Livelihood Struggles of the Chronic Poor in Rural Bangladesh (1)*

by

Pk. Md. Motiur Rahman (Dhaka University)
Noriatsu Matsui (Yamaguchi University)
Yukio Ikemoto (University of Tokyo)

ABSTRACT

This paper is a part of the big research project on the chronic poor in Bangladesh. The sample of 1282 households were selected throughout the country, covering all the rural areas as representative of the poor areas. The survey covers comprehensive items of questions, ranging from economic conditions, demographic characteristics, consumption, food security, debts and assets, status of women and children, nutrition and health conditions.

We try to make analysis from the data about the chronic poor in Bangladesh. The purpose of the research is to do in-depth study of the conditions and behaviours of the four categories of poor and non-poor households in rural Bangladesh. This study is significant because there has been no similar research concentrated on the poor in Bangladesh so far.

^{*}本研究は、平成16年度山口大学経済学部学術振興基金からの研究助成を受けて実施されたものの報告の一部である。ここに記して感謝する。

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Chapter 1. Struggling Chronic Poor

1.1 Introduction

1.1.1 Poverty in Bangladesh

Bangladesh has made some progress in reducing poverty but still faces the reality that about 42 percent of its population live in poverty. The poverty ratio is about 43 percent for rural area and 38 percent for urban area in March 2004 [Bangladesh Bureau of Statistics (2004)]. The corresponding figures in May 1999 were 45 percent, 45 percent and 41 percent, respectively, indicating about 3 percent point fall at national level, 2 percent point in rural, and 3 percent point fall in urban area over the last five years. Of the poor, two out of three are caught in extreme poverty, as measured by direct calorie intake (DCI) method. But because of population growth, Bangladesh entered the new millennium with the same absolute number of poor among its people as ten years earlier [World Bank (2003)]. Significant reduction of poverty required higher level of economic growth with social justice so that it reaches the poor and expands their capabilities and opportunities. It appears that Bangladesh has experienced some reduction of poverty over the last five years, but this aggregate trend does not tell us what happened to individual household. A fall of 3 percent at the national level poverty between 1999 and 2004 does not imply that 3 percent of households that were poor or extreme poor have moved out of poverty, or that 3 percent households have become richer. There are some households who moved out of poverty and some non-poor households who slided into poverty. Thus, study on how people's poverty status changes or does not change, over time is more important rather than studying only the trends of poverty.

Until the 1990s, poverty was considered in absolute term, which is normally measured as the population living below an income level or threshold income.

The measure of income poverty suffers from deficiencies and ignores deprivations of several capabilities and opportunities. More recently, vulnerability and some basic dimensions of deprivation: lack of access to education, lack of access to health, lack of access to public services etc. are considered as the measure of poverty. About 36 percent of the population of Bangladesh lives below the international poverty line US\$ 1/day. Another estimate suggests that about one-third of the poor live in chronic poverty [Chronic Poverty Research Centre (2004-05)].

The main concern of the present study is not to estimate proportion of household in chronic poverty but to analyse the household characteristics of the chronic poor with other categories of dynamic groups such as ascending poor (who were once poor but now above the poverty line), descending non-poor (who were once non-poor but now below the poverty line) and non-poor (who permanently above the poverty line) based on quantitative household survey data. All these categories of poverty can be seen in a dynamic sense followed from the terminology used by the Chronic Poverty Research Centre (CPRC).

1.1.2 Who Are the Chronic Poor?

The distinguishing feature of chronic poor is the long duration poverty, i.e., people who live in chronic poverty remain poor for longer period or all their whole lives. Many of them also inherit poverty and pass on to their children. In a broader sense, chronic poverty refers to greater extent of deprivation and denial of opportunities in education, health, material well-being, access to markets, productive assets, job security, political and social capital and many other invisible phenomena. These phenomena have been examined by one-shot cross-section data obtained from sample survey on 1282 households spread over 32 villages in 6 administrative divisions of the country. Comparison has been made with regard to multi-dimensional aspects between various poor categories

and non-poor households. Attempt has been also made to explain the factors responsible for mobility or immobility of transient and chronic poor households.

1.2 Study Plan and Source of Data

1.2.1 Sampling Design

Considering time and resource constraint and to provide estimation at national level, a sample of 1282 households from 4 categories of economic status such as (i) non-poor, (ii) ascending poor, (iii) descending non-poor, and (iv) chronic poor were selected from the list of household prepared for 32 sample villages. In order to approximately equalize the size of population with other divisions, Chittagong and Sylhet divisions were considered as one division. Similarly Khulna and Barisal divisions were combined and considered as one division.

In order to select least developed district, composite index was estimated on the basis of a few simple indicators such as (a) percentage of landless households, (b) cropping intensity, and (c) percentage of agricultural labour. These indicators were taken to capture at least a part of reality of development of 64 districts of the country. Two least developed districts were then selected from each division and from each selected district 4 unions were selected with probability proportional to size (PPS) method and from each selected union one village was selected by PPS method. The size being the number of household in the union or village. Thus, a total of 32 villages were selected from four divisions for in-depth household survey. The list of selected village by division and district is shown in Appendix A.

A total of 1282 households from the above mentioned four categories were surveyed. At the first stage of the survey, household listing was made in each selected village and the listed households were classified into four categories on the basis of the economic status of the household as rated by the household

heads. The categories are (i) non-poor, (ii) ascending poor, (iii) descending non-poor, and (iv) chronic poor. Household whose per capita monthly income was above the poverty line income of Tk. 594 as estimated by the BBS (2004) were classified as non-poor, while households whose per capita income is always below the poverty line for a long period were classified as "Chronic Poor". Households whose per capita income once above the defined poverty line but now below the poverty line were classifies as descending non-poor. On the contrary, household whose income were below poverty line but now above poverty line were classified as "Ascending Poor".

From the household list of each sample village, 10 households from non-poor category, 7 from ascending poor, 7 from descending non-poor and 16 households from chronic poor category were selected at random for in-depth interview. Information on 50 chronic poor households from two villages of Santal Community in Rajshahi district were also collected. Thus, a total of 1332 household were in our sample. The collected data will be helpful to assess poverty in terms of household expenditure, income, consumption, asset, nutritional status, etc. Distribution of sample households by category is shown in Table 1.1.

