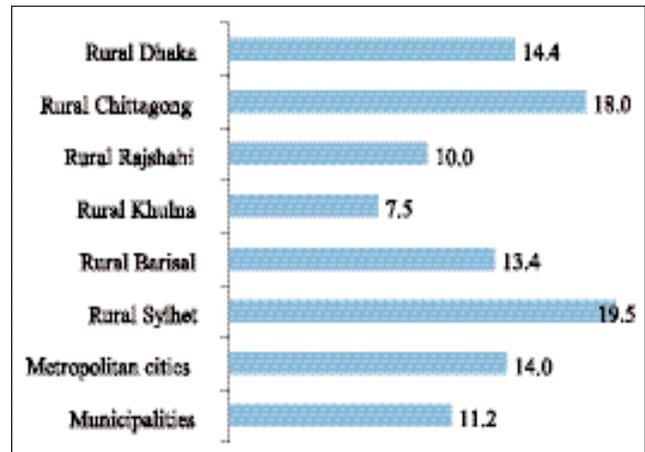
among the boys than the girls and in rural areas than in urban areas. Further analysis of this confirms that majority of these children came from those households where parents had no schooling and household food security status was *always in deficit*. Age-wise, 35% of the six-years old, 14.5% of the seven years old, 6.7% of the eight years old, 5.5% of the nine years old and 7.9% of the 10-years old children were found to be out-of-school. Figure 5.8 provides proportion of out-of-school children by stratum.

Evidences show that the proportion of out-of-school children decreased over time - 23% in 1998 to 13.6% in 2008; nearly one percentage point per year. Decrease in out-of-school children was observed in all groups of children categorized by age, gender, area of residence, parental education, household food security status, religious beliefs and ethnicity. Major improvement was noticed in the poorest (*always in deficit*) households. Whereas, the proportion of out-of-school children decreased 3.1 percentage points in the *surplus* households it decreased 21.8 percentage points in the *always in deficit* households between the two periods.

Recognizing the fact that there is no one cause of a child being out-of-school and in most cases a combination of multiple causes act, the parents were asked to mention the most important reasons for keeping their children out-of-school. Nine specific reasons came out (Table 5.10). Of them, four came out as the major reasons. In case of nearly half of the out-of-school children (48.7%), the parents mentioned that the children were too young to enroll in school. However, all of their wards were in the range of official age for primary education. The other reasons include scarcity of money (12.6%), child dislikes school (11.8%) and school authority refused admission (10.8%). Gender-wise analysis shows that 'too young for schooling' was

Figure 5.8

Proportion of out-of-school children by stratum



Source: Education Watch Household Survey, 2008

Table 5.10  
Percentage distribution of out-of-school children (6-10 years) by causes of non-enrolment, gender and area

Causes of non-enrolment	Gender		Area		All (2,026)
	Girls (1,107)	Boys (919)	Rural (1,643)	Urban (383)	
School is far from home	5.5	5.1	6.0	0.0	5.3
Scarcity of money	12.9	12.2	11.6	19.8	12.6
Admission refused	11.2	10.4	11.5	5.3	10.8
No use of education	0.6	0.5	0.6	0.3	0.5
Child works at/outside home	2.8	2.1	2.6	1.1	2.4
Child dislikes school	8.5	14.6	11.9	10.8	11.8
Too young for schooling	51.1	46.6	48.2	53.3	48.7
Security concern	1.5	1.7	1.8	0.8	1.6
Disability	2.8	4.9	3.9	4.2	3.9
Others	3.0	1.7	2.0	4.2	2.3
Total	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

mentioned more for the girls than the boys (51.1% vs. 46.6%) and 'child dislikes school' was mentioned more for the boys than the girls (14.6% vs. 8.5%). Otherwise, 'too young for schooling' and 'scarcity of money' were mentioned more by the urban parents than their rural counterparts. 'Refusal of admission' occurred more among the rural children than the urban children.

Some variations in the proportions against various reasons of out-of-schooling were noticed when stratum-wise analysis of data was done (Annex 5.15). For instance, 'too young for schooling' was mentioned by the highest proportion of parents in each stratum but it was highest in rural Khulna (61.3%) and lowest in rural Barisal (41.5%). A good proportion of the parents (23%) of rural Barisal mentioned that due to distance between home and school they kept their children out-of-school. Refusal of admission by the school authorities prominently occurred in three divisions, viz., Dhaka, Chittagong and Rajshahi. Scarcity of money was a major problem in rural Sylhet division and metropolitan cities, a moderate problem in rural Rajshahi division and municipalities and least problem in other areas.

Analysis of the reasons of out-of-schooling by age of the children provides following interesting findings (Annexes 5.16 to 5.18).

- The reasons 'scarcity of money' and 'child dislikes school' became prominent with the increase in age of the children. Both are obvious because private expenditure for schooling increases with the increase of class, which has a direct link with the age of the children. As children become older they become more sensitive to the non-friendly environment of classroom teaching which may cause disliking.
- The tendency to 'regret admission' by the school authorities and parental tendency to say 'too young to enroll' decreased with the increase of age of the children. Both the reasons are interlinked and might be rooted in the same place, not being convinced about the official start age of schooling by both the parents and the school authorities. A system of birth registration could address many of these problems.

Although the proportion of out-of-school children decreased over time but the reasons of this as cited by the parents did not change much during the past decade.

Distance between home and various types of educational institutions providing primary education was collected to see whether it has any relationship with out-of-schooling. The institutions included government, non-government and non-formal primary schools, ebtedayee and higher madrasas, and junior and other primary attached secondary schools. The respondents reported that 64.2% of the primary aged children (6-10 years) had any type of primary school within a half kilometer radius of their home, 22% had school within 0.5-<1 km radius, 10.4% had school within

**Table 5.11**  
*Percentage of out-of-school children by distance between home and school and gender*

Distance between home to school (km)	Gender		Both
	Girls	Boys	
< 0.5 km	11.8	12.9	12.4
0.5 - <1.0 km	12.2	13.9	13.1
1.0 - <1.5 km	15.2	17.4	16.3
1.5 - <2.0 km	15.4	22.9	19.0
2.0 km+	52.6	51.3	51.9

Source: Education Watch Household Survey, 2008

1-<1.5 km radius, 2% had school within 1.5-<2 km radius and 1.4% had school within 2 km or more radius. Other way, 3.4% of the eligible children had no primary school or madrasa within 1.5 km radius of their homes and the schools were located beyond one kilometer of their homes of 13.8% of the eligible children.

A positive relationship between out-of-schooling and distance between home and school was observed (Table 5.11). If the distance between home and school increased the proportion of children out-of-school also increased. The rate of out-of-school children was higher than the national average if the distance between home and school was one kilometer or more. More than half of the children were out-of-school if there was no school within two kilometers radius of home.

### G. Multivariate analysis of enrolment

A logistic regression model was developed to understand the predictive power of the socioeconomic characteristics of the children in their enrolment. Children aged 6-10 years were considered. The dependent variable was the children's enrolment status measured dichotomously: currently enrolled or not. Eight independent variables were taken. These are: age, sex, residence, fathers education, mothers education, religion, household food security status, and distance between home and nearest primary educational institution. All of them were categorical. A stepwise approach was followed and the variables appeared in the model through forward selected and backward elimination. Except religion, the model considered all other seven variables as significant predictors of primary enrolment ( $p < 0.001$ ). Table 5.12 provides the regression coefficients with odds ratios and their 95% confidence limits. Following are the major observations from this analysis:

**Table 5.12**  
*Logistic regression model predicting primary enrolment*

Predictors	Regression coefficients	Odds ratio	95% confidence interval
<b>Age</b>			
6 yrs	0	1.00	
7 yrs	1.34	3.83	3.35 - 4.39
8 yrs	2.27	9.67	8.16 - 11.46
9 yrs	2.46	11.70	9.54 - 14.34
10 yrs	2.20	9.00	7.69 - 10.53
<b>Gender</b>			
Boys	0	1.00	
Girls	0.19	1.21	1.09 - 1.34
<b>Residence</b>			
Urban	0	1.00	
Rural	0.27	1.31	1.11 - 1.55
<b>Fathers education</b>			
Nil	0	1.00	
Primary	0.33	1.39	1.21 - 1.59
Secondary	0.67	1.96	1.65 - 2.33
Tertiary	1.22	3.38	2.33 - 4.99
<b>Mothers education</b>			
Nil	0	1.00	
Primary	0.61	1.84	1.61 - 2.10
Secondary+	0.88	2.41	2.00 - 2.89
<b>HH food security status</b>			
Always in deficit	0	1.00	
Sometimes in deficit	0.36	1.43	1.23 - 1.66
Breakeven	0.60	1.83	1.56 - 2.14
Surplus	0.64	1.90	1.58 - 2.28
<b>Distance from home to nearest school</b>			
2.0 km +	0	1.00	
1.5 - <2.0 km	1.39	4.01	2.57 - 6.25
1.0 - <1.5 km	1.55	4.74	3.38 - 6.64
0.5 - <1.0 km	1.86	6.46	4.67 - 8.92
<0.5 km	1.95	7.05	5.16 - 9.63
<b>Constant</b>			
-2 Log likelihood	9555.27		
Cox & Snell R <sup>2</sup>	0.13		
Nagelkerke R <sup>2</sup>	0.24		

All the regression coefficients are statistically significant at  $p < 0.001$

Source: Education Watch Household Survey, 2008

- Age of the children came out as the most important predictor followed by mothers' education. Age explained more than half of the total variation in primary enrolment and mothers' education a quarter.
- Distance between home and nearest primary school and fathers education came out as the third and fourth variables in the model.
- Residence, gender and household food security status were the three least contributing variables from the bottom.

Findings of this analysis, in terms of relationship between the explanatory variables and enrolment corroborated in most cases with that observed in bi-variate analysis presented earlier. The only exception is area of residence of the children. Table 5.6 showed that urban children were ahead of their rural counterparts ( $p < 0.05$ ) but this analysis shows an opposite relationship when the affects of other variables were controlled.

## H. Gross and net intake ratios

It is already reported that both over and under aged children were currently enrolled in the primary classes. Instead of all children of primary school age this section specifically looks at the children of age six - the entry age for primary schooling. This is important especially in relation to completion of universal primary education within the limited timeframe (2015 AD according to the MDGs). Two measures were considered, viz., gross intake ratio (GIR) and net intake rate (NIR). Following are the definitions of these two:

- The gross intake ratio (GIR) is the total number of new entrants in the first grade of primary education, regardless of age, expressed as a percentage of the population at the official primary school-entrance age.
- The net entrance rate (NIR) is the new entrants in the first grade of primary education who are of the official primary school-entrance age, expressed as a percentage of the population of the same age.

Among the children of age six, in 2008, 18.8% enrolled in pre-primary class, 38.6% in class I, 5.2% in class II, 2.3% in the non-recognized madrasas and 35% was out-of-school (Table 5.13). Although 65% of all children of this particular age were in school, 38.6% was in the first grade. Thus, at the national level, the NIR was 38.6%. On the other hand, a good proportion of children of other ages (majority over aged and few under aged) also enrolled in the first grade. Considering all of them the GIR stood at 159% - over four times of the net rate. This means that of the students of the first grade, only a quarter was from the official primary school-entrance age and three quarters from

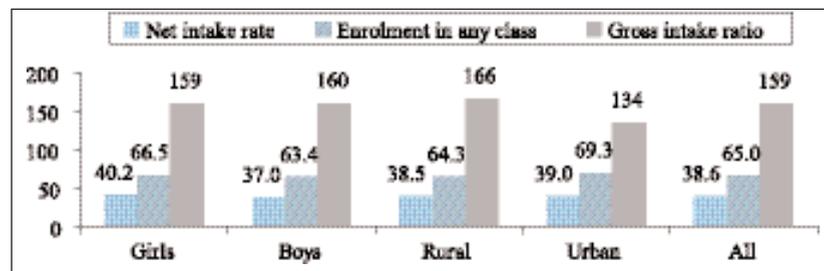
**Table 5.13**  
*Percentage distribution of children of age six by level of education and year*

Level of education	Year			
	1998	2000	2005	2008
Pre-primary	9.5	10.8	16.5	18.8
Class I	41.9	44.5	41.0	38.6
Class II	8.4	8.8	13.0	5.2
Non-graded madrasa	1.0	0.5	1.0	2.3
Our of school	39.2	35.4	28.5	35.0
Total	100.0	100.0	100.0	100.0

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

outside. Figure 5.9 provides net intake rate, gross intake ratio and enrolment rate of age six children in any class. In terms of NIR the girls were ahead of the boys but there was no difference between rural and urban children. On the other hand, no gender difference was found in GIR but the rural children were much ahead of their urban counterparts. The girls and the urban children were ahead of their respective counterparts in enrolment in any class.

**Figure 5.9**  
*The enrolment scenario at official primary school-entrance age*



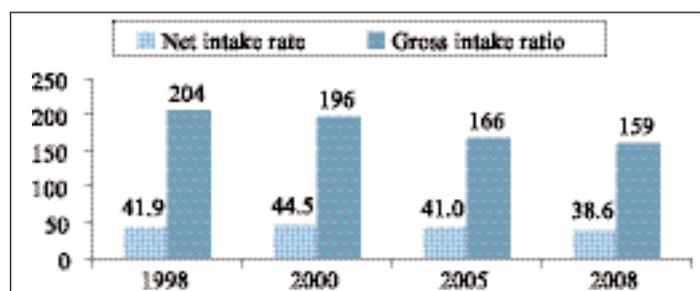
Source: Education Watch Household Survey, 2008

Stratum-wise analysis shows that the top three positions in terms of both net and gross intake ratios were captured by the same three rural divisions, viz., Rajshahi, Khulna and Barisal (Annex 5.19). Rural Rajshahi division topped in GIR (186%) followed by rural Khulna and Barisal divisions (respectively 182% and 180%). Otherwise, the highest NIR was found for rural Khulna division where nearly half of the children of age six enrolled in class I. The positions of Barisal and Rajshahi divisions were respectively second and third who were 6-7 percentage points behind the top division.

On the other hand, the lowest GIR was found in the municipalities (124%) followed by rural Chittagong (141%) and the metropolitan cities (145%). Except the three top ranking divisions the NIR of the other six strata were below 40%. The lowest position was catered by rural Chittagong division with only a third of the six-year old children enrolled in class I. The rate was around 36% for rural Sylhet and Dhaka divisions. Annex 5.20 provides more analysis on this.

Let us take a look at the trends in net and gross intake ratios during 1998-2008. Both the ratios decreased over time (Figure 5.10). Whereas, the decrease in GIR was drastic, it was slower in net rate. For instance, the GIR was 204% in 1998 which decreased to 196% in 2000, 166% in 2005 and 159% in 2008. On the other hand, the NIR increased from 41.9% in 1998 to 44.5% in 2000 and then decreased back to 41% in 2005 and further to 38.6% in 2008. The gap between gross and net ratios also decreased - 162 percentage points in 1998 to 120 percentage points in 2008. GIR was five times of NIR in 1998, which became four times in 2008.

**Figure 5.10**  
*Net and gross intake ratios by year*



Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

In the ideal situation there should be no or very little difference between gross and net intake ratios. Much higher GIR indicates that majority children start the first grade of education at later age. The reasons behind lower net intake rate are two. First, a good proportion of the children of age six

did not enroll in school (35% in 2008) and second, a portion of them enrolled in pre-primary class (18.8% in 2008). Trend analysis shows that proportion of children aged six enrolled in pre-primary class increased over time; nearly one percentage points per year (Table 5.13). The proportion of out-of-school children was decreasing till 2005, which increased afterwards. The same happened to those started the first grade of primary education at an earlier age (i.e., at five). All these created a difficult situation for Bangladesh to ensure enrolment of all eligible children in grade I by 2011 and hence the full completion of primary education by 2015.

## I. Students' attendance

Attendance in classrooms is the second stage of participation after access to school. To derive the attendance rate of the students in schools two methods were utilized. First, asking the respondents of the household survey whether the respective students attended classes on the day before the survey. Second, a head count was conducted during the day of the school survey and the numbers were compared with the enrolment registers. The first attempt derived a rate of about 90%, which seemed to be overestimated. Thus, the attendance rate derived from the second method is presented here. Overall, out of the 41.2 registered students per class 27.9 were present on the count day. Thus, the overall attendance rate in the primary level educational institutions surveyed was 67.7% (Table 5.14). The attendance rate was 68% among the students of rural schools and 66.6% among the students of urban schools. The rate for the girls was 69.8% and for boys 65.4%. The girls were ahead of the boys in both the areas.

**Table 5.14**  
*Students' attendance rate by area and gender*

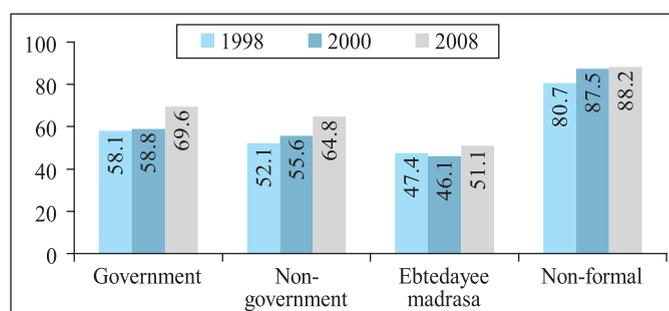
Area	Gender		
	Girls	Boys	Both
Rural	70.3 (20,205)	65.5 (18,929)	68.0 (39,134)
Urban	68.1 (18,724)	65.1 (17,565)	66.6 (36,289)
All	69.8 (38,929)	65.4 (36,494)	67.7 (75,423)

*Figures in the parentheses indicate number of children  
Source: Education Watch Household Survey, 2008*

The highest attendance rate of the students was calculated in the non-formal primary schools (88.2%) followed by the government and primary attached high school students (both over 69%). The rate was 64.8% among the students of non-government primary schools, 53.3% in the high madrasas and 51.1% in the ebtedayee madrasas (Annex 5.21). More analysis of students' attendance by school type, gender and area is provided in Annexes 5.21 and 5.22.

Attendance of the students in schools increased over time (Figure 5.11). A statistically significant improvement was noticed between 2000 and 2008. Overall, the attendance rate of the students was about 60% during 1998-2000 it jumped up to

**Figure 5.11**  
*Attendance rate by school type and year*



*Sources: Education Watch Household Surveys, 1998, 2000, 2008*

67.7% in 2008 - about one percentage point increase for every year. School type-wise analysis shows that the rate was always highest among the students of non-formal primary schools. Major improvement in attendance rate in this type of school occurred between 1998 and 2000 and it was between 2000 and 2008 for other three types of schools. The attendance rate in government primary schools improved 11.5 percentage points during 1998-2008 which was 12.7 percentage points for the non-government schools and 3.7 percentage points for the ebte dayee madrasas.

## J. Salient findings

Access to education is the most important issue after setting up a school. Attendance of students in the classrooms is a next step. This section analyses both enrolment and attendance of the students using household and school survey data.

- The gross enrolment ratio increased during the first two years of the past decade and then declined and stood at 103% in 2008. Smooth decline among the girls and the rural children was observed. In 2008, the ratio was highest among the rural girls (107%) and lowest among the urban boys (97%).
- During 1998-2000, about a third of the primary school students were out of officially determined age range (6-10 years) which decreased during 2005-8. This gives the impression that majority of the primary students were within the official age range. A critical look at the age issue gave a different scenario. Ideally the difference between age and grade should be five; for instance, the children of age six should enrol in class I, age seven in class II and so on. However, this was not the case. In 2008, only a fifth of the primary students enrolled in the classes suitable for their ages but this never went beyond 25%. A slight improvement could be noticed over time, if a difference of six is considered acceptable between age and class.
- The highest proportion of the primary students was found enrolled in the government primary schools in all the surveys. But the share of the government schools gradually decreased over time. A static situation was observed for non-government primary schools with about 20% share and for the primary attached to secondary schools with less than 2% share. Share of the English medium schools also increased over time. Rural Chittagong and Sylhet had the highest proportion of government school students (66-67%) and lowest proportion of non-government and non-formal school students. Sylhet was the top in terms of madrasa students followed by Chittagong.
- The net enrolment rate at primary level increased from 77% in 1998 to 86.8% in 2005, an increase at the rate of 1.4 percentage points per year. The rate got stagnant afterwards. The net rate was found to be 86.4% in 2008. The girls outnumbering the boys in net enrolment was first documented in 1998 (78.5% vs. 75.5%;  $p < 0.001$ ) and continued till 2008 (87.1% vs. 85.6%;  $p < 0.01$ ). The rural children lagged behind their urban counterparts in net enrolment throughout the decade. None of the differences (by gender or by area) between 2005 and 2008, however, were found statistically significant.
- Age specific net enrolment rate gradually increased from age six to nine and then declined at age 10 in three of the four surveys except 2005. Decline in the rate started from age nine in 2005.

Between 2005 and 2008, the net rate declined much for those of age six; it was mostly equal for ages seven and eight but increased for ages nine and ten.

- Of the eight strata, steady improvement in net enrolment was observed in three, viz., rural Rajshahi and Khulna divisions and the metropolitan cities. Significant fall between 2005 and 2008 was found in rural Sylhet division and the municipalities. Both gross and net enrolment ratios in Sylhet were significantly lower in 2000 and 2008 than the past years.
- In terms of correlates with economic status, the net rate between 2005 and 2008 declined in upper three of the four categories of self rated household food security status, but not in the poorest group where the rate increased two percentage points (from 76.1% to 78.1%).
- Positive correlation between net enrolment and parental education was also observed throughout the decade. The proportion of never schooled parents decreased over time - from 47.7% in 1998 to 45.4% in 2000, 35.4% in 2005 and 33.3% in 2008. The net enrolment rate increased for the children of both never and ever schooled parents during 1998-2005 which became stagnant in 2008 for both the groups.
- In terms of admitting children from the poorest households and the first generation learners, the non-formal schools did better than others. Few children with such characteristics admitted in the kindergartens or the primary attached high schools. Mean age of the students of government, non-government and non-formal schools were mostly equal (average 9 years) but it was higher for the madrasas and lower for kindergartens and primary attached high schools. No non-Muslim students were admitted in the madrasas.
- Not only the older students enrolled in the primary classes, some primary aged children also got enrolled in the pre-primary and secondary classes and the non-graded madrasas. The proportion of primary aged children in primary classes increased from 70.9% in 1998 to 77% in 2005 and then decreased to 75.7% in 2008. On the other hand, proportion of primary students enrolled in pre-primary and non-graded madrasas increased throughout the decade.
- Situation of out-of-schooling improved during the past decade - 23% in 1998 to 13.6% in 2008. Major improvement was observed in the poorest households. The parents were asked to mention the most important reason for their children's non-enrolment in school. In about a half of the out-of-school cases the parents thought that their children were not enough grown up to enrol in school although they were 6-8 years old. The other reason for younger children being out-of-school was the refusal by the schools. Reasons like 'scarcity of money' and 'losing interest in school' were mostly prominent for the older children. Five to six percent of the children could not enrol due to distance between home and school and about 4% could not do so due to disability. More than half of the children were out-of-school if there was no school within two kilometers radius of home.
- The gross intake ratio drastically decreased over time - from a very high of 204% in 1998 to 196% in 2000, 166% in 2005 and 159% in 2008. On the other hand, the net intake rate improved from 41.9% in 1998 to 44.5% in 2000 and then decreased to 41% in 2005 and 38.6% in 2008.

- The six years old children are supposed to enrol in class I but a large proportion did not. These children's enrolment in pre-primary class significantly increased over time - from 9.5% in 1998 to 10.8% in 2000, 16.5% in 2005 and 18.8% in 2008. Again for a good portion of them, the parents thought that age six was too young to enrol in school. They were about a fifth of all six years old children in 2000, 25% in 2005 and 27% in 2008. These two clearly shows that Bangladesh is going behind in terms of achieving the second MDG.
- Attendance in school is an important indicator for measuring participation in education. Although the respondents of household survey reported 90% attendance rate in 2008 the head count in the schools showed that it was only 67.7%. The school attendance rate was higher for the girls than the boys (69.8% vs. 65.4%) and the rural students than urban (68% vs. 66.6%). Overall, the attendance rate increased from about 60% during 1998-2000 to 67.7% in 2008. Increase in enrolment occurred in all types of primary schools; however, the highest rate was found for non-formal schools.





## Chapter 6

### Internal Efficiency of Primary Education

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Analysing two years school records on enrolment, promotion, repetition and dropout of students, this chapter provides an estimate of primary completion and efficiency of institutions through a reconstructed (*synthetic*) cohort analysis. Primary education provision has become less efficient than in the past and the coefficient of efficiency varied by school type/streams, residence and gender. Primary-attached high schools are the most efficient and the ebtedayee madrasas are the least efficient primary provisions in the country.



The household survey findings as presented in the previous chapter provided a partial picture of dropout scenario. An alternative and arguably more popular method of gauging dropout is through the use of school records of class-wise data on promotion, repetition and dropout. Comparing two years enrolment data from school records may provide students retention rate at various classes and ultimately help compute the completion rate at primary level. However, note that an ideal method for doing this is to follow a cohort of students for five consecutive years. In absence of the appropriate information to attempt this, a reconstructed (*synthetic*) cohort analysis was done to estimate primary completion and dropout rates and the coefficient of efficiency using school records for two most recent years. It was not feasible to include the non-formal schools in this analysis. Thus, the national estimates were generated using the data gathered from the other five types of schools.

### A. Promotion, dropout and repetition

Class-wise information on number of students enrolled, promoted, dropped out and repeated were collected for each of the educational institutions under survey. This allowed calculating promotion, dropout and repetition rates for 2007-8.

On an average, the promotion rate at primary level in Bangladesh was 77.6% among those students whose names appeared in the school registers at the beginning of 2007 (Table 6.1). The average dropout rate was 11.5% during the year and 10.9% of the students repeated in the same class the following year.

The promotion rate varied by class and no smooth trend was observed (Table 6.1). The rate was over 80% in classes II and V, over 76% in classes III and IV, and 74% in class I. The dropout rate was 11.8% in class I, which decreased to 9.3% in class II and then gradually increased up to 13.4% in class V. The repetition rate was highest in class I (14%) and lowest in class V (5.5%).

School type-wise analysis shows that the promotion rate was highest in the primary-attached high schools (91.7%) and lowest in the independent ebtedayee madrasas (72.6%) (Table 6.2). The ebtedayee attached high madrasas were in the second with 82.6% promotion rate. It was 77.7% in the government primary schools and 74.2% in the non-government primary schools.

**Table 6.1**  
*Promotion, dropout and repeater rates by class*

Class	Number of students	Percentage of students			Total
		Promoted	Dropped out	Repeated	
Class I	18,382	74.2	11.8	14.0	100.0
Class II	14,899	81.2	9.3	9.5	100.0
Class III	14,974	76.6	10.5	12.9	100.0
Class IV	13,520	76.5	12.8	10.7	100.0
Class V	11,929	81.1	13.4	5.5	100.0
All	73,704	77.6	11.5	10.9	100.0

Source: Education Watch Educational Institution Survey, 2008

**Table 6.2**  
*Promotion, dropout and repeater rates by school type*

School type	Percentage of students			Total
	Promoted	Dropped out	Repeated	
Government school	77.7	10.3	12.0	100.0
Non-government school	74.2	14.7	11.1	100.0
Ebtedayee madrasa	72.6	19.4	8.0	100.0
High school	91.7	3.9	4.4	100.0
High madrasa	82.6	7.9	9.5	100.0

Source: Education Watch Educational Institution Survey, 2008

The converse is the dropout rate which was highest in the ebte dayee madrasas (19.4%) and lowest in the primary-attached high schools (3.9%). Repetition rate was also lowest in the primary-attached high schools but was much higher in the government and non-government primary schools.

## B. Retention and cycle completion

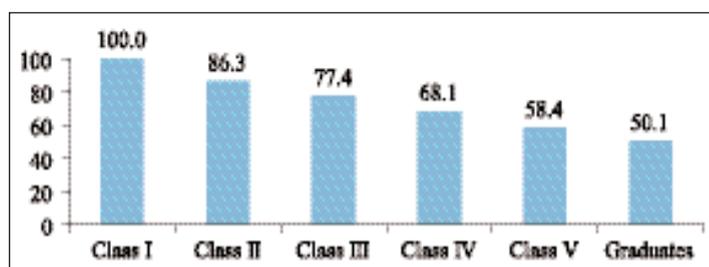
Retention of students in various classes, survival up to class V and completion of full cycle of primary education are three important indicators for assessing internal efficiency of primary education. As mentioned previously, a simplified or 'synthetic' cohort method, under some assumptions, allows reconstructing the progress of pupils from two consecutive years data on number of students registered and a single year data on promotion, dropout and repetition. This is known as reconstructed cohort method. In this method, a hypothetical cohort of 1,000 students entering in class I is reconstructed and assumed that they would experience the current promotion, repetition and dropout rates for next five years. This allows finding refined estimates of cycle completion and other internal efficiency indicators including the coefficient of efficiency. Data from school records were analyzed by using UNESCO-PROAP software called Edu Analysis (UNESCO 2001). Reliability of the estimates depended to a large extent on the authenticity of the school records.

*Students' retention at various levels:* At the national level, among the students who enrolled in class I, 86.3% survived up to class II, 77.4% up to class III, 68.1% up to class IV and 58.4% up to class V (Figure 6.1). Half of the students crossed the barrier of the fifth grade. Gender-wise analysis shows

that the retention rates at the second and the third grades were higher among the boys than the girls, which reversed in the following two grades (Table 6.3). Area-wise, the retention rates were higher for the urban students compared to their rural counterparts.

School type-wise analysis shows impressive retention rates of the students of primary-attached secondary schools at various classes (Table 6.4). It was more than 90% at every class of primary education. Of the five types of educational institutions, the position of the ebte dayee-attached high madrasas was the second and the independent ebte dayee madrasas the last. Among the students who enrolled in class I in the ebte dayee madrasas, 72.3%

**Figure 6.1**  
*Retention rates at various stages of primary education, 2007-8*



Source: Education Watch Educational Institution Survey, 2008

**Table 6.3**  
*Retention rates at various stages of primary education by area and gender, 2007-8*

Stages	Gender		Area		All
	Girls	Boys	Rural	Urban	
Class I	100.0	100.0	100.0	100.0	100.0
Class II	85.1	87.6	85.5	93.7	86.3
Class III	77.0	77.9	75.2	93.7	77.4
Class IV	69.0	67.1	65.2	90.0	68.1
Class V	60.2	56.5	55.8	77.8	58.4
Graduates	51.9	48.3	47.6	69.2	50.1

Source: Education Watch Educational Institution Survey, 2008

survived to class II, 61.2% to class III, 52.3% to class IV and 37.9% to class V. The survival rate in each class was higher among the students of the government schools than those of the non-government schools. Among those admitted in the government schools in class I, 90% survived to class II, 79.5% to class III, 70.1% to class IV and 59.4% to class V (Table 6.4).

**Table 6.4**  
*Retention rates at various stages of primary education by school type, 2007-8*

Stages	School type				
	Government	Non-govt.	Ebtedayee madrasa	High school	High madrasa
Class I	100.0	100.0	100.0	100.0	100.0
Class II	90.0	82.5	72.3	99.0	83.7
Class III	79.5	72.4	61.2	99.0	83.7
Class IV	70.1	59.9	52.3	97.8	83.7
Class V	59.4	48.7	37.9	91.2	83.7
Graduates	53.1	39.7	31.5	83.7	65.5

Source: Education Watch Educational Institution Survey, 2008

*Survival up to class V:* This is the number of students who promoted to class V against those enrolled in class I expressed in percentage form. Overall, the survival rate was estimated as 58.4%. More girls than boys survived up to class V (60.2% vs. 56.5%) and the rate was significantly higher among the urban students compared to their rural counterparts (77.8% vs. 55.8%). Whereas the gender gap in survival rate was 3.7 percentage points, it was 22 percentage points between urban and rural students (Table 6.5).

