#### **WORKING PAPER -1**

# Sunamganj Community Based Resource Management Project (SCBRMP) –LGED

First Round Livelihood Impact Monitoring Report of Beel User Group (BUG) Member



The WorldFish Center and SCBRMP-LGED

Dhaka - 2008

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FISHERIES RESEARCH SUPPORT PROJECT (FRSP)

The WorldFish Center and SCBRMP-LGED

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## **List of Acronyms and Abbreviations**

ASA	Association for Social Advancement				
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				
СВО	Community Based Organization				
CBRMP	Community Based Fisheries Management Project				
FGD	Focus Group Discussions				
FRSP	Fisheries Resource Support Project				
HH	Household				
IFAD	International Fund for Agricultural Development				
IGA	Income Generating Activity				
LGED	Local Government Engineering Department				
NGO	Non governmental Organization				
PRA	Participatory Rural Appraisal				
SCBRMP	Sunamganj Community Based Resources Management Project				

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#### **Executive summary**

Despite decades of development initiatives in different parts of Bangladesh, poverty persists predominantly in the North Eastern part of the country. The level of poverty is typically higher for those who depend on fishing as their principle occupation. Regional variations in poverty are also influenced by natural hazards. 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 access to natural and other resources. This report summarizes the livelihood impact of this initiative on a sample of household members of a Beel User Group (BUG).

First round livelihood impact monitoring of BUG members (considered as baseline), covers a wide range of indicators considered for livelihood development in the SCBRMP. The purpose of the study is to monitor livelihood changes of the BUG members over the SCBRMP project period. The intended outcomes of the monitoring are:

- To quantify changes in livelihoods among project participants;
- o To understand the causes behind these livelihood changes;
- o To analyze the periodical impact on the BUG members over the project time.

First round monitoring of livelihood and the surveys conducted in 125 sample households of BUG members were carried out during March – May '08.

Based on experience from the baseline survey, livelihood monitoring explores aspects of the population profile, income, occupation, landholding, assets, food security, women mobility, institutional involvement and credit utilization. In this survey, the households were categorized as – fulltime fisher led households (38%), part-time fisher led households (44%) and non fisher led households (18%). These categories have been decided from the fishing status of the household head.

#### Role of Social and Human Capital in Livelihoods

Membership in local institutions is positively correlated with wealth across all the defined membership categories of the study, especially membership in integrated projects like SCBRMP. Male participation is most dominant in local institutions and committees, and women are gradually involved by the project as participants in fisheries management. However, at present women represent 13% of the total BUG memberships but target up to 30% of total institutional memberships. Women of participating households got more mobility to other institutions (Union Parishad, Health services, NGOs, Bank and Samittees) than other sections of same women in the community.

The fisheries management project has been following community approaches (involving fisher and other non fisher led households), which has allowed fulltime and part time fisher households to have more access to resources allowing them to participate in project activities more than other communities. Increased participation provided access services and established connections to government authorities.

Higher literacy levels are strongly correlated with the ability to utilize an increased number of services and can possibly be associated with better living conditions and higher status as well. The present study reveals that only 41% of the BUG member households can read and write.

This is low when compared to most parts of the country. About 23% of household members completed grade five (V), less than 1% went beyond class 10 (X) and about 17% dropped out before class five. However, it is worth mentioning that total enrolment in primary education has been increasing gradually.

#### **Livelihoods Strategies**

#### **Income and Expenditure**

Primary income sources in the project area are diversified, having agriculture as the dominant income source. About 38% of sample households are fisher led and 18% have been earning from other sources. The study also reveals that 44% of households are part-time fisher led and depend primarily on income from fishing, while poor households always depend on agricultural and non-agriculture labor; including rickshaw pulling, stone collection, earth cutting, homestead work, etc.

About 2% of the households have remittances. These households seem to be doing relatively better compared to other households, as they have a higher income than the rest of the group.

Sampled households are the most vulnerable ones for having a lower level of education, poor asset bases, weak social networks, food insecurity, and often miss workdays because of limited access to the common property resources like waterbodies. Their main source of income (30%) is fishing followed by agriculture (12%) and non agricultural labor.

The demand for agricultural labor does not remain constant and there is a seasonal fluctuation, which sometimes descends abruptly due to flashflood. The wage rate (per day) varies from Tk 100 to Tk 150, but women get a lower wage rate than their male counterparts for the same amount of work. The largest expenditure for households is food, followed by healthcare, clothing and loan repayment.

