INSTITUTE OF INTEGRATED RURAL DEVELOPMENT

FOOD SECURITY THROUGH SUSTAINABLE INCOME UPLIFT AND POVERTY ERADICATION PROJECT

A SOCIO-ECONOMIC BASELINE SURVEY

FINAL REPORT

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FOOD SECURITY THROUGH SUSTAINABLE INCOME UPLIFT AND POVERTY ERADICATION PROJECT:
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GLOSSARY OF TERMS

Abbreviations

ANOVA	Analysis of variance
ASA	Association for Social Development, an NGO in Bangladesh
BCG	Bacille Calmette-Guerin, a tuberculosis vaccine
BRAC	Present name of Bangladesh Rural Advancement Committee, a non-governmental rural development organization
C.I.	Corrugated iron (sheets)
DFL	Disease free laying, eggs for producing cocoons in sericulture
DPT	Diphtheria, Pertussis and Tetanus, a composite vaccine
EC	European Commission
EPI	Expanded Programme on Immunization
GB	Grameen Bank, a micro-financing institution
GO	Government organization
HH	Household
IIRD	Institute of Integrated Rural Development, an NGO in Bangladesh
NGO	Non-governmental organization
RED	Research and Evaluation Division of BRAC
SPSS	Statistical Package for Social Science, a software for data analysis
Tk.	Taka, unit of Bangladesh currency

Bangla words

Amon	Summer and rainy season rice crop, harvested in November-December
Aus	Early summer rice crop/crop season
Boro	Winter variety of rice. In cropping calender, the winter season crops are termed as boro season crops
Chhan	Wild grass or straw, mainly used in rural areas as housing material (for roof and wall) by the poor.
Jhupries	Shanty, makeshift living shed used by destitutes and floating population
Khas	Indicates a category of land whose ownership is vested in the State
Khat	Cot or bed made from wooden planks
Mushti chal	Handful of rice saved by rural women before cooking
Saree	Traditional dress of women in Bangladesh
Upazila	Sub-district, an administrative unit in Bangladesh

TABLE OF CONTENTS

EXECUTIVE SUMMARY vii

I. INTRODUCTION 1

1.1 Background of the study 1
1.2 Methodology 2
1.3 Definitions 4
1.4 Organization of the report 4

2. DEMOGRAPHIC CHARACTERISTICS OF THE TARGET HOUSEHOLDS 6

2.1. Characteristics of Household Members 6
2.2 Characteristics of Household Heads 8

3. SOCIAL CHARACTERISTICS 10

3.1 Number of income earners in the households: 10
3.2 Dependency 10
3.3 Occupation 11
3.4 Housing 13
3.5 Educational Status 15
3.6 Water and Sanitation 16

4. ECONOMIC CHARACTERISTICS 18

4.1 Land holding status 18
4.2 Non-land Asset Ownership 20
4.3 Household Income/expenditure 21
4.4 Training Received 24
4.5 NGO Membership Status 24
4.6 Perception on Food Security 26
4.7 Coping With Crises 28

5. CREDIT AND SAVINGS 31

5.1 Credit 31
5.2 Savings 37

6. PROSPECTS FOR EMPLOYMENT AND INCOME GENERATION 39

6.1 Pisciculture 39
6.2 Poultry 41
6.3 Livestock/Dairy Farming 42
6.4 Sericulture 42
6.5 Horticulture/Vegetable Gardening 43

7. HEALTH STATUS OF THE SAMPLE POPULATION 45

7.1 Incidence of Diseases 45
7.2 Treatment Seeking Behaviour 46
7.3 Availibility of Health Services 47
7.4 Infant and Child Deaths 48
7.5 EPI Coverage 50

8. POLICY IMPLICATIONS 52

ANNEX 1 56

ANNEX 2 57

LIST OF TABLES

1: Distribution of samples for IIRD baseline survey
2a: Distribution of households by size of households and poverty category (%)
2b: Number of members per household by sex and poverty category
3: Distribution of household population by age, sex and poverty category (%)
4: Distribution of household heads by age, sex and poverty category
5: Distribution of household heads by marital status, sex and poverty category.
6: Distribution of households by number of income earners and poverty category
7: Economic dependency by poverty category (%)
8: Distribution of household heads by occupation, sex and poverty
9: Distribution of population by occupation, sex and poverty category (>10 years)
10: Distribution of households by living houses and poverty category
11: Distribution of living houses by roof construction materials and poverty category
12: Distribution of living houses with C.I. sheet roofing by source of fund and poverty category
13: Distribution of household heads by education, sex and poverty category .
14: Distribution of population by education, sex and poverty category (>6 Years).
15: Distribution of households by sources of drinking water and poverty category
16: Distribution of households by places of defecation and poverty category
17: Distribution of households by size of landholding and poverty category
18: Distribution of households by landholding and poverty category
19: Distribution of area under cultivation by poverty category
20: Distribution of gross cultivated area under different crops by poverty category
21: Non-land asset ownership by poverty category
22: Annual per capita food and non food expenditure by poverty category (%)
23: Distribution of households by type of expenditure and poverty category (%)
24: Distribution of households by per capita monthly expenditure range and poverty category.
25: Percent of population within 10-60 years of age category having any kind of training and its types by poverty category
26a: Distribution of households by NGO involvement and poverty category
26b: Distribution of households by NGO involvement and poverty category
26c: Distribution of household members involved in NGOs by poverty category
27: Distribution of households by possession of extra saree of wives of household heads by poverty category
28: Percentage of households facing any kind of crisis by poverty category
29: Types of crisis faced by poverty category
30: Crisis coping/management by poverty category
31: Credit received by source and poverty category
32: Information on outstanding loans by poverty category
33a: Use of loan by poverty category
33b: Use of loan by sources and poverty category
34a: Reasons of borrowing by poverty category
34b: Distribution of loan use and diversion by poverty category
35a: Source wise interest rate for all samples
35b: Source-wise interest rate for Hardcore poor
35c: Source-wise interest rate for very poor

36: Amount of savings by types and poverty category (considering all households)
37: Amount of savings by types and poverty category (considering only those who saved)
38: Percent of population within 10-60 years of age category having any kind of skill and its types by poverty category
39: Distribution of households by ownership of pond and poverty category
40: Different uses of ponds by poverty category
41: Incidence of disease during the previous one month by poverty category
42: Different types of diseases during the last one month by poverty category
43a: Treatment practices by diseases among the hardcore poor households.
43b. Treatment practices by diseases among the very poor households.
43c: Places of treatment seeking by poverty category
44: Types of nearest health centres by poverty category (%)
45: Distribution of households by the distance of nearest health centres by poverty category
46: Distribution of dead children by cause of death and poverty category
47: Distribution of male infants and children who died by cause of death and poverty category
48: Distribution of female infants and children who died by cause of death and poverty category
49: EPI coverage by poverty category
50: Age-wise vaccination status by poverty category
A.2: Criteria used in defining immunization status of children

Figures

1: Poverty self-assessment by poverty category
A.1: Different programmes of IIRD

EXECUTIVE SUMMARY

1. Introduction

1.1. The study analyses the current socio-economic status of the sample population of the EC assisted three-year rural development project undertaken by the IIRD, a rural development organisation. It's project area covers five upazilas of four districts in Bangladesh.

1.2. The study covers demographic, social and economic characteristics of the target population. Existing status of the sample population on different indicators such as credit, savings, prospects for employment and income generation and health related aspects including incidence of diseases, treatment seeking behaviour, causes of infant and child deaths and EPI coverage are also included in the study.

2. Methodology

2.1 A sample survey was conducted covering all five upazilas under four districts where the IIRD project is being implemented. A total of 1,888 samples were selected for the study with 966 from the 'hardcore' and 922 from the 'very' poor households at the rate of 5% households from each group.

2.2 The hardcore poor, according to IIRD, are the most poor 10-15% households in rural Bangladesh with lack of food security, substandard housing and unable to meet the five basic needs. The very poor are the next 25-30% of the population who are a little better-off than the hardcore poor but also have problems in meeting the five basic needs.

2.3 Data were collected carefully by administering a structured questionnaire by experienced field enumerators during July-August, 2000. Data were duly processed and analysed in computers using the SPSS package programme.

3. Demographic Characteristics

3.1 The demographic characteristics of the households showed that in comparison with the very poor, the hardcore poor had a smaller household, and a larger

number of females than males. Female population for both poverty groups were higher than male population for the 16-45 age group but lower in the other age groups.

3.2 The hardcore poor had significantly more female headed households (20%) than very poor households (8%) indicating higher vulnerability of the hardcore households. The percentage of currently married heads was higher for very poor households than the hardcore poor. Eighty nine percent of all female heads were either divorced or widowed or separated.

3.3. A significant indication of the extreme poverty status of the sample households is that majority (52%) household heads of both poverty groups were wage labourers. The males were primarily engaged in the agriculture sector while the female were mainly engaged in the non-agriculture sector. There was no major difference between the two poverty groups except that the hardcore poor had more dependent heads (6%) than the other (1%).

4. Social Characteristics

4.1. Findings on social characteristics of the sample households show that on an average, 60% households had a single income earner, 27% two income earners and only 12% had more than two earners. In comparison with the hardcore poor, more very poor households had a single earner and less of them had two or more income earners. Three percent hardcore poor and less than 1% very poor households had no income earner. The hardcore poor also had a relatively higher number of female income earners. But average earner being same, with smaller household size, the hardcore poor had relatively less dependency. The overall dependency rate for the two groups together was 2.4 per earner.

4.2. Occupation of household members was also determined. Thirty five percent of household members above 10 years were engaged in household work most of whom were females while 25% were engaged as wage labourers. Only 6% were engaged in rural transport operation and 5% in small business. Other minor

occupations included poultry and livestock raising, various food processing, tailoring, cottage industries, carpentry and various professional activities and only 10% were self-employed.

4.3. Considering value of their living houses, the housing condition of the sample population may be termed as poor. Thirty nine percent lived in houses with value less than Tk. 1,000 (50% hardcore and 27% very poor). Twenty nine percent of hardcore poor and 14% of very poor lived in shanty houses or *jhupries* with values less than Tk. 500.

4.4. Bamboo and jute sticks were the most common raw materials used for wall while c.i. sheets and straw/*chhan* used as roofing materials. There was visible difference among the two poverty groups with the quality of houses of very poor being better.

4.5. Majority (52%) of household heads were also illiterate with illiteracy rate being relatively higher in case of the hardcore poor heads. Thirty seven percent could sign their names, which was the result of GO-NGO literacy campaign, especially required for eligibility to receive credit.

4.6. Data on educational status of household members show that 34% over 6 were illiterate, 29% could only sign their names, 8% could read and write only while 23% had attended primary school and 5% had education beyond primary level. The status of very poor households was better than hardcore poor and male performance was better than female performance.

4.7. Data showed that access to tubewell water for drinking was universal (99%) with no difference among the two poverty groups while 28% among the very poor and 20% among the hardcore poor used slab latrines for defecation.

5. Economic characteristics

5.1. Landholding status of the two poverty groups does not show much difference. Average land owned by the hardcore poor considering all types of land including homestead was 8 decimals while that for the very poor was 10 decimals. Sixty

nine percent of all households had only homestead and only 9% had both homestead and cultivable land. Less than one fourth of all sample households were involved in agriculture production with most of the land being rented/mortgaged/leased in.

5.2. Paddy was the most important crop produced by the sample households of both poverty groups covering around 80% of the gross cropped area. Other minor crops included wheat, oilseeds, pulses, spices, potato and vegetables during the *boro* season and jute, vegetables and sugarcane during the *aus-amon* season.

5.3. Non-land assets owned by the sample population include poultry and livestock, timber and fruit trees, and durable goods like bicycle, boat, looms, watch, radio, furniture, jewelry, etc. Ninety-five percent of the very poor and 91% or hardcore poor owned any type of asset. Only 25% of hardcore and 27% of very poor owned livestock, 54% of hardcore and 61% of very poor households owned poultry, 61% hardcore and 71% very poor owned jewelry, and 72% hardcore and 83% very poor households owned any type of durable asset.

5.4. Average values of non-land assets were Tk. 2,000 and Tk. 2,494 per hardcore and very poor household respectively. Asset value of the latter were 30% higher than that of the hardcore poor. Overall, the asset base of both poverty groups was very weak.

5.5. Data on household income were collected but not used because of gross under-statements in income data. Thus expenditure data were used for assessing the poverty situation of the sample population.

5.6. Per capita monthly expenditures of the hardcore and the very poor households were Tk. 384 and Tk. 417 respectivley, the expenditure of the very poor being 9% higher. Food constitutes the largest share of household expenditure with 79% for the hardcore poor and 78% for the very poor. Expenditure on clothing was the second largest source (7%) and treatment was the third (4%). There was not much difference in the expenditure pattern of the two poverty groups.

6. Training

6.1. Only 1.3% of the hardcore poor and 1.4% of the very poor household members of 10-60 years of age received training of any kind. This indicates a very poor training status of the sample population.

7. NGO membership status

7.1. Considering all households, 44% had involvement in NGOs. Forty percent of hardcore poor and 46% of very poor households had NGO members. Average number of NGO members per household was just over 1 with only 3% households having more than one NGO member. The largest number of NGO members belonged to the IIRD (43-44%) followed by BRAC (14-17), GB, Proshika and ASA (For more details, please see Table 26b).

8. Food security

8.1. According to their own perceptions, the sample households had a very low poverty status considering the fact that 73% of them suffered from either occasional or chronic food deficit throughout the year. Only 4% had surplus food. Food deficit faced by the hardcore poor was higher than that faced by the very poor. They had a very low status also judged by the criterion that only 23% wives of household heads/or female household heads had extra sarees.

9. Coping with crisis

9.1. During the previous one year, less than one third of the sample households faced some crises, the major among which were illness, death of household members and accidents. The second important source of crisis was natural calamities. Loss in business was another source of crisis. It may be noted that the year under consideration was free from any major natural calamity like cyclones and floods so the effects of calamities were moderate.

9.2. To cope with crises, two-thirds of the sample households resorted to borrowing. Relief and assistance was received by only 10% of the crisis affected households. More of the very poor households borrowed than the hardcore poor. Similarly, sale of assets was also higher for the very poor households.

10. Credit

10.1. Sixty seven percent of all sample households received credit. Among them were 64% hardcore and 70% very poor households. Loan amount of the very poor households was higher. Among the four sources, the largest number of households borrowed from informal sources. NGOs were the second most important source followed by non-registered organizations and govt/cooperative sources. Loan outstanding was lowest for NGOs and highest for informal sources.

