

**SUMMARY REPORT OF
THE HOUSEHOLD EXPENDITURE SURVEY
1995-96**

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1. INTRODUCTION, OBJECTIVES AND SAMPLING DESIGN

1.1 INTRODUCTION

The Household Expenditure Survey is one of the most important instrument for estimating rationally representative comprehensive measures of expenditures on food and non-food, consumption, income, investment and savings. It also provides information for measuring the distribution of welfare and the level of poverty in the country. HES data are also used to describe the trends in access to utilization of public services such as electricity, water supply, sanitation, etc.

Bangladesh Bureau of Statistics (BBS) has a long tradition of conducting the Household Expenditure Survey (HES), which dates back to the pre-independence period. After liberation, BBS carried out the first HES in 1973-74. Since then, including the latest survey in 1995-96, BBS has completed 12 rounds of the HES to-date. In 1983-84, the diary system for collecting information on household food consumption was introduced. For the first time, the 1995-96 HES also collected comprehensive information on (1) the education characteristics of household members through a special purpose education questionnaire; and (2) community characteristics in rural areas through a separate community level questionnaire.

The main unit of observation in this survey is the household, which has been defined to be a dwelling unit where one or more persons live and eat together under a common cooking arrangement. In addition to collecting data at the household level, the survey also collects information on a number of important socio-demographic characteristics for all household members.

1.2 OBJECTIVES

The main objectives of the survey can briefly be summarized as:

- obtaining detailed data on household expenditure, income and consumption;
- estimating household demand functions for various items;
- determining poverty lines and provide poverty indicators/measures;
- providing information about living standards and nutritional status of the population;
- determining weights for the consumer price indices;
- providing household level consumption data used in compiling national account estimates;
- assessing gender variation in selected characteristics; and
- helping in conducting research on issues of policy interest, and in formulating appropriate public policies.

In the interest of publishing the results of the survey as early as possible, this report is descriptive rather than analytic in approach. Some of the main findings of the survey are highlighted in the report and, wherever possible, compared to results from earlier HES surveys and other comparable data sources. Given that the HES is a fairly large and complex survey that collects information on a wide range of topics, especially now that a detailed section on education as well as a community questionnaire have been included in the 1995-96 round, the tables presented in this report comprise only a small subset of the large number of tables that could be prepared from the survey. Furthermore, this summary report confines itself to simply reporting estimates of a few key variables based on the data collected -- and wherever possible, trends over time -- rather than presenting an analysis of possible underlying causes of these findings.

This emphasis on early dissemination and selectivity is consistent with the modern view and practice of household surveys as, for example, pioneered by the World Bank's Living Standard Measurement Surveys, elements of which have been incorporated into the 1995-96 HES. It is hoped that the rich data available in the 1995-96 HES will lead to a considerable amount of in-depth analytical work by researchers exploring specific, focused questions related to the living standards of the population.

1.3 SAMPLING DESIGN AND METHODOLOGY

A two-stage stratified random sampling technique was followed in drawing the sample for the Household Expenditure Survey 1995-96 under the framework of Integrated Multipurpose Sample (IMPS) design developed on the basis of Population and Housing Census 1991. This design consists of 372 Primary Sampling Units (PSU) throughout the country. There are 252 rural and 120 urban PSUs. The PSU is defined as contiguous two or more enumeration areas (EA) used in the Population and Housing Census 1991. Each PSU comprises of around 250 households.

In the first stage, a total of 372 PSUs were drawn from the sample frame with probability proportional to size (PPS). These PSUs were selected from the 14 different strata. There were 5 rural and 9 urban strata (4 Statistical Metropolitan Areas (SMA) and 5 municipal areas). In the second stage, 20 households were selected from each PSU by systematic random sampling method.

Amongst the 372 PSUs selected for the 1995-96 HES, one PSU in Dhaka Statistical Metropolitan Area (SMA) could not be visited by the field teams. As a result, a total of 371 PSUs

were covered in the 1995-96 HES (119 in urban and 252 in rural areas), where a total of 7,420 households were interviewed. The distribution of the sample amongst the various parts of the country is given in Table 1.1. The community questionnaire was fielded in the rural PSUs.

**TABLE 1.1 NUMBER OF SAMPLE PSUs, HOUSEHOLDS AND POPULATION
1995-96 HES SAMPLE**

DIVISION	NUMBER OF SAMPLE PSUs, HOUSEHOLDS AND POPULATION		
	NATIONAL	RURAL	URBAN
	SAMPLE PSUs		
Barisal	36	26	10
Chittagong	86	60	26
Dhaka	113	69	44
Khulna	48	29	19
Rajshahi	88	68	20
TOTAL	371	252	119
	SAMPLE HOUSEHOLDS		
Barisal	720	520	200
Chittagong	1,720	1,200	520
Dhaka	2,260	1,380	880
Khulna	960	580	380
Rajshahi	1,760	1,360	400
TOTAL	7,420	5,040	2,380
	SAMPLE POPULATION		
Barisal	3,831	2,792	1,039
Chittagong	9,826	6,959	2,867
Dhaka	11,660	7,053	4,607
Khulna	5,011	3,096	1,915
Rajshahi	8,715	6,548	2,167
TOTAL	39,043	26,448	12,595

Note: Definition of urban/rural in HES95-96 differs significantly from the population census 1991 definition. Some urban areas according to census classified as rural in HES95-96.

A number of innovations in survey operations and methodology have been introduced in the 1995-96 HES. As mentioned earlier, two new modules have been added to the questionnaire. Furthermore, the 1995-96 HES round is also the first survey conducted by BBS in which data entry was carried out in the regional statistical offices using microcomputers. This allowed early detection and correction of inconsistencies

and errors in the data, as a result of which data quality has improved considerably. Finally, most of the work on data processing and tabulation presented in this report has been carried using statistical analysis software on microcomputers, which has allowed BBS to publish this report in a much shorter period of time than has been possible in the past. As noted, these innovations are based on technical assistance from the World Bank and are derived from the Bank's Living Standard Measurement Surveys. Further, information on the methodology of the survey can be obtained from the data documentation that will accompany the data package.

1.4 SELECTED DEMOGRAPHIC CHARACTERISTICS

The latest round of the HES reported a lower average household size compared to earlier years (Table 1.2). In the country as a whole, average household size was found to have declined from 5.35 in 1991-92 to 5.26 in 1995-96. On average, household size was largest in the Chittagong division, and smallest in the Rajshahi division. On the whole, there was very little difference between average household size in urban and rural areas.

TABLE 1.2 AVERAGE HOUSEHOLD SIZE

YEAR/DIVISION	NATIONAL	RURAL	URBAN
1988-89 HES	5.54	5.52	5.61
1991 Pop. census	5.48	5.47	5.51
1991-92 HES	5.35	5.35	5.34
1995-96 HES	5.26	5.25	5.30
Barisal	5.36	5.37	5.19
Chittagong	5.76	5.80	5.50
Dhaka	5.15	5.11	5.24
Khulna	5.30	5.34	5.04
Rajshahi	4.88	4.81	5.44

NOTE: Source of household size estimates for 1988-89 to 1991-92: Report on Household Expenditure Survey 1991-92, Bangladesh Bureau of Statistics, November 1995, Page 8.

A comparison of the distribution of the population by age and sex of the 1991 Population Census and the 1995-96 Household Expenditure Survey is presented in Table 1.3. The most prominent feature of this table is the decline between 1991 and 1995-96 in the share of the population aged 0-4 years, from 16.5 percent to 13.7 percent, and in the share of population aged 5-9 years from 16.6 to 15.0 percent respectively. This suggests that fertility in the country may have fallen in recent years. Moreover, this would also help explain why average household size in this survey was found to be lower than that in earlier HES surveys.

TABLE 1.3 AGE-SEX STRUCTURE (PERCENTAGE) OF POPULATION BY RESIDENCE

AGE GROUP (YEARS)	1991 CENSUS			1995-96 HES		
	BOTH SEX	MALE	FEMALE	BOTH SEX	MALE	FEMALE
NATIONAL	100.0	100.0	100.0	100.0	100.0	100.0
0 - 4	16.5	16.2	16.8	13.7	13.9	13.5
5 - 9	16.6	16.6	16.5	15.0	14.9	15.2
10 - 14	12.2	12.6	11.7	14.5	14.8	14.1
15 - 19	8.4	8.3	8.5	9.0	9.8	8.2
20 - 24	8.3	7.5	9.2	7.2	6.4	8.0
25 - 29	8.5	7.9	9.2	8.1	7.0	9.3
30 - 34	6.2	6.2	6.3	6.4	5.8	7.1
35 - 39	5.6	6.0	5.3	6.7	7.0	6.3
40 - 44	4.3	4.5	4.2	4.7	5.0	4.4
45 - 49	3.4	3.5	3.2	4.0	4.3	3.6
50 - 54	2.9	3.0	2.9	3.1	3.2	2.9
55 - 59	1.8	2.0	1.7	2.2	2.3	2.1
60 - 64	2.1	2.2	2.0	2.1	2.1	2.0
65 +	3.2	3.6	2.8	3.4	3.6	3.1
RURAL	100.0	100.0	100.0	100.0	100.0	100.0
0 - 4	17.2	17.0	17.3	14.2	14.3	14.1
5 - 9	17.1	17.4	16.9	15.4	15.2	15.6
10 - 14	12.1	12.8	11.3	14.4	14.9	13.9
15 - 19	8.1	8.1	8.1	8.7	9.6	7.7
20 - 24	7.8	6.9	8.8	6.9	6.1	7.7
25 - 29	8.2	7.4	9.0	8.0	6.9	9.1
30 - 34	6.0	5.8	6.1	6.3	5.6	7.1
35 - 39	5.5	5.7	5.3	6.5	6.9	6.2
40 - 44	4.3	4.3	4.3	4.6	4.8	4.4
45 - 49	3.4	3.5	3.3	4.0	4.2	3.7
50 - 54	3.0	3.0	2.9	3.1	3.2	3.1
55 - 59	1.9	2.1	1.7	2.3	2.4	2.2
60 - 64	2.2	2.3	2.1	2.1	2.2	2.1
65 +	3.4	3.8	2.9	3.5	3.7	3.3

URBAN	100.0	100.0	100.0	100.0	100.0	100.0
0 - 4	n/a	12.7	14.5	11.2	11.6	10.8
5 - 9	n/a	13.5	15.0	13.1	13.1	13.1
10 - 14	n/a	12.0	13.1	14.7	14.1	15.3
15 - 19	n/a	9.2	10.1	10.9	10.9	11.0
20 - 24	n/a	9.9	10.8	8.8	8.1	9.4
25 - 29	n/a	9.8	10.1	8.8	7.2	10.4
30 - 34	n/a	7.6	6.7	6.8	6.6	7.0
35 - 39	n/a	7.1	5.3	7.3	7.5	7.1
40 - 44	n/a	5.3	3.9	5.2	5.9	4.5
45 - 49	n/a	3.7	2.7	4.2	5.0	3.3
50 - 54	n/a	2.9	2.5	2.7	3.1	2.3
55 - 59	n/a	1.7	1.3	1.9	2.2	1.6
60 - 64	n/a	1.9	1.7	1.7	1.7	1.7
65 +	n/a	2.7	2.3	2.8	3.0	2.6

NOTES:

1. Source of census estimates: Bangladesh Population Census 1991: Volume 1: Analytical Report, Bangladesh Bureau of Statistics, September 1994. Pages 25 & 80. n/a: Not available.
2. Totals may not add up to 100 because of rounding.

