# Political Economy of Poverty in the Haor Region of Bangladesh

**Md. Mehdi Hasan**
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Department of Sociology
University of Dhaka

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**Supervisor:**

**Prof. Dr. A S M Amanullah**
**Department of Sociology**
**University of Dhaka**

**Submitted by:**

**Md. Mehdi Hasan**
**M.Phil. Reg. No.: 243**
**Session: 2004-2005**
**Department of Sociology**
**University of Dhaka**

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# Acronyms

| | |
|---|---|
| AEZ | Agro Economic Zone |
| AIUB | American International University- Bangladesh |
| BBS | Bangladesh Bureau of Statistics |
| BIDS | Bangladesh Institute of Development Studies |
| BWDB | Bangladesh Water Development Board |
| CBN | Cost of Basic Needs |
| CBO | Community Based Organization |
| CDMP | Comprehensive Disaster Management Programme |
| CLTS | Community Led Total Sanitation |
| CNRS | Center for Natural Resource Studies |
| CPR | Common Pool Resources |
| CRA | Community Risk Assessment |
| DCI | Direct Calorie Intake |
| DoE | Department of Environment |
| FAO | Food and Agricultural Organization |
| HES | Household Expenditure Survey |
| HH | Household |
| HYV | High Yielding Variety |
| LWI | Land and Water Interface |
| MACH | Management of Aquatic Ecosystem through Community Husbandry |
| MFI | Micro-Finance Institute |
| NFPCSP | National Food Policy Capacity Building Strengthening Programme |
| PRSP | Poverty Reduction Strategy Paper |
| SUST | Shahjalal University of Science and Technology |
| SHIREE | Stimulating Household Improvement Resulting in Economic Empowerment |

# Abstract

This research critically analyses the relationship between political economy and the incidence of poverty in the haor region of Bangladesh. Attempts are made to analyze the forces responsible within the framework of wider agrarian socioeconomic structure and political context using structural functionalist framework. The findings revel from the analysis of 1500 extreme poor households, case studies, key informant interviews and observation that, poverty in the haor region is caused by uneven social structure, low resource endowment (agricultural, forest and wetland land), low productivity, climate change induced threats- early flash floods, illiteracy, unemployment, exclusion from common pull resources, natural calamities- flood and flash floods, political issues of impoverishment, unfavorable state polices- wetland and khas land policies, poor governance affecting access to natural resources as well as lack of efficient and effective delivery of basic services to the poor and vulnerable population. The study concludes, a complex and dominant power relation is present both at the vertical and horizontal relations which create an identity, a new class equipped with musclemen and backed by state power causing absolute exclusion of poor mass from common pull resources and local economic activities and thereby, contributing sustaining abject poverty in the haor basin. Weak presence of the state, coupled with bad governance facilitated a structural domination resulted in economic deprivation of masses. As a result, far from concept of common pull resources providing widespread opportunities for the poor in the short to medium term, the level of haor poverty is increasing in absolute terms, both in relations to incidence and depth. In this situation, for any socio-economic changes, a shifting in the existing economic and power relationship is inevitable.

# Executive Summary

Haors form a unique ecosystem and remains inundated for 6-8 months each year. The haor basin covers about 25,000 $km^2$ in seven districts of northeast Bangladesh. Haors are one of the most poverty prone areas in Bangladesh, because the land is single cropped (mainly the rice) is damaged by flash floods. The severity of flash floods increased, which is consistent with the increasing in rainfall in the upper catchments of Megahalaya, in India in the last 30 years (Indian Meteorological Department, 2012). Moreover, unusual cold waves and drought also damaging rice crops mire due to climatic change. About 20 million peoples' livelihoods are dependent on haor resources (CNRS-Action Aid Bangladesh, 2008, 2012). Over 10 million people live below the poverty level and about 3.5 million people live in extreme poverty, thus more than 10% of haor area people live in extreme poverty. The bottom 10% includes female-headed households, elderly people with no family support, households with disabled members, and large families are dependent on a single earner. In this backdrop, this study is explicitly concerned with the factors responsible for aggravating and perpetuating poverty situation in haor region of Bangladesh.

The conceptual framework of the study revolves around structural functionalist notion. It explains how groups or fractions monopolize opportunities, regardless of the official legitimation. Domination and exclusions operates with a different concept of distributive justice; something has more like functional importance rather than market scarcity in the haor region of Bangladesh.

With the continuous struggle in addressing the structural problems of poverty in the haor region, uneven social structure, low resource endowment (agricultural, forest and wetland, khas land), low productivity, climate change induced threats, illiteracy, unemployment, exclusion from common pull resources, natural calamities and political issues of impoverishment and poor governance affect the equal access to natural

resources as well as efficient and effective delivery of basic services to the poor. Attempts have been taken to analyze responsible forces within the framework of wider agrarian socioeconomic structure and political context. The politics of who, owns how and with what authority and the questions of how power is contested in social interactions in such a way as to reproduce widespread cultural, social and economic domination.

The findings are generalized for the whole deep haor basin after analyzing data from 1500 extreme poor households of 42 villages collected following essential and supplementary indicators of respondent selection, case studies and observation methods. The research shows, like many other villages, there are huge volumes of khas lands as recorded to the upazila (sub-districts) land office. However, most of the cultivable khas lands are under the control of local leaders, landlords and political elites. Without making them happy no one can have access to it. Although these leaders have different opinions on many issues, but are united on controlling the khas lands and it has gone so far that, these elites behave like it is their parental property. Interestingly, they have made the khas land issue so complex and clumsy in cooperation with local land officials that the illiterate and powerless poor people cannot apply for and contest illegal occupancy of power elites rather relies on their mercy.

Fisheries are one of the main economic activities. It is the main consumption sources of the Haor people which is totally occupied by muscleman and politically affiliated elites. Even the members of the parliament are involved with these activities. According to the wetland policy and national rule, only authentic fishermen cooperative and groups can have lease of these wetlands but, ironically, all the wetlands are captured by politically backed fishermen associations somehow or other. The ramification of this kind of occupation is widespread and has dire social and economic consequences. These powerful people take lease from government and puts barrier to fishing in the wetland. In the rainy season, wetlands get flooded and become a vast sea-like place. Then the most important and shocking exclusion happens as the lease holders restricts the local

poor, fishermen putting an excuse that, their fish now came out. In some cases the poor are abused, beaten, threatened or even killed because of entering into the water. This season is critical as all the Haor lands go under water and there is no other source of income than fishing.

Because of the extensive exclusion, the deep Haor basin's poor people are compelled to migrate in search of livelihood to other districts. The study also finds poor people are becoming engaged in hazardous and risky jobs like sand and stone excavation labor, rickshaw puller, day laborers and others. Another vicious circle is advance labor selling during rainy season in very cheap rate preventing from fair wages during the working season. Here, the issue of political elites, inadequate safety net coverage, misuse of state power and poor governance came forward. Thus, the result is a widespread 'exclusion' of the poor from integration into the local economic activities and the influx of absolute poverty.

On the other hand, budgetary allocation for haor region at national level is much less than other regions. The issue of power politics, geography and the calculation of immediate return always come first into consideration. As an example, one-kilometer concrete road requires several times more money than plain land of other parts of the country. In a resource-scarce economy budgetary allocation often goes to places where more output could be generated.

The study concludes, a complex and dominating power relation is present both at the vertical and horizontal relations which create an identity, a new class equipped with musclemen and backed by state power causing absolute exclusion of poor mass from common pull resources and local economic activities and thereby, contributing sustaining abject poverty in the haor basin. Week presence of the state, coupled with bad governance facilitated a structural domination resulted in an economic deprivation of masses. In this situation, for any socio-economic changes; a shifting in the existing economic and power relationship is inevitable.

The findings may contribute to the understanding of local economy, resources, exclusion, culture, institutional structure, geographical challenges and power relations that dominate the socio-economic interactions of the people in haor region. It can also foster further research and development activities in line with socio-economic development, disaster risk reduction, climate change adaptation as well as regional development plan of the government. As a result, The findings could offer insights to several ministries and departments like, Ministry of Disaster Management and Relief, Ministry of Environment and Forest, Local Government Engineering Department, Ministry of Planning, Ministry of Environment and Forest, Ministry of Land, ministry of Education, Ministry of Water Resource, Ministry of Social welfare along with interested individuals and organizations.

The study may also help policy makers to understand regional dimensions to take appropriate development planning and strategies. Relevant organization and department including: Comprehensive Disaster Management Program (CDMP) could be directly benefited from the findings and can look at the following broader recommendations to lessen vulnerabilities of the people and to reduce the burden of the poverty toward a resilient community.

To sustainably overcome poverty situations of millions of haor people, this study put together following recommendations for immediate and long-term consideration:

- Political commitment and willingness of poverty reduction and socio-economic development from government and local leaders.
- Inclusive regional development plan incorporating poor and marginal people and communities under comprehensive policies.
- Establish rights to resources- government land for poor and wetlands for fishermen. It would certainly help them graduate out of poverty.
- Allocate more development budget and ensure proper implementation and utilization.

- Conduct inventory, assess and map all the khas lands in the area and document the current status, use patterns including the areas under the control of land grabbers.
- Inform and sensitize upazila and district khas land distribution committees to take legal actions/steps to salvage the khas land grabbed by the rich people.
- Aware and organize communities around productive use of khas lands for food/crop production, housing (for the landless families having no homestead of their own), cattle grazing, swamp afforestation and other community uses.
- Proper utilization of wetland relate policies of the government
- Promotion of technical and vocational education for unemployed could create income opportunities.
- Increase coverage of Safety Net Program of government could play a significant role.
- Promotion of diversified climate adaptive livelihood options and technologies rather than sole dependence on traditional agriculture and fisheries.
- More government and NGO program initiatives for improving water and sanitation, health and nutrition, communication, education and employment sectors.
- Establish alternative mechanisms for public services involving local government and communities for hard to reach areas.
- Special budgetary allocation and dedicated development program considering the uniqueness of the geography.
- Making local people partner in development planning, implementation and management including disaster risk reduction and climate change adaptation.

# 1 Introduction

**Introduction**

'Haors' form a unique ecosystem that remains inundated for 6 to 8 months each year. The haor basin covers about 25,000 $km^2$ in seven districts of northeast Bangladesh. haors are one of the most poverty prone areas in Bangladesh, because the land is single cropped (mainly rice) is damaged by flash floods. The severity of flash floods increased which is consistent with increases in rainfall in the upper catchments of Megahalaya in India in the last 30 years. Moreover, climate change, unusual cold waves and drought also damage rice crops. About 20 million people's livelihoods are dependent on haor resources. Over 10 million people live below the poverty level and about 3.5 million people live in extreme poverty (direct calorie Intake -16% and cost of basic needs- 35%, CNRS, 2012). Thus, more than 10% of haor area people live in extreme poverty. The bottom 10% includes female-headed households, elderly people with no family support, households with disabled members, and large families dependent on a single earner (CNRS, 2006, 2012).

Increasing incidence of poverty in the haor region is to be a direct consequence of the combination of economic and political forces, which reinforces each other. Exclusion is the major cause of poverty, which is perpetuated essentially by use of political and muscle power, reinforced by inert institutions that have very little impact on shifting the perpetual course.

## 1.1 Statement of the Problem

More than 1 billion people live in poverty around the world and a great majority of them are in developing countries. Bangladesh is one of the world's most densely populated

countries with 154.07 million people Population Census, 2011), around 24.8 percent of whom live below the national poverty line (MDG Progress Report, 2015). Moreover, variations exist among different regions and evidence also shows that there are very large regional disparities in Bangladesh. Some of the regional areas have generally been lagging behind on various issues compared to other divisions and national averages. In addition, child malnutrition rates, gender disparity and discriminations, maternal mortality, high prevalence of extreme poverty crates a condition that is tied to the low social status of poor in Haor areas of Bangladesh.

The haors are considered the most productive wetland resources of Bangladesh. The basin supports a large variety of wetland bio-diversity and works as natural reservoir as it plays a key role in basin water resources by regulating water flows of the Meghna river system. Also, the haors are noted sanctuaries of both permanent and migratory birds. With the recession of floodwater, a large variety of small fishes, oysters, water snails and bivalves, and pasture spread over the surface attracting a large number of migratory birds. These birds use the haor as temporary resting and roosting ground before moving elsewhere. The swamp forests, which were once dominant with the flood tolerant tree species like hijal (Barringtonia acutangula) and Koroch (Pongamia pinnata), have been reduced to a few small patches. The haors are also fishing ground of the country. In the past century or so, when the population pressure was less, most of the rim-lands of the haors remained as cultivable wasteland and was used for extensive grazing in the dry season. As population increased, boro cultivation expanded onto these marginal lands leading to a large area being drained. Thus, the very existences of these wetlands are now threatened (Alam and Hossain, 2003).

A complex and dominating power relation is present both at the vertical and horizontal relation which creates an identity, a new class equipped with musclemen and backed by state power causing absolute exclusion of poor mass from common pull resources and local economic activities and thereby, contributing a sustaining abject poverty in the haor basin. Week presence of the state, coupled with bad governance facilitated a structural domination resulted in economic deprivation of masses.

## 1.2 Background and Rational of the Study

“Haor” is one of the agro-economic zones and most remote and hard-to-reach areas of the country. Seasonal dimensions to food insecurity, natural shock and disasters, socio-economic and political exploitation keep population of this area highly vulnerable almost round the year. In most part of the areas, there is only one annual rice harvesting, that resultants seasonal variation in food availability and prices. Due to remote location and difficult physical conditions, government services are almost absent. This region is socially conservative and imposes strict restrictions on women's mobility. Absence of adequate health service providers and lack of transportation facilities badly affects the entire population - particularly the children, pregnant women and elderly people when they become sick. Geographical situation made this region more vulnerable to disasters. Moreover, governance issues affect the efficient and effective delivery of basic services to the poor. However, so far, it remains as a continuous struggle in addressing the structural problems of poverty in the haor regions of Bangladesh (MACH, 2008).

The present study analyzes the political economy of poverty of haor areas. This has also been reflected in the measurement process; which took into account not just income or consumption levels but also access to natural resources, adequate shelter, social capital, education, migration and food security. Several criteria have been used to identify the extreme poor from the extent of poor communities. The criteria covers female headed household with a single earner, poor quality or no regular housing, women with disabled husbands, landless (or up to 10 decimal of land), seasonal wage laborers, recurrent food insecurity, have no or little productive assets, begging, dependent on donated clothing, unable to finance children’s education and women with many young or older dependents. However, one common set of indicator for all extreme poor is not plausible and it requires a multidimensional approach as well.

While, dealing with extreme poverty in haor areas of Bangladesh, the study assessed the influence of socio-economic, political, structural, behavioral, natural and cultural aspects, which are responsible to the deteriorating poverty situation of haor region. This study tried to explore how all these factors are contributing to the cross-generational continuation of poverty and increasing vulnerability of the poor in the haor region of Bangladesh.

### 1.3 Objective of the study

The overall purpose of the study is to understand and analyze the interplay of class and state power in retaining abject poverty in the haor region of Bangladesh. However, the specific objectives are:

a) To understand the dynamics of poverty in the haor region of Bangladesh.
b) To identify the socio-economic characteristics of the extreme poor households.
c) To capture the experiences of the extreme poor households in the haor region.
d) To understand the political economic implication of resource exclusion.

### 1.4 Review of the relevant literature

The literature on poverty is quite large today and the contributors came from diverse disciplines. However, the scholars have directed their attention to poverty as a distinct area of enquiry only since late fifties and early sixties of last century. The interest of scholars followed the interest of policy makers rather than being predecessor. Even though, large scale poverty did not disappear from less developed countries or even developed countries after the decades of research and development activities.

Scholarly attention to poverty seems to be imprecise. Arthur Young and Sir Fredrick Eden had attempted to measure poverty as early as 18th century (Eden, 1797) Charles Booth possibly did the first systematic enquiry into people in want in 1886 in his book ***Life and Labour of the People in London, 1889***.He undertook a house-to-house enquiry in the poorer district of London. His discourse used two Terminologies viz. poor and very

poor. He described poor as those who struggle but are able to earn sufficiently regular income to obtain necessaries of life for making both ends meet. In contrast, the very poor cannot do so and live in a state of chronic want. The book has gone through several publications over the last century. An abridge edition was published in 1969. Booth, it may be said, invented what is known today as poverty line and also Head count of Households in poverty through application of social survey method.

Seebohm Rowntree followed C. Booth, who in 1899 carried out a research to find out the extent of poverty in York (Rowntree, 1901). The result of his research was published in 1901 and the study was entitled '***Poverty: A Study of Town Life'.*** He is recognized with ascertaining precise levels of income according to size of family, which need be spent on specified goods and services in order to get minimum but adequate quantum of food, clothing and shelter so as to maintain physical efficiency. He introduced the term 'primary poverty' to indicate the level below this calculated income. This is similar to Booth's very poor. He also introduced the concept of 'secondary poor', which is again similar to 'poor' in Booth's work.

Rowntree's survey pointed out two principal causes of variation in the incidence of poverty. The first is unforeseen interruptions in income due to ill health, unemployment and death of principal wage earner. The second is foreseeable lifecycle of individuals – from childhood to post-retirement and in these periods wants very due to status of own and other dependents and thus the income level necessary to meet the basic want of the family.

In 1936 Rowntree repeated his social survey of York and the results were published in a volume entitled ***'Poverty and Progress': A second survey of York in 1941***. The basic finding of the survey was that the poverty line income has increased not only in normal terms but also in real terms to allow for the rise in standards of nutrition. In his first survey he found that 67% of the people in want were employed but was getting low wage. In his second survey this percentage dropped to 33% while the percentage of unemployed increased from 3 to 29. It may be recalled that the year of survey was conditioned by great depression.

Rowntree repeated the survey in 1951. The book was entitled ***'Poverty and the Welfare State: A Third Social Survey of York Dealing Only with Economic Question'***. He again concluded that the income equivalent of poverty line did increase in real terms due to change in the standard of nutrition. But the social legislation of the post-war years brought a qualitative change in the cause of want. These legislations significantly brought down the percentage of people under poverty line and such people constituted primarily of the old people and the people with chronic illness.

Peter Townsend in his book ***'Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living' (1979)*** discusses about poverty and analysis the dimensions that related to poverty and makes a poverty line. He defines poverty as: individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in activities and have the living conditions and amenities which are customary or are at least widely encouraged or approved in the societies to which the belong.