**Table 6.5**  
*Hypothetical cohort analysis of primary school students by area and gender, 2007-8*

Indicators	Gender		Area		All
	Girls	Boys	Rural	Urban	
Survival rate up to grade V	60.2	56.5	55.8	77.8	58.4
Completion rate	51.9	48.3	47.6	69.2	50.1
Dropout rate	48.1	51.7	52.4	30.8	49.9
Coefficient of efficiency	59.6	54.6	55.3	70.0	57.2
Pupil years invested per graduate	8.4	9.2	9.0	7.1	8.7

Source: Education Watch Educational Institution Survey, 2008

The survival rate in class V was highest among the students of the primary-attached high schools and lowest among those of the ebtedayee madrasas (91.2% and 37.9%). The gap between them was 53.3 percentage points. The ebtedayee-attached high madrasas ranked second with 83.7% survival rate, the government schools the third position with 59.4% and the non-government schools followed them with 48.7% survival rate (Table 6.6).

In terms of survival rate, the girls were ahead of the boys in three types of schools. These are government schools, ebtedayee madrasas and the ebtedayee-attached to high madrasas (Table 6.7). The gender gap was the highest in ebtedayee madrasas - 19.4 percentage points. The boys were ahead of the girls in the non-government schools and the primary-attached high schools.

Area-wise, no variation was found in two types of educational institutions, viz., non-government schools and the ebtedayee madrasas (Table 6.8). The high schools and the high madrasas located in the

**Table 6.6**  
*Hypothetical cohort analysis of primary school students by school type, 2007-8*

Indicators	School type				
	Government	Non-govt.	Ebtedayee madrasa	High school	High madrasa
Survival rate up to grade V	59.4	48.7	37.9	91.2	83.7
Completion rate	53.1	39.7	31.5	83.7	65.4
Dropout rate	46.9	60.3	68.5	16.3	34.6
Coefficient of efficiency	58.6	48.6	44.7	82.5	68.1
Pupil years invested per graduate	8.5	10.1	11.2	6.1	7.3

Source: Education Watch Educational Institution Survey, 2008

urban areas were slightly ahead of their respective rural counterparts. Otherwise, the urban government schools were 19.2 percentage points ahead of their rural counterparts in survival rate (76% vs. 56.8%).

*Primary cycle completion rate:* On an average, half of the students completed the full cycle of primary education with a substantial gap between urban and rural areas. The gender gap was less phenomenal.

The completion rate was 51.9% among the girls and 48.3% among the boys. It was 47.6% among the students of rural schools and 69.2% among those in urban schools.

The completion rate varied considerably by school type - highest in the primary attached high schools (83.7%) and lowest in the ebtedayee madrasas (31.5%). The lowest was less than half of the highest (Table 6.6).

**Table 6.7**  
*Hypothetical cohort analysis of primary school students by school type and gender, 2007-8*

Indicators	School type				
	Government	Non-govt.	Ebtedayee madrasa	High school	High madrasa
<b>Girls</b>					
Survival rate up to grade V	60.7	45.5	48.3	88.2	83.4
Completion rate	54.4	37.4	40.7	80.7	65.5
Dropout rate	45.6	62.6	59.3	19.3	34.5
Coefficient of efficiency	61.2	47.3	53.8	79.6	68.7
Pupil years invested per graduate	8.2	10.6	9.3	6.3	7.3
<b>Boys</b>					
Survival rate up to grade V	57.9	52.1	28.9	90.4	76.5
Completion rate	51.6	42.0	23.8	83.1	59.4
Dropout rate	48.4	58.0	76.2	16.9	40.0
Coefficient of efficiency	55.9	49.8	36.1	83.7	64.1
Pupil years invested per graduate	8.9	10.0	13.9	6.0	7.8

Source: Education Watch Educational Institution Survey, 2008

The high madrasas ranked the second; however, they were 18.3 percentage points behind the top scorer. It is interesting to note that these two top scorers served only 6.1% of the total primary student population (the high schools served 1.3% of total primary students). Serving 56.9% of the total students the government schools had a completion rate of 53.1% and serving a fifth of the total students the non-government schools had 39.7% completion rate.

Gender gap was noticed in all five types of schools under study. The completion rate was higher in favour of the girls in three types of schools, viz., the government schools and the two types of madrasas. A reverse trend was observed in the other two. Completion rates in rural and urban schools

**Table 6.8**  
*Hypothetical cohort analysis of primary school students by school type and area, 2007-8*

Indicators	School type				
	Government	Non-govt.	Ebtedayee madrasa	High school	High madrasa
<i>Rural</i>					
Survival rate up to grade V	56.8	48.8	37.8	87.8	83.6
Completion rate	50.6	39.6	31.5	72.0	65.3
Dropout rate	49.1	60.4	68.5	28.0	34.7
Coefficient of efficiency	57.1	48.5	44.7	73.9	68.0
Pupil years invested per graduate	8.8	10.3	11.2	6.8	7.3
<i>Urban</i>					
Survival rate up to grade V	76.0	48.4	37.9	91.7	85.8
Completion rate	67.4	41.1	30.6	85.5	66.3
Dropout rate	32.6	58.9	69.4	14.5	33.7
Coefficient of efficiency	67.8	50.2	45.0	83.8	70.0
Pupil years invested per graduate	7.4	10.0	11.1	6.0	7.1

Source: Education Watch Educational Institution Survey, 2008

were very close to each other in three types of schools. They are the non-government schools and the two types of madrasas. On the other hand, the urban government schools and the primary attached to high schools were ahead of their rural counterparts. The gap was 16.8 percentage points for government schools and 13.5 percentage points for high schools.

*Gap between survival and completion:* On an average, the gap between the survival rate at class V and the primary completion rate was 8.3 percentage points. The difference was found similar for boys and girls and for rural and urban students. The highest gap was 18.3 percentage points found for the ebteyadee-attached high madrasas and lowest for the government schools (6.3 percentage points). High deviation between the two rates was observed among all four groups (rural/urban, boys/girls) of students of ebteyadee-attached high madrasas and the rural students of the high schools.

*Coefficient of efficiency:* This is a composite measure of internal efficiency of any education provision. It is a ratio of expected pupil years required to complete the primary cycle by the graduates and total years actually spent to produce those graduates expressed in percentage terms. This coefficient was 57.2% compared to the ideal number of 100 for the primary education provisions as a whole; 59.6% for the girls and 54.6% for the boys. Overall, the urban schools were more efficient than the rural schools; the coefficients were found 70% and 55.3% respectively.

The coefficient of efficiency varied by school type; it was highest for the primary attached high schools (82.5%) and lowest for the ebteyadee madrasas (44.7%). The coefficient was 68.1% for ebteyadee attached high madrasas, 58.6% for government schools and 48.6% for non-government schools. All five types of urban schools were more efficient than their respective rural counterparts. However, the highest gap was observed for primary-attached high schools - about 10 percentage points.

On an average, 8.7 pupil years were required to complete the five-year course of primary education - 3.7 years more than the expected. The pupil years required to complete the primary cycle was 8.4 years for boys, 9.2 years for girls, 9 years for rural students and 7.1 years for urban students. School type-wise variation was observed; highest for ebtedayee madrasas and lowest for primary-attached high schools. It took twice of the expected time for non-government schools and ebtedayee madrasas. The boys of ebtedayee madrasas took 13.9 pupil years to complete the primary cycle.

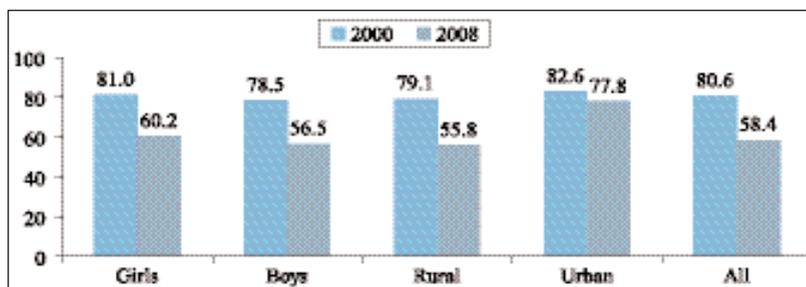
The dropout and completion rates and the pupil years required to complete the primary cycle clearly indicate primary education systems inefficiency as a whole. However, some sub-systems were more efficient than others. The sub-system which served a small portion of students had the highest efficiency level and the major provider a moderate level of efficiency. Efficiency levels of the ebtedayee madrasas and the non-government schools were very low compared to others, which jointly admitted about a quarter of the total primary students.

### C. Changes in internal efficiency

Overall, the promotion rate from one grade to another decreased over last 8-10 years and at the same time the dropout and the repetition rates increased, which resulted lower survival and completion rates. This has a direct link with the lower efficiency of the system. The average dropout and repetition rates were respectively 5.6% and 8% in 1998 which became 4.9% and 8.1% in 2000. These rates increased over time and reached at respectively 11.5% and 10.9% in 2008. The dropout rate almost doubled during the past 10 years. The overall promotion rate from one class to another was about 87% during 1998-2000 which decreased to 77.6% in 2008.

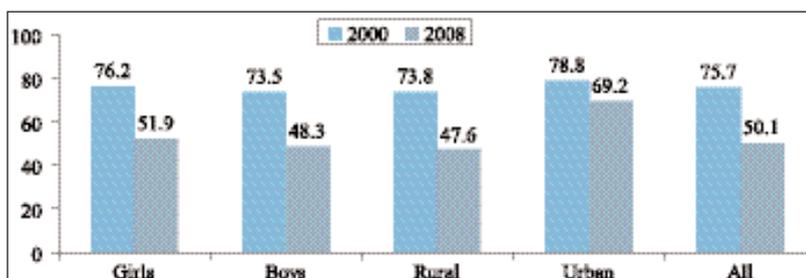
The survival rate at class V was estimated as 76.6% in 1998 which increased to 80.6% in 2000; however, decreased to 58.4% in 2008. Such change occurred irrespective of gender of the students and area of residence. However, the rate of decrease was not similar for all the groups. For instance, during 2000-2008, the survival rate decreased 23.3 percentage points among the rural students compared to 4.8 percentage points among the urban students (Figure 6.2). It decreased 20.8 percentage points among the girls and 22 percentage points among the boys.

Figure 6.2  
Changes in survival rate by gender and area



Sources: Education Watch Educational Institution Surveys, 2000, 2008

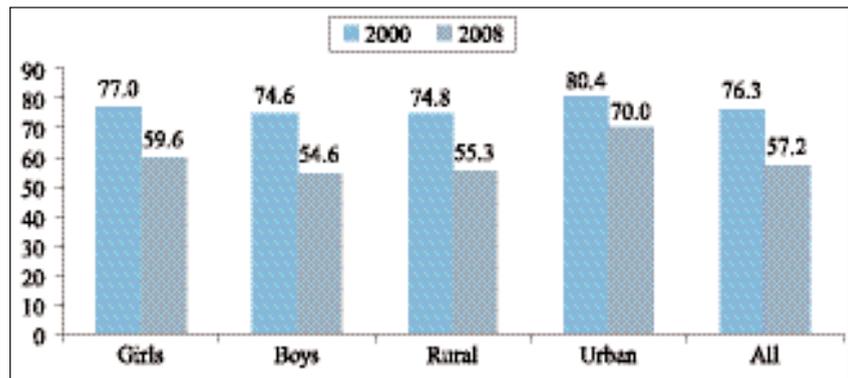
Figure 6.3  
Changes in completion rate by gender and area



Sources: Education Watch Educational Institution Surveys, 2000, 2008

Whereas, the primary cycle completion rate was 72.7% in 1998 and 75.7% in 2000, it drastically reduced to 50.1% in 2008. Changes in completion rates from 2000 to 2008 for boys and girls and urban and rural students are provided in Figure 6.3. The students of urban areas were found different from those of rural areas. The cycle completion rate was highest among them in both the years and the deviation over time was also least there. Mostly similar level of change occurred in case of the boys and the girls. As the coefficient of efficiency is a reflection of all the above factors similar kind of results were found; Overall, the efficiency of primary education provision reduced from 76.3% in 2000 to 57.2% in 2008 (Figure 6.4)

**Figure 6.4**  
*Changes in coefficient of efficiency by gender and area*



Sources: Education Watch Educational Institution Surveys, 2000, 2008

#### D. Salient findings

A reconstructed cohort analysis was done to estimate promotion, dropout and repetition rates and hence calculating retention and cycle completion rates and coefficient of efficiency of the system. Extracting from school level data, this section provides national as well as area, school type and gender-wise analysis of internal efficiency.

- During the past decade, the promotion rates at different classes of primary educational institutions decreased. This means an increase in the dropout and repetition rates which have negative implications for other efficiency indicators. Whereas the average dropout and repetition rates in each class were respectively 5.6% and 8% in 1998, these increased to 11.5% and 10.9% in 2008 respectively.
- Of the children enrolled in class I, 77.4% reached at class III, 58.4% survived up to class V and 50.1% completed the full cycle of primary education. The survival and completion rates were higher for the girls than the boys. These were much higher for the urban students than their rural counterparts. The cycle completion rate was highest in the primary-attached high schools (83.7%), followed by ebtedayee-attached high madrasas (65.5%). It was lowest in the ebtedayee madrasas (31.5%), followed by non-government (39.7%) and government schools (53.1%).
- Survival and completion rates and the coefficient of efficiency decreased during the past decade. Between 1998 and 2008, the survival rate decreased from 80.6% to 58.4% and the completion rate from 75.7% to 50.1%. The coefficient of efficiency was 76.3% in 1998 which reduced to 57.2% in 2008. All these clearly show a drastic fall in the efficiency of the primary education system in Bangladesh.





## Chapter 7

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### Students' Achievement of Competencies

Using the test instrument developed for *Education Watch 2000*, this chapter reports competencies achievement of the students of class V. Twenty-seven of the 50 terminal competencies were addressed in the test. Students' performance improved over time but very slowly. Performance of the primary-attached high schools and the non-formal schools were best, government and the non-government schools mediocre and the madrasas poorest. Regression analyses reveal that socioeconomic characteristics and additional inputs like private tutoring contributed more in predicting students' learning achievement than the school related factors. This indicates less contribution of the schools in learning and the need for them to be more pro-active.

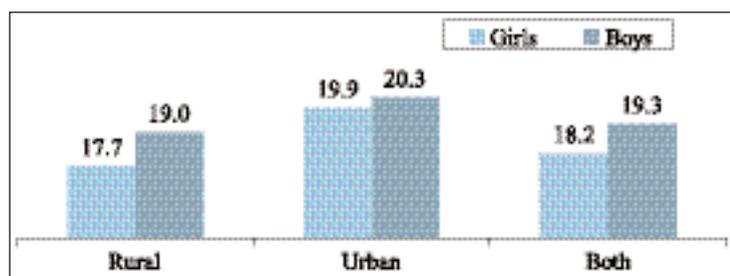


This chapter presents learning outcome of the students at the completion of primary cycle as assessed by *Education Watch*. In the overall framework of quality education, learning achievement of the students is considered as an immediate output of any education provision. As noted earlier this assessment was based on 27 of the 50 terminal competencies which were amenable for paper-pencil based test. Changes in learning achievement between 2000 and 2008 are also presented. Note that the nature of the question items against each of the competencies and the minimum level of skills needed to qualify for each of them are provided in Annexes 7.1 to 7.6.

### A. Average achievement

Of the 27 competencies under test, the students, on an average, achieved 18.7 competencies with a range zero to 27. In other words, the students who completed primary education in 2008 achieved 69.3% of the competencies under test (18.7 out of 27). The average achievement of the boys was significantly higher than that of the girls (19.3 vs. 18.2;  $p < 0.001$ ). Again, the urban school students surpassed their rural counterparts with a significant margin (20.1 vs. 18.4;  $p < 0.001$ ). The gender difference was higher in rural areas than that in urban areas (Figure 7.1). In both urban and rural areas, the girls lagged behind the boys. Of these four groups of students, the gap between the highest performing group (i.e., the urban boys) and the lowest performing group (i.e., the rural girls) was, on an average, 2.6 competencies.

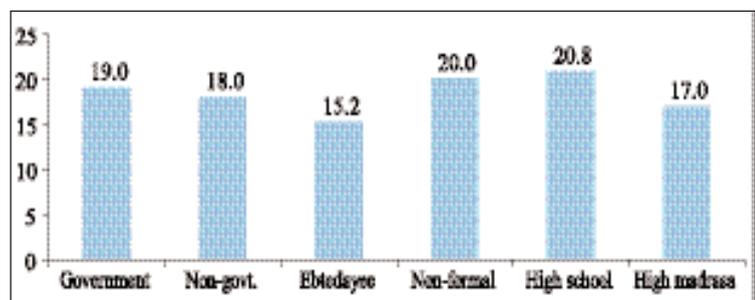
Figure 7.1  
Mean number of competencies achieved by area and gender



Source: Education Watch Competencies Achievement Test, 2008

Statistically significant variation by school type was observed in the competency achievement by the students. Of the six types of educational institutions, the highest performing were the students of primary-attached to secondary schools and the lowest were those in the ebteyee madrasas (Figure 7.2). The average number of competencies achieved by them was respectively 20.8 and 15.2. The overall ranking of the non-formal school students was the second with a difference of less than one competency from the first. The government primary schools ranked third with an average of 19 competencies and the non-government schools the fourth with an average of 18 competencies. The rank of the ebteyee-attached to high madrasas was the fifth. More statistics on the number of competencies achieved by gender, area and school type are provided in Annexes 7.7 and 7.8.

Figure 7.2  
Mean number of competencies achieved by school type



Source: Education Watch Competencies Achievement Test, 2008

Gender difference was observed in three types of educational institutions (Table 7.1). The boys did better than the girls in all of them which included the government primary (boys 19.7, girls 18.4;  $p < 0.001$ ) and the non-government primary schools (boys 18.4, girls 17.7;  $p < 0.01$ ), and the ebtedayee-attached high madrasas (boys 18.1, girls 16;  $p < 0.001$ ). The highest difference occurred in the ebtedayee-attached high madrasas and the lowest in the non-government primary schools. No statistically significant gender difference was found in ebtedayee madrasas, non-formal primary schools and the primary-attached high schools.

Location of educational institutions substantially affected learning achievement of the students (Table 7.2). Except for the non-government primary schools, area-wise variation of different degrees was found in other five types of educational institutions. The urban students out performed their rural counterparts in all cases. The highest variation occurred in the primary-attached high schools where the urban students, on an average, achieved 2.9 more competencies than the rural students. Area-wise gap in the government and the non-formal schools was mostly equal. The students of the primary-attached high schools in urban areas came out as the best performing group in this analysis with an average of 21.8 competencies per student.

Subject-wise analysis shows that the students, on an average, did best in *Poribesh Porichiti*. This subject had two parts, viz., Science and Society. The students did better in the Science part of *Poribesh Porichiti* than the other. Of the nine competencies in Science the students achieved 7.33 competencies and of the seven competencies in Society they achieved 4.41 competencies. In other words, the students collectively achieved respectively 81.4% and 73.5% of the competencies in these two areas (Figure 7.3). Performance in Bangla followed the above with an average score of 71.3%. The students did poorly in

**Table 7.1**  
*Mean number of competencies achieved by school type and gender*

School type	Gender		Level of significance
	Girls	Boys	
Government school	18.4 (651)	19.7 (624)	$p < 0.001$
Non-government school	17.7 (640)	18.4 (580)	$p < 0.01$
Ebtedayee madrasa	14.9 (429)	15.4 (399)	ns
Non-formal school	19.9 (690)	20.1 (601)	ns
High school	20.7 (664)	21.0 (503)	ns
High madrasa	16.0 (664)	18.1 (648)	$p < 0.001$
Level of significance	$p < 0.001$	$p < 0.001$	

Figures in the parentheses indicate number of students under test  
Source: Education Watch Competencies Achievement Test, 2008

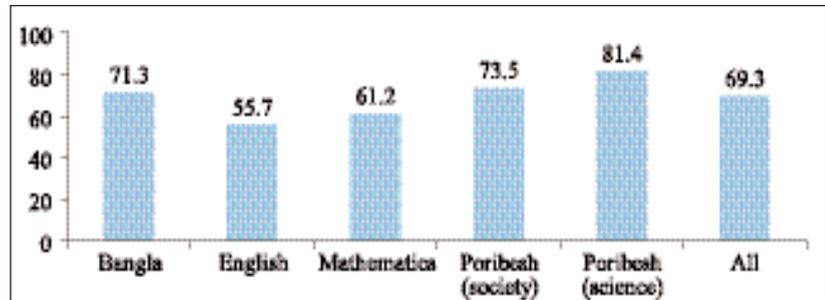
**Table 7.2**  
*Mean number of competencies achieved by school type and area*

School type	Area		Level of significance
	Rural	Urban	
Government school	18.6 (626)	20.2 (649)	$p < 0.001$
Non-government school	18.0 (621)	18.4 (599)	ns
Ebtedayee madrasa	15.1 (664)	16.2 (164)	$p < 0.01$
Non-formal school	19.8 (645)	21.3 (646)	$p < 0.001$
High school	19.2 (536)	21.8 (631)	$p < 0.001$
High madrasa	17.0 (705)	17.6 (607)	$p < 0.05$
Level of significance	$p < 0.001$	$p < 0.001$	

Figures in the parentheses indicate number of students under test  
Source: Education Watch Competencies Achievement Test, 2008

English with an average achievement of 55.7%. The performance in Mathematics was somewhere in between English and Bangla. The boys in general showed better performance in all the subjects than the girls and the urban students did better compared to their rural counterparts (Annexes 7.9 and 7.10).

**Figure 7.3**  
*Average competencies achievement in percentage terms by subject*



Source: Education Watch Competencies Achievement Test, 2008

School type-wise above analysis showed trends similar to that of overall performance presented in Figure 7.2. The students of primary-attached high schools did best in all the subjects (Annex 7.11). The non-formal primary school students tied up with them in *Poribesh Porichiti* (Science) but secured second position in other subjects. Position of the government primary schools was behind them who were followed by the non-government primary schools. The last two positions were occupied by the two types of madrasas.

The median number of competencies attained was 20 - slightly higher than the mean. This means that half of the students attained less than 20 competencies and another half attained 20 or more competencies. The median value also varied by area, gender and school type (Annexes 7.7 and 7.8). For instance, it was 20 for boys and 19 for girls, 19 for rural students and 21 for urban students. The median was 21 for non-formal primary and primary-attached high schools, 20 for government primary schools, 19 for non-government primary schools, 17 for ebte dayee-attached high madrasas and 15 for ebte dayee madrasas. Percentage distribution of students by number of competencies achieved, gender, residence and school type is provided in Annexes 7.12 and 7.13.

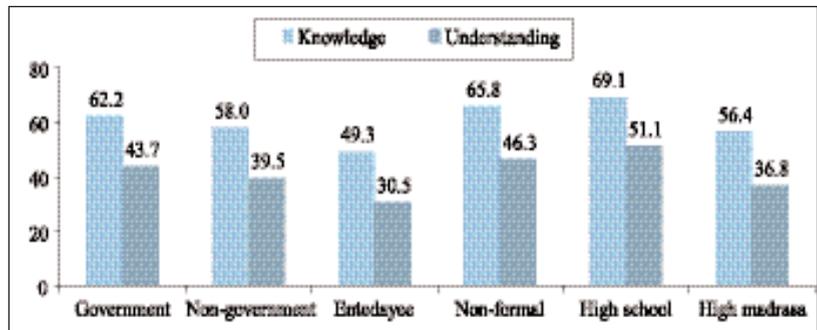
## **B. Analysis by taxonomic class level**

Of the 64 items in the test, 45 fall under 'knowledge' domain and 19 under 'understanding' domain (comprehension 6, application 7, analysis 3 and synthesis 3). An attempt was made to see the students' performance according to such classification. Of the 45 items of 'knowledge' level, the students, on an average, were successful in 27.5 items and out of 19 items of 'understanding' level they were successful in 8.1 items (Annex 7.14). Thus, the overall achievement in 'knowledge' level items was 61.1% and 'understanding' level items 42.6%. Better performance in the knowledge level items than the understanding level items was found in all groups when data were analyzed by gender, area or school type (Annexes 7.14 and 7.15 and Figure 7.4)). The gap between the two types of items was mostly equal among the student groups.

Statistically significant gender difference in favour of the boys was found in both knowledge and understanding level items in three types of schools, viz., government and non-government schools and the ebte dayee-attached high madrasas (Annex 7.16). It was only in the knowledge level items for the ebte dayee madrasa students. No gender difference in any type of items was observed among the students of non-formal schools and the primary-attached high schools. The urban students of the

government, non-formal and high schools correctly answered more items of both knowledge and understanding levels than their counterparts in rural schools (Annex 7.17). Area-wise variation was also found in knowledge level items for non-government schools and in understanding level items for ebtedayee madrasas.

**Figure 7.4**  
Percentage of items correctly answering by the students by taxonomic class level and school type



Source: Education Watch Competencies Achievement Test, 2008

### C. Classification of the competencies

Percentage of students achieving each of the 27 competencies and their breakdown by area, gender and school type is provided in Annexes 7.18 and 7.19. The analysis shows that the performance of the students in all the competencies significantly varied by school type. The urban students did significantly better than the rural students in 25 out of the 27 competencies. The two competencies where the students of both the areas showed equal performance were: knowing the preventive measures of common diseases and knowing about the prophets of various religions. No gender difference was found in four competencies; the girls did better than the boys in two; and the boys did better than the girls in 21.

Let us now categorize the competencies according to the performance of the students. Similar to the *Education Watch 2000* study four categories were considered. They are: *very difficult*, *difficult*, *easy* and *very easy*. The following are the definitions.

- *Very difficult*: If less than 40% of the students attained a particular competency (the level of achievement is 'poor');
- *Difficult*: If 40-59.9% of the students attained a particular competency (the level of achievement is 'mediocre');
- *Easy*: If 60-79.9% of the students attained a particular competency (the level of achievement is 'satisfactory');
- *Very easy*: If 80% or more students attained a particular competency (the level of achievement is 'excellent').

Table 7.3 presents frequency distribution of the competencies according to the above classification. It is seen that at the national level, the students showed 'excellent' performance in 12 competencies, 'satisfactory' in seven, 'mediocre' in five, and 'poor' in three. A list of the competencies according to this classification is provided in Table 7.4. The three competencies which the students found to be 'very difficult' were writing in English, word problem solving in Mathematics and knowing about Prophet Mohammed (SM) or the preachers of own religion. Note that the students of *Education Watch 2000* also found these three competencies 'very difficult'.

**Table 7.3**  
*Frequency distribution of number of competencies by level of achievement and school type*

Level of achievement	Difficulty level	Type of school						All
		Government school	Non-govt. school	Ebtedayee madrasa	Non-formal school	High school	High madrasa	
Poor	Very difficult	3	3	5	2	2	4	3
Mediocre	Difficult	4	5	6	5	4	4	5
Satisfactory	Easy	6	10	13	5	4	14	7
Excellent	Very easy	14	9	3	15	17	5	12

Source: Education Watch Competencies Achievement Test, 2008

Distribution of competencies varied by school type - the students of primary-attached high schools showed 'excellent' performance in 17 competencies, non-formal schools in 15 competencies, government schools in 14 competencies, non-government in nine, high madrasas in five and ebtedayee madrasas in three (Table 7.3). There were three common competencies in which the students of all types of schools showed 'excellent' performance. They are 'duties as member of society', 'importance of good health' and 'information collection ability'. Students irrespective of school type found two competencies 'very difficult' which were writing in English and knowing about Prophet Mohammed (SM) or the preachers of own religion. The students of government and non-government schools and the two types of madrasas found word problem in Mathematics as 'very difficult'. The ebtedayee madrasa students faced equal difficulty in two more

**Table 7.4**  
*Classification of the competencies according to the level of performance*

Level of performance	Competencies	Difficulty level
Poor	1. Writing skills in English	Very difficult
	2. Word problem solving in mathematics	
	3. Life sketch of prophet Mohammad (SM) or the preachers of own religion	
Mediocre	1. Writing skills in Bangla	Difficult
	2. Skills on four basic operations of arithmetic	
	3. Skills on measurement units	
	4. Knowing about the country	
	5. Knowing about the children of other countries	
Satisfactory	1. Reading skills in Bangla	Easy
	2. Reading skills in English	
	3. Knowing the duties as citizen of Bangladesh	
	4. Knowing the importance of balanced diet	
	5. Knowing prevention of common diseases	
	6. Scientific investigation skills	
	7. Identification of cause and effect relationship	
Excellent	1. Listening skills in Bangla	Very easy
	2. Listening skills in English	
	3. Basic number skills	
	4. Identification of geometric figures	
	5. Knowing the duties as family members	
	6. Knowing the duties as members of society	
	7. Manners with persons of various relationships	
	8. Knowing the importance of good health	
	9. Physical and environmental health systems	
	10. Information collection ability	
	11. Observation skills on natural objects	
	12. Science and technology in everyday life	

Source: Education Watch Competencies Achievement Test, 2008

competencies which were 'writing in Bangla' and 'knowing about the children of other countries'. The students of the ebteyee-attached high madrasas faced the same level of difficulty in measurement units in Mathematics.

Similar analyses by area and gender were also done and are provided in Annex 7.20. It

shows that the urban students showed 'excellent' performance in 15 competencies and the rural students in 10; it was 14 competencies for the boys and nine for the girls.

#### D. Progress in competencies attainment

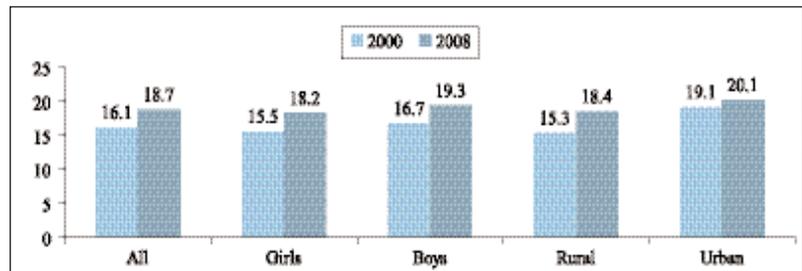
This section compares the performance of the students of 2008 with that of 2000. In doing so, only three types of schools, viz., the government, non-government and the non-formal were considered as the 2000 study was done only on these types of schools. A closer look at this year's data identified almost no difference between the pooled national and sub-national estimates of 'three types' and 'six types' of schools (Annexes 7.7 and 7.21). Thus, all six types of schools were considered in this analysis too.

Overall, the primary school completers achieved 16.1 competencies in 2000, which increased to 18.7 competencies in 2008 (Figure 7.5). This means that over a period of eight years, the amount of improvement was 2.6 competencies - 0.33 competency per year. This indicates very slow progress in learning outcomes in terms of competencies attainment. Improvement in competencies attainment occurred irrespective of gender and area. Although mostly an equal amount of improvement occurred for boys and the girls, the rate of improvement was more in rural schools than in urban schools. The rate of increase in rural schools was three times of that in urban schools - respectively 0.39 and 0.13 competency per year.

Improvement in competencies achievement occurred with the same pace in all three types of schools common in both the studies. For instance, the government primary school students, on an average, attained 16.1 competencies in 2000 which increased to 19 competencies in 2008. The average attainment improved from 15.2 in 2000 to 18 in 2008 for the non-government primary schools and from 17.2 in 2000 to 20 in 2008 for the non-formal primary schools (Figure 7.6).

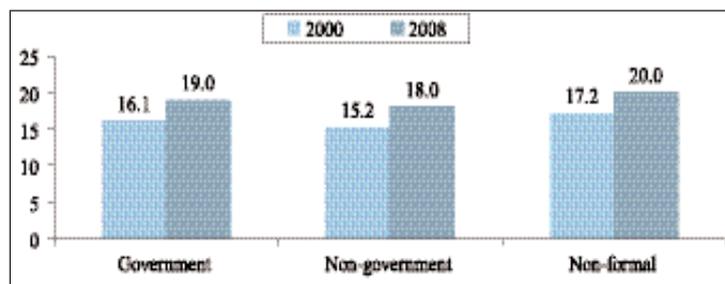
Progress occurred in both 'knowledge' and 'understanding' level

**Figure 7.5**  
Mean number of competencies achieved by the students by area, gender and year



Sources: Education Watch Competencies Achievement Test, 2000, 2008

**Figure 7.6**  
Mean number of competencies achieved by the students by school type and year



Sources: Education Watch Competencies Achievement Test, 2000, 2008

of items; however, it was more in the former type of items than the later type. Of the 45 'knowledge' level items, the students of 2000 correctly answered 21.6 items which increased to 27.5 in 2008. On the other hand, out of 19 'understanding' level items, the average attainment was 6.8 in 2000 and 8.1 in 2008. The overall increase for 'knowledge' level items was 16.1 percentage points and 6.8 percentage points for the 'understanding' level items.