2. HOUSEHOLD INCOME, EXPENDITURE AND CONSUMPTION

2.1 LEVEL OF INCOME, EXPENDITURE AND CONSUMPTION

The distribution of the estimates of average monthly household income, expenditure and consumption from the different rounds of HES surveys are presented in Table 2.1. The figures in the table show, an increase between 1991-92 and 1995-96. For instance, average nominal household expenditure has increased by 39.1 percent in 1995-96 over the four year period, or 8.6 percent annually. Average nominal household income and average nominal household consumption also increased annually at 6.9 percent and 8.5 percent respectively during this period. Average monthly household expenditures in urban areas increased at a much faster rate (13.5 percent annually) compared to the rate of increase in rural areas (6.3 percent annually). This was the case with average household income as well as with average household consumption.

TABLE 2. 1 MONTHLY LEVEL OF NOMINAL INCOME, EXPENDITURE AND CONSUMPTION PER HOUSEHOLD

SURVEY YEAR	RESIDENCE	AVERAGE MONTHLY			PERCENT. OF TOTAL EXP.	
		INCOME	EXPENDITURE	CONSUMPTION	CONSUMPTION	NON-CONS.
1995-96	National	4,366	4,096	4,026	98.3	1.7
	Rural	3,658	3,473	3,426	98.7	1.3
	Urban	7,973	7,274	7,084	97.4	2.6
1991-92	National	3,341	2,944	2,904	98.6	1.4
	Rural	3,109	2,721	2,690	98.9	1.1
	Urban	4,832	4,377	4,280	97.8	2.2
1988-89	National	2,865	2,592	2,554	98.5	1.5
	Rural	2,670	2,405	2,374	98.7	1.3
	Urban	4,223	3,900	3,816	97.7	2.3
1985-86	National	2,578	2,345	2,316	98.8	1.2
	Rural	2,413	2,179	2,157	99.0	1.0
	Urban	3,766	3,540	3,459	97.7	2.3
1983-84	National	1,917	1,701	1,686	99.2	0.8
	Rural	1,844	1,623	1,612	99.3	0.7
	Urban	2,487	2,316	2,272	98.1	1.9

NOTE: Figures for household income, expenditure and consumption reported in the above table are in nominal terms and have not been adjusted for temporal or regional price differences. Figures for previous years come from page 15 of 1991-92 HES report.

2.2 EXPENDITURE PATTERN

Food expenditures as a percentage of total nominal household consumption expenditures were found to be lower in urban areas compared to rural areas (Table 2.2). Overall, the share of food expenditures in total consumption expenditures in the country as a whole declined quite considerably from almost 67 percent in 1991-92 to about 58 percent in 1995-96. As highlighted in the previous section, total household nominal consumption expenditure increased between 1991-92 and 1995-96, the same period over which the food share declined. The data thus suggest that a disproportionate share of the increase in household nominal consumption expenditure during this period was on non-food rather than on food items.

TABLE 2.2 FOOD AND NON-FOOD EXPENDITURE AS A PERCENTAGE OF HOUSEHOLD CONSUMPTION EXPENDITURE

SURVEY YEAR	NATIONAL		RURAL		URBAN	
	FOOD	NON-FOOD	FOOD	NON-FOOD	FOOD	NON-FOOD
1995-96	57.7	42.3	62.4	37.6	46.3	53.7
1991-92	66.6	33.4	69.2	30.8	56.1	43.9
1988-89	65.5	34.2	67.6	32.4	56.1	43.9
1985-86	63.3	36.7	65.1	34.9	55.1	45.0
1983-84	65.1	34.9	66.7	33.3	56.7	43.3

NOTE:

1. The food and non-food shares reported above are for average monthly food and non-food consumption expenditures respectively as a proportion of total consumption expenditures (i.e. not the average of the food and non-food shares of households interviewed in the survey).
2. Figures for previous years come from page 15 of 1991-92 HES report.
3. Non-food items include clothing and foot-wear, housing and house rent, fuel and lighting, household effects and miscellaneous.

As shown in Table 2.3, much of the increase in share of non-food consumption expenditures between 1991-92 and 1995-96

has been due to the increase in the share of expenditure on miscellaneous non-food items (11.75 to 17.23 percent respectively) and clothing and footwear (4.70 to 6.49 percent respectively).

The figures in table also reveal a number of other interesting insights about variations in consumption patterns in the country. For instance, the table shows that while the share of total expenditures allocated to clothing and footwear, fuel and lighting, as well as household effects are approximately the same in urban and rural areas, the share of housing and miscellaneous non-food items is considerably higher in urban areas compared to rural areas. Correspondingly, the share of food expenditures in urban areas is lower than in rural areas.

TABLE 2.3 PERCENTAGE DISTRIBUTION OF AVE. MONTHLY HOUSEHOLD CONSUMPTION EXPENDITURE BY MAJOR GROUPS

YEAR AND RESIDENCE	AVE. CONS. EXPEN.TK.	Total	Food & Bever.	Cloth & F/wear	Housing &H/Rent	Fuel & Light.	HH. effects	Misc. item*
1995-96								
National	4,026	100.00	57.74	6.49	11.05	5.59	1.90	17.23
Rural	3,426	100.00	62.40	6.47	8.49	5.98	1.72	14.93
Urban	7,084	100.00	46.27	6.53	17.34	4.63	2.32	22.91
1991-92								
National	2,904	100.00	66.58	4.70	10.43	5.62	0.92	11.75
Rural	2,690	100.00	69.19	4.79	8.94	5.47	0.86	10.75
Urban	4,280	100.00	56.07	4.34	16.44	6.20	1.15	15.80
1988-89								
National	2,555	100.00	65.45	5.55	9.64	5.79	1.35	12.22
Rural	2,374	100.00	67.63	5.62	8.09	5.88	1.29	11.49
Urban	3,816	100.00	56.11	5.24	16.29	5.39	1.62	15.34
1985-86								
National	2,316	100.00	63.26	5.92	8.85	8.39	1.40	12.18
Rural	2,157	100.00	65.08	5.91	7.36	8.97	1.22	11.46
Urban	3,459	100.00	55.05	5.95	15.61	5.78	2.20	15.42
1983-84								
National	1,686	100.00	65.14	7.71	7.83	7.59	1.04	10.70
Rural	1,612	100.00	66.66	7.66	6.83	7.95	0.94	9.93
Urban	2,272	100.00	56.70	7.92	13.34	5.56	1.56	14.92

Note: Miscellaneous items include cosmetics, washing and cleaning, transport, kitchen ware, recreational care, personal effects, educational expenses, medicare, etc.

Estimated average per capita daily intake of major food items in recent years is given in Table 2.4. As the table shows, per capita consumption of potatoes, vegetables, beef,

chicken, fish, milk and fruit increased between 1991-92 and 1995-96, while consumption of pulses, eggs and miscellaneous food items declined during this period. Consumption of other food items remained more or less the same.

The table also shows that in 1995-96, per capita consumption of wheat, potatoes, pulses, edible oil, onion, beef, mutton, chicken, eggs, fish, milk and fruits was higher in urban areas compared to rural areas, while consumption of rice and vegetables was lower.

**TABLE 2.4 AVERAGE PER CAPITA DAILY INTAKE OF MAJOR FOOD ITEMS
(IN GRAMS)**

FOOD ITEM	1995-96			1991-92			1988-89		
	NATIO NAL	RURAL	URBAN	NATIO NAL	RURAL	URBAN	NATIO NAL	RURAL	URBAN
Rice	464.3	479.0	390.3	472.8	481.6	416.0	441.7	448.7	395.1
Wheat	33.7	32.4	40.1	36.3	34.6	47.1	58.1	58.8	53.1
Potato	49.5	46.7	64.4	43.7	41.4	58.3	39.5	37.3	55.0
Pulses	13.9	12.9	19.4	17.9	17.3	21.7	21.8	21.1	25.3
Vegetables	152.5	154.4	142.9	137.4	135.3	150.9	133.5	131.3	148.7
Edible Oil	9.8	8.4	17.0	10.1	9.0	16.4	9.2	8.4	14.3
Onion	11.6	9.9	20.2	11.9	11.2	17.0	10.2	9.5	15.6
Beef	6.6	4.9	15.0	5.2	4.5	9.9	3.4	2.8	7.5
Mutton	1.0	0.8	1.6	0.9	0.8	1.3	0.8	0.7	1.7
Chick.duck	4.0	3.4	7.5	2.0	1.9	3.1	1.9	1.7	2.8
Eggs	3.2	2.6	5.9	4.7	4.6	5.8	5.9	6.1	4.5
Fish	43.8	42.2	51.7	34.5	32.5	47.8	34.8	32.5	50.9
Milk	32.3	30.3	42.1	19.1	18.5	23.2	22.0	20.8	30.8
Fruits	27.6	25.3	38.8	16.9	15.9	23.4	13.3	12.4	19.5
Sugar/Gur	9.2	9.1	10.1	8.8	8.5	10.8	9.1	8.9	10.9
Miscellan.	50.9	48.2	64.6	64.0	60.5	85.7	63.6	62.1	74.7
Total	913.8	910.5	930.8	886.2	878.1	938.4	868.8	863.1	910.4

NOTE: Miscellaneous includes semai, suji, cheena kaon, barley, cooked cake, garlic, chilies, turmeric, dhonia, jira, ginger, spices, salt, pork, lever, tortoise, betel-leaf, betel-nut, juice, sugar cane, date juice, cold drinks, ovaltine, horlicks, bread, biscuits, pickle, jelly, etc.

2.3 AVERAGE CALORIE AND PROTEIN INTAKE

Average per capita daily intake of calorie and protein are presented in Table 2.5 and 2.6 respectively. The per capita daily intake of calorie has decreased between 1991-92 and 1995-96 (Table 2.5): from 2,266 in 1991-92 to 2,244 calorie per person per day in 1995-96. The average daily protein intake in the country in 1995-96 was 64.96 grams, which is considerably higher than the minimum recommended dose of 48 grams per person per day.¹

TABLE 2.5 AVERAGE PER CAPITA DAILY CALORIE INTAKE (K.CAL.) BY RESIDENCE

SURVEY YEAR	NATIONAL	RURAL	URBAN
1995-96	2,244	2,251	2,209
1991-92	2,266	2,267	2,258
1988-89	2,215	2,217	2,183
1985-86	2,191	2,203	2,107
1983-84	2,102	2,113	2,020

TABLE 2.6 AVERAGE DAILY PER CAPITA INTAKE OF PROTEIN (IN GRAMS) BY RESIDENCE

SURVEY YEAR	NATIONAL	RURAL	URBAN
1995-96	64.96	64.45	67.50
1991-92	62.72	62.29	65.49
1988-89	63.66	63.30	68.27
1985-86	63.50	63.23	65.42
1983-84	60.93	60.68	62.86

¹ Source Report on HES 1988-89, Page No. 31

2.4 DISTRIBUTION OF LAND AND INCOME

The pattern of land ownership in the country is presented in Table 2.7. As the table shows, about 10 percent of households overall were landless, while 14 percent owned less than 0.05 acres of land. Amongst the land size classes presented, the largest share of households own between 0.05 and 0.49 acres of land.