Table 1.1 Distribution of Sample Households by Category

Category	No. of Household*	%нн
Non-Poor	320	25.0
Ascending Poor	227	17.7
Descending Non-Poor	225	17.6
Chronic Poor	510	39.8
Total	1282	100.0

^{*}Excluding 50 Santal Households.

1.2.2 Data Collection Instrument

A draft questionnaire was first developed covering the following broad important items in line to the objectives of our study. Information on different aspects of households have been collected in the survey among which the following broad items are important:

- Socio-demographic profile of household
- Educational status of family members
- Health care related information such as anti-natal care (ANC),
 post-natal care (PNC) etc
- Housing facilities
- Income and consumption expenditure
- Household consumer productive assets
- Food consumption expenditure
- Per capita calorie intake
- Non-food expenditure
- Food security
- Household loan/debt
- Durable assets
- Social capital
- Crisis coping strategies
- Status of women
- Nutritional status of children

The draft questionnaire was then pre-tested in order to test its validity with respect to the objectives of the study. Another important aim of pre-testing of questionnaire was to ascertain the time length of interview, suitability of questions and sequence flow of it. Interview for pre-testing of questionnaire was conducted in two spots by the supervisions and field investigators. After

analysis of the pre-test results, the questionnaire was modified and finalized for data collection from the field.

1.2.3 Recruitment and Training of Field Investigators and Supervisors

One Field Coordinator, four field supervisors and 14 investigators were recruited for the purpose of data collection from the field. The field coordinator, all supervisors and field investigators were male and almost all were master degree holder and they had previous experience in field research and data collection. They were first given basic idea about the study and its objectives, the purpose of the survey and its design, and the purpose of different questions. They were also given guidelines for administering the survey, the procedure of data collection and data management in the field. All the field supervisors and investigators were given five days (from 16 December - 22 December 2004) intensive class room lecture and field training in respect of concept of different questions set in the questionnaires, administering of questionnaires and other aspects of the field work. During training, the Coordinator was present and took active part in training classes and explained the purpose of the survey.

1.2.4 Field Operation and Administering of Questionnaire

Data collection from the field was conducted over a period of one month beginning from 23rd December 2004. The field investigators and supervisors were sent to pre-selected villages. The list of villages was prepared and given from Dhaka for conducting field survey and collecting information from the four categories of respondents.

1.2.5 Inspection and Supervision of Field Work for Quality Control

The Team Leader and the Field Coordinator were in constant touch with the field supervisors and investigators so that they could obtain clarification and instruction on the concepts, definition and difficulties encountered in carrying out the field work under the actual operational condition. The Team Leader undertook monitoring of field survey activities in some selected places to oversee the survey activities and to ensure quality of collected information. The Coordinator also monitored the field work and took active part in collecting information from the field.

1.2.6 Method of Data Collection

Personal interview approach was adopted for collection of primary data. This method relates to the collection of data directly from the respondents. The field investigators personally contacted the respondents and obtained desired information by explaining the objectives of the study to the respondents. Some data, especially, those relating to soci-economic conditions, household characteristics, etc. were collected through observational approach as far as possible.

1.2.7 Data Management and Editing of Questionnaire

The data management activities included registration of the questionnaire, editing of questionnaires, data entry, processing and analysis. As soon as the filled in questionnaires were received from the field, the questionnaires were recorded in a registration book which noted identification numbers. The registration of questionnaires facilitates in storing and handleing of the questionnaires during the data processing stage. A research officer of the consulting firm was assigned to register, store and maintain the questionnaires. Each questionnaire was edited before entry into the computer. Editing of questionnaires was undertaken in order to ensure that the questionnaires were accurately and completely filled out by the field investigators and were consistent with the responses. The field coordinator oversaw the editing process.

1.2.8 Data Processing and Analysis

The data processing involved two important steps. The first step was to categorize the individual information and the second step was to allocate individual answers to them. The set of coding frames covering all the information was extracted from the questionnaires. Another step of data processing was to enter the data into computer using the software designed for this purpose, and to obtain required output by running the computer programme assigned by the consultant. Once the edited data were entered into computer, the data were put together in pre-designed one-way, two-way and multi-way tables and required statistical analysis was performed.

Chapter 2

General Demographic Characteristics

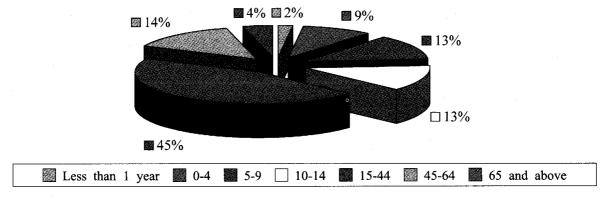
2.1 Age and Sex Composition of Household Members

As the sample size is very small (1282 households in 32 villages), the population profile may not be strictly comparable with national population data compiled by the Bangladesh Bureau of Statistics (BBS). However, a small baseline survey conducted in 32 villages on 1282 households of four categories gives a total of 6397 households members. Of the total household members, about 2397 (37.5%) are children aged 14 years and below of whom 134 (2.1%) are infants aged 12 months or below. On the contrary, the aging population aged 65 years and more is found to be 4.2 percent, while the economically active population (persons aged 15 years to 64 years) is observed to be 58.8 percent (Table 2.1).

Table 2.1	Percentage	Distribution	of	Population	by	Age	Group	
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Age Group	Population	% of Total Population
Less than 1 year	134	2.1
0-4	574	9.0
5-9	831	13.0
10-14	858	13.4
15-44	2824	44.1
45-64	906	14.2
65 and above	270	4.2
Total	6397	100.0

Figure 2.1 Percentage Distribution of Population by Age Group



The demographic dependency ratio (DDR) of a household is one of the very important factors to get involved in economic activities and it is estimated at 72.0 percent for the overall sample while it is 54.2 percent for non-poor households, 70.0 percent for ascending poor, 69.4 percent for descending non-poor and 80.0 percent for chronic poor households implying that the burden of inactive children and old aged people are much more in chronic poor households (Table 2.2).