10.2. Use of loan shows that 39% of the loans were used on household consumption/ expenses, 24% on asset purchase, 20% on agricultural production and small business taken together, 12% on house construction or repair and 11% on treatment. There was not much difference in this respect among the two poverty groups except that the hardcore poor spent more on consumption than the other group. Use of loan by sources show that largest proportion of loanees used NGO loans on asset purchases while largest number of loanees spent loans from non-institutional loans on consumption. On diversion of loans, in general, the hardcore poor appeared to have diverted more loans than the very poor.

10.3. On interest rates, the highest rate (72%) was charged by non-registered organizations while lowest (10%) by govt/cooperatives. However, there were loans without interest from various sources, the extent of which differed. This resulted in lowering the average interest rates. The highest single interest rate was found to be 360% in case of a loan from an informal source. In general, the hardcore poor paid a relatively higher rate of interest than the very poor.

11. Savings

11.1. Among the hardcore poor, 52% households had savings and among the very poor 58% had savings. The amount of last years' and cumulative savings of the hardcore poor who had accumulated savings, were Tk. 1,171 and Tk. 1,829 respectively. The same amounts for the very poor were Tk. 1,440 and Tk. 2,518 respectively. The largest number of households of both poverty groups saved in

the form of cash while other types/ forms of savings were paddy/rice, *mushti chal*, mortaged-in land and loans to others. The largest amount saved was also in the form of cash.

12. Propects for Employment and Income Generation

Prospects of the sample population for employment and income generation were explored mainly considering their skill in selected areas, involvement in different activities and asset ownership.

12.1. Pisciculture: Eight percent of the sample population aged 10-60 years had skill in fishing. On the other hand, 14% of the hardcore poor and 20% of the very poor owned or shared the ownership of ponds. The average size of the ponds was very small (4-5 dec.) and less than one-third of the ponds were used for fish culture. Joint ownership of 95% of the ponds might have acted as an impediment to promote fish culture. However, proper leasing arrangements, training, motivation, formation of groups and provision of inputs may help promote pisciculture for the target population.

12.2. Poultry: Among the active age population, only four percent reported to have had any skill in poultry raising most of whom were females. On the other hand 54% of the hardcore poor and 61% of the very poor households owned poultry birds. To realize the potential for small scale poultry farming, in addition to training, credit and other essential input services like quality chicks, improved feed and vaccination of birds should be provided along with creation of marketing facilities.

12.3. Livestock/dairy farming: Five percent had skill in livestock/dairy farming. They were mostly male household members. However, since 25% of hardcore poor and 27% of very poor households owned livestock there is a prospect for promoting livestock/dairy farming by providing training and other necessary input services to members of both poverty groups.

12.4. Sericulture: No household member from the very poor received any training or had any skill in sericulture. An insignificant number of active age members among the hardcore poor received training and only 0.3% reported to have attained skill in sericulture. Thus prospects for involving the sample population appear to be extremely limited. For success of sericulture, supply of quality mulberry of leaves, disease free laying eggs (DFLs), provision of processing facilities and market outlets need to be provided.

12.5. Horticulture/vegetable gardening: Sixty nine percent of the sample households have only homestead and no cultivable land. The average size of household land was only 3.5 decimals. Only 9% of all sample households had both homestead and cultivable land. Thus, for a majority of households, the potential for production of vegetables and horticulture crops is rather limited. However, through planned and intensive utilization of homestead land, some amount of these crops can be grown. In fact, 22% of the hardcore poor and 25% of the very poor were found to have owned horticulture trees in their homestead. Since no major difference between the involvement and potentiality of the two poverty groups was visible in this respect, members of both groups can be involved in the production of vegetables and horticulture crops by providing training, quality seeds or seedlings and other inputs.

13. Health Status

13.1. Incidence of diseases: The incidence of diseases among the sample population was found to be very high. During the previous one month, 83% of households had any kind of sickness with an average of 1.8 members per household falling sick. The difference between the two poverty groups in this respect was minor. Most common diseases were those related to fever, cough and cold (64%) with 20% suffering from intestinal diseases, and 4% suffering from skin disease, asthma, TB and mental ailments.

13.2. Treatment seeking behaviour: Some kind of treatment was received by 90% households and 80% went for allopathy treatment. But in case of seeking

allopathy treatment, only 20% went to qualified doctors, and the rest went to unqualified persons, usually to a drugstore. Availability of health services shows that almost all health centres were government health centres situated within an average distance of 1.5 kilometers from the homes of the respondents. Lack of availability of adequate treatment facilities in these centres was, perhaps, the main reason for a very low use (20%) of these facilities by the sample population.

13.3. Causes of death of infants/children: Causes of death of children were investigated but accurate information could not be found because many respondents could not provide any meaningful answer on the causes of death of their children. Considering all infants and children below five, the highest number of death was caused by infectious diseases (37%), followed by respiratory diseases (10%), and cardiovascular diseases (5%). Other diseases include gastro-intestinal diseases, accidents, nutritional deficiency, obstetric complication and bleeding disorder.

13.4. EPI coverage: Vaccination status of children below two years was assessed in the study covering vaccinations on DPT, Polio, BCG and measles. According to findings, considering children of both poverty groups, 28% had completed all doses of required vaccination, 55% were partially vaccinated and 19% had no vaccination at all. Immunization performance was relatively better for children of the very poor, and for both poverty groups, performance was better for the higher age groups than lower ones.

14. Policy Implications

14.1 The division of the target population into hardcore and very poor does not appear to have been based on adequate measurable indicators. There were only minor differences in the socio-economic condition of these two groups, especially in terms of land ownership, occupation, household expenditure, food security and crisis coping. However, a considerable heterogeneity was observed among households of each group in their socio-economic characteristics and poverty

status. There was significant difference in housing , but this criterion is not always a very effective one in determining poverty status. Often the poor improve their housing condition by receiving relief or grant without being able to change the other indicators of their poverty status. In such cases, housing status will not reflect true poverty status. The incidence of female headed households was also higher among the hardcore poor households.

14.2. Since the two poverty groups showed mixed characteritics as judged by most indicators, a composite index may be used to reconstitute the groups considering land ownership, occupation, income/expenditure and food security.

14.3. Based on the overall findings of the survey, it appears that the planned intervention package of IIRD largely fits the needs of the target population. These include providing access to *khas* land and creation of self-employment opportunities. However, training for skill development, input and market services will be necessary. Prospects for pisciculture, poultry and livestock raising including dairy and vegetable/horticulture production are there. The scope for sericulture is extremely limited and special care should be taken such as training, provision of quality mulberry leaves, disease free laying eggs, other inputs and processing and marketing facilities. Only supplementary income may be possible to be derived by the extreme poor from this enterprise.

14.4. Another area that deserves special attention is intervention in the health sector to reduce morbidity which would increase opportunities for employment and income generation and also help reduce child mortality. Immunization was also extremely low.

I. INTRODUCTION

1.1 Background of the study

The Institute of Integrated Rural Development (IIRD) is a rural development organization established in 1987. It has been working in five Upazilas of four districts in Bangladesh for socio-economic development of the poor. It aims at developing a model for Upazila level integrated rural development for Bangladesh and, therefore, follows a holistic approach in pursuing its development activities. It undertakes both economic and social development programmes for the rural poor, with special attention to the poorest of the poor. The different areas of programme intervention of IIRD including both its core and support programmes are enumerated in Annex I.

Recently a three year rural development project has been undertaken by the IIRD with financial assistance from the European Commission titled, "Food security through sustainable income uplift and poverty eradication". The objective of the project is to assist as many as possible of the 40% poorest households of the IIRD working areas to reach sustainable income level and attain food security. The upazilas are: Kachua of Chandpur district, Sadar upazila of Netrokona district, Nikli of Kishoreganj district and Sherpur and Dhunot of Bogra district. The project aims to raise at least 2,400 currently hardcore poor households to a very poor level and 7,200 very poor households above the poverty level during the three year project period.

The present study has been undertaken to provide bench-mark data on the current socio-economic status of the hard core and very poor through a sample survey so that at the end of the project period, its achievements can be measured in both quantitative and qualitative terms. IIRD has assigned the task of conducting the base line survey to the Research and Evaluation Division (RED) of BRAC.

As per terms of the agreement, the following were assessed by the baseline survey:

- Household heads' characteristics
- Household members' characteristics (age, sex, etc.)
- Household income and expenditure pattern

- Educational status of household members
- Occupational pattern of target groups (hard core and very poor)
- Land category, land ownership and land use pattern
- Non-land resource base of the target population (trees, poultry & livestock, ponds and disposable goods such as radio, television, bicycle, almirah, *khat*, etc.)
- Housing, sanitation and drinking water situation
- Infant mortality, child mortality, EPI coverage, availability of health services
- NGO status, training received, use of training
- Savings, loan received, use of loan of the sample population
- Indebtedness, interest rates and repayment rates
- Crisis coping capacity
- Prospects for pisciculture
- Poultry and livestock/dairy rearing situation
- Prospects for sericulture
- Identification of horticulture and vegetable gardening activities of the sample households.

1.2 Methodology

1.2.1 Sampling: A sample survey was conducted by administering a structured questionnaire in all the working areas of IIRD. The sample population for the survey was identified by using the lists of total target population and selecting five percent of both the hardcore and very poor households on a random basis. Thus a total of 1888 samples were selected for the study from all the five upazilas under IIRD. Samples were selected from all the Unions under the working areas of IIRD. Five percent of households from each of the two household groups i.e., hardcore and very poor, were selected. The number of villages from which samples were selected varied from union to union depending on the distribution of the number of target households in the concerned villages. For example, those villages where the listed target population households numbered less than ten, they were excluded. The distribution of the sample households by area is shown in Table 1 below:

Table 1: Distribution of samples for IIRD baseline survey

Dist.	Upazila	Union (number)	Villages	Number of hhs selected		
				Hardcore	Very poor	Total
Netrokona	Sadar	12	23	405	289	694
Bogra	Dhunot	8	14	240	175	415
Bogra	Sherpur	1	2	51	66	117
Chandpur	Kachua	11	14	187	319	506
Kishoreganj	Nikli	2	3	83	73	156
All districts	5	34	56	966 (51%)	922 (49%)	1888* (100%)

* The figure excludes one household, the questionnaire for which was rejected due to defective printing

Out of 1,888 sample households on which data were collected, 966 (51%) were hard core poor households and 922 (49%) were very poor households.

1.2.2 Data collection: The survey of sample households was conducted by a team of 22 Field Enumerators who were trained for the purpose. The questionnaire was also field tested before finalizing it. Four experienced BRAC staff supervised the collection of data by the Enumerators. Overall supervision was done by the Principal Investigator and the Co-investigator. Data collection was done during July-August, 2000. Except some minor problems faced during the collection of data which were resolved, no major problem was encountered.

1.2.3 Quality control: For ensuring quality of data the Enumerators were given extensive training along with field test exercises before sending them to the field. A team of supervisors visited the study areas to provide necessary monitoring and supervision and resolve any problem that arose. Besides, to cross check the validity of data collected, a re-interview of approximately five percent samples was done (by supervisors) that helped improve the quality of data and remove errors. After collection of data, they were carefully edited and coded. Data were entered into computer for processing. Data cleaning was also done by making 10% print checks and consistency check of all data files.

1.2.4 Processing and analysis of data: Simple statistical tools and methods were largely applied in analyzing the data. T-tests, Chi-square tests and ANOVA have been done where appropriate. The SPSS computer package was used in analysing data.

1.3 Definitions

1.3.1 Hardcore poor: The hardcore poor or the destitute households according to IIRD project document are the most poor 10-15% households in rural Bangladesh. They usually can manage one meal a day, live in sub-human standard housing, cannot meet the five basis needs of food, shelter, housing, education and medical care. Many of these households are women-headed. They are usually totally landless or have only homestead land.

1.3.2 Very poor: They are a little better off than the hardcore poor but have problems in meeting the basic human needs. They constitute the next 25-30% of the population in Bangladesh. They are functionally landless i.e. own less than 50 decimals of land and many of them are also absolute landless. Their relative depth of poverty normally depends on the number of household members employed and income earned compared to their number of dependents. These households also cannot ensure adequate food security.

1.4 Organization of the report

The report on the baseline survey has been presented in eight chapters. The first chapter presents the background of the study, methodology and definition of the terms hardcore and very poor. Chapter 2 emunerates the demographic characteristics of the sample household members including those of the household heads which include household size, age and sex distribution and incidence of female-headed households. The social characteristics of the sample households which include number of income earners, dependency, occupation, housing, education and sanitation status of the households are presented in chapter 3. Chapter 4 delineates the economic characteristics of the households including their landholding status, ownership of non-land assets, expenditure pattern, training, NGO membership status, their perception on food security and crisis coping status.

Credit and savings situation of the sample households is depicted in chapter 5 which includes sources and volume of credit, use of loan, interest rates, savings and forms of

saving. The prospects for employment and income generation have been briefly discussed in Chapter 6 that includes pisciculture, poultry, livestock, sericulture, horticulture and vegetable gardening. Chapter 7 presents the study results on the health status of the sample population including incidence of diseases, treatment seeking behaviour, availability of health services, causes of infant and child deaths and EPI coverage.

The final chapter of the draft report presents some policy implications derived from the study.

2. DEMOGRAPHIC CHARACTERISTICS OF THE TARGET HOUSEHOLDS

2.1. Characteristics of Household Members

The main demographic characteristics of the target population analysed include the family size, age and sex distribution, and incidence of female-headed households. The analysis has been done separately for the hardcore and very poor households to determine the differences between these two groups. The characteristics of household heads have been discussed separately. Discussions on the social characteristics including number of income earners, dependency, occupation, housing, education and sanitation practices are placed in Chapter 3.

2.1.1 Household size: Distribution of the households by size of membership is shown in Table 2a. Five percent of the hardcore poor and two percent of the very poor households have single members. Eleven percent of the hardcore and seven percent of the very poor households have two members each. Sixty eight percent of the hardcore and 76% of the very poor households have four or more members each. Considering both the target groups, the average number of members per household was 4.5 (Table 2b). The hardcore poor had a smaller size of household which consisted of 4.4 members. Very poor households consisted of 4.7 members.

Table 2a: Distribution of households by size of households and poverty category (%)

Household size	Hardcore poor	Very poor	Total
One member	4.8	1.8	3.3
Two members	10.7	7.2	9.0
Three members	16.6	15.0	15.8
4-5 members	43.8	45.8	44.8
>5 members	24.2	30.3	27.2

Table 2b: Number of members per household by sex and poverty category

Sex distribution	Hardcore poor	Very poor	All households
Male	2.1	2.4	2.2
Female	2.3	2.3	2.3
Total	4.4	4.7	4.5

Considering all sample households, they had more female members than male though very poor households had more male members than female. The results appear to be realistic because rural hardcore poor households include some very small households headed by females who are either widowed, or divorced or separated. The average size of the target households is smaller than that of the average national household size for rural areas which is 5.25 (BBS: 1997).