Overall, the students of both the periods showed 'poor' performance in the same three competencies. This means that no improvement occurred in these three areas during last eight years. The 2000 study found that the students showed 'excellent' performance in only three competencies and 'satisfactory' performance in 12. With a big jump, this study found 'excellent' performance in 12 competencies and 'satisfactory' in seven. Such an improvement actually confirmed the progress in overall learning outcome over a period of eight years.

### **E. Factors affecting competencies achievement**

This section examines relationships between competencies attainment of the students and some selected socioeconomic and educational factors. Three types of factors have been considered: socio-economic, educational institution related and additional educational inputs. A list of 23 such factors categorically mentioned in Annex 7.22. Background information of the students under test in terms of the above factors are provided in Annex 7.23. Most of this is similar to those presented in chapters 3-5. This section is thus contains two parts; first, bi-variate analyses of achievement and the factors and second, multivariate regression analyses.

*Bi-variate analysis:* Mean and standard deviation of number of competencies achieved by the students against the above factors are provided in Table 7.5. A negative relationship between age of the students and competencies attainment was observed. On the other hand, mean achievement of the students significantly increased with the increase of the level of education of their parents and households food security status. Although there was no difference between the Muslims and the non-Muslims; the ethnic minorities were less likely to achieve competencies than the majority Bangalis. A positive relationship between students' access to mass media and learning achievement was also found.

Students who had private tutors or parental mentoring at home did significantly better in the test compared to those who had no such inputs. Students' participation in co-curricular activities also helped in learning achievement. Guardians' attendance in school meetings or their discussions on pedagogical issues with the teachers were significantly related with the improvement of the students learning achievement.

An inverse U-shape relationship was observed between class size and students competencies achievement. If the number of students per teacher was lower the mean number of competencies achieved by them was higher and vice versa - this indicates a negative relationship between student-teacher ratio in school and competencies achievement of students. Statistically significant positive relationship of students' learning achievement was also observed when this was cross tabulated with some other characteristics of the teachers like educational qualifications, length of teaching experience and professional training. On the other hand, no straight forward relationship was found between the distance between *upazila* and school and students' learning achievement; however, the highest score

**Table 7.5**  
*Mean and standard deviation of number of competencies achieved by different socioeconomic and school characteristics*

Characteristics	Mean	Sd	Characteristics	Mean	Sd
<b>Age</b>			<b>Participated in co-curricular</b>		
9-10y	19.7	4.2	Participate	19.3	4.5
11-12y	18.6	4.9	Did not participate	18.3	4.9
13y+	17.5	4.9	<i>Significance</i>	<i>p&lt;0.001</i>	
<i>Significance</i>	<i>p&lt;0.001</i>		<b>Guardians discussion of with teachers</b>		
<b>Mothers education</b>			Discussed	19.1	4.6
Nil	17.9	4.8	Did not discuss	17.6	5.0
Primary	18.4	4.8	<i>Significance</i>	<i>p&lt;0.001</i>	
Secondary+	20.1	4.3	<b>Guardians participation in school meetings</b>		
<i>Significance</i>	<i>p&lt;0.001</i>		Participated	19.0	4.8
<b>Fathers education</b>			Did not participate	18.3	4.7
Nil	17.6	4.8	<i>Significance</i>	<i>p&lt;0.001</i>	
Primary	17.9	4.9	<b>Size of class V</b>		
Secondary	19.7	4.2	< 25	18.2	5.1
More than secondary	21.4	3.9	26 - 40	19.1	4.4
<i>Significance</i>	<i>p&lt;0.001</i>		41+	18.9	4.7
<b>HH food security status</b>			<i>Significance</i>	<i>p&lt;0.001</i>	
Always in deficit	17.7	5.0	<b>Teacher student ratio</b>		
Sometimes in deficit	18.1	4.8	< 30	19.6	4.8
Breakeven	18.7	4.6	31 - 40	18.9	4.8
Surplus	20.0	4.4	41 - 60	18.3	4.7
<i>Significance</i>	<i>p&lt;0.001</i>		61+	18.1	4.5
<b>Religion</b>			<i>Significance</i>	<i>p&lt;0.001</i>	
Muslim	18.7	4.6	<b>Teachers' mean years of education</b>		
Non-Muslim	18.5	5.5	< 12	18.3	4.6
<i>Significance</i>	<i>Ns</i>		12	18.6	4.7
<b>Ethnicity</b>			13	19.0	4.8
Ethnic minority	14.7	5.5	14+	19.1	4.8
Bangali	18.8	4.7	<i>Significance</i>	<i>p&lt;0.001</i>	
<i>Significance</i>	<i>p&lt;0.001</i>		<b>Teachers' mean years of experience</b>		
<b>Students' access to media</b>			< 10	18.1	4.9
None	17.9	4.7	10 - 14	18.8	4.7
One	19.0	4.7	15 - 19	18.6	4.7
Two	19.2	4.6	20+	19.5	4.6
Three	22.1	3.5	<i>Significance</i>	<i>p&lt;0.001</i>	
<i>Significance</i>	<i>p&lt;0.001</i>		<b>Teachers having training</b>		
<b>Parental tutoring support</b>			Half or less	17.8	5.0
Yes	19.5	4.5	More than half but not all	18.4	4.4
No	18.1	4.9	All	19.1	4.7
<i>Significance</i>	<i>p&lt;0.001</i>		<i>Significance</i>	<i>p&lt;0.001</i>	
<b>Having private tutor</b>			<b>Distance of school from upazila (km)</b>		
Had tutor	19.2	4.5	< 5	19.8	4.3
Did not have tutor	17.5	5.2	6 - 10	18.4	4.8
<i>Significance</i>	<i>p&lt;0.001</i>		11 - 15	17.4	5.3
			16+	18.2	4.5
			<i>Significance</i>	<i>p&lt;0.001</i>	

Source: Education Watch Competencies Achievement Test, 2008

was obtained by those students which have schools located within five kilometres of the *upazila* centres.

*Multivariate analysis:* Multivariate regression analyses were performed to understand the explanatory power of the socioeconomic, educational institution related and additional educational inputs in the prediction of the competencies achieved by the students. Number of competencies achieved by the students was considered as dependent variable. The list of 23 explanatory variables used in the multivariate analyses is provided in Annex 7.22 and the measurement of the variables in Annex 7.24. As the dependent variable was continuous in nature and the explanatory variables a combination of both dichotomous and continuous, an ordinary least square method (OLS) was considered appropriate.

A total of five regression models were built. One for each of the three sets of explanatory variables, one combining the socioeconomic and school related variables and the last one for all the variables together. In each case, a stepwise approach with forward selection and backward elimination was done in order to select the predictive variables. This means that only those variables which had significant contribution (at  $p < 0.05$  level) in explaining the variation in the dependent variable were kept in the final models.

The model I represents the socioeconomic predictors of competencies achievement of the students (Annex 7.25). Of the nine variables considered, the model took seven. No contribution of mothers' education and household food security status was found in explaining variations in competencies achievement. In terms of predictive power, the most important variable was fathers' education, followed respectively by age, gender, ethnicity, area, electricity at home and religion. Fathers' education and having electricity at home were positively linked with competencies achievement and the age of the students negatively. The boys, urban students, Bangalis and the non-Muslims did better compared to their respective counterparts. The explanatory variables collectively explained 13% of total variation in learning outcome.

The model II represents the educational institution related predictors of competencies achievement of the students (Annex 2.25). Of the eight variables considered, the model took seven. Of them, the school type contributed the most in predicting the competencies achievement, followed respectively by teachers' teaching experience, their educational qualifications, SMC meeting, distance between school and *upazila*, student-teacher ratio and class size. Distance between school and *upazila* and student-teacher ratio had negative relationship with learning achievement of the students and the rest had positive relationship. No contribution of teachers training was found. The explanatory variables collectively explained 7% of total variation in learning outcome.

The model III represents the additional educational input related predictors of competencies achievement of the students (Annex 7.25). The model took all the six variables considered. The most significant predictor was the duration of private tutoring, followed respectively by access to media, guardians' discussion of pedagogical matters with teachers, participation of students in co-curricular activities, parental mentoring at home and guardians' attendance in school meeting. All of them were positively correlated with learning outcome. The explanatory variables collectively explained 9% of total variation in learning outcome.

The fourth model was built considering the socioeconomic and the educational institution related variables as explanatory variables (Annex 7.26). Of the 17 variables considered, the model took 10 of them. Six of these variables are socioeconomic and four related to educational institutions. Similar to the first model the fathers' education had the most predictive power which was followed by school type - the most important predictor found in the second model. Four of the first five important predictors found in this model were socioeconomic. The 10 predictors of this model collectively explained 16% of the total variation in learning outcome of the students.

The final model considered all the three sets of variables. Of the 23 variables under consideration the model took 17 (Table 7.6). They collectively explained 19% of total variation of the dependent variable. Of the variables, six each from socioeconomic and educational institution related baskets and five from additional educational input basket. This, in one sense, shows that variables from each three baskets played important role in predicting students learning outcome. However, chronology of the variables entering into the model showed importance of the socioeconomic variables over others. However, of the first three important predictors, fathers' education was on the top followed respectively by private tutoring which came from additional input basket and school type which came from educational institution related basket.

The main message from these analyses is that variation in the students learning outcome was very much influenced by the variation in socioeconomic characteristics of individuals, lead by fathers education which in fact represents education of both the parents (as they were positively correlated) and household economy and poverty status (being fathers were the main bread earners). Second, appearance of private tutoring as the second most important predictor and school type as third, signal weak teaching learning provisions in the classrooms.

## F. Salient findings

The first and most rigorous outcome indicator of education provisions is the learning achievement of the students. Following are the major findings on the students learning achievement.

**Table 7.6**  
*Multivariate regression model predicting number of competencies achieved*

Predictors	Beta coefficients
Fathers education	0.17***
Private tutoring	0.15***
School type	0.13***
Ethnicity	0.13***
Gender of student	0.10***
Age of student	-0.09***
SMC meeting	0.10***
Teachers teaching experience	0.06***
Participation in co-curricular activities	0.07***
Student-teacher ratio	0.05***
Electricity at home	0.04**
Access to media	0.04**
Parents mentoring at home	-0.04**
Area of residence	0.03**
Guardians attendance in school meetings	0.03**
Class size	0.03**
Teachers education	0.03*
Constant	13.07***
Adjusted R <sup>2</sup>	0.19
Analysis of variance (F value)	89.45***

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.01$

Source: Education Watch Competencies Achievement Test, 2008

- Of the 27 competencies tested the students, on an average, attained 16.1 competencies in 1998 which went up to 18.7 in 2008. Overall, increase was 2.6 competencies. Although the girls significantly lagged behind the boys in both the time and the rural students compared to their urban counterparts, improvements were noticed in all four groups of students. An equal rate of improvement was noticed in all three common types of schools covered in both the years (government, non-government and non-formal).
- In 2008, the students of the primary-attached high schools did the best in the test. The non-formal schools were the second, government schools third and the non-government schools fourth. The two types of madrasas were least successful. Gender difference disfavouring the girls was observed in the government and non-government schools and the high schools. Except for the non-government schools, urban educational institutions of the other five types were significantly ahead of their rural counterparts.
- The students in both the years, in general, did better in *Poribesh Porichiti* (both society and science) followed respectively by Bangla and Mathematics. The worst performance was in English. The students of each type of schools performed better in the knowledge level items compared to those needing skills of higher order. Overall, improvement was more in the knowledge level items than the understanding level items. The students in both the years (2000 and 2008) found three competencies very difficult: writing in English, word problem solving in Mathematics and life sketch of Prophet Mohammad (SM) or the preachers of own religion. There was a big jump in 'excellent' performance: in 2000, the students showed such performance in three competencies and 'satisfactory' in 12 but this went up to 12 and seven in 2008.
- Like the previous studies, this study confirms positive correlation between the students learning achievement with their socioeconomic characteristics, school related inputs and process factors. Of the three sets of variables, socioeconomic characteristics had the highest predictive power in order to explain variations in students learning achievement, followed respectively by additional educational inputs and school related input and process factors. Fathers' education came out as the most important predictor of learning achievement followed by length of private tutoring.





## Chapter 8

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### Education and Literacy Situation of Population

An obvious impact of increased school enrolment is the increase of years of schooling and literacy among the population. Two-thirds of the population aged six years and above were ever schooled, more than half of the 11+ population completed primary education and 14% of the 15+ population completed secondary education. Literacy rate is still around 50% and at least one person in 78.5% of the households is literate. Major improvement in literacy occurred among those aged 15-49 years during the past decade. Urban-rural gap is much prominent than gender gap.



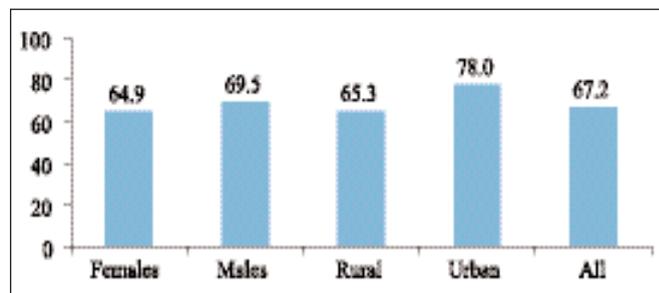
Education has many different impacts on an individual's life and on the society s/he lives. Some of these are immediate and some are longer term. One of the immediate results of education expansion is the increase of educated population in the society and hence improvement in literacy situation. The purpose of this chapter is to explore the results of primary education expansion in Bangladesh on education and literacy situation of the population. Trends in the situation are explored by comparing this year's *Education Watch* data with those of previous years'.

### A. Schooling of the population

It is easy to understand that ever schooled population would increase as a result of expansion of primary education in the country. As the official age for starting primary education is six years, it was thus prudent to examine the years of schooling completed by the population aged six years and above. However, note that pre-primary education has a place among the well-off urban population and increasingly becoming popular among the others. Children start pre-primary education before age six.

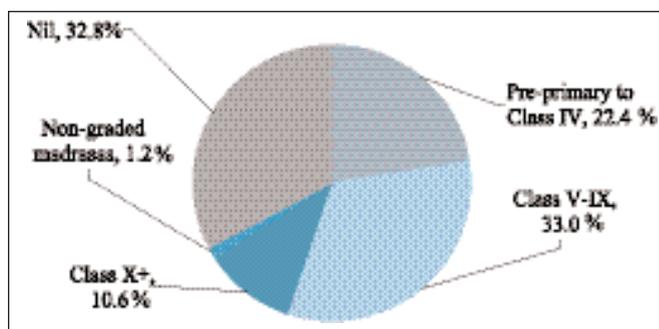
In 2008, two-thirds of the population aged six years and over was found ever enrolled in any type of educational institution (Figure 8.1). Here, ever enrolled means completed at least one year at pre-primary or primary, but did not include those who just attended a school for a few days only. The proportion of ever schooled population was 64.9% among the females and 69.5% among the males ( $p < 0.001$ ), 65.3% among the rural and 78% among the urban population ( $p < 0.001$ ). One-third of the population never went to school, 22.4% completed any grade from pre-primary to class IV, 33% any grade between V-IX, and 10.6% any grade starting from class X (Figure 8.2). A small portion, 1.2% went to the non-graded madrasas like hafizia, kowmi and kharizi. This analysis also shows that 43.6% of the Bangladeshi population aged six and above completed primary education and 10.6% completed secondary education. The rate of population aged six years and above who completed primary education was 42.2% among the females, 45.1% among the males, 40.7% in the rural areas and 59.8% in the urban areas (Annex 8.1). The proportion of secondary education completers, among the same population, was higher for the males than the females (13.4% vs. 7.8%) and for the urban people than the rural people (23.8% vs. 8.2%).

**Figure 8.1**  
Percentage of population (6y+) ever enrolled in school



Source: Education Watch Household Survey, 2008

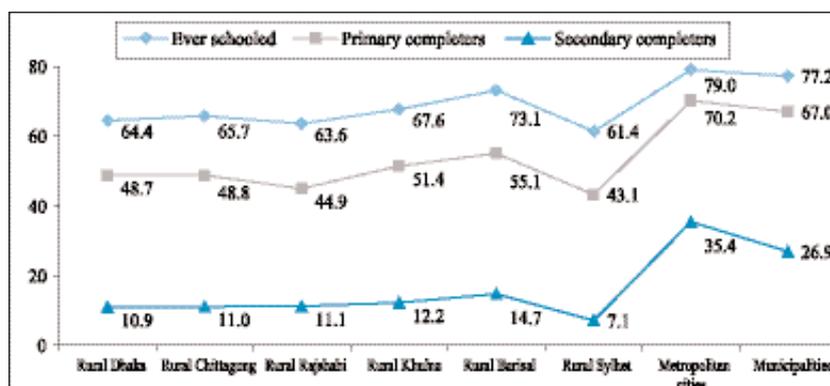
**Figure 8.2**  
Percentage distribution of population (6y+) by years of schooling completed



Source: Education Watch Household Survey, 2008

Stratum-wise analysis shows that the proportion of ever schooled population was more than 60% in each of the strata (Figure 8.3). The highest proportion of ever schooled population was found in the metropolitan cities (79%), followed by those in the municipalities (77.2%). The rate was lowest in rural Sylhet division (61.4%). Of the rural divisions, Barisal scored the top position with 73.1% ever schooled population followed by Khulna with 67.6% ever schooled population. The situation of rural Dhaka, Chittagong and Rajshahi was closer to each other with small differences. Except in rural Barisal, females lagged behind the males in all other areas with a significant margin ( $p < 0.001$ ) (Annex 8.2). The situation of the males of metropolitan cities was the best with 81.4% ever schooled population and it was worst among the females of rural Sylhet with 58.7% of the population ever enrolled in school.

**Figure 8.3**  
Percentage of population at various levels of education by stratum

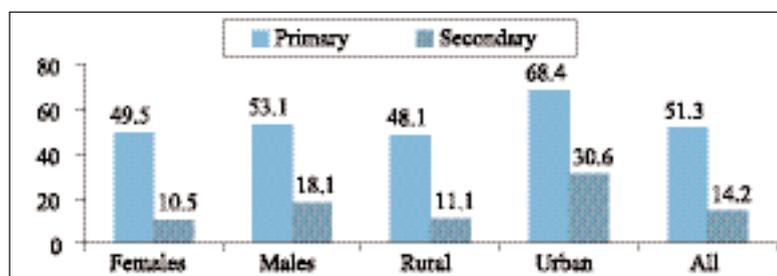


Notes: The denominator for the first issue was population 6y+, for the second issue 11y+ and for the third issue 15y+

Source: Education Watch Household Survey, 2008

Children of age 11 years are expected to have completed primary education and those of age 15 years completed secondary education. It is thus important to see the ratio of primary education completers among those aged 11 years and above and the ratio of secondary education completers among those aged 15 years and above. Of the population aged 11 years and more, 51.3% completed primary education (Figure 8.4). Whereas the gender gap was only 3.8 percentage points (females 49.5%, males 53.1%;  $p < 0.001$ ), the rural-urban gap was 20 percentage points (rural 48.1%, urban 68.4%;  $p < 0.001$ ). Stratum-wise analysis shows substantial variation among the rates of different areas. For instance, the rate of primary school completers was highest in the metropolitan cities (70.2%) and lowest in rural Sylhet division (43.1%) - a difference of 27.1 percentage points (Figure 8.3). The rate was below the national average in four areas: rural Dhaka, Chittagong, Rajshahi and Sylhet divisions (Annex 8.3). Gender difference in this was observed in six areas (Annex 8.3). The males and the females of rural Dhaka and Barisal divisions had the equal

**Figure 8.4**  
Percentage of population completed primary and secondary education



Note: The denominator for primary was population 11y+ and for secondary 15y+  
Source: Education Watch Household Survey, 2008

completion rate. Among the population 15 years and above, 14.2% completed secondary education with a significant variation among the strata (Figures 8.3 and 8.4). The rate was 35.4% in the metropolitan cities and 26.9% in the municipalities. Only 7.1% of the rural Sylhet population aged 15 years and above completed secondary education. Gender difference was observed at the national level (Females 10.5%, Males 18.1%;  $p < 0.001$ ) as well as in all strata (Annex 8.4). Eleven percent of rural and 30.6% of urban population completed secondary education.

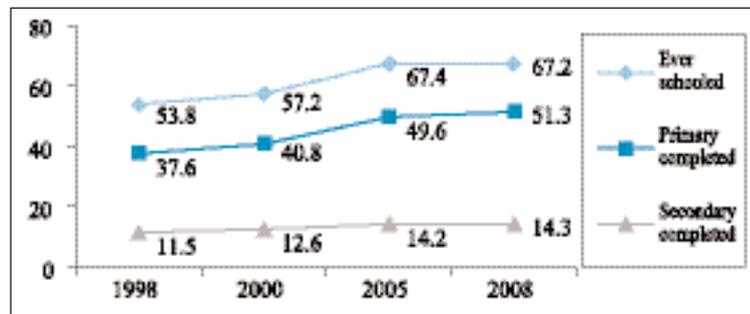
## B. Progress in years of schooling

Percentage of population ever enrolled in school, completed primary education or secondary education increased over time in Bangladesh (Figure 8.5). Among the population aged six years and above, 53.8% completed at least a single year of schooling in 1998 which reached to 67.2% in 2008 - an increase of 13.4 percentage points

over a period of 10 years. Among the population aged 11 years and over, 37.6% had completed primary education in 1998 which increased to 51.3% in 2008 - 13.7 percentage points increase during the past 10 years. On the other hand, percentage of population 15 years and over completing secondary education was 11.5% in 1998, which increased 2.8 percentage points during last 10 years and reached at 14.3% in 2008. This shows that the rate of increase was mostly equal in case of ever enrolled population and primary completers; however it was much lower for secondary completers. The other important issue is that the improvement was much prominent from 1998 to 2000 and again from 2000 to 2005. However, no significant difference was observed between the rates for 2005 and 2008 in any of the three indicators.

The rate of improvement in schooling was more among the females than the males and among the rural population than those in urban areas (Tables 8.1 and 8.2). Of these four groups of population, the rate of improvement was highest among the females, followed by the rural population. The proportion of ever schooled females increased 15.3 percentage points during last 10 years and the proportion of females completing primary education increased 16.6 percentage points. The amount of improvement for the rural population was respectively 14.3 and 14.5 percentage points.

**Figure 8.5**  
Percentage of population ever schooled, primary completed and secondary completed by year



Sources : Education Watch Household Surveys, 1998, 2000, 2005, 2008

**Table 8.1**  
Percentage of population (6y+) ever schooled by area, gender and year

Area and gender	Year				Increase
	1998	2000	2005	2008	
Females	49.6	58.0	64.6	64.9	15.3
Males	57.9	61.4	70.2	69.5	11.6
Rural area	51.0	54.5	65.3	65.3	14.3
Urban area	68.6	71.6	78.8	78.0	9.4
All	53.8	57.2	67.4	67.2	13.4

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

Table 8.3 provides cumulative percentage distribution of adult population (aged 15y+) by level of education completed and year. It shows the educational status of the adult population in Bangladesh in terms of years of schooling and how it changed over time. For instance, about a half of the adult population of 1998 had no schooling at all; with the improvement the rate of never enrolled adult population declined to 35.7% in 2008. Conversely, the proportion of ever schooled population increased from 50.2% in 1998 to 64.3% in 2008. Total improvement was 14.1 percentage points with a rate of 1.41 percentage points per year. Proportion of adult population completing primary education was 37.8% in 1998 which increased to 51.7% in 2008. In 2008, 7% of Bangladeshi adult population had higher secondary level education, 3% had bachelor degree and less than one percent had masters, MPhil or doctoral level education.

### C. The literacy situation

The literacy status of a population is measured in two ways. The popular one is the self reported literacy as is popularly used in the censuses and the other one is the test-based literacy. Obviously, there is a difference between the two; the test-based method measures literacy status of a population rigorously and objectively than the other method which is more subjective in nature, and hence yields a more reliable estimate. The *Education Watch* for the first time in Bangladesh conducted a literacy survey using the test-based method in 2002 which was later replicated and used by UNESCO Dhaka and the Bangladesh Bureau of Statistics (BBS). The *Education Watch* household surveys of 2000, 2005 and 2008 collected information on literacy status reported by the respondents. In this, the respondents were asked to report the literacy status of every household member, following a standard definition

**Table 8.2**  
*Percentage of population (11y+) completed primary education by area, gender and year*

Area and gender	Year				Increase
	1998	2000	2005	2008	
Females	32.9	36.6	46.5	49.5	16.6
Males	42.2	44.8	52.6	53.1	10.9
Rural area	33.6	37.0	46.2	48.1	14.5
Urban area	57.1	59.3	67.1	68.4	11.3
All	37.6	40.8	49.6	51.3	13.7

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

**Table 8.3**  
*Cumulative percentage distribution of adult population (15y+) by level of education and year*

Level of education	Year			
	1998	2000	2005	2008
Total	100.0	100.0	100.0	100.0
Never schooled	49.8	46.3	36.6	35.7
Ever schooled	50.2	53.7	63.4	64.3
Primary completed (V+)	37.8	41.1	49.2	51.7
Junior secondary completed (VIII+)	21.4	24.0	30.4	31.1
Secondary completed (X+)	11.5	12.6	14.2	14.3
Higher secondary completed (XII+)	5.8	6.4	7.0	7.0
Bachelor degree holder	2.7	3.0	3.2	3.0
Masters/MPhil/PhD degree holder	0.7	0.8	1.0	0.9
n	128,715	92,833	77,394	72,838

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

used in the Bangladesh Census. The definition was 'ability to write a communication letter'. This definition was used in all four decennial censuses held after the Independence of Bangladesh. The literacy status was measured dichotomously - literate or illiterate.

The tradition in Bangladesh is to estimate literacy rates for two groups of population - all population (7 years and over) and adult population (15 years and over). However, all three test-based literacy studies measured literacy status of population 11 years and over (post-primary age). Literacy statuses of all three groups of population were estimated for this study using the census definition of literacy. Of the population seven years and over, 48.5% was literate; 46.5% among the females and 50.4% among the males ( $p < 0.001$ ). The literacy rate was 53.9% for the population 11 years and above and 52.1% for those 15 years and above. The females significantly lagged behind the males in both the cases (Table 8.4).

Urban-rural gap in literacy rate was much higher compared to the gender gap. The literacy rate was significantly higher for urban population than their rural counterparts (Table 8.5). The urban-rural gap was 20 percentage points for the population aged seven years and above, 20.4 percentage points for those 11 years and more and 22.2 percentage points for the adult population. Statistically significant gender gap was observed in both rural and urban areas.

Stratum-wise analysis shows that the highest literacy rate was found in the metropolitan cities followed by the municipalities - both the rates were around 65% for the population seven years and more (Annex 8.5). The rates were respectively 73% and 69.1% for the adult population of these two areas (Annex 8.6). The lowest literacy rate was found in rural Sylhet division - 40.7% for all population (7y+) and 44.4% for the adults. In both the cases, the situation of rural Rajshahi division was second from the bottom. Of the rural divisions, Barisal was at the top of the list, followed by Khulna. The males were ahead of the females in each stratum.

**Table 8.4**  
*Literacy rates of population by gender*

Population groups	Gender		Both	Level of significance
	Females	Males		
7y+ population	46.5	50.4	48.5	$p < 0.001$
11y+ population	51.4	56.3	53.9	$p < 0.001$
15y+ population	48.6	55.7	52.1	$p < 0.001$

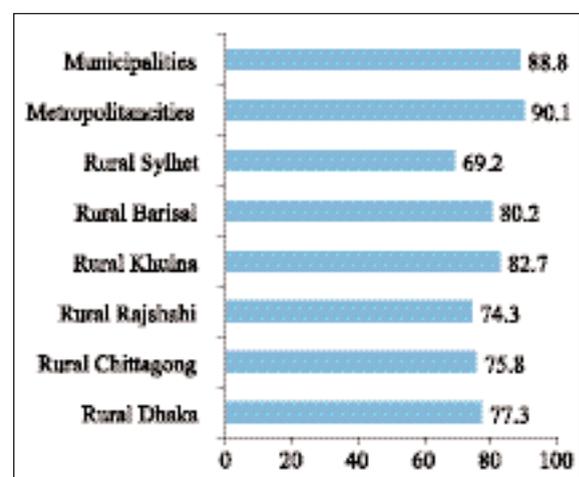
Source: Education Watch Household Survey, 2008

**Table 8.5**  
*Literacy rates of population by area*

Population groups	Area		Both	Level of significance
	Rural	Urban		
7y+ population	45.4	65.4	48.5	$p < 0.001$
11y+ population	50.7	71.1	53.9	$p < 0.001$
15y+ population	48.6	70.8	52.1	$p < 0.001$

Source: Education Watch Household Survey, 2008

**Figure 8.6**  
*Percentage of households with at least one literate person by stratum*



Source: Education Watch Household Survey, 2008

Age-specific analysis shows that the literacy rate was highest among those aged 15-19 years (Annex 8.7). Four-fifth of the population of this age group was found literate. They were followed by the next age cohort, i.e., the population aged 20-24 years (72.1%). A quarter of the elders (60y+) were found to be literate. Of the households under study, 21.5% had no literate person and 78.5% had at least one literate person (Annex 8.8). All members of 8% of the households, three-quarters of the members of 17.6% of the households and half of the members of 45.2% of the households were literate. Over three-quarters of the households in rural areas and 89.4% of them in urban areas had at least one literate person. Figure 8.6 presents percentage of households with at least one literate person by stratum.

#### D. Changes in literacy rate

The literacy rate of the population seven years and above increased from 37% in 2000 to 49.7% in 2005 and then decreased to 48.5% in 2008 (Table 8.6). Gender-wise, it increased for females from 33.3% in 2000 to 46.1% in 2005 and 46.5% in 2008. Otherwise, for the males, the rate increased from 40.6% in 2000 to 53.3% in 2005 and then decreased to 50.4% in 2008. Thus, decrease in literacy rate was due to decrease of the rate among the males. Although the males were significantly ahead of the females in all three years, the gender gap reduced over time. This is due to faster growth of female schooling than that of the males. The gender gap was 7.3, 7.2 and 3.9 percentage points respectively in 2000, 2005 and 2008. Similar trends were observed when the adult literacy rates were calculated (Annex 8.9). The gap was over 11 percentage points in 2000 and 2005, which reduced to seven percentage points in 2008. Area-wise analysis shows that the literacy rate increased from 2000 to 2005 in both the areas and then decreased in 2008 (Annexes 8.10 and 8.11). Although the urban-rural gap decreased over time it was much higher than the gender gap in all three survey years.

Literacy rate was found highest in the age group 15-19 years in all three surveys and second among those aged 20-24 years (Annex 8.7). The rate gradually increased in both the age cohort. For instance, among 15-19 years old, the literacy rate was 64.6% in 2000, 78.3% in 2005 and 80.6% in 2008. In 20-24 age cohort, the rate was 55.3% in 2000, 70.4% in 2005 and 72.1% in 2008. The literacy rate increased in all age cohorts from 2000 to 2005; however, the increasing trend continued only in four age cohorts from 15-34 years (Annex 8.7 and Figure 8.7). In all other cohorts it decreased between 2005 and 2008. Among the elders (60y+), the literacy rate was 18.1% in 2000, 27.3% in 2005 and 25.7% in 2008 (Annex 8.7).

