WORKING PAPER -3

Sunamganj Community Based Resource Management Project (SCBRMP)–LGED

Community Organization (CO) Members Livelihood Study Report

FISHERIES RESEARCH SUPPORT PROJECT (FRSP)

The WorldFish Center and SCBRMP-LGED

Dhaka – April 2010

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List of Acronyms and Abbreviations

Abbreviation	Elaboration
ASA	Association for Social Advancement
BARI	Bangladesh Agricultural Research Institute
BRAC	Bangladesh Rural Advancement Committee
BUG	Beel User Group
CBFM – CLP	Community Based Fisheries Management – Chars Livelihood Project
CBFM – SSEA	Community Based Fisheries Management in South and South East Asia
CBO	Community Based Organization
CBFMP	Community Based Fisheries Management Project
CO	Credit/Community Organization
DAE	Department of Agricultural Extension
DLS	Department of Livestock Services
DoF	Department of Fisheries
FGD	Focus Group Discussions
FRSP	Fisheries Research Support Project
HH	Household
IFAD	International Fund for Agricultural Development
IGA	Income Generating Activity
LGED	Local Government Engineering Department
MT	Metric Ton
MFI	Micro Finance Institute
NGO	Non-governmental Organization
PRA	Participatory Rural Appraisal
R&HD	Roads and Highway Department
SCBRMP	Sunamganj Community Based Resources Management Project
SPSS	Statistics Package for Social Science
ToR	Terms of References

Executive summary

Despite a large number of development initiatives in different parts of Bangladesh, poverty still persists mainly in the North Eastern part of the country especially in the haor basin. The level of poverty is typically higher for those who depend on agriculture and fishing as their principle occupation. Poverty levels are also influenced by natural hazards such as flash flooding. For this reason, the Sunamganj Community Based Resources Management Project (SCBRMP) has launched an integrated development program in the North Eastern part of the country to reduce poverty through establishing better access to micro finances. This report summarizes the livelihood impact of households who participated in credit organizations (CO).

The CO livelihood impact monitoring has covered a wide range of indicators considered for livelihood development in the SCBRMP. The purpose of the study is to assess livelihood changes of the CO members resulting from the SCBRMP project. The intended outcomes of the monitoring are:

- To quantify changes in livelihoods among CO participants;
- To understand the causes behind changes of livelihoods;
- To analyze the impact on the CO members over the project time.

A household profile survey (baseline) was conducted at the beginning of each CO was organized. Inception of CO livelihood Impact study started just after signing of the contract in March 2009. Three Research Assistants were recruited for the survey, and with their help, data collection, checking and coding were completed in May 2009. The Livelihood Impact Survey was conducted on 250 sample households taken from 50 sample COs (25 each from male and female CO). After survey data had been thoroughly checked both for completeness and consistency, coding was conducted at the WorldFish Center Sunamganj office. The data entry template was prepared at the WorldFish Dhaka office and this system was used by the Research Assistants of Fisheries Research Support Project (FRSP) to enter the data into the computer program. Simultaneously a timeline for data entry as well as a general outlines was prepared for tables to be generated. Data entry was completed at the end of June 2009.

The livelihood impact study compares aspects of the population profile, income, occupation, landholding, assets, food security, women mobility, institutional involvement and infrastructural changes to the situation established in the baseline survey. In this survey, the households were categorized as female members' households and male members' households. The households in the sample were allocated to these groups based on the profile of the CO household.

Role of Social and Human Capital in Livelihoods

The overall size of respondents' households was slightly larger than in the base year; since average population per household increased by about one person. This increase may be a result of project activities that have created positive income opportunities and food security or simply a matter of households having additional children since the baseline survey was conducted. Membership in COs had a positive correlation across all the defined membership categories of the study, especially membership in integrated projects like SCBRMP. Male and female participation in local institutions and committees have changed about equally over time. However, it is apparent from the data that the number of general members in male groups is more than in female COs. At present, general membership of male participants is 57% compared to only 43% of female members in sample groups. Women of participating households had better access to institutions (Union Parishad, Health services, NGOs, Bank and educational institutes) than non-participating women of similar sections of the community.

The micro finance management by the project has created a more diversified income portfolio for the CO participating households through skill training[1] compared to other segments of communities. Increased participation provided better access to finances, services and established improved connections to government authorities.

Normally higher literacy rates are strongly linked with increased number of services gained from different sources. This is also associated with better living conditions and higher social status. The present study

[1] Total 9699 people received skill development training from the SCBRMP in these three Upazilas, source: SCBRMP

reveals that within the project period the literacy rate increased about 8%. It is also observed from the study data that education rate in secondary and higher secondary level and above increased about 2 and 1 percent, respectively.

Household Situation of Natural Capital

Use of total land holding (per household) is bigger in the *haor* area – averaging 13.8 decimal homestead area - than in other areas of the country. Female headed households have less homestead area than male households; average homestead size of the female members' households remained almost the same in the base and impact years. While in 2009 male households homestead area are slightly increased from base year. On the other hand, the study data show that the overall increase of land holding is higher in male (10%) members' households than in female (5%) members' households.

Due to project intervention, cropping pattern and cropping intensity both changed positively. Total paddy production (of the sample households) in base year was about 8 MT whereas, this increased to 10.5 MT[2] in 2009, similarly, production was used for household consumption purposes not for sale in base year and total production in 2009 has increased significantly.

The impact study exhibits importance of dwelling houses in the project area with respect to target beneficiaries. It is apparent that SCBRMP activities created a positive impact on housing conditions of CO participants, in the base year sample household had on average 1.19 dwelling houses while, this number has increased to 1.24 in 2009. While the number of dwelling houses only increased slightly, the total dwelling area has increased to 309 sq ft in 2009 from 296 sq. ft dwelling area in the base year. The share of tin roof housed increased to 87% compare to 73% in the base year. Material of walls also changed, in the base year only 15% households had made of tin (corrugated iron) walls compare to 25% in 2009.

Water borne diseases are very prominent in *haor* areas, due to extended flooding and heavy rainfall. At the beginning of the project period, 59% of CO households used traditional latrines and 27% used the open field for this purposes. Only 33% households had water sealed latrines whereas in 2009 the use of water sealed latrines increased to 87% of households, most of it was provided by the SCBRMP.

Livelihoods Strategies

Income and Expenditure

Households were asked to estimate their income from different sources for the 12 months prior to the survey date. A similar recall study was conducted in the base year with the sample households, so that we can compare the before and after the project situation of participating households.. From the impact study it is observed that the CO members household income have increased within this period. It is found from the impact data that total income per sample households have been increased significantly within the project period, i.e. 67% growth of income recorded from the base year.

Households involved in the COs have about two acres of cultivable land per participating household; however, this does not reflect the real economic condition of respective households. Due to lower cropping intensity[3] and vulnerability of crops households do not have sufficient agricultural production to sustain on. Since the CO members are mostly marginal farmers, their main source of earnings are from agriculture. Contribution from own farming was almost the same in the base and impact year in percentage but total earning from farming increased by about 62% within this period. In the base year, total earning from farming was Tk.15,520 while it has increased to Tk.25,219[4] in 2009. Second highest contributor is petty trading/business in both year nevertheless, total amount from this sector increased about 55% compare to the status in the base year. The present study demonstrates that contribution from fishing related activities has increase about 114% compared to the base year, i.e. from Tk.3669 to Tk.9130 in 2009.

[2] Average paddy production of in study area is about 5MT per hector (sources: DAE), whereas, it is more than 10 MT produced by the project participants.

[3] Average cropping intensity in Sunamganj district is 134 while it is 197 at the national level. Source: Department of Agriculture Extension (DAE)

[4] One USD = 69.40 BDT

Access to savings and credit

Despite the large micro-credit programs by the SCBRMP in the project area, there is still a debate about the effectiveness of such programs for poverty alleviation. The impact study shows that the numbers of loans received per household from informal sources has declined. This proves that people of the lower income segment are now less involved in the non formal credit sector (where they have to pay much higher interest rates). Although micro-finance institutions and projects such as SCBRMP have provided ample supply of micro credits, our data shows that the number of credit recipients has fallen from 184 in the base year to 107 in 2009.