2.1.2 Age and sex distribution: Table 3 shows the age and sex distribution of the two target group households. Household members aged 15 years and below constitute 48% of the total household population. In this age group, male population is higher than female population. Male members of this age group constituted 51% of the total male population of all age groups while female population of the same age group constituted 45% of the total female population of all age groups. There is a small difference between the two poverty categories in terms of sex distribution with the hardcore poor households having a little higher percentage of male than female population in this age group. Considering all age groups and both poverty categories, however, female population is higher than the male population. The difference between male and female population is highest in the 16-35 age group with female population being significantly higher than male population. This seems to be somewhat unusual. This may be due to rounding up error and over estimation of female members' age to conceal underage marriage.

2.1.3 Female-headed households: Data show that 14% of all sample households were female-headed. There was considerable difference between the two poverty categories in terms of this indicator. Twenty percent of the hardcore poor households were headed by females while only eight percent very poor households were headed by them (Table 4). The higher incidence of female-headed househods among the hardcore poor indicates a more vulnerable socio-economic condition of this poverty category.

Table 3: Distribution of household population by age, sex and poverty category (%)

Age category (yrs)	Hardcore poor			Very poor			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<2	5.5	5.1	5.3	5.3	4.7	5.0	5.4	4.9	5.1
2-5	13.2	13.5	13.4	13.4	12.5	13.0	13.3	13.0	13.2
6-10	18.7	14.6	16.6	17.8	16.9	17.4	18.2	15.7	17.0
11-15	13.3	11.4	12.3	13.9	11.9	12.9	13.6	11.6	12.6
16-25	10.2	16.9	13.7	10.2	16.1	13.2	10.2	16.5	13.4
26-35	14.1	16.8	15.5	15.2	19.0	17.1	14.7	17.9	16.3
36-45	12.4	9.5	10.9	13.0	8.7	10.8	12.7	9.1	10.9
46-55	5.2	5.8	5.5	5.2	5.1	5.1	5.2	5.5	5.3
56-65	3.8	3.8	3.8	3.9	3.2	3.5	3.8	3.5	3.7
>65	3.6	2.7	3.1	2.2	1.9	2.1	2.9	2.3	2.6
Total	100 (2035)	100 (2197)	100 (4232)	100 (2207)	100 (2150)	100 (4357)	100 (4244)	100 (4347)	100 (8589)

2.2 Characteristics of Household Heads

2.2.1 Age and sex distribution: Considering both the poverty groups together, 86% of the household heads were males though there was significant difference between hardcore poor and very poor households in this respect. As stated above, in case of hardcore poor over 20% households were headed by women while for the very poor only 8% households were headed by females (Table 4). The age group distribution of the household heads shows that 65% of the heads were in the 26-45 years age group, 30% were 46 years or older while only 5% were below 26. The hard-core poor had a higher percentage (33%) of household heads than the very poor (27%) in the oldest age groups (>45 years).

Table 4: Distribution of household heads by age, sex and poverty category

Age category (years)	Hardcore poor			Very poor			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
≤ 15	0.3	-	0.2	-	-	-	0.1	-	0.1
16-25	5.3	1.5	4.6	5.3	1.4	5.0	5.3	1.5	4.8
26-35	32.5	25.5	31.1	36.2	25.4	35.4	34.4	25.5	33.2
36-45	31.7	30.1	31.4	32.9	35.2	33.1	32.3	31.5	32.2
46-55	13.0	18.4	14.1	13.0	14.1	13.1	13.0	17.2	13.6
56-65	9.4	14.8	10.5	9.0	19.7	9.9	9.2	16.1	10.2
>65	7.9	9.7	8.3	3.5	4.2	3.6	5.6	8.2	6.0
Total	79.7 (770)	20.3 (196)	100 (966)	92.3 (851)	7.7 (71)	100 (922)	85.9 (1621)	14.1 (267)	100 (1,888)

2.2.2 Marital status: Eighty four percent of the household heads were currently married, 2% unmarried and 14% divorced or separated or widows (Table 5). Significant difference was found between hardcore and very poor and also between male and female heads. The percentage of currently married heads was higher for moderate households (89%) than for the hardcore (78%). Again, among both the hardcore and moderate households, 89% female heads were either divorced or separated or widowed while only 2% of male heads were in this category.

Table 5: Distribution of household heads by marital status, sex and poverty category.

Marital status category	Hardcore poor			Very poor			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Unmarried	2.3	1.0	2.1	2.5	-	2.3	2.4	0.7	2.2
Married	95.7	9.7	78.3	95.5	11.3	89.0	95.6	10.1	83.5
Divorced/widowed /Separated	1.9	89.3	19.7	2.0	88.7	8.7	2.0	89.1	14.3
Total	79.7 (770)	20.3 (196)	100 (966)	92.3 (851)	7.7 (71)	100 (922)	85.9 (1621)	267 (14.1)	100 (1,888)

3. SOCIAL CHARACTERISTICS

3.1 Number of income earners in the households:

Table 6 shows that 60% of the households had a single income earner each while 27% had two income earners per household and about 12% had three or more income earners. Among the two poverty categories, the very poor had more single income earner households but less households with two or more income earners per household than the hardcore poor. On an average, each household had 1.5 income earners which was the same for both the hardcore and very poor. Nearly three percent of the hardcore poor had no income earner in their households while in case of the very poor only one percent households did not have any income earner. Among the income earners, average number of male income earners per household was 1.1 while the number of female earners was 0.4 per household. It may be noted from the table that in case of the hardcore poor, the number of male income earner was relatively less than that among the very poor while the number of female earner was relatively higher than that among the very poor. Though the difference was small, it indicates the relatively higher vulnerability of the hardcore poor households.

Table 6: Distribution of households by number of income earners and poverty category

Indicators	Hardcore poor	Very poor	Total
None	2.7	0.7	1.7
Single earner	56.8	63.1	59.9
Two earner	28.2	25.5	26.9
Three & above earners	12.3	10.7	11.5
Average income earners	1.5	1.5	1.5
Male	1.0	1.2	1.1
Female	0.5	0.3	0.4
No of dependents per income earner	2.2	2.6	2.4

3.2 Dependency

The level of economic dependency of the sample households is shown in Table 7. Considering households of both poverty categories, average number of dependents per income earner is higher (2.6) among very poor households than hardcore poor households (2.2). The table indicates that more than 30% of all households have one or

less number of dependents per income earner, 25% households have more than one to two dependents, 20% have more than two to three dependents and 24% have more than three dependents per income earner in a household.

Table 7: Economic dependency by poverty category (%)

Sl. No.	Number of dependents	Hardcore poor hhs	Very poor hhs	All hhs
1	Nil	6.7	3.8	5.3
2	< one	9.9	7.2	8.6
3	One	17.9	15.0	16.5
4	> 1 ≤ 2	26.6	23.8	25.2
5	> 2 ≤ 3	18.8	21.4	20.1
6	> 3 ≤ 4	10.0	14.3	12.1
7	>4	9.9	14.6	12.2
Level of significance Av. number of dependents per income earner		2.2	P<.01 2.6***	2.4

*** - Significant at 1% level

3.3 Occupation

3.3.1 Occupation of household heads: Table 8 shows that majority of the household heads (52%) of both the target household groups were wage labourers. Among them, the male household heads were primarily involved in the agriculture sector while the female heads were engaged mostly in the non-agriculture sector. Rural transport was the primary occupation of 13% heads while business was the occupation of 11% heads. Both the groups being almost landless, self employment in agriculture covered only 4% of the heads. No major difference in occupation has been found between heads of hardcore and very poor households except that in the former group there is a higher percentage of dependent heads (6%) than in the latter group (1%).

3.3.2 Occupation of household members: Thirty five percent of household members above ten years of age were engaged in household work while 25% were engaged as wage labourers in both the agriculture (15%) and the non-agriculture (10%) sectors (Table 9). Only 6% were engaged in rural transport operation while 5% were engaged in small business. Ten percent were students. Other minor occupations included poultry and livestock raising, food processing, tailoring, cottage industries, carpentry and various professional activities. Those who were engaged in household

work were mainly the female members. An estimated 10% were self employed. This excludes those who were engaged rural transport and owned their vehicles. Four percent were service holders.

Table 8: Distribution of household heads by occupation, sex and poverty category

Occupation	Hardcore poor			Very poor			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Agriculture -own	3.9	-	3.1	4.9	-	4.6	4.4	-	3.8
Agriculture -day labour	40.5	6.6	33.6	38.1	9.9	35.9	39.2	7.5	34.7
Non-agriculture -day labour	14.8	30.6	18.0	15.6	21.1	16.1	15.2	28.1	17.1
Household work	0.5	24.0	5.3	0.7	42.3	3.9	0.6	28.8	4.6
Rural transport	13.6	1.5	11.2	16.0	-	14.8	14.9	1.1	12.9
Self employee	6.0	5.6	5.9	4.7	5.6	4.8	5.3	5.6	5.3
Service	1.9	2.0	2.0	4.1	7.0	4.3	3.1	3.4	3.1
Business	11.6	5.6	10.4	12.9	4.2	12.3	12.3	5.2	11.3
Dependents*	3.5	15.8	6.0	0.8	7.0	1.3	2.1	13.5	3.7
Others	3.6	8.2	4.5	2.1	2.8	2.2	2.8	6.7	3.4
Total	79.7 (770)	20.3 (196)	100 (966)	92.3 (851)	7.7 (71)	100 (922)	85.9 (1,621)	14.1 (267)	100 (1,888)

* Dependents include those depending on outside support

Table 9: Distribution of population by occupation, sex and poverty category (>10 Years)

Occupation	Hardcore poor			Very poor			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Agriculture -own	2.7	0.1	1.3	4.1	0.1	2.1	3.4	0.1	1.7
Agriculture - day labour	31.8	1.6	15.6	28.9	1.0	14.9	30.3	1.3	15.3
Non-agriculture - day labour	13.1	9.3	11.0	13.0	4.7	8.9	13.1	7.0	9.9
Household work	2.9	60.7	33.8	2.2	68.9	35.7	2.5	64.7	34.8
Rural transport	10.9	0.2	5.2	12.3	-	6.1	11.6	0.1	5.7
Self employee	4.9	2.4	3.6	4.1	1.4	2.8	4.5	1.9	3.2
Service	5.1	2.0	3.4	6.3	1.7	4.0	5.7	1.8	3.7
Business	9.2	1.2	4.9	8.8	0.8	8.3	9.0	1.0	4.9
Dependents	3.7	4.2	3.9	1.2	1.5	1.3	2.4	2.8	2.6
Others	6.8	10.1	8.6	7.6	9.0	8.3	7.2	9.6	8.5
Student	8.9	8.4	8.6	11.3	10.9	11.1	10.2	9.6	9.9
Total	46.5 (1276)	53.5 (1468)	100 (2744)	49.8 (1403)	50.2 (1416)	100 (2819)	48.2 (2679)	51.8 (2884)	100 (5563)

3.4 Housing

3.4.1 Value of living houses: Considering the value of their living houses, the housing condition of the sample population may be termed as poor. Thirty nine percent of all the households lived in houses whose current values were Tk. 1000 or less (Table 10). Fifty percent of the hardcore and 27% of the very poor belonged to this category. Only about 13% had living houses worth more than Tk. 5000 each. The rest of the households i.e. 48% had living houses with their values between Tk. 1000 and Tk. 5000. The average value of a living house considering all sample households was Tk. 2739 only. Again twenty one percent of the households lived in houses whose values were less than Tk. 500. Twenty nine percent of the hardcore poor and 14% of the very poor were in this group living in shanty houses or *jhupries*.

Table 10: Distribution of households by living houses and poverty category

Value of living houses category	Hardcore poor	Very poor	Total	Average living house value (Tk.)
<=Tk. 500	28.5	13.6	21.2	341
Tk. 501-Tk. 1000	21.3	13.2	17.3	862
Tk. 1001- Tk. 2000	23.4	22.4	22.9	1,605
Tk. 2001- Tk. 3000	10.0	15.2	12.6	2,769
Tk. 3001- Tk. 4000	5.3	10.7	7.9	3,843
Tk. 4001-Tk. 5000	2.4	8.9	5.6	4,935
>Tk. 5001	9.2	16.0	12.5	9,970
Average living house value Tk.)	2,091.56	3,417.21	2,738.94	-

Note: For 19 cases data were not available.

3.4.2 Construction materials for living houses

Bamboo and jutestick were the most common raw materials used for walls by the sample households while c.i.sheets and straw/*chhan* were most commonly used for roofing as raw materials. Table 11 shows that in case of the hardcore poor households, bamboo was used as wall materials in 34% living houses and jute stick was used in 28% houses. Other wall materials used included straw/*chhan* (19%), mud/jute stick (14%) and c.i. sheets (4%). The very poor used bamboo as wall material in 43% houses, jute stick in 25% houses, mud/jute stick in 14% houses, straw/*chhan* in 11% houses and c.i.sheets in 6% houses. The data indicate visible difference between the quality of wall

materials used by the two poverty groups. In relatively more houses of the very poor, better and more durable materials like c.i.sheet and bamboo were used than in the houses of the hardcore poor.

Table 11: Distribution of living houses by roof construction materials and poverty category

Construction materials	Hardcore poor (n = 1014)		Very poor (n = 999)	
	Wall	Roof	Wall	Roof
None	0.1	-	0.2	-
C.I. Sheet	3.5	47.3	5.6	65.6
Bamboo	34.4	2.0	43.2	1.4
Jute stick	27.9	0.6	25.3	0.6
Mud/Jutestick	13.6	-	13.7	-
Straw, *Chhan*	19.1	48.8	11.0	31.8
Brick/Concrete	0.4	0.5	0.5	0.2
Others	1.0	0.8	0.4	0.4

As roofing materials, c.i.sheets were used in 47% of the living houses of the hardcore poor and in 66% living houses of the very poor. The difference between the hardcore and very poor households in this respect was found to be highly significant ($p<.01$). Straw/*chhan* was used by the hardcore poor as roofing material in 49% of their living houses while the very poor used this roofing material in 32% of their living houses. One possible reason for a relatively high incidence of c.i.sheet roofing for the poor is that it is considered more economic to have c.i.sheets as roofing material than straw/*chhan*. C.i.sheets last much longer and also have a very high resale value for which they may be used for sale during any emergency. Nevertheless, the results of the study show that even in case of roofing, better quality materials were used more by the very poor than the hardcore poor households.