Percentage of households having at least one literate person increased over time in all the strata under study (Annex 8.8). However, the amount of increase substantially varied from one stratum to another. The highest increase was found in rural Rajshahi division (22.3 percentage points), followed by rural Dhaka division (20.9 percentage points) and the lowest was seen in the metropolitan cities (6.8

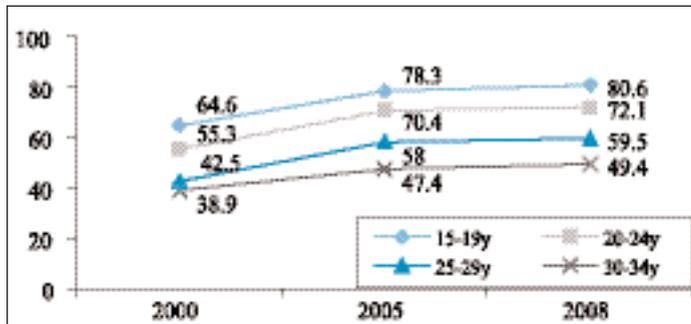
**Table 8.6**  
*Literacy rate of population (7y+) by year and gender*

Year	Gender		Both	Level of significance	Difference
	Females	Males			
2000	33.3	40.6	37.0	p<0.001	7.3
2005	46.1	53.3	49.7	p<0.001	7.2
2008	46.5	50.4	48.5	p<0.001	3.9

Sources: Education Watch Household Surveys, 2000, 2005, 2008

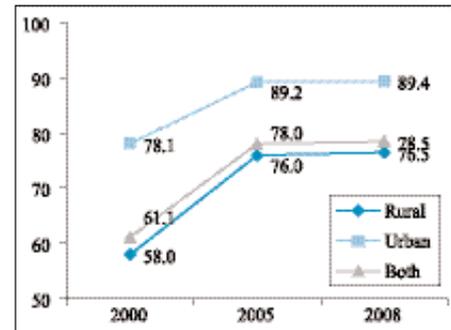
percentage points). Overall, the increase was 17.4 percentage points at the national level; 18.5 percentage points in the rural households and 11.3 percentage points in the urban households (Figure 8.8).

**Figure 8.7**  
*Literacy rate of population 15-34y by age group and year*



Sources: Education Watch Household Surveys, 2000, 2005, 2008

**Figure 8.8**  
*Percentage of households with at least one literate person by area and year*



Sources: Education Watch Household Surveys, 2000, 2005, 2008

## E. Salient findings

Due to continuous efforts for primary and secondary education and progress made at school enrolment, a positive impact of these is expected in the overall education and literacy situation of the country.

- Three measures were taken to understand the level of education of the population. Population ever schooled was estimated for among those six years and above, primary completers among those 11 years and above, and secondary completers among those 15 years and above. During the decade, mostly an equal amount of improvement was observed in the rates of ever schooled and primary education completed population. These were respectively 13.4 and 13.7 percentage points. The improvement in the population completing secondary education was much lower than the above - only 2.8 percentage points. In 2008, over two-thirds of the country's population was found to be ever schooled, more than a half completed primary education and 14.3% completed secondary education.
- During the decade, the females lagged behind the males and urban population surpassed their rural counterparts in all three indicators mentioned above but the rate of improvement was more among the females than the males and in the rural areas compared to the urban areas.
- Literacy rate of the population seven years and older increased from 37% in 2000 to 49.7% in 2005 and then slightly decreased to 48.5% in 2008. The adult (15 years and above) literacy rate was 41.6% in 2000 which increased to 52.6% in 2005 and then slightly decreased to 52.1% in 2008. None of the difference between 2005 and 2008 was statistically significant. Improvement in literacy rate from 2000 to 2005 was observed irrespective of gender and area. However, from 2005 to 2008, decrease was noticed only among the males. Age specific analysis shows a steady improvement only in four age-cohorts between 15-34 years.
- A consistent 20-22 percentage points gap between urban and rural areas was observed in the literacy rates throughout the decade. On the other hand, gender gap reduced over time. For population seven years and older, the gender gap reduced from 7.3 percentage points in 2000 to

3.9 percentage points in 2008. In case of adult literacy, it reduced from 11.5 percentage points in 2000 to 7.1 percentage points in 2008.

- Household with at least one literate person is often called as literate household. Sixty-one percent of the households had at least one literate person in 2000 which increased to 78% in 2005 and to 78.5% in 2008. Proportion of non-literate households reduced 17.5 percentage points during the last eight years - over two percentage points per year. In 2008, 89.4% of the urban and 76.5% of the rural households had at least one literate person.



## Chapter 9

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### Discussion, Conclusions and Policy Recommendations

Discussion of the findings presented in the previous chapters and conclusions made from them are presented in this final chapter. Findings of previous *Education Watch* reports and other studies, including those done by the government agencies are also considered in the discussion. Eight major messages were gleaned and nine policy recommendations made. A 'business as usual' approach is not going to work anymore, and a strong political commitment towards a major overhaul in the education system is the flavour of the report.



This final chapter discusses the findings of this year's *Education Watch* as presented in the foregoing chapters. Relevant findings on the issue by the previous *Education Watch* reports and other studies are also discussed. Major messages drawn from the findings are presented with some policy recommendations. As the parameters of quality covered in this report were also investigated in previous *Watch* reports, this gives an opportunity to compare changes over time in the quality as defined through the parameters.

### A. Discussion and conclusions

The Constitution of Bangladesh obliges the government to 'establish a uniform, mass-oriented and universal system of education and extending free and compulsory education to all children to such stage as may be determined by law' (Article 17a). A number of laws have been enacted since Independence to enhance primary education in the country. These include The Primary Education Laws (repeal) Ordinance 1973, The Primary Schools (taking over) Act 1974, The Primary Education Act 1981 and The Compulsory Primary Education Act 1990 (GoB 1973, 1974, 1981, 1990). It took about 20 years, after the Independence, to have a legal frame of compulsory primary education for five-year duration. On the other hand, nearly two decades have passed since the introduction of such an Act but the nation is still struggling to reach the goal of UPE. The statistics and studies provided by the government and various institutions showed that the primary education in Bangladesh improved considerably after the implementation of the Act (DPE 2006, Chowdhury *et al.* 1999, Nath and Chowdhury 2001, BBS and UNICEF 2007). This is true in terms of improving access and removing gender disparity at primary level. As an immediate effect of improvement in primary education, access to secondary education has also increased and gender parity achieved in the first few grades (Ahmed *et al.* 2006, BANBEIS 2006). The emphasis now has shifted to quality. It is a challenge for Bangladesh to improve quality of primary education in the country.

The *Education Watch* was established ten years ago to monitor the progress of primary and basic education in the country. It is now several years since the first three *Education Watch* reports documented the quality aspects of primary education. The concept of quality is an encompassing one; anything that happens in the education system will have some bearing on its quality. On the other hand, there is no upper limit of the level of quality that one can expect from the education system. Question of quality is not only a matter of concern in the low income countries; it is often raised in high income countries as well. The issue has been flagged as a matter of concern in all the initiatives taken internationally since the Jomtien conference (WCEFA 1990, UNESCO 2000).

The main aim of this year's *Watch* was to explore the quality of primary education in Bangladesh and to examine how much we progressed in terms of various quality indicators. The first constraint we faced was the absence of any recognized quality assessment model or framework for Bangladesh. Reviewing the aim of primary education in the country, the two sets of progress monitoring indicators (KPI and PSQL) adapted by the government along with the earlier contributions on this issue by Mayer *et al.* (2000), UNESCO (2005), Chowdhury *et al.* (1997) and Nath (2006a), an Input-Process-Output framework of analyzing quality was developed and adopted for this study. Three types of surveys fed information in the analytical framework which were a household survey, a school survey and a competency achievement test for students.

This study surveyed six types of educational institutions providing primary education which cover about 95% of the total primary students in the country. Government schools, non-government schools and primary-attached to high schools are the mainstream schools providing primary education through a nationally recommended curriculum. The non-formal schools also follow the national curriculum but these are 'non-formal' schools with one room and single teacher. The other two are the ebte dayee madrasas and the ebte dayee-attached to high madrasas which are similar to those of the mainstream schools but the curriculum is slightly different. In addition to the shortened version of the national curriculum, Arabic language and literature and Islamic history and culture are particularly emphasized in the madrasas. Except for the non-formal schools, all the others provide the full course of primary education within a time span of five calendar years. The study looked at the variations among different types of primary institutions in terms of quality indicators. The main output of educational provisions measured how in terms of quality was the competencies achievement by the students at the end of primary cycle. These are nationally adapted terminal competencies for primary education which are supposed to be attained by all of primary level institutions. The terminal competencies were the main basis for comparison by streams and type of school under this study.

Physical facilities and the learning provisions are the two critical things that need to be established first in order to create an atmosphere of educational opportunities for the children. As this study documented, the overall physical facilities of the primary educational institutions improved during the past decade. The improvement can be noticed in terms of number of classrooms, quality of construction materials, seating capacity in the classrooms and water and sanitation facilities in the schools. In terms of all physical facilities the primary-attached high schools were most advantaged. High schools are naturally bigger and better resourced. Owing to their attachment with a high school the students got better physical facilities than those of others. Improvement of such facilities in the government and non-government schools indicate investments through the PEDP II. However, the improvement of facilities in the madrasas and the non-formal schools was much slower. The non-formal schools are temporary stop-gap provisions and are thus different from others in terms of physical facilities. But why the madrasas did not improve much? These institutions were mostly established under the auspices of the communities and the government did not have much intervention in them. Because of the religious sentiment attached, no objection was made if these were established violating the rules of the ministry or without ensuring the basic minimums. As part of mainstream primary education provisions, the madrasas should ensure adequate physical and educational facilities necessary for quality education.

Cleanliness of floors and walls of the classrooms, quality of blackboards, taking additional care of the pupils after school hour and arranging co-curricular activities are some of the indicators for educational facilities in the schools. Interestingly, the non-formal schools were found much ahead of others in all these indicators. However, these are not enough in terms of quality education. The key success laid in what happened in the classrooms, i.e., the process and output of student-teacher interaction. Classroom observation done under *Education Watch 2000* and *2003/4* identified that the teaching-learning provisions were much child-centric in the non-formal schools compared to the mainstream schools including the madrasas. A study by Nath and Shahjamal (2004) also reported much cohesive interaction between the students and their teachers in the non-formal schools over the

government schools. A few studies sponsored by ADB, ESTEEM and Plan Bangladesh conducted on the mainstream government and non-government primary schools during the past decade also reported poor quality of teaching-learning and student-teacher interactions in these schools (PSPMP 2000, Nath *et al.* 2005, Nath and Mahbub 2008). This year's *Watch* did not include a classroom observation and hence could not collect information on classroom activities. However, the recent work of Nath and Mahbub (2008) on school culture and other qualitative works done in the past decade clearly give a sense that there are lots of more to do in the improvement of classroom teaching in the majority of schools and madrasas.

If education is known as the backbone of a nation then the teachers are the backbone of any educational system. The teachers directly interact with the pupils in the classrooms; so their education, training, experience and overall preparation are exceedingly important for quality education. Findings of this study showed that the average number of teachers per student in the government primary schools increased during the past decade. This happened because of major recruitment drive under PEDP II. Improvements also occurred in proportion of female teachers and educational qualification, professional training and subject based training of teachers. The non-formal schools traditionally recruit females as teachers and the PEDP II also recruited more female teachers than ever. Increasing proportion of female teachers was also found in the primary attached high schools. However, the madrasas lagged much behind in this regard. Owing to arrangement of training in two shifts in the Primary Teacher Training Institutions (PTIs) it was found that a large number of the government and non-government school teachers were trained during the past decade. The non-formal school teachers follow a separate mode of training and most of them were found trained. Major deficiency of training was observed in the madrasas where only 10% of the teachers were trained. Nearly half of the teachers in high school-attached teachers were also found un-trained. Lots of gaps were observed in the teachers' subject-based training, even in the government primary schools. Proportion of teachers having such training did not cross 30% for any of the subjects. Provision of training for the madrasa and high school teachers and the subject based training for all types of schools need to be considered seriously.

This study found that 42.5% of all primary teachers were late on the survey day; they, on an average, were late by half an hour. This finding corroborates with the findings of Nath and Mahbub (2008) which portrayed the process of teachers' disuse of school contact hour through late attendance, gossiping and spending time in the guise of doing official work. It was estimated that 40% of the official contact hour is misused in such manner. The problem of teachers' late attendance was more in the mainstream primary schools and madrasas than in the non-formal and primary-attached high schools. The Nath and Mahbub (2008) study mentioned above, the teachers reported that 'since late attendance by them had been overlooked by the head teachers, school managing committees and the *upazila* education offices, they become used to this'. The late attendance and consequent disuse of time by the teachers could be demoralizing for the students and hence a threat to school discipline and consequently on quality of instruction. Need for further streamlining of monitoring and supervision of teachers and schools is the call of the hour.

The management at the institution level can play a significant role in assuring quality if they are empowered and a congenial environment is created. Most of the institutions under study had managing committees in which the heads of the institutions were the member secretaries. It was not possible to

understand whether any change got in place during the past decade in the process of school management. Obviously the government circulars in this regard were not enough to empower them and create such condition. The functions done by these committees were less pro-active, at least. The issues discussed in the SMC meetings were limited to examination affairs, students' absenteeism, construction issues and *upabritti*. It did not cover issues like local resource management or improvement of leadership for quality education. Lack of training or orientation of the SMC members was surely a constraint. Except for a few NGO schools such as BRAC, there was no provision of training for the SMC members. Thus, majority of them were not aware of the role they could do or they were expected of doing. The qualitative studies referred to earlier found that if the members did not attend the meeting, their signatures were collected later from their homes and meeting minutes were sometimes prepared according to the instructions of the influential members of the committees (Nath and Mahbub 2008, Nath *et al.* 1995, PSPMP 2000). The other important issue is that the average educational qualification of the SMC members or even that of the SMC chair was found less than the educational qualification of the teachers or the head teachers. The question comes here is that whether such an imbalance of educational qualification can provide adequate leadership where education is the prime concern? Scanning the SMC meeting minutes we identified that absenteeism of the students was a frequently discussed issue in the meetings but no discussion on teachers' absenteeism or their late attendance was found. A positive development is that the proportion of females in the SMCs increased during the past decade.

It is quite glorious that the primary enrolment rate has increased so fast in Bangladesh since 1990 which did not happen earlier: from an estimated net rate of 60% in 1990 to nearly 80% in 2000 and 87% in 2005; 27 percentage points over a period of 15 years (BBS and UNICEF 2000, Nath and Chowdhury 2001, Nath *et al.* 1995). The latest figure corroborates with other estimates as well (DPE 2006, BBS and UNICEF 2007). Although the overall improvement looks impressive but a closer look would show about two percentage points improvement per year during the first decade and 1.4 percentage points during the next half a decade. This indicates a slowing down of the rate of progress. This was probably not too unexpected as the task became harder to reach the final 10% ('the hard-core'). This *Watch* report also showed that there was no change in net enrolment between 2005 and 2008. This study design was not amenable to identify specific reasons for such stagnancy. However, one can conjecture the socio-political circumstances that dominated that period, especially the last two years. The year 2006 was the last year for a political government and 2007-8 was a regime for a prolonged non-political caretaker government. As free and fair national election was the main agenda for the caretaker government, it was not unlikely that maintaining and manoeuvring for political stability got more attention than social agendas. Also, it is possible that primary education was affected to an unknown extent owing to teachers and education officers' involvement in preparing fresh voter list and making national identity cards and use of school houses for those purposes. Educational programmes had to be compressed including shortening of school/contact hours for such activities. The other indicator of participation, viz., attendance, increased seven percentage points during the last eight years. Such an increase might be occurred due to high dropout of those who were irregular in school.

The other important issue related to participation is the access to education by the children aged six years. According to the Compulsory Primary Education Act 1990, children of age six years are

supposed to admit in class I. We need to ensure enrolment of all such children in class I by 2010 if the second MDG is to be attained. We have serious lacking in this respect. The net intake rate for class I did never go beyond 45% at any time during the past decade and it was found below 40% in 2008. The major challenge in this regard is keeping a large portion of these children out-of-school (35% in 2008). This happened mainly due to lack of parental awareness about the Act or they were not convinced at the start age of schooling. Over three-fourth of the parents of these children thought that age six was too young to enrol in school. DPE, the main primary education implementing agency, should take this issue seriously. In order to make the parents aware of the Act mass awareness raising campaign through all types of mass communication media (radio, TV, press media, etc.), schools and the grassroots level social organizations can be mobilized. It is also important to explore why the parents thought like this. Findings of such exploration would need to be acted upon. The next level of problem was that those who were convinced to send their six-year old children to school at age six, 30% actually sent their children for pre-primary classes and 4-5% in the non-graded madrasas. The tendency of the parents to send their children of age six in these institutions has increased over time. It should be made clear that any pre-schooling should be completed before age six. An issue that comes to the fore is the correct estimation of the age. A plausible reason why parents do not send their children to school at recommended age is their ignorance of the actual age itself. The absence of birth registration (and vital registration) is a serious impediment and should be attended to.

To explore the immediate output of primary education provision we assessed competencies achievement of the students who completed the full course in 2000 and 2008. The same measurement tool was used in both. The average performance of the students increased during the past eight years; with a rate of 0.33 competencies per year. Such improvement was observed irrespective of school type. This indicates that competencies learning of the students through primary education are gradually improving but at a considerably slow pace. The study showed that the performance of the students varied widely by their school type. The primary-attached high schools and the non-formal schools did best, the government and non-government schools mediocre and the madrasas poor. This has a positive correlation with the teaching learning and other provisions in the schools. It can be easily said that the primary-attached high school students did best because of better physical facilities and teachers' educational qualification, and relatively well-off economic condition of the students' families. The non-formal schools did better due to relatively better teacher preparation and teaching-learning provision, additional care to the students, and better supervision and monitoring of the schools. On the other hand, all these lack in the madrasas and thus the students of these institutions could not do equally well. This indicates inequity in primary education in terms of performance of the students. The other type of inequity is related to gender and area of residence of the pupils. The girls and the rural students could not do well like as their respective counterparts. To remove the inequity, whatever the type, the first and probably the best way is to provide equal facilities and create equal learning opportunities in all the primary schools in the country through additional inputs as needed.

Findings of this study reveals that the students in general did better in *Poribesh Porichiti* (both Society and Science), followed respectively by Bangla, Mathematics and English. This corroborates well with the findings of the national assessment of the pupils done under PEDP II (Nanayakkana *et al.* 2007). This study also identified that the students in both 2000 and 2008 did better in the knowledge

level items compared to those needing skills of higher order. The difference of performance in these two types of items was found similar in both the years. This is an area where more attention is required. The knowledge level items sometimes can be performed through memorization of facts but in order to do well in the higher order items one needs to have higher level of skills. Provision for developing higher level of skills among the students is largely absent in our primary education system. Studies based on classroom observations identified this as a serious problem in primary classroom teaching (PSPMP 2000, Nath and Chowdhury 2001, Nath *et al.* 2005, Nath and Mahbub 2008). Such a situation is obviously related to teachers' training, everyday preparation for teaching and largely commitment to quality teaching. If creative classroom teaching cannot be arranged, learning cannot be creative and hence students cannot grow up as creative citizens. Thus, in order to improve students higher order skills and competencies, more emphasis on creative teaching-learning in the classrooms is an imperative.

The schools are supposed to play the most important role in the advancement of learning of our young learners. Multivariate analysis of the students' performance revealed that this was not happening in the primary education sector in Bangladesh. Separate analysis for three bunches of inputs and process indicators showed that in terms of predictive power, the socioeconomic characteristics of the students was the most influential factor in explaining students' learning. The place of additional educational inputs provided by the families was the second and the school related factors came out in the third. Again, when all three types of variables were considered for building a single model the highest predictive value was found for fathers' education followed by private tutoring and then school type. Of the five most powerful inputs only one was related to a school factor. All these clearly indicate that the schools' relative role in students' learning competencies was behind the families' inputs. This has multifarious implications for our primary education development. First, the schools, in general, are not playing their roles as they are supposed to. Second, as a third of our primary school students are first generation learners, if the fathers' education plays the most important role in achieving competencies instead of the schools, how these learners would perform well? Third, the educated parents are more likely to be economically better-off and they are more likely to look after their children's education and/or provide private tutors (Nath 2008). Having private tutoring as the second most important predictor and the increasing tendency to engage private tutor among the primary students clearly demonstrate that primary education in Bangladesh is increasingly becoming dependent on private tutoring. Experiences from other countries, both low and high-income, show that it is difficult to remove private tutoring from the education system for many reasons in this competitive society and in the era of globalization (Bray 1999, 2006, Bray and Kwok 2003). Considering the hard reality of Bangladesh with high incidence of poverty, high amount of never schooled parents and low quality of education, it is important to emphasize more on increased responsibility for the schools. Improvement of the quality of classroom teaching is the only visible and effective tool in this regard.

This section would remain incomplete without a discussion on the gender issue. We feel proud of our achievement in ensuring gender parity in school enrolment, often with complacency. This study as well as the other studies on primary education showed consistently that the girls are ahead of the boys in enrolment in all primary grades. This means that they are more successful than their counterparts in surviving at various grades as well as completing the full-cycle of primary education.

The sixth *Education Watch* and the official data published by BANBEIS also reported that the girls survived more than the boys till class VIII (Ahmed *et al.* 2006, BANBEIS 2006). However, this was not the case when the learner outcomes were considered. This study as well as the national assessment of pupils in 2006 found that the girls did not perform well as the boys in the learning achievement tests. Our primary education cannot reach its goals without ensuring equal learning achievement for both girls and the boys. Social attitudes and practices as well as learning opportunities at school are responsible for this. The girls are expected to do more household work than the boys which leads to having less time for study at home. A study on Mathematics education in primary schools showed that the girls are given less motivation in learning mathematics at home, by the education officials and the teachers (Shahjamal 2000). This may happen in other subjects too affecting the overall learning of the girls. It is thus important to give them an equal opportunity by creating an enabling learning environment both at home and in schools, so that they can learn equally well as the boys. The system as a whole has to be responsive to girls' learning needs. The role of the teachers is very much important in this regard.

The other issues related to gender in education include sex ratio among the teachers, the education officials and in the SMCs, and role of the females in school development. The non-formal schools, in general, got good dividend by recruiting more females as teachers and in the SMCs. On the other hand, the madrasa education had less involvement of the females and the students of these institutions showed poorest performance as well. The policy to recruit more female teachers in the government primary schools and the primary-attached high schools should be kept up. Except for the non-formal schools, participation of women in the SMCs, as head of the institutions or as education officials is much less than what it should ideally be. Involving more women in these areas of education and providing them adequate support including training might help bring a balanced environment in the primary schools. This may ultimately create the expected condition for the girls to perform equally well and hence improve overall quality of education.

## **B. Key messages from the study**

Following are the key messages emanating from the findings of the present study:

*The first message* is that there is a huge wastage taking place in our primary education system. Half of the enrolled children drop out before completing the full five-year cycle. Owing to increase in dropout and repetition rates across all the primary classes, there is a visible drop in the retention and survival rates in recent years, which resulted in the shrinking of primary completion rate. Such high dropout indicate lack of quality provisions, loss of secure resources and thus inefficiency in the system.

*The second message* is that there is an indication of stagnation in enrolment since 2005. Improvement in primary enrolment was evident up to 2005 which stagnated afterwards due to a significant fall in enrolment in some areas and among the children aged six years. Parents of half of such children thought that their wards were too young to enrol in school. Refusal of admission by the school authority, children losing interest in education, scarcity of money to meet the private cost of education, and disability were some of the major reasons for such a stagnant situation. Distance between home and school in some areas is another reason for the stagnation. This low net intake rate is a serious obstacle to achieving the second MDG.

*The third message* is that students' achievement of nationally determined competencies improved but it is far from expectation. Low achievements in the 'understanding level' items and inequities in terms of gender, school type and residence are some related issues linked to the quality of the system. Students' learning achievement depended much on their background characteristics and private tutoring than on the school related factors, which should be a wake-up call for the schools.

*The fourth message* is that the girls are ahead of the boys in terms of enrolment, attendance, survival up to class V and completion of the full cycle of primary education but are significantly behind when the question of learning achievement comes. This is true irrespective of school type. Females' participation in teaching profession increased significantly but their numbers are still low in the leadership of the institutions and participation in school managing committees.

*The fifth message* is that the madrasas are lagging behind in most of the quality indicators. Poor educational provision in these institutions is partly to blame for this. The ebte dayee madrasas which are basically independent institutions providing primary education is at the bottom of the league table. These institutions use separate textbooks and a majority do not have basic minimum infrastructure and learning facilities. Lack of trained teachers is a serious problem in the madrasas. Women's participation in teaching, school leadership and SMC is the lowest in madrasas.

*The sixth message* is that owing to continuous push for school enrolment, level of education and literacy status of the population increased over time. However, increase of ever schooled population and those who completed primary education was modest with a rate of 1.4 percentage points per year. Although the literacy situation made important strides in recent times, it is yet to cross the 50% mark.

*The seventh message* is that the non-formal primary schools have been contributing significantly to achieving EFA. As supplementary and complementary to the mainstream education provision, it caters for 9.6% of total primary enrolments in 2008. Although these schools do not have enough physical facilities like the mainstream schools they are sometimes better endowed than other types in terms of educational software such as teacher training, teaching-learning provisions, child-friendly environment, teacher attendance and parental participation leading to better outcomes such as student attendance, cycle completion and learning achievements.

*The eighth message* is that physical facilities, teachers' education and training and learning provisions for the primary education system in Bangladesh have improved as a whole during the past decade. However, the improvement has been uneven. Madrasas and the non-government primary schools often lack basic minimum standards of enabling condition. There are shortcomings in the teachers' subject based training, management training of the heads of the institutions and effective functioning of the school managing committees. Dependence on private tutoring has increased over time.

### **C. Policy recommendations**

The findings and the main messages of the *Education Watch 2008* study on the quality of primary education raise the following policy issues:

1. Primary education, wherever provided should, in principle, be linked with the Directorate of Primary Education (DPE) - the government's key authority to implement primary education.

*Upazila* Education Offices, on behalf of DPE should play the principal role in coordinating primary education, of all types, at the *upazila* level. This implies decentralization of authority to the *upazila* level and making them accountable for access, equity and quality of education to the people of the respective *upazilas* and the Ministry of Primary and Mass Education.

2. There should be a 'minimum' provision of physical and learning facilities, qualified and trained teachers, co-curricular activities and functioning school managing committee. All existing formal educational institutions including the madrasas should be judged on the basis of this standard and those not meeting the standards should receive direct support through government subvention. A yearly survey (like the *Education Watch*) should be carried out by DPE to monitor improvements over time. Phase-wise five-year development plans may be considered. The learning process should take place in classrooms not private tutors' homes.
3. Pre-primary education should be confined for the children below age six. To ensure admission of children of age six in class I, campaigns of various forms should be considered, which, at the school level, can include school-catchment area based survey, meeting with the parents of non-enrolled children and community level campaigns. National and district level campaigns through all types of media such as radio, television, newspapers, mobile phones, bill boards, Internet as well as folk media may be utilized. Some of these are already being used in some places; however, these need to be strengthened throughout the country for immediate action. The civil society should be utilized more in such campaigns.
4. In order to reduce distance/communication related barriers to school enrolment, non-formal primary schools should be promoted in the short run. Such provisions should be continued for those who missed primary education at age six and for the dropouts. The quality assuring mechanisms as practiced in non-formal schools, such as continuous training of teachers, supportive academic supervision, provision of co-curricular activities, community monitoring and special support to the disadvantaged and disabled students, can be adapted in the formal schools. Collaboration between DPE and the agencies implementing non-formal programmes through a task force could be considered as a public-private partnership (PPP) which is being promoted by the newly elected government.
5. We have reasons to be happy about the achievement of gender parity at participation level but there is no need to be complacent about it. Gender related issues should be addressed in teacher training, school management and day-to-day school operation. Additional care, attention and encouragement can improve girls' competency achievements. More policy action is needed through *affirmative actions* to put more females as heads of the educational institutions including the madrasas and in the school managing committees.
6. Recognizing the contribution of madrasas in enhancing access to education, necessary facilities including unified and common set of standards for learning provisions, teaching personnel and core curriculum objectives and contents is a need of the hour. Additional support is needed for their improvement with adequate supervision and monitoring for the best use of the support.
7. The Compulsory Primary Education Act 1990 need to be revisited as it is inadequate to meeting modern day requirements. The Act is faulty as there is scope for the heads of the educational

institutions to refuse admission without showing any reason; especially the disabled could be subjected to discriminations due to this. It is necessary to amend the Act towards achieving 'quality primary education for all' and vesting greater role, responsibility and authority to the *upazila* education offices.

8. In order to come out of the 'business as usual' approach, strong political commitment for a major overhaul in the education sector is required. 'Vision 2021' or the 'Digital Bangladesh' or any other developmental goals would be difficult to achieve without proper development of our human resources.
9. A large portion of the provision of 'block allocation' in the national budget 2009-10 can be utilized for education in addition to its usual allocation. Massive change in teacher education capable of impacting in classroom culture and school discipline, subvention to the schools and madrasas to create minimum standard of educational facilities towards reducing inequity among the educational institutions and establishing a strong monitoring mechanism should be the priority activities with this allocation.



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## Annexes

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## Annex 1.1

*Titles of previous Education Watch reports and main issues addressed*

Year	Report title	Issues addressed
1999	Hope not complacency: state of primary education in Bangladesh	<ul style="list-style-type: none"> <li>• Internal efficiency</li> <li>• Level of basic competencies achievement</li> </ul>
2000	A question of quality: state of primary education in Bangladesh	<ul style="list-style-type: none"> <li>• Competency-based learning achievement</li> <li>• Teacher education</li> </ul>
2001	Renewed hope daunting challenges: state of primary education in Bangladesh	<ul style="list-style-type: none"> <li>• Internal efficiency</li> <li>• Private expenditure of education</li> <li>• School budgets</li> <li>• Literacy status</li> </ul>
2002	Literacy in Bangladesh: need for a new vision	<ul style="list-style-type: none"> <li>• Exploration of literacy levels of the population</li> </ul>
2003-4	Quality with equity: the primary education agenda	<ul style="list-style-type: none"> <li>• In-depth probe of participation, equity and quality in primary education</li> </ul>
2005	The state of secondary education: progress and challenges	<ul style="list-style-type: none"> <li>• Internal efficiency</li> <li>• Financing</li> <li>• Management</li> </ul>
2006	Financing primary and secondary education in Bangladesh	<ul style="list-style-type: none"> <li>• State level financing in education</li> <li>• Private expenditure for education</li> </ul>
2007	The state of secondary education: quality and equity challenges	<ul style="list-style-type: none"> <li>• Equivalence in secondary curriculum</li> <li>• Quality of secondary graduates</li> <li>• Further education and employment opportunities</li> </ul>

## Annex 1.2

*Objectives of primary education*

1. To instil in the learner an absolute trust and faith in Almighty Allah so that it works as a constant source of inspiration for all of his/her thoughts and actions and helps develop spiritual, moral, social and human values.
2. To help the child develop moral qualities and qualities related to character through the cultivation of respective religious instructions.
3. To arouse in the mind of the learner a sense of love, respect, equality, fellow-feeling and cooperation to all, irrespective of nationality-religion-caste, male-female, and make him/her desirous of peaceful environment.
4. To arouse in the mind of the child an eagerness for human rights, mutual understanding, cooperation, universal brotherhood, internationalism, and world peace and culture.
5. To make learner interested in manual labour, develop his/her a sense of respect for manual labourers, and help develop an awareness of enhancing quality of life through economically gainful labour.
6. To develop awareness in the learner about his/her own as well as others' rights, duties and responsibilities, through active participation in various activities undertaken in the family, society and the school.
7. To help the learner practice tolerance to others' opinion and cultivate democratic norms and rules.
8. To arouse in the children a sense of patriotism and nationalism, a spirit of sacrifice and motivate them to take part in the nation-building activities, through inspiring them in the spirit of liberation war.
9. To help gain knowledge about and insight into national history, heritage and culture and arouse in them a sense of respect for these.
10. To help the learners in physical development through physical exercise and games and sports and help develop the habit of healthful living.
11. To help acquire all the basic skills of Bangla language as a medium of instruction for effective use in all spheres of life.
12. To help the learner acquire mathematical concept and skills and the competences of rational thinking and problem solving.
13. To use the learner acquire basic skills of English as a foreign language and help in the use of this language.
14. To make the learners interested in lifelong education through arousing in them adequate curiosity towards learning skills and knowledge.
15. To acquire knowledge of science and technology, develop habit of solving problems through using scientific methods, and help develop scientific attitude for improving standard of living.
16. To help acquire ideas about sources of information, collection of information through various media including computer, their use, processing and preservation.
17. To help the children know and understand about environment, and motivate them in its development and preservation by making them take part in the prevention of pollution of environment.
18. To help the child unfold his/her creativity, sense of beauty through the study of music, arts and crafts, etc.
19. To help develop attitude of appropriate use of community and national resources and to be careful of their conservation.
20. To help develop in the child the desired moral and social qualities like: sense of justice, duty, discipline, good manners and orientation towards living together.
21. To form ideas about the effect of population growth on the basic needs of people and environment and to help develop awareness about this.
22. To help the learners acquire necessary knowledge and skill as per the ability, aptitude and interest of the learner, so that he/she can grow up as a complete individual and a capable citizen and to develop him as eligible for the next stage of education.