About 30% of CO family members are involved in other Micro Finance Institutes (MFI), and 27% took a loan from those institutes. The CBRMP distributed the largest number of loans to participants (122), followed by BRAC and ASA. The average loan size is more than BDT10,000 from these MFIs. Out of all sample households 28% keep their savings in other MFI with average savings per households being about BDT3,000. The impact study shows that the total number of credit in cash and kind distributed by the project among sample households in 2009 was 384 while, this number was only 24 in base year. Overall, 36% of all credits were used to support daily needs, 16% for financing agricultural production, 12% for business and 9% for fishing gear purchase. In all credit 37 CO members' households received seed and credit support for crop demonstration. Another implication is that amount of loans has increased about five times from the first loan per household received. Revolving capital formation is one of the important indicators of the project impact. Community Organizations used their accumulated savings in credit operation among members to enhance financial capacity of each CO. In the impact year (2009) the total number of loans distributed from CO savings was 128, with the amount of individual credits increased from Tk.4754 for the first loan to Tk.9,500 for the fourth loan.

Access to institutions

Membership and/or participation in institutions is a good proxy of social capital, because it provides members with network access to material and non-material goods and/or services. The most common way to assess access to institution of CO members is the number of capacity building trainings on different skill/capacity development participated in over the project period. Study data shows that there were three different types of training conducted by the SCBRMP: individual skill development, management capacity and human development. Among sample households, baseline data shows that during the first project year only one sample household had received skill development training while this number has increased to 46 in 2009; similarly in the base year only 5 sample households' members had received training on CO management and human development whereas this number has increased to 122 in 2009.

Food Security

The SCBRMP project provided micro credits to take more responsibility in sustaining food security by engaging in economic activities such as agriculture, fisheries management, livestock rearing and infrastructure development.

This section describes the seasonality of households' nutritional status; the data show that in the base year 20% of households had no deficit of food, 50% of households had maximum shortage up to three months, 25% of households had food shortage of 4 -6 months and there were 12% of households with food shortage for more than six months within one year. The impact data shows a drastic (or significant) improvement in the food security status of participants: 37% of sample households had no deficit of food, 42% households had maximum shortage up to three months, 17% households had shortage of 4 -6 months and only 4% households had food shortage of more than six months[5].

Regarding the protein intake, baseline data showed that only 39% of households ate meat while all sampled households (100%) consumed meat in the impact year (on average 58 times). Similarly in base year 86% households consumed eggs 100 times in a year while in the impact year average consumption of eggs was 128 times per households for all sample households. Milk consumption has been increased significantly over the project period, in base year only 9% households used to consume milk whereas in 2009 this amount increased to 65%. Average consumption per household was 133 times in base year but this number has increased to 210 in the impact year.

[5] The chi-square statistic is significant at the 5% level.

Infrastructural Impact

Rural Infrastructure Development Programs

The rural infrastructure development component has been playing a very vital role in rural poverty alleviations among the five components of the SCBRM project. The project supported rural road constructed by organized communities. Mainly two types of rural road were constructed under this scheme: re concrete road (kacha) and concrete block road (pacca). A total of 110 km road have been constructed by the SCBRMP in three study Upazilas. These roads, together with constructed culverts and community centers have created an enhanced trading and social network within and beyond the project community.
The impact study data show that kacha road construction in the study area has been declined slightly, in base year around in each village about 1.91 km road constructed while in 2009 this area has been declined to 1.62 km. Simultaneously, Pacca road construction has increased to 2.05 km from 0.69 km in the base year per CO.

Over the project period, significant diversity has emerged in economic sectors and CO livelihood through infrastructure development such as the construction of concrete roads in the rural area. Along with microcredit based employment generation program, road construction in rural areas created diversified access to different institution for all strata of people in the target villages. Examples are better access to growth centers, health centers, government offices, financial institutes, agriculture service centers, local government institutes (union Parishad) and educational institutes. Improved road networks facilitate a broad range of activities: food transportation to increase safety-nets for the poor, building and maintenance of rural infrastructure.
Considerable changes have taken place in rural road sector in project area to strengthen the development impact. From the impact study data it has been observed that earthen roads only increased by 2 km in the project area. Pacca road increased in the samples area significantly, in base year there were only 29 km Pacca road whereas it has increased to 97 km in 2009. The Sunamganj Community Based Resource Management project constructed 95 km Pacca road in sample unions. Data shows diminishing trend of Pacca road construction in the project area, in base year 24 km road constructed in the sample unions whereas it is only 3 km in 2009. Apart from SCBRMP and LGED there was no new road constructed by any other departments in the sample villages after the project intervention started.

The issue of mobility is particularly important for both urban and rural people. Since the project area is low lying and suffering heavy rainfall, extended flooding interrupts normal mobility of rural people. People use a variety of different kinds of transport: in the base year about 60% households members traveled to distant places on foot, 32% of people used rickshaw, 4% used motorbikes and only one percent of people used a bicycle. In the impact year due to project intervention and improved economic conditions this picture has changed a lot: 50% of sample households used rickshaw, 38% traveled by motorbike and only 8% community people travel on foot.

1. Background and Introduction

1.1 Background

Extensive floodplain areas cover about 4 million hectares in Bangladesh. A large share of the fish caught in the floodplains comes from the north-eastern parts districts including Sunamganj. This district has more than 1,000 water bodies covering a total area of 16,000 hectares with substantially larger areas during the monsoon season. However, fish yields have been diminishing over the last decades, due to ever-increasing fishing pressure from a growing population and environmental degradation. To address this issue the Sunamganj Community Based Resource Management Project (SCBRMP) started to implement community based fisheries management activities in more than 200 water bodies of different types along with other rural development activities. The SCBRMP has been initiated by the Local Government Engineering Department (LGED) in January 2003. The SCBRMP is an integrated development project funded by the International Fund for Agricultural Development (IFAD) under loan agreement No. 567 BD. The project location is the Sunamganj district which is one of the poorest areas in the North-Eastern part of Bangladesh. The district comprises 11 Upazilas with an area of 3,670 sq. km and 2,782 villages (BBS Year Book 2006). Sunamganj is a deeply flooded area; remaining under water about seven months in a year. During the monsoon season most of the area goes under water and the elevated villages become isolated islands (see picture below). The extended floodplain around villages becomes dangerous in the monsoon due to wave action which causes erosion of the homestead area. To help the local population under these environmental conditions, SCBRMP has been implementing the following five major livelihoods components:

1. Labor intensive infrastructure development;
2. Fisheries development;
3. Crop and livestock production;
4. Micro credit; and
5. Institutional support.

The main objectives of the project are to:

- Increase the assets and income of some 135,000 households by developing self managing grass roots organizations to improve beneficiary access to primary resources, create employment , self – employment and credit;

- Support the development of available national institutions to replicate the project approach in other areas of Bangladesh.

To achieve these objectives, SCBRMP has been implementing activities in association with government departments such as the Department of Agricultural Extension (DAE), the Department of Livestock Services (DLS), the Department of Fisheries (DoF), the WorldFish Center, an international research institute and advanced research institutes, namely the Bangladesh Rice Research Institute (BRRI) and the Bangladesh Agricultural Research Institute (BARI). All these organizations and departments are involved to support implementation activities through promoting new technologies and approaches. In addition, communication products will be prepared to highlight project achievements. Among the five components of the project, micro credits are the major tool to achieve livelihoods development. Grass root organizations called Credit/Community organizations (CO) have been created to coordinate and facilitate the micro credits. SCBRMP provided an additional assignment to the WorldFish Center, in addition to its role in supporting fisheries development, to conduct an impact study of the sample CO members' households. This report shows the findings of the impact study conducted in 2009 as compared to the base line year (2002-04).

1.2 Introduction

In order to monitor changes in livelihoods it is important to identify livelihood indicators that adequately capture project impacts upon the lives of the project participants. These indicators need to be measured at different stages of the project to ascertain positive impact of micro credits on the poor participants.