TABLE 2.7 PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY SIZE OF LAND OWNED

SIZE OF LAND OWNED (ACRES)	NATIONAL	RURAL	URBAN
TOTAL	100.00	100.00	100.00
No land owned	9.97	6.43	28.02
Less than 0.05	14.05	12.34	22.78
0.05 - 0.49	35.19	36.46	28.71
0.50 - 1.49	19.03	20.80	10.04
0.50 - 2.49	8.89	9.84	4.04
2.50 - 7.49	10.88	11.97	5.34
7.50 or more	1.98	2.16	1.08

The proportion of income accruing to households in each decile for selected years when the HES surveys were conducted is given in Table 2.8, along with the Gini coefficients summarizing the extent of inequality in the income distribution. In all surveys conducted to-date, income inequality (as measured by the Gini coefficient) was found to be consistently higher in urban areas compared to rural areas.

Between 1983-84 and 1991-92, the Gini coefficient for income distribution in the country as a whole remained between 0.36 - 0.39. However, data from the HES surveys show that income inequality in Bangladesh increased between 1991-92 and 1995-96, with the Gini rising from 0.388 in 1991-92 to 0.432 in 1995-96. In urban areas in particular, income inequality rose quite sharply during this period. However, HES surveys are widely acknowledged to have been more successful in

accurately estimating trends in household *expenditure* rather than income. So it would be worth investigating whether per capita expenditure estimates from these surveys also show a similar rise in inequality. In the past, Gini coefficients of inequality based on per capita expenditure estimates were not computed by BBS, so such a comparison is not possible at present. In carrying out further such analysis, it would also be worthwhile to adjust data on nominal expenditures to take into account cost of living differences between regions.

TABLE 2.8 PERCENTAGE DISTRIBUTION OF INCOME ACCRUING TO HOUSEHOLDS IN GROUPS AND GINI COEFFICIENTS

HHOLD.INCOME GROUP AND GINICOEFFICIENT	1995-96	1991-92	1988-89	1985-86	1983-84
TOTAL - NATIONAL	100.00	100.00	100.00	100.00	100.00
Lowest 5%	0.88	1.03	1.06	1.18	1.17
Decile 1	2.24	2.58	2.64	2.81	2.89
Decile 2	3.47	3.94	4.00	4.18	4.31
Decile 3	4.46	4.95	4.96	5.13	5.39
Decile 4	5.37	5.94	5.93	6.05	6.36
Decile 5	6.35	7.08	6.95	6.98	7.38
Decile 6	7.53	8.45	8.10	8.09	8.56
Decile 7	9.15	10.09	9.61	9.48	9.99
Decile 8	11.35	12.10	11.62	11.25	11.74
Decile 9	15.40	15.64	15.20	14.58	15.08
Decile 10	34.68	29.23	31.00	31.46	28.30
Top 5%	23.62	18.85	20.51	21.35	18.30
GINI COEFFICIENT	0.432	0.388	0.379	0.370	0.360
TOTAL - RURAL	100.00	100.00	100.00	100.00	100.00
Lowest 5%	1.00	1.07	1.10	1.23	1.19
Decile 1	2.56	2.67	2.74	2.92	2.95
Decile 2	3.93	4.07	4.13	4.30	4.37
Decile 3	4.97	5.10	5.10	5.30	5.46
Decile 4	5.97	6.05	6.05	6.20	6.46
Decile 5	6.98	7.21	7.21	7.16	7.53
Decile 6	8.16	8.57	8.25	8.20	8.67
Decile 7	9.75	10.28	9.69	9.55	10.11
Decile 8	11.87	12.30	11.74	11.30	11.75
Decile 9	15.58	15.71	15.10	14.07	14.81
Decile 10	30.23	28.04	30.08	31.00	27.89
Top 5%	19.73	17.80	19.81	21.36	18.14
GINI COEFFICIENT	0.384	0.364	0.368	0.360	0.350

**TABLE 2.8 PERCENTAGE DISTRIBUTION OF INCOME ACCRUING TO
HOUSEHOLDS IN GROUPS AND GINI COEFFICIENTS (CONTINUED)**

HHOLD.INCOME GROUP AND GINICOEFFICIENT	1995-96	1991-92	1988-89	1985-86	1983-84
TOTAL - URBAN	100.00	100.00	100.00	100.00	100.00
Lowest 5%	0.74	1.09	1.12	1.20	1.18
Decile 1	1.92	2.64	2.76	2.84	2.82
Decile 2	3.20	4.06	4.05	4.08	4.10
Decile 3	4.06	5.01	4.91	5.09	5.02
Decile 4	4.98	5.88	5.80	5.99	5.93
Decile 5	6.97	6.80	6.84	7.04	7.00
Decile 6	7.20	8.11	7.91	8.29	8.34
Decile 7	8.98	9.66	9.42	10.30	10.09
Decile 8	11.35	11.77	11.57	12.24	12.48
Decile 9	16.29	15.64	15.56	15.73	16.39
Decile 10	36.05	30.43	31.19	28.41	27.83
Top 5%	24.30	19.42	20.02	18.04	16.93
GINI COEFFICIENT	0.444	0.398	0.381	0.370	0.370

3. LEVEL OF LIVING INDICATORS

3.1 HOUSING CONDITIONS

In 1995-96 HES, the information on materials of the dwelling houses where the head of household resided and the toilet facility therein, have been summarized and presented in the Tables 3.1 - 3.3.

TABLE 3.1 PERCENTAGE DISTRIBUTION OF MAIN DWELLING STRUCTURE BY MATERIAL OF WALL AND RESIDENCE

RESIDENCE AND MATERIAL OF WALLS	NATIONAL	BARISL	CH'GONG	DHAKA	KHULNA	RAJSHAHI
TOTAL - NATIONAL	100.00	100.00	100.00	100.00	100.00	100.00
Bricks/cement	11.36	3.68	9.47	16.89	13.53	7.32
CIS/brick/cemnt/wood	18.81	48.72	16.77	21.73	16.17	10.37
Mud/unburnt bricks	23.48	1.66	14.97	13.79	49.96	36.84
Hay/bamboo/leaf	45.99	44.10	58.55	47.22	19.96	45.41
Other	0.36	1.84	0.25	0.37	0.37	0.07
TOTAL - RURAL	100.00	100.00	100.00	100.00	100.00	100.00
Bricks/cement	4.48	3.08	6.67	2.25	8.62	3.31
CIS/brick/cemnt/wood	19.41	48.27	17.92	22.75	17.41	10.22
Mud/unburnt bricks	26.01	1.73	15.17	17.03	55.17	38.53
Hay/bamboo/leaf	49.69	45.00	60.00	57.46	18.45	47.87
Other	0.41	1.92	0.25	0.51	0.34	0.07
TOTAL - URBAN	100.00	100.00	100.00	100.00	100.00	100.00
Bricks/cement	46.40	13.50	27.61	56.44	43.21	43.55
CIS/brick/cemnt/wood	15.79	56.00	9.33	18.98	8.68	11.71
Mud/unburnt bricks	10.59	0.50	13.72	5.04	18.46	21.56
Hay/bamboo/leaf	27.11	29.50	49.13	19.54	29.13	23.18
Other	0.11	0.50	0.22	0.00	0.53	0.00

NOTES:

1. Households with walls of the type indicated, expressed as a percentage of the total number of households in that particular group.
2. CIS: Corrugated iron sheet.
3. Totals may not add up to 100 because of rounding.

As shown in Table 3.1, hay/bamboo/leaves were the main materials used for constructing walls of dwellings, with slightly under half the total number of households in the country using this material. Permanent building materials such as "bricks/cement" and "CIS/bricks/cement/wood" were used more often for housing units in urban areas compared to rural

areas. The same materials were more frequent in Barisal and Dhaka divisions compared to other divisions in the country.

Construction materials used to make roofs of dwellings showed a similar pattern (Table 3.2), with "cement" and "CIS/wood" used more often in urban areas and in Dhaka division compared to other parts of the country.

TABLE 3.2 PERCENTAGE DISTRIBUTION OF MAIN DWELLING STRUCTURE BY MATERIAL OF ROOF AND RESIDENCE

RESIDENCE AND MATERIAL OF ROOF	NATIONAL	BARISAL	CH'GONG	DHAKA	KHULNA	RAJSHAHI
TOTAL - NATIONAL	100.00	100.00	100.00	100.00	100.00	100.00
Cement	5.49	1.40	3.35	10.81	5.40	2.04
CIS/wood	56.35	58.21	59.68	61.16	48.42	50.52
Hemp/hay/bamboo	37.97	39.66	36.82	27.87	45.81	47.38
Other	0.19	0.72	0.14	0.15	0.37	0.07
TOTAL - RURAL	100.00	100.00	100.00	100.00	100.00	100.00
Cement	1.14	0.96	1.58	0.87	2.41	0.51
CIS/wood	56.36	57.88	60.25	62.97	50.00	48.68
Hemp/hay/bamboo	42.31	40.38	38.00	36.09	47.24	50.74
Other	0.18	0.77	0.17	0.07	0.34	0.07
TOTAL - URBAN	100.00	100.00	100.00	100.00	100.00	100.00
Cement	27.61	8.50	14.76	37.68	23.47	15.78
CIS/wood	56.29	63.50	56.02	56.27	38.85	67.15
Hemp/hay/bamboo	15.85	28.00	29.21	5.68	37.16	17.07
Other	0.25	0.00	0.00	0.38	0.52	0.00

NOTES :

1. Households with roofs of the type indicated, expressed as a percentage of the total number of households in that particular group.
2. CIS: Corrugated iron sheet.
3. Totals may not add up to 100 because of rounding.

Only one in five houses in the country were connected to either "pucca: septic tank" or "pucca: water sealed" toilet facilities (Table 3.3): 44.58 percent of housing units had a kucha toilet while 30.11 percent of units had no toilet facilities whatsoever. As one would expect, the survey showed that toilet facilities were in general much better in urban areas compared to rural areas.