Basically, his definition about poverty is based on the relative deprivation, which has three forms: *objective, normative,* and *subjective* deprivation. Townsend analyses the forms of deprivation and measurement of poverty from the social perspective. He discusses three measures of poverty, as the State's standard of poverty, the relative standard of poverty and the deprivation standards of poverty. He sees, the first two types have some shortcomings to measure the actual feature of poverty. So he uses an index by 60 items that is known as *Deprivation Index*. He also discusses about the categories of poverty: as minority group poverty, subsistence poverty, starvation poverty, relative poverty, poverty as mismanagement. He has given a full-fledged idea about household choices that are directly related to the life style of the people.

**Amartya Sen (1981)** has pointed out that the concept of poverty must involve the issue of identification of poor and the issue of aggregation of the set of poor. He argues with the critics that due to variation in the physical features, climatic conditions and work

habits, nutritional requirement into minimum food requirement varies as the choice of commodities vary and that non-food requirement are not easy to specify. Even after agreeing that almost every procedure in the subsistence level definition of poverty can be challenged. Sen asserts that despite vagueness of the concept of nutritional requirement, all is not lost. He points out that it is not necessary to see whether one has income to meet the defined level but find out empirically whether one meets such standard and that identification need to be intermediated through income. He further argued that if we go through income there exist particular patterns of consumption behavior in a community to identify the income required to meet the typical nutrition basket. Sen also points out that malnutrition captures only one aspect though it is the central concept of poverty.

Sen in his studies on standard of living has expressed doubts about utility or satisfaction as the ultimate development of living standard. Such an approach has much similarity with the idea of affluence. He has opted to concentrate attention on functioning and capabilities. He argues that consumable goods are transformed into certain enabling characteristics given the physical, social and political environment, which creates capabilities in a person, given his personal characteristics, and these capabilities are transformed into functioning for achievements. It has been suggested by Meullbauer that higher level of functioning is associated with high utilities. Sen, however argues that standard of living is about the multidimensional set of a available capabilities of person to function.

In the field of poverty and inequality measurements, very few scientific and organized studies have so far been done about rural poverty in Bangladesh. In the recent past this branch of study received increasing attention of policy makers and researchers. At different times government organizations and individual researchers have tried to measure the extent of poverty and inequality and explain the various factors causing them. The more important available studies amongst others are by Khan, A. R. (1977); Alamgir, M. (1978); Osmani, S. R. (1982), Siddiqui, K. (1982); Schendel, W. V. (1982);

Ahmed, Q. K. (1986); Hossain, M. (1994); Rahman, A. and Hoque, T. (1988); Rahman, H. Z. (1995); Bangladesh Bureau of Statistics (BBS) and Bangladesh Institute of Development Studies (BIDS).

The main concern of **Khan's** study **(1977)** was to estimate the proportion of households and individuals who were in absolute and extreme poverty in rural Bangladesh for 1963-64, 1968-89 and 1975. The figures indicated a sharp increase in incidence of rural poverty in between the first two periods. The percentage of households under poverty increased from 51.7 in 1963-64 to 84.1 in 1968-69 and then declined to 70.3 in 1975. This decline was, however explained by the fact that estimate of calorie requirement was not same and the estimate was based on Household Expenditure Survey (HES) of only one quarter of 1975 and as such we cannot ascertain the possible direction of bias due to this factor.

In a recent study Khan (1990) made an indirect estimate of threshold income for rural areas on the basis of 2112 k. calories and 58 grams of protein per day per person. Rural families with per capita income below 1.25 times the cost of specified food bundle were classified as moderately poor. Subsequently he adjusted the threshold income over time by using the cost of living index. According to his estimates and based on HES data about 56%of rural population in 1973-74, 70% in 1981-82, 39% in 1983-84 and 35% in 1985-86 were found to be moderately poor. The corresponding figures for extremely poor 43, 57, 24 and 21 presented respectively. The estimate of poverty ratio indicated that incidence of poverty increased sharply between 1673-74 and 1981-82 and then decline dramatically between 1981-82 and 193-84 but modestly between 1983-84 and 1985-86. Khan suggested two important points regarding apparent improvement in the poverty situation in mid- 1980s. The first point relates to the methodological change in data collection (complete count of food consumption) from 1983-84 made by BBS, while the second one relates to the improvement in rural wages of agriculture labor over the period. But some researchers pointed out that it is hard to conceive the reduction of extreme poverty by 60% over a brief of two years time.

The main focus of **Alamgir's** study **(1978)** is on measuring the income inequality and poverty indices for 1963-64, 1966-67, 1968-69 and 1973-74 in the urban and rural areas of Bangladesh. He analyzed critically in the light of the level and structure of real income, poverty and inequality in Bangladesh. A historical perspective was also provided for identifying the process through which social forces interacted for producing underlying trends in poverty and inequality. He used data particularly from BBS and published materials of BIDS for different periods from 1959 to 1973-74 for urban and rural areas. His findings indicated a decline in incidence of poverty between early and late sixties. He also proposed a new index of poverty as the average of Gini Index and composite poverty index as developed by Sen (1976). That index is however is subject to much criticism: Osmani points out that Alamgir's index is not altogether legitimate but appropriate only in specific context. Nonetheless, his efforts were more directed towards measurement of poverty line and index than explaining the causes thereof.

Other researchers' made an attempt to estimate poverty for two villages only. They preferred to adopt the method of estimating per head income to provide a family with stipulated level of calorie per head (2250 k. calories and 2150 k. calories for the poverty and the acute poverty respectively). In that sense of poverty, 10 to 12 percent households in Bhatpara and 30 percent households in another village Bhabanipur were found to have inadequate income for the intake of adequate energy from food (**Khan, Islam and Huq, 1981**).

**Osmani (1982,)** in his study developed more scientific methods to examine economic inequality and construct poverty line. He explored some of these new avenues in the realms of both theory and practice. Normative approach to inequality and has been discussed in his study for comparison of inequality and poverty with the existing measurement. Osmani constructed the poverty line for Bangladesh on the basis of an interpersonal distribution of expenditure, the nutrition coefficient matrix, information on the physical amounts of different food items consumed at various levels of expenditure and the minimum nutritional requirement vector. He studied rural poverty

for the period 1963-64 and 1973- 74.the results led to the interpretation that a less severe overall poverty was found in 1973-74. He concluded that the proportion of the poor was lower in 1973-74 but the absolute number of the poor people were considerably higher and so the average poverty was higher in that year in comparison with that of 1963-64. In spite of different methods used by Khan and Osmani, their conclusions in respect of poverty were similar. Osmani's study contains some other important findings, which reveal that social welfare declined from 1963-64 to 1966-67. Osmani didn't make further attempt to delineate the causes and effects of poverty.

**Osmani (1990),** in his recent study tried to analyze the change that has occurred in the structure of labors force in rural Bangladesh and to relate this change to the recent trend in poverty. He observed that the volume of non-farm labor-force has increased to a great extent in post-liberation period, which was associated with the increase in income, and consequently decrease in incidence of poverty. Osmani also made a critical review on poverty estimation done by World Bank (WB), Bangladesh Bureau of statistics (BBS) and Rahman and Haque. He concluded that the methodology followed by Rahman and Haque leads to the result of increasing poverty, while that followed by WB and BBS showed a decline in poverty. But, BBS admitted that HES data for 1973-74 were based on an incomplete enumeration of calorie consumption which led to an underestimation of total calorie intake and hence over-estimation of magnitude of poverty.

In view of this problem, Osmani re-estimated the poverty ratio for 1973-74 taking full count estimates of calorie consumption and using the methodology adopted by WB and BBS. The modified estimate of moderately poor was found to be 62-68 percent, while for extremely poor it was 25-26 percent. The corresponding figures obtained by WB and BBS were 82.9 and 44.3 percent respectively. But between 1973-74 and 1983-84, Osmani observed that while there was a fall in moderate poverty from 62-68 to 57 percent; there was a rise in extreme poverty from 25-29 to 38 percent. The main explanation was the exclusion of certain minor items during Household Expenditure Survey in 1973-74. Osmani (1990b) also provided interesting explanation of this

phenomenon. In another study, he gave detailed critique of the BBS data and the methodology of poverty estimation adopted by WB BBS as well as his own alternative approach.

Kamal Siddiqui's study ***The Political Economy of Rural Poverty in Bangladesh (1982)*** has a good historical perspective of rural poverty but it lacks empirical support. The main concern of his study was on of the identification of factors which cause, aggravate and perpetuate poverty in rural Bangladesh. Attempts were also made to analyses the forces which are responsible for rural poverty within the framework of agrarian structure. He also tried to establish the international dimensions and to examine the urban forces contributing to rural poverty. His study was based on information obtained from a single village of Jessore district in 1977-78. due to the limitation of sample size, his findings may not be generalized for rural areas. He did not take any attempt to measure the poverty line or extent of poverty. In his study, a positive correlation between the level of food consumption and land ownership position of the household was found.

Willem Van Schendel in his book ***Peasant Mobility: the odds of life in rural Bangladesh(1982)*** discussed the mobility patterns and living standards of the peasants through direct fieldwork. He sees in his book that an enormous; hardly differentiate population living in deepest poverty. He examined it that the stagnant economy is the root causes of poverty. This study stressed on getting away from static notions of peasantry, poverty and inequality. It deals with peasant differentiation in Bangladesh and with various processes, both long term and short term, underlying it. The main units of research are peasant households in three areas (Rangpur, Bogra, Comilla) in Bangladesh whereas he sees living conditions of the poor and poorest who are in enduring inequalities and abject poverty.

In the book ***Poverty Issues in Rural Bangladesh,*** **(**Motiur, 1994) has identified the causes of poverty. He identifies as: high population growth and density, low level of economic

growth, uneven social structure, low resource endowment (land), low productivity, illiteracy, unemployment, natural calamities and political issues of impoverishment.

A report of the 'Like-Minded Group' on ***'Rural Poverty in Bangladesh'*** provided an alternative approach and conceptual issues of rural poverty in Bangladesh. The main focus of the approach was to place the processes of poverty within the wider socioeconomic and political context of Bangladesh. In addition, two sets of questions were addressed in this report. The first set relates to the second configuration of rural poverty and changes over time, while the second one relates to the patterns of development assistances and how these assistances affect the level of living of the within the context of national policies and programmes. Poverty line income was also estimated in this report on the basis of the methodology suggested by the FAO/WHO (Hossain, 1990).

In order to compute the minimum calorie requirement based on that methodology, the "expected body weight for existing height was multiplied by energy required per kg of body weight." The cost of minimum prescribed calorie requirement was worked out and added to the cost of other essential basic nonfood items to obtain poverty line income. The rural poor did not consider the cost of meat, milk and sugar in estimating the total cost of food items on the ground that there was very little consumption of them. On the other hand about 50% of the required cost of fruits and vegetables was taken as these commodities were assumed to be consumed by the rural people from their own produce in kitchen garden. Furthermore, only 15% of the total cost on account of food items was considered for non-food items, even though the HES (1976-77) estimated this figure at 25%. In this perspective the poverty line income set in this report was very much conservative. However the poverty line income at current price per household per month was estimated at Tk. 220 for 1963-64, Tk. 722 for 1973-74 and Tk. 894 for 1976-77, while the percentage rural population below that poverty line income was found to be 75.0, 74.5 and 83.0 respectively (ibid).

**Ahmed and Hossain (1984),** in their study suggested some policies for alleviation ofrural poverty and estimated poverty line income for some selected years. They further adjusted the estimate of poverty line income as recommended by FAO on the basis of consumption habits in respect of some commodities like milk, meat, sugar, fruits etc. They calculated the poverty line income by taking into cognizance the minimum cost of food items. Though, the HES (1976-77) computed that the expenditure on non-food items account for about 25% of the total cost of food items, Ahmed and Hossain considered only 15% of the recommended costs of food items to arrive at the poverty line income for rural Bangladesh. On the basis they estimated the poverty line income at current prices by per household per month at Tk. 148.0 for 1963-64, Tk. 501 for 1973-74 and Tk. 586.0 for 1976-77. The percentage of rural population below poverty line income was found to be 52.0 in 1963-63, 55.7 in 1973-74 and 61.1 in 1976-77. Some researches in this line however, pointed out that the estimates of proportion of the poor were low mainly because of their conservative estimate of poverty line income and assumptions made on some food and non-food items.

**Hossain (1988),** attempt to examine the impact of credit for alleviation of rural poverty. He undertook this study as an evaluation of Grammen Bank Prokalpo. Hossain observed that GB had a pervasive effect on the credit market in respect of accumulation of capital by the poor, employment generation, poverty alleviation ctc. On the basis of 2112 k. calories and gram of protein he computed the cost of consumption bundle for 1984-85 at Tk. 9.85 per capita per day. Based on certain assumption he also estimated threshold income for moderate and extreme poverty at Tk. 3500 and Tk. 2975 respectively per capita per year. From his study he observed that about 84% of the total population of the target group non-participant in project villages and 80% in control villages were in moderate poverty, while this figure was only 61% from GB members. Those living in extreme poverty were estimated at 48% for member and 75% for non-member group. He concluded that the GB has made a positive contribution to the alleviation of rural poverty. In another study Hossain et al. (1990) analyzed the effect of adaptation of modern variety of rice on the distribution of income and incidence of rural poverty.

They also estimated poverty line income based on 2212 k. calories per capita per day. About 30% of the estimated food cost was considered as the cost of non-food items. Considering these two components of cost the poverty income for 1987 was estimated at Tk. 4300.0 per capita per year.

Based on this estimated poverty line income and household data gathered from 62 sample villages, it was observed that 60% of the total population was in moderate poverty. Incidence of poverty and adaptation of modern rice technology showed an inverse relation. Hossain et al. also observed that about 51% of the total population was below poverty line income in the "higher-adopter" while it was 56% in "lower-adopter" and 66% in medium-adopter villages.

**Rahman and Haque (1988),** attempted to examine the dimension and trend of poverty and inequality in Bangladesh over the time spectrum of 1982 and 1984-85 on the basis of data collect by BBS and subsequently making a comparison with other secondary sources. Based on three methods viz, the income method of measurement, calorie – income graph based on primary or grouped data and estimated actual calorie intakes of respondents, they studied the extent of poverty. The authors adopted the adjusted minimum consumption bundle, which provides 2200 k. calories and a minimum of 61.1 gms. of protein per person per day as Prescribed by FAO to make the results comparable with BBS estimates. Findings from an analysis of various poverty correlates do not support that poverty has reduced drastically vis-à-vis an increase of government development programmes over the early eighties.

**Streeten (1990**), in his keynote paper made a comprehensive overview of the conceptual issues of poverty measurement. A six-step procedure was proposed by him to construct a more meaningful measure of poverty. After identifying the problems that arise in defining a poverty line and constructing poverty indices, he suggested a set of monitoring indicators and some institutional mechanisms to construct a more meaningful measure of poverty.

**Ravallion (1990),** in his study investigated the robustness of some estimates which present a dramatic decline in poverty in Bangladesh in 1980s. He indicated that HES data collected by BBS showed a real per capita consumption growth rate of 9.9 percent per annum between 1981-82 to 1985-86 as against 0.5 percent according to National Account (NA) data. Ravallion pointed out that higher growth rate in HES data appears to be highly exaggerated. His study had two other attractive features. The first feature provided us "deeper" estimate of poverty, i.e. Foster-Thorbecke (FGT) index, for a=1 as well as a=2. The former was closely related to "income-gap ratio" as proposed by Sen (1976), while the latter was more sensitive to income distribution. All these estimates, however, gave us similar result as shown by head count ratio over time. But Ravallion's revised estimate based on NA data showed initial decline followed by a rise. The second feature consisted of assessing the impact of distributional neutral growth of poverty. He used the elasticity of the FGT poverty index with respect to changes in mean income and the Gini index of income distribution for the purpose.

**Sen, Binayak. et at. (1990),** started their study on poverty trend with the objective of addressing perceived weakness in the conceptual and empirical understanding of rural poverty. Overviews of various studies and national surveys on nutrition and poverty were discussed in their study. Three independent indicators of poverty, namely, (i) per capita income (ii) Household's self-evaluation about its deficit status and (iii) housing condition were used to measure the extent of rural poverty. The poverty line income was also estimated on the basis of 2112 k. calories. About 25 percent of total cost for food items needed to meet the said calories was considered as the cost of non-food items. The poverty level income at 1987-88 rural retail prices was estimated at TK.4608 per capita per year. Based on household data gathered from 62 sample villages and three independent indicators, the percentage of rural household living in poverty was found to be about 60, 50 and 52 respectively. They also estimated the incidence of poverty by occupation. The highest percent (82%) of agricultural wage labor households was found to be in moderate poverty which was followed by the households engaged in

cottage industry (64%), while those engaged in service showed the lowest incidence of poverty.

Hossain Z. R. & Mahbub H. in their book (edited) ***Rethinking Rural Poverty: Bangladeshas a case study (1995)*** has seen the analysis of poverty trends. This book is theculmination of an extraordinarily fruitful team effort involving researchers with diverse professional backgrounds and a dynamic field team of fresh graduates. Through 16 articles on rural poverty trends, dimensions of poverty such as, household income, household resources, food and nutrition, health and sanitation, gender issues etc. social composition of poverty as socio-economic characteristics of the poor, poverty in female-headed households, incidence of poverty as environment disaster, seasonality and lastly poverty alleviation strategy.

One of the recent study entitled ***Food Securities Strategies of the People Living in HaorAreas: Status and Prospects*** by a research team of Shahjalal University of Science and Technology (SUST) and American International University- Bangladesh (AIUB) with the financial help of National Food Policy Capacity Strengthening Programme (NFPCSP) in 2010. Its main focuses on how food insecurity is creating problem in the haor region of Bangladesh. It identifies that; a large amount of fertile land lies in the haor areas of six northeastern districts of Bangladesh. During summer it transformed into floodplains for capture fisheries. The high seasonality of haor based economy forces local people to remain out of work for a considerable period of time and as a result they suffer from food insecurity. This extensive and in-depth research on haor economy and livelihood opportunities specially focuses on food security is almost rare. Only a very few studies were found related to fisheries resources and community based resource management in haor areas. The lack of systemic information is a serious constrain to development planning with respect to food security of the haor people. It is needed to investigate into the physical and social accessibility of the food to the vulnerable people in this region.

In recent times another phenomenon Feminization of poverty comes into light. This focuses on how women are becoming poorer day by day irrespective of the overall improvement of the poverty situation. Gender segregated data had taken strong place in the researches and policy. So, from this study we will also try to understand the poverty situation of the vulnerable women from wider as well as recent specific perspectives.