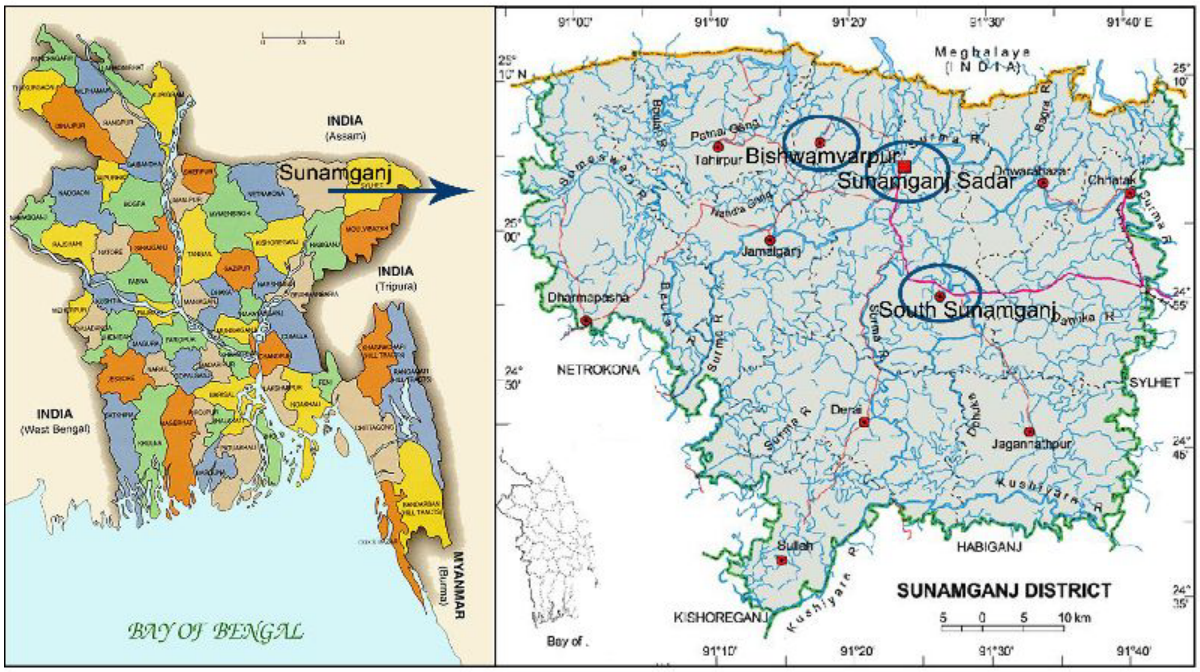


Figure 1: Sunamganj Community-Based Resource Management Project (SCBRMP) area.

2. Technical Approach and Methodology

2.1 Objective of the assignment

The objective of the survey is to measure changes in the identified livelihood indicators for sample CO member household compared to the status at the time of first enrolment in the project (as captured in the SCBRMP household profile). The initial household profiles of all selected sample households were used as base year household information. The WorldFish Center has used a structured questionnaire (provided in the ToR) to measure the impact of the project intervention by collecting indicator information which can be matched with the original profiles of each individual household. In addition, the impact questionnaire contains questions related to the delivery of project services (loans, training and infrastructure development) and on the size of changes that have occurred in some indicators since 2002-4 (i.e. during the last 4 to 6 years).

2.2 Sampling Methodology

A two stage sampling design was applied to ensure a representative sample at the participant level.

First stage:

In first two years SCBRMP worked in only three Upazilas, in order to make a comparison COs were selected only from these three Upazilas. The CO member list was generated from the COs involved in SCBRMP in three Upazilas.. Out of the total number of 80 COs, a sample of 50 COs (25 male and 25 female COs) was selected by Linear Systematic Sampling from the respective lists of male and female COs.

Second stage:

In the second stage, 125 male and 125 female CO members were selected from the 50 COs selected in step one. We used Simple Random Sampling to select 5 members each per CO selected in the first stage.

Only before and after comparison of Community Organizations (CO) has been considered in this impact study. A with and without comparison was initially considered by had to be dropped due to time and fund constraints. To allow for a maximum of time for impacts to materialize and thus get a clear picture of change between base year and impact year, the impact study only considered Community Organizations (CO)s which were formed within the first two years of the project (2002-2004). The decision has been taken in consultation with SCBRMP senior management and WorldFish Center senior staff. A total of 80 COs were organized in the sample Upazilas by the project in first two years. This report thus shows changes over time (baseline year to 2009) of a random sample of CO members

2.3 Analytical framework

This framework was developed to guide the CO member households' impact study by the IFAD review mission of the SCBRMP. The study has been designed to measure changes in the indicators over the project period. The WorldFish Center developed and used a questionnaire to measure the present impact of the CO member households' livelihoods by comparing the situation between inception year and impact year. It captures a number of factors influencing livelihood changes, measured in quantitative indicators.

2.4 Quantitative surveys

The livelihood impact study of CO members of the SCBRMP provides essential information of livelihood changes as of the time of interview. The study has drawn upon a previous quantitative assessment of the SCBRMP member households conducted by the WorldFish Center at the start of the project (referred to as baseline). This baseline study was conducted between 2002 and 2004 depending on when individual COs were formed. The impact monitoring study initiated in May 2009 has captured the main trends and characteristics of the CO members' livelihoods resulting from the project intervention (before and after comparison). It thus gives a snapshot picture of changes which have so far occurred and can help to identify issues which require future exploration or even adaption of project interventions. A structured, pre-coded questionnaire (Annex 1) was used for data collection. This report gives an overview of the results in the following categories: sources of income, housing status, sanitation, education, occupation, ownership of assets, land holding, agricultural production, food security, sources of finance, institutional involvement, women mobility, infrastructural development and human capacity building. In this impact study, the total number of sample households was 250 from 50 COs (25 male and 25 female COs).

2.5 Quality control

The survey team was trained and selected with great care and priority was given to staff with previous experience in conducting household surveys. To further harmonize the interviews across team members, the questionnaire included a guideline for each question. The CO impact study maintained data quality through cross checking of questionnaires. The SCBRMP management provided continuous feedback on filled in questionnaires to ensure data quality. The monitoring personnel oversaw data collection carefully, provided on-the-spot training, feedback after reviewing the filled-in questionnaire on a sample basis, and shared experiences during team meetings. The WorldFish Center study team also monitored closely all interviews and provided specific feedback to the Research Assistants (e.g., questioning style, use of probing questions). As a follow up of the survey, a senior member of the study team checked at least 30% of the sample households to identify missing information, ambiguous answers, and digital errors, and provided feedback to the team.

2.6 Data management and analysis

The data entry template was designed in MS-Access. Consistency checks and keystroke errors were detected and corrected before data table preparation and analysis. Data analysis was done using SPSS

software.

2.7 Livelihood profiles

The assessment of human capital comprises a brief description of literacy and education levels (adults and children), school enrolment by gender, illness, skills, occupations (primary and secondary), wage status, women mobility, etc. The household profile is represented as a summary of different characteristics of the sample households both in the base year and the impact study year. We discuss areas where major livelihood changes have occurred according to our findings.

3. General Demographic Characteristics

3.1 Household size

The average size of surveyed households was 5.41 in the base year. In 2009, the average number household members in surveyed households had increased to 6.58. This means the household size roughly increased by one member on average since the base year. This increase may be a cause of increased food production in Sunamganj haor area in the last 5 years or simply a natural development over time of families having additional children as time progresses (assuming most of the households included in the sample are younger and middle old families). The increase in household size has been more pronounced in male CO households compared to female CO households (Table 1b).

Table 1a: Status of Household size in different categories

	Base year	2009
Household sample	N= 250	N= 250
Total people	1,353	1,646
People per household	5.41	6.58

Table 1b: Status of household size in different categories

	Base year		2009	
	Female CO HH	Male CO HH	Female CO HH	Male CO HH
Household sample	N=125	N= 125	N= 125	N= 125
Total people	608	745	705	941
People per household	4.86	5.96	5.64	7.53

3.2 Household Membership

Table 2 shows the membership status (including executive committee membership) and the number of male and female members of sample households in the executive committees of COs, respectively. In the base year, the number of male and female CO members in executive committees was 16% both in male and female COs. Whereas, in 2009, male and female CO members were in the executive committee were 18% and 22% respectively. From Table 2 it is apparent that female members became more empowered in CO committees compared to the base year situation and compared to male members. In the base year general membership of male participants was 57% and 43% of male and female members, respectively, while these figures changed to 54% and 46% for male and female members in 2009. From this it is also apparent that female involvement across all CO has increased over the period. Although this may simply reflect the comparativeness of male female involvement in CO targeted by the SCBRMP intervention, it can also be a reflection of increased social capital for those households.