**Annex 1.3**  
*The 50 terminal competencies*

1. To place unflinching trust to Allah, the almighty.
2. To know about the Creator and remember Him in all activities and to be grateful to Him.
3. To know the life sketch of Hazrat Mohammad (peace be on him), the prophet of Allah or the preachers of own religion and follow their teachings and examples created by them.
4. To know about the religious books of own religion and to build ethical and moral standard through following the teaching instructions of the religions.
5. To love all creations of the Creator.
6. To show respect and tolerance to all irrespective of ethnicity, religion, race and gender.
7. To know about the people of other countries and to show love and gratitude to them.
8. To get idea about the basic needs of human beings and to be aware of developing a nice livelihood.
9. To be aware of one's own rights and as well as the rights of others.
10. To allow others to express their opinions and to show respect to such opinions.
11. To be cooperative and friendly to all.
12. To be interested in manual work and to be respectful to people living on such work.
13. To be aware of one's own duties and responsibilities as a member of the family and to take part in household work.
14. To be aware of own and others rights, duties and responsibilities through active participation in the activities in school and in the society
15. To be aware of democratic norms and to be aware of one's own responsibilities and duties as a good citizen.
16. To participate in nation building activities through avoiding self interest.
17. To get some ideas about geographical location and characteristics of Bangladesh.
18. To be inspired in love to the country and in nationalism in light of the War of Independence.
19. To know about national history, heritage, culture and literature and to be respectful to these.
20. To be active in environmental development and preservation.
21. To develop liberal attitude towards universal brotherhood and the culture of various countries and to develop an appreciation of the spirit of world peace.
22. To develop an attitude to be careful in making appropriate use of personal, family, community and national resources and their conservation.
23. To be informed about the gradually increasing population of the country and to gain awareness of its effect on environment.
24. To gain knowledge about the mode of construction of Bangla language, arrangement of sentences (syntax) and rules and orders and to be able to apply them.
25. To be able to understand the central ideas of rhymes, poems, stories, speeches, narrations and conversations in Bangla, listening to them attentively.
26. To be able to speak to class fellows and others understandably in colloquial Bangla with correct and standard pronunciation.
27. To be able to read printed and handwritten texts correctly and understand the sense of the text read.
28. To be able to express in writing, the observations, experiences and ideas in Bangla correctly and clearly, write common letters and applications and fill in various forms.

*Cont ...*

Cont ...

29. To gain basic ideas about numbers and be able to use them.
30. To be able to listen, speak. Read and write numerical and ordinal words including dates.
31. To know the four fundamental rules (operations) of mathematics and to be able to use them.
32. To recognize the geometrical shapes and sizes of various things in the environment and to be able to use them.
33. To know the units of length, weights, area, volume, time and coins and to be able to use them.
34. To be able to apply mathematical skills in solving practical and information-based simple problems.
35. To be able to use various information from the environment through collection, organization and processing them.
36. To know about calculator and computer and to be able to use calculator in computations.
37. To be able to apply mathematical knowledge in solving population-related problems.
38. To listen to and understand simple conversations, stories and rhymes in English and to enjoy them.
39. To be able to speak in simple and correct sentences in English about one's own observations, ideas and feelings.
40. To be able to read and understand printed and handwritten materials in English.
41. To be able to write brief accounts of experience and know things in correct and simple English.
42. To acquire knowledge about the application of science and technology in enhancing the quality of day to day life.
43. To develop habit of solving problems by adopting scientific methods.
44. To develop scientific attitude.
45. To know the environment through observation and enquiry and to be able to classify different things and events on the basis of the knowledge acquired.
46. To be aware of the variety in creations through the study of arts and crafts (such as drawings, designs and sketches; work of clay, wood, cloth and paper) and to develop one's creativity and extend areas for enjoying beauty.
47. To promote one's own creativity, sense of beauty, aesthetics and intelligence through the study of music, dance and drama.
48. To be interested in games and physical exercise.
49. To know and follow health rules with a view to ensuring healthful living.
50. To acquire the mentality of living together and to be imbued with the attitude of honesty, sense of justice, duty, discipline and good manner and behave accordingly.

## Annex 1.4

*Primary school quality levels (PSQL) indicators*

Following are supposed to be achieved by 2010

1. Increasing the number of children admitted in schools.
2. Increasing the number of children with special needs admitted in school.
3. Reduce the number of pupils per class to 40.
4. Reduce the pupil-teacher ratio in schools to 46:1.
5. Built 30,000 new classrooms all over the country
6. Ensure properly constructed classrooms with durable materials; sufficient size of at least 26' x 19'-6"; well-lighted; properly ventilated; and accessible by physically disabled students.
7. Ensure that the classrooms are furnished to suit the age and size of the children; have a chalkboard of size 12'x 4'; and have secure storage.
8. Ensure that schools have proper hygienic separate latrines for girls and boys and accessible by the physically disabled.
9. Ensure that schools have a potable water supply for both male and female staff and students.
10. Ensure that schools provide and promote ideals of good health and hygiene for all students.
11. Ensure 900 contact hours per annum for the students of each grade.
12. Make sure that the students receive textbooks from the first day of each academic year.
13. Ensure textbooks for all subjects for each of the students.
14. Ensure supply of teaching aids; supplementary books and learning materials to each school.
15. Provide basic minimum training (Certificate-in-Education or E-in-Ed) to all teachers.
16. Allocate one trained teacher to each class/section.
17. Provide various in service training to all the teachers.
18. Provide all necessary materials to each of the teachers. The materials may include teacher edition of textbooks, teacher guides, and basic package of teaching aids and equipment.
19. Provide following training to the head teachers: school management; teacher support and supervision; and community mobilization and participation.
20. SMC receives regular training to undertake its specified functions and meet the needs of the school and community.

## Annex 1.5

*List of Key performance indicators (KPI)*

Following are supposed to be achieved by 2010

1. Public expenditure on education increased at least to 2.8% of gross national product (GNP).
2. Per student public expenditure at primary level increased to 10% of GNP.
3. Ensure 47-48% of total public expenditure on education for primary education.
4. Gross intake ratio (GIR) increased to 103%.
5. Net intake rate (NIR) increased to 90%.
6. Gross enrolment ratio (GER) increased at 107%.
7. Net enrolment rate (NER) increased at 88%.
8. Decrease of pupil-teacher ratio to 1:46.
9. Number of schools operating a single shift system increased to 50% and ensure 900 hours per year for all classes.
10. Proportion teachers with professional training (C-in-Ed) increased to 95%.
11. Teacher absenteeism without leave reduced to 10%.
12. Teacher attendance on time increased to 90%.
13. Repetition rates in all classes less than 20%.
14. Survival rate to Grade 5 (percentage of the pupil cohort reaching and completing Grade 5) 82%.
15. Coefficient of efficiency (ideal number of pupil years needed for a cohort to complete the primary cycle, expressed as a percentage of the actual number of pupil-years) 116%, or a cycle time of 5.8 years.
16. Percentage of pupils having reached at least Grade 4 of primary schooling and who master a set of nationally defined learning competencies 50%.
17. The number of disabled children out of school reduced by 30%.
18. Student absenteeism reduced to 20%, with no discrepancy between boys and girls.
19. Education achievement of girls improved to at least the same level as boys.
20. The number of pupils achieving acceptable levels of literacy and numeracy (as measured by National Assessment instruments) increased by 50%.
21. The proportion of Class 5 students entering for the Primary Education Scholarship Examination increased to 50%.
22. The proportion of Class 5 students achieving the Primary Education Scholarship Examination pass level increased to 60%.
23. The transition rate from Class 5 to Class 6 increased to 40%, with gender parity.
24. The number of students achieving a defined level of competency based learning achievement to reach 65%.

## Annex 2.1

*Competencies addressed in the learning achievement test**Bangla*

1. Ability to read and understand both printed and hand written materials.
2. Capability to express own observations, experiences and understanding in written form, ability to write personal letter and application and ability to fill up official forms.
3. Ability to understand the main theme of an easy dialogue, lectures, descriptions, etc.

*English*

4. Ability to read both printed and hand written materials in English.
5. Ability to describe briefly, correctly and clearly any known object in English.
6. Ability to understand easy English dialogue, stories, rimes, etc.

*Mathematics*

7. Have basic idea about numbers and ability to use them.
8. To know about four basic operations of arithmetic and ability to use those rules.
9. Ability to apply the easy techniques in daily life accounting.
10. To know the measurement units of money, length, weight, area and time and ability to use these units.
11. To know and understand different geometric figures

*Poribesh Porichiti (society)*

12. To know his/her own duties as a member of a family.
13. To know his/her own duties as a member of a society.
14. To know his/her own duties as a citizen of Bangladesh.
15. To know about the country
16. To know how to behave with persons of various relationships.
17. To know about the children of different countries.

*Poribesh Porichiti (science)*

18. To understand the importance of good health in order to live a healthy life.
19. To know about physical and environment health systems.
20. To know about balanced diet and to understand its importance.
21. To know about common diseases, causes and preventive measures, and the cautions about these.
22. Having capacity in collecting information.
23. Having observation skills in order to know and understand natural and social environment.
24. Scientific ability in asking specific questions, classifying observed subjects and hypothesizing.
25. Ability to identify cause and affect relationship among different problems of everyday life.
26. Ability to observe that use of science and technology can increase standard of life and to understand their importance in life.

*Religious studies*

27. To know about life history of Prophet Mohammed (SM) or the preachers of own religion

## Annex 2.2

## Students' socioeconomic survey questionnaire

গণসাক্ষরতা অভিযান

## এডুকেশন ওয়াচ ২০০৮: শিক্ষার্থীদের শিক্ষা ও আর্থসামাজিক তথ্য

সনাক্তকরণ

শিক্ষাপ্রতিষ্ঠানের নাম: ----- কোড:   শিক্ষার্থীর নাম: ----- শ্রেণীতে ক্রমিক:----- কোড:   

পিতা/আভিভাবকের নাম: -----

আবাসিক ঠিকানা:

ইউনিয়ন/ওয়ার্ড: -----   গ্রাম/মহল্লা: -----   বাড়ীর নাম/নম্বর: -----

এই প্রশ্নপত্রটির মূল উত্তরদাতা শিক্ষার্থীর পিতা, মাতা কিংবা অভিভাবক; প্রয়োজনে সংশ্লিষ্ট শিক্ষার্থীর সাহায্য নেওয়া যাবে।

ক্রমিক	প্রশ্ন	কোড
1	লিঙ্গ	ছেলে 1 মেয়ে 2
2	শিক্ষার্থীর বয়স কত? (পূর্ণ বৎসরে)	

3. শিক্ষার্থী নিচের সালগুলোর কোনটিতে কোন শ্রেণীতে পড়ালেখা করত?

সাল	২০০৮	২০০৭	২০০৬	২০০৫	২০০৪	২০০৩	২০০২	২০০১	২০০০	১৯৯৯
শ্রেণী										

ক্রমিক	প্রশ্ন	কোড
4	শিক্ষার্থীর পিতা/মাতা বা অন্য কেউ এ বছর তার পড়ালেখা সংক্রান্ত কোন বিষয়ে শিক্ষকের সংগে আলোচনা করার জন্য স্কুলে গিয়েছেন কি? যদি যান, তবে কে কয়বার গিয়েছেন? (একবারও না গেলে কোড 0 বসাবেন)	পিতা মাতা অন্য কেউ
5	এবছর শিক্ষার্থীর পিতা/মাতা বা অন্য কেউ তার স্কুলসংক্রান্ত কোন সভায় যোগ দিয়েছেন কি? কোড: হ্যাঁ = 1, না = 2, জানা নেই = 3, প্রযোজ্য নয় = 9	পিতা মাতা অন্য কেউ
6	পড়ালেখায় সাহায্য করার জন্য (অর্থের বিনিময়ে) এ বছরের জানুয়ারি মাস থেকে অক্টোবর মাস পর্যন্ত যে কোন সময় শিক্ষার্থীর কোন গৃহশিক্ষক ছিল কি?	হ্যাঁ 1 না 2
7	গৃহশিক্ষক থাকলে তিনি কে? (একাধিক উত্তর হতে পারে) কোড: শিক্ষার্থীর স্কুলের শিক্ষক= 1, অন্য স্কুলের শিক্ষক= 2, কোচিং সেন্টার= 3, প্রাইভেট শিক্ষক = 4, লজিং মাস্টার= 5, আত্মীয়-স্বজন= 6, প্রতিবেশী= 7, জানা নেই= 8, প্রযোজ্য নয়= 9	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
8	শিক্ষার্থী এবছর মোট কত মাস গৃহশিক্ষকের কাছে পড়েছে?	
9	শিক্ষার্থীর পিতা-মাতা বা ভাই-বোন কি উক্ত সময়ে তাকে পড়াশুনায় কোন সাহায্য করেছেন?	পিতা-মাতা: হ্যাঁ= 1, না= 2 ভাই-বোন: হ্যাঁ= 1, না= 2

Cont ...

Cont ...

ক্রমিক	প্রশ্ন	কোড
10	শিক্ষার্থী এবছর কোন সহপাঠক্রমিক কার্যক্রমে অংশ নিয়ে থাকলে কোন্ কার্যক্রমে কোথায় অংশ নিয়েছে ? কোড: অংশ নেয়নি = 0, বিতর্ক = 1, সাংস্কৃতিক অনুষ্ঠান/বার্ষিক নাটক = 2, ক্রিড়া ও খেলাধুলা = 3, ধর্মীয় অনুষ্ঠান = 4, কাব/স্কাউট/রোভার/বিএনসিসি/গার্লসগাইড/সমাজ কর্ম = 5, বিজ্ঞান মেলা = 6, শিক্ষা সফর = 7, জানা নেই = 8	স্কুলে/মাদ্রাসায় অন্যত্র
11	এ বছর (২০০৮ সালের জানুয়ারি থেকে অক্টোবর) শিক্ষার্থীর পড়ালেখা বাবদ নিচের খাতগুলোতে কত টাকা খরচ হয়েছে। (সময় নিয়ে হিসাব করে উত্তর দিতে বলুন)	
	খাত	টাকা
	ভর্তি, পুন: ভর্তি, সেশান ফি ইত্যাদি	
	স্কুলের/মাদ্রাসার বেতন	
	পাঠ্যপুস্তক ক্রয়/সংগ্রহ	
	সাহায্যকারী পুস্তক ক্রয়/সংগ্রহ	
	বিবিধ শিক্ষাপকরণ ক্রয়(খাতা, কলম, পেনসিল, জ্যামিতি বক্স, স্টেশনারি ইত্যাদি)	
	স্কুলের/মাদ্রাসার পোষাক, জুতা/স্যাডেল	
	বিভিন্ন প্রকার চাঁদা (মিলাদ, পূজা, খেলাধুলা ইত্যাদি উপলক্ষে)	
	পরীক্ষাসমূহের ফি	
	স্কুলে/মাদ্রাসায় যাতায়াত	
	গৃহশিক্ষকের বেতন/কোচিং সেন্টারের ফি	
	গৃহশিক্ষকের বাড়ি/কোচিং সেন্টারে যাতায়াত	
	অন্যান্য খরচ	
12	শিক্ষার্থীর মাতা কোন্ শ্রেণী পাশ করেছেন?	
13	শিক্ষার্থীর পিতা কোন্ শ্রেণী পাশ করেছেন?	
14	শিক্ষার্থী কোন্ ধর্মাবলম্বী?	ইসলাম 1 হিন্দু 2 বৌদ্ধ 3 খৃষ্টান 4 অন্যান্য 5
15	শিক্ষার্থীর জাতি পরিচয় কি?	বান্গালী 1 অবান্গালী 2
16	গত এক বৎসরে বিভিন্ন উৎস থেকে যা আয় হয়েছে এবং সংসার চালাতে যা ব্যয় হয়েছে তা বিবেচনায় রেখে বলুন যে আপনার খানার বাৎসরিক আয় ব্যয়ের অবস্থা কি? (সময় নিয়ে হিসাব করে উত্তর দিতে বলুন)	সবসময় ঘাটতি 1 মাঝে মাঝে ঘাটতি 2 সমান সমান 3 উদ্বৃত্ত 4
17	শিক্ষার্থীর বাসায়/বাড়িতে বিদ্যুৎ সুবিধা আছে কি?	হ্যাঁ 1 না 2
18	শিক্ষার্থীকে জিজ্ঞেস করুন: তুমি কি গত এক সপ্তাহের মধ্যে কখনো ----- কোড: হ্যাঁ= 1, না= 2, জানা নেই= 8	রেডিওতে কোন অনুষ্ঠান শুনেছ? টেলিভিশনে কোন অনুষ্ঠান দেখেছ? খবরের কাগজ পড়েছ?

তথ্যসংগ্রহকারীর নাম .....তারিখ:

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**Annex 2.3.**  
**Educational institution survey questionnaire**

এই তথ্য শুধু গবেষণার  
কাঙ্ক্ষ ব্যবহার করা হবে

গণসাক্ষরতা অভিযান

## প্রযুক্তিগত ওয়াচ ২০০৮: শিক্ষাপ্রতিষ্ঠান জরিপ প্রশ্নপত্র

### সনাক্তকরণ

শিক্ষাপ্রতিষ্ঠানের নাম: ----- কোড:

গ্রাম: ----- ইউনিয়ন: ----- উপজেলা: -----

জেলা: ----- বিভাগ: -----

### শিক্ষাপ্রতিষ্ঠানের ধরন

সরকারি প্রাথমিক বিদ্যালয় = 1,      বেসরকারি প্রাথমিক বিদ্যালয় = 2      এবতেদায়ী মাদ্রাসা = 3  
উপানুষ্ঠানিক প্রাথমিক বিদ্যালয় = 4      উচ্চ বিদ্যালয় সংলগ্ন প্রাথমিক = 5      উচ্চ মাদ্রাসা সংলগ্ন এবতেদায়ী = 6

### ক. শিক্ষাপ্রতিষ্ঠানের সাধারণ তথ্য

শিক্ষা- প্রতিষ্ঠানের প্রতিষ্ঠা সাল	উপজেলা থেকে প্রতিষ্ঠানের দূরত্ব (কি.মি.)	উপজেলা থেকে যোগাযোগের অবস্থা	কাদের পড়ালেখার ব্যবস্থা আছে	কোন শ্রেণী থেকে কোন্ শ্রেণী পর্যন্ত পড়ালেখার ব্যবস্থা আছে	বিদ্যালয় শুরু ও ছুটির সময় কী?	বিদ্যালয়ের শিফট সংখ্যা
1	2	3	4	5	6	7
		সুগম মোটামুটি দুর্গম	1 শুধু ছেলেদের 2 শুধু মেয়েদের 3 উভয়ের	1 2 3 ..... থেকে.....	...থেকে...	
8. ক্যাচমেন্ট এলাকায় মোট খানার সংখ্যা কত? কোড: জানা নেই = 8888						
9. ক্যাচমেন্ট এলাকায় প্রাথমিক শিক্ষালয়ে গমনোপযোগী (৬-১০ বছর বয়সী) শিশুর সংখ্যা কত? কোড: জানা নেই = 8888						

### খ. শিক্ষাপ্রতিষ্ঠানের ভৌত অবকাঠামো

(সরেজমিন পর্যবেক্ষণ করে তথ্য লিপিবদ্ধ করুন)

নিজস্ব জমি আছে কি?	ভবন সংখ্যা কতটি?	ভবনসমূহে কয়টি কক্ষ আছে?	ভবন প্রতিবন্ধী-বান্ধব কি?	বিদ্যুৎ সংযোগ আছে কি?	খেলার মাঠ আছে কি?	ফুলবাগান আছে কি?	হস্তান্তর হয়নি এমন ভবন সংখ্যা	
10	11	12	13	14	15	16	17	
আছে	1		হ্যাঁ	1	হ্যাঁ	1	হ্যাঁ	1
নাই	2		না	2	না	2	না	2

Cont ...

Cont ...

ক্রমিক	প্রশ্ন	উত্তর/কোড			
18	শ্রেণীকক্ষ, বারান্দা ইত্যাদির মেঝে কতটা পরিষ্কার-পরিচ্ছন্ন?	মেঝেতে ধুলাবালি, কাগজপত্র পড়ে আছে	1		
		মেঝেতে ধুলাবালি পড়ে আছে	2		
		ধুলাবালি ও কাগজপত্রবিহীন পরিষ্কার মেঝে	3		
19	শ্রেণীকক্ষ, বারান্দা ইত্যাদির দেওয়াল কতটা পরিষ্কার-পরিচ্ছন্ন?	দেওয়াল রং করা ও পরিষ্কার	1		
		দেওয়াল রং করা আছে কিন্তু অপরিষ্কার	2		
		দেওয়ালে রং নেই কিন্তু পরিষ্কার	3		
		দেওয়ালে রং নেই এবং অপরিষ্কার	4		
20	এই বিদ্যালয়ে পানীয় জলের কী ধরনের ব্যবস্থা রয়েছে?	বিদ্যালয়ের নিজস্ব টিউবওয়েল/সাপ্লাই	12		
		পাশের বাড়ির বা অন্য প্রতিষ্ঠানের	3		
		টিউবওয়েল/সাপ্লাই	4		
		মটকা/কলসিতে সংরক্ষিত পানি			
		কোন ব্যবস্থা নেই			
21	এই বিদ্যালয়ে শিক্ষার্থীদের জন্য কী ধরনের শৌচাগারের ব্যবস্থা আছে?	ছেলে ও মেয়েদের জন্য পৃথক	1		
		উভয়ের জন্য একই	2		
		শুধু ছেলেদের জন্য	3		
		শুধু মেয়েদের জন্য	4		
		কোন ব্যবস্থা নেই	5		
22	এই বিদ্যালয়ের শিক্ষার্থীদের ব্যবহৃত শৌচাগারের অবস্থা কী রকম?		ছেলে	মেয়ে	একত্রে
		স্বাস্থ্যসম্মত	1	1	1
		মোটামুটি স্বাস্থ্যসম্মত	2	2	2
		স্বাস্থ্যসম্মত নয়	3	3	3
		প্রযোজ্য নয়	9	9	9
23	এই বিদ্যালয়ের শিক্ষকদের জন্য আলাদা শৌচাগারের ব্যবস্থা আছে কি?			হ্যাঁ	1
				না	2
24	কোন একটি শৌচাগারে বিশেষ চাহিদা সম্পন্ন (প্রতিবন্ধী) শিশুদের উপযোগী ব্যবস্থা আছে কি?			হ্যাঁ	1
				না	2
25	এই বিদ্যালয়ে বার্ষিক পরিকল্পনা (লিখিত) আছে কি?			হ্যাঁ	1
				না	2



Cont ...

## গ. শ্রেণীকক্ষে বসার ব্যবস্থা ও উপস্থিতি

শ্রেণী ও শাখা	স্বাভাবিকভাবে কত জন বসতে পারে		ছাত্র		ছাত্রী	
			তালিকাভুক্ত (রেজিস্টার থেকে)	আজ ক্লাশে উপস্থিত (মাথা গুণে)	তালিকাভুক্ত (রেজিস্টার থেকে)	আজ ক্লাশে উপস্থিত (মাথা গুণে)
1-2	3		4	5	6	7
প্রথম	1	1				
	1	2				
	1	3				
	1	4				
দ্বিতীয়	2	1				
	2	2				
	2	3				
	2	4				
তৃতীয়	3	1				
	3	2				
	3	3				
	3	4				
চতুর্থ	4	1				
	4	2				
	4	3				
	4	4				
পঞ্চম	5	1				
	5	2				
	5	3				
	5	4				

## ঘ. উপবৃত্তি

বর্তমানে এই বিদ্যালয়ের কোন শ্রেণীতে কত জন শিক্ষার্থী উপবৃত্তি পাচ্ছে?

সাল	প্রথম শ্রেণী		দ্বিতীয় শ্রেণী		তৃতীয় শ্রেণী		চতুর্থ শ্রেণী		পঞ্চম শ্রেণী	
	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী
1	2	3	4	5	6	7	8	9	10	11
২০০৮										

কোড : তথ্য জানা নাই= 888

Cont ...

Cont ...

**ঙ. শিক্ষার মানোন্নয়নে অতিরিক্ত ব্যবস্থা**

স্বাভাবিক কার্যক্রমের বাইরে শিক্ষার্থীদের পড়ালেখার মানোন্নয়নে এই বিদ্যালয়ে কী কী ধরনের ব্যবস্থা নেওয়া হয়?

ক্রমিক	প্রশ্ন	উত্তর/কোড				
		প্রথম	দ্বিতীয়	তৃতীয়	চতুর্থ	পঞ্চম
1	দৈনিক কোচিং ক্লাশ হয় কি? (উত্তর কোড 2 হলে 4 নম্বর প্রশ্নে চলে যান)	হয়			1	
		হয় না			2	
2	কোচিং ক্লাশ হলে কোন শ্রেণীতে অংশগ্রহণকারী শিক্ষার্থীর সংখ্যা কত?	ছাত্র				
		ছাত্রী				
3	এজন্য প্রতি মাসে কোন শ্রেণীর শিক্ষার্থীকে কত টাকা করে দিতে হয়?					
4	এবছর (২০০৮ সালে) প্রাথমিক বৃত্তি কোচিং হয়েছে/হচ্ছে কি? (উত্তর কোড 2 হলে 'চ' অংশে চলে যান)	হয়			1	
		হয় না			2	
5	হ্যাঁ হলে, কতজন শিক্ষার্থী অংশগ্রহণ করেছিলো/করছে?					
6	এজন্য শিক্ষার্থী প্রতি মাসে কত টাকা দিতে হয়?					

**চ. সহ-পাঠক্রমিক কার্যক্রম**

1	গত পাঁচ বছরে কোন্ কোন্ সালে বার্ষিক ক্রীড়া প্রতিযোগিতা অনুষ্ঠিত হয়েছে? কোড: হ্যাঁ = 1, না = 2	২০০৪	২০০৫	২০০৬	২০০৭	২০০৮
2	বিদ্যালয়ে কোন কাব দল আছে কি?	আছে			1	
		নাই			2	
3	কোন কোন শ্রেণীতে নিয়মিত চারু ও কারুকলা ক্লাশ অনুষ্ঠিত হয়? কোড: আলাদা = 1, অন্য শ্রেণীর সঙ্গে একত্রে = 2, হয় না = 3	প্রথম	দ্বিতীয়	তৃতীয়	চতুর্থ	পঞ্চম

**ছ. পঞ্চম শ্রেণীর বৃত্তি পরীক্ষা**

গত তিন বছরে এই বিদ্যালয়ের কত জন শিক্ষার্থী প্রাথমিক বৃত্তি পরীক্ষায় অংশ নিয়েছে, কত জন পাশ করেছে এবং কত জন বৃত্তি পেয়েছে?

সাল	ছাত্র				ছাত্রী			
	শিক্ষার্থী সংখ্যা	বৃত্তি দিয়েছে	পাশ করেছে	বৃত্তি পেয়েছে	শিক্ষার্থী সংখ্যা	বৃত্তি দিয়েছে	পাশ করেছে	বৃত্তি পেয়েছে
1	2	3	4	5	6	7	8	9
২০০৫								
২০০৬								
২০০৭								

কোড: তথ্য জানা নাই = ৪৪৪

Cont ...

Cont ...

## জ. পঞ্চম শ্রেণীর সমাপনী পরীক্ষার ফলাফল

সাল	ছাত্র			ছাত্রী		
	শিক্ষার্থী সংখ্যা	পরীক্ষা দিয়েছে	পাশ করেছে	শিক্ষার্থী সংখ্যা	পরীক্ষা দিয়েছে	পাশ করেছে
1	2	3	4	5	6	7
২০০৫						
২০০৬						
২০০৭						

কোড: তথ্য জানা নাই = ৪৪৪

## ঝ. শ্রেণী এবং জেভারভেদে গত চার বছরের শিক্ষার্থী সংখ্যা (প্রতি বছরের ৩১ মার্চ-এর হিসাব)

সাল	প্রথম শ্রেণী		দ্বিতীয় শ্রেণী		তৃতীয় শ্রেণী		চতুর্থ শ্রেণী		পঞ্চম শ্রেণী	
	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী
1	2	3	4	5	6	7	8	9	10	11
২০০৫										
২০০৬										
২০০৭										
২০০৮										

কোড: তথ্য জানা নাই = ৪৪৪

## ঞ. শ্রেণী এবং জেভারভেদে গত চার বছরের শিক্ষার্থী সংখ্যা (প্রতি বছরের ৩১ মার্চ-এর হিসাব)

সাল	প্রথম শ্রেণী		দ্বিতীয় শ্রেণী		তৃতীয় শ্রেণী		চতুর্থ শ্রেণী		পঞ্চম শ্রেণী	
	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী	ছাত্র	ছাত্রী
1	2	3	4	5	6	7	8	9	10	11
২০০৫										
২০০৬										
২০০৭										
২০০৮										

কোড: তথ্য জানা নাই = ৪৪৪

## ট. শিশু শ্রেণী বা প্রাক-প্রাথমিক শিক্ষা, ২০০৮

এই শিক্ষাপ্রতিষ্ঠানে প্রাক-প্রাথমিক বা শিশু শ্রেণী আছে কি?	উত্তর হ্যাঁ হলে, শিক্ষার্থী সংখ্যা কত?			কে পরিচালনা করে?	
	ছাত্র	ছাত্রী	মোট	সংশ্লিষ্ট শিক্ষাপ্রতিষ্ঠান	1
হ্যাঁ	1			এনজিও	2
না	2			এনজিও-র নাম	

উত্তর 'না' হলে পরবর্তী প্রশ্নে চলে যান।

Cont ...





Cont ...

## গ. শিক্ষকমতলী

ক্রমিক নং	নাম	শিক্ষকতায় যোগদানের মাস ও সাল		কী কী ধরনের পেশাগত প্রশিক্ষণ পেয়েছেন	বিষয়ভিত্তিক কী কী প্রশিক্ষণ পেয়েছেন					কোন বিষয়ের জন্য দায়িত্ব প্রাপ্ত	কোন শ্রেণীতে কোন বিষয়ে পাঠদান করেন				কাল কয়টি ক্লাশ নিয়ে ছেন		
		মাস	সাল		বাংলা	ইংরেজি	গণিত	পরিবেশ (সমাজ)	পরিবেশ (বিজ্ঞান)		বাবস্থা পনা	প্রথম	দ্বিতীয়	তৃতীয়		চতুর্থ	পঞ্চম
1	2	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
22. পেশাগত প্রশিক্ষণের ধরন		23-28. বিষয়ভিত্তিক প্রশিক্ষণ			29-34. কোন বিষয়ের জন্য দায়িত্বপ্রাপ্ত ও কোন শ্রেণীতে কোন বিষয় পড়ান (একাধিক কোড হতে পারে)					35. কয়টি ক্লাশ নিরেছেন							
PTI/C-in-Ed = 1 B.Ed = 2 M.Ed = 3 Dip-in-Ed = 4 Bp.Ed = 5 অন্যান্য = 6 প্রশিক্ষণ নাই = 7		পেয়েছেন = 1 পান নি = 2			বাংলা = 1 ইংরেজি = 2 গণিত = 3 পরিবেশ পরিচিতি (সমাজ) = 4 পরিবেশ পরিচিতি (বিজ্ঞান) = 5 ধর্ম = 6 চার = ও কার-কলা = 7					ছুটিতে/প্রশিক্ষণে/প্রবোজ্য নয় = 99 জানা নেই = 88							

Cont ...