Age group in years		n-Poor =320	P	ending Poor =227	Nor	ending n-Poor =225	Chronic Poor N=510		Total N=1282	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-4	78	94	63	59	65	70	134	145	340	368
5-9	87	103	86	68	75	66	176	170	424	407
10-14	106	111	100	83	88	63	157	150	451	407
15-44	462	378	238	252	280	251	476	487	1456	1368
45-64	158	138	94	69	83	66	158	140	493	413
65 & above	66	31	35	14	24	24	44	33	168	102
Total	956	855	616	545	615	540	1145	1125	3332	3065
Sex ratio*		112		113	1	114	1	102]	109
Dependency ratio**	54	1.2%	70	0.0%	69	0.4%	80	0.0%	72	2.0%

Table 2.2 Sample Household Population by Age, Sex and Economic Status

**DDR =
$$\frac{Population\ below\ 15\ years + Population\ 65^+}{Population\ 15-64\ years} \times 100$$

The ratio of men to women reflects the gender balance or imbalance depending on the value of sex-ratio and it is calculated at 112 percent in non-poor households, 113 percent in ascending poor, 114 percent in descending non-poor and 102 percent in chronic poor households, indicating that there are fewer male members in chronic poor households than those of other categories. This means that the male earning members in chronic poor households are much lower which resulted in lower household income.

The vast majority of sample households are Muslim (89.0%), a few are Hindu (7.4%) and only 4.0 percent are Buddhist (Table 2.3).

^{*}Sex ratio = $\frac{M}{F} \times 100$

Table 2.3 Distribution of Household by Religion and Economic Status

Economic Status	Religion of the Household Head						
Economic Status	Muslim	Hindu	Buddhist	Total			
Non-Poor	287	20	13	320			
	(89.7)	(6.3)	(4.1)	(100.0)			
Ascending Poor	199	17	11	227			
	(87.7)	(7.5)	(4.8)	(100.0)			
Descending Non-Poor	198	19	8	225			
	(88.0)	(8.4)	(3.6)	(100.0)			
Chronic Poor	455	39	16	510			
	(89.2)	(7.6)	(3.1)	(100.0)			
Total	1139	95	48	1282			
	(88.8)	(7.4)	(3.7)	(100.0)			

2.2 Gender of Head of Household and Poverty

There are 1181 (92.1%) male-headed and 101 (7.9%) female-headed households in the sample. The female-headed households, have only 28 percent male members of productive age (15-64 years) and majority of the female-headed households are chronic poor (57.4%), while little more than one-third of the male-headed households are chronic poor (Table 2.4).

Table 2.4 Distribution of Household Head by Sex and Economic Status

Economic Status	Sex of Hou	Total	
Economic Status	Male	Female	10(a)
Non-Poor	303	17	320
	94.7%	5.3%	100.0%
	25.7%	16.8%	25.0%
Ascending Poor	213	14	227
	93.8%	6.2%	100.0%
	18.0%	13.9%	17.7%
Descending Non-Poor	213	12	225
	94.7%	5.3%	100.0%
	18.0%	17.9%	17.6%
Chronic Poor	452	58	510
	88.6%	11.4%	100.0%
	38.3%	57.4%	39.8%
Total	1181	101	1282
	9.1%	7.9%	100.0%
	100.0%	100.0%	100.0%

Among the male-headed households, about 26 percent are non-poor, 18 percent are ascending poor, 18 percent are descending non-poor and 38 percent are chronic poor. The respective figure for female-headed household is 17 percent, 14 percent, 18 percent and 57 percent indicating that majority of the female-headed households are chronic poor. Among the female-headed households majority of them are widowed (about 47 % of all female head) and about 10 percent of them are divorced or separated (Table 2.5). The female-headed households have about 48 percent males of reproductive age group (15-44 years), while this figure for male-headed is 52 percent indicating that there are more active people in male-headed households compared to female-headed households. The social and economic position of poor women in rural areas are more vulnerable when they reach old age and/or widowed and they receive less advantage of economic development and public services. These groups (widowed or divorced or separated) have a considerably higher incidence of poverty relative to others since they have less access to resources, services and employment. In rural society, the widows lead a very isolated, powerless and oppressed lives in the society. The society itself makes widows isolated from other members of the family and expects especially behavioral pattern, role and functions from the widows. The widows also experience social isolation, lack of social capital, aimlessness, vulnerability and marginality. As a result they are more easily exposed to poverty.

Table 2.5 Marital Status of Household Head by Sex

Manital Status	Sex of Hou	Total	
Marital Status	Male	Female	Total
Married	1134 (96.0)	41 (40.6)	1175 (91.7)
Unmarried	35 (3.0)	1 (1.0)	36 (2.8)
Widow/Widower	12 (1.0)	47 (46.5)	59 (4.6)
Abandoned/Separated	_	10 (9.9)	10 (0.8)
Divorced	· <u>—</u>	(2.0)	(0.2)
Total	1181 (100.0)	101 (100.0)	1282 (100.0)

2.3 Household Size

The overall average household size of the sample population is 5.0. Non-Poor households have the largest size of household with a mean member of 5.66, while Chronic Poor households has the smallest size of 4.45 persons. The average household size of ascending poor and descending non-poor households is 5.11 and 5.13 respectively (Table 2.6). Female-headed households are smaller in size (3.5 mean of member) compared to male-headed households (mean of 5.1 members). The larger size of non-poor households may be due to the fact that many of these households are joint families, while decomposition of households are frequently occurred among many of the chronic poor households.

Economic Status Mean N Sts. Deviation Non-Poor 5.66 320 2.24 Ascending Poor 5.11 227 2.03 Descending Non-Poor 5.13 225 1.88 Chronic Poor 4.45 510 1.83 **Total** 4.99 1282 2.04

Table 2.6 Average Household Size by Economic Status.

2.4 Average Household Size by Gender of Household Head

There are 1181 male headed and 101 female-headed households in the sample survey. The mean household size varies with the variation of gender of households head. The male-headed households have the largest household size with a mean size of 5.12 members, while the female-headed household have a mean size of 3.5 (P<0.05). The average household size is positively correlated with economic status. The female-headed mean is smaller because many of these households is nuclear family, while non-poor household means are larger because many of these households are found to maintain joint families.