3.4.3 Sources of funds for c.i.sheet roofing

In case of the very poor households, funds for c.i.sheet roofing for 66% living houses were provided by the owners and for 34% houses, roofing fund sources were relief, NGO donation, or credit, gift or partial contribution of owners along with external assistance (Table 12). In case of the hardcore poor, for 59% living houses with c.i.sheet roofing, c.i.sheets were provided by owners. Fourteen percent received donations from

NGOs including IIRD, 10% got relief/gift and 4% received credit for purchasing c.i.sheets for roof. Own contribution was higher for the very poor which was 66%.

Table 12: Distribution of living houses with C.I. sheet roofing by source of fund and poverty category

Ownership of living houses	Hardcore poor n= 485		Very poor n= 657	
	Wall (n=58)	Roof (n=485)	Wall (n=95)	Roof (n=657)
Own	63.4	59.0	67.4	66.1
Relief / Help/gift	29.3	9.5	11.6	8.7
Given/donated by NGOs	-	14.2	2.1	5.3
Partially funded	8.6	13.2	11.6	14.9
Credit	8.6	4.1	7.4	5.0

Ownership of the living houses by the two poverty categories shows that ninety eight percent of the hardcore and 99% of the very poor households owned their living houses. Judged by the quality of wall and roofing materials used, it may be concluded that the very poor were in a better-off condition. Thus, in terms of housing condition, the hardcore poor were in a relatively worse-off situation.

3.5 Educational Status

3.5.1 Educational status of household heads: Fifty two percent of the household heads were illiterate while only 3% had education beyond the primary level (Table 13). Thirty seven percent could only sign their names and about 7% went to primary school. Literacy level was comparatively higher for the very poor than the hard-core poor households.

Table 13: Distribution of household heads by education, sex and poverty category .

Education category	Hardcore poor			Very poor			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Illiterate	56.1	54.1	55.7	46.9	60.6	47.9	51.3	55.8	51.9
Can sign only	32.7	40.8	34.4	40.2	36.6	39.9	36.6	39.7	37.1
Can read & write	2.1	1.0	1.9	1.2	-	1.1	1.6	0.7	1.5
1 to 5 class	6.5	3.1	5.8	8.0	2.8	7.6	7.3	3.0	6.7
6 to 10 class	2.5	1.0	2.2	3.4	-	3.1	3.0	0.7	2.6
>10 class	0.1	-	0.1	0.4	-	0.3	0.2	-	0.2
Total	79.7 (770)	20.3 (196)	100 (966)	92.3 (851)	7.7 (71)	100 (922)	85.9 (1621)	14.1 (267)	100 (1,888)

3.5.2 Educational status of household members: The educational status of the household members of the sample population is shown in Table 14. The estimates cover population over six years of age. Over 34% are illiterate, 29% can sign their names, 8% can read and write only, 23% had attended primary school and only 5% had received education beyond the primary level. Illiteracy is higher among the hardcore poor. Considering overall literacy level also the very poor households had performed better than the hard-core poor. In case of both poverty groups, among those who can sign their names only, the female population is 9% higher than male, mainly because, the females had learnt to sign due to their higher involvement in NGOs. Among other literacy groups, the performance of males was better than females for both poverty groups.

Table 14: Distribution of population by education, sex and poverty category (>6 Years).

Education category	Hardcore poor			Very poor			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Illiterate	40.6	35.8	38.1	31.5	30.0	30.7	35.9	32.9	34.4
Can sign only	22.1	33.2	27.9	27.2	34.6	30.8	24.7	33.9	29.4
Can read & write	8.7	6.2	7.4	9.2	8.3	8.7	8.9	7.2	8.1
1 to 5 class	22.4	21.3	21.8	26.0	23.1	24.5	24.3	22.2	23.2
6 to 10 class	4.7	3.1	3.9	4.7	3.5	4.1	4.7	3.3	4.0
>10 class	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0
Total	100 (1600)	100 (1741)	100 (3341)	100 (1734)	100 (1725)	100 (3459)	100 (3334)	100 (3466)	100 (6800)

3.6 Water and Sanitation

According to the data provided by the sample households, almost 99% had access to tubewells for drinking water (Table 15). There was no difference among the two poverty categories in this respect. However, only 24% households used slab latrines for defecation (Table 16). Twenty eight percent households among the very poor and 20% among the hardcore poor households had access to slab latrines. All other households used holes (32%), bushes (28%), or other places including open space (16%). Seventy percent of the households owned the slab latrines they used.

Table 15: Distribution of households by sources of drinking water and poverty category

Water sources	Hardcore poor n= 966	Very poor n= 922	Total n= 1,888
Tube well	98.8	98.7	98.7
River	0.3	0.5	0.4
Pond	0.5	0.5	0.5
Others	0.4	0.2	0.3

Table 16: Distribution of households by places of defecation and poverty category

Places of defecation	Hardcore poor n= 966	Very poor n= 922	Total n= 1,888
Ring/Slab	19.7	28.2	23.8
Hole	31.3	32.9	32.0
(bushes)	33.7	22.1	28.1
Open space	8.0	4.9	6.5
Others	7.3	11.9	9.6
% owned ring-slab latrine			
Yes	64.7	73.8	70.0
No	35.3	26.2	30.0
Total	100 (190)	100 (260)	100 (450)

4. ECONOMIC CHARACTERISTICS

4.1 Land holding status

4.1.1 Land ownership: The land holding status of both the poverty categories of samples show that there was not much difference in the average land size of the hardcore and the very poor. Table17 shows that these two categories of poor had average land size of 8 decimals and 10 decimals respectively. Overwhelmingly the largest number of all sample households (85%) covering both the poverty categories had land ownership of 1-15 decimals. Only 2.5% of hardcore poor and 3.7% of very poor households had land over 50 decimals. Again, the majority of both categories of households had only homestead which included 72% of hardcore poor households and 66% of very poor households (Table 18). Only 7% of the hardcore poor and 10% of the very poor sample households had both homestead and cultivable land.

Table 17: Distribution of households by size of landholding and poverty category

Land category	Hardcore poor	Very poor	All households
No land	2.9	1.2	2.1
1-15 decimals	85.7	84.2	85.0
16-25 decimals	5.2	4.7	4.9
26-50 decimals	3.7	6.3	5.0
>50 decimals	2.5	3.7	3.1
Average land size (dec.)	7.89	9.60	8.72

Table 18: Distribution of households by landholding and poverty category

Land category	Hardcore poor	Very poor	Total	Average land size (dec.)
No land	2.9	1.2	2.1	0
Only homestead	71.6	65.8	68.8	3.5
Homestead + cultivable	7.2	10.0	8.6	30.6
Others	18.2	23.0	20.6	17.9

Table 19: Distribution of area under cultivation by poverty category

Indicators	Hardcore poor	Very poor	Total
% of hhs owning cultivated land including rented/mortgaged out	11.5	15.5	13.5
% of hhs with cultivated land under operation (Own/rented/ mortgaged in)	18.6	29.6	24.0
Total cultivable land owned including rented/mortgaged out (dec.)	2.9	4.3	3.6
Cultivable land owned excluding rented/mortgaged out (dec.)	1.5	2.1	1.8
Net cultivable land under operation including rented/mortgaged in (dec.)	6.7	11.9	9.3

The distribution of cultivated area by poverty category is shown in Table 19. Considering all households of both poverty categories only 14% owned cultivable land including mortgaged out land. Twelve percent of the hardcore poor and 16% of the very poor households were in this category. The average area owned was less than 4 decimals per household. Excluding the mortgaged out land, the average net cultivable area owned per household was only about 2 decimals. This shows the vulnerability of the sample households which compelled them to rent/mortgage/lease out half the owned land.

On the other hand, though only 14% households owned cultivable land including mortgaged out land, 24% had cultivated land under operation including rented/mortgaged/leased in land. The average net area under cultivation was over 9 decimals. Thus, a considerable number of households rented in land and were engaged in agricultural production. It appears that very poor households rented in more land since the data show that their net cultivated area including rented in land per operating household was 12 decimals while that of the hardcore poor was 7 decimals per operating household. More medium poor households also rented in cultivable land as data show that 30% medium poor households had cultivable land under operation including rented-in land against 19% hardcore poor.

The results show, therefore, that though significantly more very poor households were involved in agricultural production, on an average, less than one-fourth of all the sample households of both poverty categories were involved in agriculture production.

4.1.2 Land use pattern: As usual, paddy was the most important crop produced by sample households of both poverty groups. Seventy nine percent of gross cultivated area was under paddy during the *boro* season it was 81% during the *aus-aman* season (Table 20). Percentage of area under paddy was a little higher for the hardcore poor during the *boro* season while it was lower than the very poor during *the aus-aman* season. The crops other than paddy produced during the *boro* season included wheat, oil seeds, pulses, spices, potato, vegetables, etc. while these were jute, vegetables, sugarcane, etc. during the *aus-aman* season. The hardcore poor did not produce any pulses during the *boro* season while they also did not produce sugarcane in their cultivated land during the *aus-aman* season. These two crops were produced only by the very poor, though a negligible number of households were involved in their production.

Table 20: Distribution of gross cultivated area under different crops by poverty category

Season / Crops	Land area under different crops		
	Hardcore poor	Very poor	Total
	% of area	% of area	% of area
BORO			
Paddy	79.6	78.1	78.7
Wheat	9.3	7.2	8.1
Oilseeds	3.0	5.8	4.6
Pulses	0.0	0.6	0.3
Spices	1.7	2.1	2.0
Potato	3.4	3.3	3.3
Vegetables	2.4	2.7	2.6
Others	0.5	0.2	0.3
AUS / AMON			
Paddy	78.2	83.0	81.1
Jute	10.9	9.6	10.1
Sugarcane	0.0	0.9	0.5
Vegetables	10.9	5.7	7.8
Others	0.0	0.8	0.5

4.2 Non-land Asset Ownership

The non-land assets owned by the sample households of both poverty categories have been estimated. These are presented in Table 21 The assets considered include poultry and livestock, timber and fruit trees, and durable goods like bicycle, boat, looms, watch, radio, furniture, jewelry, etc.

Table 21: Non-land asset ownership by poverty category

Types of asset	Hardcore poor n=966					Very poor n=922						
	Owner-ship	Num-ber>0	Number all sample	Value >0	Value all sample	Owner-ship	Number >0	Number all sample	Value >0	Value all sample	Owner-ship	Value
Livestock	24.7	1.9	0.5	2334	557	26.7	2.0	0.5	2530	675	NS	NS
Poultry	53.7	5.5	3.0	225	121	60.6	5.7	3.4	285	173	p<.01	p<05
Timber	26.7	2.7	0.7	1268	339	33.0	2.3	0.8	1120	369	p<.01	NS
Fruit	22.0	2.9	0.7	953	210	24.9	3.6	0.9	1006	251	NS	NS
Durable	71.6	2.1	1.5	793	568	82.6	2.5	2.1	1041	860	p<.01	p<.01
Jewelry	60.5	1.7	1.0	307	185	70.7	1.8	1.3	376	266	p<.01	p<.01
Total/av.	90.7	8.0	7.3	2180	2000	95.4	9.3	8.9	2688	2594	p<.01	p<.01

Ninety one percent of the hardcore poor and 95% of the very poor households owned any type of asset. However, considering different individual types of assets, only 25% of hardcore and 27% of very poor households owned livestock, 54% of hardcore and 61% of very poor households owned poultry; 61% of hardcore and 71% of very poor owned jewelry and 72% hardcore and 83% very poor households owned any type of durable assets.

The average values of all non-land assets were Tk. 2000 and Tk. 2494 per household for hardcore and very poor households respectively. The value of non-land assets of the very poor was 30% higher than that of the hardcore poor. The difference was significant ($p<.01$). The differences between the hardcore and very poor households in respect of ownership of different types of non-land assets show that they were not significant in cases of ownership of livestock, timber and fruit trees but significant for poultry, durable goods and jewelry (Table 21).

Nevertheless, the data on ownership of different non-land asset testify to the fact that the sample households have a weak asset base and the hardcore poor were in a more vulnerable position than the very poor in this respect.

4.3 Household Income/expenditure

An attempt was made to estimate average per capita income and expenditure of the sample households. In general, it is very difficult to derive reliable income data because respondents tend to understate income figures either willingly or unwillingly. Estimation of income was attempted to be based on income from both agricultural and non-

agricultural sources. Results of analysis of income data, however, showed a gross under-estimation of income in relation to expenditure data. It was, therefore, decided not to use income data for assessment of the poverty situation of the target households, but to depend on expenditure data which were considered to be relatively more consistent and reliable.

4.3.1 Expenditure pattern: Analysis of data on expenditure revealed that per capita total annual expenditure for the hardcore poor was Tk. 4,613 and that for the very poor was Tk. 5,008 (Table 22). Average per capita expenditure for both poverty categories was Tk. 4,806. Per capita expenditure was 9% higher for the very poor than that of the hardcore poor.

Table 22: Annual per capita food and non food expenditure by poverty category (%)

Types of expenditure	Hardcore poor	Very poor	Total
Food	78.7	77.7	78.2
Non food	21.3	22.3	21.8
Total	100.0	100	100
	(4,613.4)	(5,007.6)	(4,805.9)
Per capita monthly exp.	384.45	417.30	400.49

**Figures in parentheses indicate per capita annual expenditure in Taka*

Distribution of household expenditure among different types or items of expenditure is shown in Table 23. Obviously food constitutes the largest share of household expenditure with 79% for the hardcore poor, 78% for the very poor and 78% for all the sample households. Expenditure on clothing was the second largest source (7%) and treatment was the third largest (4%). Expenditure on house repair/construction was the fourth highest single source of expenditure (3.5%). Other items included fuel, utensils, furniture, interest on loan, transport, social activities, education, recreation, etc. The difference between the hardcore poor and very poor households were negligible in cases of all items.

Table 23: Distribution of households by type of expenditure and poverty category (%)

Types of expenditure	Hardcore poor	Very poor	Total
Food	78.7	77.7	78.2
Fuel	1.0	0.9	1.0
Cosmetics	0.3	0.3	0.3
Cloths	7.1	6.9	7.0
HH utensils, furniture & recreation	1.2	1.3	1.2
Housing	3.3	3.6	3.5
Interest on loan	1.6	1.9	1.8
Education	0.5	0.6	0.6
Treatment	3.8	4.1	4.0
Transport	1.0	1.0	1.0
Other social activities	1.5	1.5	1.5
Total	100.0	100.0	100.0

4.3.2 Monthly per capita expenditure: The monthly per capita expenditure for the hardcore and the very poor households were Tk. 385 and Tk. 417 respectively (Table 22). According to variation in per capita expenditure per month, the sample households were classified into seven categories from <Tk. 200 to >Tk. 700 (Table 24). Eleven percent of the hardcore poor had per capita monthly expenditure of less than Tk. 200 while among the very poor, only 6% had expenditure in this category. On the other hand, 7% of the hardcore poor and 8% of the very poor had per capita expenditure of more than Tk. 700 per month. For the largest proportion of samples in case of both the poverty categories per capita expenditure was Tk. 300-400 per month. Twenty eight percent of the hardcore poor and 27% of the very poor were in this category. Among all samples, 78% had per capita expenditure of Tk. 500 or less per month and only 22% spent more than Tk. 500 per month.