Another recent book, ***'Measuring Multidimensionality: State of Poverty in Bangladesh' 2013,*** is published by a think tank Unnayan Onneshan. The research describes that; the rate of poverty reduction in Bangladesh has slowed down in recent years. Poverty declined by 9.8 percentage points during the five years of 2000-2005 while during the successive five years (2005-2010) the total decline was 8.5 percentage points.

The depth of poverty or poverty gap, a measure of the average income gap of the poor in relation to a certain threshold, and severity of poverty or squared poverty gap, a measure sensitive to the income distribution among the poor, have also witnessed a slower rate of reduction in last few years. The rate of fall in depth of poverty was 5.94 percent between 2000 and 2005 and was 5.56 percent between 2005 and 2010. Likewise, the severity of poverty was 7.39 percent between 2000 and 2005 while 6.21 percent between 2005 and 2010.

This book, for the first time employed major approaches of measurement of poverty such as monetary, capability, participatory and social exclusion to comprehend the dynamics of poverty in the country. It also identified some important problems associated with different approaches of measuring poverty such as estimation, selection and targeting biases. Considering capability approach, broadly measured by the human development index (HDI), the research finds that the HDI value increased from 0.453 in 2010 to 0.515 in 2012 with an annual rate of 4.56 percent. "On the other hand, the inequality-adjusted HDI (IHDI) increased to 0.374 in 2012 from 0.331 in 2010 with a rate of 4.33 percent per annum. "This lower rate of increase in IHDI over HDI indicates that

inequality has a greater impact on poverty reduction since under the perfect equality condition, the HDI and the IHDI are equal," observes the study.

The reduction rate of hunger (3.67 percent per annum) is slower than the rate of reduction in extreme poverty (4.87 percent per annum) during the period of 2000-2010. The number of hungry people as a percentage of extreme poor has increased over the years, adds the research. It points out that gender inequality decreased at a decreasing rate of 1.66 percent annually over the period of 2005 to 2012. The value of Gender Inequality Index in 2012 suggests that Bangladesh is still far from ensuring equality because of deprivation of women in equal access to education, healthcare and decision-making. Observing that the participation of people in economic activities has been increasing over the years, it, however, detects that the rate of reduction of poverty is not matching the similar pace in Bangladesh.

"The participation of population in income generating activities increased from 39 million in 1999-2000 to 54.1 million in 2010 with an annual rate of increase of 3.87 percent whereas the rate of poverty declined from 49.8 percent to 31.5 percent with the decrease rate of 3.67 percent per year during the same period," added the research. The study observes that the country is still experiencing social exclusion on the basis of ethnicity, descent, religion, sexual orientation, gender, age, disability, and region.

The study also finds that the rate of poverty among the widowed, divorced and separated people has decreased at a lower rate from 59.7 percent in 1995-96 to 33.9 percent in 2010 with an annual rate of 2.88 percent. The incidence of poverty among the landless reduced from 58.2 percent in 1995-96 to 35.4 percent in 2010 with an annual rate of 2.61 percent. The incidence of poverty among uneducated household head has reduced from 67.0 percent in 1995-96 to 42.8 percent in 2010 with an annual rate of 3.2 percent whereas the incidence of poverty at national level has reduced to 25.1 percent in 2010 from 48.0 percent in 1995-96 with an annual rate of 2.4 percent.

Referring to the slower rate of reduction in poverty, the study reasons challenges like unemployment, inequality, environmental degradation and climate change, decreasing agricultural land etc. The study underscored that current anti-poverty strategies have not been able to comprehend poverty as a process that interlinks to and emanates from the functioning of society. It also points out that the central framework seems to promote dominant neoliberal policies that have questionable effects on people's lives and the institutions have failed to address the power imbalances that exist between different classes. Finally, the book proposes a set of indicators based on five new fundamental principles of rights, equality, justice, sustainability and partnership for development through the historic responsibility for a zero-poverty Sustainable Development Goals (SDGs) development framework.

# 2 Methodology

**Introduction**

The present study deals with political economy of poverty in the haor regions of Bangladesh and its influence of socio-economic, political, structural, behavioral and cultural aspects, which are linked, to the deteriorating poverty situation of Haor region. The study tries to explore how all these factors are contributing to the cross-generational continuation of poverty and increasing vulnerability of the people of haor region.

**2.1 Study area/ Scope of the study**

The study is conducted in Fenarbag and Beheli Unions of Jamalganj Upazila of Sunamgonj Districts. Typically Haor is highly vulnerable to flash floods and climate change induced threats and high presence of extreme poverty (WFP Poverty Map, 2010). The study covers two big Haors called (Pagnar Haor) and Beheli (Halir Haor) in Jamalganj upazila.

These two unions are very remote and highly susceptible to flash floods. Villages with a high incidence of extreme poverty are selected purposively to identify the extreme poor households. Rigorous efforts have been made at the outset of the study to identify the target households. Academic and practical experiences have been applied in this regard to avoid miss-targeting. To identify extremely poor households, the present study takes help of CNRS' household census and profiles of the selected villages followed by matching of final criteria have questionnaire survey.

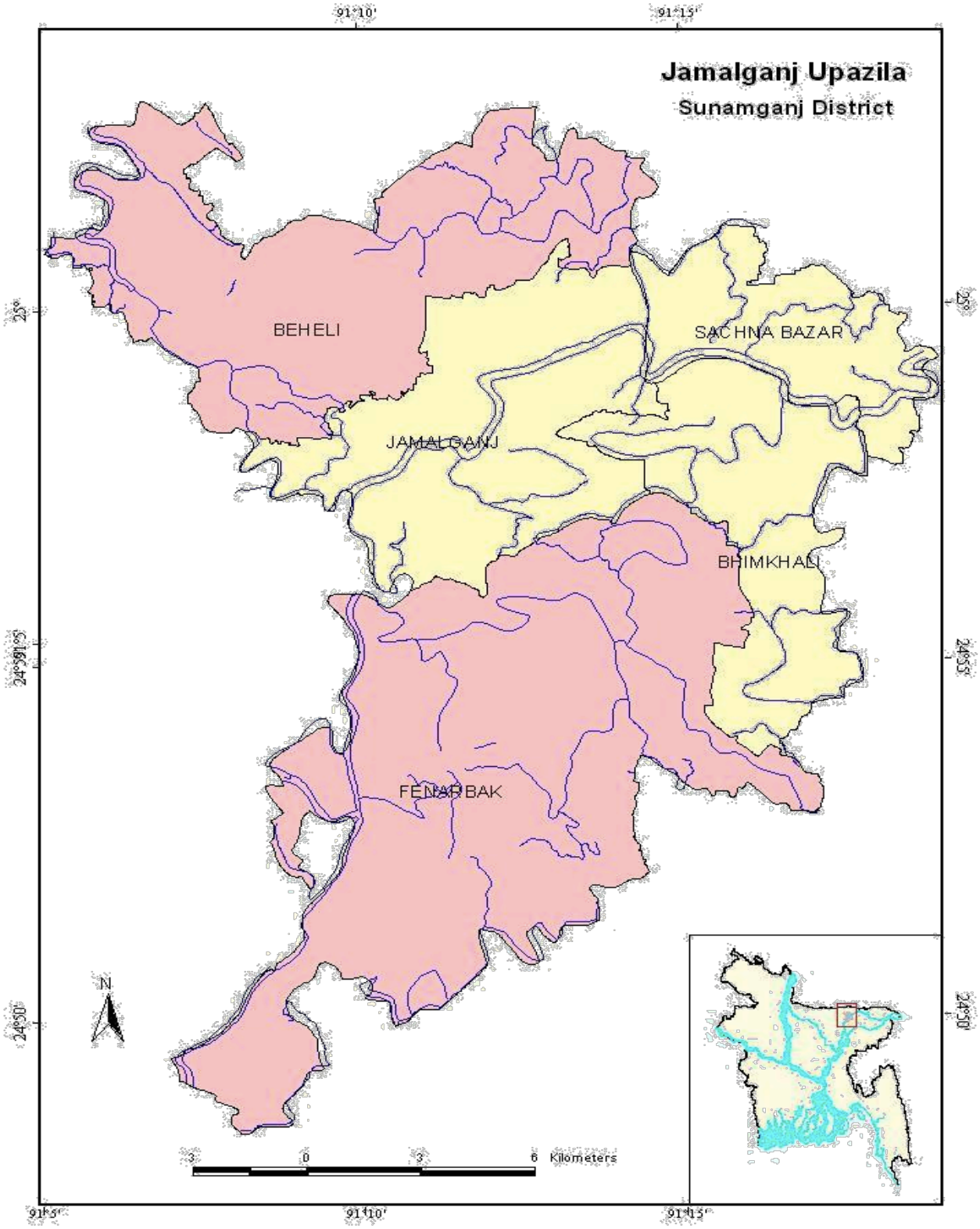


Figure 2.1: Study area-Jamalgonj Upazila

In order to study the socio-economic, political, structural, behavioral, natural, cultural and other phenomena related to persistent poverty of the haor regions, this research focuses mainly on extreme poor of the deep haor basin of Jamalong Upazila of Sunamgonj district covering two unions: 1. Fanerbak and 2. Beheli

**2.2 Data Collection Procedure**

**Primary Source:**

This study employs quantitative techniques of data collection to investigate unexplored political, social and economic phenomena of the very specific geographical location of Bangladesh. Data collection phase actually consists of two sub-phases, development of a structured questionnaire and the main study. Some workable techniques and approaches are identified to prepare a questionnaire, which later finalized adjusting feedbacks from stakeholders. Female interviewers are deployed to explore culture sensitive issues related to the study.

**Secondary Source:**

Secondary data are collected from different sources like official reports, documents, journals, newspaper clippings and the Internet.

**2.3 Sampling or Selection of Respondents**

Respondents are selected using multi-stage sampling receiving help of the organization Center for Natural Resource Studies (CNRS) that conducted a census of the Unions and identified several thousand poor households. The study draw sample of 1500 extreme poor households employing some prefixed inclusion and criteria or indicators to identify the poorest of the poor who remains in the very bottom of the socio-economic status and the worst victim of the political and economic system in haor region.

Careful efforts have been made at the outset of the study. Following are the criteria, which have been finalized for the final selection of the beneficiary households.

| Criteria | Indicators | Qualification of indicators |
|---|---|---|
| **Essential criteria** | | |
| Socio-economic status | 1. Income generating asset worth less than Tk. 3,000.<br>2. No access to productive land.<br>3. Household income under Tk. 1500 per month.<br>4. Not more than 2 meals/day for 4 months a year. | All of these indicators must apply to every single beneficiary household |
| **Supplementary Criteria** | | |
| **Low Livelihood** | 6. Daily labor: insufficient work (<150 days/year).<br>7. Advance sale of labor at lower wage or forced to migrate for work.<br>8. Scavenging for free resources (fishing of open space water, collect fuel, wetland and forest resources, glean fallen paddy).<br>9. Begging in rural areas.<br>10. Domestic service in return for food or minimal cash wages. | At least **one** must be met. |
| **Vulnerability** | 11. Scavenge food from wild plants etc.<br>12. Chronic indebtedness (not able to repay).<br>13. Widow/divorced /separated/abandoned woman as head of household.<br>14. No savings or assets for emergencies. | At least **one** must be met. |
| **Inadequate shelter & Weak human resource** | 15. Living on someone else's land.<br>16. Poor quality house (grass or low graded/relief tin or rice straw roof and bamboo fence/low graded tin).<br>17. Head of household is person with disability/head of household person with choric disability or economically inactive adult(s) unable to work.<br>18. Ethnic and/or religious minority household. | At least **one** must be met. |

## 2.4 Study Instruments

A structured questionnaire is developed to proceed with the study. After that, a field test and informal discussions are made with various stakeholders to explore their views. Finally, a well-organized, concise structured-questioner is used to collect quantitative data for this study. Observation method is also applied along with other qualitative techniques like case studies and key informant interviews.

## 2.5 Data analysis

After gathering the data, the study goes through another demanding task of organizing the raw data in a form in which they can be analyzed. As survey is conducted so, it has been analyzed employing statistical methods and techniques.

## 2.6 Limitation of the study

Despite all positive initiatives taken to conduct the study properly, the findings of the study had a number of limitations. As this study dealt with a limited number of respondents the results and the generalization are not above questions. Further, the study area is hard to reach and sometimes it takes even eight hours boat journey to collect data. In most of the cases boat is the only way of communication. High cost is involved with the data collection procedures. As extreme poor people are engaged in different activities to maintain their life and livelihood so, unavailability of the respondents slows down the data collection activities tremendously. Considering the female headed households, couples of female interviewers are also deployed. So, time, communication, expenses and availability of the respondents are among the main limitations.

## 2.7 Ethical Issues

Following several ethical principles, usually employed in social sciences, I took every possible steps to ensure ethical standards. I convinced the respondents that I am a student not the representative of any organization. Measures are taken to protect the right of the people who participated in this study by explaining them the purpose before collecting information. Some of the steps are stated below:

**Introduction and explaining the purpose**

Introduction of the interviewer and explaining the purpose of the study are done before collecting information from the respondents. The study indicated to the respondents that, this participation is voluntary. The participants are briefed about the research objectives and other relevant issues as well.

**Confidentiality**

The respondents are informed clearly that, the information they and providing would be kept confidential. Only the researcher would have access to the checklist and this checklist would be destroyed on completion of the analysis if they wish. The name, address and picture of the respondents who are not willing would not be recorded anywhere in the study report.

**Privacy**

Furthermore, privacy during conducting the case studies is safeguarded. The interviews are held under conditions wherein the respondents felt most comfortable to respond. Those who are not willing their identity are not linked to the study at any point of time or stages. All documents, checklist, tapes and other materials are kept under strict restriction.

# 3 Theoretical Framework

**Introduction**

This research critically analyzes the relationship between political economy and the incidence of poverty. Today, political sociologists are likely to be concerned with how identities and more specifically class identities are formed that contribute to structural domination by one group over another. The politics of who owns how and with what authority and the questions of how power is contested in social interactions in such a way as to reproduce widespread cultural, social and economic domination. Such questions are to be search in this research.

The conceptual framework revolves around structural functionalist perspective. It explains how groups of fractions monopolize opportunities, regardless of official legitimation. Domination and exclusion widely operate in the haor region of Bangladesh.

Theoretical analysis of poverty from socio-political perspective includes utilization of contemporary economic, social and business frameworks to address major challenges inherent in the poverty study. The socio-economic and political aspects seek to explain the relationship between human behaviors and the social environment in relation to the economic, political and business relationships. It also looks to the root and analyze the economic perspectives across geography and cultures. So, different theoretical perspectives are also discussed before laying out the structural framework for this study.

### 3.1 Theory of poverty

According to Jordan (1996), there are two broad traditions of poverty discourse in the West that has taken shape and crystallized over a period of more than two hundred years. The first is the Anglo-Saxon liberal tradition and the second is the continental mercantilist tradition. The Anglo- Saxon - liberal tradition focuses on the

'competitive interaction under scarcity (Jordan, 1996:4) and the nature of collective action that it gives rise to. The continental mercantilist tradition has been preoccupied with harnessing human resources for enrichment of the state. The poor are like sheep and cattle to be farmed for the glory of the rich.

Marxism of different varieties has remained a major theoretical perspective for understanding poverty. Dependency theory, which emerged in Latin America, has been particularly concerned with third world poverty. Theory of marginalization again of Latin American vintage has a rich tradition of exploring the fate of human deprivation and marginality.

More generally Kerbo (1996) has identified four different types of poverty theory.

### 3.2 Social Darwinian theory of poverty

This is the first theory that tried to explain poverty in terms of the behavior and attitudes of the poor themselves. The poor were poor because they did not work hard; they squandered money on 'gambling, drinking and unnecessary luxuries and they had disorder of family life. They had no ambition, no inner call for work, were fatalistic, and suffered from "an intractable ineducability" as the Brock Committee phrased it (cited in Matza, 1966:294). Even a whole nation was conceived in these terms.

Everywhere the poor made up the “dangerous classes” living in “regions of squalid want and wicked woe” (cited in Matza, 1066:302). Both Malthus and Herbert Spencer thought that only hunger could teach the poor civility and subjection (Townsend, 1979).

A more recent proponent of this view has been the US New Right. George Gilder, Murray and Richard Hernstein have argued that the poor are genetically blueprinted to be at the bottom of the social hierarchy. The poor are poor because they have low IQ and low mental capacity and biologically destined to be poor. The welfare system that underwrites this human substratum of deviance is a sheer wastage of resources and should be dismantled (Kerbo, 1996).

**3.3 Culture of poverty**

The second theory is the theory of culture of poverty developed by Oscar Lewis, an anthropologist in 1959. Lewis developed his theory from his experience of Mexico. The culture of poverty is a specific syndrome that grows up in some situations. It requires an economic setting of cash economy, a high rate of unemployment and under employment, low wages and people with low skills. In the absence of voluntary or state support and stable family, the low-income population tends to develop the culture of poverty against the dominant ideology of accumulation of the middle class. The poor realize that they have a marginal position within a highly stratified and individualistic capitalistic society, which does not offer them any prospect for upward mobility. In order to survive the poor have to develop their own institutions and agencies because the larger society tends to ignore and bypass them. Thus the poor come to embody a common set of values, norms and pattern of behavior, which is different from the general culture as such. He classified these traits into four types. These are 1. Relationships between the subculture and the larger society 2. Nature of the slum community 3. Nature of the family: bilateral kinship system, unstable marriage, matrifocal family 4. Attitudes, values and personality of the individual (Islam, 2005).

Once the subculture is formed it tends to be perpetuated. It is transmitted from one generation to another through socialization. Lewis saw it as an extreme form of adaptation that the poor are forced to make under certain circumstances and in certain places. The poor rejects the dominant culture and its institutions because they do not serve them. Their own subculture grows out of despair and protest (ibid).

### 3.4 Situational Theory of poverty

The situational theory of poverty holds that the poor behave differently because they do not have the resources and opportunities for adopting the middle class life styles. Young people have few opportunities to go to college and so they drop out. Women prefer matrifocal family because it allows them to have greater claim upon their children. The situational theory gives importance to the structural conditions that give rise to poverty, but it also tends to focus upon the individual responses to the objective situation of poverty. It differs from the culture of poverty theory in a fundamental sense. It does not assume the pre-existence of a subculture that gives coherence and solidity to the behavior of the poor. The situational theory holds that individuals rationally follow a pattern of behavior, which is suitable for the objective situation of their life. It has been argued from this perspective that the poor do not follow middle class values because they know that they cannot achieve it. So in practice they tolerate large deviations from middle class aspirations. This has been described as the lower class 'value stretch' (Rodman, 1963; Della Fave, 1974).