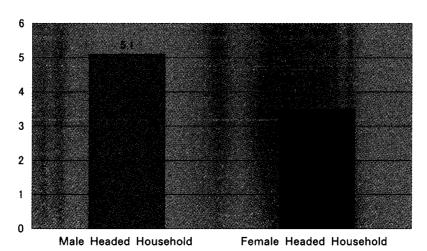


Figure 2.2 Average Household Size by Gender of Household Head

Gender of Head of Household

Chapter 3

Human Capital of the Chronic Poor

3.1 Introduction

Human capital may be defined as the knowledge, skills, long and healthy life and competencies of individuals that facilitate the creation of personal, social and economic well-being. Amartya Sen refers it as means which enable people to achieve functionings. He conceptualised poverty as the capability deprivation which focus on the unfreedom to achieve the alternative functioning combinations from which one can choose (Sen, 1999, p.75). For instance, being adequately nourished, leading a longer and healthy life, being a literate, leading a better and wealthy life (Gordon and Spicker, 1999). The main capital for the poor in Bangladesh is their labour. The skill and quality of labour is important for thier mobility and higher income earning opportunity. Basic education and healthy life are important dimensions of human capital. Therefore, there is a need for higher human capital for poverty alleviation and the poor can be benefited from the government investment on education and health. government policies and higher budgetary allocations on education and health are essential for increasing human capital of the poor through increasing their literacy, skill and healthy life. In spite of considerable rhetoric concerning the importance of human capital development in particular, government efforts in this area, as measured by the share of development budgets on education and health sectors, appear undistinguished, certainly far from reflecting any sense of priority. Actual development expenditure in education ranges between 12 to 14 percent of GDP in recent years. This figure for health and family welfare stood at 6 to 8 percent. Although the share of resource allocation on education is 12 to 14 percent of the total GDP allocation, the public expenditure amounts to only 1.5 percent of GDP (Table 3.1).

Table 3.1 Resource Allocation for Education and Health and Family Welfare as Percentage of GDP.

Year	Education and Religion	Health and Family Welfare
1999-2000	12.8	8.3
2000-2001	13.3	7.3
2001-2002	14.2	7.9
2002-2003	13.8	6.7
2003-2004	12.8	10.0

Source: Bangladesh Economic Review, 2004

Public spending particularly on primary education and health care in rural areas can benefit the poor most but the chronically poor people fail to derive that benefit. As a result multiple capability deprivations, such as illiteracy, poor skill, bad health, inadequate nutrition etc. are found among the chronic poor.

3.2 Literacy and Education

Illiteracy remains one of the main social problems particularly in rural Bangladesh. In spite of having considerable progress in literacy rate during the last decades, it is still remain low, particularly for females. Generally speaking, the main obstacle to enrolment is the inability of parents to afford sending their children to school due to poverty. Although school is nominally free, school attendance involves both actual expenses such as purchase of books, school dress, fees etc. and opportunity costs as parents must forgo children's contribution to the household economy. But education is essential for human capital development and expanding human capabilities. However, there are distinct disparity in literacy and level of education among different categories of households. In chronic poor households, about 52 percent of the members aged 7 years and above are illiterate and have no formal education, 36 percent have primary (1-5 grades), 7 percent have junior secondary (6-8 grades) and only 3 percent of them have secondary level (9-10 grades) of education. Very

few individuals have SSC and higher level of education. On the contrary, about 78 percent of the members from non-poor households are literate among which about 29 percent have primary, 17 percent have junior secondary, 10 percent have secondary, 11 percent have SSC, 3 percent have HSC and 7 percent have degree and above level of education. Literacy and education level of individuals from ascending poor and descending non-poor households fall between the two extreme groups (Table 3.2).

Table 3.2 Education Level of Household Members of Age 7 Years and Above by Economic Status

Educational					
Level	Non-Poor	Ascending Poor	Descending Non-Poor	Chronic Poor	Total
Illiterate	360	332	368	961	2021
	(23.0)	(23.6)	(38.2)	(52.2)	(37.3)
Grade I-V	458	396	337	669	1860
	(29.3)	(40.1)	(35.0)	(36.3)	(34.7)
Grade VI-VIII	272	131	123	137	663
	(17.4)	(13.3)	(12.8)	(7.4)	(12.4)
Grade IX-X	160	73	70	57	360
	(10.2)	(7.4)	(7.3)	(3.1)	(6.7)
SSC	167	39	41	11	258
	(10.7)	(3.9)	(4.3)	(0.6)	(4.8)
HSC	44 (2.8)	(0.7)	10 (1.0)	5 (0.3)	66 (1.2)
Degree	104 (6.6)	10 (1.0)	15 (1.6)	(0.1)	130 (2.4)
Total	1565	988	964	1841	5358
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Available evidence thus indicates a high degree of inequality in level of education between economic classes. There exist considerable differentials (P<0.05) in deprivation in education between non-poor and chronic poor household members. While the provisional results from population census 2001 on literacy rate showed 45.3 percent for both sex, 49.6 percent for male and 40.8 percent for female, our estimate of literacy rate is much higher compared to census figure. But the results on education level from Poverty Monitoring

Survey done by the BBS are very close to our estimates.

3.3 Adult Education

There exists a considerable socio-economic differentials in adult education. It is seen from Table 3.3 that about 57.8 percent of male and 68.9 of female adult members in chronic poor households are illiterate and have no formal education, while it is only 18.2 percent for male and 34.5 percent for female in non-poor household. There is a large inequality in education level across economic class categories. More than 42 percent of the male individuals aged 15 years and above from chronic poor household have some education among which about 28 percent have only primary level of education. This figure for female members is 31.0 percent and 20.0 percent, respectively.