Table 24: Distribution of households by per capita monthly expenditure range and poverty category.

Income category (Tk)	Hardcore poor	Very poor	Total
<=200	10.7	5.6	8.2
201-300	25.4	23.8	24.6
301-400	27.8	27.3	27.6
401-500	16.8	18.8	17.7
501-600	8.8	9.3	9.1
601-700	3.9	6.8	5.3
>701	6.6	8.4	7.5
Total	51.2 (966)	48.8 (922)	100 (1,888)

4.4 Training Received

Training is of vital importance in developing the skill of the poor and in improving their productive capacity to raise their level of income and well-being. It deserves to be a high priority area while undertaking a development programme for the poor. Table 25 shows the number of persons between 10 and 60 years of age among the sample population who received any kind of training and the areas in which they received training. Only 1.3% among the hardcore poor and 1.4% among the very poor received any kind of training. This indicates a very poor training status of the sample population. However, it may be noted here that all those who received training reported that they had utilized the training they received.

Table 25: Percent of population within 10-60 years of age category having any kind of training and its types by poverty category

Indicators	Hardcore poor n= 34			Very poor n= 40			Total n= 74		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
% having any training	0.9	1.6	1.3	1.7	1.4	1.4	1.3	1.4	1.3
% used training	100	100	100	100	100	100	100	100	100
Types of training									
Fishing	-	-	-	4.2	-	2.5	2.9	-	1.4
Poultry	27.3	39.1	35.3	4.2	6.3	5.0	11.4	25.6	18.9
Livestock	-	4.3	2.9	20.8	18.8	20.0	14.3	10.3	12.2
Agriculture	27.3	17.4	20.6	20.8	12.5	17.5	22.9	15.4	18.9
Sericulture	-	8.7	5.9	-	-	-	-	5.1	2.7
Professional job	36.4	17.4	23.5	16.7	31.3	22.5	22.9	23.1	23.0
Awareness	9.1	13.0	11.8	33.3	31.3	32.5	25.7	20.5	23.0

Among those who received training, the largest number received training in awareness building (23%) and the same number received training in various professional jobs. Other areas of training included agriculture, poultry, livestock, sericulture and fisheries.

4.5 NGO Membership Status

The NGO membership status of sample households as on the date of field survey for the present study was investigated. Distribution of sample households by NGO involvement is shown in Table 26a. Considering all households of both poverty categories, 44% households had involvement in NGO membership. Forty two percent of hardcore poor households had members in NGOs while among the very poor, 46% households had

NGO members. Average number of members per household was 1.08 which indicates that among the households involved in NGO membership there was slightly over one NGO member per household. That is, some households had more than one member in NGOs. Data show that only three percent households had more that one NGO member in the household (Table 26b).

Table 26a: Distribution of households by NGO involvement and poverty category

	Hardcore poor	Very poor	Total
NGO involvement			
Yes	42.0	46.2	44.1
No	58.0	53.8	55.9
Av. number of NGO members per household	1.08	1.07	1.08
Maximum length of involvement (Month)	144	120	144

Table 26b: Distribution of households by NGO involvement and poverty category

Indicators	Hardcore poor	Very poor	Total
None	58.0	53.8	55.9
Single involved	39.2	43.0	41.0
Two involved	2.3	3.1	2.7
Three involved	0.5	0.1	0.3
Total	51.2	48.8	100.0

The distribution of household members involved in different NGOs indicate that largest number of them were involved in IIRD. Forty three percent among the hardcore poor and 44% among the very poor were IIRD members (Table 26c). The second largest membership was in BRAC, followed by Grameen Bank (GB), Proshika and ASA. A considerable number of household members from both poverty categories were, however, members of other small NGOs. One interesting finding was that GB rarely included any household member from the hardcore poor in its membership. Only 0.5% household members from the hardcore poor were members of GB while 15.5% from very poor households were members of GB.

Table 26c: Distribution of household members involved in NGOs by poverty category

Name of NGOs	Hardcore poor	Very poor
IIRD	42.7	44.0
BRAC	17.4	14.4
GB	0.1	15.5
Proshika	4.6	4.8
ASA	3.4	7.0
Others	23.7	20.8
Total	438	457

* Multiple response considered

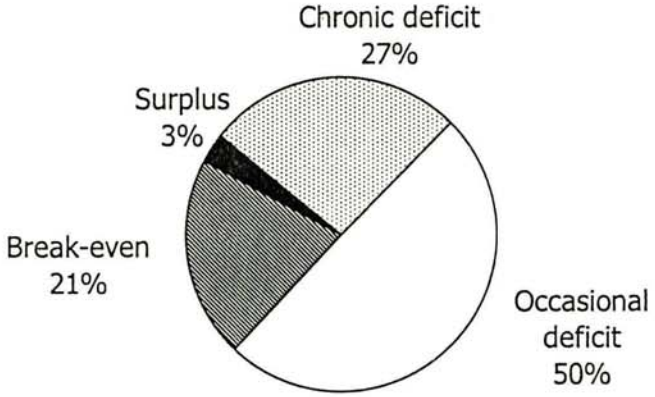
4.6 Perception on Food Security

4.6.1 Food security: The respondents were asked to make a self assessment of their poverty status through a question on their food availability/deficit during the year preceding the interview. Their perception on whether they had chronic deficit, occasional deficit, no deficit or surplus food during the year was obtained. The results are depicted in the pie diagrams presented below (Fig. 1).

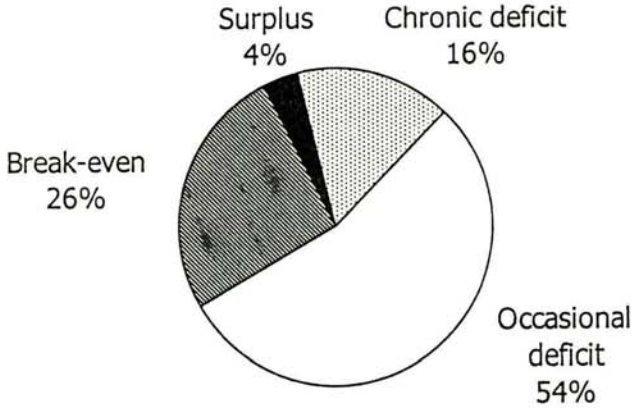
Considering both poverty categories together, 73% of all sample households had either occasional or chronic food deficit throughout the year. Twenty three percent households were on a break-even position having neither deficit nor surplus of food (cereal) during the year and only 4% had surplus of food. Fifty two percent households had occasional deficit while 21% had chronic deficit of food throughout the year.

There was some variation among the hardcore poor and the very poor in terms of food availability situation (Fig. 1, a and b). Chronic deficit was faced by 27% of the hardcore poor and by 16% of the very poor. Occasional deficit was faced by 50% and 54% of the hardcore and very poor households respectively. Twenty one percent of the hardcore poor had break-even position and 3% had food surplus while for the very poor these were 26% and 4% respectively. According to their own perceptions, about three-fourths of the sample population are suffering from food insecurity, though the hardcore poor were in a relatively worse-off position than the very poor in terms of food security. This may be seen as an evidence of the severely low poverty status of both the target population groups.

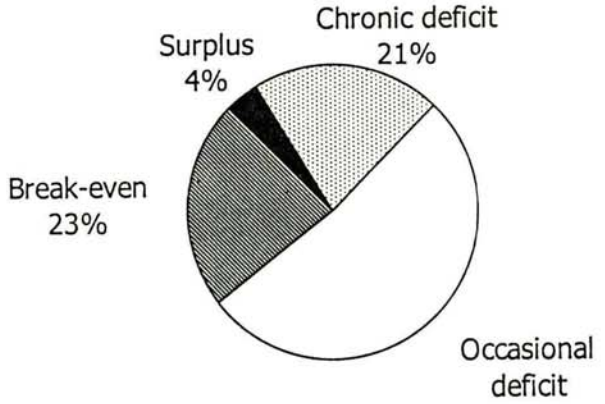
Figure 1: Poverty self assessment by poverty category



a. Hardcore poor



b. Very poor



c. Both categories

4.6.2 Possession of extra *saree*. Another indicator used to assess the poverty status of the sample households was the possession of extra *saree* by the wives of household heads or women household heads. Analysis of data showed that 23% had extra *sarees* (Table 27). Among the hardcore poor only 19% had extra *sarees* while in case of the very poor, 27% had extra *sarees*. Thus, based on this indicator also, all the households demonstrated a very low status in terms of poverty and the situation of the hardcore poor was even worse.

Table 27: Distribution of households by possession of extra saree of wives of household heads by poverty category

Possession of *tola saree*	Hardcore poor (n= 966)	Very poor (n= 922)	Total (n= 1,888)
Yes	18.8	26.5	22.6
No	81.2	73.5	77.4
Total	51.2	48.8	100.0

4.7 Coping With Crises

4.7.1 Incidence and nature of crises: Less than one third of the sample households faced some crisis during the last one year from the date of the survey. Data showed that 30% of the hardcore and 25% of the very poor households faced any kind of crisis during the period (Table 28). Taking the two groups together, 28% households faced crisis.

Table 28: Percentage of households facing any kind of crisis by poverty category

Status	Hardcore poor	Very poor	Total
Yes	30.4	24.9	27.8
No	69.6	75.1	72.2
Total	51.2 (966)	48.8 (922)	100.0 (1,888)

About the nature of crisis faced by the sample households, data showed that illness, death of household members and accidents taken together constituted the largest type of crisis felt by both the poverty groups (Table 29). Fifty five percent of the sample

households facing any crisis suffered from these problems. The second most important source of crisis was natural calamities which affected 23% of the total households facing crisis. Loss in business affected only 5% of the crisis facing households.

Table 29: Types of crisis faced by poverty category

Types of crisis	Hardcore poor (n=294)	Very poor (n= 230)	Total (n= 524)
Death of members	9.2	8.3	8.8
Illness	38.8	52.2	44.7
Loss in business	4.8	5.2	5.0
Natural calamities	27.2	17.4	22.9
Accident	1.0	1.3	1.1
Others	19.0	15.7	17.6
Total	56.1	43.9	100.0

Since the year under consideration was free from any large-scale natural calamity of a severe nature like floods and cyclones, the importance of this crisis factor was relatively less. Bangladesh is a country which is prone to frequent natural disasters. Thus, in years of devastating natural disasters, natural calamities may become the main source of household crisis for the poor.

4.7.2 Coping mechanism: Two-thirds of the sample households facing any crisis resorted to borrowing for coping with their crisis (Table 29). Relief and assistance were received by only 10% of the crisis affected households. Borrowing was used by more very poor affected households (66%) than hardcore poor households (60%) while relief/assistance was received by more hardcore poor affected households (12%) than the very poor (7%). Sale of assets occured in case of only 5% affected households, which included 3% of the affected hardcore poor and 8% of the very poor. In case of only one percent households, migration and/or begging were reported as a consequence of crisis. Here again, had there been any severe natural disaster occuring during the year, the relative importance of relief and assistance would have increased.

Table 30: Crisis coping/management by poverty category

Type of coping	Hardcore poor (n=294)	Very poor (n= 230)	Total (n= 524)
Sell assets	3.1	8.3	5.3
Send household members to work elsewhere	1.4	1.7	1.5
Receive advice from others	11.6	6.1	9.2
Borrow from others	60.2	66.1	62.8
Seek relief / others help	11.6	7.0	9.5
Go for begging	1.0	-	0.6
Migrate to other area	-	0.4	0.2
Others	11.2	10.4	10.9
Total	56.1	43.9	100.0

5. CREDIT AND SAVINGS

5.1 Credit

5.1.1 Sources and volume of credit: Sixty seven percent of all sample households had received credit. Sixty four percent of the hardcore and 70% of the very poor households borrowed from different sources which have been classified into four groups. Among the formal sources are banks/co-operatives and NGOs while informal sources are non-registered organisations and other informal sources[1]. The average amount of credit from all sources per borrower was Tk. 4,404 for the hardcore and Tk. 6,056 for the very poor households (Table 31). Thus the percentage of borrowers and amount borrowed was higher for moderate households than for hardcore poor households.

The distribution of borrowers by source of loan (Table 31) shows that the largest number of sample households of both poverty groups borrowed from other informal sources (35%). The second most popular source was NGOs (32%). Only 3% borrowed from non-registered organizations. Least number of borrowers had access to govt/cooperatives as a source of loan (2%). There was practically no difference between the hardcore poor and the very poor in terms of their relative access to different sources of loan.

Table 31: Credit received by source and poverty category

Source of loan	Hardcore poor			Very poor			Total		
	% borro-wed	Amount (Tk)		% borro-wed	Amount (Tk)		% borro-wed	Amount (Tk)	
		All sample	only borrower		All sample	only borrower		All sample	only borro-wer
Bank/Govt./ cooperative	1.9	144	7744	2.9	175	5993	2.4	160	6693
NGO	30.5	1434	4697	34.2	2007	5874	32.3	1714	5305
Non-registered organization	2.8	80	2867	2.8	167	5906	2.8	122	4358
Informal sources	34.3	1150	3356	36.7	1881	5131	35.4	1507	4253
All sources	63.8	2809	4404	69.8	4230	6056	66.7	3503	5248

[1] Other informal sources will be termed as informal sources for convenience of expression.

Amount borrowed by source of loan and poverty category is also shown in Table 32 which shows that the highest amount per loan was taken from banks/co-operatives by the hardcore poor and from non-registered organizations by the very poor. On an average, the second highest amount per loan was from the NGOs while the lowest average size of loan was from informal sources.

Loan outstanding as percentage of total loans from different sources indicate that in case of NGO loans the percentage of outstanding was lowest (70%) while highest percentage was for loans from informal sources (115%). The hardcore poor had a relatively higher amount of outstanding loan than the very poor in case of all sources except NGO loans (Table 32).