TABLE 3.3 PERCENTAGE DISTRIBUTION OF HOUSEHOLD ACCESS TO TOILET BY TYPE AND RESIDENCE

RESIDENCE AND TYPE OF LATRINE	NATIONL	BARISAL	CH'GONG	DHAKA	KHULNA	RAJSHAHI
TOTAL - NATIONAL	100.00	100.00	100.00	100.00	100.00	100.00
Pucca:septic tank	6.61	2.62	5.17	10.39	7.84	3.78
Pucca:water seald	14.00	29.26	13.16	14.58	18.10	8.11
Pucca:unsealed	4.70	1.88	6.85	6.58	2.45	2.16
Kucha:fixed place	44.58	52.39	57.53	46.17	37.67	31.70
Open field	30.11	13.85	17.29	22.29	33.94	54.25
TOTAL - RURAL	100.00	100.00	100.00	100.00	100.00	100.00
Pucca:septic tank	2.28	1.73	3.67	0.72	4.83	1.62
Pucca:water seald	11.24	28.65	10.25	10.07	15.69	6.47
Pucca:unsealed	3.39	1.35	6.08	4.20	1.55	1.54
Kucha:fixed place	48.74	53.65	60.67	56.23	39.83	33.16
Open field	34.34	14.62	19.33	28.77	38.10	57.21
TOTAL - URBAN	100.00	100.00	100.00	100.00	100.00	100.00
Pucca:septic tank	28.67	17.00	14.89	36.51	26.04	23.28
Pucca:water seald	28.07	39.00	32.00	26.74	32.64	22.88
Pucca:unsealed	11.36	10.50	11.82	13.00	7.88	7.77
Kucha:fixed place	23.37	32.00	37.19	18.97	24.66	18.55
Open field	8.52	1.50	4.09	4.77	8.78	27.53

NOTES:

1. Households with toilets of the type indicated, expressed as a percentage of the total number of households in that particular group.
2. Totals may not add up to 100 because of rounding.

3.2 ACCESS TO AMENITIES

An overwhelming majority of households in the country (88.66 percent) obtained their drinking water from tubewells (Table 3.4). "Supply water" was available to only a small fraction of households in most parts of the country, the exception being urban Dhaka where 57.55 percent of households obtained their drinking water from this source.

TABLE 3.4 PERCENTAGE DISTRIBUTION OF HOUSEHOLD BY SOURCES OF DRINKING WATER

RESIDENCE AND SOURCE OF WATER	NATIONAL	BARISAL	CH'GONG	DHAKA	KHULNA	RAJSHAHI
TOTAL - NATIONAL:	100.00	100.00	100.00	100.00	100.00	100.00
Supply water	6.95	3.01	5.79	15.70	2.42	0.41
Tubewell	88.66	87.51	87.19	82.72	95.92	94.29
Well/indara	2.38	0.03	2.78	1.16	0.78	4.88
Pond/river	2.01	9.45	4.24	0.42	0.89	0.43
TOTAL - RURAL:	100.00	100.00	100.00	100.00	100.00	100.00
Supply water	0.83	0.38	2.75	0.22	0.34	0.07
Tubewell	94.08	89.62	89.25	97.97	97.76	94.12
Well/indara	2.75	0.00	3.17	1.38	0.86	5.37
Pond/river	2.34	10.00	4.83	0.43	1.03	0.44
TOTAL - URBAN:	100.00	100.00	100.00	100.00	100.00	100.00
Supply water	38.16	45.50	25.50	57.55	14.97	3.42
Tubewell	61.05	53.50	73.83	41.50	84.77	95.81
Well/indara	0.47	0.50	0.30	0.58	0.26	0.47
Pond/river	0.33	0.50	0.37	0.38	0.00	0.31

NOTES:

1. Households with drinking water sources of the type indicated, expressed as a percentage of the total number of households in that particular group.
2. Totals may not add up to 100 because of rounding.

The 1995-96 HES found that 20.5 percent of households in the country had electricity connections (Table 3.5). The proportion of households having electricity connection was much higher in urban areas compared to rural areas (72.6 vs. 10.3 percent respectively).

TABLE 3.5 PERCENTAGE OF HOUSEHOLDS HAVING ELECTRICITY

ADMINISTRATIVE DIVISION	NATIONAL	RURAL	URBAN
TOTAL	20.5	10.3	72.6
Barisal	12.7	10.4	51.0
Chittagong	20.9	14.3	63.9
Dhaka	32.9	13.6	85.0
Khulna	16.0	8.1	63.8
Rajshahi	9.1	4.5	51.0

4. PROFILE OF POVERTY

Up until 1985-86, BBS used the food energy intake method (FEI) for measuring the incidence of poverty in the country. In recent years (1988-89 and 1991-92), BBS changed the methodology followed to the direct calorie intake method (DCI). The 1995-96 survey marks the first time in the history of BBS Household Expenditure Survey series that the cost-of-basic-needs method (CBN) has been used to measure poverty incidence in the country. This new approach to the measurement of poverty has been adopted because it was felt that, on balance, this technique provides the best methodology that is currently available on the measurement of poverty.² Thus Tables 4.2 - 4.10 all present poverty measures that have been derived using the cost-of-basic-needs methodology. However, for the sake of comparability over time of poverty estimates, this report also includes head-count measures of poverty computed using the direct calorie intake method, which are presented in Table 4.1.

The methodology used in computing the poverty lines used in this report is briefly outlined in the Appendix, along with a short introduction to the head-count rate, the poverty gap, and the squared poverty gap that are presented in this report.

4.1 INCIDENCE OF POVERTY USING DCI METHOD

Poverty head-count rates derived using the DCI method are presented in Table 4.1. As the table shows, based on the "absolute poverty" line, the head-count rate in rural areas declined slightly in 1995-96 than 1991-92 while the head-count

² For a more comprehensive discussion of the benefits of using the CBN methodology to measure the incidence of poverty, the reader is referred to Ravallion, Martin, *Poverty Comparisons*, Harwood Academic Publishers, Switzerland, 1994; When Method Matters: Towards a Resolution of the Debate about Bangladesh's Poverty *Measures* Economic Development and Cultural Change 44: 761-792.

rate in urban areas increased from 46.7 percent to 48.5 percent during this period. The head-count rate based on the "hard-core poverty" line fell from 28.3 percent in 1991-92 to 23.3 percent in 1995-96 in rural areas, but almost stationary in urban areas, in the same period.

TABLE 4.1 INCIDENCE OF POVERTY (HEAD-COUNT RATIO) - DIRECT CALORIE INTAKE METHOD

SURVEY YEAR	NUMBER AND PROPORTION OF THE POPULATION BELOW THE POVERTY LINE INDICATED							
	POVERTY LINE-1: ABSOLUTE POVERTY 2122 K.CAL PER PERSON PER DAY				POVERTY LINE-2: HARD-CORE POVERTY 1805 K.CAL PER PERSON PER DAY			
	RURAL		URBAN		RURAL		URBAN	
	NO. IN MILLION	PERCENT OF POP.	NO. IN MILLION	PERCENT OF POP.	NO. IN MILLION	PERCENT OF POP.	NO. IN MILLION	PERCENT OF POP.
1995-96	44.0	45.4	9.3	48.5	22.7	23.3	5.1	26.4
1991-92	44.8	47.6	6.8	46.7	26.6	28.3	3.8	26.3
1988-89	43.4	47.8	6.3	47.6	26.0	28.6	3.5	26.4
1985-86*	47.4	54.7	7.9	62.6	22.8	26.3	3.9	30.7
1983-84*	51.1	61.9	7.3	67.7	30.2	36.7	4.8	37.4

1. Poverty lines for absolute and hard-core poverty in 1983-84 and 1985-86 were estimated based on 2200 and 1800 kcals respectively.
2. Figures for earlier years taken from page 31 of 1991-92 HES report.

4.2 INCIDENCE OF POVERTY USING COST OF BASIC NEEDS(CBN)METHOD

In all tables that follow in this chapter, poverty measures have been derived using the CBN method. It is worth emphasizing at the outset that as these measures are based on a different methodology from that used by BBS in earlier years, they are not comparable with earlier poverty estimates. As head-count rates based on the CBN method were not calculated by BBS in the past using HES data, trends over time in the incidence of poverty based on this method are not available at present. However, work on deriving head-count rates for earlier rounds of the HES based on this new methodology is currently in progress, and a consistent series of poverty measures derived using the CBN method will soon be available.

The head-count rates for 1995-96 obtained using the CBN method are presented in Table 4.2. Two head-count rates are shown: one for a lower poverty line and one for an upper poverty line - these poverty lines are defined in the Appendix-B. In the country as a whole, the incidence of poverty was found to be 35.6 percent using the lower poverty line (53.1 percent based on the upper poverty line). As the table reveals, one of the most striking features of poverty measures obtained using this approach is that poverty incidence in urban areas is much lower than in rural areas. In sharp contrast, the head-count rate based on the DCI method shows roughly the same incidence of poverty in both urban and rural areas.

TABLE 4.2 INCIDENCE OF POVERTY (HEAD-COUNT RATIO) - COST-OF-BASIC-NEEDS METHOD

POVERTY LINE AND DIVISION	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE			
NATIONAL	35.6	39.8	14.3
Barisal	43.9	44.8	28.9
Chittagong	32.4	35.3	12.1
Dhaka	33.0	41.5	10.8
Khulna	32.2	33.2	25.8
Rajshahi	41.6	44.4	19.2
2. USING THE UPPER POVERTY LINE			
NATIONAL	53.1	56.7	35.0
Barisal	59.9	60.6	47.7
Chittagong	44.9	47.2	29.2
Dhaka	52.0	58.9	33.6
Khulna	51.7	51.5	53.3
Rajshahi	62.2	65.7	33.9

As mentioned earlier, head-count rates obtained using the DCI and CBN methods are not comparable with one another. Nonetheless, it is worth elaborating why the two methods give such differing patterns of poverty incidence in the country. As has been shown earlier in Table 2.4, there is a considerable difference between households living in urban areas compared to those living in rural areas as far as the expenditure pattern for different food items is concerned. In urban areas, households consume relatively more expensive food items such as beef, mutton, chicken, eggs and fish compared to those living in rural areas. The difference in total food expenditures between these two types of households is therefore much greater than the difference in terms of consumption of calories. It is therefore not surprising that the CBN method, which uses total per capita expenditures to compute poverty measures, shows a much lower incidence of poverty in urban areas compared to the DCI method, which relies exclusively on the per capita intake of calories.

As shown in Table 4.2, the incidence of poverty is highest in Barisal and Rajshahi divisions. Based on the lower poverty line, in 1995-96, 43.9 percent of the population in Barisal and 41.6 percent of the population in Rajshahi was found to be below the poverty line. Using the upper poverty line, the head-count rate was 59.9 percent in Barisal and 62.2 percent in Rajshahi division compared to the national head-count rate of 53.1 percent.