## ত. শিক্ষাপ্রতিষ্ঠান ব্যবস্থাপনা কমিটি

ক্রমিক	প্রশ্ন	কোড	
1	এই শিক্ষাপ্রতিষ্ঠানে ব্যবস্থাপনা কমিটি আছে কি? উত্তর কোড 2 হলে তথ্যসংগ্রহ এখানেই শেষ করুন	হ্যাঁ	1
		না	2
2	যদি থাকে, তবে কমিটির সদস্য সংখ্যা কত জন?		
3	এবছর (২০০৮ সালে) কমিটির মোট কতটি সভা অনুষ্ঠিত হয়েছে?		
4	সভার কার্য বিবরণী লিখিত হয়েছে কি?	হ্যাঁ	1
		না	2
5	গত তিনটি সভায় কী কী বিষয় আলোচিত হয়েছে? ----- ----- -----		

## খ. ব্যবস্থাপনা কমিটির সদস্যগণ

ক্রমিক নং	নাম	লিঙ্গ	ধর্ম	পদবী	সদস্য পদের ধরন	সর্বোচ্চ শ্রেণী পাশ	প্রধান পেশা	গত সভায় উপস্থিত ছিলেন কি?
1	2	3	4	5	6	7	8	9
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
<b>3. লিঙ্গ</b> পুরুষ = 1 নারী = 2	<b>4. ধর্ম</b> ইসলাম = 1 হিন্দু = 2 বৌদ্ধ = 3 খ্রিস্টান = 4 অন্যান্য = 5	<b>5. পদবী</b> সভাপতি = 1 সহ-সভাপতি = 2 সদস্য-সচিব = 3 সদস্য = 4	<b>6. সদস্যপদের ধরন</b> শিক্ষক প্রতিনিধি = 1 অভিভাবক প্রতিনিধি = 2 স্থাপনা সদস্য = 3 দাতা সদস্য = 4	<b>বিদ্যোৎসাহী সদস্য = 5</b> <b>মনোনীত সদস্য = 6</b> <b>নির্বাচিত সদস্য = 7</b> <b>পদাধিকারবলে = 8</b>	<b>8. প্রধান পেশা</b> কৃষি = 1 চাকরি = 2 ব্যবসা = 3 শিক্ষকতা = 4 সমাজসেবা = 5 অন্যান্য = 6	<b>9. সভায় উপস্থিতি</b> হ্যাঁ = 1 না = 2		

তথ্যসংগ্রহকারীর নাম :

স্বাক্ষর ও তারিখ:



Cont ...

বর্তমানে স্কুলগামী শিক্ষার্থীদের তথ্য (প্রথম পৃষ্ঠার ৪ নম্বর কলামে যাদের কোড 1 অর্থাৎ বর্তমানে স্কুলে যাচ্ছে, এই অংশ শুধু তাদের জন্য প্রযোজ্য)

ক্রমিক	প্রশ্ন	শিক্ষার্থীর নাম	
		শিক্ষার্থীর নাম	সাইন নম্বর
1	শিক্ষার্থী কি এ বছরের জন্য প্রয়োজনীয় সব পাঠ্যপুস্তক পেরেছে? কোড: হ্যাঁ = 1, আংশিক = 2, না = 3, জানা নাই = 8		
2	শিক্ষার্থী কোন প্রকার বৃত্তি পেয়ে থাকলে তা কোন ধরনের? কোড: উপবৃত্তি = 1, ছাত্রী উপবৃত্তি = 2, মেধাবৃত্তি = 3, পায় না = 4, জানা নাই = 8		
3	এ বছর লেখাপড়ায় সাহায্য করার জন্য গৃহশিক্ষক (অর্থের বিনিময়ে) থাকলে তিনি কে? কোড: শিক্ষার্থীর স্কুলের শিক্ষক = 1, অন্য স্কুলের শিক্ষক = 2, কোচিং সেন্টার = 3, প্রাইভেট শিক্ষক = 4, লজিং মাস্টার = 5, আত্মীয়-স্বজন = 6, প্রতিবেশী = 7, জানা নাই = 8, গৃহশিক্ষক নেই = 9 (একজন শিক্ষার্থীর জন্য একাধিক কোড হতে পারে)		
4	এ বছর গৃহশিক্ষককে মোট কত টাকা দিতে হয়েছিল? প্রযোজ্য নয় = 9999		
5	এ বছর (২০০৮ সালে) শিক্ষার্থীর পিতা/মাতা বা অন্য কেউ তার স্কুলের কোন সভায় যোগ দিয়েছেন কি? কোড: হ্যাঁ = 1, না = 2, জানা নাই = 8, প্রযোজ্য নয় = 9	পিতা মাতা অন্য কেউ	

খানার আর্থ-সামাজিক তথ্য (জরিপকৃত সকল খানার জন্য প্রযোজ্য)

ক্রমিক	প্রশ্ন	কোড				তথ্যসংগ্রহকারীর নাম:
		সবসময় যাচিতি	মাঝে মাঝে যাচিতি	সমান সমান	উদ্ভূত	
1	গত এক বছরে, এই খানার আর্থিক অবস্থা কী রকম ছিল? (খানা প্রধানকে জিজ্ঞেস করুন যে, গত এক বছরে বিভিন্ন খাত থেকে এই খানায় যত টাকা আয় হয়েছে এবং বিভিন্ন খাতে যত টাকা ব্যয় হয়েছে তার তারতম্যের ভিত্তিতে গত বছর খানার আর্থিক অবস্থা কী রকম ছিল?)	1	2	3	4	
2	এই খানার সদস্যরা কোন ধর্মাবলম্বী?	মুসলিম	হিন্দু	বৌদ্ধ	খ্রিস্টান	অন্যান্য
3	এই খানার সদস্যদের জাতিগত পরিচয় কী?	আদিবাসী	1	2		
4	খানা থেকে নিকটতম বিদ্যালয়সমূহের দূরত্ব কত কিলোমিটার? কোড: জানা নেই = 88	সরকারি প্রাথমিক বিদ্যালয়	বেসরকারি প্রাথমিক বিদ্যালয়	এবংতদায়ি মাদ্রাসা	উপানুষ্ঠানিক প্রাথমিক বিদ্যালয়	নিম্নমাধ্যমিক বিদ্যালয়
		সরকারি প্রাথমিক বিদ্যালয়	বেসরকারি প্রাথমিক বিদ্যালয়	এবংতদায়ি মাদ্রাসা	উপানুষ্ঠানিক প্রাথমিক বিদ্যালয়	নিম্নমাধ্যমিক বিদ্যালয়
		সরকারি/বেসরকারি মাধ্যমিক/স্কুল ও কলেজ	দাখিল/আলিম/কা/জিল/কামিল মাদ্রাসা			

## Annex 2.5

*Definitions of various indicators used in this report*

Gross enrolment ratio (GER): It refers to the number of children currently enrolled at the primary level (classes I to V) for every 100 children of age 6-10 years.

Net enrolment rate (NER): It is defined as the number of children aged 6-10 years currently enrolled in any class in any school for every 100 children of the same age.

Real net enrolment rate: It is the number of children aged 6-10 years currently enrolled at primary level (classes I to V) for every 100 children of the same age.

Gross intake ratio (GIR): It is the number of new entrants in the first grade of primary education, regardless of age, expressed as a percentage of the population at the official primary school-entrance age (i.e., six).

Net intake rate (NIR): It is the number of new entrants in the first grade of primary education who are of the official primary school-entrance age (i.e., six), expressed as a percentage of the population of the same age.

Attendance rate: Number of students attended in class in the school survey day among the students who admitted in the particular class, expressed in percentage form.

Promotion rate: Number of students of a certain class promoted to the next class among the students who admitted in a certain class, expressed in percentage form.

Repetition rate: Number of students of a certain class repeated the same class in the following year among the students of that particular class, expressed in percentage form.

Dropout rate: Number of students of a certain class dropped out from education among those admitted in that particular class, expressed in percentage form.

Completion rate: This was calculated through reconstructing a cohort of 1000 students and assuming the following:

- i) promotion and repetition rates are constant throughout the period
- ii) all students are considered to have same likelihood of promotion and repetition, whether they have never repeated or have repeated once or more
- iii) the possible number of times a class is repeated is limited to 2 or 3
- iv) there is no other entrants apart from the original 1000

Thus, completion rate is the percentage of students completing the whole cycle of primary education among the students enrolled in class I five years ago.

Co-efficient of efficiency: This is a ratio of expected students year needed to complete the primary cycle by the graduates and total student years spent to produce the graduates expressed in percentage form.

Literate person: A person reported to have skills in reading and writing a communication letter.

Literacy rate: Percentage of population of aged 7 years and above can read and write a communication letter among those belong to the same age.

Adult literacy rate: Percentage of population of aged 15 years and above can read and write a communication letter among those belong to the same age.

Literate household: A household having at least one literate person.

### Annex 2.6 *Determination of sample size*

Two variables were considered as principal to determine sample size for this study. These are: school enrolment for household survey and competency achievement for learning achievement test. Both were dichotomously categorised. School enrolment was categorised as currently enrolled or not and competency achievement was categorised as achieved or not. Following formula was used in determining sample size (Cochran 1977, Calton 1983).

$$n = \frac{z^2 \times p \times q}{a^2} \times d$$

- Where, n is the estimated sample size
- p is the probability of a child aged 6-10 years currently enrolled in school or a student of class V achieved a certain competency
- q (1 - p) is the probability of a child did not enrol in school or a student of class V did not achieve a certain competency
- z is the area of the standard normal curve under certain confidence limit, and
- a is the desired level of precision
- d Cluster effect

Taking a value of 0.5 for both p and q (because such a value maximises the sample size) and considering the confidence limit as 95% (of which the value of z is 1.96) with 5% error level for enrolment and 7% for competency test it was calculated that the required sample size for an estimate stands at 384 for household survey and 196 for test. These estimates are true if simple random sampling procedure is applied. However, a cluster sampling approach was followed in this Watch. Thus, to reduce cluster effect it was decided to double the size for enrolment issue and 1.5 times for the test. This means that 576 children of age 6-10 years were required for a reliable estimate of enrolment status and 294 for competency achievement.

The study intended 16 separate estimates for enrolment (8 strata x 2 gender) and 24 separate estimates for competency achievement test (6 types of schools x 2 areas x 2 gender). Thus, total sample required for estimation of enrolment was  $764 \times 16 = 12,288$  and for competency achievement test  $294 \times 24 = 7,104$ .

**Annex 2.7**  
*Calculation of weighting factors*

The problem arose with considering an equal size of sample for each stratum; however, population size was not equal. Thus, a weighting factor needs to be used in order to have pooled estimates for rural Bangladesh, urban Bangladesh and for the national level. Following formula was used for the purpose.

$$P = \sum s_i \times w_i$$

Where, P is the pooled estimate  
 $s_i$ 's are the estimates for different strata  
 $w_i$ 's are the weights

Latest available census information (Census 2001 by Bangladesh Bureau of statistics) was used to find the weights for each of the stratum (BBS, 2001) under household survey. On the other hand, multiple sources (DPE, BANBEIS, CAMPE, BRAC and previous *Education Watch* database) had to be used for those estimates based on learning achievement test and survey of educational institutions. Following tables provide basic information for weight calculation and calculated weights for various indicators.

*Number of primary schools by type and area*

School type	Rural	Urban	All
Government school <sup>1</sup>	34,833	2,839	37,672
Non-government school <sup>1</sup>	19,889	904	20,798
Ebtedayee madrasa <sup>2</sup>	5,830	866	6,696
Non-formal school <sup>3</sup>	32,358	2,956	35,314
High school <sup>1</sup>	561	1,008	1,569
High madrasa <sup>1</sup>	7,889	440	8,329
Total	1,01,360	9,013	1,10,378

Sources: 1DPE, 2BANBEIS, 3BRAC and CAMPE

*Number of students by school type and area*

School type	Rural	Urban	All
Government school <sup>1</sup>	78,37,425	10,22,040	88,59,465
Non-government school <sup>1</sup>	38,38,577	1,78,088	40,16,665
Ebtedayee madrasa <sup>2</sup>	10,20,250	1,16,044	11,36,294
Non-formal school <sup>3</sup>	10,35,456	82,768	11,18,224
High school <sup>1</sup>	94,809	2,59,056	3,53,865
High madrasa <sup>1</sup>	13,96,353	74,360	14,70,713
Total	1,52,22,870	17,32,356	1,69,55,226

Sources: 1DPE, 2BANBEIS, 3BRAC and CAMPE; Education Watch School Survey 2008

Cont ...

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<i>Number of teachers by school type and area</i>						
School type	Rural		Urban		All	
Government school <sup>1</sup>	1,73,249		20,647		1,93,896	
Non-government school <sup>1</sup>	77,189		3,759		80,948	
Ebtedayee madrasa <sup>2</sup>	26,738		4,384		31,122	
Non-formal school <sup>3</sup>	32,358		2,956		35,314	
High school <sup>1</sup>	4,198		10,944		15,142	
High madrasa <sup>1</sup>	57,016		3,459		60,475	
Total	3,70,748		46,149		4,16,897	

Sources: 1DPE, 2BANBEIS, 3BRAC and CAMPE; Education Watch School Survey 2008

<i>Number of rooms by school type and area</i>						
School type	Rural		Urban		All	
Government school <sup>1</sup>	2,15,965		22,145		2,38,110	
Non-government school <sup>1</sup>	87,512		4,430		91,942	
Ebtedayee madrasa <sup>2</sup>	2,624		4,244		6,868	
Non-formal school <sup>3</sup>	32,358		2,956		35,314	
High school <sup>1</sup>	3,703		8,468		12,171	
High madrasa <sup>1</sup>	58,379		3,036		61,415	
Total	4,00,541		45,279		4,45,820	

Sources: 1DPE, 2BANBEIS, 3BRAC and CAMPE; Education Watch School Survey 2008

<i>Weights for cohort analysis based on number of students</i>						
School type	For single national estimate		For rural and urban estimates		For school type wise estimates	
	Rural	Urban	Rural	Urban	Rural	Urban
Government school	4.949	0.645	2.762	3.098	1.769	0.231
Non-government school	2.424	0.112	1.353	0.540	1.911	0.089
Entedayee madrasa	0.644	0.073	0.360	0.352	1.796	0.204
High school	0.060	0.164	0.033	0.785	0.536	1.464
High madrasa	0.882	0.047	0.492	0.225	1.899	0.101

<i>Weights based on number of schools</i>						
School type	For single national estimate		For rural and urban estimates		For school type wise estimates	
	Rural	Urban	Rural	Urban	Rural	Urban
Government school	3.786	0.309	2.062	1.890	1.849	0.151
Non-government school	2.162	0.098	1.177	0.602	1.913	0.087
Entedayee madrasa	0.634	0.094	0.345	0.577	1.741	0.259
Non-formal school	3.516	0.321	1.915	1.968	1.833	0.167
High school	0.061	0.110	0.033	0.671	0.715	1.285
High madrasa	0.858	0.048	0.467	0.293	1.894	0.106

Cont ...

Cont ...

<i>Weights based on number of teachers in schools</i>						
School type	For single national estimate		For rural and urban estimates		For school type wise estimates	
	Rural	Urban	Rural	Urban	Rural	Urban
Government school	4.987	0.594	2.804	2.684	1.787	0.213
Non-government school	2.222	0.108	1.249	0.489	1.907	0.093
Entedayee madrasa	0.770	0.126	0.433	0.570	1.718	0.282
Non-formal school	0.931	0.085	0.524	0.384	1.833	0.167
High school	0.121	0.315	0.068	1.423	0.554	1.446
High madrasa	1.641	0.100	0.923	0.450	1.886	0.114

<i>Weights based on number of rooms in schools</i>						
School type	For single national estimate		For rural and urban estimates		For school type wise estimates	
	Rural	Urban	Rural	Urban	Rural	Urban
Government school	5.813	0.596	3.235	2.935	1.814	0.186
Non-government school	2.355	0.119	1.311	0.587	1.904	0.096
Entedayee madrasa	0.071	0.114	0.039	0.562	0.764	1.236
Non-formal school	0.871	0.080	0.485	0.392	1.833	0.167
High school	0.100	0.228	0.055	1.122	0.608	1.392
High madrasa	1.571	0.082	0.875	0.402	1.901	0.099

<i>Weights based on children 6-10 years</i>						
Stratum	Proportion of population			Weights		
	National	Rural	Urban	National	Rural	Urban
Rural Dhaka division	0.243	0.288	-	1.944	1.728	-
Rural Chittagong division	0.164	0.194	-	1.312	1.164	-
Rural Rajshahi division	0.218	0.257	-	1.744	1.542	-
Rural Khulna division	0.101	0.120	-	0.808	0.720	-
Rural Barisal division	0.060	0.071	-	0.480	0.426	-
Rural Sylhet division	0.059	0.070	-	0.472	0.420	-
Metropolitan cities	0.070	-	0.451	0.560	-	0.902
Municipalities	0.085	-	0.549	0.680	-	1.098
Total	1.000	1.000	1.000	8.000	6.000	2.000

**Annex 3.1**  
*Percentage of schools by year of establishment and school type*

Year of establishment	School type						All
	Government	Non-government	Ebtedayee	Non-formal	High school	High madrasa	
Up to 1947	58.7	0.0	1.9	0.0	31.3	4.7	28.6
1948-1971	34.7	7.2	15.4	0.0	19.4	31.4	24.2
1972-1990	6.7	75.9	60.6	0.0	37.3	41.9	37.1
1991-2008	0.0	16.9	22.1	100.0	11.9	22.1	10.1
Mean age (y)	63.5	25.1	25.3	4.0	49.8	33.6	44.4

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.2**  
*Percentage of schools by distance from upazila and school type*

Distance from upazila	School type						All
	Government	Non-govt.	Ebtedayee	Nonformal	High school	High madrasa	
<5 km	26.3	10.7	18.3	33.8	72.7	23.0	24.5
5.1-10 km	36.8	36.9	40.4	41.5	18.2	35.6	38.0
10.1-15 km	17.1	27.4	25.0	13.8	7.6	26.4	19.8
15.1 km+	19.7	25.0	16.3	10.8	1.5	14.9	17.7
Mean (km)	10.9	12.4	10.7	8.7	4.3	10.7	11.0

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.3**  
*Percentage of schools by level of difficulty to reach school and school type*

Level of difficulty to reach school	School type						All
	Government	Non-government	Ebtedayee madrasa	Non-formal	High school	High madrasa	
Easy going	62.7	56.0	53.3	59.7	85.1	60.2	59.8
Moderately hard to reach	29.3	23.8	26.7	23.9	7.5	15.9	25.1
Hard to reach	8.0	20.2	20.0	16.4	7.5	23.9	15.1

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.4**  
*Percentage of schools having annual sports and cub activities by school type and year*

School type	Annual sports					Cub activities
	2004	2005	2006	2007	2008	
Government primary	78.9	76.3	78.7	71.1	58.7	64.5
Non-govt. primary	71.1	67.5	66.7	66.7	50.6	52.4
Ebtedayee madrasa	53.3	60.0	58.1	58.1	34.3	1.9
Non-formal primary	0.0	6.0	3.0	3.0	3.0	0.0
High school	97.0	95.5	95.5	97.0	88.1	47.1
High madrasa	70.1	70.1	77.0	77.0	54.5	22.7
All	73.1	71.5	73.1	69.6	53.4	48.6

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.5**  
*Percentage of schools having art classes by school type*

School type	Classes	
	I-II	III-V
Government primary	89.5	94.7
Non-govt. primary	81.0	85.7
Ebtedayee madrasa	13.4	13.4
High school	67.3	70.8
High madrasa	6.9	6.9
All	47.3	49.8

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.6**  
*Mean number of teachers per school by school type and area*

School type	Area		All
	Rural	Urban	
Government school	5.0 (38)	7.3 (33)	5.2 (71)
Non-govt. school	3.9 (42)	4.2 (38)	3.9 (80)
Ebtedayee madrasa	4.6 (58)	5.1 (16)	4.7 (74)
Non-formal school	1.0 (33)	1.0 (36)	1.0 (69)
High school	7.5 (31)	10.9 (35)	9.1 (66)
High madrasa	7.2 (44)	7.9 (36)	7.3 (80)
All	4.8 (246)	7.4 (194)	5.1 (440)

Figures in the parenthesis indicate number of schools under survey

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.7**  
*Percentage of teachers from ethnic minorities, non-Muslims and their attendance rate by school type and area*

School type	Ethnic minority		Non-Muslim		Attended	
	Rural	Urban	Rural	Urban	Rural	Urban
Government school	3.7	0.0	21.7	14.2	85.2	90.4
Non-government school	0.0	0.0	18.4	17.7	89.6	91.1
Ebtedayeemadrasa	0.0	0.0	1.5	0.0	80.8	81.5
Non-formal school	5.7	2.8	20.0	11.1	97.1	97.2
High school	3.9	0.0	27.6	15.6	91.4	94.5
High madrasa	0.3	0.0	1.3	0.0	93.1	96.5
All	1.9	0.0	14.2	13.1	87.8	92.3

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.8**  
*Percentage of teachers at various activities on the day of visit*

	No. of teachers	Attended in school	Not-attended	On leave	Official work outside school	On training
<b>School type</b>						
Government school	429	85.9	2.1	6.9	0.0	5.1
Non-government school	321	89.6	2.5	4.6	0.6	2.5
Ebtedayee madrasa	347	80.8	10.6	7.9	0.6	0.0
Non-formal school	71	97.1	0.0	2.9	0.0	0.0
High school	612	93.0	2.0	2.7	1.0	1.3
High madrasa	601	93.2	1.9	4.0	0.9	0.0
<b>Area</b>						
Rural	1,203	87.8	2.9	6.0	0.4	2.8
Urban	1,178	92.3	2.6	2.9	0.5	1.7
<b>Gender</b>						
Female	881	84.8	2.0	7.9	0.2	5.1
Male	1,500	90.7	3.4	4.2	0.5	1.2
All	2,381	88.4	2.9	5.6	0.4	2.7

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.9**  
*Percentage distribution of teachers by school type they are currently teaching and the type they received their highest level of education*

	Number of teachers	Highest level of education		
		General	Madrasa	Total
<b>School type</b>				
Government school	429	97.9	2.1	100.0
Non-government school	321	94.8	5.2	100.0
Ebtedayee madrasa	347	37.7	62.3	100.0
Non-formal school	71	100.0	0.0	100.0
High school	612	93.6	6.4	100.0
High madrasa	601	36.4	63.6	100.0
<b>Area</b>				
Rural	1,203	76.0	24.0	100.0
Urban	1,178	90.2	9.8	100.0
<b>Gender</b>				
Female	881	95.6	4.4	100.0
Male	1,500	66.4	33.6	100.0
All	2,381	77.9	22.1	100.0

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.10**  
*Percentage of teachers by level of education and group of study*

Level of education	Group of study				
	Humanities	Science	Commerce	Hifzul Qur'an/ Muzabbid	Not appeared
Secondary	67.6	28.0	2.9	1.5	-
Higher secondary	56.7	16.6	6.0	0.7	20.0
Bachelors	41.1	6.7	2.1	0.2	49.9
Masters	15.7	2.5	0.5	0.2	81.1

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.11**  
*Percentage of teachers by school type and group of study at various levels of education*

	Secondary		Higher secondary		Bachelors		Masters	
	Hum.	Sc.	Hum.	Sc.	Hum.	Sc.	Hum.	Sc.
<b>School type</b>								
Government	54.8	40.6	47.2	25.6	39.1	11.3	13.6	4.4
Non-government	68.7	25.2	39.0	8.0	15.7	0.0	1.8	0.0
Ebtedayee madrasa	78.8	12.7	72.2	6.7	41.3	1.0	16.8	0.4
Non-formal school	81.7	9.9	40.8	2.8	11.4	0.0	0.0	0.0
High school	65.4	28.9	59.4	20.1	51.3	11.0	17.8	5.0
High madrasa	83.0	10.8	78.3	7.6	59.7	3.2	28.2	0.3
<b>Area</b>								
Rural	67.0	27.2	55.7	16.1	39.9	6.2	15.1	2.3
Urban	62.4	32.8	57.8	19.9	47.7	9.7	18.8	3.8
<b>Gender</b>								
Females	58.0	36.9	52.7	19.6	36.3	7.1	10.3	2.4
Males	71.8	22.2	58.1	14.6	43.8	6.5	19.1	2.5

Source: Education Watch Educational Institution Survey, 2008

**Annex 3.12**  
*Percentage of teachers having subject based training*

School type, area and gender	Subjects					
	Bangla	English	Mathe- matics	Social studies	General science	Manage- ment
<b>School type</b>						
Government school	28.1	31.4	35.5	18.8	21.0	12.3
Non-government school	34.7	41.2	42.3	25.8	24.3	12.9
Ebtedayee madrasa	0.4	1.0	0.6	0.0	0.0	1.7
Non-formal school	27.1	35.7	30.0	24.3	32.9	11.4
High school	9.0	6.4	5.0	6.0	5.4	7.7
High madrasa	0.9	2.2	1.3	0.0	0.9	5.7
<b>Area</b>						
Rural	19.0	22.6	23.8	13.6	14.1	9.8
Urban	20.3	19.0	23.2	10.3	15.3	8.5
<b>Gender</b>						
Female	24.4	27.1	30.3	14.6	19.7	5.5
Male	15.8	18.9	19.4	12.2	10.8	12.3
All	19.2	22.1	23.4	13.1	14.3	9.6

Source: Education Watch Educational Institution Survey, 2008

## Annex 3.13

*Percentage of teachers received no subject based training by school type and area*

School type	Area		All
	Rural	Urban	
Government school	30.4	20.4	29.4
Non-government school	12.9	22.2	13.2
Ebtedayee madrasa	98.9	98.8	98.8
Non-formal school	51.4	75.0	53.5
High school	72.4	77.4	75.2
High madrasa	95.0	95.8	95.1
All	51.2	51.4	51.2

Source: Education Watch Educational Institution Survey, 2008

## Annex 3.14

*Percentage distribution of teachers by time of present in school and school type*

Time of teachers present in school	School type					
	Government	Non-govt.	Ebtedayee	Non-formal	High school	High madrasa
Before the school started	34.6	35.2	39.9	54.0	60.2	46.9
On exact time	18.4	14.9	15.0	33.3	16.0	17.2
Within 10 minutes of the school started	17.5	19.6	10.1	1.6	7.8	14.7
After 10 minutes of the school started	29.4	30.2	35.0	11.1	16.0	21.1
Average late tome (Minutes)	30.4	35.3	36.9	27.7	28.9	21.3

Source: Education Watch Educational Institution Survey, 2008

## Annex 3.15

*Percentage distribution of head and other teachers by time of present in school*

Time of teachers present in school	Teacher type	
	Head teachers	Other teachers
Before the school started	33.0	41.3
On exact time	20.5	16.4
Within 10 minutes of the school started	14.6	16.2
After 10 minutes of the school started	31.9	26.0
Average late tome (Minutes)	39.8	27.3

Source: Education Watch Educational Institution Survey, 2008

## Annex 3.16

*Mean number of students per teacher by school type and area*

School type	Area		All
	Rural	Urban	
Government school	45 (189)	49 (240)	46 (429)
Non-govt. school	50 (163)	47 (158)	50 (321)
Ebtedayee madrasa	38 (266)	26 (81)	39 (347)
Non-formal school	32 (35)	28 (36)	30 (71)
High school	23 (232)	24 (380)	23 (612)
High madrasa	25 (318)	21 (283)	24 (601)
All	40 (1,203)	36 (1,178)	39 (2,381)

Figures in the parenthesis indicate number of teachers under the survey

Source: Education Watch Educational Institution Survey, 2008

## Annex 4.1

*Mean years of schooling of the SMC members by school type and position*

School type	Position of SMC members			
	President	Vice-president	Secretary	Executive Member
Government school	9.9	9.6	14.2	9.6
Non-government school	9.0	8.8	11.7	8.5
Ebtedayee madrasa	12.5	10.3	14.4	9.0
Non-formal school	5.9	4.3	11.1	3.9
High school	14.6	13.1	14.8	12.5
High madrasa	15.5	12.2	15.9	11.0
All	9.2	9.2	13.0	8.4

Source: Education Watch Educational Institution Survey, 2008

## Annex 4.2

*Mean years of schooling of the SMC members by school type and area*

School type	Area		All
	Rural	Urban	
Government school	10.0	11.1	10.1
Non-government school	8.8	10.7	8.8
Ebtedayee madrasa	9.9	10.3	9.9
Non-formal school	5.1	6.0	5.2
High school	12.1	13.5	13.0
High madrasa	11.7	13.0	11.8
All	8.9	9.9	9.0

Source: Education Watch Educational Institution Survey, 2008

## Annex 4.3

*Percentage distribution of SMC members by school type and main occupation*

Occupation	School type						All
	Government	Non-government	Ebtedayee madrasa	Non-formal	High school	High madrasa	
Agriculture	26.3	32.4	29.6	15.9	7.1	17.5	24.8
Service	14.3	12.5	18.2	1.7	33.0	28.6	13.1
Business	22.5	18.6	22.6	7.6	26.1	26.1	18.9
Teaching	21.6	23.4	19.2	12.3	24.4	21.4	19.9
Social work	4.7	4.1	5.6	0.8	4.9	4.5	3.8
Housekeeping	7.3	5.6	1.4	59.5	0.8	0.2	16.5
Others	3.3	3.4	3.4	2.1	3.7	1.8	3.0

Source: Education Watch Educational Institution Survey, 2008

## Annex 4.4

*Percentage distribution of SMC members by their main occupation, area and gender*

Occupation	Gender		Area		All
	Females	Males	Rural	Urban	
Agriculture	3.7	32.5	25.7	10.5	24.8
Service	8.0	15.1	12.9	15.4	13.1
Business	0.3	25.7	18.5	23.0	18.9
Teaching	21.9	19.2	19.7	22.7	19.9
Social work	3.1	4.2	3.8	3.6	3.8
Housekeeping	2.6	3.1	2.8	5.1	16.5
Others	60.5	0.3	16.5	19.7	3.0

Source: Education Watch Educational Institution Survey, 2008

## Annex 5.1

*Gross enrolment ratio at primary level by strata and year*

Strata	Year			
	1998	2000	2005	2008
Rural Dhaka division	106	110	105	100
Rural Chittagong division	104	111	101	101
Rural Rajshahi division	109	110	115	112
Rural Khulna division	117	130	115	111
Rural Barisal division	107	96	101	107
Rural Sylhet division	105	99	100	99
Metropolitan cities	101	105	92	99
Municipalities	108	106	109	101
Rural Bangladesh	108	108	105	104
Urban Bangladesh	105	106	100	100
All Bangladesh	107	108	104	103

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

## Annex 5.2

*Percentage distribution of primary students by class and stratum*

Classes	Strata							
	Rural Dhaka	Rural Chittagong	Rural Rajshahi	Rural Khulna	Rural Barisal	Rural Sylhet	Metropolit an cities	Municipalities
Class I	29.1	26.4	29.7	29.4	31.7	27.6	26.6	24.4
Class II	22.8	21.7	20.8	19.4	22.3	22.3	20.3	22.4
Class III	17.7	21.4	19.5	19.6	17.0	20.6	20.8	20.6
Class IV	16.0	17.2	16.0	16.6	16.1	15.3	16.5	17.1
Class V	14.4	13.3	14.0	15.1	12.9	14.2	15.8	15.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	1,848	2,259	1,952	1,851	2,104	2,123	1,495	1,557

Source: Education Watch Household Survey, 2008

## Annex 5.3

## Percentage distribution of primary students by class and year

	Year			
	1998	2000	2005	2008
Class I	33.4	31.7	28.0	28.3
Class II	19.6	20.3	21.8	21.6
Class III	19.4	18.7	19.5	19.5
Class IV	13.8	14.3	14.8	16.3
Class V	13.7	15.1	19.5	14.2
Total	100.0	100.0	100.0	100.0
n	15,189			