Table 32: Information on outstanding loans by poverty category

Source of loan	Hardcore poor		Very poor		All	
	Amount borrowed (Tk.)	Amount Outstan-ding (Tk.)	Amount borrowed (Tk.)	Amount Outstan-ding (Tk.)	Amount borrowed (Tk.)	Amount Outstan-ding (Tk.)
Bank/Govt./cooperative	6,061	6,029	4,759	3,804	5,284	4,702 (89%)
NGO	3,627	2,480	4,205	2,973	3,936	2,744 (70%)
Non-registered organisation	2,092	1,925	5,118	4,683	3,447	3,160 (92%)
Informal sources	2,798	3,380	4,563	5,044	3,662	4,194 (115%)

5.1.2 Use of loan by sources: Considering all sources of loans and both poverty categories, the sample households spent 39% of their loans on household consumption/expenses, 24% on asset purchase, 20% on agricultural production and business taken together, 12% on house construction/maintenance and 11% on treatment (Table 33a). Except that the hardcore poor spent relatively a little more on consumption than the very poor, there was no considerable difference between the two poverty groups in terms of use of loans.

Table 33a: Use of loan by poverty category

Use of loan	Hardcore poor	Very poor	Total
Asset purchase	23.5	23.9	23.7
Business	11.7	11.1	12.1
Household consumption/Exp.	40.5	38.5	39.3
Agri. production	5.7	5.4	7.5
Marriage	4.6	4.4	4.5
Treatment	11.9	11.3	11.0
Education of Children	0.5	0.5	0.6
Debt servicing	5.6	5.3	5.5
House construction	10.4	9.8	11.7
Others	1.0	0.9	0.8
Total	839	884	1723

* Multiple response considered

Considering the use of loans by different sources of loans, Table 33b shows that in case of loans from govt./coops., largest proportion of hardcore poor loanees spent the loans on consumption (44%) while the largest proportion of very poor loanees used them for debt servicing and treatment (39% in each case). Largest proportion of loanees among both the hardcore and very poor households used loans from NGOs on asset purchase. On the other hand, largest number of loanees of both poverty categories used loans from non-registered organizations and other informal sources on consumption. The table indicates that in terms of use of loans for productive purposes, the relative performance of NGO loans is better than loans from other sources.

The sample borrowers stated some specific purpose before taking a loan. In many cases, they did not actually use the loan for the stated purpose but diverted the use of the loan. Table 34a shows the stated purposes of loans as reported by the borrowers, the percentage distribution of different loans for these purposes and the average amounts of loans for each of the stated purposes. Table 34b indicates the extent to which loans were actually used for the purpose for which it was taken and the extent of diversion of loan. According to the responses provided by the sample borrowers, in case of the hardcore poor, least diversion occurred for marriage loans (3.3%) and highest diversion for small trading/business loans (53.7%). Among the very poor, highest diversion was in case of small trading loans (48.8%) and least diversion was from housing loan (17.4%). In general, the hardcore poor appeared to have diverted loans to a greater extent than the very poor though the differences were not significant.

Table 33b: Use of loan by sources and poverty category

Use of loan	Source of loan							
	Hardcore poor				Very poor			
	Bank/ Govt. coopera-tive	NGO	Non-registe-red organiza-tion	Informal sources	Bank/ Govt. coopera-tive	NGO	Non-registe-red organiza-tion	Infor-mal sources
Asset purchase	39.1	33.8	13.5	13.6	29.4	32.0	13.3	14.7
Business	4.3	20.9	2.7	4.0	11.8	18.6	16.7	5.0
Household consumption/Exp.	43.5	28.0	51.4	51.4	26.5	30.2	43.3	48.2
Agri. production	17.4	7.1	-	4.3	12.9	10.0	6.7	8.9
Marriage	-	4.5	5.4	5.0	12.9	3.2	6.7	5.8
Treatment	-	4.7	18.9	18.9	38.8	4.8	3.3	16.8
Education of Children	-	0.5	5.4	-	-	0.7	-	0.8
Debt serving	-	9.2	8.1	2.3	38.8	7.7	3.3	2.6
House construction	8.7	10.7	18.9	9.3	14.7	12.0	10.0	13.9
Others	-	1.6	-	0.5	12.7	0.2	-	0.8
Total	23	382	37	397	34	440	30	380

*Multiple response considered

Table 34a: Reasons of borrowing by poverty category

Reasons of borrowing	Hardcore poor		Very poor		Total	
	%	Amount	%	Amount	%	Amount
Asset purchase	20.4	4,028	20.2	4,584	20.3	4,313
Rural trading / business	17.8	4,077	19.2	4,512	18.5	4,309
Household consumption	28.1	1,948	21.8	2,433	24.9	2,166
Agricultural production	7.7	2,982	11.7	3,570	9.8	3,343
To arrange marriage	3.6	3,923	4.4	4,708	4.0	4,367
Treatment	13.2	1,998	10.9	3,185	12.0	2,549
Housing	8.1	3,518	10.4	5,252	9.3	4,515
Other emergency	1.1	20,489	1.4	41,858	1.2	32,700

Table 34b: Distribution of loan use and diversion by poverty category

Reasons of borrowing	Hardcore poor		Very poor	
	% used for the purpose	% diverted	% used for the purpose	% diverted
Asset purchase	68.4	31.6	69.8	30.2
Rural trading / business	46.3	53.7	51.2	48.8
Household consumption	84.7	15.3	82.4	17.6
Agricultural production	53.8	46.2	69.9	30.1
To arrange marriage	96.7	3.3	82.1	17.9
Treatment	68.5	31.5	69.8	30.2
Housing	76.5	23.5	82.6	17.4

5.1.3 Interest rates: Analysis of data presented in Table 35a showed that for both poverty groups taken together, the highest average interest rate was charged by non-registered organizations (72%) while lowest interest was charged for govt/cooperative loans (10%). NGO loans carried an average annual interest rate of 13% while informal sources carried an average interest rate of 70%. One interesting finding was that according to the responses provided by the samples, all sources had provided some loan without any interest. That is why, estimates on average interest rates given above are lower than the actual or prevailing interest rates. The proportion of loans without interest varies among different sources. Thirty six percent loans from other informal sources were interest free, while only 3% loans from non-registered organizations were interest free. Due to this difference, the interest rates for informal sources appear to be lower than the rates charged by non-registered organizations. Data also show that 17% of loans for both hardcore and very poor households carried interest rates over 100%, the single highest rate charged being 360% in case of a loan from an informal source. Interest rates on loans from NGOs ranged from zero interest rate to 25%.

Table 35a: Source wise interest rate for all samples

Interest category	Sources of loan				
	Bank/Govt. cooperative	NGO	Non-registered organization	Informal sources	Total
0	21.1	11.4	11.9	33.6	21.8
1-5	-	1.5	3.0	0.5	1.0
6-10	36.8	18.4	13.4	4.9	12.7
11-15	31.6	51.3	10.4	1.3	26.5
16-20	8.8	16.4	6.0	1.8	9.2
21-50	1.8	1.0	10.4	12.1	6.4
51-100	-	-	14.9	11.6	5.8
>100	-	-	29.9	34.2	16.6
Total	3.3 (57)	47.7 (822)	3.9 (67)	45.1 (777)	100 (1723)
Av. annual interest rate	10.0	12.9	71.6	69.5	40.6
Min. interest rate	0	0	0	0	0
Max. interest rate	25	25	240	360	360

A comparison between the two poverty categories on interest rates shows that the hardcore poor paid higher interest for loans from all sources except informal sources as may be seen from Tables 35b and 35c. The highest interest rate paid by the hardcore

poor was for loans from unregistered organizations while for the very poor the highest rate of interest was paid for loans from informal sources. Considering loans from all sources, the hardcore poor paid a relatively higher rate of interest on loans than the very poor.

Table 35b: Source-wise interest rate for Hardcore poor

Interest category	Sources of loan				
	Bank/Govt. cooperative	NGO	Non-registered organization	Informal sources	Total
0	13.0	10.7	2.7	36.0	22.4
1-5	-	1.0	-	-	0.5
6-10	39.1	18.1	16.2	2.8	11.3
11-15	34.8	51.6	16.2	2.0	26.1
16-20	13.0	16.8	8.1	1.8	9.2
21-50	-	1.8	5.4	13.1	7.3
51-100	-	-	21.6	12.1	6.7
>100	-	-	29.7	32.2	16.6
Total	2.7 (23)	45.5 (382)	4.4 (37)	47.3 (397	100 (839)
Av. annual interest rate	11.0	13.1	74.0	67.2	41.3
Min. interest rate	0	0	0	0	0
Max. interest rate	20.0	25.0	240.0	360	360

Table 35c: Source-wise interest rate for very poor

Interest category	Sources of loan				
	Bank/Govt. cooperative	NGO	Non-registered organization	Informal sources	Total
0	26.5	12.0	23.3	31.1	21.2
1-5	-	1.8	6.7	1.1	1.6
6-10	35.3	18.6	10.0	7.1	14.0
11-15	29.4	51.1	3.3	0.5	26.9
16-20	5.9	16.1	3.3	1.8	9.2
21-50	2.9	0.2	16.7	11.1	5.5
51-100	-	-	6.7	11.1	5.0
>100	-	-	30.0	36.3	16.6
Total	3.8 (34)	49.8 (440)	3.4 (30)	43.0 (380)	100 (884)
Av. annual interest rate	9.4	12.7	68.7	71.9	39.9
Min. interest rate	0	0	0	0	0
Max. interest rate	25.0	25.0	240.0	240	240

5.2 Savings

5.2.1 Amount of savings: The average amount of savings accumulated by a hardcore poor household during the last one year was Tk. 593 and that accumulated by a very poor household was Tk. 809. The cumulative amounts of total savings per household were Tk. 945 and Tk. 1,456 for the hardcore and the very poor respectively. The average savings last year and cumulative savings for the two groups taken together were Tk. 698 and Tk. 1,194 respectively (Table 36). The above figures have been derived by considering all samples including those who did not have any savings. However, all sample households did not report to have had savings. Among the hardcore poor, 52% households had savings while among the very poor, 58% had savings. Considering all samples, 55% households had some form of savings. The percentage of savers was higher among the very poor than the hardcore poor. The very poor also had a higher rate of savings than the hardcore poor.

Table 36: Amount of savings by types and poverty category (considering all households)

Types of savings	Hardcore poor			Very poor			Total		
	% owned	Amount (Tk.)		% owned	Amount (Tk.)		% owned	Amount (Tk.)	
		Last one year	Cum.		Last one year	Cum.		Last one year	Cum.
Cash	37.4	203	462	44.4	259	702	40.8	230	579
Rice/paddy	8.1	127	127	6.8	141	160	7.5	134	143
Mushti chal	4.0	1.0	19	4.7	2.0	13	4.3	1.3	16
Mortgaged in land	3.3	162	204	6.9	338	489	5.1	248	343
Loaned to others	2.2	31	51	1.5	20	27	1.9	25	39
Others	5.0	68	82	4.6	50	64	4.8	59	74
Total	51.7	593	945	57.8	809	1456	54.7	698	1194

Considering the sample households who had accumulated savings, the average amounts of last year's and cumulative savings of the hardcore poor households were Tk. 1,171 and Tk.1,829 respectively while those for the very poor households were Tk. 1,440 and Tk. 2,518 respectively (Table 37). The average totals per household for both poverty categories taken together were Tk. 1,309 and Tk. 2,185 respectively.

5.2.2 Types/forms of savings: The sample households had their savings in different forms as shown in Tables 36 and 37. The largest number of hardcore poor households saved in cash (37%). Eight percent saved in the form of paddy/rice, 4% saved *mushti chal,* 3% mortgaged-in land and 2% saved as loans to others. For the very poor households, these percentages were 44, 7, 5, 7 and 2 respectively. In comparison with the hardcore poor, proportionately more very poor households saved in cash, mortgaged-in land and *mushti chal* but proportionately less households saved in the form of paddy and loans to others.

Table 37: Amount of savings by types and poverty category (considering only those who saved)

Types of savings	Hardcore poor			Very poor			Total		
	% owned	Amount (Tk.)		% owned	Amount (Tk.)		% owned	Amount (Tk.)	
		Last one year	Cum.		Last one year	Cum.		Last one year	Cum.
Cash	37.4	555	1,236	44.4	590	1,583	40.8	574	1,420
Loaned to others	2.2	2,788	2,430	1.5	3,168	3,418	1.9	2,978	2,869
Rice/paddy	8.1	1,586	1,586	6.8	2,548	2,548	7.5	2,111	2,111
Mushti chal	4.0	14	1,047	4.7	40	620	4.3	28	827
Mortgaged in land	3.3	6,056	5,450	6.9	7,426	7,186	5.1	7,063	6,669
Others	5.0	4,948	4,599	4.6	2,019	2,019	4.8	4,070	3,895
Total	51.7	1,171	1,829	57.8	1,440	2,518	54.7	1,309	2,185

Among the different types of savings, per capita amount saved was highest in the form of cash and the second highest amount was in the form of mortgaged-in land, taking all sample households of both poverty categories together. Per capita cumulative amount of savings in these two forms were Tk. 579 and Tk. 343 respectively. The third important form of savings was savings in the form of paddy/rice. Considering only the households who had accumulated savings in different forms, the largest amount of saving per saver in that form was for mortgaged-in land which was Tk. 6669. However, only 5% of the households saved in that form. The second highest amount of cumulative savings per saver was Tk. 2869 which was in the form of loans to others. Here again, only 2% of all households saved in this form. The third highest amount per saver was Tk. 2111 for savings in paddy/rice that covered 8% of the sample households. The average amount of savings in cash, in which the largest number of households participated, was Tk. 1420 per saver.

6. PROSPECTS FOR EMPLOYMENT AND INCOME GENERATION

The study made an endeavour to assess the prospects for employment and income generation activities of the sample households. This was done mainly by considering their skill in different selected areas and ownership of assets in these sectors. Training in the relevant sector could be considered as a factor. However, due to the fact that only an insignificant number of household members received training in different IGAs, this factor could not virtually be considered. For assessing the prospects for employment and income generation only the household members aged 10-60 years are considered, which is assumed to be the active age for the present analysis.

6.1 Pisciculture

Eight percent of the population of total sample households aged 10-60 years reported to have had any kind of skill related to fishing. Among male population, 9% had skill and among females, 4% had skill in this sector (Table 38). The data on training show that none among the hardcore poor had received any training on fisheries and only an insignificant number of the household members aged 10-60 years among the very poor had received training in the field. Thus, in terms of availability of skill and training in fisheries, the sample population, especially the hardcore poor, does not appear to have a considerable involvement in pisciculture.

Regarding ownership of ponds, the results of the study show that only 14% of the hardcore poor and 20% of the very poor owned or shared ownership of ponds (Table 39). The average size of the ponds was also very small (4 dec. for very poor and 5 dec. for the hardcore poor). Thus the vast majority of the sample households do not have any opportunity to engage in fish culture unless some kind of leasing arrangements can be made to involve them in fish culture.