Another way to look at the distribution of poverty in the country is to ask the question: of the total number of poor in the country -- i.e. all those individuals whose total expenditures is less than the poverty line -- what proportion live in each geographic group of interest? Thus, for instance, one might be interested in finding out what percentage of the poor in the country live in urban areas as compared to rural

areas. The answer to this question can be found in Table 4.3 which shows that 6.7 percent of the poor lived in urban areas in 1995-96 (based on the lower poverty line). Dhaka division had the largest number of poor individuals in the country, with 28.8 percent of all individuals below the lower poverty line residing here. This is partly due to the fact that it has the highest population of all administrative divisions in the country.

TABLE 4.3 PERCENTAGE DISTRIBUTION OF POOR BY RESIDENCE

DIVISION	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE			
NATIONAL	100.0	93.3	6.7
Barisal	8.6	8.3	0.3
Chittagong	23.8	22.7	1.1
Dhaka	28.8	26.2	2.6
Khulna	10.9	9.7	1.2
Rajshahi	27.9	26.4	1.4
2. USING THE UPPER POVERTY LINE			
NATIONAL	100.0	89.0	11.0
Barisal	7.9	7.5	0.4
Chittagong	22.2	20.3	1.8
Dhaka	30.3	24.9	5.4
Khulna	11.7	10.1	1.6
Rajshahi	27.9	26.2	1.7

NOTES:

1. Percentage of the poor (i.e. those with total expenditures below the poverty line) living in the region indicated.
2. Figures may not add up to 100 due to rounding.

The poverty gap and squared poverty gap measures for 1995-96 are presented in Table 4.4. As was the case with the head-count rate presented in Table 4.2, both these measure also show higher poverty in Barisal and Rajshahi divisions.

Standard errors for the various measures of poverty are presented in the Appendix-C.

TABLE 4.4 POVERTY GAP AND SQUARED POVERTY GAP-COST-OF-BASIC-NEEDS METHOD

POVERTY LINE AND DIVISION	POVERTY GAP			SQUARED POVERTY GAP		
	NATIONAL	RURAL	URBAN	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE						
NATIONAL	7.9	8.9	2.7	2.6	2.9	0.8
Barisal	10.2	10.4	7.6	3.4	3.4	2.6
Chittagong	6.1	6.7	1.7	1.7	1.9	0.4
Dhaka	8.0	10.2	2.0	2.8	3.6	0.5
Khulna	6.5	6.5	6.2	2.0	1.9	2.2
Rajshahi	9.8	10.6	3.7	3.4	3.7	1.0
2. USING THE UPPER POVERTY LINE						
NATIONAL	14.4	15.4	9.2	5.4	5.7	3.4
Barisal	18.0	18.1	16.7	7.1	7.1	7.7
Chittagong	10.5	11.2	5.9	3.4	3.6	1.7
Dhaka	14.9	17.1	8.9	5.8	6.7	3.4
Khulna	12.4	11.7	16.6	4.3	3.9	7.0
Rajshahi	17.9	19.1	8.5	7.0	7.6	2.9

NOTE: For details on the interpretation of the poverty gap and squared poverty gap measures, please refer to the appendix.

4.3 POVERTY AND HOUSEHOLD CHARACTERISTICS

The correlation between incidence of poverty and a number of different household characteristics is presented in Tables 4.5 - 4.10. For instance, Table 4.5 shows how the incidence of poverty varies with the size of household in which the individual lives. Persons living in small households (1-2 members) had the lowest incidence of poverty: the head-count rate amongst this group (18.9 percent) was found to be almost half the overall national head-count rate (35.6 percent). As is shown in the table, the incidence of poverty increases with household size up to a point, after which it starts to decline again. Thus individuals living in households with 5-6 members had the highest rate of poverty incidence (39.4 percent) compared to other groups.

TABLE 4.5 INCIDENCE OF POVERTY AND SIZE OF HOUSEHOLD

HOUSEHOLD SIZE, NUMBER OF PERSONS	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE			
ALL SIZES	35.6	39.8	14.3
1- 2	18.9	21.9	3.0
3- 4	32.8	37.2	10.9
5- 6	39.4	44.0	17.3
7- 8	37.0	40.7	16.5
9-10	36.3	40.8	15.3
11+	25.2	29.0	6.0
2. USING THE UPPER POVERTY LINE			
ALL SIZES	53.1	56.7	35.0
1- 2	31.0	33.4	18.3
3- 4	50.3	54.3	30.3
5- 6	57.5	61.3	39.0
7- 8	54.4	57.0	39.8
9-10	54.2	58.2	36.0
11+	41.7	45.9	20.5

NOTE: Percentage of the population living below the poverty line indicated, expressed as a percentage of the total population in that particular group.

It reveals from table 4.6 that individuals living in household with a young head of household (" ≤ 29 years" or "30 - 39 years") had a higher probability of being poor than those living in households with an older head.

TABLE 4.6 INCIDENCE OF POVERTY AND AGE OF HEAD OF HOUSEHOLD

AGE OF HEAD IN YEARS	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE			
ALL AGES	35.6	39.8	14.3
≤ 29	40.0	44.5	14.0
30-39	43.6	48.7	18.9
40-49	35.9	40.9	14.2
50-59	32.1	36.2	10.5
60+	25.4	28.0	10.0
2. USING THE UPPER POVERTY LINE			
ALL AGES	53.1	56.7	35.0
≤ 29	58.7	61.8	40.9
30-39	62.6	66.9	41.5
40-49	52.6	57.3	32.7
50-59	49.6	52.9	32.1
60+	41.6	43.8	28.6

NOTE: Percentage of the population living below the poverty line indicated, expressed as a percentage of the total population in that particular group.

As shown in Table 4.7, individuals living in households where the head of household was widowed or divorced had a higher incidence of poverty (42.9 percent) compared to the population as a whole (35.6 percent), as did individuals living in a female-headed household (38.8 percent).

TABLE 4.7 INCIDENCE OF POVERTY AND SELECTED HOUSEHOLD CHARACTERISTICS

CHARACTERISTIC OF HEAD OF HOUSEHOLD	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE			
NATIONAL	35.6	39.8	14.3
GENDER OF HEAD			
Male	35.3	39.4	14.4
Female	38.8	45.3	13.7
MARITAL STATUS			
Married	35.5	39.6	14.4
Unmarried	26.3	31.3	6.4
Widowed/Divorced	42.9	49.8	17.3
RELIGION			
Muslim	36.7	40.9	15.1
Non-Muslim	27.0	30.6	8.3
2. USING THE UPPER POVERTY LINE			
NATIONAL	53.1	56.7	35.0
GENDER OF HEAD			
Male	53.2	56.7	35.0
Female	52.2	56.6	35.2
MARITAL STATUS			
Married	53.1	56.7	34.7
Unmarried	43.6	44.7	39.2
Widowed/Divorced	59.7	65.3	38.8
RELIGION			
Muslim	54.3	58.0	35.5
Non-Muslim	43.5	45.9	31.7

NOTE: Percentage of the population living below the poverty line indicated, expressed as a percentage of the total population in that particular group.

4.4 POVERTY, EDUCATIONAL BACKGROUND AND LAND OWNERSHIP

As shown in Table 4.8, individuals living in households where the head of household was illiterate had a much higher probability of being poor compared to households where the head was literate. In general, there appears to be a strong negative correlation between the educational attainment of the head of household and poverty. Based on the lower poverty line, the incidence of poverty amongst individuals living in a household where the head had completed SSC level or higher was less than one-fifth the rate of incidence in the population as a whole.

TABLE 4.8 INCIDENCE OF POVERTY AND EDUCATIONAL BACKGROUND OF HEAD OF HOUSEHOLD

CHARACTERISTIC OF HEAD OF HOUSEHOLD	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE			
NATIONAL	35.6	39.8	14.3
LITERACY STATUS			
Illiterate	47.3	49.3	29.0
Literate	19.8	24.3	6.9
EDUCATION LEVEL			
No education	48.0	50.1	29.0
Compltd class I-IV	30.6	33.0	16.2
Compltd class V-IX	22.7	25.8	10.7
Completed SSC +	6.9	11.0	1.7
2. USING THE UPPER POVERTY LINE			
NATIONAL	53.1	56.7	35.0
LITERACY STATUS			
Illiterate	66.4	66.8	62.7
Literate	35.3	40.2	21.0
EDUCATION LEVEL			
No education	67.0	67.5	62.3
Compltd class I-IV	49.9	50.7	44.8
Compltd class V-IX	40.5	42.7	31.7
Completed SSC +	15.5	22.8	6.3

NOTES:

1. Percentage of the population living below the poverty line indicated, expressed as a percentage of the total population in that particular group.

2. Literacy was defined to be the ability to read and write a letter.

Similarly, the rate of poverty incidence amongst households where the heads were engaged in certain types of occupations was considerably lower than that for others (Table 4.9); in particular individuals living in households where the head of household was a "professional/executive", "owner farmer" or engaged in "business" was considerably lower.

TABLE 4.9 INCIDENCE AND MAIN OCCUPATION OF HEAD OF HOUSEHOLD

RESIDENCE AND OCCUPATION OF HEAD	USING LOWER POVERTY LINE	USING UPPER POVERTY LINE
RURAL		
ALL OCCUPATIONS	39.8	56.7
Owner farmer	20.5	39.9
Agri. worker with land	50.7	69.5
Landless agri. worker	74.8	86.8
Tenant farmer	42.0	64.6
Fisherman, livestock, etc	45.4	64.4
non-agri. occupation	38.1	54.3
Not working	33.3	45.2
URBAN		
ALL OCCUPATIONS	14.3	35.0
Professional/executive	5.0	12.9
Business	8.7	27.6
Laborer	28.3	57.3
Other occupation	16.6	43.2
Not working	10.2	29.7

NOTES :

1. Occupation - Rural: Owner farmer includes "Owner farmer (not working)" and "Owner farmer (working)", Agri. worker with land includes "Agri. worker (working in family land)" and "Agri. worker (working in family land and others)", Landless agri. worker includes "Agricultural laborer" and "Contract basis agri. worker", Tenant farmer includes "Tenant (share cropper including own land)" and "Tenant (only share cropper)", Fisherman livestock etc. includes "Fisherman" and "Forest/livestock" Other occupation includes all other occupations, and Not working includes "Household work", "Seeking work but not getting work", "Not seeking work", "Student", and "Not working".
2. Occupation - Urban: Professional/executive includes "Professional administrator", "Executive administrator", ("Other officials" and "Teaching", Business includes "Business", "Seller (hawker)" and "Broker/middle man", Laborer includes "Production laborer", "Laborer engaged in electricity gas and water", "Person engaged in construction", "Transport and communication laborer" and "Day laborer", Other occupation includes all other occupations, and Not working includes "Household work", "Seeking work but not getting work", "Not seeking work", "Student", and "Not working".

The 1995-96 HES also found that poverty incidence was negatively correlated with size of land holding (Table 4.10). For instance, individuals living in households owning "2.5 - 7.49 acres" had less than half the head-count rate of poverty compared to the national average.