### 3.5 Structural perspective

Society like a biological organism and is a bounded system that is self-regulating and maintains equilibrium, like the human body, society has basic needs that must be fulfilled in order for the system to survive. Various parts play certain functions for the survival and equilibrium of society (Maykovich, 1980, p. 39).

According to structural functionalism theory, a social system is divided into subsystem. Each of the systems is further differentiated into smaller units. For instance, within a broad system of politics subunits such as a powerful and powerless relationship may be identified (Maykovich, 1980, p. 44). The system of a society helps other subsystem to play role. So when any system fails in playing proper role then the other subsystem naturally suffer damage. As a result, when the problem turns into cancerous situation then, affects other subsystems including family, religion, education employment etc. Such a situation hinders the social life of extreme poor women. Because of the low socio-economic status, low knowledge and awareness, lack of proper government services and infrastructures in the countryside poor becomes poorer and thus serve the interest of certain group of powerful people and act as an agent of balance or equilibrium in society.

Power and class fulfill functional prerequisites to maintaining equilibrium in the society which keeps alive other institutionalized social factors such as, poverty, illiteracy, exclusion, unconsciousness, religious barrier, and deprivation for its won fulfillment and so called oppressive equilibrium.

Structural functional theory, we can here reiterates, is concerned with the way in which the dominant economic structure of society determines inequalityboth in economic and power structure, as well as shaped the relations upon which the major social institutions are built.

Structural theories of poverty hold that poverty is caused by the structure of the larger socioeconomic order. It is the macro structure of society that produces inequality and consequently poverty. Another key phrase that has become immensely popular in recent years is social exclusion (Friedman, 1996). The exclusion perspective has increasingly achieved theoretical clarity and sophistication. Gore (1995) argues that the process of exclusion occurs through the institutions of market, state and civil society. The structure of global capitalism, for example, gives rise to inequality and large-scale Poverty all over the world.

Social exclusion approach argues that social exclusion gives us a broader view of deprivation focusing upon societal mechanisms, institutions and strategic actors causing it. Thus it can be used to link up macro and micro processes. Rodgers (1996) holds that the term social exclusion offers a multi-dimensional and multi-disciplinary view of poverty. It allows us to view poverty as a process. The impact of exclusion can be seen at various levels. It can illuminate the relationship between structure and agency. It has been held that the perspective of social exclusion can be deployed fruitfully in the South for a coherent analysis of poverty and blueprinting consistent anti-poverty policy measures. Most importantly, it allows the scope for a more relational and comprehensive analysis of poverty.

It makes it possible to look into the causes, processes and consequences of poverty as well as the way the discourse of poverty is constructed and deprived people react in a variety of ways to the existing situation of their life. Focusing on the institutional mechanism of inequality provides a deeper analysis of material and discursive aspects of poverty, the way poor are constructed as a social category and the way stigma is associated with it.

It can powerfully interconnect structure, discourse and agency and show that poverty is largely a social construction along with countervailing action. In recent years we have begun to hear the voices of the poor. But we need to know more about the way the historical destiny of deprived people are created materially and symbolically and how they live with and struggle against their socially constructed fate.

Functionalist also claims that poverty is closely tied to unequal distribution of resources and uneven patriarchal power structure rather than as the result of mere individual frailty, failure or weakness. It has positive role bringing equilibrium. Extreme poverty of the haor area could be explained by functional theory as the outcome of exploitation by dominant class and powerful help functioning the social and economic system of the region.

One of the critical areas of exclusion in the haor region is governance failure in land management. The landlords and elites established complete sway over these areas. They have grabbed the government land and water bodies and driven the minorities away from the village. They are successful in establishing a patrimonial rule in miniature and a regime of fear. Another aspect of exclusion was bureaucratic dysfunction that led to livelihood failure e.g. the flood control measures of Bangladesh Water Development Board were often faulty and made the villages vulnerable to flash flood. This is especially true for earthwork, which would be started too late and left incomplete which often results in the total loss of crops in the course of a single day. Other key areas of exclusion are health, education, housing, communication and employment opportunities (Islam, 2005).

# 4 Geo-Physical characteristics and social Structure of Haor Areas

**Introduction**

Haor is a bowl-shaped large tectonic depression. It receives surface runoff water by rivers and khals, and consequently, a haor becomes very extensive water body in the monsoon and dries up mostly in winter. In Bangladesh haors are found mainly in greater Sylhet and Mymensingh regions. It becomes vast stretch of turbulent water in monsoon. The word is a corrupt form of the Sanskrit word Sagar (sea).

The haor basin is bounded by the hill ranges of Meghalaya (India) on the North, the hills of Tripura and Mizoram (India) on the South, and the highlands of Manipur (India) on the East. The basin includes about 47 major haors and some 6,300 beels of varying size, out of which about 3,500 are permanent and 2,800 are seasonal. Small permanent water bodies within the haors are called beels, which occupy the lowest part of the depressions. During winter, most of the water drains out leaving one or more shallow beels which become mostly overgrown with aquatic vegetation or completely dry out by the end of dry season exposing rich alluvial soils extensively cultivated for rice (Banglapedia, 2003).

The plains remain flooded for about 7 to 8 months. During monsoon, the villages appear as islands into a vast inland sea. Occasional high winds during July to September generate large waves in the haor, which cause considerable damage to homesteads.

The entire Sunamganj district, major portion of Habiganj district, some parts of Sylhet Sadar upazila and Maulvi Bazar district are covered by many Haors. In greater Sylhet the most prominent haors are Saneer haor, Hail Haor, Hakaluki haor, Dekar haor, Maker haor, Chayer haor, tanguar haor, and Kawadighi haor.

The haors are considered the most productive wetland resources of Bangladesh. The basin supports a large variety of wetland bio-diversity and works as natural reservoir as it plays a key role in basin water resources by regulating water flows of the Meghna river system. Also, the haors are noted sanctuaries of both permanent and migratory birds. With the recession of floodwater, a large variety of small fishes, oysters, water snails and bivalves, and pasture spread over the surface attracting a large number of migratory birds. These birds use the haor as temporary resting and roosting ground before moving elsewhere. The swamp forests, which were once dominant with the flood tolerant tree species like hijal (Barringtonia acutangula) and Koroch (Pongamia pinnata), have been reduced to a few small patches.

The haors are also important fishing grounds of the country. In the past century or so, when the population pressure was less, most of the rim-lands of the Haors remained as cultivable wetland and was used for extensive grazing in the dry season. As population increased, boro cultivation expanded onto these marginal lands leading to a large area being drained. Thus, the very existences of these wetlands are now threatened. (Banglapedia, 2003).

**4.1 Physical characteristics of Haor System:**

This system is also known as haor basin, located in northeast part of Bangladesh coverers 48 Upazilaz (sub-districts) of greater Sylhet and Mymensingha Districts, 395 haors, with 2417 sqkm area . A total of 15,47,133 acres of land is recorded as Haor. (viz. Sylhet Sunamgonj, Moulavibazar, Hobigonj, Kishorgonj, Netrokuna) at about $24^0$50’ to $25^0$10’ north and south and at about $91^0$15’ to $91^0$35’ east and west. Total area is about 5million acres (2.0016 mill ha). Approximately 25% of this area lies below 5 m elevation and 50% lies below 8 m elevation. The annual average sediment load deposited in Hail haor is estimated at around 100.000 tons, and in some places this haor is filling up as a rate of about 5 cm a year (MACH, 2001). The haor basin once affluent with natural resources including rich fisheries, biological diversity of flora & fauna and is still richest in the haor ecosystem than any wetland systems in the country (ibid).

The haor basin is characterized by having diverse wetlands (beels, khals, rivers and vast seasonally flooded lands) and kanda's (raised land along the edges of wetlands usually remain fallow in the dry season). Swamp forests and reed lands in the haor basin make the rich aquatic environment. The aquatic products are used to provide various benefits to the people such as food, nutrition, income, fodder, fuel, thatching materials, medicine and varieties of other benefits. These are now under threat due to over use and lack of any sustainable management interventions. The poorer communities are therefore the worst sufferers of the resource depletion making the living of vast majority at risk (MACH, 2008).

### 4.2 Fenarbak and Beheli Union (study area)

The study covered Fenarbak and Beheli Union of Jamalogonj Upazila of Sunamgonj district. These are typical Haor Upazilas that have experienced major damage of crop by flash floods eight times within last 14 years (1997 to 2010). Seasonal migration rate is also very high here.

Fenarbak (Pagnar haor) and Beheli (Halir haor) are very hard to reach and chances of damage of crops by flash floods is higher here than in the other three unions of the upazila. These two unions are very remote with a high incidence of poverty.

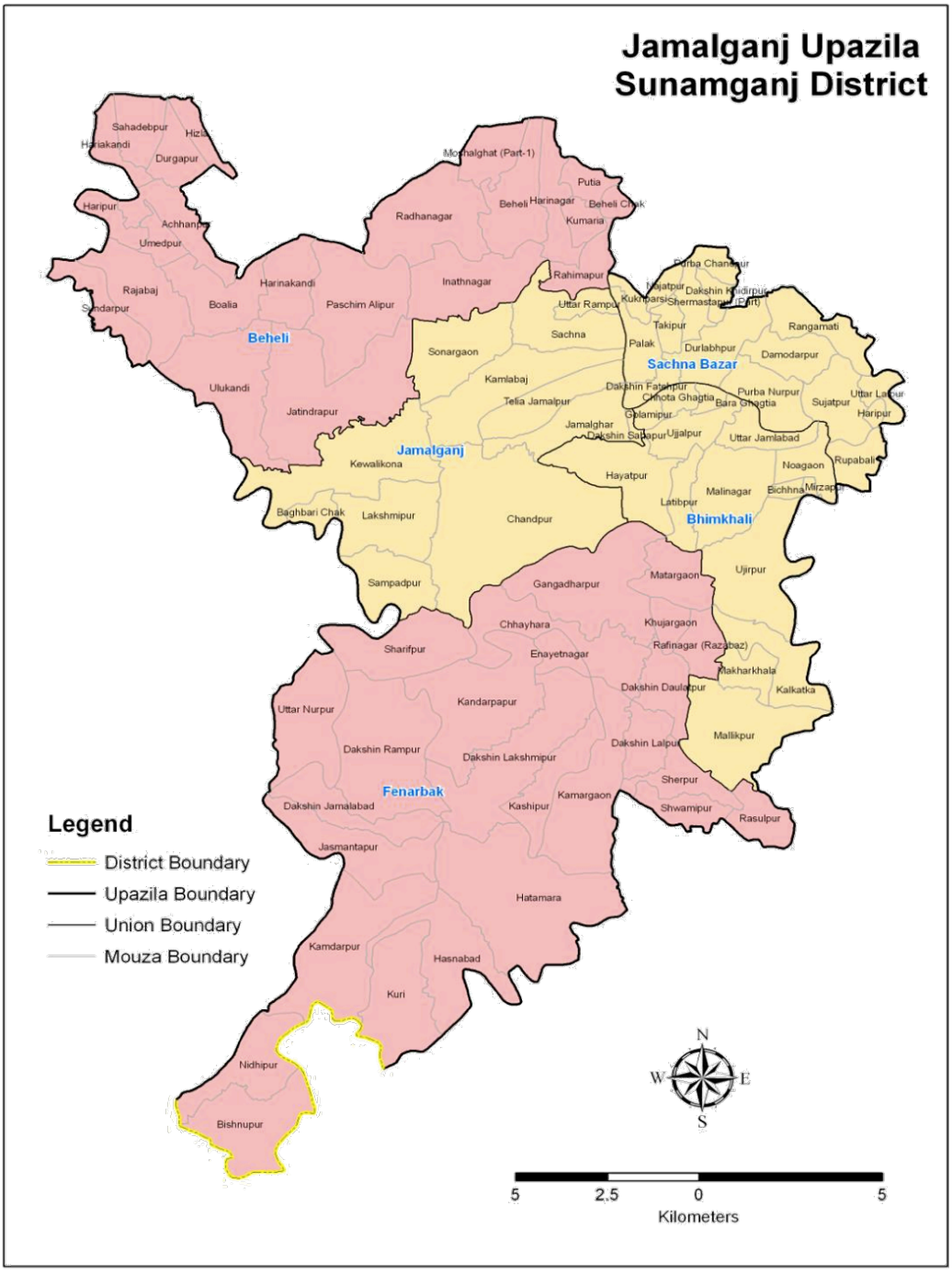


Figure 4.1: Map of Beheli and Fenarbak Unions

### 4.3 Social Classes

The social classes are generally defined in Bangladesh by land size, for example: (i) landless-households having cultivable land of their own up to 50 decimals (0.5 acre, 0.2 ha); (ii) marginal farmers having land 51-150 decimals; (iii) small farm households have landholdings of 151- 250 decimals; (iv) medium farmers having own land of 251-500 decimals; and (v) the large farmers own more than 500 decimals (MACH, 2001, 2008).

The studies of different projects recorded information on social classes by land owned per household. For example, a study for IUCN in Hakaluki Haor indicates that 54% landless categories, MACH 53% landless in 2001, and Tangur Haor 57% in 2007. A similar survey of Hail haor found the percentage of land owned is decreases rapidly for poorer land holding classes (MACH, 2001, 2008).

### 4.4 Household size

Average household size in Greater Sylhet is 5.5 persons, slightly larger than the national average of 4.4 (2011 population census). MACH study (2001, 2008) recorded the family size 5.8, 5.3 and 4.5. in Hail Haor, Turag-Bongshi and Kangsha Malijhee site respectively. It indicates that household size is lager in haor area than that of other areas.

### 4.5 Livelihood

It is generally observed that livelihood governs by richness of resource base system. Haor system is deep flooding in the monsoon months and producing crops in the dry season. The people of the area also act to maintain their livelihood over the seasons, viz. in monsoon majority of the people do fishing, collecting aquatics products while in the dry season farming, send stone collecting and farm related activities are the main source of livelihood. In 2007, a Community Risk Assessment (CRA) study was conducted by Center for Natural Resource Studies for Comprehensive Disaster Management Program and recorded percentage of people in major professions of Haor areas inselected Upazilas: For example, Taherpur Upazila Agriculture 34%; Business 11.18%; Fishermen 5.43%, Service 4.75%; Remittance.85%; Agricultural

Labor 15.66%; Non-Agri. Labor 19.31%; Fishermen/Farmer 6.71% and other .71% (CDMP-CRS, 2007).

**4.6 Land use**

Land and water resource is the basis of diversified resource base of the haor area, which has strong seasonality character directed by hydrological regime.

In haor area, overall land use for agriculture, settlement, Common Pool Resources (CPRs) comprises river, kanda, reed land, Beel, khal, grazing land, swamp forest and hillocks fallow land, graveyard and swamp forest.

Lands within the haor systems have various forms and uses including: beels, rivers, khals and streams, riparian bushes and trees, reed lands, aquatic vegetation and swamp forest, farm land, open grazing areas (kanda), raised settlement areas, rural roads, embankments. Institutions areas, growth centers. Two of the main economic land uses are agriculture and fisheries.

On an average land used per household for different purposes were found to be 9 decimal homesteads, 75 decimal cultivable, and 4 decimal ponds. The overall extent of fallow land per household was 11 decimal while it was found to be only 1 decimal for land less class (CNRS-ActionAid, Land Use Survey, 2008).

### 4.7 Common Properties

Haor common proparties comprises River, kanda, reed land, Beel, khal, grazing land, swamp forest, areas under institutions, market, graveyard, and hillocks. There is very little or even no exclusive study before this (UNDP-IUCN-CNRS,CPR, 2013).

### 4.8 Agriculture Practices

Farmers cultivate only one crop of rice (boro) in the floodplains around beels and water bodies. About 80-100% of the cultivated area is planted with boro rice. In higher elevated areas more than one crop is grow. This includes some of these naturally higher lands dry season Rabi crops like mustard and wheat. Vegetables are grown around homesteads on higher elevated land, and some of these areas are also used in the dry season for paddy processing and grazing.

Other than land, fisheries and swamp forest with diversified species is the main resource base for benefiting the poor. Most of the basin remains under water in the monsoon and at that fishing is only the livelihood option of the people. While after recession of water people do cultivate winter rice except the perennial part of the beel areas. In Haor area vegetables cultivation is limited compare to other area in the country. Data in Agricultural year book 2010 shows that area under vegetable cultivation trend is decreased in Sylhet from 2005 (CNRS, 2011).

The region is mostly single cropped area. The cropping intensity is very low 146 as against national level 179 (statistical year book 2010). Generally, different types of Boro are grown in haor areas. Local varieties of paddy are grown in the lowest part of lands. Three major types of Boro varieties are cultivated in the single cropped lands based onelevation and exposition. In the area, winter crops except rice, other

crops cultivation is very limited. Vegetable cultivation is done in very limited area (ibid).

High Yielding Variety (HYV) boro crop replaced local boro. Trend indicates that area under local boro cultivation decreased 5.84% during the period of 2004-05 compare to that of 2000-2001 while HYV boro area increased 3.27%. In 2010, total 31194 acres of land used to cultivate local boro rice where total 328368 acres of land used for HYV boro and toal 148261 acres land used for hybrid rice cultivation (BBS 2010). HYV boro needs more water than that of local boro. The farmers abstract a large amount of surface water for irrigating their HYV boro crops resulting reduction of fish habitat in the dry season. Simulation results of Land and water interface (LWI) project show that boro irrigation from surface water has a strong negative effect on fish catches due to the high water requirement for winter rice. There is even a danger of recruitment failure and complete collapse of the fishery. As a result fresh water fish production and diversity decreased over the period of last two decades. Total 200021 acres of land and total 199849 MT rice was damaged due to flash flood during 2009-10 seasons in Sylhet (ibid).

**4.9 Major Problems of Haor area are:**

As unique geography of the country, haor has some inherent problems. Which includes: flash floods and regular floods, siltation of wetlands, loss of biodiversity in wetlands, wetland habitats degraded due to loss of connectivity and swamp trees, vulnerability to climate change (meanwhile this area has gained experiences from 2004, 2007 and 2010 flashflood, higher use of surface water for winter rice with strong negative effect on fish catches, lack of quality seed and production inputs supply in time, lack of technical know how about vegetable cultivation and marketing of products, lack of sustainable management plan for haor basin, loss of regular earning opportunities of local people, lack of data on climate change on wetlands in Bangladesh. Moreover, there exists political and economic confrontation over the natural resources among different socio-economic and power classes (ibid).