Table 3.3 Education Level of Adult Household Members (age 15+) by Economic Status

	% of adult members							
Educational Level	Non-Poor		Ascending Poor		Descending Non-Poor		Chronic Poor	
	Male	Female	Male	Female	Male	Female	Male	Female
Illiterate	18.2	34.5	35.3	46.4	38.0	52.9	57.8	68.9
Grade- I-V	20.4	20.0	29.0	28.1	26.6	21.2	27.7	20.1
Grade VI-VIII	14.5	17.8	14.4	11.4	12.8	12.6	7.9	7.5
Grade IX-X	12.8	12.5	10.1	9.9	9.7	8.3	4.9	2.7
SSC	16.7	9.7	7.4	3.6	7.3	3.8	1.2	0.5
HSC	5.0	1.8	1.4	0.6	2.0	0.6	0.4	0.3
Degree & above	12.4	3.7	2.4	-	3.6	0.6	0.1	•
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Illiteracy rates vary from 35.3 percent for male and 46.4 percent for female in ascending poor, while it is 38.0 percent and 52.9 percent in descending non-poor household. There is a large gender disparity in adult literacy. Very few members of chronic poor household have higher degree and only 1.2 percent male and 0.5 percent female members passed the secondary school

certificate (SSC) examination. On the contrary, 16.7 percent of the male and 12.5 percent of the female members in non-poor households passed SSC.

3.4 Gender and Year of Schooling

Average year of schooling varies significantly by economic status of household and it ranges from 4.3 for the chronic poor to 6.78 for non-poor households (P<0.05). This indicates that some of the members of the chronic poor households attended schools but many of them did not complete primary level and thus they tend to have low level of education. There exists a gender disparities in year of schooling across the household categories (Table 3.4). The average year of schooling for ascending poor and descending non-poor households is found to be 5.3 and 5.6 years respectively indicating that the family members of these categories have higher level of education than the members of the chronic poor households. A significantly higher proportion of male household members are literate than female members. Lack of literate skill in chronic poor and female could be a reason for their limited access to essential services and resources.

Table 3.4 Average Year of School of Household Members (7+ years) by Economic Status

Economic Status	Sex of the HH members	Mean	N	Std. Deviation
Non-Poor	Male	7.39	856	4.71
	Female	6.07	737	5.01
	Total	6.78	1593	4.90
Ascending Poor	Male	5.48	535	5.13
	Female	5.09	478	5.26
	Total	5.30	1013	5.20
Descending Non-Poor	Male Female Total	5.82 5.27 5.57	532 455 987	5.37 5.69 5.53
Chronic Poor	Male	4.82	969	5.86
	Female	3.76	942	5.41
	Total	4.30	1911	5.67
Total	Male	5.89	2892	5.42
	Female	4.92	2612	5.40
	Total	5.43	5504	5.43

Somewhat surprisingly, the data do not show any significant difference in average year of school between male head (6.75%) and female head (6.39%) though this in turn could be because of adult and non-formal education programs particularly in rural areas.

3.5 Year of Schooling by Gender and Age

It is interesting to note that the average year of schooling between male and female varies with the variation of age group. The variation is the highest for the elderly population (age 65 years and above) while it is the lowest for the younger age group 6-14 years. The average year of schooling for male is 2.83 for age group 6-14 years, 7.23 for 15-24 years, 7.90 for 25-34 years, 7.49 for 35-44 years, 6.38 for 45-54 years, 5.38 for 55-64 years and 5.20 for 65 years and above. This figure for female is 2.89, 6.80, 6.57, 5.76, 4.74, 2.73 and 2.25 respectively (Table 3.5). Thus there exists an intrinsic relationship between population aging and average year of schooling. The elderly female population have the lowest year of schooling (2.25), while for male it is more than double (5.2) and the people of productive age group (age 15-54 years) have the highest average year of schooling.

Table 3.5 Average Year of School by Age and Sex

Age group	Average year of schooling			
(in year)	Male	Female		
6-14	2.83	2.89		
15-24	7.23	6.80		
25-34	7.90	6.57		
35-44	7.49	5.76		
45-54	6.38	4.75		
55-64	5.83	2.73		
65+	5.20	2.25		

3.6 Uneven Access to Education

It is observed that average year of schooling varies with the variation of economic status. The highest year of schooling (6.8) is observed among the non-poor household members, while it is the lowest (4.4) among the number of chronic poor household. The average year of schooling is 5.4 for descending non-poor and 5.7 for ascending poor household. The year of schooling is more evenly distributed among the non-poor household members which signifies that all members of age 7 years and above have some sort of education. The variation in year of schooling is, however, much more pronounced among the members of chronic poor households. This means many children in chronic poor households remain out of school and join in the labour market to contribute to their household economy. Inequality in average year of schooling as measured by Gini index for different household categories is shown in Table 3.6.

Table 3.6 Average Year of School and its Inequality by Economic Status.

Household Status	Average Year of Schooling	Gini Index
Non-Poor	6.8	0.3868
Ascending Poor	5.7	0.5203
Descending Non-Poor	5.4	0.5086
Chronic Poor	4.4	0.6354
Overall	5.5	0.5226

The inequality in year of schooling (0.5226) among the rural household members of different categories is much more higher than the inequality in income distribution (0.428). Thus showing greater inequality in year of schooling than in income distribution. In other words, education of individuals deviates more from a perfectly equal distribution than the deviation of income of the individuals. The highest value of Gini index (0.6354) for chronic poor signifies that a few number of persons have education and all others have no

or less education.

3.7 Private Spending on Education

Besides public expenditure there are some private expenditure which are spent by the head of the household for purchase of books, school dress, fees, stationeries, private tutor etc. When examined by economic status, the amount of expenditure on education for all categories increases with the increase of economic status (Table 3.7). The annual investment on education by the non-poor household is the highest, while it is the lowest for the chronically poor households. For the non-poor, investment on education is estimated at an annual average of Tk.2502.5. Ascending poor households spent annually Tk.1337.0 and descending non-poor households spent Tk.1290.0 in the last year. This figure for chronic poor households is only Tk.653 which is only one-fourth of amount spent by the non-poor households.

Table 3.7 Average Annual Expenditure on Education by Economic Status

Economic Status	Average Investment (in Tk.)	Investment as % of Total Assets	
Non-Poor	2502.5	2.6	
Ascending Poor	1337.0	4.4	
Descending Non-Poor	1289.6	3.5	
Chronic Poor	653.0	6.7	

Parents in non-poor households concentrate more resources on the education for their children and there is a greater disparity between non-poor and chronic poor. Although chronic poor households spent the lowest amount, the relative amount of expenditure (expenditure/total asset value) is the highest (6.7%) among all categories of households. On the otherhand, the non-poor households have spent almost four times higher than the chronic poor do. But the relative amount of expenditure on education is the lowest (2.6%) for non-poor

households.