TABLE 4.10 POVERTY INCIDENCE AND LAND OWNERSHIP

SIZE OF LAND HOLDING (ACRES)	NATIONAL	RURAL	URBAN
1. USING THE LOWER POVERTY LINE			
ALL SIZES	35.6	39.8	14.3
No land owned	39.9	57.9	19.4
Less than 0.05	50.5	63.1	22.1
0.05 - 0.49	47.0	53.1	13.2
0.50 - 1.49	30.9	33.5	4.5
0.50 - 2.49	21.4	22.9	3.6
2.50 - 7.49	16.0	17.4	0.6
7.50 or more	2.4	2.6	0.0
2. USING THE UPPER POVERTY LINE			
ALL SIZES	53.1	56.7	35.0
No land owned	58.2	69.0	45.8
Less than 0.05	68.9	80.0	43.6
0.05 - 0.49	64.2	69.8	32.9
0.50 - 1.49	51.0	53.6	24.2
0.50 - 2.49	40.6	42.8	13.8
2.50 - 7.49	30.9	32.4	13.1
7.50 or more	9.3	9.1	11.0

NOTE: Percentage of the population living below the poverty line indicated, expressed as a percentage of the total population in that particular group.

5. EDUCATION

The 1995-96 Household Expenditure Survey is the first survey in the HES series where, in addition to the information on household expenditure, consumption and income pattern, data were also collected on the educational background of all members residing in the households. It is therefore possible to derive a number of key indicators related to education in addition to the literacy status of the population such as current school enrollment amongst children of school-going age.

5.1 LITERACY

Estimates of the proportion of the population aged 7 years and older that is literate are presented in Table 5.1. As the table reveals, literacy rates in Bangladesh have increased from 32 percent in 1991 to 38.9 percent in 1995-96. Literacy rates were found by the 1995-96 HES to be considerably higher in urban areas (59.6 percent) compared to rural areas (34.6 percent), and for men (44.3 percent) compared to women (33.4 percent).

TABLE 5.1 LITERACY RATES (7 YEARS AND OVER)-BY GENDER AND ADMINISTRATIVE DIVISION

GENDER AND DIVISION	1991 POPULATION CENSUS			1995-96 HES		
	NATIONAL	RURAL	URBAN	NATIONAL	RURAL	URBAN
BOTH SEXES	32	28	50	38.9	34.6	59.6
Barisal	n/a	n/a	n/a	48.2	47.3	63.1
Chittagong	"	"	"	36.6	33.9	53.8
Dhaka	"	"	"	39.4	29.7	63.3
Khulna	"	"	"	44.1	41.4	61.6
Rajshahi	"	"	"	35.2	32.9	53.3
MEN	39	34	56	44.3	39.8	66.1
Barisal	n/a	n/a	n/a	51.8	50.7	70.4
Chittagong	"	"	"	41.9	38.9	60.9
Dhaka	"	"	"	44.4	34.4	69.5
Khulna	"	"	"	50.1	47.4	68.3
Rajshahi	"	"	"	41.2	38.9	59.6
WOMEN	26	22	42	33.4	29.2	53.2
Barisal	n/a	n/a	n/a	44.4	43.7	55.7
Chittagong	"	"	"	31.3	28.9	46.7
Dhaka	"	"	"	34.4	25.0	57.2
Khulna	"	"	"	37.3	34.5	54.4
Rajshahi	"	"	"	29.0	26.7	46.7

NOTES:

1. Source of census estimates: Bangladesh Population Census 1991: Volume 1: Analytical Report, Bangladesh Bureau of Statistics, September 1994. Page 130. n/a: Not available
2. Population aged 7 years and older that is literate, expressed as a percentage of the total population 7 years and older.
3. Literacy: 1991 census: All individuals who could write a letter. HES: All individuals who could read and write a letter.

5.2 SCHOOL ENROLLMENT

All individuals interviewed in the survey were asked about their educational background (i.e. whether or not they had ever enrolled in school, as well as whether or not they were currently enrolled in school). Based on the data collected, percentages have been computed of the population aged 6 - 10 years and 11 - 15 years those were enrolled in school. The results are presented in Tables 5.2. About 80 percent of all children aged 6 - 10 years were attending school in 1995-96, while around 64 percent of children aged 11 - 15 were enrolled in schools.

TABLE 5.2 PERCENTAGE OF CHILDREN ENROLLED IN SCHOOL

GENDER AND DIVISION	CHILDREN AGED 6 - 10 YEARS			CHILDREN AGED 11 - 15 YEARS		
	NATIONA L	RURAL	URBAN	NATIONA L	RURAL	URBAN
BOTH SEXES	80.1	80.0	80.5	63.7	63.0	67.3
Barisal	84.6	85.0	76.7	69.0	69.0	69.6
Chittagong	79.1	78.6	83.2	60.9	59.4	71.1
Dhaka	76.1	75.1	79.2	62.3	61.3	64.6
Khulna	89.2	89.4	87.8	71.9	71.1	76.8
Rajshahi	80.6	80.9	77.9	62.5	62.0	65.4
BOYS	80.5	80.3	81.3	61.6	60.6	66.7
Barisal	83.0	83.2	78.4	64.3	63.7	75.8
Chittagong	80.9	80.9	81.3	62.2	61.5	67.3
Dhaka	75.9	74.7	79.7	59.0	56.6	65.5
Khulna	89.3	89.2	90.1	67.3	66.7	71.0
Rajshahi	80.9	80.8	82.4	60.0	59.4	65.3
GIRLS	79.7	79.7	79.8	66.2	65.8	67.9
Barisal	86.4	86.9	75.0	74.3	75.0	64.4
Chittagong	77.3	76.3	84.9	59.4	56.7	74.8
Dhaka	76.4	75.6	78.7	65.6	66.4	63.9
Khulna	89.1	89.6	85.7	77.8	76.8	84.0
Rajshahi	80.3	81.0	73.4	65.5	65.5	65.5

NOTE: Population in the relevant age group that were enrolled in school (in any grade), expressed as a percentage of the total number of children in the age group.

Were children living in households below the poverty line less likely to be enrolled in school compared to those in richer households? Table 5.3 shows that this indeed was the case, with 71.0 percent of children aged 6 - 10 years enrolled in school amongst poor households (those with per capita expenditure less than the lower poverty line) compared to 86.9 percent of children living in non-poor households. Amongst children aged 11 - 15 years, this tendency was even more pronounced, with only 49.1 percent of the children in poor households enrolled in school compared to 70.6 percent in non-poor households (Table 5.4).

TABLE 5.3 PERCENTAGE OF CHILDREN AGED 6 - 10 ENROLLED - BY POOR/NON-POOR (LOWER POVERTY LINE)

GENDER AND DIVISION	POOR			NON-POOR		
	NATIONA L	RURAL	URBAN	NATIONA L	RURAL	URBAN
BOTH SEXES	71.0	71.3	67.4	86.9	87.7	83.9
Barisal	76.4	76.6	71.0	93.4	94.2	80.7
Chittagong	69.2	69.0	72.7	85.4	85.5	85.2
Dhaka	64.8	65.2	61.6	84.1	85.0	82.4
Khulna	86.8	87.4	82.5	90.9	90.8	91.1
Rajshahi	71.8	72.4	61.9	89.1	89.7	84.9
BOYS	70.8	71.0	68.3	87.6	88.2	85.1
Barisal	70.8	71.0	66.7	94.2	94.7	85.1
Chittagong	73.3	72.9	82.2	85.9	86.7	81.2
Dhaka	63.3	63.6	61.6	85.2	85.9	83.9
Khulna	88.1	88.4	84.9	90.1	89.7	92.7
Rajshahi	70.7	71.3	63.2	90.0	89.7	92.2
GIRLS	71.3	71.6	66.3	86.2	87.1	82.9
Barisal	81.5	81.8	74.3	92.5	93.5	75.6
Chittagong	64.8	64.9	63.5	85.0	84.2	89.0
Dhaka	66.5	66.9	61.6	83.0	84.1	81.0
Khulna	85.7	86.4	80.9	91.7	92.0	89.5
Rajshahi	72.8	73.4	60.4	88.2	89.8	78.4

NOTE:

1. Poor/non-poor defined respectively as whether or not the child resides in a household where the per capita expenditure is less than the lower CBN poverty line defined in Section 4.
2. Population aged 6 - 10 years old that were enrolled in school (in any grade), expressed as a percentage of the total population of children aged 6 - 10 years old.

As can be seen from both table 5.3 as well as table 5.4, however, there appeared to be no gender bias associated with poverty in this respect: for both age categories, roughly the same proportion of girls were enrolled in school compared to boys in both groups.

TABLE 5.4 PERCENTAGE OF CHILDREN AGED 11-15 ENROLLED - BY POOR/NON-POOR (LOWER POVERTY LINE)

GENDER AND DIVISION	POOR			NON-POOR		
	NATIONA L	RURAL	URBAN	NATIONA L	RURAL	URBAN
BOTH SEXES	49.1	49.3	45.3	70.6	70.6	70.6
Barisal	60.8	61.5	41.7	74.9	74.5	79.8
Chittagong	45.7	45.7	45.1	67.6	66.2	74.0
Dhaka	46.3	46.8	42.7	68.4	69.1	67.1
Khulna	55.6	56.3	49.9	79.7	78.6	85.4
Rajshahi	47.3	47.3	47.3	70.7	71.0	68.9
BOYS	46.6	47.2	39.1	68.7	68.0	71.3
Barisal	54.0	53.8	61.1	72.8	72.2	81.8
Chittagong	47.3	47.9	32.2	68.4	68.0	70.8
Dhaka	42.8	43.4	38.9	65.8	64.0	69.2
Khulna	50.1	51.8	35.1	76.0	74.8	82.2
Rajshahi	45.1	45.2	43.0	67.6	67.2	70.4
GIRLS	51.9	51.9	52.5	72.7	73.6	69.9
Barisal	70.0	72.1	22.2	77.0	76.9	78.2
Chittagong	43.9	43.3	55.6	66.6	64.1	77.2
Dhaka	50.4	50.7	47.6	70.9	74.6	65.3
Khulna	63.3	62.7	67.7	84.3	83.3	89.3
Rajshahi	49.8	49.7	52.1	74.7	76.4	67.7

NOTE:

1. Poor/non-poor defined respectively as whether or not the child resides in a household where the per capita expenditure is less than the lower CBN poverty line defined in Section 4.
2. Population aged 11 - 15 years old that were enrolled in school (in any grade), expressed as a percentage of the total population of children aged 11 - 15 years old.

Has enrollment in the country risen in recent years? Table 5.5 gives estimates for 1991 and 1995-96 of primary level gross enrollment rates -- the total number of children currently enrolled at the primary level, expressed as a proportion of all children aged 6 - 10 years old. As this table shows, gross enrollment rates in the country have increased from 89 percent in 1991 to an estimated 102 percent in 1995-96.