Table 38: Percent of population within 10-60 years of age category having any kind of skill and its types by poverty category

Indicators	Hardcore poor n= 630			Very poor n= 675			Total n= 1305		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
% having any skill	32.3	15.3	23.2	35.0	12.7	23.8	33.7	14.0	23.5
Types of skill									
Fishing	10.8	4.1	8.4	7.9	3.9	6.8	9.2	4.0	7.6
Poultry	0.7	11.3	4.4	1.2	10.0	3.6	1.0	10.7	4.0
Veterinary	0.5	0.9	0.6	0.4	2.2	0.9	0.4	1.5	0.8
Livestock	3.9	7.7	5.2	3.2	3.9	3.4	3.5	6.0	4.3
Agriculture	32.0	11.3	24.8	35.6	16.1	30.4	34.0	13.5	27.7
Sericulture	-	0.9	0.3	-	-	-	-	0.5	0.2
Business	10.5	4.5	8.4	7.7	5.0	7.0	9.0	4.7	7.7
Carpentry	9.3	18.1	12.4	6.9	18.9	10.1	8.0	18.5	11.2
Service	1.0	4.5	2.2	2.2	3.3	2.5	1.7	4.0	2.4
Mechanic	1.0	0.5	0.8	0.2	1.1	0.4	0.6	0.7	0.6
Transport	17.1	8.1	14.0	24.2	10.0	20.4	21.0	9.0	17.3
Food processing	2.2	12.7	5.9	1.2	5.6	2.4	1.7	9.5	4.1
Professional job	11.0	15.4	12.5	9.3	20.0	12.1	10.1	17.5	12.3

Table 39: Distribution of households by ownership of pond and poverty category

Ownership of ponds	Hardcore poor n=966	Very poor n=922
Owned	14.4	19.6
Not owned	85.6	80.4
Level of significance <.01		
Av. pond size (dec.)	5.0	3.8
Av. pond size (dec.) including all samples	0.72	0.74

Table 40: Different uses of ponds by poverty category

Use of pond	Hardcore poor n=139			Very poor n=191		
	year round water	only in rainy season	Total	year round water	only in rainy season	Total
Unused	12.0	27.7	17.3	5.6	25.0	10.5
Household work	5.4	4.3	5.0	11.9	8.8	13.6
Household work + Fish cultivation	31.5	17.0	26.6	36.4	29.2	34.6
Household work + natural way fish cultivation	38.0	51.1	42.4	41.3	27.1	37.7
Lease + Mortgage	13.0	-	8.6	4.9	-	3.7
Total	66.2 (92)	33.8 (47)	100 (139)	74.9 (143)	25.1 (48)	100 (191)

On the use of ponds owned/shared by sample households, the highest number ponds was used for twin purposes i.e. for household work and natural fish cultivation (Table 40). Over forty two percent of the ponds of hardcore poor and 38% of the very poor were used for these twin purposes. Seventeen percent of the ponds of hardcore poor and 11% ponds of the very poor were reportedly not used for any purpose. Fish culture along with household use was done on 27% and 35% of the ponds of the hardcore and very poor owners respectively. Thus, taking ponds of both poverty groups together less than one third (31%) of the ponds were used for fish culture and another 40% ponds were natural reservoirs for fish. Thus it appears that there is a possibility to increase fish culture in the ponds owned by the sample households. One important reason why the full potentialities of the available ponds are not utilized is that nearly 95% of the ponds have joint ownership which most likely acts as an impediment to fish culture. To improve the potentiality of fish culture among the target population, training, motivation and promotion of organized groups would be necessary.

6.2 Poultry

Among the active age population of the sample households, that is, those between 10 and 60 years of age, only four percent had any skill in poultry raising. Most of these were females. On the other hand, 54% of the hardcore and 61% of the very poor households had owned some poultry birds. In fact, small-scale poultry raising is a

traditional phenomenon in rural Bangladesh. It has not developed into an organized industry because of many reasons. The birds are raised in small flocks in a scavenging method, they are low yielding because of poor breed and there is high rate of mortality due to absence of proper vaccination.

Under the circumstances, to realize the potential of small-scale poultry farming, in addition to training, credit and other essential inputs like better quality chicks, improved feed and proper arrangements for vaccination of birds should be provided along with creation of marketing outlets, where necessary.

6.3 Livestock/Dairy Farming

Only 5% of the sample population of the active age reported to have had skill in livestock/dairy farming. Most of those who had skill were male members of the sample households. There is a possibility of training female members in the field to enable them to take up livestock raising including dairy farming. However, as in the field of poultry, necessary inputs and other related support will have to be provided to promote livestock raising as an income generation activity among the target people.

The ownership of livestock by the sample households as non-land assets shows that 25% of hardcore poor and 27% of very poor households owned livestock. Thus, there was not much difference among the two poverty categories in respect of livestock ownership. Household members of the hardcore poor also appear to have a scope for involvement in livestock raising. Accordingly, in developing EIG programmes, the IIRD may take this factor into consideration.

6.4 Sericulture

Data collected in the baseline survey show that no household member from the very poor households reported to have received training or had any skill in sericulture. Among the hardcore poor, an insignificant number of active age household members received training and only 0.3% reported to have attained skill in sericulture. Thus, the existing involvement in sericulture appears to be extremely limited.

Development of sericulture as an income generation activity (IGA) for the poor require certain prerequisites. These include, in addition to training provision of adequate quantity of quality mulberry leaves, assured supply of quality disease free layings (DFL), provision of processing facilities and market outlets. For development of sericulture as an IGA for the poor, the above prerequisites need to be fulfilled. Even then, it should be remembered that for the IIRD target group, sericulture can provide only supplementary income to those who would be involved in it since income from sericulture actvities are not expected to be enough to provide either full employment or adequate income to sustain a household.

6.5 Horticulture/Vegetable Gardening

The potentiality of involvement in horticulture and vegetable production by the poorest households in rural Bangladesh is limited primarily by the absence of land on which to grow these plants. The land ownership pattern of the sample population shows that 69% of the total sample households have only homestead. They do not have any cultivable land. The average size of their homestead land is only 3.5 decimals. With this small amount of homestead land, it is hardly possible to go for horticultural or vegetable production on a considerable scale. Only 9% of the total sample households had both homestead and cultivable land. These households can undertake production of vegetables and horticultural crops in addition to production of field crops. Thus, it appears that for a large majority of households, the potential for undertaking production of vegetables and horticultural crops is rather limited. However, through planned and intensive utilization of homestead land, some amount of these crops can be grown. For example, though only 9% had both homestead and cultivable land, survey data found that 22% of the hardcore poor and 25% of the very poor households owned horticultural trees in their homestead as non-land assets (Table 21). In this respect, no major difference between the hardcore and the very poor households has been observed. The programme can be undertaken on a limited scale for both types of the poverty groups.In fact, though they own relatively less land than the very poor, more hardcore poor households produced vegetables during the last aus-aman season than the very poor households (Table 20).

A very small number (9%) of the sample households had both homestead and cultivable land, but 28% reported to have had skill in agricultural production. Obviously, many of them had lost their cultivable land but rented in land or worked in others' land as wage labourers. Again, only an insignificant number of active age members of the sample population reported that they had received training in agricultural production including horticultural and vegetable crop production and raising nurseries. The above discussion indicates that, though on a limited scale, there is a potentiality for undertaking production of horticultural and vegetable crops by a segment of the sample population of both poverty categories. Provision of training, motivation and other input services are necessary to promote production of vegetables and horticultural crops.

7. HEALTH STATUS OF THE SAMPLE POPULATION

7.1 Incidence of Diseases

On the prevalence of diseases among the sample households during the last one month, analysis of data showed that 83% households had incidence of disease of any member (Table 41). On an average, the number of members who fell sick during the period was 1.8 per household. The number per household was 1.7 for the hardcore and 1.9 for the very poor.

Table 41: Incidence of disease during the previous one month by poverty category

Indicators	Hardcore poor n= 966	Very poor n= 922	Total n= 1,888
% of households with sick members	82.5	84.2	83.3
Av. number of household members sick	1.66	1.88	1.77
% received treatment	89.1	91.3	90.2

About the incidence of different types of diseases during the last one month from the date of survey, the most frequent disease was related to fever, cough and cold (64%) while the incidences of other types of diseases were 20% for intestinal diseases, 4% for skin diseases and asthma, TB and mental ailments. The hardcore poor suffered a little less from fever, cough and cold while they suffered more from intestinal diseases (Table 42). However, difference in the incidence of different diseases between the two poverty groups appeared to be insignificant.

Table 42: Different types of diseases during the last one month by poverty category

Types of disease	Hardcore poor n= 966	Very poor n= 922	Total n= 1,888
Fever/Cough & cold	60.5	67.0	63.7
Intestinal disease	21.0	19.8	20.4
Skin disease	4.9	3.5	4.2
Asthma, TB & mental	3.0	4.0	3.5
Others (unspecified)	20.8	22.5	21.6

7.2 Treatment Seeking Behaviour

In case of 90% households, some form of treatment was received for any kind of illness. In case of the hardcore poor, treatment was received by 89% households while 91% very poor households received any kind of treatment (Table 41).

Data were collected also on the treatment practices of the two poverty groups. Among the hardcore poor households, about 80% went for allopathic treatment, 4% for homeopathy and 3% for *kabiraji* treatment. Nearly 11% did not go for any kind of treatment (Table 43a). A relatively larger number of moderate households (86%) went for allopathic treatment and only 8% did not go for any treatment (Table 43b). This apparently shows that awareness about modern means of treatment was quite high among both the poverty groups. However, data were collected to determine the places where the sample household members go to seek treatment for any disease. Results show that only 20% went to hospitals/clinics or to qualified doctors (Table 43c). Eighty percent went to non-specialists such as quacks or to a dispensary or asked the salesman of a drug store to seek treatment. Thus it was found that though 80% of the hardcore poor and 86% of the very poor sought allopathy treatment, most of them did not go to qualified doctors or health centres but to unqualified persons to seek advise and buy medicine.

Table 43a:Treatment practices by diseases among the hardcore poor households.

Type of disease	Type of treatment , Hardcore poor (n = 1,319)				
	No treatment	*Kabiraji*	Homeopathy	Allopathy	Others
Fever/Cough & cold	9.3	1.4	4.9	84.0	0.4
Intestinal disease	13.4	2.5	3.2	68.8	12.1
Skin disease	19.0	14.3	4.8	61.9	-
Asthma, TB & mental	18.5	-	3.7	77.8	-
Others (unspecified)	10.7	11.2	3.0	72.8	2.4
Total	10.5 (138)	3.2 (42)	4.4 (58)	79.9 (1,054)	2.0 (27)

* Considered only the single response per individual in terms of number of diseases faced and types of treatment practices

Table 43b: Treatment practices by diseases among the very poor households.

Types of diseases	Type of treatment , Very poor (n = 1460)				
	No treatment	*Kabiraji*	Homeopathy	Allopathy	Others
Fever/Cough & cold	7.1	0.3	3.7	88.6	0.4
Intestinal disease	7.9	-	2.4	79.5	10.2
Skin disease	8.7	17.4	4.3	69.6	-
Asthma, TB & mental	6.9	3.4	-	89.7	-
Others (unspecified)	12.3	6.8	2.5	74.1	4.3
Total	7.7 (113)	1.3 (19)	3.4 (49)	85.9 (1,254)	1.7 (25)

* Considered only the single response per individual in terms of number of diseases faced and types of treatment practices

Table 43c: Places of treatment seeking by poverty category (%)

Place	Hardcore poor	Very poor	Total
Hospital/ Clinic (specialists)	18.6	21.1	19.9
Others (Non-specialists)	81.4	78.9	80.1

7.3 Availibility of Health Services

Available data showed that almost all (99.7%) nearest health centres were government health centres (Table 44) and the average distance of these centres was only 1.5 kilometers from the homes of the respondents (Table 45). Thirty six percent of the health centres were within one kilometer from their homes. Inspite of the availability of these facilities, however, only 20% of the sample households were found to have gone to hospitals or clinics to seek treatment for different ailments. Twenty one percent of the very poor and 19% of the hardcore poor sought these facilities. Lack of availability of adequate treatment facilities in these health centres were, perhaps, a major reason for an apparent apathy of the sample households to seek treatment from them.

Table 44. Types of nearest health centres by poverty category (%)

Types of health centres	Hardcore poor	Very poor	Total
Govt.	99.8	99.7	99.7
Non-Govt.	0.2	0.3	0.3
Total	51.2 (966)	48.8 (922)	100 (1,888)

Table 45. Distribution of households by the distance of nearest health centres by poverty category

Category	Hardcore poor (n=966)	Very poor (n=922)	Total (n=1,888)
<= 0.5 km.	17.2	26.0	21.5
0.51-1 km.	36.4	36.4	36.4
1.01-1.50 km.	8.8	8.9	8.8
1.51-2 km.	15.6	12.1	13.9
>2 km.	21.9	16.5	19.3
Average distance (km.)	1.7	1.4	1.5

7.4 Infant and Child Deaths

The study did not aim at conducting a thorough study on infant and child mortality and analyse different demographic aspects related to such mortaility. Data were collected from the households on the causes of death of children who died in the past.

7.4.1 Causes of death of infants/children: The study also investigated the causes of death of infants and children in sample households who had died upto the date of interview. The analysis of data indicated some identification problem in this respect. Many respondents could not accurately identify the cause of death of child while some could not even provide any meaningful answer on the same.

However, it was attempted to interpret their answers and classify the reported causes of death into a number of groups as presented in Table 46. The results were analysed in such a way that differences between the hardcore and the very poor households could be determined. Gender distribution was also made to enumerate gender differences in causes of infant and child deaths.

Considering all infants and children below five, the highest number of deaths were caused by infectious diseases which were responsible for death of 37% of all children who died. Ten percent died due to respiratory diseases while five percent deaths were caused by cardiovascular diseases. Other reported causes of death of children include gastro-intestinal diseases, accidents, nutritional deficiency, obstetric complications and bleeding disorder. However, the exact causes of death could not be identified for 34% deaths, either due to inability of the respondents to identify the causes or misleading

answers. Distribution of infants and children showing causes of death by poverty categories and gender differences is shown in Tables 47 and 48.