# 5 Study Findings and discussions

**Introduction:**

The study is conducted among 1500 extreme poor households from 42 villages following essential and supplementary indicators of respondent selection and then generalizes for the whole Haor basin. Information is collected on socio-demographic indicators, livelihood options, asset endowment, access to government and private services, housing condition, safety net coverage, migration status, land ownership, kash land access and dynamics, microfinance coverage, water and sanitation and nutritional status of respondents. The findings arealso discussed in relation to objectives of the study. Several case studies have also been put forward in support of quantitative findings.

### 5.1: Distribution of households by unions and by household heads

Data is collected from 1500 extreme poor householdsconsisting of 1256 male headed and 244 female headed. Among the households 1136 (75.73%) came from Fenerbak securing highest representation of both male-headed and female-headed households among all the study unions. Beheli union represents 197 households, which is 13.13% of the total respondents. Dakshin Sukhaiirpur and Jamalgonj represent 87 and 80 households respectively. The percentage is 5.80 and 5.33 respectively. However, there are representations of female-headed households from all study unions.

Table 1: Distribution of households by unions (gender disaggregated)

| Unions | Gender | | Total | |
|---|---|---|---|---|
| | Male Headed | Female Headed | | |
| | No. | No. | No. | ( % ) |
| Beheli | 178 | 19 | 197 | 13.13 |
| Dakshin Sukhairrajapur | 76 | 11 | 87 | 5.80 |
| Fenerbak | 928 | 208 | 1136 | 75.73 |
| Jamalganj | 74 | 6 | 80 | 5.33 |
| **Total** | **1256** | **244** | **1500** | **100.00** |

## 5.2: Distribution of household by religion

The study covered 1500 households. Among those 1081 are Muslin, 418 are Hindu and only 1 is found Buddies. The percentage is 72.1, 27.9 and .1 respectively. The representation of religious groups in this study also closely matches with both the national and regional picture.

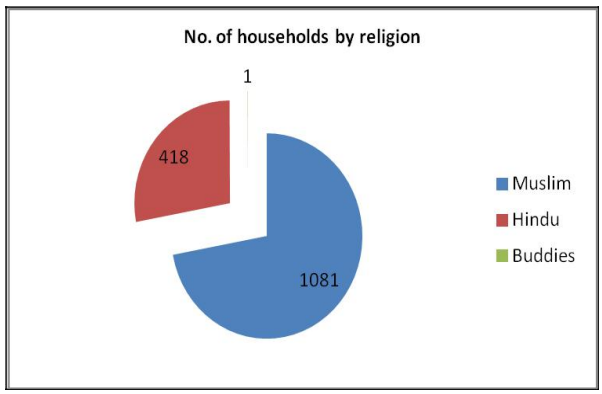


Figure 5.1: Number of households by religion

Table 2: Distribution of households by religion

| Distribution of households by religion | | |
|---|---|---|
| **Religion** | **No.** | **Percent** |
| Muslim | 1081 | 72.1 |
| Hindu | 418 | 27.9 |
| Buddies | 1 | .1 |
| **Total** | **1500** | **100.0** |

## 5.3: Distribution of total population of sample household by regions

This table gives picture of complete population coverage of the study. The study is conducted with 1500 households consisting of 6391 family members. Among the populations 3145 are male and the rest 3246 are female. This represents that; female populations are a bit higher than the male populations. However, Fenarbak union represents highest number of populations claiming 73.85% of the total. On the other hand, a total of 899 (14.07%) populations are from Beheli consisting of 459 male and 440 female. Again, total 393 (6.15%) populations are from Dakshin Sukhairrajapur represents 206 male and 178 female. Moreover, a total of 379 (5.93%) are from Jamalganj consisting of 197 and 182 male and female respectively.

Table 3: Distribution of total population of sample households by regions

| Union | Sex | | Total | |
|---|---|---|---|---|
| | Male | Female | | |
| | No. | No. | No. | ( % ) |
| Beheli | 459 | 440 | 899 | 14.07 |
| Dakshin Sukhairrajapur | 206 | 187 | 393 | 6.15 |
| Fenerbak | 2283 | 2437 | 4720 | 73.85 |
| Jamalganj | 197 | 182 | 379 | 5.93 |
| **Total** | **3145** | **3246** | **6391** | **100.00** |

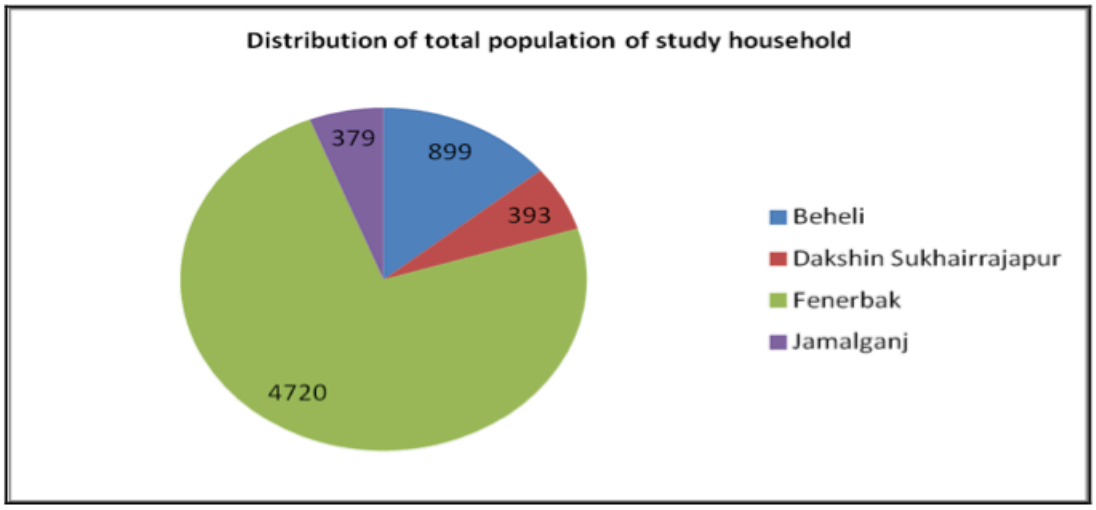


Figure 5.2: Distribution of total population of study households

### 5.4: Distribution of household by member

According to the survey, majority of the families, 1012 (68%) out of 1500 consists of 2 to 5 members and among them 865 are male headed and 147 are female headed. However, 395 (26%) families have members in-between 6 to 9, where 382 and 13 are male and female headed respectively. Yet, there are 93 (6%) single member families. Among them 84 are female headed and only 9 are male headed.

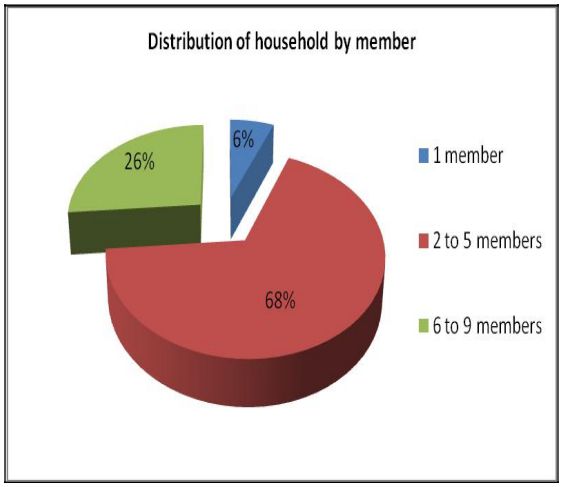


Figure 5.3: Distribution of households by member

The overall average family size is found 4.27, while male headed and female-headed average family size is 4.6 and 2.54 respectively. The average family size is how ever close to national average (4.68), (BBS Census, 2011). But around one quarter of extreme poor households is way up to the national average.According to survey, male-headed families are more than female headed. On the other hand, female-headed families have less family members than their counterpart.

Table 4: Distribution of households by member

| Family Size /members | Male Headed | Female Headed | Total | |
|---|---|---|---|---|
| | No. | No. | No. | ( % ) |
| 1 | 9 | 84 | 93 | 6.2 |
| 2 to 5 | 865 | 147 | 1012 | 67.47 |
| 6 to 9 | 382 | 13 | 395 | 26.33 |
| ***Total*** | ***1256*** | ***244*** | ***1500*** | ***100*** |
| ***Average Family Size*** | ***4.6*** | ***2.54*** | ***4.27*** | |

### 5.5: Distribution of household head by age group

The graph gives an age group scenario of household heads. Most of the study household heads (445) are in age group of 26-45. There are 523 people are in the age group of 26-35 and 404 are the in the age group of 36-45. This indicates among the respondents age group of 26-45 is liable for economic and social decision making. There are 10 households rendering the age group of 6-18, which means most of them are orphans or have single parent or may either physically or mentally or both way disable to take responsibilities. There are 128 household heads that are above 61.

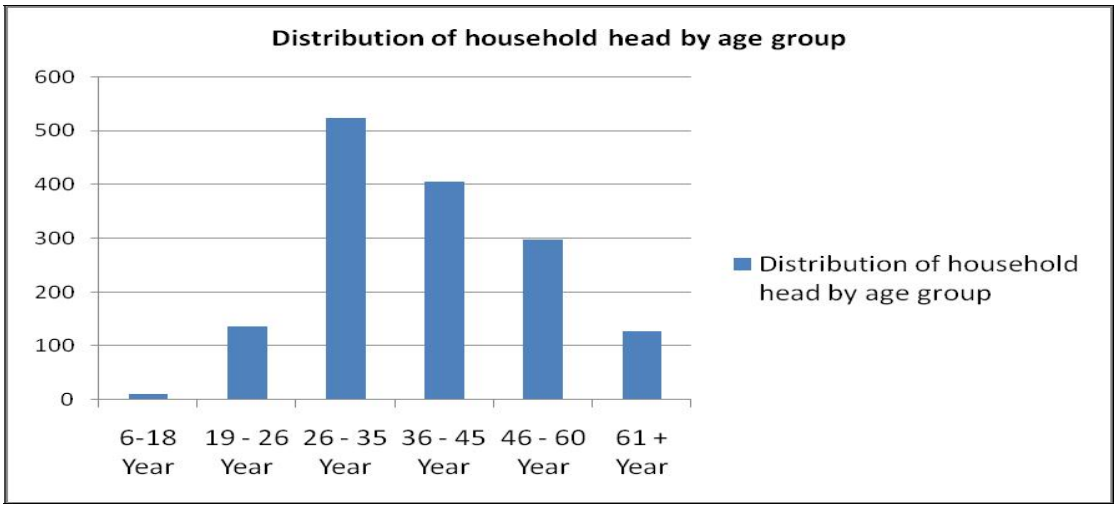


Figure5.4: Age group of household heads

### 5.6: Education status of household head and total population of households

Among the 1500 study household heads, 1137 do not have any schooling at all. There are 296 respondents who have primary education and 51 have studied up to in-between class VI-IX. Additionally, Secondary school certificate holders are 12 and Higher Secondary Certificate holders are only 4. The overall educational status is very poor and none is graduated and equivalent which reminds us the correlation between education and income or occupation.

Table 5: Educational status of household heads

| Education of household heads | |
|---|---|
| **Level of Education** | **Head of Household** |
| No Schooling | 1137 |
| Class I - V | 296 |
| Class VI - IX | 51 |
| SSC or equivalent | 12 |
| HSC or equivalent | 4 |
| Graduate or equivalent | 0 |
| **Total** | **1500** |

### 5.7: Occupation of study household members

The respondents were asked about their main occupation during interview. According to their answers, 41.25 % respondents do not work which is 2636 of total study population. The number is 1215 and 1421 male and female respectively. This indicates the rate of jobless is pretty high. As per response, 10.01% means 640 people of the total respondents are agricultural day labor where 615 are and 25 are female. Total 14.25% (911) respondents are other day labor representing 752 male and 159 female. Again, 4.29% (274) of the total respondents are domestic maid representing 267 female and 7 male. Additionally, 0.63% (40) respondents are involved in rickshaw/van/boat/bullock/pushcart. Very few, only 0.06 % respondents were skilled labor (manual).

Despite of rivers and wetlands, only 1.69% (108) people of total respondents do fishing in open water. Among other earning sources such as livestock/poultry, Industrial labor, Petty business, handicrafts and transport worker are very low in

numbers and only 2, 9, 11, 1, 16 and 2 respectively. Moreover, there are 926 housewives. There are 624 students representing 302 male and 322 female respectively. About 1.67% (107) respondents earn their livelihood by scavenging.

Table 6: Main occupation of study household members

| Main Occupation | Male | Female | Total | |
|---|---|---|---|---|
| | No. | No. | No. | ( % ) |
| Does not work | 1215 | 1421 | 2636 | 41.25 |
| Agricultural day labor | 615 | 25 | 640 | 10.01 |
| Other day labor | 752 | 159 | 911 | 14.25 |
| Domestic maid | 7 | 267 | 274 | 4.29 |
| Rickshaw/van/boat/bullock/ push card | 40 | | 40 | 0.63 |
| Skilled labor (Manual) | 4 | | 4 | 0.06 |
| Fishing in open water | 106 | 2 | 108 | 1.69 |
| Livestock/poultry | | 2 | 2 | 0.03 |
| Industrial labor | 4 | 5 | 9 | 0.14 |
| Petty trade/Small business | 7 | 4 | 11 | 0.17 |
| Other business | 1 | | 1 | 0.02 |
| Handicraft/ cottage industry | 2 | 14 | 16 | 0.25 |
| Service | | 1 | 1 | 0.02 |
| Transport worker | 2 | | 2 | 0.03 |
| Begging | 3 | 13 | 16 | 0.25 |
| Scavenging | 46 | 61 | 107 | 1.67 |
| Housewife | 9 | 926 | 935 | 14.63 |
| Student | 302 | 322 | 624 | 9.76 |
| Migrant worker | 9 | 1 | 10 | 0.16 |
| Other" | 21 | 23 | 44 | 0.69 |
| **Total** | **3145** | **3246** | **6391** | **100.00** |

**5.8: Case of Bhuson**

Bhuson Chandra Das lives in Jatindrapur village under Beheli union of Jamalgonj upazila which is located in the low lying deep basin of the Shanir Haor which is one of the largest haor in Sunamgonj district. Communication from the upazila head quarter (around 14km from Jamalgonj town) to the village is very difficult and costly.

Fishing is one of the major livelihood means of the majority poor people. Like many others, Bhuson's is an extreme poor (EP) and sustain on fishing and wage laboring. His family comprises of 6 members (husband, wife and 3 daughters and one son).

Bhuson is to do subsistence fishing for about 6 months of the year from Jaisthay-Kartik (May to October) for around 20 days per month with 'current jal'. He used to earn roughly Tk. 100 every day. From current jal fishing in the haor over a period of six months he earned Tk. 12,000 (@ Tk. 2,000 per month). Besides, he regularly works as boro rice transplantation laborer for around 45 days during Agrahayan - Magh and (mid November to mid February) earned around Tk. 9,000 (@ Tk. 200 per day). After boro rice transplantation, people face serious job crisis in the haor area.

During dry season viz. Falgun-Chaitra (mid February to March) when wetlands are almost dry thus no fishing opportunity exists, rice is yet to harvest thus no job in the rice fields, people define this situation in the haor as *nidan* (crisis period) and the poor face serious livelihood crisis due to lack of income earning opportunities.

During this time Bhuson dewater small ditches full of weeds to get some left over fish. He used to get on an average Tk. 70 per day from ditch fishing. However, he could do this work for roughly around four weeks over a period two months. From this he earns around Tk. 1,000 per month, which is good support for his family to overcome the crisis period. During rice harvesting time he worked for one-month viz. Baishak (April) and earned around 7 mounds of rice (worth Tk. 4,200).

## 5.9: Distribution of occupation and educational status

If we see the educational status among the total population under the study, there are 4753 people who do not have any schooling at all and among those 2636 are not engaged in income earning. There are 1424 people who have only primary education, 160 went to high school and only 24 students had passed SSC or equivalent. Only 15 had passed HSC, 6 are graduate and only 1 is master's students. Most of the people are day labor. Besides, there are 640 people serving as agricultural day labor and among them very few are skilled. A total of 935 people out of 6391 are housewives.

Table 7: Cross tabulation of education and occupation of total population of the study

| Occupation | | | | | Levels of Education | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | No Schooling | Class I-V | Class VI-IX | SSC or equivalent | HSC or equivalent | Graduate or equivalent | Masters or equivalent | Others | Total |
| Does not work | 2387 | 227 | 16 | 1 | 1 | 0 | 0 | 4 | 2636 |
| Agricultural day labor | 433 | 179 | 23 | 5 | 0 | 0 | 0 | 0 | 640 |
| Other day labor | 716 | 162 | 29 | 1 | 3 | 0 | 0 | 0 | 911 |
| Domestic maid | 236 | 37 | 1 | 0 | 0 | 0 | 0 | 0 | 274 |
| Rickshaw/van/boat/ push card | 31 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 40 |
| Skilled labor (Manual) | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Fishing in open water | 81 | 22 | 4 | 1 | 0 | 0 | 0 | 0 | 108 |
| Livestock/poultry | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Industrial labor | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 9 |
| Petty trade/Small business | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 11 |
| Other business | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Handicraft/ cottage industry | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Service | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Transport worker | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Begging | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Scavenging | 83 | 21 | 2 | 0 | 0 | 0 | 0 | 1 | 107 |
| Housewife | 707 | 202 | 22 | 2 | 1 | 0 | 0 | 1 | 935 |
| Student | 5 | 538 | 56 | 9 | 8 | 6 | 0 | 2 | 624 |
| Migrant worker | 5 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 10 |
| Other | 23 | 13 | 2 | 4 | 1 | 0 | 1 | 0 | 44 |
| | **4753** | **1424** | **160** | **24** | **15** | **6** | **1** | **8** | **6391** |

### 5.10: Average income of the households

Average monthly income of the households are found taka 1604.5 only in the study. This remains far below the national lower poverty line of Bangladesh.