Table 2a: Membership types in COs of sample households

	Base Year		2009	
Category	**Male**	**Female**	**Male**	**Female**
President	6	3	7	7
Manager	16	14	17	17
Assistant Manager	1	0	1	1
Member	119	91	111	89
Total	**142**	**108**	**136**	**114**

Table 2b: Membership types of Sample households by Male and Female CO

	Base Year		2009	
Category	**Male CO HH**	**Female CO HH**	**Male CO HH**	**Female CO HH**
President	5	4	7	7
Manager	14	16	16	18
Assistant Manager	1	0	1	1
Member	105	105	101	99
Total	**125**	**125**	**125**	**125**

Table 2c, shows that in the base year male earning member was 48% whereas, female earning member was only 4% in the sample households. On the other hand, in 2009 47% household member was male earning member and 7% earning members are female. Data shows that scope of work increased more for the female due to project intervene than male. However, it has been appeared that total earning member has increased in male and female.

Table2c: Number of Earning Member by Household Categories

	Base Year		2009	
Category	**Adult**	**Children**	**Adult**	**Children**
Number of Earning Male Member	376 (48%)	101	434 (47%)	186
Number of Earning Female Member	31(4%)	114	66 (7%)	204
Other non earning member	372	359	432	323
Total	779	574	932	713

3.3 Education and literacy

The geo-physical location and especially the (physical) access to educational institutes crucially determine the level of education of households. SCBRMP as an integrated rural development project created better road infrastructure to improve access to the educational institutes. The baseline surveyed revealed that of the sample households, 34% of people were illiterate, 18% are below 5 years of age, 47% are literate and 19% could only sign., By 2009 the literacy rate has increased in the same households (Table 3). The impact survey shows a reduced illiteracy rate (28%), 17% of respondents are below 5 years of age, 55% are literate and 17% could sign. Although the total number of household members increased over the assessed period (baseline to 2009), the CO impact study shows that the literacy rate among project participants has been increased about 8% compared to the base years.

Education

Table 3a: Level of education (% people) in sample households (all members)

	Base year		2009	
Education	**Number**	**%**	**Number**	**%**
Children up to 5 years	250	18.47	275	16.66
None	462	34.15	461	28.02
Can Sign only	256	18.92	275	16.72
Formal Education Level 1-4	286	21.14	426	25.90
Formal Education Level 5-10	322	23.80	434	26.38
>= Formal Education Level 11	26	1.92	48	2.92
Total	**1,353**		**1,645**	

Table 3b: shows that in the study area education levels of male and female households have increased slightly. Our findings show, that formal education levels have increased faster in female compared to male household members.

Table 3b: Level of education(% people) in sample households (all members)

	Base year				2009			
	Female CO HH		Male CO HH		Female CO HH		Male CO HH	
Education	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**
Children up to 5 years	121	19.90	128	17.18	112	15.89	162	17.22
None	112	18.42	112	15.03	94	13.33	107	11.37
Can Sign only	117	19.24	139	18.66	126	17.87	149	15.83
Formal Education Level 1-4	107	17.60	169	22.68	167	23.69	248	26.35
Formal Education Level 5-10	140	23.02	182	24.43	187	26.52	246	26.14
>= Formal Education Level 11	11	1.81	15	2.01	19	2.70	29	3.08
Total	**608**		**745**		**705**		**941**	

4. Household situation of Natural Capital

4.1 Land ownership pattern

The impact study data show that there is no or very little change in the average land ownership of sample households and in the ownership of homestead area and cultivable area (Table 4). It has been observed that use of total land holding (per household) is bigger in the *haor* area, – averaging 12.7 decimal homestead area - than in other areas of the country[6]. Almost all households used to rent and cultivate land from local landlords. However, the amount of sharecropped land was about 16 decimals lower in 2009 compared to the base year. We assume that this is probably due to less crop damage by flash flood during this year and subsequently less need for additional farming area beyond the household's own landholdings. Similarly households had given less amount land for sharecropping or rent out.

Table 4: Changes of land ownership categories over the project period

Ownership category	**Base Year**	**2009**
	Decimals	Decimals
Own homestead land	12.77	12.76
Homestead land owned by someone else	0.27	0.25
Own pond or ditch	2.77	1.48
Land owned and cultivated by the household	72.46	71.32
Land cultivated last year but owned by others (Sharecropped/rented /mortgaged in)	82.92	67.16
Land owned but cultivated last year by others (Sharecropped/rented out)	23.90	21.18
Land owned but mortgaged out	3.82	5.11
Own non-cultivated land	4.44	4.44

The cultivable total area (considering multiple crops) has increased (by 45%) significantly over the study period. Study data also reveal that the number of crops produced also increased compared to the base year. Changes in agricultural production are also positive, though due to scarcity of production data for different items, we could only compare production of paddy and aggregated other crops directly (Table 5). Agricultural lands were underutilized due to flash flood risks before the project period; project trained people to diversifying agricultural crops are getting better yields. It is worth mentioning that the value of open water fish catch by the sample household members has increased about 53% from the base year to impact year (2009).

Table 5: Changes in the agricultural sector over the project period

					Baseline	2009
Items	**Base Year Area (dec)**	**Area 2009**	**Production Base Year (md)**	**Production (md) 2009**	**Amount Sold**	**Value (TK)**	**Value (TK)**
Paddy	29,166	41,133.5	8,028	10547	NA	NA	NA
Other Crop	151	647	11	625.5	NA	NA	NA
Vegetables	78	269.92	DD	6697	NA	31,400	69153
Aquaculture	81	545.5	1052	5172	NA	52,600	333300
Open water catch	0		DD	281	NA	640,100	981200
	29,476	**42,595.92**					

[6] Average homestead area in the country is 7decimas. Source: Statistical Pocket Bangladesh 2008

5. Physical Condition of Housing, Sanitation and Assets Ownership

5.1 Housing Condition

The impact study studies the importance of dwelling houses in the project area with respect to target beneficiaries. It is apparent that SCBRMP activities created a positive impact on housing condition of CO participants. Table 6, shows that in the base year each sample household had on average 1.19 dwelling houses. This number has slightly increased to an average of 1.24 in 2009. While the average number of dwelling houses remains more or less the same in the base and impact year, the average dwelling area has increased. In the base year, households had on average 297 sq. ft dwelling area while this figure increased to 311 sq. ft in the impact year. At the same time, the share of tin roof houses increased to 87% of sampled households compare to only 73% in the base year. Material used to construct walls also changed: in the base year only 15% households had tin (corrugated iron) walls compare to 25% in 2009

Table 6: Changes in housing of the sample households

Attribute		Base Year	2009
Number of houses		297	311
Number of houses/household		1.19	1.24
Average house area (sq ft)		250	251
Wall material (%)	straw/grass/jute/bamboo	12.0	11.2
	tin	14.8	25.2
Roof material (%)	straw/grass/jute/bamboo	15.2	6.4
	tin	72.8	87.2

5.2 Household sanitation

Low laying water levels and subsequently infection with water borne diseases are very prominent in *haor* areas, due to extended flooding and heavy rainfall. This problem is aggravated if floods inundate tube wells and latrines. At the beginning of the project, 59% of interviewed households used traditional latrines and 27% used the open field for this purpose. Only 33% of the sample households had water sealed latrines. By 2009, the use of water sealed latrines had increased significantly and about 87% of the households now use water sealed latrine, most of them provided by the SCBRMP. The traditional use of hanging latrines near the flowing river adjacent to each residence was reduced to only 2%. Table 7, represents the drastic improvements in sanitation in the project area.[7]

Table 7: Changes in household sanitation situation over the period

	Base Year #	Base Year (%)	2009	2009 (%)
Water Sealed or Pacca Latrine	33	13.2	218	87.2
Not Water Sealed/Kacha	147	58.8	25	10
None/Open Field	68	27.2	6	2.4
Other	2	0.8	1	0.4
	250	100.0	250	100

The people of haor area have been thriving for a dependable water supply for their drinking purposes for a very long time. Decades ago, people used untreated surface water from haor, Beel, river or pond as sources to meet drinking and other domestic water demand. As a result, the incidence of diarrhea and water borne diseases were high. There was no remarkable intervention for safe drinking water through the public sector until the emergence of the State of Bangladesh (1971). Basically a supply driven strategy and top-down planning were followed in the implementation of the water and sanitation program. Since the start of SCBRMP, there was a big push for providing safe drinking water. At the beginning of the project about 82% households drank water

[7] The SCBRMP project set up 1,167 tubewells and 32,613 water sealed latrines in the project area.

from neighbors or public owned tube wells, whereas, this situation changed a lot due to the intervention of the SCBRMP. By 2009, 35% of participating households use project community owned tube wells water. At the same time, sample households no longer use *Beel*/*Hoar*/river water for their drinking purposes. Table 8 illustrates the situation of access to safe and sources of drinking water of the sample households.