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

## Annex 5.4

## Percentage distribution of primary level students by type of institution and strata, 2008

Type of institution	Rural Rhaka	Rural Ctg.	Rural Rajshahi	Rural Khulna	Rural Barisal	Rural Sylhet	Metro. cities	Punici-palities
Government primary	63.1	65.6	38.0	55.1	63.7	66.9	49.6	64.9
Non-govt. primary (reg.)	15.0	12.3	32.7	25.2	19.7	11.1	8.6	9.8
Non-govt. primary (un-reg.)	0.2	1.6	1.1	0.2	0.2	1.2	0.3	2.0
Community primary	0.9	1.5	0.9	0.5	0.9	1.0	0.7	0.0
Non-formal primary	10.6	5.0	16.5	11.3	3.9	8.2	5.6	4.9
Ebtedayee madrasa	1.9	3.9	2.0	1.2	1.2	2.3	0.9	1.9
High madrasa	4.5	4.7	5.8	2.4	7.7	6.9	0.9	2.0
Kindergartens	3.7	4.7	2.8	1.7	1.0	2.4	21.8	10.7
High schools	0.2	0.6	0.4	0.3	1.6	0.1	11.6	3.7
All students	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	1,847	2,259	1,951	1,851	2,104	2,123	1,495	1,556

Source: Education Watch Household Survey, 2008

## Annex 5.5

## Net enrolment rate at primary level by stratum and year

Strata	Year				Level of significance	Improvement	
	1998	2000	2005	2008		1998 to 2005	1005 to 2008
Rural Dhaka division	75.2	77.9	86.4	85.6	p<0.001	11.2	-0.8
Rural Chittagong division	73.8	77.8	83.5	82.0	p<0.001	9.7	-1.5
Rural Rajshahi division	76.9	80.3	88.5	90.0	p<0.001	11.6	1.5
Rural Khulna division	82.5	90.9	91.7	92.5	p<0.001	9.2	0.8
Rural Barisal division	80.0	79.7	87.6	86.6	p<0.001	7.6	-1.0
Rural Sylhet division	78.2	75.7	84.5	80.5	p<0.001	6.3	-4.0
Metropolitan cities	77.0	81.2	83.8	86.1	p<0.001	6.8	2.3
Municipalities	80.7	81.7	91.5	88.8	p<0.001	10.8	-2.7
All	77.0	79.8	86.8	86.4	p<0.001	9.8	-0.4

Sources: Education Watch Household Surveys, 1998, 2000, 2005, 2008

**Annex 5.6**  
*Age specific net enrolment rate by sex*

Age	Gender			Level of significance
	Girls	Boys	Both	
6 yrs.	66.5 (1,332)	63.4 (1,358)	65.0 (2,690)	ns
7 yrs.	85.8 (1,556)	85.2 (1,538)	85.5 (3,094)	ns
8 yrs.	93.1 (1,550)	93.3 (1,561)	93.3 (3,111)	ns
9 yrs.	96.1 (1,142)	92.9 (1,175)	94.5 (2,317)	p<0.001
10 yrs.	93.4 (1,671)	90.9 (1,805)	92.1 (3,476)	p<0.01

ns = not significant at p = 0.05

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

**Annex 5.7**  
*Age specific net enrolment rate by area*

Age	Area			Level of significance
	Rural	Urban	Both	
6 yrs.	64.3 (2,109)	69.3 (581)	65.0 (2,690)	p<0.05
7 yrs.	84.9 (2,453)	89.5 (641)	85.5 (3,094)	p<0.01
8 yrs.	93.1 (2,493)	94.3 (618)	93.3 (3,111)	ns
9 yrs.	94.6 (1,804)	93.5 (513)	94.5 (2,317)	ns
10 yrs.	92.3 (2,766)	90.6 (710)	92.1 (3,476)	ns

ns = not significant at p = 0.05

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

**Annex 5.8**  
*Net enrolment rate by household food security status and gender*

Household food security status	Gender			Level of significance
	Girls	Boys	Both	
Always in deficit	79.5 (940)	76.7 (915)	78.1 (1855)	ns
Sometimes in deficit	85.6 (2116)	82.9 (2135)	84.3 (4251)	p<0.05
Breakeven	88.2 (2381)	87.6 (2423)	87.9 (4804)	ns
Surplus	91.5 (1814)	90.5 (1964)	91.0 (3778)	ns
Level of significance	p<0.001	p<0.001	p<0.001	

ns = not significant at p = 0.05

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

**Annex 5.9**  
*Net enrolment rate by parental education and gender*

Parental education	Gender			Level of significance
	Girls	Boys	Both	
<b>Mothers education</b>				
Nil	81.6 (3073)	79.9 (3132)	80.8 (6205)	ns
Primary	90.2 (2222)	88.3 (2257)	89.2 (4479)	p<0.05
Secondary+	93.8 (1933)	92.6 (2034)	93.2 (3967)	ns
Level of significance	p<0.001	p<0.001	p<0.001	
<b>Fathers education</b>				
Nil	82.4 (3235)	80.4 (3256)	81.4 (6481)	p<0.05
Primary	89.3 (1737)	87.0 (1819)	88.1 (3556)	p<0.05
Secondary	92.9 (1692)	92.0 (1759)	92.5 (3451)	ns
Higher secondary+	95.3 (542)	96.3 (563)	95.7 (1105)	ns
Level of significance	p<0.001	p<0.001	p<0.001	

ns = not significant at p = 0.05

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

**Annex 5.10**  
*Net enrolment rate by parental education*

Parental education	Gender		Area		All
	Girls	Boys	Rural	Urban	
None went to school	80.0 (2245)	78.0 (2283)	79.4 (3952)	74.3 (576)	79.0 (4528)
One had schooling	87.7 (1298)	85.0 (1324)	86.7 (2232)	83.4 (390)	86.4 (2622)
Both went to school	92.2 (3649)	91.1 (3786)	91.4 (5383)	92.7 (2052)	91.6 (7435)
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

**Annex 5.11**  
*Net enrolment rate by religion and gender*

Religion	Gender			Level of significance
	Girls	Boys	Both	
Muslim	87.1 (6322)	85.2 (6446)	86.2 (12768)	p<0.01
Non-Muslim	87.2 (929)	88.4 (991)	87.8 (1920)	ns
Level of significance	ns	p<0.01	p<0.05	

ns = not significant at p = 0.05

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

**Annex 5.12**  
*Net enrolment rate by ethnicity and gender*

Ethnicity	Gender			Level of significance
	Girls	Boys	Both	
Bangali	87.5 (7091)	85.4 (7261)	86.6 (14352)	p<0.01
Ethnic minorities	73.9 (160)	81.2 (176)	77.9 (336)	ns
Level of significance	p<0.001	ns	p<0.001	

ns = not significant at p = 0.05

Figures in the parentheses indicate number of children aged 6-10 years

Source: Education Watch Household Survey, 2008

**Annex 5.13**  
*Percentage distribution of primary school aged children by level of education they are currently enrolled and age*

Level of education	Age					All
	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs	
Pre-primary	18.8	9.6	4.5	1.1	0.8	6.8
Primary	43.9	72.1	85.6	90.1	85.2	75.7
Secondary	-	-	-	0.3	2.3	0.6
Non-graded madrasas	2.3	3.8	3.2	3.0	3.8	3.3
Out of school	35.0	14.5	6.7	5.5	7.9	13.6

Source: Education Watch Household Survey, 2008

**Annex 5.14**  
*Percentage distribution of primary school aged children by level of education they are currently enrolled and strata*

Level of education	Rural Dhaka	Rural Ctg.	Rural Rajshahi	Rural Khulna	Rural Barisal	Rural Sylhet	Metro. cities	Municipalities
Pre-primary	7.1	5.5	8.4	6.8	6.2	2.6	8.6	8.1
Primary	73.9	71.4	78.9	82.7	77.6	72.8	74.2	77.9
Secondary	0.3	0.3	0.8	0.9	1.0	0.2	0.8	1.2
Non-graded madrasas	4.3	4.8	1.9	2.1	1.8	4.9	2.4	1.6
Out-of-school	14.4	18.0	10.0	7.5	13.4	19.5	14.0	11.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n								

Source: Education Watch Household Survey, 2008

## Annex 5.15

*Percentage distribution of out of school children (6-10 years) by causes of non-enrolment and strata*

Type of institution	Rural Dhaka	Rural Ctg.	Rural Rajshahi	Rural Khulna	Rural Barisal	Rural Sylhet	Metro. cities	Municipalities
School is far from home	8.2	2.2	2.9	2.4	23.0	6.3	0.0	0.0
Scarcity of money	7.5	10.4	15.0	11.3	9.4	21.9	24.8	15.0
Admission refused	11.9	16.2	11.6	1.6	2.6	8.0	6.7	4.0
No use of education	0.0	1.5	0.0	0.0	0.8	0.5	0.0	0.6
Child works at/outside home	2.2	4.7	1.2	1.6	1.9	1.2	1.9	0.0
Child dislikes school	10.8	12.4	11.6	11.3	12.1	14.1	9.5	12.7
Too young for schooling	52.6	43.8	48.0	61.3	41.5	45.7	51.0	55.5
Security concern	1.1	4.0	1.2	0.0	0.4	0.7	0.5	0.0
Disability	3.4	3.2	5.8	9.7	4.5	0.5	1.9	6.4
Others	2.2	1.5	2.9	0.8	3.8	1.0	3.3	5.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
n	268	402	173	124	265	411	210	173

Source: Education Watch Household Survey, 2008

## Annex 5.16

*Percentage distribution of out-of-school children by major causes of non-enrolment and age, 2008*

Causes	Age					All
	6	7	8	9	10	
Scarcity of money	1.7	7.9	19.8	40.5	39.1	12.6
School regrets admission	12.0	17.3	7.1	4.8	1.1	10.8
Child does not like	2.7	11.6	20.3	22.2	31.8	11.8
Too young to enroll	77.3	44.7	20.3	3.2	0.0	48.7
School away from home	3.5	6.1	11.3	4.0	6.2	5.3
Have to work at home	0.0	2.4	5.7	5.6	6.6	2.4
Disability	1.3	3.7	6.1	12.7	7.3	3.9

Source: Education Watch Household Survey, 2008

## Annex 5.17

*Percentage distribution of out of school children by major causes of non-enrolment and age, 1998*

Causes	Age					All
	6	7	8	9	10	
Scarcity of money	10.7	23.7	40.8	49.9	57.5	31.6
Too young to enroll	70.4	39.9	18.8	7.5	2.0	36.9
Child does not like	4.7	12.3	17.4	16.7	17.2	12.0

Source: Education Watch Household Survey, 1998

**Annex 5.18**  
*Percentage distribution of out of school children by major causes of non-enrolment and age, 2000*

Causes	Age					All
	6	7	8	9	10	
School is away from home	5.9	10.2	13.5	10.1	9.9	9.1
Scarcity of money	7.2	15.7	30.7	42.4	42.2	23.7
Too young to enroll	70.3	47.1	17.5	7.5	2.0	40.8
Child does not like	5.0	8.8	13.8	16.7	20.6	9.8

Source: Education Watch Household Survey, 2000

**Annex 5.19**  
*Net and gross intake ratios by stratum*

Strata	n	Net intake rate	Gross intake ratio
Rural Dhaka division	328	36.0	164
Rural Chittagong division	422	32.2	141
Rural Rajshahi division	312	42.3	186
Rural Khulna division	298	49.3	182
Rural Barisal division	371	43.4	180
Rural Sylhet division	378	36.5	155
Metropolitan cities	275	38.9	145
Municipalities	306	39.2	124
Rural Bangladesh	2,109	38.5	166
Urban Bangladesh	581	39.0	134
All Bangladesh	2,690	38.6	159

Source: Education Watch Household Survey, 2008

**Annex 5.20**  
*Percentage distribution of six years old children by strata and level of education*

Strata	n	Pre-primary	Class I	Class II	Non-graded madrasas	% out-of-school
Rural Dhaka division	328	18.3	36.0	4.3	1.5	39.9
Rural Chittagong division	422	14.7	32.2	3.8	4.0	45.3
Rural Rajshahi division	312	23.4	42.3	7.7	2.2	24.4
Rural Khulna division	298	22.8	49.3	4.4	2.7	20.8
Rural Barisal division	371	17.5	43.4	6.5	1.3	31.3
Rural Sylhet division	378	6.6	36.5	4.7	2.4	49.7
Metropolitan cities	275	22.5	38.9	6.9	1.1	30.5
Municipalities	306	23.5	39.2	5.2	2.0	30.7
Rural Bangladesh	2,109	18.2	38.5	5.1	2.5	35.7
Urban Bangladesh	581	23.1	39.0	5.6	1.5	30.7
All Bangladesh	2,690	18.8	38.6	5.2	2.3	35.0

Source: Education Watch Household Survey, 2008

**Annex 5.21**  
*Students' attendance rate by school type and gender*

School type	Gender		
	Girls	Boys	Both
Government school	72.4 (10,142)	66.7 (9,747)	69.6 (19,889)
Non-govt. school	64.8 (7,593)	64.8 (7,348)	64.8 (14,941)
Ebtedayee madrasa	50.1 (5,998)	52.1 (5,875)	51.1 (11,873)
Non-formal school	87.6 (1,269)	89.3 (766)	88.2 (2,035)
High school	70.0 (7,230)	68.4 (5,693)	69.3 (12,923)
High madrasa	56.6 (6,697)	50.0 (7,065)	53.3 (13,762)

Source: Education Watch Household Survey, 2008

**Annex 5.22**  
*Students' attendance rate by school type and area*

School type	Area		
	Rural	Urban	Both
Government school	70.7 (8,260)	66.7 (11,629)	69.6 (19,889)
Non-govt. school	64.8 (7,879)	64.7 (7,062)	64.8 (14,941)
Ebtedayee madrasa	51.1 (9,789)	50.6 (2,084)	51.1 (11,873)
Non-formal school	89.0 (1,019)	82.2 (1,016)	88.2 (2,035)
High school	62.3 (4,384)	70.1 (8,539)	69.3 (12,923)
High madrasa	53.6 (7,803)	47.8 (5,959)	53.3 (13,762)

Source: Education Watch Household Survey, 2008

**Annex 7.1**  
*Competencies, test items, and minimum levels for qualifying in Bangla*

Competency	Test items	Minimum level for competency achievement
Reading	<ul style="list-style-type: none"> <li>● Answer two questions from a printed paragraph</li> <li>● Answer two questions from a hand written paragraph</li> </ul>	Answer one correctly Answer one correctly
Writing	<ul style="list-style-type: none"> <li>● Describe a given scenery in four sentences</li> <li>● Describe own home in four sentences</li> <li>● Fill out a form with eight blanks (any six is acceptable)</li> <li>● Write an application with date, salutation, and closing (message with any two acceptable)</li> </ul>	Answer correctly any three on the left
Listening	Answer two questions based on a pre-recorded paragraph	Answer one correctly

Source: Nath and Chowdhury (2001). *A question of quality, Education Watch Report 2000*

**Annex 7.2**  
*Competencies, test items and minimum levels for qualifying in English*

Competency	Test items	Minimum level for competency achievement
Reading	<ul style="list-style-type: none"> <li>● Answer two questions from a printed paragraph</li> <li>● Answer two questions from a handwritten paragraph</li> </ul>	Answer one correctly Answer one correctly
Writing	Describe a given picture in five sentences	Write three sentences
Listening	Answer two questions based on a pre-recorded dialogue between two friends	Answer one correctly

Source: Nath and Chowdhury (2001). *A question of quality, Education Watch Report 2000*

**Annex 7.3**  
*Competencies, test items and minimum levels for qualifying in Mathematics*

Competency	Test items	Minimum level for competency achievement
Basic numbers	<ul style="list-style-type: none"> <li>● Arrange four given numbers in ascending order</li> <li>● Identify the largest from four given digits</li> </ul>	Answer correctly any one of the items on the left.
Four basic rules	<ul style="list-style-type: none"> <li>● An addition</li> <li>● A subtraction</li> <li>● A multiplication</li> <li>● A division</li> <li>● A simplification</li> </ul>	Do the simplification correctly or any three of the four others
Problem solving	Four sums needing skills on <ul style="list-style-type: none"> <li>● Basic arithmetic operation</li> <li>● Unitary method</li> <li>● Percentage</li> <li>● Graph</li> </ul>	Answer correctly any two of the items on the left
Measurement units	<ul style="list-style-type: none"> <li>● Convert some hours and some minutes to seconds</li> <li>● Find the length of a pencil</li> </ul>	Answer correctly any one of the items on the left
Geometric figures	<ul style="list-style-type: none"> <li>● Find the number of triangles and rectangles in a figure</li> <li>● Identify four geometric figures</li> </ul>	Answer correctly any one of the items on the left

Source: Nath and Chowdhury (2001). *A question of quality, Education Watch Report 2000*

## Annex 7.4

*Competencies, test items and minimum levels for qualifying in Poribesh Porichiti (society)*

Competency	Test items	Minimum level for competency achievement
Duties as family member	<ul style="list-style-type: none"> <li>How a family becomes a happy family</li> <li>Responsibility as a member of the society</li> </ul>	Answer correctly any one of the items on the left
Duties as a member of the society	<ul style="list-style-type: none"> <li>Responsibility of family members</li> <li>Why one should not play radio/TV loudly</li> </ul>	Answer correctly any one of the items on the left
Duties as citizen of Bangladesh	<ul style="list-style-type: none"> <li>Responsibility as a citizen</li> <li>Eligibility to vote in national elections</li> </ul>	Answer correctly any one of the items on the left
Knowledge about the country	<ul style="list-style-type: none"> <li>Independence day</li> <li>Major transportation system</li> <li>Place of highest rainfall</li> </ul>	Answer correctly any two of the items on the left
Manners with other people	<ul style="list-style-type: none"> <li>Right manners with teachers</li> <li>Right manners with younger siblings</li> </ul>	Answer correctly any one of the items on the left
Knowledge about children of other countries	<ul style="list-style-type: none"> <li>Main food of the children of Maldives</li> <li>Popular games in Nepal</li> </ul>	Answer correctly any one of the items on the left

Source: Nath and Chowdhury (2001). *A question of quality, Education Watch Report 2000*

## Annex 7.5

*Competencies, test items and minimum levels for qualifying in Poribesh Porichiti (science)*

Competency	Test items	Minimum level for competency achievement
Knowledge about importance of good health	<ul style="list-style-type: none"> <li>How good health is achieved</li> <li>Why one takes carbohydrate</li> </ul>	Answer correctly any of the items on the left
Knowledge about physical and environmental health	<ul style="list-style-type: none"> <li>Which tube well water is safe</li> <li>How diarrhoea spreads</li> </ul>	Answer correctly any of the items on the left
Knowledge of balanced diet	<ul style="list-style-type: none"> <li>What is a balanced diet</li> <li>Why should adolescents take extra food</li> </ul>	Answer correctly any of the items on the left
Knowledge about prevention of common illnesses	<ul style="list-style-type: none"> <li>Transmission of worms</li> <li>Skin diseases</li> </ul>	Answer correctly any of the items on the left
Information collection ability	<ul style="list-style-type: none"> <li>What is the fastest mass media</li> <li>Highest and lowest temperatures during summer</li> </ul>	Answer correctly any of the items on the left
Observation skills	<ul style="list-style-type: none"> <li>Which tree has no branch</li> <li>Plant without a flower</li> </ul>	Answer correctly any of the items on the left
Scientific investigation	<ul style="list-style-type: none"> <li>Identification of preventive measures for given illness</li> <li>Identify effects of over population</li> </ul>	Answer correctly any of the items on the left
Cause and effect relationship	<ul style="list-style-type: none"> <li>Energy that causes a boiling kettle lid to move up</li> <li>Energy which drives a bullock cart</li> </ul>	Answer correctly any of the items on the left
Everyday science	<ul style="list-style-type: none"> <li>What is information communication</li> <li>What are modern agricultural technologies</li> </ul>	Answer correctly any of the items on the left

Source: Nath and Chowdhury (2001). *A question of quality, Education Watch Report 2000*

**Annex 7.6**  
*Competency, test item, and minimum level for qualifying in Religious Studies*

Competency	Test items	Minimum level for competency achievement
Life sketch of Prophet Mohammed (SM) or the preachers of own religion.	Write five sentences on the life of any one of the following: Mohammed (SM), Jesus Christ, Goutam Buddha and Shree Ramakrishna.	Correctly writing three sentences

Source: Nath and Chowdhury (2001). *A question of quality, Education Watch Report 2000*

**Annex 7.7**  
*Mean, median and standard deviation of number of competencies achieved by the students by gender and area*

Gender and area	Mean	Standard deviation	Median
<i>Gender</i>			
Girls	18.2	5.0	19.0
Boys	19.3	4.4	20.0
<i>Area</i>			
Rural	18.4	4.8	19.0
Urban	20.1	4.2	21.0
All	18.7	4.7	20.0

Source: Education Watch Competencies Achievement Test, 2008

**Annex 7.8**  
*Mean, median and standard deviation of number of competencies achieved by the students by school type*

School type	Mean	Standard deviation	Median
Government school	19.0	4.7	20.0
Non-government school	18.0	4.7	19.0
Ebtedayee madrasa	15.2	5.3	15.0
Non-formal school	20.0	4.0	21.0
High school	20.8	4.1	21.0
High madrasa	17.0	5.0	17.0

Source: Education Watch Competencies Achievement Test, 2008

**Annex 7.9**  
*Mean number of competencies and their percentages on number of competencies under test by subject and gender*

Subjects	Number of competencies	Mean		Percentage		All (mean)	All (%)
		Girls	Boys	Girls	Boys		
Bangla	3	2.08	2.21	69.3	73.7	2.14	71.3
English	3	1.62	1.73	54.0	57.7	1.67	55.7
Mathematics	5	2.89	3.25	57.8	65.0	3.06	61.2
Social studies	6	4.34	4.48	72.3	74.7	4.41	73.5
Science	9	7.14	7.53	79.3	83.7	7.33	81.4

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.10

*Mean number of competencies and their percentages on number of competencies under test by subject and area*

Subjects	Number of competencies	Mean		Percentage	
		Rural	Urban	Rural	Urban
Bangla	3	2.11	2.27	70.3	75.7
English	3	1.62	1.87	54.0	62.3
Mathematics	5	2.97	3.43	59.4	68.6
Social studies	6	4.31	4.78	71.8	79.7
Science	9	7.24	7.67	80.4	85.2

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.11

*Mean number of competencies achieved by the students by subjects and school type*

Subjects	School type					
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal	High school	High madrasa
Bangla	2.21	1.99	1.63	2.29	2.42	1.91
English	1.73	1.53	1.21	1.80	1.98	1.45
Mathematics	3.14	2.85	2.35	3.50	3.62	2.57
Social studies	4.44	4.36	3.74	4.53	4.87	4.13
Science	7.39	7.20	6.12	7.78	7.78	6.85

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.12

*Percentage distribution of students by number of competencies achieved, gender and area*

Number of competencies	Gender		Area		All (7,093)
	Girls (3,738)	Boys (3,355)	Rural (3,797)	Urban (3,296)	
Nil	0.1	0.0	0.0	0.0	0.0
1 - 3	0.4	0.1	0.3	0.1	0.2
4 - 6	1.6	0.7	1.4	0.3	1.2
7 - 9	4.0	2.4	3.7	1.3	3.2
10 - 12	8.5	4.8	7.4	4.2	6.7
13 - 15	13.2	11.4	13.5	7.8	12.3
16 - 18	19.4	17.1	18.3	17.9	18.3
19 - 21	24.0	28.0	26.1	25.4	26.0
22 - 24	20.3	27.0	22.3	28.3	23.5
25 - 27	8.7	8.4	7.0	14.6	8.6
All	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of students under test  
Source: Education Watch Competencies Achievement Test, 2008

**Annex 7.13**  
*Percentage distribution of students by number of competencies achieved and type of educational institution*

Number of competencies	Type of educational institution					
	Government (1,275)	Non-government (1,220)	Ebtedayee madrasa (828)	Non-formal school (1,291)	High school (1,167)	High madrasa (1,312)
Nil	0.0	0.0	0.2	0.0	0.0	0.3
1 - 3	0.2	0.3	1.7	0.1	0.2	0.7
4 - 6	0.9	1.9	4.9	0.3	0.4	2.0
7 - 9	3.2	2.7	9.1	1.3	0.8	4.8
10 - 12	6.3	7.5	15.3	3.9	2.3	9.8
13 - 15	11.0	15.4	19.8	8.4	6.5	18.9
16 - 18	17.9	19.6	19.0	14.7	14.6	22.1
19 - 21	25.6	28.1	18.2	30.1	25.5	21.8
22 - 24	25.8	17.9	10.1	31.1	30.6	13.8
25 - 27	9.1	6.6	1.8	10.0	19.1	5.8
All	100.0	100.0	100.0	100.0	100.0	100.0

Figures in the parentheses indicate number of students under test  
 Source: Education Watch Competencies Achievement Test, 2008

**Annex 7.14**  
*Mean number of correctly answering items by taxonomic class level, area and gender*

Taxonomic class level	No. of items	All	Gender		Area	
			Girls	Boys	Rural	Urban
Knowledge	45	27.5	26.5	28.6	26.8	30.1
Understanding	19	8.1	7.7	8.4	7.8	9.0
Comprehension	6	3.4	3.2	3.5	3.3	3.5
Application	7	2.5	2.4	2.7	2.4	3.0
Analysis	3	0.9	0.8	0.9	0.8	1.1
Synthesis	3	1.3	1.3	1.3	1.3	1.4

Source: Education Watch Competencies Achievement Test, 2008

**Annex 7.15**  
*Mean number of correctly answering items by taxonomic class level, school type*

Taxonomic class level	No. of items	School type					
		Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa
Knowledge	45	28.0	26.1	22.2	29.6	31.1	25.4
Understanding	19	8.3	7.5	5.8	8.8	9.7	7.0
Comprehension	6	3.4	3.3	2.8	3.4	3.8	3.1
Application	7	2.6	2.4	1.7	3.0	3.2	2.1
Analysis	3	0.9	0.8	0.6	1.1	1.2	0.8
Synthesis	3	1.4	1.0	0.6	1.3	1.5	1.1

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.16

*Mean number of correctly answering items by taxonomic class level, school type and sex*

School type	Knowledge level items			Understanding level items		
	Girls	Boys	Sig.	Girls	Boys	Sig.
Government	26.7	29.2	p<0.001	7.9	8.6	p<0.001
Non-government	25.5	26.9	p<0.001	7.1	7.9	p<0.001
Ebtedayee	21.7	22.7	p<0.05	5.8	5.8	ns
Non-formal	29.5	29.6	ns	8.7	9.0	ns
High school	30.9	31.4	ns	9.6	9.9	ns
High madrasa	23.8	27.0	p<0.001	6.4	7.6	p<0.001

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.17

*Mean number of correctly answering items by taxonomic class level, school type and area*

School type	Knowledge level items			Understanding level items		
	Rural	Urban	Sig.	Rural	Urban	Sig.
Government	27.2	30.3	p<0.001	8.0	9.0	p<0.001
Non-government	26.0	27.4	p<0.001	7.4	7.6	ns
Ebtedayee	22.1	23.4	ns	5.8	6.5	p<0.01
Non-formal	29.2	32.0	p<0.001	8.7	9.8	p<0.001
High school	26.9	31.5	p<0.001	7.5	10.0	p<0.001
High madrasa	25.4	25.9	ns	7.0	6.8	ns

Source: Education Watch Competencies Achievement Test, 2008

**Annex 7.18**  
*Percentage of students satisfying minimum requirements for the competencies  
 under test by school type*

Competency	Government	Non-government	Ebtadyee madrasa	Non-formal	High school	High madrasa	Significance
<i>Bangla</i>							
24	73.7	71.5	65.9	76.8	83.6	69.7	p<0.001
25	59.9	43.3	20.6	58.7	65.5	42.7	p<0.001
27	86.9	83.8	76.9	93.0	93.1	78.2	p<0.001
<i>English</i>							
50	77.4	71.5	52.4	80.3	89.1	65.0	p<0.001
53	11.3	7.3	5.0	20.2	27.6	7.9	p<0.001
51	83.9	74.7	63.7	79.1	80.8	72.2	p<0.001
<i>Mathematics</i>							
28	82.0	77.3	69.9	83.3	83.3	75.9	p<0.001
29	60.4	49.2	44.7	76.2	72.9	51.7	p<0.001
30	36.0	33.1	15.0	47.0	58.5	21.8	p<0.001
31	51.8	46.9	43.6	57.3	56.2	35.6	p<0.001
32	83.3	78.7	61.3	86.1	90.9	71.8	p<0.001
<i>Poribesh Porichiti (society)</i>							
9	87.3	82.2	70.7	92.9	93.9	76.5	p<0.001
10	91.4	89.2	80.3	93.6	95.7	87.9	p<0.001
11	80.1	78.2	66.2	85.4	91.6	73.5	p<0.001
15	46.7	50.3	47.5	44.8	59.2	50.6	p<0.001
48	87.6	84.2	72.6	90.8	91.6	82.7	p<0.001
49	51.3	52.4	36.6	45.4	54.7	42.0	p<0.001
<i>Poribesh Porichiti (science)</i>							
19	89.7	88.6	81.0	92.6	94.6	88.2	p<0.001
21	89.7	89.3	77.6	93.6	92.0	86.7	p<0.001
22	81.2	76.7	62.3	87.1	87.3	69.1	p<0.001
23	69.2	65.8	55.4	73.4	69.2	64.5	p<0.001
33	91.2	90.1	82.4	92.0	94.8	88.2	p<0.001
38	83.1	86.3	67.3	86.6	85.4	74.5	p<0.001
39	75.5	75.0	64.1	80.0	78.7	70.3	p<0.001
40	70.7	65.9	56.7	79.5	82.7	67.3	p<0.001
41	88.4	82.0	65.0	93.5	93.2	75.8	p<0.001
<i>Religious studies</i>							
3	10.2	8.9	9.9	7.4	17.8	12.9	p<0.001

Source: Education Watch Competencies Achievement Test, 2008

**Annex 7.19**  
*Percentage of students satisfying minimum requirements for the  
 competencies under test by school type*

Competency	All	Rural	Urban	Significance	Boys	Girls	Significance
<b>Bangla</b>							
24	73.3	71.9	78.7	p<0.001	76.0	70.2	p<0.001
25	54.8	53.6	59.5	p<0.001	55.1	54.6	Ns
27	86.1	85.4	88.7	p<0.001	88.8	83.5	p<0.001
<b>English</b>							
50	75.4	73.2	83.9	p<0.001	79.3	71.7	p<0.001
53	11.4	9.5	18.8	p<0.001	11.8	11.0	ns
51	80.4	79.5	84.1	p<0.001	82.0	77.0	p<0.001
<b>Mathematics</b>							
28	80.6	79.9	83.1	p<0.001	83.1	78.1	p<0.001
29	59.0	56.2	69.5	p<0.001	65.9	52.4	p<0.001
30	35.4	32.1	48.2	p<0.001	39.2	31.8	p<0.001
31	49.9	48.3	56.2	p<0.001	52.3	47.6	p<0.001
32	81.5	80.3	86.4	p<0.001	84.0	79.2	p<0.001
<b>Poribesh Porichiti (society)</b>							
9	85.8	84.6	90.2	p<0.001	87.5	84.1	p<0.001
10	90.8	89.6	95.4	p<0.001	93.6	88.2	p<0.001
11	79.7	77.6	87.5	p<0.001	84.1	75.5	p<0.001
15	47.9	45.3	57.8	p<0.001	47.7	48.0	ns
48	86.6	85.6	90.7	p<0.001	85.8	87.4	p<0.05
49	50.0	48.4	56.5	p<0.001	49.6	50.5	ns
<b>Poribesh Porichiti (science)</b>							
19	89.6	88.5	93.9	p<0.001	90.8	88.5	p<0.001
21	89.6	88.9	92.3	p<0.001	91.6	87.7	p<0.001
22	79.6	78.4	84.6	p<0.001	82.3	77.1	p<0.001
23	68.3	68.2	68.8	ns	70.9	65.8	p<0.001
33	90.8	90.1	93.6	p<0.001	92.2	89.5	p<0.001
38	83.0	82.5	85.1	p<0.01	83.9	82.2	ns
39	75.2	74.3	78.5	p<0.001	76.6	73.9	p<0.01
40	70.4	68.2	78.5	p<0.001	76.2	64.9	p<0.001
41	86.3	85.0	91.4	p<0.001	88.2	84.5	p<0.001
<b>Religious studies</b>							
3	10.2	10.3	9.9	ns	9.5	10.9	p<0.05

ns = not significant at p=0.05

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.20

*Frequency distribution of number of competencies by level of achievement, area and gender*

Level of achievement	Difficulty level	Gender		Area	
		Girls	Boys	Rural	Urban
Poor	Very difficult	3	3	3	2
Mediocre	Difficult	5	4	7	5
Satisfactory	Easy	10	6	7	5
Excellent	Very easy	9	14	10	15

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.21

*Mean, median and standard deviation of number of competencies achieved by the students by gender and area (government, non-government and non-formal only)*

Area and gender	Mean	Standard deviation	Median
<b>Gender</b>			
Girls	18.4	4.9	19.0
Boys	19.4	4.3	20.0
<b>Area</b>			
Rural	18.6	4.7	20.0
Urban	20.0	4.2	21.0
All	18.9	4.6	20.0

Source: Education Watch Competencies Achievement Test, 2008

## Annex 7.22

*Socio-economic, school related and additional educational input variables considered as predictors of competencies achievement*

Socio-economic	School related	Additional educational input
<ul style="list-style-type: none"> <li>● Sex of student</li> <li>● Age of student</li> <li>● Area of residence</li> <li>● Mothers education</li> <li>● Fathers education</li> <li>● Religion</li> <li>● Ethnicity</li> <li>● Household food security status</li> <li>● Electricity at home</li> </ul>	<ul style="list-style-type: none"> <li>● Type of school</li> <li>● Class size</li> <li>● Student teacher ratio</li> <li>● Teachers educational qualification</li> <li>● Teachers professional training</li> <li>● Teachers length of experience</li> <li>● SMC meeting</li> <li>● Distance between school and upazila</li> </ul>	<ul style="list-style-type: none"> <li>● Students duration of having private tutor</li> <li>● Parental mentoring at home</li> <li>● Guardians attendance in school meeting</li> <li>● Guardians discussions with teachers</li> <li>● Students participation co-curricular activities</li> <li>● Students access to media</li> </ul>

**Annex 7.23**  
*Background of the students under test*

The mean age of the students was 11.3 years; a quarter of them were aged 9-10 years, 62.5% aged 11-12 years and 13% more than 12 years (A). The madrasa students were older than all others, followed by those of non-formal schools. The students of primary attached to high schools were the youngest followed by those of government and non-government schools. The fathers of the students under test had more years of schooling than the mothers (B). A third of the mothers and 28.8% of the fathers never went to school. More than 40% of the mothers and 28.3% of the mothers had education beyond primary level. Overall, nearly a fifth of the students was first generation learners; ranged from 3.4% in the primary attached to high schools and 24.3% in the non-formal schools. In terms of self reported food security status of the households, 11.6% were reported as *always in deficit*, 26.9% *sometimes in deficit*, 37.3% *breakeven* and 23.9% *surplus* (C). More than half of the students of ebteyee madrasas came from deficit households; this was 45.5% in non-formal, 43% in non-government, 41.1% in high madrasas, 36.4% in government and 18.7% in the high schools. Overall, 12.4% of the students tested were non-Muslims and 2.6% ethnic minorities (D). Information on students' access to three mass media viz., radio, television and newspaper were collected. Majority had access to television. On average, 30.3% of the students did not have access to any mass media, 55.5% had access to any one, 13.1% had access to two and 1.1% had access to all three (E). The madrasa students had the least and the high school students had the most access to mass media.