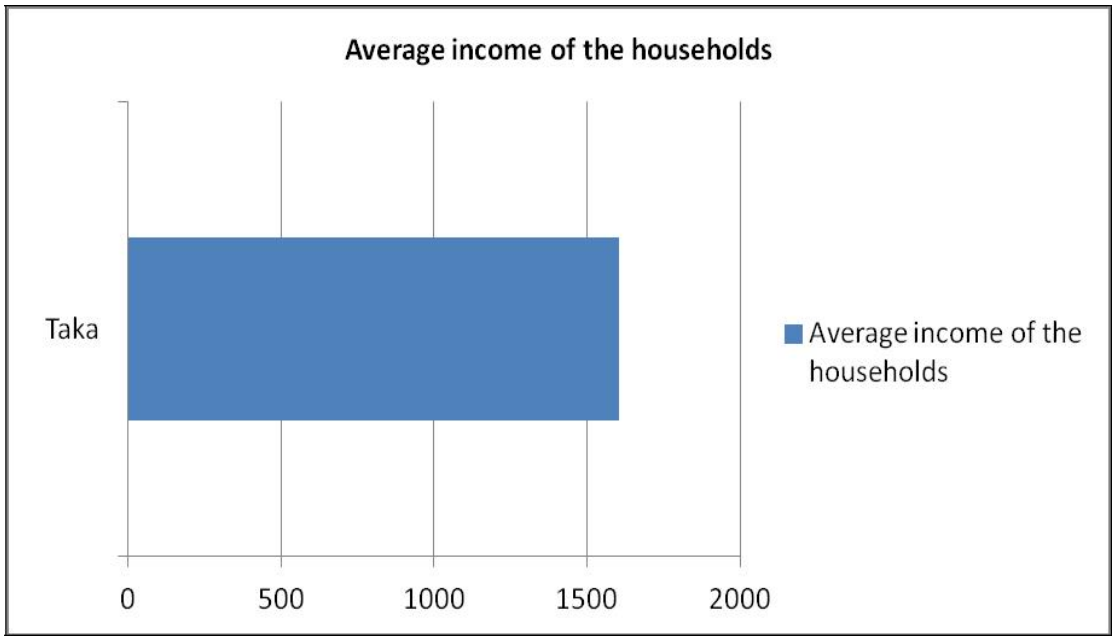


Figure 5.5: Average income of the households

### 5.11: Distribution of households with disable people

The study found 26 household heads are disabled and mainly dependent on other family members whereas the rest 1474 household heads are able bodied person.

Table 8: Household with disabled people

| Number of Disabled in the Household | |
|---|---|
| **No. of Disabled people in HH** | **Household Head** |
| 0 | 1474 |
| 1 | 26 |
| **Total** | **1500** |

### 5.12: Ownership of the households

Ownership of the household is one of the important indicators in the context of poverty. However, in this study around 30 percent of the households do not have their own house and living in the relatives' or rented house.

Table 9: Ownership of the house

| Ownership of House | Male Headed | Female Headed | Total | ( % ) |
|---|---|---|---|---|
| Own | 941 | 127 | 1068 | 71.20 |
| Rented | 3 | 1 | 4 | 0.27 |
| Parents | 110 | 29 | 139 | 9.27 |
| Father in law | 42 | 5 | 47 | 3.13 |
| Without rent | 67 | 25 | 92 | 6.13 |
| Others | 93 | 57 | 150 | 10.00 |
| **Total** | **1256** | **244** | **1500** | **100.00** |

### 5.13: Condition of the houses/room

The study also assessed the house condition of the respondents and found mostly range between moderate to very bad status. A total of 613 houses are found moderate, 177 are broken and 277 are huts. Which are 40.87%, 11.80% and 18.47% respectively. A total of 380 houses are found in bad condition which needs immediate repairing, and the percentage is 25.33.

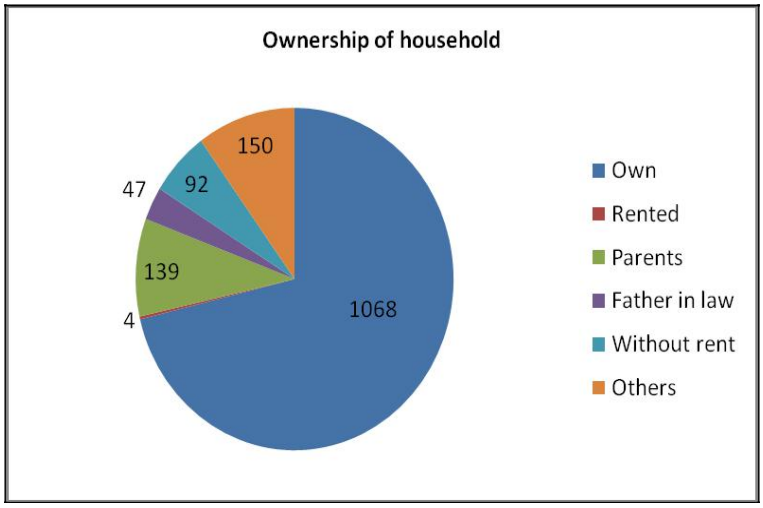


Figure 5.6: Household ownership category

Table 10: Condition of the houses/room

| Condition House | Male Headed | Female Headed | Total | ( % ) |
|---|---|---|---|---|
| Good | 41 | 12 | 53 | 3.53 |
| Moderate | 509 | 104 | 613 | 40.87 |
| Bad | 329 | 51 | 380 | 25.33 |
| Broken | 138 | 39 | 177 | 11.80 |
| Hut | 239 | 38 | 277 | 18.47 |
| **Total** | **1256** | **244** | **1500** | **100.00** |

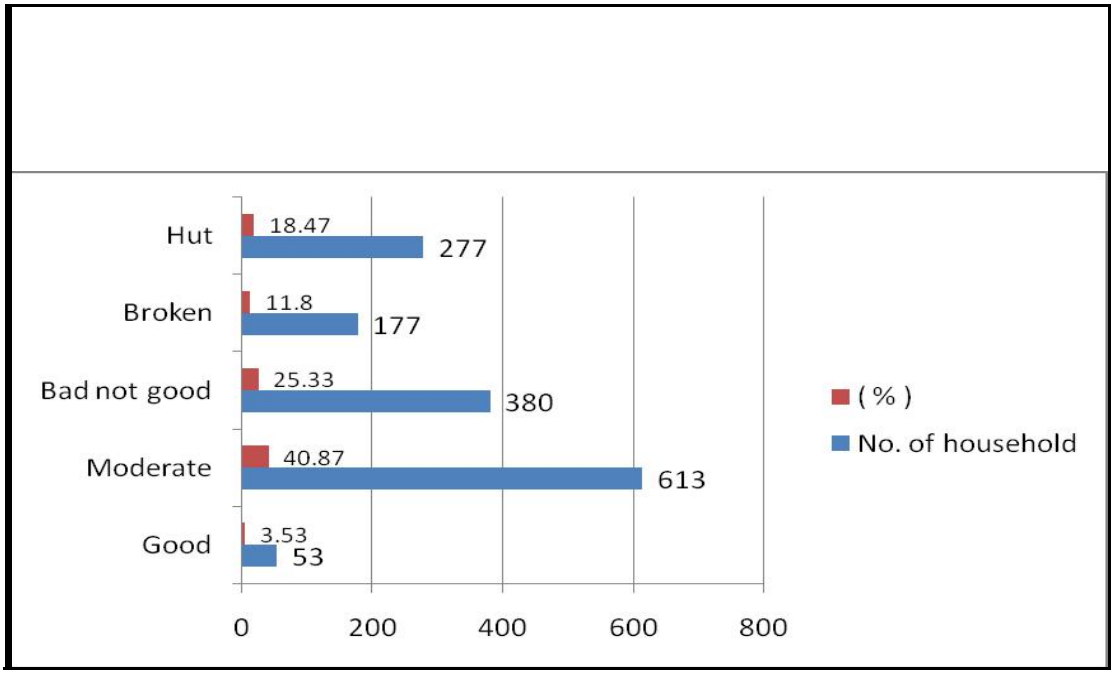


Figure 5.7: Condition of houses of the respondents

### 5.14: Households under different safety net programs

Among 1500 households only 9 get cash for education, 5 get food for work, 46 people get old age allowance, 31 get widow allowances, 5 get disability allowance, 3 get freedom fighter allowance and 2 households get 100 days cash for work scope. More importantly, 1400 extreme poor households are not under the coverage of safety net programs of the government of Bangladesh.

Table 11: Households under safety-nets program

| Households under safety nets program | |
|---|---|
| **Safety net program** | **No. of HH** |
| No support | 1400 |
| Cash for education | 6 |
| Food for work | 0 |
| VGD | 20 |
| VGF | 15 |
| Old age allowance | 27 |
| Widow allowance | 25 |
| Disabled allowance | 3 |
| Freedom fighters allow. | 2 |
| 100 days cash for work | 2 |
| **Total** | **1500** |

### 5.15: Saving status of the households

The study also looked into the savings status of the households. Almost 84.3 percent (1264) of the respondent replied that, they do not have any savings whereas 15.3 percent (236) respondents have savings.

Table 12: Status of savings of the households

| Savings status | | | |
|---|---|---|---|
| **Category** | **Frequency** | | **Percent** |
| No savings | 1264 | | 84.3 |
| Has savings | 236 | | 15.7 |
| **Total** | **1500** | | **100.0** |

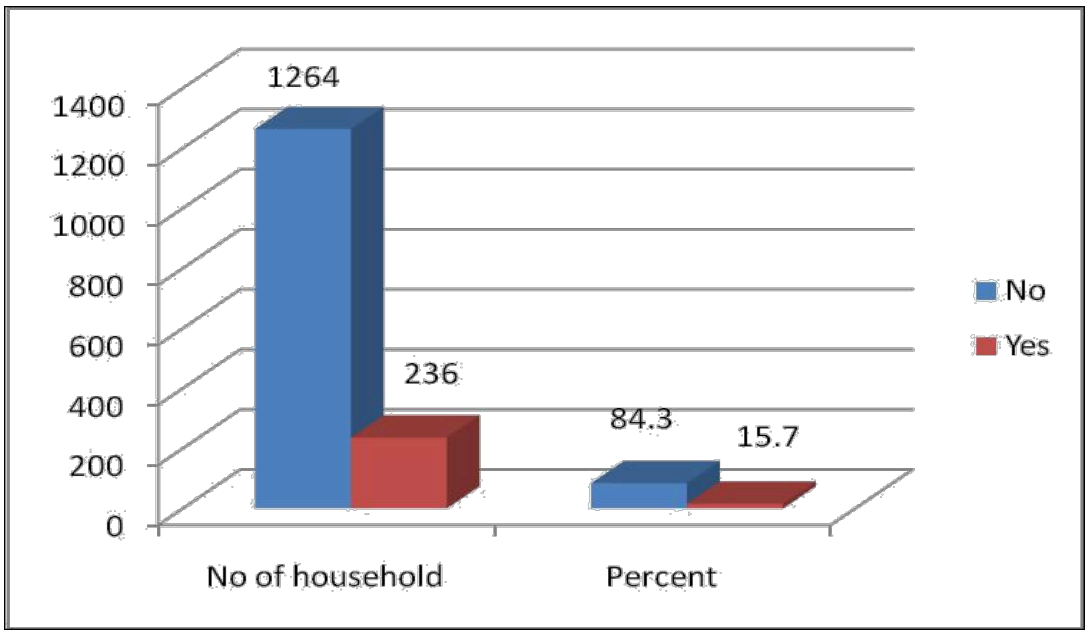


Figure 5.8: Household saving status

### 5.16: Migration away from home

Among all the study households, 579 migrate away from home for at least one month for livelihood, 36 households goes for two months, 6 households for three months. The percentage is 38.6, 2.4 and 0.4 respectively. It is also found that, 2 households member goes out for ten and twelve months each. A total of 877 household replied that, they do not migrate from their household at all.

Table 13: Migration away from home for livelihood

| **Migration away from home for months in a year** | | |
|---|---|---|
| **Migration/Month** | **Households** | **Percent** |
| No migration | 877 | 58.4 |
| 1 month | 579 | 38.6 |
| 2 month | 36 | 2.4 |
| 3 month | 6 | .4 |
| 10 month | 1 | .1 |
| 12 month | 1 | .1 |
| **Total** | **1500** | **100.0** |

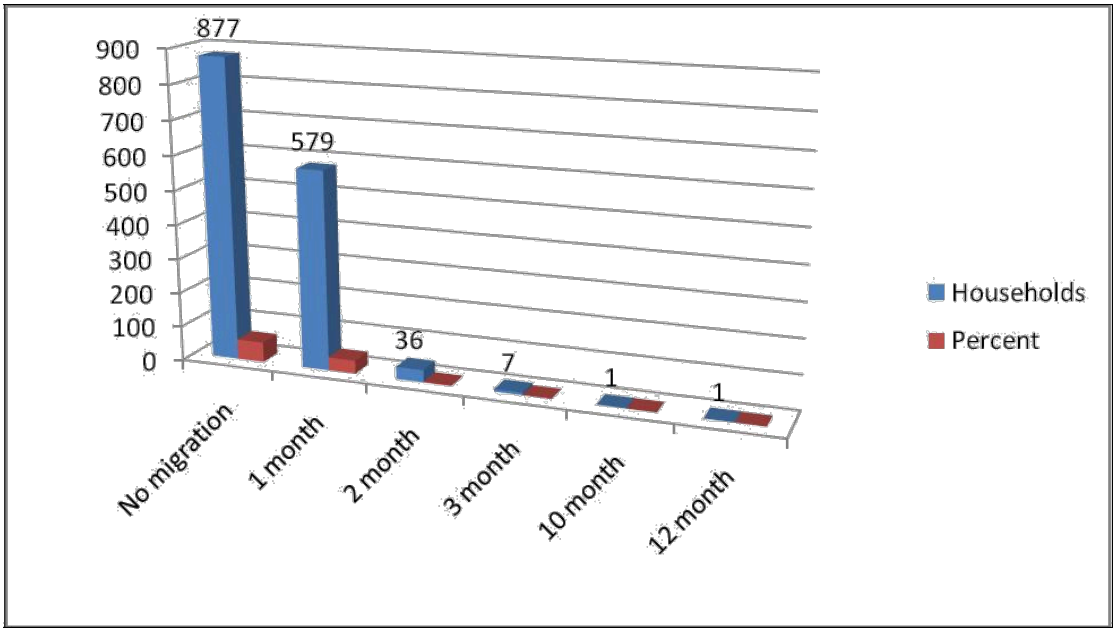


Figure 5.9: Migration away from home for livelihood

### 5.17: Case of Maskuda Begum

Maskuda Begum of Hotamara village of Fenerbak union under Jamalgani upazila in Suamganj district got married in 1996 when she was 18. She has a son. Her husband, a drug addict, left them in 1999 and never got back to see her. Her village is located deep inside the hoar and is surrounded by 4 *beel*s namely Aila, Sagaya, Apartokia and Pakua. During monsoon, the entire village becomes surrounded by water with strong wind and wave action and remains isolated from other villages.

Maskuda used to migrate twice a year like her other compatriots to work as seasonal stone carrying laborer. She usually earned taka 150-200/day. The laborer leaders often cheated her along with her other co-workers, paying the wages of only 5 days against 7 days work. Doing nothing against this deprivation, she decided to go to Sylhet town to work as maid servant and she did that in 2003 and used to work there from February to October each year. Maskuda used to work in 4 houses from 7am to 5pm and stayed in one of those working houses. She was paid a total of Taka 50/day by 4 house lords and was occasionally provided with food. She had been carrying out such works since her husband's disappearance. She was unable to send her son to the school due to odd nature of her works and lack of money. She once took a loan of taka 5,000 from the local money lender (*mohajan*) and returned Taka 7,500 in total covering principal & interest after three months meaning an impact of 200% yearly interest or providing 600kg paddy instead. She spent the loan money to buy food, health care and house reconstruction. She mostly takes 1-2 meals (vegetables and rice) instead of 3 meals a day.

### 5.18: Coverage under micro-finance institutions/traditional lenders

The study also found it true that, the poorest of the poor are not covered by micro finance institutes and become inclined to traditional lenders. The study found 1256 households do not have access to any sort of institutional loan whereas 244 households managed to access loans from local money lenders. The percentage is 83.7 and 16.3 respectively.

Table 14: Loan status of the households from micro-finance institutions

| Coverage under micro-finance institutions/traditional lenders | No. of households | Percent |
|---|---|---|
| No | 1256 | 83.7 |
| Yes | 244 | 16.3 |
| **Total** | **1500** | **100.0** |

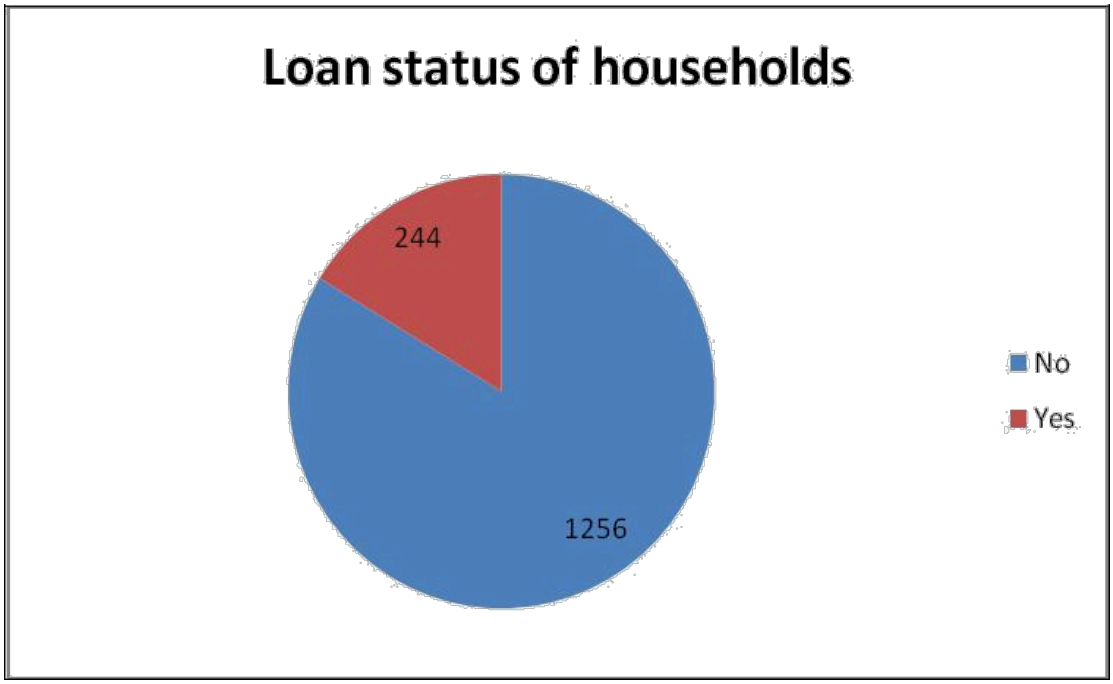


Figure 5.10: Loan status of the households

**5.19: Water and sanitation**

In the study it is found that, almost all households of the study areas are using tube well water (groundwater) for drinking purposes. For other domestic purposes, about half of them are using open source (river/pond) water. These tube wells are provided by various NGOs and government agencies as part of emergency response and rehabilitation program in the last decade. However, there are lots of areas where safe water and sanitation is still absent.