Table 8: Sources of drinking water for sample households

Attribute	Base Year	Base Year (%)	2009 #	2009 (%)
Own tube well	39	15.60	50	20.00
Tube well owned by other	205	82.00	111	44.40
Tube well set by SCBRMP	1	0.40	87	34.80
Pond water	1	0.40	1	0.40
Beel/haor	1	0.40		0.00
River	2	0.80		0.00
Other	1	0.40	1	0.40
Total#	**250**	**100.00**	**250**	**100.00**

5.3 Household asset ownership

The study data shows asset ownership changed positively over the period. In base year 74% households had beds in base year but it has increased to 80% in impact year, similarly other wooden furniture like table and chair has increased by about 12% within this period. Other assets are like fishing nets, boats, livestock, poultry birds and trees also increased by 3-7% within this project period. The study also reveals that fewer luxury assets such as radio, television, gold, cabinet, etc. are possessed by CO members and also increased at the same time. Precious items like rickshaw, bicycle, mechanized boat, shallow machine, power tiller and sewing machine have been possessed only few households own them and their value is much higher than other assets. One significant change observed in mobile ownership, in base year only one household had mobile phone whereas this number increased to 19 in impact year. Table 9, presents the status of asset ownership among CO members households.

Table9: Asset ownership (% of sample households) in base and impact year

SlNo	Asset	Owned # of HH	% of ownership Base year	Owned # of HH	% of ownership in 2009
1	Rickshaw/Van	5	2.00	8	3.20
2	Bicycle	12	4.80	25	10.00
3	Table	106	42.40	133	53.20
4	Chair	105	42.00	138	55.20
5	Boat	38	15.20	55	22.00
6	Mechanized Boat	0	0.00	1	0.40
7	Fishing net	31	12.40	42	16.80
8	Plough	93	37.20	94	37.60
9	Shallow machine	2	0.80	5	2.00
10	Power tiller	3	1.20	6	2.40
11	Radio/cassette	13	5.20	21	8.40
12	TV	26	10.40	44	17.60
13	Gold (Ornament) gm	96	38.40	109	43.60
14	Sewing mechine	5	2.00	6	2.40
15	Beds/Cots (Khat)	186	74.40	201	80.40
16	Show case/Almirah	57	22.80	81	32.40
17	Cattle/Buffalo	98	39.20	112	44.80
18	Cart	4	1.60	6	2.40
19	Electric fan	12	4.80	37	14.80
20	Thresher machine	1	0.40	3	1.20
21	Trees	77	30.80	83	33.20
22	Goat/Sheep	24	9.60	30	12.00
23	Poultry	108	43.20	119	47.60
24	Mobile	1	0.40	19	7.60
25	Meat safe	0	0.00	3	1.20
26	Motorcycle	0	0.00	2	0.80
27	Solar pannel	1	0.40	5	2.00
28	Auto rice mill/Husking mill	0	0.00	2	0.80

29	Sofa	1	0.40	3	1.20
	Total HH 3	250		250	

6. Household Financial Condition

6.1 Household Income Profile

Households were asked to estimate their income from different sources for the 12 months prior to the survey. A similar study was conducted in the base year with the sample households, so that based on the present impact study we can make a comparison of the situation before and after the project intervention. From the impact study it is observed that the CO members' household incomes have risen within this period. Table 10 shows that the total annual income per sample households has increased significantly within the project period, i.e. 67% growth of income compared to the base year.

Apart from cultivable land, natural resources have been playing an important role for the *haor*'s peoples livelihoods. Households involved in COs have about two acres of cultivable land per participating households. However, this does not reflect the real economic condition of respective households. Due to lower cropping intensity and vulnerability of crops, households do not have sufficient agricultural production to sustain on. Since the CO members are mostly marginal farmers, their main source of earnings are from agriculture. Contributions from own farming were almost the same in the base and impact year in percentage of overall incomes, but total earning from farming increased by a factor of two within the project period. In the base year, total earning from farming was Tk.15,520 while it has increased to Tk.25,219 in 2009. The second highest contributor to household income is petty trading/business, which has increased in terms of the average total amount contributed by about 55% compare to the base year (Table 10). The present study demonstrates that contributions from fishing related activities have increased about 114% from the base year. In the base year income from fishing was Tk.3,669 per household on average while, this amount has increased to Tk.9,130 in 2009. Table 10 shows that income from non agricultural day laboring remains almost the same in both survey years. Income from non formal sectors (Beel leasing, sale of fruits, land mortgage and sale), showed the highest growth within this period.

Table 10: Change of households' income from base to impact year

		Base Year		2009		Variance
	Sources of Income	**Income\(HH)**	**%**	**Income\(HH)**	**%**	**%**
1	Own farming	15520	31	25219	30	62
2	Service	5932	12	9899	12	67
3	Day labor (agriculture)	3863	8	5451	7	41
4	Day labor (others)	8827	18	9130	11	3
5	Fishing/aquaculture	3669	7	7839	9	114
6	Petty trade/business	9024	18	13980	17	55
7	Cottage industry	160	0	257	0	61
8	Rickshaw/boats	1022	2	2956	4	189
9	Other	1401	3	7979	10	470
	Total HH#	**49418**	**100**	**82708**	**100**	**67**

6.2 Household expenditure

The impact study also disaggregated household expenditure for different consumption items. A large share of 55.5% of total expenditure is used for food items. The next highest share on average was for health expenditures (7.9% of total). See Table 11 for a complete break-down of types of expenditure.

Table 11: Average annual household expenditure by items

Items	**Average Expenditure 2009 (TK)**	**%**
Expenditure on food items	40623.21	55.5
Clothing (Male)	2503.40	3.4
Clothing (Female)	2678.40	3.7
House repair/building	3300.80	4.5
Education	4442.00	6.1
Health	5776.60	7.9
Fuel/Electricity	2258.95	3.1
Travel	1864.67	2.5
Savings	1486.44	2.0
Land (purchase, tax, mortgage)	2248.20	3.1
Livestock	172.26	0.2
Furniture and equipment	524.80	0.7

Festivals, ceremonies, marriage etc	5278.40	7.2
Total HH#	**73158.13**	**100**

6.3 Status and Source of Credit

Despite the huge expansion of micro-credit programs by the SCBRMP in the project area, the debate about its effectiveness on poverty alleviation is still on. Our impact study data show that the numbers of average loans received per household from informal sources has reduced slightly (Table 12). Also, fewer households had loans (107 in 2009 compared to 184 in the base year). However, the volume of loans has increased about 77% from the base year. Since micro finance institutions and projects like SCBRMP have been dominating the supply of micro credits, the dependency for credits from informal sources by sample households has decreased significantly. Though people of lower income segments are now less involved in non formal credits, such non formal sources of credit still play a vital role in the rural economy. On average, households took Tk.11,332 in loans from these sources. Though the average interest rate for loans went down from the base year to 2009 because of a reduction of informal credits, the current rate of 73% per annum is still substantial.

Table 12: Informal source of loan of the sample households

Sl. No.	Name of Sources	Base Year	2009
		N =184	***N = 107***
1	Number of loan per year	1.47	1.02
2	Total amount of Taka	6418	11332.
3	Interest (%) per year	81	73

Table 13 indicates that 30% of COs family members are involved in other micro finance institutes (MFI), and out of those, 27% took a loan from those institutes. The average loan size from these MFIs is more than Tk.10,000 . Out of all sample households, 28% keep their savings in other MFI, with average savings per households reaching about TK.3,000. There was no report of MFI activities in the base year, most likely since none were operating in this area and most NGOs have only started giving out loans from 2004 onwards.