3.8 Deprivation in Education

Deprivation in education means lack of education relative to the local community to which individual belongs or live. It is measured as percentage of primary and secondary school aged children who are out of school. The children of 6-10 years and 11-15 years are considered as primary and secondary school-aged population. There were 860 primary school-aged children in the sample 1282 households among which 200 were in non-poor households, 164 in ascending poor, 146 in descending non-poor and 350 children in chronic poor households. Of the total children 813 (95%) were in the primary school, while 47 (5%) were out of schools. It is interesting to note that 36 (77%) children out of 47 who were out of school were from chronic poor households indicating that the highest proportion of children from chronic poor households are being deprived of primary education (Table 3.8).

Table 3.8 Primary School-Age (6-10 Years) Children by Schooling and Economic Status

Economic Status	School-Age Children Attend	Total	
	Attend Don't Attend		
Non-Poor	199 (99.5)	1 (0.5)	200 (100.0)
Ascending Poor	160 (97.6)	4 (2.4)	164 (100.0)
Descending Non-Poor	140 (95.9)	6 (4.1)	146 (100.0)
Chronic Poor	314 (89.7)	36 (10.3)	350 (100.0)
Total	813 (94.5)	47 (5.5)	860 (100.0)

The number of secondary school-aged (11-15 years) children was 825 among which 211 were from non-poor households, 181 from ascending poor, 145 from

descending non-poor and 288 from chronic poor households. Of the total children, 94 (11.4%) were out of school. Like primary, large number 61 (64.9%) of the total out of school children were from chronic poor households. This figure was 12 (13%) for non-poor, 11 (12%) for ascending poor and 10 (10.6%) for descending poor households (Table 3.9). Thus deprivation in secondary education is also the highest for the children in chronic poor households, while it is the lowest in descending non-poor, followed by ascending poor and non-poor households. It is interesting to note that boys' and girls' enrollment rates are quite similar in primary level education both in urban and rural areas, but the pattern of enrollment of girls' exceeding that of boys' in secondary level in all areas. This fact suggests the positive impact of Female Secondary Stipend Program (FSSP) on female children. Although the gender parity in enrollment has been achieved in primary level a large proportion of boys and girls discontinue school after completion of primary level education. The stipend program also does not help particularly the chronic poor households, who need their children's labour once they reach their teens.

Table 3.9 Secondary School-Age (11-15 Years) Children by Economic and Schooling Status

Economic Status	School-Age School Attend	Total		
	Attend	Don't Attend		
Non-Poor	199(94.3)	12(5.7)	211(100.0)	
Ascending Poor	170(93.9)	11(6.1)	181(100.0)	
Descending Non-Poor	135(93.1)	10(6.2)	145(100.0)	
Chronic Poor	227(78.8)	61(21.2)	288(100.0)	
Total	731(88.6)	94(11.4)	825(100.0)	

Deprivation of children in primary and secondary education levels by national, urban and rural areas may be seen in Table 3.10.

Table 3.10 Percentage of Children Currently Enrolled in School in Bangladesh

	% of Children aged 6-10 Years			% of Children aged 11-15 Years		
	National	Rural	Urban	National	Rural	Urban
Bangladesh	80	80	81	64	63	67
Boys	81	80	81	62	61	67
Girls	80	80	80	66	66	68

Source: World Bank and Asian Development Bank, 2003

It appears that about 20 percent of primary school-age children is still out of school. In secondary level it is around 36 percent. This entails a great loss of human potential to the future of the nation.

3.9 Poverty of Opportunity Index (POPI) in Education

Poverty of opportunity in education in a broader sense refers to a denial of opportunity in education or lack of access to basic education. The percentage of population deprived of education is measured as an weighted average of two variables such as

- (i) Percentage of illiterate adults, and
- (ii) Percentage of primary school-age children who are out of school

These two variables have been considered to capture both present and future deprivation (UNDP, 1997). The weight is again based on the ratio of the adult population to the primary school-age population. These variables have been estimated from the sample households for four economic statuses and shown in Table 3.11.

Table 3.11 Description of Variables Used in Estimating Poverty of Opportunity Index (POPI) in Education

Economic Status	Adult Population	Adult Illiteracy rate (%)	Primary School-age Children (6-10 years)	% of out of School Children	Weight= Adult Population/ Primary School-age Population
Non-Poor	1226	25.5	200	0.5	6.13
Ascending Poor	700	40.6	164	2.4	4.26
Descending Non-Poor	724	45.1	146	4.1	5.00
Chronic Poor	1332	63.2	350	10.3	3.81
Total	3982	44.3	860	5.5	4.63

To arrive at the POPI value in education, the weighted average of adult illiteracy rate and out-of-school children as a percentage of primary school-age population was calculated. The weight being the ratio of the adult population to the primary school-age population. The estimated values of POPI in education for four categories of households are shown in Table 3.12.

Table 3.12 Estimated value of POPI in Education by Economic Status

Economic Status	Value of POPI (%)		
Non-Poor	22.0		
Ascending Poor	33.3		
Descending Non-Poor	38.3		
Chronic Poor	50.0		
Overall	37.4		

It appears from Table 3.12 that there is a wide variation in deprivations in education among the population of different categories of household. A little more than one-fifth (22%) of the population of non-poor households were deprived of opportunities in education, while this figure for chronic poor is 50.0 percent. This means half of the population of the chronic poor households were deprived of opportunity in education. The deprivations of population in ascending poor and descending non-poor households were 33 percent and 38

percent respectively (Figure-3.2). The overall deprivation in education in rural areas is 37 percent. High deprivation in education among the chronically poor people means that there is a high capability deprivation (ill-health, lack of skills etc.) and thus there are few opportunities for them to raise their incomes and assets.