Table 46: Distribution of dead children by cause of death and poverty category

Cause of death category	Hardcore poor			Very poor			Total		
	Boys	Girl	All	Boys	Girl	All	Boys	Girl	All
Infections disease	36.5	38.0	37.2	41.2	32.4	37.1	38.7	35.5	37.2
Respiratory disease	9.0	11.1	10.0	10.2	8.7	9.5	9.6	10.0	9.8
Cardiovascular disease	5.2	4.1	4.7	3.1	5.9	4.4	4.2	4.9	4.5
Gastrointestinal disease	3.8	4.8	4.3	3.5	4.6	4.0	3.7	4.7	4.2
Accident	3.8	3.0	3.4	5.1	2.7	4.0	4.4	2.9	3.7
Nutritional	2.8	5.9	4.3	0.4	2.3	1.3	1.7	4.3	2.9
Obstetric Complication	4.2	1.8	3.0	2.7	1.8	2.3	3.5	1.8	2.7
Bleeding disorder	1.4	1.5	1.4	1.2	-	0.6	1.3	0.8	1.1
Unknown disease	33.3	29.9	31.7	32.5	41.6	36.7	33.0	35.1	34.0
Total	288	271	559	255	219	474	543	490	1,033

Table 47: Distribution of male infants and children who died by cause of death and poverty category

Cause of death category	Hardcore poor			Very poor			Total		
	<=1 yr. Infants	>1 yr. Children	All	<= 1 yr. Infants	>1 yr. Children	All	<= 1 yr. Infants	>1 yr. Children	All
Infections disease	37.4	33.8	36.5	40.3	43.2	41.2	38.8	38.4	38.7
Respiratory disease	8.1	11.7	9.0	12.7	4.1	10.2	10.2	7.9	9.6
Cardiovascular disease	4.3	7.8	5.2	1.7	6.8	3.1	3.1	7.3	4.2
Gastrointestinal disease	2.4	7.8	3.8	2.8	5.4	3.5	2.6	6.6	3.7
Accident	0.5	13.0	3.8	1.1	14.9	5.1	0.8	13.9	4.4
Nutritional	1.4	6.5	2.8	-	1.4	0.4	0.8	4.0	1.7
Obstetric Complication	5.7	-	4.2	3.9	-	2.7	4.8	-	3.5
Bleeding disorder	1.4	1.3	1.4	1.7	-	1.2	1.5	0.7	1.3
Unknown disease	38.9	18.2	33.3	35.9	24.3	32.5	37.5	21.2	33.0
Total	211	77	288	181	74	255	392	151	543

Table 48: Distribution of female infants and children who died by cause of death and poverty category

Cause of death category	Hardcore poor			Very poor			Total		
	<= 1 yr. Infants	>1 Yr. Children	All	<= 1 yr. Infants	>1 Yr. Children	All	<= 1 yr. Infants	>1 Yr. Children	All
Infections disease	35.1	42.7	38.0	33.3	30.9	32.4	34.3	37.5	35.5
Respiratory disease	13.1	7.8	11.1	11.6	3.7	8.7	12.4	6.0	10.0
Cardiovascular disease	1.8	7.8	4.1	1.4	13.6	5.9	1.6	10.3	4.9
Gastrointestinal disease	1.8	9.7	4.8	2.2	8.6	4.6	2.0	9.2	4.9
Accident	0.6	6.8	3.0	1.4	4.9	2.7	1.0	6.0	2.9
Nutritional	5.4	6.8	5.9	1.4	3.7	2.3	3.6	5.4	4.3
Obstetric Complication	3.0	-	1.8	2.9	-	1.8	2.9	-	1.8
Bleeding disorder	1.8	1.0	1.5	-	-	-	1.0	0.5	0.8
Unknown disease	37.5	17.5	29.9	45.7	34.6	41.6	41.2	25.0	35.1
Total	168	103	271	138	81	219	3.6	184	490

7.5 EPI Coverage

EPI coverage of children of the sample households was determined by collecting data on the vaccination status of all children below two years of age by covering vaccinations on DPT, Polio, BCG and measles. According to vaccination status, the children were placed into three categories. All those children below two years of age who had completed all the specified doses of all vaccines were placed in the 'completed' category, those who had been given partial vaccination by considering all the vaccines mentioned above, were placed in the 'partial' category and those who did not have any vaccination at all were placed in the 'none' category. Table 49 shows the vaccination status of all children of sample households below two years of age. The table also shows the vaccination status by poverty category and by dividing the children into two age categories, that is, those below twelve months and those between twelve and twenty three months.

The results of data analysis on vaccination status shows that among children below two years of both poverty categories, 28% had completed all doses of required vaccination, 55% were partially vaccinated and 19% had no vaccination at all. The vaccination status of the children of the very poor is found to be relatively better than that of the children of the hardcore poor. Again, according to the age distribution of the chidren, it is found that the rate of complete vaccination was only 10% for chidren below 12 months but was 47% for children between 12-23 months. The vaccination status of children of the higher age group was found to be significantly higher ($p < 0.1$) than that of the lower age group.

Table 49: EPI coverage by poverty category

Vaccination status category	Hardcore poor			Very poor			Total		
	<=12 month	13-23 month	All	<=12 month	13-23 month	All	<=12 month	13-23 month	All
Complete	10.2	40.6	23.2	9.7	53.3	28.2	9.9	46.8	25.7
Partial	63.3	43.8	54.9	66.9	39.1	55.1	65.1	41.5	55.0
None	26.6	15.6	21.9	23.4	7.6	16.7	25.0	11.7	19.3
No of children	128	96	224	124	92	216	252	188	440
Level of significance	$p < 0.1$			$p < 0.1$			$p < 0.1$		

An attempt was made to determine the age-wise vaccination status of the children in more details as may be seen in Table 50. It shows, for different age groups, the percentage of children who had completed the doses of different vaccinations due at that age. Therefore, it is not the completion of all the doses of various vaccines but the doses they were supposed to have completed and had actaully completed. According to this criterion, the table shows that 38% of the one month old babies had had their due vaccination, which was obviously the first dose of DPT, Polio and BCG. Similarly percentages of children having their due doses of vaccination are shown for other age groups. Only 11% of children of the 9-11 month age group and 16% of the children above 11 months had completed their vaccination duly. The performance is found to be relatively better for children of very poor households. The criteria used for defining immunization status is presented in Annex Table 2.

Table 50: Age-wise vaccination status by poverty category

Age (month)	No. of children	Hardcore poor	Very poor	Total (% immunized)*
1	8	33.3	40.0	37.5
2	8	0	0	0
3	8	3	3	3
4	18	0	0	0
5	9	0	16.7	11.1
6	20	0	20.0	10.0
7	38	21.7	20.0	21.1
8	35	18.8	26.3	22.9
9-11	35	6.3	15.8	11.4
>11	233	17.7	12.8	15.5

*This column does not show % of children fully immunized but immunized for the respective age indicated.

8. POLICY IMPLICATIONS

Targeting indicators: The IIRD has divided the target population into two groups - the hardcore and the very poor. Presumably, the division was done by using some observational methods.

Considering the main indicators of land ownership, occupation and level of expenditure, the two poverty groups had close similarities. Both the groups were near landless. Each of the groups, on an average, owned less than 10 decimals of land. The cultivable land owned by both groups was less than two decimals. Majority household heads of both poverty groups were wage earners and both groups suffered from food insecurity. Seventy percent or more households of both poverty groups had either occasional or chronic food deficit throughout the year. The two groups also showed minor differences in household expenditure. Though, on an average, per capita expenditure of the very poor was 9% higher than that of the hardcore poor, the level of expenditure of both poverty groups may be considered as very low. More than three-fourths of both groups of households had a monthly expenditure level below Tk. 500. In coping with crises, the mechanisms used by the two poverty groups did not differ greatly.

However, differences were visible in the incidence of female-headed households among the two groups. Twent percent of the hardcore poor households were female-headed while only eight percent of the very poor households were headed by women.

Again, in case of housing, there was considerable difference in the quality of housing of the two groups. Average value of living houses of the very poor was 63% higher than that of the hardcore poor.

But it may be noted that house value is not always a very effective criterion in determining poverty status. In Bangladesh, many hardcore and very poor households receive housing materials including c.i. sheets as relief after natural disasters by which they can improve their quality of housing. NGOs like the IIRD also provide housing

materials on a very subsidized rate or even free to hardcore and the very poor households. Under such circumstances, the housing condition of such beneficiaries may improve with other socio-economic conditions remaining the same. Using housing status as an indicator of poverty may become misleading in such cases.

While there were both similarities and differences between the two poverty groups in terms of various poverty indicators, a considerable heterogeneity was found among households of each group in their socio-economic characteristics and poverty status. On land ownership, it was found that while 4% of the very poor households owned land over 50 decimals, 3% of the hardcore poor households also owned more than 50 decimals of land. In case of household level of expenditure, while eight percent of the very poor households had a per capita monthly expenditure of more than Tk. 700, seven percent of the hardcore poor households also had per capita monthly expenditure over Tk. 700. Again, in the case of food insecurity, findings showed that while four percent very poor households had food surplus during the previous year, three percent of the hardcore poor households also had surplus food during the same period.

Under the circumstances, the division of the population does not appear to have been made on adequate measurable indicators. Therefore, for more meaningfully classifying the two poverty groups, a composite index may be used to demarcate and reconstitute the two groups considering land ownership, occupation, income/expenditure and food security.

Access to land: Based on the findings of the baseline survey, it appears that the planned intervention package of IIRD by and large fits the needs of the target population, directly or indirectly, since a large majority of the target population did not have cultivable land. The proposal to create access of the target households to *khas* land would be a welcome move. Creation of self-employment opportunities would also be a step in the right direction, especially for the female population since 65% of them are primarily involved in household work.

Training: However, for involvement of the target population in different employment and income generation activities, training may be considered as a major factor in improving their skill. Findings show that their present status on training is very poor. Only 1.3% had received any kind of training, of which most are not skill training but awareness building and others.

Health sector intervention: Another factor which has been apparently overlooked is the intervention in the health sector. Findings show that 83% of the target households had incidence of disease during the last one month. Since, the poorest are most vulnerable to diseases which reduce their working period, with an adverse effect on their employment and income, better health facilities can help improve the situation in this respect.

Prospects for Employment and income generation: On the prospects for employment and income opportunities for the target population, findings show that there are opportunities in the fields of pisciculture, poultry, livestock/dairy farming and horticulture/vegetables production provided some essential prerequisites are fulfilled. Among these, the common requirements are training, input and market support, and extension services. In case of pisciculture, since joint ownership of ponds would create a bottleneck, appropriate leasing arrangements may be made and farmer groups formed for fish cultivation in ponds available in the working areas of IIRD.

On sericulture, since current involvement and experience of the target households are almost absent, careful steps must be taken before encouraging members of the hardcore poor households in this activity. It should be remembered that provision of quality mulberry leaves, disease free layings and processing and marketing facilities would be necessary for the sericulture programme. Again, as found from experience of BRAC in this respect, involvement of the hardcore poor in this enterprise would be on a very small scale yielding only supplementary employment and income opportunities*. IIRD should not expect sericulture to be an activity capable of ensuring full employment or income opportunties for its target population.

Food insecurity and credit: The IIRD intends to ensure a more productive use of the microcredit advanced to its target households. However, certain precautionary measures need to be taken in this respect. Findings of the study show that a major part of the credit received by them are used for household consumption and other non-productive purposes. This is particularly true for the households which suffer from food insecurity. According to findings, a large majority of the target households have food insecurity. Thus to ensure a more productive use of credit, steps would be necessary to provide, at least initially, food and other consumption support to them. Again, during crisis periods necessary arrangements may be made for providing supplementary credit to help the target groups to cope with crises. At the same time, it may be desirable to create a disaster management fund for the purpose.

* For further details, see: Halder, S.R. (1998), Cost Benefit Analysis of BRAC's Sericulture Programme, BRAC, Dhaka.

Figure A 1: Different programmes of IIRD

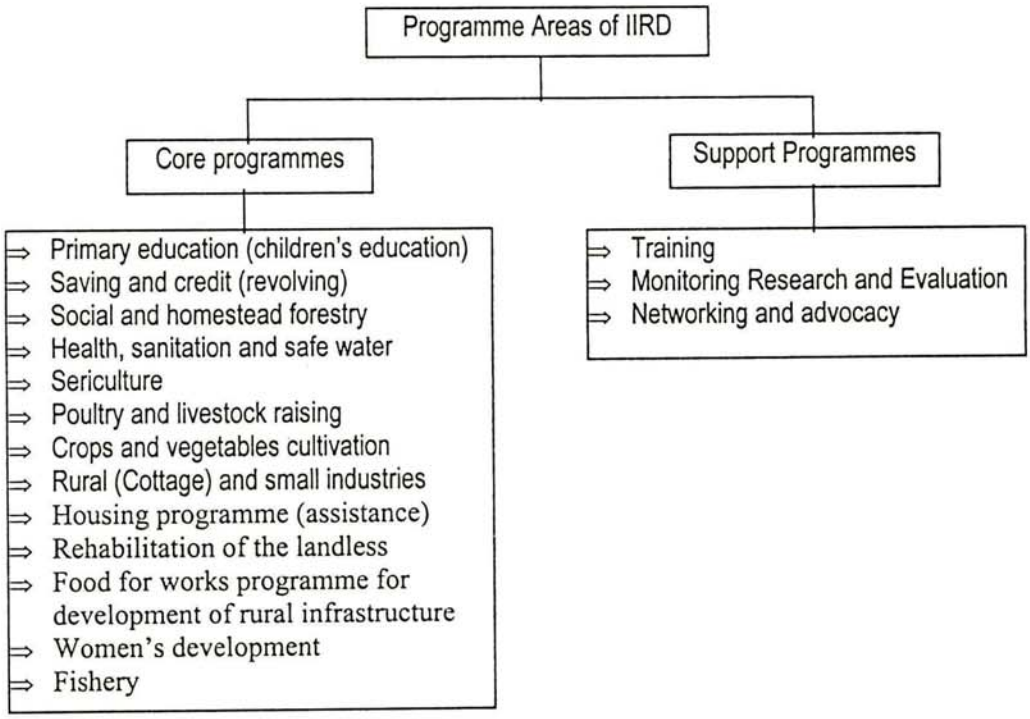


Table A2: Criteria used in defining immunization status of children

Age in months	Vaccine Doses								Vaccination status		
	DPT			Polio			BCG	Measles	Full	Partial	None
	1	2	3	1	2	3					
1.5	√			√			√		√		
1.5-2.5	√	√		√	√		√		√		
2.5-3.5	√	√	√	√	√	√	√		√		
3.5-4.5	√	√	√	√	√	√	√		√		
4.5-5.5	√	√	√	√	√	√	√		√		
5.5-6.5	√	√	√	√	√	√	√		√		
6.5-7.5	√	√	√	√	√	√	√		√		
7.5-8.5	√	√	√	√	√	√	√		√		
8.5-9.5	√	√	√	√	√	√	√		√		
9.5-11	√	√	√	√	√	√	√	√	√		
11-23	√	√	√	√	√	√	√	√	√		

Note: Any dose less than what is shown on the chart (tick sign) by age is defined as partially immunized children and no dose at all received is not immunized