Table 13: Status of involvement in other Micro Finance Institute (MFI)

Involvement		
	Base Year	**2009**
% of hh member involve in MFI	na	30%
% of hh member took loan from MFI	na	27%
Amount of credit taken from MFI (Tk)/HH	na	10590
% of hh member kept saving in MFI	na	28%
Amount of Savings accumulated in MFI (Tk)/HH	na	2723

It is observed from the impact study that the total number of credits distributed among sample households in 2009 was 383 while, this number was only 24 in the base year. Total 37 CO members' households received kind support from the project as crop demonstration. Another implication is that the amount of loans has increased about five times from the first loan received per household. Revolving capital formation is one of the important indicators of the project impact. Community Organizations used their accumulated savings in credit operations among members to enhance financial capacity of each CO. In the impact year, the total number of loans distributed from CO savings to member households was 128. The amount of credit increased from Tk.4,754 for the first loan to Tk.9,500 for the fourth loan. The financial implication of this availability of credit fund which is a diversification from previous non-formal sources is strengthening of COs as a self-help group. Table 14 shows the operational status of micro credits operated by COs.

Table 14: Status of micro credit operation conducted by different COs under SCBRMP

Loans	Base Year			2009		
	Loan from CO	#HH	SCBRMP Loan	CO Loan	#HH	SCBRMP Loan
	Name			Name		
First Loan	Project CBRMP	21(8%)	4,238	From CO	65 (26%)	4754
				SCBRMP	166 (66%)	4280
Second Loan	Project CBRMP	3 (1%)	10,000	From CO	44 (18%)	8034
				SCBRMP	118 (47%)	9203
Third Loan				From CO	14(06%)	10357
				SCBRMP	53 (21%)	13943
Fourth Loan				From CO	4(02%)	9500
				SCBRMP	10 (04%)	24800
Crop demonstration					26 (10%)	4950
Seed Support					11 (04%)	1101

7. Household Food and Nutrition

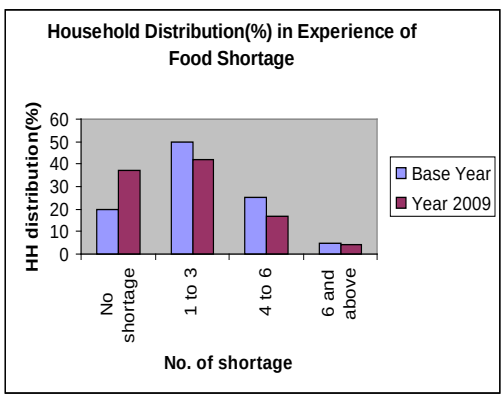
Food security is one of the key livelihood indicators that reflect the conditions of poverty and nutritional vulnerability. In rural Bangladesh, food consumption depends heavily on the crop production cycle. The questionnaire included questions about duration, or the number of months with food deficit, of the respective household. The access to micro finances and diversification of economic activities can enhance food security of the households by increasing overall income as well as reducing/spreading risks of shortfalls. The SCBRMP project provided micro credits to facilitate the engagement of participating households in more diverse economic activities such as agriculture, fisheries management, livestock rearing and infrastructural development. Fisheries management and livestock rearing created income opportunities directly to the participants while, infrastructure lime construction of road created better marketing facilities for the communities in project area.

This section describes the seasonality of household's nutritional status; the data show that in the base year 20% of households had no deficit of food, 50% of households had a maximum shortage of up to three months, 25% of households had a shortage for 4 -6 months and there were 12% of households with food shortage for more than six months per year. The impact study data clearly show that the food security situation has much improved compared to the base line situation. In 2009, out of the same sample 37% of households had no deficit of food, 42% of households had a maximum shortage of up to three months, 17% of households had a shortage of 4 -6 months and only 4% of households had a food shortage of more than six months (Table 15). While there was an increase in the share of households with no food shortage, the share of the most food insecure households has not changed. It will be interesting to question why the project impact does not have seem to have reached the very poor.

Table 15: Average duration of food shortage experience by sample households (base year and 2009)

Numbers of months of food shortage per year	Base Year	2009
	HH# distribution	HH# distribution
No Shortage	50 (20)	93 (37%)
One to Three months	126 (50%)	105 (42%)
Four to Six months	62 (25%)	42 (17%)
Six months and above	12 (5%)	10 (4%)
	250 (100%)	**250 (100%)**

Fig- 2



During the survey, respondents were asked directly about their day to day protein intake. Data show significant improvement in food consumption in 2009 compare to the base year. In the baseline data, 39% of households reported to eat meat and intake was on average 37 times in a year. In the impact year, this figure had increased to 58 times per year. Similarly in the base year, 86% of households consumed eggs on average 100 times in a year while in the impact year, the average consumption of egg was 128 times per household for all sample households.

Milk consumption, another important source of protein, has also increased significantly over the project period. In the base year only 9% of households consumed milk whereas in 2009, this share has increased to 65%. The average frequency of consumption per households was 133 times in the base year but this has increased to 210 times per year in the impact year. Table 16 shows consumption of meat, egg and milk per household over the study period.

Table16: Change in meat, egg and milk intake over the project period

	Meat		Egg		Milk	
	Baseline	**Impact**	**Baseline**	**Impact**	**Baseline**	**Impact**
Total Number of HH Consume	97	250	215	250	97	162
% of Consumption	39	100	86	100	39	65
Average Consumption time/Year	37	58	100	128	133	210

8. Institutional involvement

Membership and/or participation in institutions functions as a good proxy of social capital, because it provides members with network access to material and non-material goods and/or services. The most commonly access of institutions are capacity building trainings of CO members on different skill/capacity development over the project period. Study data show that there were three different types of training conducted by the SCBRMP, namely individual skill development, management capacity and human development. Among sample households, baseline data show that during the first year of the project only one household had received skill development training while this number has increased to 46 in 2009; similarly in the base year only 5 sample households' members received training on CO management and human development whereas this number stands to 122 (80 and 42, respectively) in 2009.

Table 17: Average number of different trainings received by sample households

	Base Year	2009
Occupational Skill training – SCBRMP	1HH	46HHs
Management training – SCBRMP	5HHs	80HHs
Human development training – SCBRMP	0	42HHs

9. Infrastructural Impact

9.1 Rural Infrastructure Development Programs

The rural infrastructure development component of SCBRMP has been playing a vital role of rural poverty alleviations among the five components of the project. The project supported two types of rural road constructed, namely concrete and concrete block roads, in the organized communities, under this scheme. A total of 17 km road have been constructed in the study Upazilas. These roads and culverts, community centers created opportunity for enhanced trading and social networking within and outside the project community. The impact study data show that fewer kacha roads were constructed in the study area has in the impact compared to the base year. Simultaneously, Pacca road construction has increased to 2.05 km in 2009 from 0.69 km in the base year.

Table 18: Changes in road construction/communication

Description	Base year	2009
Average amount of Kacha road constructed in sample area (Km)	1.91	1.62
Average amount of Pacca road constructed in sample area (Km)	0.69	2.05

Over the project period, significant diversity has emerged in economic sectors and CO livelihood fostered through infrastructure development such as construction of concrete roads in the rural area. Along with the microcredit based employment generation program, road construction in rural areas created diversified access to different institution (such as growth centers, health centers, government offices, financial

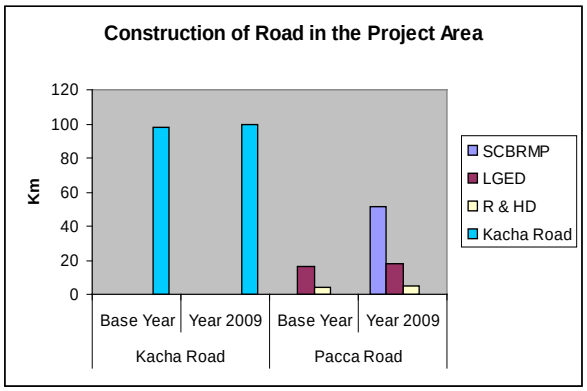
institutes, agriculture service centers, local government institutes (union Parishad) and educational institutes) for all strata of people in the target villages.