APPENDIX A. LIST OF SAMPLE VILLAGES

Name of Division	Name of District	Name of Upazila	Name of Union	Name of Village	
Barisal	Borguna	Amtoli	Amtoli	Mohesdana	
and		Amtoli	Kukua	Purba Kukua	
Khulna		Betagi	Kazerbad	Kumra Khali	
		Sadar	Dhalua	Kadamtala	
	Satkhira	Kolaroa	Jojikhali	Paikpara	
		Assasuni	Assasuni	Shitalpur	
		Sadar Balli		Mukandapur	
	,	Shamnagar	Munshigonj	Munshigonj	
Chittagong	Khagrachari	Mati Ranga	Guimara	Bazar Area	
and Sylhet		Panchari	Panchari	Madumangalpara	
		Dighinala	Menung	Uttar Rashknagar	
		Sadar	Golabari	Golabari	
	Sunamgonj	Derai	Karimpur	Banglartik	
		Sadar	Gourarang	Kamartuk	
		Dowara Bazar	Uttar Purba Dowara Bazar	Lastaburgaon	
		Biswamar Pur	Palash	Haiabari	
Dhaka	Madaripur	Sadar	Dhurail	Khalashikandi	
		Shipchar	Charjanajat	Fazlu Sarkar Kandi	
		Rajoir	Bandar Pasha	Patankandi	
		Kalkini	Balligram	Paschim Balligram	
	Sherpur	Nalitabari	Baghber Kalas Par	Gaglajani	
	:	Jhainaigati	Jhainagati	Jhainaigati	
		Sreebardi	Behula	Cakbandi	
		Sadar	Bhatsala	Sapmari	
Rajshahi	Panchagarh	Boda	Kajal Dighi Kaligonj	Auguntala	
		Atueari	Dhamor	Dhamor	
		Debigonj	Saladanga	Shikarpur	
		Sadar	Magura	Azadpur	
	Kurigram	Roumari	Roumari	Natun Para	
		Bhurungamari	Bhurungamari	Dakshimpara	
		Nagshueari	Nagshueari	Nasgshueari	
		Phulbari	Phulbari	Kabir Mamud	
6	8	32	32	32	

APPENDIX B. Voices of the Silenced Poor

Mr. Majid Mia:

I am deprived of my house for 30 years. I have no land. My brother has taken all the land in his own name by cheating me. Now what will I do being landless! I have been transferred to a street beggar from good economic condition. For doing anything I need money and land. But I am empty. At the age of 70 years I have to do work sometimes as labour. Sometimes my wife has to do work to other's house for food. Due to poverty I could not provide education to my son. As a result he has to do work as day labour from his early age. If government would give at least old allowance, then I and my wife could get relief from this distressed life. I wouldn't do work as labour. I am weak physically. Sometimes I think if my son would separate away after marriage and if I could not work further due to lack of energy then how we will pass days. In this way we are passing days and we shall have to continue our life in this way.

Begum:

I am an orphan woman refused by husband. I have no child. Only one child was born. But he died. Brothers and sisters are busy with their own families. Father has sold all the wealth during his lifetime. That's why I have to stay in other's place by making a small hut. I have to sleep on the floor. I have to earn by working in other's house. And sometimes when I haven't any work then I can't eat anymore. When I feel sick then I pass my day without food. I have no VGD card, widow allowance. Chairman does not give it to me. They want illegal gratification. If I give illegal gratification, they will provide those facilities. But where will I get the money for braving! That's why I have no those facilities for livelihood. I have to pass my days with so much sorrow. I am living by eating sometimes one time, sometimes two times a day.

Rina Begum:

My husband has died at my early age keeping two children with me. I was thinking how to survive with children. Then I started working as labour. When I work I can arrange food. But when I can't do work, then I can't arrange food. I have come in this world with great sorrow.

Morium Begum:

I am refused by my husband. For want of family needs, I have given one of my daughters to other's house where she get food three times and get cloth in line of her hard work. My son is a day labourer. But the boy of this age is supposed to go to school. During lean period there is no work, especially in the month of May and June. We can't eat two times a day and three times are far. The cost of living is very high. We can't fulfill our basic needs with our income. I have given marriage one of daughters in her early age, because I could not know how I give her food and clothes! And no one wants to marry without dowry. That's why I am motivated for giving marriage of my daughter by begging door to door in this society and selling my only asset cow. If my son would get good job then my sorrow would remove. I myself do work to other's house. The amount of my money is so little that I cannot maintain myself. Thus somehow we are living and passing the days.

Nur Nobi, (Father's name: Late Samad Ali):

The respondent Nur Nobi has no own house and land. She is staying in other's place. She has no son and there is none to earn income. She works as labour to other's house. In this way she somehow passing her days. She had three daughters, she gave them marriage. Her younger daughter with her daughter has come back and stay with her. Sometime her husband sends some money from Dhaka. She does not get any help from any government or private organization. If she goes to Chairman or member they say now there is no rice and flour, come later. She is old now and that's why she can't do much work for her livelihood.

Golam Mostafa:

My grand father had much land. My father has sold all of them. Now I have got very small amount of property. It is not sufficient for livelihood. I am illiterate so I can't do other works. In the mean time I have spent much money for the purpose of marriage of my daughter. Being poor and landless, I can't get any way to live.

Hamida Begum:

Hamida Begum was abandoned by her husband. She has no son. She has nothing except a house. She has none to earn income. She herself earn by her

labour. When she has work she can eat and when she has no work she can't eat one time in a day. Moreover her daughter Myful and grand daughter live with her. Daughter's husband also refused her and grand daughter. Her husband has driven away with her daughter. She doesn't get any government relief. Her husband has gone away and got married to another woman. She is passing her days with great sorrow with her daughter and grand daughter.

Mr. Md. Zulhas:

I have no own house to live. I live in other's house. If I could work then I can eat otherwise not. I don't get any help from government. I don't get any food of relief. Chairman and Members give relief to their own relatives. During the period of Eid-Ul-Fitar I got 20 kg of wheat after several requests. No one gives loan to me because I have no house. I have no thick clothes, so I can't sleep at night in winter.

Bina Pani:

I have been old still I have to earn by doing work to other's house. My son can't bear cost properly by the money that he earns so he does give me nothing. I am passing my days with great difficulty. When I get sick then I pass my days without food and medication. Who will give me food? During the month of July and August I don't get any work. Then I pass my days by almost fasting. I live in so much sorrow.