The enrollment rates in 1995-96 exceeding 100 percent simply reflects the fact that many children aged 11 years and older were also attending primary school. The table shows that enrollment rates are equally high in both urban as well as rural areas in the country. The table also reveals that there was no remarked difference between enrollment rates for girls and boys in both urban as well as rural areas.

TABLE 5.5 GROSS ENROLLMENT RATE(PERCENT)AT THE PRIMARY LEVEL

GENDER AND DIVISION	1991			1995-96 HES		
	NATIONAL	RURAL	URBAN	NATIONAL	RURAL	URBAN
BOTH SEXES	89	n/a	n/a	102	103	100
Barisal	n/a	"	"	110	111	91
Chittagong	"	"	"	100	100	106
Dhaka	"	"	"	96	96	96
Khulna	"	"	"	119	119	112
Rajshahi	"	"	"	103	104	99
BOYS	97	n/a	n/a	103	103	101
Barisal	n/a	"	"	108	109	92
Chittagong	"	"	"	104	104	102
Dhaka	"	"	"	95	95	96
Khulna	"	"	"	118	118	120
Rajshahi	"	"	"	104	104	104
GIRLS	80	n/a	n/a	102	102	99
Barisal	n/a	"	"	113	114	91
Chittagong	"	"	"	97	95	110
Dhaka	"	"	"	98	98	96
Khulna	"	"	"	119	121	106
Rajshahi	"	"	"	102	103	95

NOTES:

1. Source of 1991 estimates: Bangladesh Education in Statistics 1991, Bangladesh Bureau of Statistics, January 1992. Page 27. n/a: Not available.
2. Gross Enrollment Rate (GER): [Number of children attending primary level (i.e. class I - V) divided by Number of children aged 6 -10 years] multiplied by 100.
3. Numerator of GER: Raised sum (i.e. after applying expansion factors or weights to the data) of all individuals who report currently attending primary level (class I - V) in the 1995-96 HES.
4. Denominator of GER: Raised sum (i.e. after applying expansion factors or weights to the data) of all individuals aged 6 - 10 years covered in the 1995-96 HES.

Among the total students attending the primary schools, about 79 and 81 percents of the boys and girls respectively, attended either government or government subsidized schools (Table 5.6). Attendance in either government or government

subsidized schools, is the highest in Barisal division (84.6% boys and 87.8% girls) and Khulna division is the lowest in respect of boys (76.8%) and Rajshahi division in respect of girls (77.04%).

TABLE 5.6 TYPE OF SCHOOL ATTENDED AT THE PRIMARY LEVEL

GENDER, RESIDENCE AND TYPE OF SCHOOL	PERCENTAGE OF CHILDREN ATTENDING TYPE OF PRIMARY SCHOOL					
	NATIONAL	BARISAL	CH'GONG	DHAKA	KHULNA	RAJSHAHI
NATIONAL	100.00	100.00	100.00	100.00	100.00	100.00
Government	57.14	68.48	66.88	52.56	49.48	53.30
Govt. subsidized	22.64	17.67	14.21	26.71	28.61	24.68
Private-Bengali	10.59	7.32	13.19	8.75	10.58	11.19
Private-English	0.64	0.41	0.27	1.54	0.17	0.25
NGO run	5.23	1.28	1.94	7.26	7.80	5.99
Madrasa	2.98	3.82	2.89	2.28	2.44	3.97
Other	0.78	1.02	0.63	0.90	0.92	0.62
BOYS	100.00	100.00	100.00	100.00	100.00	100.00
Government	55.65	66.15	64.06	53.15	46.12	51.77
Govt. subsidized	23.22	18.47	14.60	25.50	30.63	27.03
Private-Bengali	11.22	6.65	14.33	9.44	11.75	11.10
Private-English	0.66	0.55	0.21	1.44	0.28	0.46
NGO run	4.10	0.83	2.02	5.71	6.39	4.11
Madrasa	4.15	6.32	3.99	3.66	3.55	4.57
Other	1.01	1.03	0.80	1.11	1.29	0.96
GIRLS	100.00	100.00	100.00	100.00	100.00	100.00
Government	58.81	70.98	70.26	51.95	53.43	55.05
Govt. subsidized	22.00	16.80	13.75	27.96	26.24	21.99
Private-Bengali	9.88	8.03	11.82	8.04	9.21	11.30
Private-English	0.62	0.25	0.34	1.65	0.06	0.00
NGO run	6.51	1.77	1.84	8.88	9.45	8.13
Madrasa	1.66	1.14	1.57	0.83	1.14	3.30
Other	0.51	1.02	0.43	0.69	0.49	0.23
RURAL	100.00	100.00	100.00	100.00	100.00	100.00
Government	58.46	68.71	68.07	55.09	49.42	53.42
Govt. subsidized	21.62	17.99	14.19	23.64	28.18	24.86
Private-Bengali	9.85	6.78	12.45	7.21	10.62	10.41
Private-English	0.27	0.39	0.06	0.67	0.00	0.18
NGO run	5.72	1.17	1.56	9.45	8.55	6.29
Madrasa	3.37	3.91	3.13	2.91	2.42	4.42
Other	0.72	1.04	0.54	1.03	0.81	0.42
URBAN	100.00	100.00	100.00	100.00	100.00	100.00
Government	51.13	64.73	59.83	46.83	49.83	52.48
Govt. subsidized	27.31	12.33	14.35	33.67	31.29	23.34
Private-Bengali	13.96	16.10	17.56	12.24	10.30	16.82
Private-English	2.35	0.68	1.49	3.52	1.24	0.72
NGO run	3.03	3.08	4.14	2.29	3.21	3.82
Madrasa	1.17	2.40	1.47	0.84	2.51	0.80
Other	1.06	0.68	1.16	0.61	1.62	2.02

NOTE: Children that are attending the type of primary school indicated, expressed as a percentage of the total number of children attending primary school in that particular group.

APPENDIX-A

SELECTED COMMUNITY CHARACTERISTICS

A1. SELECTED COMMUNITY CHARACTERISTICS

As mentioned earlier in the report, a community questionnaire was used for the first time in the 1995-96 HES round. This questionnaire was administered rural communities where the survey was conducted, and it collected information on a wide range of topics. Basic demographic characteristics of the community, agricultural practices, quality of social and physical infrastructure, availability of schools and health facilities, access to various amenities, and development programs and activities undertaken by the government and NGOs in the community were amongst the various topics on which data were collected.

This section presents a few tabulations based on the data collected using this module. It is important to point out, however, that the findings reported here should be interpreted with caution; the results presented in this appendix have not been weighted and therefore may not necessarily be representative of the country as a whole.

The data in the community questionnaire can be helpful to answer questions in the household level. For instance, whether or not there is a school present within the PSU may be an important variable to control for, when analyzing factors determining school enrollment of children. Similarly, cropping patterns prevalent in the area might help explain variation in price of different food commodities, etc. The main reason for including tabulations in this report based on data from the community questionnaire is to draw attention to the wide scope and richness of the data collected.

A1 GENERAL INFORMATION ABOUT VILLAGES WITHIN PSUs IN RURAL AREAS

NO. OF VILLAGES	NO. OF HOUSEHOLD S	TOTAL POPULATION	NO. OF VILLAGES HAVING UNION PARISHAD EXECUTIVES		
			CHAIRMAN	MEMBER	SECRETARY
252	138,445	701,858	42	164	23

RELIGIOUS COMPOSITION OF THE POPULATION (PERCENT)			
TOTAL	MUSLIM	HINDU	OTHERS
100	90	9	1

A2 ACCESS TO FACILITIES

FACILITY	AVE.TIME TO REACH FACILITY (HOURS)	PERCENTAGE OF VILLAGES WITH FACILITY AT DISTANCE (IN MILES) SHOWN					NON-RES PONES (% OF TOTAL)
		WITHIN VILLAGE	1-3	4-5	6-9	ABOVE 9	
Agricultural Bank	1.12	19.91	35.50	16.45	15.15	12.99	7.97
Commercial Bank	1.02	17.98	35.09	14.47	14.04	18.42	9.16
Grameen Bank	1.00	16.81	38.94	13.72	11.50	19.03	9.96
Hat/Bazar	1.14	45.96	24.26	9.36	8.09	12.34	6.37
Veterinary Doctor	1.08	24.15	33.47	13.56	13.14	15.68	5.98
Open Market Food Center	1.02	18.97	36.64	14.66	12.07	17.67	7.57
Club	1.12	51.45	20.33	8.30	9.96	9.96	3.98
Cinema Hall	1.04	15.49	36.28	12.83	16.81	18.58	9.96
Playground	1.05	54.55	25.21	7.44	4.96	7.85	3.59
Community Center	0.90	19.30	37.28	12.28	14.47	16.67	9.16
Cyclone Shelter	0.89	18.99	32.91	12.66	18.14	17.30	5.58
Post Office	0.85	30.67	35.29	9.66	10.08	14.29	5.18
Police Station	0.96	14.22	34.22	14.67	17.78	19.11	10.36
Fertilizer Sales Center	1.21	31.20	37.18	9.83	10.26	11.54	6.77

A3 ACCESS TO HEALTH CARE FACILITIES

FACILITY	AVE.TIME TO REACH FACILITY (HOURS)	PERCENTAGE OF VILLAGES WITH FACILITY AT DISTANCE (IN MILES) SHOWN					NON- RESPONSES (PERCENT OF TOTAL)
		WITHIN VILLAGE	1-3	4-5	6-9	ABOVE 9	
Govt. Hospital	1.05	1.61	21.69	17.27	28.92	30.52	0.80
Rural Health Center	1.33	20.20	53.69	12.81	8.87	4.43	19.12
Temporary Clinic	1.12	29.24	29.82	12.87	10.53	17.54	31.87
Fam. Planning Clinic	1.07	11.64	57.76	15.52	8.62	6.47	7.57
Private Hospital	1.09	12.82	7.18	6.67	9.74	63.59	22.31
Private Clinic	1.31	8.33	13.43	8.33	11.57	58.33	13.94
Private Doctor	1.06	21.76	36.57	14.81	12.04	14.81	13.94
Medicine Shop	0.92	32.89	54.67	7.11	3.56	1.78	10.36
Immunization Center	1.01	39.32	36.41	9.71	7.28	7.28	17.93
NGO First Aid Center	1.21	24.06	20.86	9.09	10.16	35.83	25.50
Mother Child Health Center	1.09	7.14	30.36	12.05	14.73	35.71	10.76

A4 NGO DEVELOPMENT PROGRAMS

TYPE OF PROGRAM	PERCENTAGE OF VILLAGES HAVING TYPE OF PROGRAM INDICATED				
	GRAMEEN BANK	BRAC	PROSHIKA	CARITAS	OTHERS
Small Business/Indust	13.10	4.76	0.79	0.40	4.37
Tech. Training	0.79	0.79	0.79	0.40	0.40
Education	1.59	14.29	0.79	0.40	1.19
Health/Fam Planning	0.79	4.37	0.40	0.79	5.16
Plantation	0.79	1.19	1.59	1.19	2.38
Water/Sewerage	0.40	0.40	0.40	0.40	0.79
Others	1.59	1.59	2.38	0.40	3.17
TOTAL	19.05	27.38	7.14	3.97	17.46

A5 GOVERNMENT DEVELOPMENT PROGRAMS

TYPE OF PROGRAM	PERCENTAGE OF VILLAGES THAT ARE RECIPIENTS OF GOVERNMENT PROGRAMS	AVERAGE NO. OF PARTICIPANTS IN EACH RECIPIENT VILLAGE	NON-RESPONSE RATE (PERCENT)
Food for work (FFW)	47.35	30	2.39
Food for educ. (FFE)	23.27	47	2.39
Vulner. group feeding	4.60	80	4.78
Farmers co-op. society	40.91	76	3.59
Have-nots co-op.society	36.40	45	4.78
B.credit l'stock/fish	15.48	66	4.78
Adult Education	17.43	35	3.98
Other Government program	11.01	36	9.56

APPENDIX-B

POVERTY LINES AND POVERTY MEASURES

POVERTY LINES AND POVERTY MEASURES

This report uses two methods for estimating poverty. The first method is based on caloric intake: a household with a per capita caloric intake of less than 1805 kcal per day is considered as "hard core poor" while a household with less than 2,122 kcal per day is considered as "absolute poor". The second method is the cost of basic needs method. To be considered as poor, a household must have a per capita expenditure below a given poverty line. This appendix focuses on the steps followed for estimating the poverty lines used in the cost of basic needs method. It also discusses various measures (headcount, poverty gap, and squared poverty gap) which can be used to estimate poverty.