Considerable changes have taken place in rural road sector in the project area due to interventions by different agencies to strengthen the rural development in this area. The impact study data shows that while only two kilometers of earthen road have been constructed in the project area, the length ofpacca road increased significantly in the samples area. In the base year there were only 29 km Pacca road whereas this figure has increased to 97 km in 2009. The Sunamganj Community Based Resource Management project constructed 95 km Pacca road in the sample unions. Apart from SCBRMP and LGED there was no new road constructed by any other departments in the sample villages after the project intervention.

Table 19: Changes local infrastructure over the project period

	Base Year				2009			
Kacha road in village (km)	98.25				99.7			
Pacca road in village (km)	20.3				74.59			
Pacca road contructed by (km)	1=SCBRMP	2=LGED	3= R&HD	4= Other	1=SCBRMP	2=LGED	3= R&HD	4= Other
	0	16.3	4	0	51.75	17.94	4.9	0

Fig - 3

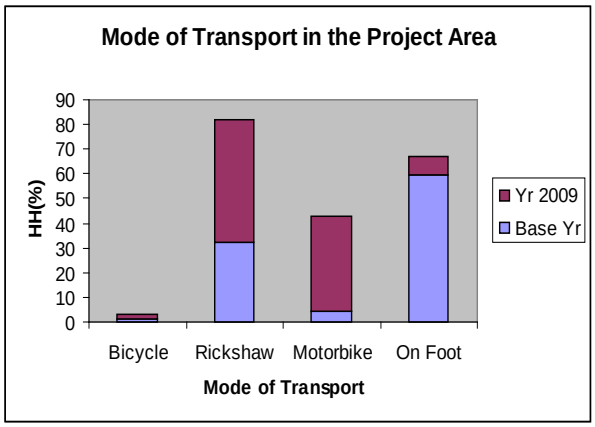


The issue of mobility is particularly important for both urban and rural people. The project area is low lying and heavy rainfall, and extended flooding interrupt the normal mobility of rural people. As a result people can't use single type of transport throughout the year. Impact study data show that in the base year the majority of households (59%) traveled to distant places by foot, 32% people used rickshaw, 4% used motorbikes and only one percent of respondents used a bicycle. In the impact year this scenario has changed lot: 50% people of sample households used rickshaws, 38% traveled by motorbike and only 8% community people travel on foot. This is a results of increased household transportation assets partly brought about by the project intervention due to improved household income.Table 20 shows the comparative situation of different modes of transport used by the community people in the two years.

Table 20: Number of households using different modes of transport (base year and 2009)

	Base year								2009							
Mode of transport used by community	Bicycle		Rickshaw		Motorbike		On Foot		Bicycle		Rickshaw		Motorbike		On Foot	
	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
	3	1.2	81	32.4	11	4.4	149	59 0.6	5	2	124	49.6	96	38.4	19	7.6
Total HH #	250															

Fig -4



Annex – 1

Baseline Questionnaire

Form No.:

Household Survey Form
Community Based Resource Management Project(CBRMP)
Local Government Engineering Development(LGED)

1. Name of the HH head:……..……**2.** Father/Husband name:……..……..

3a)Respondent's name:……**4**a) Village:……..……4b)Union:……

4c)Upazila……..……4d) District……

5a) CO Member Name ……5b) CO Name……

5c)Date of Joining……5d) Position in CO: President / Manager / Secretary / Member

Sl. No.	Name	Relation with HH	Age(Year-Month)	Marital status	Educational Qualification	Expert/Train	Cooptation		Monthly Income (Tk.)
							Main	Additional	
1									
2									
3									
4									
5									
6									
7									
							Household Monthly income		
							Household Yearly income		

7. Sources of income for all household:

Sl No	**Name of source**	**Annual income from source Taka**
a)	Own farming	
b)	Service	
c)	Day labor -agric.	
d)	Day labor - other	
e)	Fishing / aquaculture	
f)	Petty trade/ business	
g)	Cottage industry	
h)	Rickshaw / boats	
i)	Other	
Total		

8a) Do household members out-migrate for livelihoods: Yes/No ….

b) if yes – how many persons: M…… F…..

c) How many months in a year.....

d) Name of Months……..

9c) **Other Assets related**

Description	**Number**	**Ownership (Male/Female/Joint)**
Home		
Cycle		
Boat		
Plough		
Shallow machine		
Power tiller		
Radio/cassette		
TV		
Ornament		
Swing machine		
Cot		
Almira/Showcase		
Cow/Horse/Buffalo Cart		
Motorcycle/ scooter		
Electricity		
Fan		
Threassure machine		
Trees		

Others(With name)		

9. Assets

a) **Land related**

Type of Land	Total decimal	Ownership (Male/Female/Joint)
a) Own land		
Homestead		
Cultivated		
Pond/dish		
b) Other (Sharecrop in/ Leased/ Mortgage in)		
c) Sharecrop/ Leased/ Mortgage out to others)		
Total		
Total Cultivable land		

9b**). Livestock**

Description	Total number		
	owned	sharecrop	Total
Cow/buffalo (including calf)			
Bullock (including calf)			
Sheep and goats			
Poultry			
Other			
Total value of Land(Tk.)			
Total value of other assets(Tk.)			

10. Housing:

Type of Home	Number
Grass/Leaf	
Tin	
Semi Pacca	
Pacca	
Total	

11 a) **Source of Drinking Water:** Tubewell/Kua/Pond/River/Cannel (Use √)

b) Tube-well in own homestead: Yes/ No

c) Time required for collection of drinking water…….minute.

12. Sanitation: Open/Slab ring/Sanitary/None

13. Field crop production:

Crops		Area grown(decimal)	Total production (Maunds/Kg)	Yearly value (Tk.)
Paddy				
Vegetable	Homestead garden			
	Field			
Other crops				
Fish	Pond			
	Open water catch			

14. Food security

a) Number of months when experience food shortage or difficulty in current year:…….month.

14b) Number of times per month normally consumes:

Meat, chicken	
Eggs	
Milk	

14c)**. Lone**

Times per year	Total amount (Tk)	Interest % per year

15. Annual expenditure on clothing:

Total Taka	Purchased by men	Purchased by women

16. Women's Mobility:

Place	One/more than one in a month	Less than one in a month	Never
Market / bazar			
Bank			
Post office			
Land settlement office			
Union perished			
Upazila headquarter			
Hospital/clinic			
Other			

17. Development service:

Lone	Received lone(Tk.)	
	From Project	Out of Project
First		
Second		
Third		
Forth		

Trainings	**Course number**	
	From project	**Out of project**
Professional		
Skill related		
Management		
Human development		

18. Information related to children less than 5 years: [Only applicable for children up to five years]

ID code	First name of children	Gender (Male/Female	Date of birth (DD/MM/YY)	Age (month)	Height (cm)	Weight (Kg)

Signature of data collector: **Full Name:** **Date:**

Annex – 2

Impact Study Questionnaire
CBRMP of LGED/WorldFish Center
Fisheries Research Support Project (FRSP)
Household Impact Survey Questionnaire

INTERVIEWER TO COMPLETE:

Name of the Community Organization (CO):…….. |__|__|__|

Name of the HH head: ……Father/Husband name: ……..

Member name: …….. M/F Relation with HH head: ……..……..|__|__|__|

Village: …….. Ward: ……. …….Union: ……. Upazila: ……..
Date of joining CO (DD/MM/YY): ……..

Position in CO: President / Manager / Asst Manager / Member

Main occupation of head of household:…….. …….. Female headed household (tick on) Yes/No

Q 1.1 Profile of Household Members:

Sl. No.	Name	Relation to H HH	M-1 F-2	Age	Education		1st occup	2nd occup
					Finish	Cont.		
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Relation:	**Education:**	**Occupation:**		
1-head of HH 2-wife/husband 3-son /daughter 4-grandchild 5-brother/sister 6-brother's wife 7-sisters husband 8-son/daughter of brother/sister 9-father/mother 10-grandparent 11-daughterinlaw 12-son in law 13-other (specify) 22-employee	**Finish**: 0-none 1 to 16 years of school completed 20-can sign name only 21-can read newspaper **Cont**: tick if yes	1-cultivate own land 2-cultivate own and sharecrop land 3-sharecropper only 4-rent out land 5-fishing 6-fish trader 7-fish net maker 8-fish processing 9-fish culture 10-fish gear trader	11-agric labourer 12-non-agric labourer 13-rickshaw/van 14-boatman 15-handicraft 16-petty trade 17-business 18-mechanic/driver 19-other employee/Non government service 20-teacher 21-government service	22-paid homestead work 23-housewife 24-livestock 25- Poultry rearing 26-- Carpenter/ Mason/blacksmith 27- student 28- beggar 29- no activity other (specify) …….