Different types of water borne diseases are found to be common among haor inhabitants. Dysentery, Cholera, Typhoid and Skin diseases were also common water-borne diseases in the households. Here it is mentioned that every year about Tk. 50 billion is spent for treatment of water-borne diseases in Bangladesh (Progotir Pathey, June 2006). High incidences of water-borne diseases in the haor areas increase the morbidity and mortality rate which is a major cause of poverty for these areas as well.

In haor areas, people often face difficulties in case of safe water collection. During dry season the situation becomes worse as mentioned by most of the people living in different types of flood-prone villages. Usually, the communication system in the haor areas is worse and it becomes worse in the dry season both in terms of time and cost. Moreover, contaminated water bodies during flood still are an unavoidable part of these localities.

As evidence suggests, this backwardness of the haor areas is mostly caused by the lack of appropriate (e.g. socio-economic and culturally conducive) and sustainable technical solution regarding sanitation. Haor communities have been tried out various technical options for sanitation for long period of time as it was similarly happened in the plain land areas. Although, it provides positive results in the plain land but proved not effective and sustainable in the haor region. The reason of failure might be due to incompatibility of the induced technical options to the local knowledge, culture, practices and social beliefs of the haor communities, water scarcity and communication problem. This has ultimately caused extreme backwardness in sanitation coverage in the region in comparison to the other (plain) areas of the country.

### 5.20: Nutritional aspects

Food insecurity is widespread in haor region. This study have have seen huge malnutrition in and among the respondents. It also corresponds with the regional status. Sylhet Division is a unique case for Bangladesh. It displays the highest rates of stunting at 49.3%, highest under five mortality rate at 83 per 1,000, wasting at 13% (NIPORT, 2010[1]; BDHS, 2011[2]), high fertility rate of 3.6 (NIRPORT, 2010) and the lowest rate of immunization in the country (DGHS, 2011). The Food Security and Nutrition Surveillance Project report confirms that progress in Sylhet in unacceptably slow (FNSNP, 2012)[3]. However, the chronic malnutrition in children in the country is falling from 41% in 2011 to 36% in 2014 (BDHS, 2014[4]).

[1]NIRPORT (2010) Bangladesh District Level Socio-demographic and Health Care Utilization Indicators
[2]Bangladesh Demographic and Health Survey 2011.
[3]FNSNP (2012) State of food security and nutrition in Bangladesh
[4]Bangladesh Demographic and Health Survey, 2014

It is widely recognized that poverty can also hinder the adoption of appropriate health and nutrition behaviors – a family cannot put into practice nutrition messages unless they have the means to do so. A recent Household Economy Approach (HEA) study in one livelihood zone in Sylhet[5] confirmed that the levels of food insecurity observed are linked to limited employment and income generating opportunities, particularly for women. In the livelihood zone studied, the poorest are dependent on a single, often seasonal male-driven livelihood activity as a primary source of income, employed as casual laborers in agriculture, quarrying or construction.

Expenditure patterns of the poorest revealed that they spend the majority of their income on meeting basic needs such as staples and basic household items. This leaves them unable to adequately plan for or invest in their future, increasing their vulnerability to economic and environmental shocks and of course, to malnutrition. According to a Cost of Diet study conducted alongside the HEA, nutritious food is available but not affordable. The extreme poor would have to invest an additional 57% of their total income to afford a nutritious diet based on locally available foods that would meet the nutrition requirements of the whole family[6].

In the countries like Bangladesh women are caught in the problem of malnutrition. Increased income may contribute to enhancing calorie intake and diversity of food intake. Yet despite increase of income, digestive problems, worms and diseases, may result in no improvement in anthropometric indicators. For this, health education is important along with linkages with service providers, which have found virtually nil. The respondents do not have social capital even.

### 5.21: Khas land

Khas land or government fellow land is one of the abandon natural resources in haor regions of Bangladesh. Like many other villages in the haor basin, there is huge volume of khas lands in the study village as estimated by the respondents. However, all these khas lands are now under the grip of so called “village elites”. Without their consent no one can have access to khas lands. Although these leaders have differences in opinion on many issues, but are united on controlling the khas lands.

[5]SCiBD (2013) Household Economy Approach: Sylhet Agriculture plain zone
[6]SCiBD (2013) Cost of Diet: Sylhet Agricultural Plain zone

On the issue of khas lands, these elites behave like they are the owners of these lands as if these are their parental property. On the other hand, khas land application process is very complex and clumsy. It is very difficult and in most cases impossible for poor illiterate in fulfilling cumbersome process. As a result, they cannot contest illegal occupancy rather relies on mercy of local elites.

Table 15: Volume of khas lands under village leaders' possession

| Group leader | Size of groups (No of HHs/ group) | Khas land under group control (acres) | Leaders' legally owned lands (acres) | Leaders' Primary occupation | Leaders' other occupations | Sociopolitical/ Institutional identity of leaders |
|---|---|---|---|---|---|---|
| Leader -1 | 65 | 80-100 | 20 | Agriculture | Land Broker | Ex- UP member |
| Leader -2 | 40 | 60-70 | 25 | Agriculture | 0 | Associated with a major political party |
| Leader -3 | 36 | 60-70 | 25 | Agriculture | 0 | Associated with a major political party |
| Leader -4 | 35 | 30-40 | 15 | Agriculture | 0 | Ex-UP Member, Associated with a major political party |
| Leader -5 | 4 | 25-30 | 18 | Agriculture | 0 | Associated with a major political party |

According to the saying, the Jaminders of Vatipara and Rajapur were the owners of all these fallow lands of Kamdhorpur village. These leaders claimed that they bought these lands from the Jaminders or their descendants. They have also made fake documents in collusion with local land officials as proof of their ownership. Only those who can pay money to their respective group leaders can get proportionate amount of lands from the respective territory.

General people of the village are not aware of the legal status of these fallow (khas) lands as to who are the real owners of these lands – whether the government or jaminders or the village leaders own these. They just pay money to the leaders and get a piece of land for long term use (as if they are legal owners) without any written (legal) document and keep using the land. Some of the followers (associates of leaders) cultivate 1-3 acres of lands by paying a small amount of money to the leaders on yearly basis.

Moreover, the landless poor people are not much aware of the government procedure of getting khas land and even if they know, they are not capable of following the lengthy process. Rather, it is easy for the landless to get the khas lands

by paying the leaders rather following a complex and lengthy system of obtaining khas lands following the government rules. In this connection, it is important to note that, current khas land application and distribution system of Bangladesh government is very difficult, cumbersome, lengthy and sometime quite impossible for the landless, illiterate poor people.

So far the five leaders distributed (or sold) 114.45 acres of lands to 84 people. Each person bought a minimum of 0.15 acre of lands to a maximum of 3 acres. The leaders claimed Tk. 1,000 per person for lands less than 1 acre and Tk. 2,000 and Tk. 3,000 for 1 acre 2-3 acres of lands respectively.

Table 16: Amount of khas lands sold by the village leaders

| Group leader | Land given to people (No) | Amount of khas land given (acres) | Land sold (acre/ perso) | Total land sold (acres) | Total money taken for lands (Tk/person) | Current use of lands by the buyers | When the land was sold (year) |
|---|---|---|---|---|---|---|---|
| Leader -1 | 3 | 80-100 | 0.15 | 0.45 | 3,000.00[7] | Farming | About 20 years back |
| Leader -2 | 39 | 60-70 | 1.46[8] | 57.00 | 92,000.00[9] | Farming | About 20 years back |
| Leader -3 | 35 | 60-70 | 1.43[10] | 50.00 | 85,000.00 | Farming | About 20 years back |
| Leader -4 | 4 | 30-40 | 1.0 | 4.00 | 8,000.00 | Farming | About 20 years back |
| Leader -5 | 3 | 25-30 | 1.0 | 3.00 | 6,000.00 | Farming | About 20 years back |
| **Total** | **84** | **255-310** | **1.36** | **114.45** | **194,000.00** | | |

The landless people of this village bear negative attitude on the legal process of getting khas land. Some people of this village failed getting land even though they bribed land office staffs. Some applied through village leaders but never get positive response. They believe that the leader took the money and neversubmitted the application. However, the process is costly for the poor to go to Upazila head quarter, land office and DC office several times especially in deep haor region and thus lost interests to getting khas land.

[7] Tk 1,000/person for 0.15 acres of lands each
[8] 1 acre/person for 25 persons, 2 acres/person for 10 persons and 3 acres/person for 4 persons
[9] Tk. 2,000/person for 1.0 acres of lands and Tk. 3,000/person for 3 acres and 2 acres of lands each
[10] 1 acre /person for 20 persons; 2 acres/person for 12 persons

A per the government policy only landless poor have the exclusive rights to own the khas lands suitable for agricultural use. The rule says, recipients of khas lands cannot alter the land pattern, nor they are entitled to handover or sell the lands to others. There are khas land distribution committees at the upazila and district levels and only these bodies are given the legal rights to assess, decide and distribute agricultural khas lands to the landless following a thorough checking of the claims made by the landless. However, the state rule is seen ignored by the so called village leaders, politically affiliated people, who by taking the advantage of ignorance of illiterate and powerless poor, and week governance in remote setting of the haor rule the people as historic tyrant leaders, thereby contribute to the continuation of abject poverty, vulnerability and misfortune of masses.

On the other hand, according to a CARE research finding, poverty and hunger are the products of inequitable power relations and resource distribution that deprive people of the capabilities and freedoms to achieve food security and sustainable livelihoods. Only 10% of households own 50% of the agricultural land, however 80% of all famers are smallholders highlighting the dependency for many (if not most) of the rural poor on subsistence agriculture. Lack of access to and control cover over these assets limits their livelihood options, making it more difficult for them to break the chain of poverty (CARE, 1 June, 2013).

The study also finds and concludes, a complex and dominating power relation is present both at the vertical and horizontal relation which creates an identity, a new class equipped with musclemen and backed by state power causing absolute exclusion of poor mass from common pull resources and local economic activities and thereby, contributing sustaining abject poverty in the haor basin. Week presence of the state, coupled with bad governance facilitated a structural domination resulted in economic deprivation of masses. In this situation, for any socio-economic changes; a shifting in the existing economic and power relationship is inevitable. Following is a case of Kamdhorpur Village.

### 5.22: Case Study: Village politics, grouping and land occupation

**Kamdhorpur** is a remote village in the haor basin of Jamalgonj upazila. The village comprising of 378 households with a population of 1,883 located about 27 km away from the upazila headquarter under Fenarbak Union Parishad (UP). Those who migrated from Narshingdi and Bhairab of Kishargonj districts in search of land and work opportunities first established this village about 150 years ago. Of the total households 175 are extreme poor, they do not own any land. There are 40 homeless people, living in other's house. There are five "village leaders" (so called "village elites"), who have been ruling the village for long. Each leader has their followers/supporters, mostly attached through kinship. One of the key strategy of such grouping is to play a dominant role in any village level decision-making based on muscle power. In any village settlement/arbitration, these leaders favor their followers. In summary, people who are in such groups, get some direct and indirect benefits and favors. Other families of the village (183 families) did not join the groups as they do not preferred to be colored or get involved in any group clash. Some of them are too poor to pay money to the elites for buying lands and thus are not in the group.

### 5.23: Wetland resources

Poor people heavily depend on fish and other wetland resources. Because of increasing influence of landlords and politically affiliated musclemen, poor are often excluded from most of the common pool resources of the haor areas. A complex and dominating power relation is revealed both at the vertical and horizontal spheres.

Fishing is one of the main economic activities of poor people. It is the main protein consumption sources of the haor people, whichare totally occupied by muscleman and politically affiliated elites. Even members of the parliament are involved with these activities. According to the wetland policy and national rule, only authentic fishermen cooperative and groups can have lease of these wetlands. But, ironically, all the wetlands are captured by politically backed fishermen associations somehow or other. The ramification of this kind of occupation is widespread and has dire social and economic consequences. These powerful people take lease from government

and put barrier to fishing in the wetland. In the summer, wetlands flooded and become a vast sea-like place. Then the most important and shocking exclusion happened as the lease holders restrict local poor and fishermen putting an excuse that, their fish now came out. In some cases the poor are abused, beaten, threaten and even killed because of entering into the water. Rainy season is critical as all the haor lands go under water and there is no other source of income than fishing.

Because of the extensive exclusion poor of the deep haor basin compelled to migrate in search of livelihood to other districts. The study finds they are becoming engaged in hazardous and risky jobs like sand and stone excavation labor, rickshaw puller, day laborers and others. Here the issue of political elites, misuse of state power and poor governance come forward along with advance labor selling issue in a very cheap rate during rainy season contributing to the vicious circle as well. The result is a widespread 'exclusion' of the poor from integration into the local economic activities and the influx of absolute poverty.

### 5.24 Case Study: Economic value of haor resource

To show economic value of haor resources the study quoted estimated annual economic output of Hail Haor from a previous study of Management of Aquatic resources through Community Husbandry (MACH) project, 2007, Conducted by Center for Natural Resource Studies (CNRS) as a case study. Overall annual economic value produced from the Hail Haor is Tk 348 million (USD 6.1 million) of which 121 million (35% of total value) derives from fisheries. Significantly the annual value of non-fish aquatic products including aquatic grasses, plants for human consumption, snails, mussels and other products is Tk 37 million (11% of total value). The value of dry season pastureland in the Haor is also very significant at Tk 44 million (12% of Haor value). The value of the Haor for recreation and flood control are also Tk. 7 million and Tk 23 million. The biodiversity value (Tk 43 million) represents the value of MACH project and likely foreign development assistance to be provided to Bangladesh due to the Haor wetland. The current value of boro rice produced within the Haor is also included (Tk 63 million or 18% of total value).

# 6 Conclusion and Recommendation

The research aimed at understanding political economy of poverty and vulnerability of the people of haor region. It also assessed poor people's day-to-day activities as part of attempting to secure a livelihood. The key problems identified were lack of income generating assets, lack of access to cultivable land or khas land, access to common pool resources, lack of availability of work and food insecurity round the year. Educational attainment is found very poor in this study. Extreme insolvency, poor communication made situation worst. Compulsory primary education is yet to be effective in this part of the country. Due to inadequate or lack of formal education, people is not getting salaried job available in the region.

It is clear that the geo-ecology of haor areas is different from other parts of Bangladesh. To survive in the haor areas people have to fight against nature like, regular flood, flash flood, drought, poor communication, river erosion, etc. Most of the time of the year haor areas remains under water. As a consequence, villagers always give priority to save their homestead. As a disaster prone area, poor has inadequate disaster response capacity and strategy to ensure safety.

Majority of the deep haor residents are living below the poverty line. The study reveals that, use of traditional technologies for agriculture without considering geographical factors is one of the major courses of poor economic status. As a result, adaptive technologies remain as important options in consideration of all geo-ecological conditions.

Most of the households reported that natural disaster; particularly flood is one of the main reasons for poverty in the haor areas. River erosion, lack of road networks and standing water bodies are major challenges to secure livelihood in haor regions. Flooding, low water table, excessive rainfall and loose soil formation are the causes

of loss in this region. Every year most of the areas remain under water for about 6 to 8 months and it wipes out certain percentage of standing crops. Therefore, the situation is deteriorating and becoming almost impossible for hardcore poor to survive in real sense. Lack of access to natural resources coupled with financial constraints made the situation worst for the poor in the haor regions.

Seasonal unemployment and migration (in the monsoon) is still identified as a major problem as many households are forced to sell their labor in advance or move elsewhere to look for work. Migration undermines cohesiveness among households, which is essential to fight against disasters. The study also finds that, extreme poor often took loans from local moneylenders, with interest rates sometimes as high as 200%. One of the main causes of seasonal unemployment is the lack of year-round diversification. Respondents are found engaged in various occupations. To combat long-term migration, diversity in the income generating activities may be an option.

Condition of house for most of the respondents are moderate to bad which need urgent repairing. During monsoon the haor become a vast water body with high wave so, every year people have to take extra initiatives to protect their households form erosion.

Poor people do not have access to government fellow land. Though, government has policy to distribute fellow land among those who do not have land or less than 10 decimals of land. But, the reality is very different, as the powerful coupled with local land management officials made the situation cumbersome so that, poor cannot afford to pursue government lands. According to this study, most of the poor scavenge various foods from certain parts of haor for their subsistence. It is because; access to common pull resources is increasingly becoming limited for poor people. Influential people, land lords and politically affiliated muscleman take lease of government water bodies and establish their across-rights to the entire surrounding areas during monsoon and exclude poor.

Government services are inadequate in the haor regions because of being hard to reach areas. Safety nets program has very limited coverage in deep haors. Some

infrastructure like submersible roads, bridges, culverts are built to protect life and standing crops from disasters. But, these are very limited than the actual need.

Regarding water, knowledge about safe water among haor communities was found to be moderate. A huge number of people still use pond/river water for other purposes except drinking. As a consequence of that water borne disease were found to be common in haor areas.

This study also looks at social structure, social norms and values and found cultural barrier widespread among the respondents. Actually social structures, defined by economy and culture have been the slowest to change. At gain, the reality is shaped by social, cultural, political and economic forces.

According to the findings of the study, politics, culture, economy, government services, policies and governances play significant role in perpetuating poverty, which should be focused to overcome the curses of poverty in this deep haor region. Elimination of the social barriers like ignorance, lack of awareness, cultural values, norms, beliefs, ideology, practices, prejudices, religion and food security aspects are very much needed as like as to stop widespread exclusion from natural resources to decrease poverty in haor areas in particular.