Sonaban:

Sonaban is a widow woman. She has no son. She has only one daughter. At present her daughter is also widow with three children and living with her mother. Sonaban has no wealth except a house. Her daughter "Dulali Begum" works as labour and she got rice by VGD card. With these they are passing their days somehow. Dulali has two daughters. She has given marriage one of them. At the time of settlement she agreed to give Tk. 18,000 as dowry. But she could give only Tk. 6,000 and still remain Tk. 12,000. They have no sufficient wealth for sale so they are unable to arrange remaining money. They are passing their days with great sorrow. When they have work they get food to eat otherwise not.

Mosharraf Hossain:

What I tell about the story of my sorrow? By working all day I earn only Tk. 50/60. I have big family. It is impossible to bear all costs with this small amount of money. I can't afford all expenditure well the money of food. I can't bear the cost of education of my younger daughter. Being father I have failed to bear the cost of education of my son. What can be a greater sorrow than this. For my inability my son couldn't continue his study. Now he is doing work in other's house. I have no money, land and any education. So I work as labour. Thus my life and future life of my children is dark.

Akkas Ali:

I have no bend of my own and sufficient money to live. I have to earn by hard work. Which I get by, doing hard work is not sufficient for my livelihood. I have no good work to do. I have no sufficient money for business. I am illiterate and landless. Sometimes I think if any time I feel in great illness then what will happen to me.

Mrs. Hafizun Bewa:

I have been born and grown up in poverty. After marriage situation has not changed. After the death of my husband I am in great distress. Now I am living somehow by hand to mouth. My two daughters are being grown up. I am thinking how I will arrange their marriages and how it is impossible to arrange how I will arrange their marriage and now it is impossible to arrange good marriage without dowry. I am in undesirable sorrow.

Mrs. Anwora Khatun:

I was born in a poor family and also grown up in poverty. I also got married in a poor family. My husband has nothing except a house. My husband is ill and he can't do work. I don't get any help from government.

Mrs. Laily Khatun:

The number of my daughter is large. I can't afford their dowry and as a result can't give their marriage. I have given marriage of my elder daughter with the help of small amount of dowry but they want more. They physically torture on my daughter. I don't get any government relief. The Union Council Chairmen and Member do not give any help.

Mrs. Aysha Begum:

My father had many properties. But all of them were drawn under the river water. As a result I have been poor. I myself am illiterate. That's why I don't get any good job anywhere. So I have to do labour work.

Mrs. Rahima Khatun:

My father and grandfather had no landed properties. They could not give me education. I got married immediate after grown up. I beat the cost of my family by doing labour work. Maybe in this way our life will pass. I can't do any progress since I have no property and money.

Past name : Chirala Present name : Mrs. Halima Khatun

Village : Zinigoti Union : Zinigoti Upazila : Zinigoti District : Sherpur

Chirala is living at Zinigoti after her birth. Her father and mother died during her childhood. She has no relatives and well-wisher. Her parents were Christians. But in the absence of her parents she converted in Muslim. She got married with a Muslim. But it is a matter of sorrow that after a few years her husband died keeping two sons, and one daughter. At last she has to bear the cost of her family with her children with great distress. Some days she gave her labour to other's house for taking care of her children. In this way her children started to grow up. But due to neighbour's pressure she go to married second time. After the second marriage she gave birth another daughter. Due to her second marriage she refuse her son Rata. Her second husband is bundle the almost do nothing. So again Chirala has to do work day and night to bear the family cost. At present one of her daughter is studying in Secondary School. But Chirala can't give her food properly, how will she bear the cost of her study. Some days before, she worked in the Cinema Hall of Upazila as a sweeper. But recently it has been closed. As a result she has lost her job there. Now she is giving her labour to other's house. Village people and neighbour don't help her anymore. Thus this distress woman has to pass her hurtful days with great sorrows. Chirala is a woman whose heart is filled with pain, sorrow and frustrations.

Honufa Bewa:

Honufa Begum is a widow. After her husband's death she came to her father's

house. Her father has given her a house. This is her only one wealth. She has a small tea shop for earning. She is passing her life with the small income from this tea stall. She gave marriage to her younger daughter. But she is divorced. Now Honufa Bewa is passing her days great distress with her younger son and daughter.

Mozlu Bepari:

Mozlu Bepari is passing his days with great sorrow from his livelihood. His father had no property. He has been grown up to other's house. Now he is passing his days with family's financial crisis. He has a small business in Dhaka and he also drives a rickshaw in Dhaka city. With this small earning he has to pass his days. There is no end of his sorrows.

Parash Ulla Matabbar (Father's name: Late Shekh Basar):

In 1349 (Bangla) my all crops was destroyed due to natural disaster. After that there occurred flood continuously for three years. That's why I have to start selling of my assets. From there I couldn't improve any more. Moreover, I had no son. Anyway, after few years I was blessed with sons and three daughters, family became large. I have to bear all the expenses of my family with the help of my own income only. Thus I sold 18 decimal of my land. Now I have nothing except 32 decimal land and a house. Now my age is 83 and my wife is 75. We are passing our days somehow and do not get meals three times a day. I don't get old allowance. I have no VGD card. I did not get any help from government. I am now helpless. I pray your help.

Mr. Sultan:

My father was very simple and innocent. Other people of our village took away all his land by flattering him. As a result my father got much trouble during his old age. Now sometimes we work for food to other's house who have before worked to our land. What can be a greater sorrow for my father than this?

Mr. Md. Hatem Hawlader (Father's name: Late Yakub Ali Hawlader):

Father of Hatem Hawlader is Yakub Ali Hawlader. Mr. Yakub has transferred all his properties in the name of his grand son. But he didn't give any properties to his son Hatem Ali Hawlader, because he didn't keep his father's

words during his early age. Now Hatem Ali Hawlader has gone away keeping his father and son. His wife has gone to Dhaka with daughter. Now he is alone at home. His wife comes to house after six months. Daughters are little. Hatem Ali bear the cost of his family by selling the fruits.

Mrs. Majid Paitan:

I rear up my children by working as day labour with great difficulties. My children have been separated after their marriage leaving us alone. They don't give any help to us. If government could help us then we could earn income by rearing ducks and hens.