Q 2.1 Sources of income for all household of the **last year** *[Complete for each relevant source for **all hh members**]*

Sl. No.	Income source	Total No. of people	Average No. of months in year	Average person days per month	Average daily income Tk/day
1.	agriculture labour				
2.	non-agriculture labour				
3.	fishing				
4.	rickshaw/van/motorbike				
5.	boatman				
6.	Handicrafts				
7.	petty trade				
8.	domestic service for others				
9.	other daily income (specify)				

Q 2.2 Annual income from other sources (for which daily/weekly calculation is difficult)

Sl. No.	Income source	Total income Tk
1.	income from agriculture	
2.	business	
3.	government service	
4.	service (private/NGO)	
5.	fish and fish related income	
6.	drying/processing fish	
7.	aquaculture	
8.	renting out fishing equipment not used by household	
9.	hiring out draft power	
10.	sale of goats/sheep/cattle	
11.	poultry birds	
12.	milk and eggs	
13.	tree sale	
14.	sale of agricultural by products (straw, jutesticks, dung) - total	
15.	household savings	
16.	remittances	
17.	Other (specify).....	

Do household members out-migrate for livelihoods: Yes/No If yes, how many persons: M____ F____

Q 3.1 Household Assets

		Base Year	2009
Number of dwellings owned by household			
Total area of dwellings owned by household (sq feet)			
Materials of main house:	**wall**		
	roof		

[materials: 1-straw/leaves, 2-grass, 3-jutesticks, 4-jute mats, 5-bamboo, 6-wood, 7-tin, 8-earth, 9-brick, 10-tiles, 11-concrete]

	Base Year	2009
What kind of **latrine** do you have?		

[*1-none, 2-not water sealed, 3-water sealed*]

	Base Year	2009
Source of drinking water		

[1 – Own tube well, 2 - Tube well owned by other, 3 –Tube well by SCBRMP, 4 – Pond, 5 – Beel/haor and 6 – River)

Q 3.2 Do you own any of the following assets?

SL.No.	Assets	Total No.	Owned (No.)		Share Owned (No.)		Price in Tk
		2009	Base	2009	Base	2009	2009
1.	Rickshaw/van						
2.	Bicycle						
3.	Table						
4.	Chair						
5.	Boat						
6.	Mechanized Boat						
7.	Fishing Net						
8.	Plough						
9.	Shallow machine						
10.	Power tiller						
11.	Radio/cassette						
12.	TV						
13.	Gold *(sonar gahona)gm*						
14.	Sewing Machine						
15.	Beds / Cots *(khat)*						
16.	Show Case/Almira						
17.	Cattle/Buffalo						
18.	Cart						
19.	Electric Fan						
20.	Thresher Machine						
21.	Trees						
22.	Goat/Sheep						
23.	Poultry						
24.	Other						

Q 4. Present Land Ownership and Tenure

Q 4.1 Area of all Household's Land:

Sl. No.	Land use	Area (dec)	
		Base	2009
1	Own homestead land		
2	Homestead land owned by someone else		
3	Own pond or ditch		
4	Land owned and cultivated by the household		
5	Land cultivated last year but owned by others (Sharecropped/rented /mortgaged in)		
6	Land owned but cultivated last year by others (Sharecropped/rented)		
7	Khas land		
8	Land owned but mortgaged out		
9	Own non-cultivated land		

Q. 5. Field crop production

	Area grown per year		Total production per year	
	Decimal	**Change (Code)**	**Mounds**	**Change (Code)**
Paddy				
Other crops				
Total				

Change in last 5 years [Code: 1=decrease, 2=no change, 3=small increase, 4=big increase]

Q 5.1. Vegetable production

	Area grown per year		Prod Kg	Sales per year	
	Decimal	**Change (Code)**		**Taka**	**Change(Code)**
Homestead garden					
Field					
Total					

Change in last 5 years [Code: 1=decrease, 2=no change, 3=small increase, 4=big increase]

Q 6. Fish production

	Decimal		Approx kg per year		Sales per year	
	Base	**2009**	**Change (Code)**		**Taka**	**Change (Code)**
Pond						
Open water catch						
Total						

Change in last 5 years [Code: 1=decrease, 2=no change, 3=small increase, 4=big increase]

Q 7. Food security

										Number		Change (Code)		
Numbers of months experience food shortage/ difficulty														
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Numbers of times per month normally consume:														
										Month		Year		
										Meat				
										Eggs				
										Milk				

Change in last 5 years Code: 1=big decrease, 2=small decrease, 3=no change, 4=small increase, 5=big increase (note improved food security will mean a decrease in period of difficulty)

Q 8. Loans from money lenders

Times per year	Total amount Tk	Interest % per year	Change in amount (code)

Change in last 5 years Code: 1=big decrease, 2=small decrease, 3=no change, 4=small increase, 5=big increase

Q 9. Project services/inputs received to date

	Loan amount Tk		Training from project	Number of courses
Loans	**Loan from CO**	**SCBRMP**	**Types of Training**	
First loan			Skill training	
Second loan			Management training	
Third loan			Human development training	
Fourth loan				
Others		**Amount Tk/gm**		
Loan for demonstration				
Seed support				

Q 10. Membership of other MFI (NGO/Grameen bank)

Ever belonged to MFI	Yes / no		If now belong to an MFI	TK
Belong earlier but not now	If yes – name of MFI		Have current savings: yes / no	
Now belong to other MFI	If yes – name of MFI		Have current loan: yes / no	

Q 11.1. Expenditure

Expenditure on **Food items**
[In the last year how much did you spend in **cash** on food consumption and non food items?]

Sl no.	Item	Expenditure (Tk)
1.	Rice/wheat	
2.	Vegetables	
3.	Egg	
4.	Fish	
5.	Meat	
6.	Dal	
7.	Fruits	
8.	Edible oil	
9.	Biri/Pan/Tea	
10.	Spices (cooking)	
11.	Others (specify)	
	Total	

Q 11.2. Expenditure on non-food items

Sl no.	Item	Expenditure (Tk)	
		Amount Spent for Male	Amount Spent for Female
1.	Clothing		
2.	House repair/building		
3.	Education		
4.	Health		
5.	Fuel/Electricity		
6.	Travel		
7.	Loan repayment		
8.	Savings		
9.	Land (purchase, tax, mortgage)		
10.	Livestock		
11.	Furniture and equipment		
12.	Festivals, ceremonies, marriage etc		
13.	Other (specify)		

Q 12. Women Mobility (wife of HH head):

SL.No.	Do Women Household go to:	How many times in a Month	How many times in a Year	Not at all
1.	Market/Bazar			
2.	Bank			
3.	Post office			
4.	Land settlement office			
5.	Union Parishad			
6.	Upazila Head Quarter			
7.	Hospital/Clinic			
8.	Went to Beel			
9.	Went to Agri field			
10.	Other (specify)			

Q 13. Changes in/for Local Infrastructure

SL.No.		Base year	2009	Remarks
1.	Kacha road in your village (Km)			
2.	Pacca road in your village (Km)			
3.	Pacca road constructed by (SCBRMP =1, LGED = 2, R&HD =3 and Other specify =4)			
4.	No. of Meeting place/Community Center in your union			
5.	Number of Market/Bazaar in your union			
6.	Mode of transport used by community (Bicycle = 1, Rickshaw = 2, Motorbike = 3 and on Foot = 4),			
7.	Access to markets			
8.	Access to resource base Agri field/Beel/waterbody			
9.	Access to health services			
10.	Access to education			
11.	Access to non-farm livelihoods			
12.	Access to Upazila/Town			
13.	Other Improvement due to infrastructure (specify)			

Code for Sl. 7 to 12: (good =1, Better =2, bad =3)

Any other comments:

Name of Interviewer : _____

Signature : _____