These findings may contribute to the understanding of the real story of the poor in the haor regions and foster further research and development activities in line with regional development plan of government. The study may also help policy makers, national and local politicians, development partners to understand regional dimensions of poverty and take appropriate development planning and actions.

Being excluded from common resources and economic activities poor people are bound to migrate in other districts and becoming engaged in hazardous and risky jobs. Who stay in the region sale advance labor to local landlords for survival during rainy season. Misuse of state power coupled with poor governance created a vicious circle. As a result poor are detested from the local economic activities, delinked from any chances of graduation and living in absolute poverty for generations.

**Recommendations:**

Haor as unique geography and one of the poverty prone areas of the country following are some broad recommendations to overcome the burden of poverty and the vulnerability of the communities:

- Increase political commitment and willingness of poverty reduction and socio-economic development from government and local leaders.
- Inclusive regional development plan incorporating poor and marginal people and communities under comprehensive policies.
- Establish rights to resources- government land for poor and wetlands for fishermen. It could certainly help them graduate out of poverty.
- Allocate more development budget and ensure proper utilization.
- Conduct inventory, assess and map all the khas lands in the area and document the current status, land-use pattern including the areas under the control of land grabbers.
- Inform and sensitize upazila and district khas land distribution committees.
- Aware and organize communities around productive use of khas lands for food/crop production, cattle grazing, swamp afforestation and other community uses.
- Formulation of pro-poor policies.
- Proper utilization of wetland rules and policies of the government.
- Promotion of technical and vocational education for unemployed could create income opportunities.
- Increase coverage of Safety Net Program.
- Promotion of diversified climate adaptive livelihood options and technologies rather than sole dependence on traditional agriculture and fisheries.
- More government and NGO program for improving water and sanitation, health and nutrition, communication, education and employment sectors.
- Establish alternative mechanisms for public services involving local government and communities for hard to reach areas.
- Special budgetary allocation and dedicated development program considering the uniqueness of the geography.
- Engage all stakeholders in development planning, implementation, monitoring and management.
- Take comprehensive programmes for local and regional resilience building against disaster and climate change induced risks.

## Reference:

Ahmad, Q. K. (1986), Promotion of Employment and Income through Rural Non-crop Activities in Bangladesh, Research Report # 45. BIDS, Dhaka.

Alom, S. M. and Hossain, S. M. (2003). Banglapedia, Vol: H. Asiatic Society of Bangladesh.

Bangladesh Demographic and Health Survey, (2014), NIPORT

Care, Round Table Discussion on Research Findings. Dhaka, 01 June, 2013, http://www.carebangladesh.org/shouhardoII/publication/newsBriefKhasLandEvent.pdf

CDMP, (2007). Community Risk Assessment for Comprehensive Disaster Management Programme, GOB-UNDP.

CEDW, (1981). Convention on the Elimination of All Forms of Discrimination Against Women, Articles 10, 11, 12, 13, and 14

Clert, Carine (1999). *Evaluating the concept of social exclusion in development discourse*. European Journal of Development Research, 11,no2 (December) 176-199.

CNRS Report, (2006). Haor Poverty, Center for Natural Resource Studies

CNRS Report, (2010), eep/shire village census report

CNRS Report, (2012), eep/shiree final report

CNRS-LGED, (2008). GIS based mouza maps of two upazilas in Sunamganj 2006-07, CNRS Community Based Resource Management Project – Local Government Engineering Department

Colquhoun, D. (1993). *Health research in practice: political, ethical, and methodological issues,* (eds.) Derek Colquhoun, Allan Kellehear Chapman, Paperback.

DoE Technical Report, (2008). Climate Cell-Department of Environment and Center for Natural Resource Studies.

FAO, (1998). Food and Agricultural Organization Annual Report.

FRASH Technical Report, (2008). Center for Natural Resource Studies and Action Aid Bangladesh.

Friedman, John (1996). *Rethinking poverty: empowerment and citizen rights*. International Social Science Journal 148:161-172.

Goffman, A. (1961). *In Stigma: Notes on the Management of Spoiled Identity of Interaction.* New York: john Wiley & Sons

Government of Bangladesh, (2005). Agricultural Year Book 2005. Bangladesh Bureau of Statistics.

Government of Bangladesh, (2008). Agricultural Year Book 2008. Bangladesh Bureau of Statistics.

Government of India, (2008). Indian Meteorological Department collected data.
Horwitz, G. (1977). *Sex bias in the family allocation of food and health care in rural Bangladesh.* Population and Development Review, Vol. 7 (No. 11 (No. 2), pp. 500–502.

Hossain, A. (1990). *Rural Poverty in Bangladesh*. 'Like-Minded Group'. UPL, Bangladesh.

http://www.shiree.org/(Accessed on August 06, 2013).

Islam, S. A. (2005). *Sociology of Poverty: Quest for a New Horizon*. *Bangladesh e-Journal of Sociology.* Volume 2. Number 1. Special Issue: Exploring the Sociological Perspective on Poverty.

Jordan, Bill (1996). *A Theory of Poverty and Social Exclusion.* Cambridge: Polity

Kerbo, Harold R. (1996). *Social Stratification and Inequality: Class Conflict in Historical and Comparative Perspective.* Boston: WCB/McGraw-Hill

Khan, A. R. A. (1977), *Real Wages of Agricultural Workers in Bangladesh*. Oxford University Press

Lewis, Oscar (1959). *Five Families: Mexican Case Studies in the Culture of Poverty*. New York: Basic Books.

MACH Technical Report, (2001). Management of Aquatic Ecosystem through Community Husbandry project technical report. CNRS and Winrock International

MACH Technical Report, (2008). Management of Aquatic Ecosystem through Community Husbandry project technical report. CNRS and Winrock International

Matza, David (1966). *The Disreputable Poor. In Class, Status and Power: Social Stratification in Comparative Perspective.* Edited by R. Bendix and S.M. Lipset. NewYork: Free Press

Maykovich, Minako, K. (1980). "Medical Sociology", Alfred Publishing Co. Morrison Street, Sherman Oaks, CA 91403.

Millennium Development Goals: Bangladesh Progress Report 2015. UNDP Bangladesh.

Michael P. T. and Stephen C. S. (2003). Economic Development, p-3, UK.

Population Census of Bangladesh (2011). Bangladesh Bureau of Statistics.

Rahman, A. and Haque, T. (1988). Poverty and inequality: Trends and causes. Oxford: Clarendon.

Rahman, H. Z. (1995). Rethinking Rural Poverty: Bangladesh as a case study. UPL, Dhaka, Bangladesh.

Rahman, P. K. and Motiur, M. (1994). Poverty Issues in Rural Bangladesh. UPL, Bangladesh.

Rodman, Hyman.1963."The Lower Class Value Stretch." Social forces 42: 205-215.
Rogers, Gerry (1996). *What is special about social exclusion approach? In Social Exclusion: Rhetoric, Reality, Responses*. Edited by Gerry Rodgers, Charles Gore and Jose B. Figueredo. Geneva: ILO.

Rowntree, S.B. and, Lavers, G. R. (1951). Social surveys, Poverty and the Welfare State: A Third Social Survey of York Dealing Only with Economic Question. Longmans Green, UK

Save the Children in Bangladesh (2013). Household Economy Approach: Sylhet Agriculture plain zone

Save the children in Bangladesh (2013) Cost of Diet: Sylhet Agricultural Plain zone

Schendel, W. V. (1982). Peasant Mobility: The Odds of Life in Rural Bangladesh. Harpers Ferry, WV, U.S.A.

Sen, A. K. (1981). Poverty and Famines: An Essay on Entitlements and Deprivation. Oxford University Press, Oxford.

Siddiqui, K. (1982). Political Economy of Rural Poverty in Bangladesh. National Institute of Local Government, Dhaka, Bangladesh.

Silver, Hilary (1996). *Reconceptualizing social disadvantage: Three paradigms of social exclusion.* In Social Exclusion: Rhetoric, Reality, Responses, edited by Gerry Rodgers, Charles Gore and Jose B. Figueredo. Geneva: ILO

Townsend, P. (1979). Poverty in the United Kingdom: a survey of household resources and standards of living, Harmondsworth: Penguin.

Turner, J. H. (1992). "Structure of Sociological Theory", University of California, USA. UNDP-IUCN-CNRS, (2013). Common Pool Resource Study.

**Appendix-1**

# Political Economy of Poverty in the Haor Region of Bangladesh

Questionnaire

This research is conducted for academic purpose to fulfill the requirements of M.Phil course under department of Sociology, University of Dhaka

# QUESTIONNAIRE

| | |
|---|---|
| NAME OF RESPONDENT | |
| ADDRESS | |

| INTERVIEWER VISITS | |
|---|---|
| DATE | |
| INTERVIEWER'S NAME | |
| RESULT | |

| | |
|---|---|
| INTERVIEW START | |

# INFORMED CONSENT FOR RESPONDENT

**আস্সালামু আলাইকুম/আদাব,**

আমার নাম: _____। বর্তমানে ----------জন্য একটি নমুনা জরীপের কাজে নিয়োজিত। এই জরীপে আপনার অংশগ্রহনের জন্য আমরা আপনার কাছে অত্যন্ড় কৃতজ্ঞ থাকব। আমি আপনাকে ---------- সম্পর্কিত কিছু প্রশ্ন করব যাতে প্রায় ২০-৩০ মিনিট সময় লাগবে। আপনার দেয়া সমস্ড় তথ্য সম্পূর্ণভাবে গোপন রাখা হবে এবং অন্য কাউকে কখনও জানানো হবে না।

এই জরীপে অংশগ্রহন সম্পূর্ণরূপে আপনার ইচ্ছার উপর নির্ভর করছে এবং আপনি ইচ্ছা করলে কোন একটি প্রশ্নের বা সম্পূর্ণ প্রশ্নের উত্তর নাও দিতে পারেন। তারপরও আমি আশা করব আপনি এই জরীপে অংশগ্রহণ করবেন। কারণ, আপনার মতামত এই জরীপের জন্য অত্যন্ড় গুর"ত্বপূর্ণ। এখন আপনি জরীপ সম্পর্কে কিছু জানতে চাইলে আমাকে জিজ্ঞাসা করতে পারেন।

আমি কি এখন সাক্ষাৎকার নেওয়া শুর" করতে পারি?

Respondent Name: …….....…….....  Father/Husband Name: ……..……

| Address: | | Code | | Code | | Code |
|---|---|---|---|---|---|---|
| District: | ……. | | Upazila: … | | Union … | |
| Ward | ……. | | Village:: … | | Para … | |

| Name | Relationship with HH head[1] | Sex M=1 F=2 | Age | | Marital status[2] | School up to passed [3] | Type of schooling[4] | Occupation[5] | Earn income (Y/N) | Govt. safety net[6] | Literacy & Numeracy[7] | Disable (any) Yes/No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Yrs | Mm | | | | | | | | |
| Head | | | | | | | | | | | | |
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1. Household Members: No. of children under age 5

*yes=1 no=0, not applicable=88 no response=99*

[1]***Relationship with hh head****: 1=head 2=spouse 3=child 4=grand-child 5=(sibling) brother/sister 6=parent 7=parent in law 8=son/daughter in law 9=other in law 10=cousine11-other(specify)*

[2] ***Marital status:*** *0=unmarried 1=married 2=widow 3=divorced/deserted/separated Sex: 1=male 2=female*

[3]***School class:*** *0=no schooling/ not starting 1-9=last class passed 10=SSC/eqv. 11=HSC/eqv. 12=degree/eqv. 13=master/ eqv. 14=others(specify) 88=not applicable 99=no response*

[4]***School type:*** *0=no schooling 1=bangla medium 2=english medium 3=alia madrasha 4=qaumia madrasha 5=NGO school 6=maqtab 7=community school (patshala)*

[5]***Occupation:*** *0=does not work 1=agree day labour 2=other day labour 3=domestic maid 4=rickshaw/van/boat/bullock/ push card 5=skilled labor(manual) 6=own agriculture 7=fishing in open water 8=aquaculture/ fish farming 9=livestock/poultry 10=industrial labour 11=petty trade/business 12=other business 13=handicraft/ cottage industry 14=service 15=transport worker 16=begging 17= scavenging 18= rag picker 19= housewife 20=student 21=migrant worker 22= other (specify)*

[6]***Govt. safety nets****: 1=cash for education 2=food for work 3=VGD, 4=VGF 5=Old age allowance 6=Widow allowance 7=disabled allowance 8= freedom fighter allowance 9=100 days cash for work (CFW) 10=others (specify)*

[7]***Literacy****: 0=can not read write and innumerate 1=can read and write only 2=functionally numerate only 3=can read, write and numerate 88=not applicable*

**2.** Religion and Ethnicity

| | | |
|---|---|---|
| *Religion* | | ***Religion code****:1=muslim 2=hindu 3=buddhist 4=christian 5=other (specify)* |
| *Caste* | | ***Caste code****: 1=rishi, 2=behara 3=kawra 4=munda/indigenous 5=other (please specify)* |
| *Ethnicity* | | ***Ethnicity code****: 1= adivasi 2= non adivasi* |

*3.* Housing:

| | | Feet | | | Code |
|---|---|---|---|---|---|
| Size of house | Length | | | Ownership | |
| | Width | | | Overall condition | |

| | Construction material |
|---|---|
| Walls | |
| Roof | |
| Floor | |
| Pillar/ khuti | |

*Ownership: 1=owned 2=rented 3= parent 4= parent in law 5=other non-family rent-free 6=other (specify)*
*House condition: 1=good 2=fair 3=poor 4=dilapidated 5= hut*
*Construction material: 1=grass/straw/stick/palm leaf/plastic 2=bamboo 3=mud 4= taly/tiles 5=tin 6=cement/brick /rod 7= wood 8= others (specify)*

**4.** Water, Sanitation and Electricity:

| | Source or type[code] | Time to collect (mins) | Ownership [code] | Quality of water | Arsenic |
|---|---|---|---|---|---|
| Main source of drinking water | | | | | |
| Latrine type used | | | | | |
| Electricity source | | | | | |

5.

***Water source code****: 1=pipe/supply 2=hand tube well 3=open well 4=pond/river/canal 5=rainwater 6=purchased water from seller 7=shallow/deep tubel well 8=purchased from private vendor 9=purchased from official source10 =others (specify)*
***Ownership code:*** *1=own 2=shared ownership 3=owned by others 4=public (govt. supplied) 5=NGO supplied 6=others (specify)*
***Quality of water:*** *1=safe drinking water 2=unsafe drinking water.****Arsenic code:*** *1=not affected 2=contaminated 3=do not know*
***Latrine type code:*** *1=open/bush 2= hanging 3= unlined pit 4= ring/slab 5= water sealed/ complete sanitary 6= community 7=others (specify)*
***Latrine ownership code:*** *1=own 2=shared ownership 3=public 4 =NGO 5=community 6= others (specify)*
***Electricity source code:*** *0=no electricity 1=mains connection 2=connection to generator 3=solar 4=other (specify)*

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6. Household Income in Last Year (Use monthly calculation sheet if needed)

| **Code** | **Source** | **Cash** | **In kind** | **Code** | **Source** | **Cash** | **In kind** |
|---|---|---|---|---|---|---|---|
| 1 | Agricultural daily labour | **(Tk.)** | **(Tk.)** | 18 | Fuel sales | **(Tk.)** | **(Tk.)** |
| 2 | Other daily labour | | | 19 | Child labour | | |
| 3 | Domestic worker | | | 20 | Rural Maintenance | | |
| 4 | Rickshaw/van/boat/bullock/ | | | 21 | Programme 100 Day Cash for Work | | |
| 5 | pushcart Skilled labour (specify) | | | 22 | Foreign remittance | | |
| 6 | Own agricultural produce | | | 23 | Donation from relatives | | |
| 7 | Fishing / Aquaculture | | | 24 | Fetra / Zakat | | |
| 8 | Livestock / Poultry / Ducks | | | 25 | Government allowance | | |
| 9 | Industrial / Garment | | | 26 | (Including: disability Training allowance from | | |
| 10 | Labour Petty trade (specify) | | | 27 | GoB / NGO shiree supported NGO | | |
| 11 | Other trade / business | | | 28 | relief Other NGO relief | | |
| 12 | (specify) Cottage industry / handicraft | | | 29 | Loan taken in last month | | |
| 13 | Service / job (specify) | | | 30 | Savings withdrawal | | |
| 14 | Transport worker (Bus & | | | 31 | Other (specify) | | |
| 15 | Truck) Begging | | | 32 | Residual crop collection | | |
| 16 | Rag picking / scavenging | | | 33 | Local remittance | | |
| 17 | Motorised van (nosiman) | | | 34 | Seasonal pavement trade | | |

**7.** Loans:

Does your household taken any loan: [Yes = 1 No = 0]

| code | Sources of loan taken | Date | If yes, amount BDT | Amount now outstanding BDT |
|---|---|---|---|---|
| 1 | Informal without interest (relative, neighbor etc.) | | | |
| 2 | With interest informal loan (mohajon, mortgage) | | | |
| 3 | Formal loan with interest (MFI, Bank, Grameen, Bank, other NGO) | | | |
| 4 | Formal loan with interest (GoB) | | | |
| 5 | Loan from shomity or CBO with interest | | | |
| 6 | Others (specify ) | | | |

8. Savings

| Do you have any savings? | Total current savings balance in Taka | Place of savings |
|---|---|---|
| | | |

*Yes =1 No=0.* ***Place of savings:*** *bank =1 NGO=2 mahajon= 3 relatives=4 Self=5 6=group savings, others=7 (specify)*

9. Food Security:

| Question | Response | No. of months |
|---|---|---|
| Number of months in total when experience food shortage or difficulty | Mostly 1 meal/day | |
| | Mostly 2 meals/day | |
| | Some difficulty, but 3 meals | |
| | 3 meals a day, no difficulty | |
| | Total months | 12 |

| Question | Response | No. of days |
|---|---|---|
| Average number of days per month household normally consumes: | Fish | |
| | Meat, chicken | |
| | Eggs | |
| | Milk | |
| | Total days | |

10. Migration to Work Away from Home

| Number from HH | | Person-month/ Year | |
|---|---|---|---|
| Male | Female | Male | Female |
| | | | |

11. Disaster Loss and Relief

| | | Yes/No | Sources of relief |
|---|---|---|---|
| | Did your household suffer from a natural disaster in the last 3 year? | | |
| | | | |
| | | | |

*Code: 1=government 2=NGO 3=private individuals 4=others*

Signature : ----------

Information Collector: ----------, Designation ----------, Date: ----------