**A. Age distribution (%) of the students of Class V by school type**

Age of students	School type						
	Government primary	Non-govt. primary	Ebteyee madrasa	Non-formal primary	High school	High madrasa	All
9-10 years	28.4	20.7	12.9	17.7	29.3	12.5	24.5
11-12 years	61.3	66.3	61.3	63.6	64.7	61.4	62.5
13 years+	10.3	13.1	25.8	18.8	6.0	26.0	13.0
Mean	11.2	11.4	11.8	11.6	11.1	11.9	11.3

Source: Education Watch Socioeconomic Survey of the Students, 2008

**B. Percentage distribution of students by various levels of parental education**

Parental education	School type						
	Government primary	Non-govt. primary	Ebteyee madrasa	Non-formal primary	High school	High madrasa	All
<b>Mothers education</b>							
Nil	29.3	41.7	38.1	51.7	9.8	32.6	33.3
Primary	39.4	35.5	46.4	35.1	22.0	43.9	38.4
Secondary	31.3	22.8	15.5	13.1	68.2	23.5	28.3
<b>Fathers education</b>							
Nil	24.6	36.4	39.5	49.4	6.8	27.8	28.8
Primary	30.5	30.6	37.4	29.9	17.1	35.5	30.7
Secondary	32.4	27.1	20.5	18.7	42.6	28.3	30.0
More than secondary	12.5	5.9	2.6	2.0	33.4	8.4	10.5
First generation learners	16.0	24.8	26.0	34.3	3.4	18.7	19.1

Source: Education Watch Socioeconomic Survey of the Students, 2008

*C. Percentage distribution of students of grade V by school type*

Household food security status	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
Always in deficit	11.2	13.0	19.7	14.2	4.3	10.6	11.6
Sometimes in deficit	25.2	30.0	33.2	32.3	14.4	30.5	26.9
Breakeven	37.3	38.5	34.8	36.0	36.6	38.0	37.5
Surplus	26.3	18.5	12.3	17.5	44.7	20.9	23.9

Source: Education Watch Socioeconomic Survey of the Students, 2008

*D. Percentage of non-Muslims and ethnic minorities by school type*

Religion and Ethnicity	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
Non-Muslims	14.4	14.7	0.0	8.9	10.3	0.0	12.4
Ethnic minorities	2.4	2.9	0.0	7.4	1.2	0.3	2.6

Source: Education Watch Socioeconomic Survey of the Students, 2008

*E. Percentage distribution of students of grade V by school type and number of media having access*

No. of media	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
None	27.0	35.9	45.5	32.0	8.4	42.8	30.3
One	58.3	52.4	44.2	51.4	62.2	47.1	55.5
Two	13.6	10.3	8.7	15.2	28.1	9.9	13.1
Three	1.1	1.4	1.7	1.3	1.4	1.1	1.1

Source: Education Watch Socioeconomic Survey of the Students, 2008

Overall, 71.6% of the students received supplementary private tutoring on payment during their tenure of class V and the parents mentored 41.1% of the students at home (F). Primary attached high school students were at the top in terms of both the measures. The ebtedayee madrasa students had the least access to the former and the non-formal school students to the later. Over three-quarters of the guardians reported that they discussed pedagogical issues of the students with the school teachers. About 61% of the guardians were reported to be attended in school meetings. Both of these can be seen as parental/ guardians involvement in educational matters. The parents/guardians of the non-formal schools were ahead of the others in both the cases. Guardians' participation in school meetings was far less in the other educational institutions, which was not the case for guardians' discussions of pedagogical issues with the teachers.

Class size was 25 or below for 38.2% of the students, 26-40 for 43.1% of them and more than 40 for the rest (G). The average class size was 28.3 for non-formal schools, and 32.3 for the government schools; it was below 25 in the non-government schools and the entedayee madrasas and over 40 in the high schools and high madrasas. Majority of the students under test came from those schools where student-teacher ratio was more than 40:1; however, it was 30:1 or less for 26.2% of the students (H). The student teacher ratio was below 30:1 in the non-formal and high schools and the high madrasas; for others it was more than 40:1. Mean years of schooling of the teachers was below 12 years for 19.7% of the students under test, 12 years for 34.1% students, 13 years for 27.2% students and 14 years or more for 19% students (I). It was the highest in the high schools and lowest in the non-formal schools. The teachers of the non-formal schools were less experienced than others (J). Half or less portion of the teachers of 17.4% of the students and all teachers of 60.2% of the teachers were professionally trained (K). Seventy percent of the students studied in schools located within 10 km away from the upazila centre; half of which were within five kilometres (L).

*F. Percentage of students with various activities by school type*

	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
Guardians discussed pedagogical issues with teachers	79.3	73.7	76.8	82.7	81.3	67.5	77.5
Guardians participated in school meetings	58.2	63.8	63.8	91.1	48.4	49.1	60.9
Students participated in co-curricular activities	48.4	44.7	36.9	7.8	57.2	39.0	43.6
Students had private tutors	77.1	65.7	53.4	58.4	85.3	58.3	71.6
Parents provided mentoring at home	45.5	33.4	30.2	27.8	65.2	35.1	41.1
Siblings provided tutoring at home	36.8	32.0	36.2	35.0	41.1	37.7	35.9
Any tutoring support at home	66.9	54.5	55.1	54.7	83.6	60.8	63.4
Mean month of private tutoring	5.0	3.6	2.5	2.7	6.4	2.7	4.4

Source: Education Watch Socioeconomic Survey of the Students, 2008

**G. Percentage distribution of students of grade V by school type and size of class V**

Size of class V	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
< 25	37.0	59.0	59.4	22.9	29.8	17.8	38.2
26 - 40	42.3	34.9	36.2	77.1	19.7	42.9	43.1
41+	20.7	6.1	4.4	0.0	50.4	39.4	18.7
Mean	32.3	24.2	24.1	28.3	45.0	41.9	31.6

Source: Education Watch Educational Institution Survey, 2008

**H. Percentage distribution of students of grade V by school type and teacher-student ratio**

Teacher-student ratio	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
< 30	18.8	9.9	31.5	61.9	67.5	62.7	26.2
31 - 40	13.9	16.7	25.4	35.4	21.6	11.6	16.3
41 - 60	45.4	41.9	24.9	2.7	7.7	25.7	38.2
60+	21.9	31.4	18.3	0.0	3.2	0.0	19.3
Mean	49:1	54:1	41:1	29:1	26:1	29:1	46:1

Source: Education Watch Educational Institution Survey, 2008

**I. Percentage distribution of students of grade V by school type and mean years of schooling of teachers**

Mean years of schooling of teachers	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
< 12	5.5	63.2	7.9	57.8	6.6	0.0	19.7
12	39.8	29.3	38.8	34.1	12.7	10.9	34.1
13	34.0	7.1	36.2	0.0	19.6	47.0	27.2
14+	20.6	0.4	17.1	8.1	61.1	42.1	19.0
Mean	13.1	11.4	12.9	11.1	14.0	13.7	12.7

Source: Education Watch Educational Institution Survey, 2008

*J. Percentage distribution of students of grade V by school type and mean years of experience of teachers*

Mean years of experience of teachers	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
< 10	26.8	3.2	45.9	66.8	29.2	19.7	25.5
10 - 14	34.3	17.9	28.8	18.0	31.2	12.4	27.9
15 - 19	22.8	39.1	11.2	12.4	6.4	25.6	24.5
20+	16.2	39.8	14.1	2.7	33.1	42.3	22.1
Mean	14.1	18.7	11.3	7.8	15.5	17.6	14.7

Source: Education Watch Educational Institution Survey, 2008

*K. Percentage distribution of students of grade V by school type and proportion of teachers having professional training*

Proportion of teachers having professional training	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
Half or less	3.7	12.2	92.7	16.8	40.2	99.4	17.4
More than half but not all	29.7	18.5	0.0	0.0	40.7	0.1	22.4
All	66.6	69.3	7.3	83.2	19.1	0.6	60.2

Source: Education Watch Educational Institution Survey, 2008

*L. Percentage distribution of students of grade V by school type and distance from upazila to school*

Distance from upazila to school (km)	School type						
	Government primary	Non-govt. primary	Ebtedayee madrasa	Non-formal primary	High school	High madrasa	All
< 5	39.4	17.8	18.0	34.4	87.4	19.8	34.6
6 - 10	34.9	37.1	37.7	39.5	11.1	38.8	35.4
11 - 15	11.9	21.8	27.7	13.6	1.0	23.8	14.8
16+	13.4	23.3	16.6	12.5	0.4	17.6	15.2
Mean	9.0	11.5	11.2	10.4	2.6	11.2	9.6

Source: Education Watch Educational Institution Survey, 2008

**Annex 7.24**  
*Measurement of variables used in the multivariate analysis*

Variables	Measurement
<b><i>Dependent variable</i></b>	
Competencies achieved	0 - 27 Number of competencies achieved by the students
<b><i>Independent variables</i></b>	
Sex of student	0 = Girl, 1 = Boy
Age of student	9 - 17 Students age in years
Area of resident	0 = Rural, 1 = Urban
Mothers education	0 - 16 Years of schooling completed by mothers
Fathers education	0 - 16 Years of schooling completed by fathers
Religion	0 = Muslim, 1 = Non-Muslim
Ethnicity	0 = Adibashi, 1 = Bangali
Electricity at home	0 = No, 1 = Yes
HH food security status	1 = Always in deficit, 2 = Sometimes in deficit, 3 = Balance, 4 = Surplus
Students' access to media	0 - 3 Number of media having access
Parental mentoring at home	0 = No, 1 = Yes
Having private tutor	0 - 10 Duration of having private tutor in months
Participation in co-curricular activities	0 = Did not participate, 1 = Participated
Guardians attendance in school meeting	0 - 3 Number of meeting attended
Guardians discussion with teachers	0 - 3 Number of discussion meetings
Class size	5 - 106 Number of students in class V
Student teacher ratio	5 - 210 number of students per teacher
Teachers educational qualification	10 - 16 Mean years of schooling completed by the teachers
Teachers professional experience	1 - 34 Mean years of professional experience of the teachers
Teachers professional training	0 - 100 Percentage of teachers having professional training
SMC meeting	0-20 Number of meetings held in 2008
Distance between school and upazila	0 - 40 km

**Annex 7.25**  
**Multivariate regression models (Beta coefficients) predicting number of competencies achieved**

Predictors	Model I	Model II	Model III
<b><i>Socioeconomic</i></b>			
Fathers education	0.19		
Age of student	- 0.12		
Gender of student	0.12		
Ethnicity	0.14		
Area of residence	0.08		
Electricity at home	0.07		
Religion	0.04		
<b><i>School related</i></b>			
School type		0.20	
Teachers length of experience		0.14	
Teachers education		0.07	
SMC meeting		0.09	
Distance from school to upazila		-0.05	
Student-teacher ratio		-0.06	
Class size		0.06	
<b><i>Additional educational inputs</i></b>			
Duration of private tutoring			0.23
Access to media			0.08
Guardians discussion with teachers			0.07
Participation in co-curricular activities			0.06
Parents mentoring at home			0.05
Guardians attendance in school meetings			0.03
Constant	18.59	9.51	15.85
Adjusted R <sup>2</sup>	0.13	0.07	0.09
Analysis of variance (F value)	146.23	77.26	121.38

Source: Education Watch Competencies Achievement Test, Educational Institution Survey and Socioeconomic survey of the Students, 2008

**Annex 7.26**  
*Multivariate regression models predicting number of competencies achieved*

Socio-economic and school related Predictors	Beta coefficients
Fathers education	0.19
School type	0.15
Ethnicity	0.13
Gender of student	0.12
Age of student	-0.11
SMC meeting	0.10
Teachers length of experience	0.08
Electricity at home	0.07
Student-teacher ratio	-0.05
Area of residence	0.04
Constant	13.88
Adjusted R2	0.16
Analysis of variance (F value)	136.25

Source: Education Watch Competencies Achievement Test, Educational Institution Survey and Socioeconomic survey of the Students, 2008

**Annex 8.1**  
*Percentage distribution of population six years and above by level of schooling completed, gender and area*

Level of education	Gender		Area		All
	Females	Males	Rural	Urban	
Nil	35.1	30.5	34.7	22.0	32.8
Pre-primary to grade IV	22.0	22.8	23.3	17.6	22.4
Grades V to IX	34.4	31.7	32.5	36.0	33.0
Grade X+	7.8	13.4	8.2	23.8	10.6
Non-graded madrasa	0.7	1.7	1.3	0.6	1.2
Total	100.0	100.0	100.0	100.0	100.0
N	49,055	48,727	73,995	23,787	97,782

Source: Education Watch Household Survey, 2008

**Annex 8.2**  
*Percentage of ever schooled population (among 6y+) by strata and gender*

Gender	Rural Dhaka	Rural Ctg.	Rural Rajshahi	Rural Khulna	Rural Barisal	Rural Sylhet	Metro. cities	Municipalities
Females	62.5	63.1	60.4	65.9	72.7	58.7	76.5	75.1
Males	66.4	68.5	66.7	69.4	73.5	64.2	81.4	79.3
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	ns	p<0.001	p<0.001	p<0.001

Source: Education Watch Household Survey, 2008

## Annex 8.3

*Percentage of primary completed population (among 11y+) by strata and gender*

Gender	Rural Dhaka	Rural Ctg.	Rural Rajshahi	Rural Khulna	Rural Barisal	Rural Sylhet	Metro. cities	Municipalities
Females	47.9	47.4	41.8	50.0	54.4	41.2	66.9	64.7
Males	49.5	50.4	47.8	52.9	55.7	45.0	73.4	69.4
Level of significance	ns	p<0.01	p<0.001	p<0.01	ns	p<0.001	p<0.001	p<0.001

Source: Education Watch Household Survey, 2008

## Annex 8.4

*Percentage of secondary completed population (among 15y+) by strata and gender*

Gender	Rural Dhaka	Rural Ctg.	Rural Rajshahi	Rural Khulna	Rural Barisal	Rural Sylhet	Metro. Cities	Municipalities
Females	7.9	8.1	6.7	8.1	11.0	5.2	29.4	22.1
Males	14.2	14.3	15.2	16.2	18.5	8.9	41.4	31.5
Level of significance	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001

Source: Education Watch Household Survey, 2008

## Annex 8.5

*Literacy rate among population of age 7 years and above by stratum and gender*

Strata	Gender			Level of significance
	Females	Males	Both	
Rural Dhaka Division	45.1 (5910)	46.4 (5704)	45.7 (11614)	ns
Rural Chittagong Division	43.0 (6568)	46.2 (5942)	44.5 (12510)	p<0.001
Rural Rajshahi Division	40.6 (5550)	47.3 (5918)	44.1 (11468)	p<0.001
Rural Khulna Division	46.3 (5762)	50.6 (5875)	48.5 (11637)	p<0.001
Rural Barisal Division	49.9 (6135)	51.9 (6058)	50.9 (12193)	p<0.05
Rural Sylhet Division	39.5 (6277)	42.1 (6179)	40.8 (12456)	p<0.01
Metropolitan cities	63.3 (5629)	69.8 (5688)	66.6 (11317)	p<0.001
Municipalities	61.9 (5892)	67.0 (5996)	64.5 (11888)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	
Rural Bangladesh	43.7 (36202)	47.2 (35676)	45.4 (71878)	p<0.001
Urban Bangladesh	62.5 (11521)	68.2 (11684)	65.4 (23205)	p<0.001
Level of significance	p<0.001	p<0.001	p<0.001	
All Bangladesh	46.5 (47723)	50.4 (47360)	48.5 (95083)	p<0.001

Figures in the parentheses indicate number of persons aged 7 years and above

Source: Education Watch Household Survey, 2008

**Annex 8.6**  
*Adult literacy rate (population of age 15 years and above) by stratum and gender*

Strata	Gender			Level of significance
	Females	Males	Both	
Rural Dhaka Division	47.3 (4561)	51.3 (4296)	49.2 (8857)	P<0.001
Rural Chittagong Division	46.2 (4850)	53.7 (4293)	49.7 (9143)	P<0.001
Rural Rajshahi Division	39.9 (4254)	50.5 (4540)	45.4 (8794)	P<0.001
Rural Khulna Division	46.7 (4507)	54.2 (4570)	50.5 (9077)	P<0.001
Rural Barisal Division	53.5 (4599)	57.6 (4551)	55.5 (9150)	P<0.001
Rural Sylhet Division	41.7 (4740)	47.3 (4609)	44.4 (9349)	P<0.001
Metropolitan cities	68.7 (4479)	77.2 (4479)	73.0 (8958)	P<0.001
Municipalities	65.3 (4703)	72.8 (4798)	69.1 (9501)	P<0.001
Level of significance	p<0.001	p<0.001	p<0.001	
Rural Bangladesh	45.3 (27511)	52.1 (26859)	48.6 (54370)	P<0.001
Urban Bangladesh	66.8 (9182)	74.7 (9277)	70.8 (18459)	P<0.001
Level of significance	p<0.001	p<0.001	p<0.001	
All Bangladesh	48.6 (36693)	55.7 (36136)	52.1 (72829)	P<0.001

Figures in the parentheses indicate number of persons aged 15 years and above  
 Source: Education Watch Household Survey, 2008

**Annex 8.7**  
*Age specific literacy rate by year*

Age (in year)	Year		
	2000	2005	2008
5 - 9	1.7	7.5	3.3
10 - 14	36.8	59.6	56.0
15 - 19	64.6	78.3	80.6
20 - 24	55.3	70.4	72.1
25 - 29	42.5	58.0	59.5
30 - 34	38.9	47.4	49.4
35 - 39	36.3	44.8	41.0
40 - 44	35.7	39.7	38.5
45 - 49	34.8	39.8	36.0
50 - 54	30.0	37.3	35.5
55 - 59	28.3	37.7	36.8
60+	18.1	27.3	25.7

Sources: Education Watch Household Surveys, 2000, 2005, 2008

**Annex 8.8**  
*Percentage of households with at least one literate person by stratum and year*

Strata	Year		
	2000	2005	2008
Rural Dhaka Division	56.4	76.0	77.3
Rural Chittagong Division	62.8	74.6	75.8
Rural Rajshahi Division	52.0	75.2	74.3
Rural Khulna Division	67.3	79.5	82.7
Rural Barisal Division	62.1	80.4	80.2
Rural Sylhet Division	53.7	72.1	69.2
Metropolitan cities	83.3	90.4	90.1
Municipalities	73.9	88.1	88.8
Rural Bangladesh	58.0	76.0	76.5
Urban Bangladesh	78.1	89.2	89.4
All Bangladesh	61.1	78.0	78.5

Sources: Education Watch Household Surveys, 2000, 2005, 2008

**Annex 8.9**  
*Adult (15y+) literacy rate by year and gender*

Year	Gender		Both	Level of significance	Difference
	Females	Males			
2000	35.8	47.3	41.6	p<0.001	11.5
2005	47.0	58.2	52.6	p<0.001	11.2
2008	48.6	55.7	52.1	p<0.001	7.1

Sources: Education Watch Household Surveys, 2000, 2005, 2008

**Annex 8.10**  
*Literacy rate (7y+ population) by year and area*

Year	Area		Both	Level of significance	Difference
	Rural	Urban			
2000	33.4	55.6	37.0	p<0.001	22.2
2005	46.4	67.1	49.7	p<0.001	20.7
2008	45.4	65.4	48.5	p<0.001	20.0

Sources: Education Watch Household Surveys, 2000, 2005, 2008

**Annex 8.11**  
*Adult (15y+) literacy rate by year and area*

Year	Area		Both	Level of significance	Difference
	Rural	Urban			
2000	37.5	62.3	41.6	p<0.001	24.8
2005	49.0	71.1	52.6	p<0.001	22.1
2008	48.6	70.8	52.1	p<0.001	22.2

Sources: Education Watch Household Surveys, 2000, 2005, 2008



# Index

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*Index***A**

Additional tutoring 31-32  
 Adult literacy rate 111  
 Affirmative actions 125  
 Age and achievement 100  
 Age and enrolment 61-62  
 Age specific enrolment rates 66  
 Age specific literacy rates 112  
 Agenda for SMC meeting 52-53  
 Aim of primary education 5  
 Analytical framework 6, 15  
 Annual sports 32-33  
 Area-wise variation in efficiency 87  
 Asian Development Bank 3, 8, 119  
 Attendance of students 76-77

**B**

BANBEIS 9, 18, 22  
 Bangladesh Bureau of Statistics 18, 22  
 Bangladesh Madrasa Education Board 6-7  
 Block allocation 126  
 BRAC Research and Evaluation division 19  
 BRAC-published textbooks 21  
 British curriculum 6

**C**

CAMPE database 7  
 Caretaker government 120  
 Class size 100-102  
 Classification of competencies 96-97  
 Classroom condition 26-27  
 Classroom observation 118  
 Classroom space 30, 40-41  
 Cleanliness in school 29  
 Co-curricular activities 32-33, 100-102, 118  
 Coefficient of efficiency 85-87  
 Competency test 16, 93  
 Completion rate 10, 86-89  
 Components of PEDP II 8-9

Compulsory Primary Education Act 8, 117, 120, 125  
 Concept of quality 4, 117  
 Cub activities 32-33

**D**

Dakar Forum 4  
 Delors Commission 4  
 Development budget 9  
 Difficulty of reach schools 25-26  
 Digital Bangladesh 126  
 Directorate of Primary Education 6, 18, 21-22, 124  
 Directorate of Secondary and Higher Education 6  
 Distance between home and school 72-73  
 Distance between school and upazila 25, 100-102  
 Distribution of students 60-61  
 Domains of education 22, 95  
 Dropout rate 83, 85-86  
 Duration of primary education 6

**E**

Education Commission reports 5  
 Education of SMC members 49-50  
 Education of teachers 34-35, 41-42  
 Education Watch 125  
 Education Watch reports 3  
 EFA global monitoring report 5  
 Electricity in school 27-28  
 ESTEEM 5, 119  
 Ethnicity and enrolment 68  
 Ethnicity of teachers 33  
 External validity 20

**F**

Factors affecting enrolment 73-74  
 Female teachers 33-34  
 Females in SMC 49-50, 53-54  
 Field operations 19  
 Financing primary education 9  
 Fine arts classes 33  
 First generation learners 68

**G**

Gender and education 122-123  
 Gender gap in efficiency 86-87  
 General Education Project 8  
 GO-NGO collaboration 125  
 Government statistics 10-11  
 Gross domestic product 9  
 Gross enrolment ratio 59-60  
 Gross intake ratio 74-76  
 Guardians' participation 100-102

**H**

Heads of institutions 50-51, 54  
 History of schools 25  
 Household food security status 66-67, 100, 102  
 Household survey 16, 18

**I**

IDEAL 5  
 Input-Process-Output 5, 117  
 In-school examinations 10

**J**

Jomtien Conference 4

**K**

Key Performance indicators 5, 9, 20, 117  
 Knowledge level skills 95-96  
 Kudar-Richardson formula 21  
 Kudrat-e-Khuda Commission 8

**L**

Laws relating to primary education 8, 117  
 Learning facilities 31, 118-119  
 Learning to be 4  
 Learning to do 4  
 Learning to know 4  
 Learning to live together 4  
 Limitations of study 21-22  
 Literacy 110  
 Literacy rate 110-112  
 Literate household 113  
 Location of schools 25

**M**

Madrassa education 125  
 Map of Bangladesh 19  
 Mass media for education 125  
 Millennium Development Goals 10, 74, 121  
 Ministry of Education 10  
 Ministry of Primary and Mass Education 125  
 Monitoring 119, 125  
 Multiple Choice Questions 20

**N**

National assessment of pupils 11  
 National Curriculum and Textbook Board 5-7, 20  
 National Education Commission 8  
 Net enrolment rate 10, 64-66, 120  
 Net intake rate 74-76  
 Non-government organization 4, 6  
 Non-formal schools 7, 29, 118-119  
 Non-graded educational institutions 69-70  
 Number of classrooms 26, 40  
 Number of institutions 7  
 Number of students 7  
 Number of teachers 7

**O**

Objectives of primary education 5  
 Occupation of SMC members 50  
 Out-of-school children 70-71

**P**

Parental education and achievement 100  
 Parental education and enrolment 67-69  
 PEDP I 8  
 PEDP II 3, 5, 8, 118-119  
 Performance of students 10, 93-95, 121  
 Physical facilities 26-30, 118  
 Pilot test 20  
 Plan Bangladesh 119  
 Play ground 27-19  
 Political transition 120  
 Pre-primary education 70, 74-75, 125  
 Primary curriculum 7-8  
 Primary cycle completion 84-85

Primary scholarship examination 10-11  
 Primary School Quality Levels 5, 9, 20, 117  
 Primary Schools Performance Monitoring Project 3  
 Private expenditure for education 9  
 Private tutoring 32, 42-43, 100-102, 122  
 Progress in performance 97-98  
 Promotion rate 83  
 Public-private partnership 125

## Q

Qualitative methods 15  
 Quality assessment framework 4  
 Quality of blackboards 31  
 Quantitative methods 15

## R

Real net enrolment rate 70  
 Reasons of out-of-schooling 71-72  
 Regression analysis 101-102, 122  
 Reliability assessment 20  
 Reliability coefficients 21  
 Religion and enrolment 68  
 Religion of teachers 33-34  
 Repetition rate 83  
 Reported net enrolment rate 70  
 Respondents for surveys 19-20  
 Retention in various classes 84-85  
 Revenue budget 9

## S

Sample size 17-18  
 Sampling strategies 17  
 School garden 27-29  
 School libraries 31  
 School managing committee 49-50, 123  
 School structure 26  
 School survey 16-17  
 School type and students background 68-69  
 School type-wise enrolment 62-63  
 Schooling of population 107-108  
 Seating capacity 30, 40-41  
 SMC meeting 51-53  
 Socioeconomic differentials of performance 99-100

State initiatives 8  
 State principles 3  
 Stop-gap arrangement 7, 118  
 Strengths of study 21-22  
 Students' access to media, 100-102  
 Student-teacher ratio 38-39, 42  
 Study instruments 15-17  
 Study objectives 15  
 Subject based training 36-37  
 Subject-wise performance 94-95  
 Supervision 119  
 Survival rate 85, 88

## T

Teacher training 35-36, 100-102, 119  
 Teacher training institute 6, 119  
 Teachers' attendance 37-38  
 Teachers' education 100-102  
 Teaching load 38-39  
 Terminal competencies 16, 93  
 The Constitution 3, 5  
 Trends in GER 60  
 Trends in literacy 112-113  
 Trends in NIR 65  
 Trends in schooling 109-110  
 Types of primary school 7

## U

Understanding level skills 95-96  
 UNESCO 4-5  
 UNICEF 4-5  
 Upabritti 52-53, 120  
 Upazila Education Office 125-126  
 US Department of Education 4-5

## V

Validity assessment 20  
 Vision 2021 126

## W

Water and sanitation 28, 40  
 WCEFA 4  
 Weighting procedure 19



Bangladesh has done reasonably well in terms of improving access and gender parity in primary education. Efficiency and quality with equity are the major challenges of the time. The first three reports under *Education Watch* were devoted to various issues related to quality of education. Reinvestigation of the same a decade later created an opportunity to see the progress over time.

The concept of quality is an encompassing one. There is no upper limit and people's expectation about quality education changes dynamic in nature. In the absence of an agreed frame for quality assessment in Bangladesh, an *Input-Process-Output* model for quality assessment was adopted for this study. This year's *Education Watch* investigated six different types/streams of primary education provisions using a learning achievement test and a household survey and came out with eight key messages and nine policy recommendations. Improvement occurred in various fields of primary education but the progress has been rather slow with no reason for complacency. Inequity and problems related to equivalency by streams are major challenges. Massive improvement is required in classroom teaching and teacher development. 'Business as usual' approach would not help much. 'Vision 2021' or 'Digital Bangladesh' would be difficult to achieve if human resources are not developed properly. A strong political commitment for a major overhaul in the education system is thus required.

**Samir Ranjan Nath** is Research Coordinator and in-charge of education research in the Research and Evaluation Division of BRAC. He has postgraduate degrees in Statistics and Educational Research Methodology from the Universities of Jahangirnagar and Oxford. He has contributed many journal articles, book chapters and books on education, published at home and abroad. He is a major researcher in *Education Watch*.

**A Mushtaque R Chowdhury** is an Associate Director in the Asia Office of the Rockefeller Foundation and a Professor of Columbia University. Formerly, he was a Deputy Executive Director of BRAC, and Dean of BRAC University. He obtained his PhD from University of London and contributed many articles and books in the areas of education, public health, environment, NGOs and poverty alleviation. He is the Convenor of *Education Watch*.

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