I. The Cost of Basic Needs Method

With the cost of basic needs method, poverty lines represent the level of per capita expenditures at which the members of a household can be expected to meet their basic needs (food consumption to meet their caloric requirement, but also non-food consumption). Because the prices of some goods and services vary dramatically between geographical areas in Bangladesh, poverty lines were estimated at a more disaggregated level than the traditional urban/rural split. Specifically, the country was divided into 14 different geographic areas (9 urban and 5 rural). Then, three steps were used to estimate what it costs for a household to meet its basic needs.

First, a food bundle was defined. The bundle consists of a dozen items: rice, wheat, pulses, milk, oil, meat, fresh water fish, potato, other vegetables, sugar, and fruits. It provides minimal nutritional requirements corresponding to

2,122 kcal per day and person, the same threshold used to identify the absolute poor with the direct caloric intake method. Prices for each item in the bundle were estimated in each of the fourteen areas. In order to capture the price paid by the poor for each food item, regressions were used to control for the impact of household characteristics such as total consumption, education, and occupation on the quality of the food consumed (better off households buy more expensive food than the poor). Denoting the required quantities in the food bundle to meet the caloric requirement by (F_1, \dots, F_N) , where F_j is the required per capita quantity of food item j , food poverty lines were computed as $Z_{kf} = \sum P_{jk} F_j$. In this equation, the nutritional needs are the same for all areas, but the prices for each item are area-specific, with the subscript k referring to area k .

The second step consisted in computing allowances for non-food consumption. This can be a difficult task. Ideally, one would wish to establish a list of non-food items considered as essential for a decent life. Then, given estimates of the prices of these items in various areas, one would proceed as for the food poverty lines and sum up the cost of basic non food needs. Unfortunately, this is not feasible. First, there is no agreement as to what constitutes non food needs (by comparison, there is little controversy about considering food needs through caloric requirements). And even if one were able to establish a finite and agreed upon list of non food needs, one would still lack information about the prices of these needs in many areas.

The alternative idea to estimate the cost of non food needs is to look at what the poor themselves spend on non food consumption. Two cases were considered. First, in each area, the non-food expenditures of households whose total

consumption is equal to their food poverty line Z_{kf} were estimated. These households spend less on food than the food poverty line. Hence what they spend on non-food items must be devoted to bare essentials. Algebraically, denoting total per capita consumption by y and food per capita consumption by x , the "lower" allowances for non-food consumption were estimated as $ZL_{kn} = E[y_i - x_i \mid y_i = Z_{kf}]$, where E is the expectation statistical symbol. Second, "upper" allowances for non-food consumption were defined by estimating the share of non-food expenditures for households whose food expenditure is equal to the food poverty line (these households do meet their food requirement). These upper allowances for non-food items can be expressed as $ZU_{kn} = E[y_i - x_i \mid x_i = Z_{kf}]$. Because the share of food expenditures in total consumption decreases as consumption increases, ZU_{kn} is larger than ZL_{kn} .

The third step in the estimation of the poverty lines consists simply in adding to the food poverty lines the lower and upper non-food allowances to yield the total lower and upper poverty lines for each of the 14 geographical area:

Lower poverty line: $ZL_k = Z_{kf} + ZL_{kn}$, where $ZL_{kn} = E[y_i - x_i \mid y_i = Z_{kf}]$

Upper poverty line: $ZU_k = Z_{kf} + ZU_{kn}$, where $ZU_{kn} = E[y_i - x_i \mid x_i = Z_{kf}]$

Thus, within each area, the estimates of the cost of basic food needs are the same with the lower and upper poverty lines. The difference between the two lines is due to the difference in estimation of the allowances for non-food consumption. None of the two poverty lines is intrinsically better than the other. The two poverty lines simply define two alternative normative conceptions of the poor, as is the case

with the direct caloric intake method where two thresholds are also used : 1805 kcal, and 2122 kcal. What is important, however, is to use both poverty lines, the lower and the upper, for poverty comparisons. If, for example, rural areas are found to be poorer than urban areas with both sets of poverty lines, then one can say that the poverty comparison between urban and rural areas is robust to the choice of the poverty line (lower or upper), and therefore that the potential policy recommendations (say, investing in rural areas) is robust as well.

II. Alternative Poverty Measures

Once the poverty lines have been estimated, several poverty measures can be used to measure the extent of deprivation. The most standard measures are the so-called FGT measures.³ The incidence of poverty is measured by the headcount index, which is simply the percentage of the population living in households with a per capita consumption below the poverty line. The depth of poverty is measured by the poverty gap index, which estimates the average distance separating the poor from the poverty line as a proportion of that line (the mean is taken over the whole sample with a zero distance allocated to the households who are not poor.) The severity of poverty is measured by the squared poverty gap index, which takes into account not only the distance separating the poor from the poverty line, but also the inequality among the poor. All three measures can be represented with the following equation:

$$P_{\alpha} = \sum [(z-y)/z]^{\alpha} \text{ with } \alpha=0, 1, \text{ or } 2$$

³ Foster, James, J. Greer, and E. Thorbecke, 1984, *A Class of Decomposable Poverty Measures*, *Econometrica*, 52 : 761-66.

The headcount index corresponds to $\alpha=0$, the poverty gap to $\alpha=1$, and the squared poverty gap to $\alpha=2$. Although the headcount is the easiest measure to understand and thereby the most widely used, it can be important for policy discussions to use the poverty gap or the squared poverty gap.

For example, imagine that two households have a per capita consumption of, respectively, 400 and 550 Taka per month. They live in an area where the poverty line is 600 Taka per month. Giving a transfer of 51 Taka to the first household will not reduce the headcount index since the consumption level of the household will remain below the poverty line. But giving the transfer to the second household will reduce the headcount since the second household will become non-poor. So, from the point of view of the headcount index, it is better to give the transfer to the second household. But if the squared poverty gap were used as the poverty measure, giving the transfer to the first household would be more effective in reducing poverty. Clearly, if the priority is to be given to the most disadvantaged, the first household should receive the transfer, not the second. This is the sense in which using the poverty gap or the squared poverty gap may at times be better for guiding policy than using the headcount index of poverty.

APPENDIX-C

STANDARD ERRORS OF COST BASIC NEEDS (CBN)

POVERTY MEASURES

C1. STANDARD ERRORS OF COST OF BASIC NEEDS (CBN) POVERTY MEASURES

The standard errors for the head-count rate, the poverty gap, and the squared poverty gap (national + divisional estimates) are as follows:

Head-count rates: Lower poverty line (HL)

Mean	Estimate	Standard Error	[95% Confidence Interval]	
HL	35.55449	1.146652	33.29944	37.80953
Barisal	43.87415	3.696908	36.60370	51.14461
Chittagong	32.36490	2.594755	27.26197	37.46782
Dhaka	33.03806	2.089760	28.92828	37.14785
Khulna	32.20021	2.592667	27.10139	37.29903
Rajshahi	41.59701	2.192553	37.28506	45.90895

Head-count rates: Upper poverty line (HU)

Mean	Estimate	Standard Error	[95% Confidence Interval]	
HU	53.07919	1.233497	50.65336	55.50503
Barisal	59.90998	3.887723	52.26427	67.55570
Chittagong	44.91762	2.845725	39.32112	50.51411
Dhaka	51.96296	2.265521	47.50752	56.41841
Khulna	51.69777	3.344972	45.11944	58.27609
Rajshahi	62.20530	2.059871	58.15429	66.25630

Poverty gap: Lower poverty line (PGL)

Mean	Estimate	Standard Error	[95% Conf. Interval]	
PGL	.0788768	.0034546	.0720828	.0856708
Barisal	.1022218	.0129004	.0768516	.1275921
Chittagong	.0607739	.0062555	.0484716	.0730762
Dhaka	.0796999	.0066652	.0665919	.0928080
Khulna	.0649217	.0071717	.0508177	.0790258
Rajshahi	.0979367	.0078256	.0825466	.1133268

Poverty gap: Upper poverty line (PGU)

Mean	Estimate	Standard Error	[95% Confidence Interval]	
PGU	.1437305	.0046294	.1346262	.1528348
Barisal	.1803360	.0173019	.1463096	.2143624
Chittagong	.1049164	.0087965	.0876170	.1222158
Dhaka	.1485357	.0088628	.1311058	.1659656
Khulna	.1240416	.0099514	.1044710	.1436123
Rajshahi	.1794019	.0101149	.1595096	.1992942

Squared poverty gap: Lower poverty line (SPGL)

Mean	Estimate	Standard Error	[95% Confidence Interval]	
SPGL	.0259201	.0014501	.0230684	.0287719
Barisal	.0336994	.0054038	.0230722	.0443266
Chittagong	.0172855	.0021812	.0129958	.0215751
Dhaka	.027758	.0029582	.0219402	.0335757
Khulna	.019574	.0029173	.0138368	.0253111
Rajshahi	.0339571	.0034627	.0271472	.0407671

Squared poverty gap: Upper poverty line (SPGU)

Mean	Estimate	Standard Error	[95% Confidence Interval]	
SPGU	.0535932	.0022218	.0492236	.0579627
Barisal	.0709097	.0085812	.0540337	.0877858
Chittagong	.0336086	.0034206	.0268816	.0403357
Dhaka	.0578383	.0044041	.0491770	.0664996
Khulna	.0428901	.0044213	.0341950	.0515852
Rajshahi	.0703895	.0054098	.0597505	.0810286