#### Access to savings and credit

Access to savings increases with wealth and in sample households living in haor cluster areas, having savings is associated with membership in CBRMP or NGOs. 97% of the sample households use credit obtained from different sources, out of which 68% is loan supplied by the SCBRMP. BRAC supports 7% of households, followed by 6% by ASA, and 16% of the support comes from other local NGOs. Apart from micro credit for daily needs, 80% of households still depend on loan from money lenders; 63% non formal loans provided by the money lender and by 17% by relatives. The sample BUG members' households use most of their credit on basic needs: food (55%), healthcare (6%), clothing (5%), house repairing (5%), etc.

#### **Productive assets**

Size of land holding varies greatly within households' categories; fulltime fisher led households possess 40 decimals, part time fisher led households own 80 decimals, while non fisher led households have a total of 111 decimals of land. Across all categories of people 96% of households own homestead, 15% have their own ditch and 34% have cultivable land.

Although housing is considered to be a productive asset, the present study did not analyze the quality of housing. This is because the type and quality of housing are often determined by

household materials. About 61% of wall material is straw/leaves, 10% is tin, whereas only 5% has brick.

Due to ecological conditions, pond fish culture is not common in the project area and only 15% of households own a pond or ditches (frequently submersed by flood water). Ponds are owned mostly by non fisher households, and unlike other parts of the country, culture fish have a lower demand in the local market and thus a lower price.

More than 50% of all households have access to cattle which is the preferred rearing activity. Goat rearing is less practiced, and sheep rearing more attractive to households in this *haor* area. Usually for poor households, ownership of cattle is mostly linked with micro credit from SCBRMP, NGOs or Grameen Bank.

#### Access to institutions

Access to other institutions has been changing over period, especially access to local government institutes like Upazila Parishad, Union Parishad and health services. The availability of services and their accessibility also varies across ecological zones within the same district. For example, government health services are more active in Sadar areas while other Upazila have less accessible facilities.

Different departments at Upazila level offers the commonly used services, which were utilized by a notable percentage of sample fisher households. Primary occupation of household head is another key variable that influences whether or not a household receives services. Fisher households frequently access the services of the Fisheries Department, Department of Youth, Cooperative, veterinary offices and land registration office.

#### Gender

Compared to other parts of the country, mobility of women was limited in the survey area, but was increased by the project intervention. Women from poor households were the most mobile, and during the study period 13% visited the local market, 81% attended the clinic/hospital, 50% went to Union Parishad, 22% went to the waterbody and 42% to the Upazila offices. Women were present at village meetings, although fewer were able to attend meetings elsewhere, and most women – especially poorer women - were able to visit the village shop for small purchases and to fetch water and fuel.

#### **Food Security**

About 74% of fisher households always suffer from food insecurity between one and three months every year, while only 3% of households have food shortage between four and six months. In fact, *haor* area food insecurity depends on the intensity of flash flood which causes crop damage. The number of months affected by flood determines whether the household will have sufficient food or not.

The livelihoods monitoring of BUG members has been carried out to presents an array of multiple and overlapping vulnerabilities for the fisher community in SCBRMP. There is an adverse interplay between a vulnerable ecology and chronic social disadvantages, leading to high levels of consumption shortfalls and high livelihood insecurity. To tackle these problems, a comprehensive approach needs to be strengthening through SCBRMP project.

#### The following investments strategies are recommended:

- Considering vulnerability of the local community more resource poor families should include in BUGs for fisheries management.
- Still non formal credit is playing a dominant role to mitigate households financial crisis. The SCBRMP highest percentage of micro credit to the participating households. Additional provision of low interest rate micro credit for BUG member households may provide better access to other income opportunities like business, livestock keeping, waterbody leasing and fulfilling emergency basic needs.
- Maximum training provided by the SCBRMP to develop human capacity of the participating households. These people have very limited access to capacity development training by other institutions in the project area. More attention should be paid to reach greater proportion of participants to develop skills.
- Women's status in the region is considerably poor. Efforts should be made to develop women's capacity through organizing increased number of skill training. Proportion of women participation in fisheries management activities should enhance gradually. Establish linkage with other development agencies will empower and provide social mobility. In addition to this emphasis should be given to both social mobilization as well as group savings.
- Increasingly fisher households are participating in project activities through accessing more waterbodies. The project already acted as a catalyst to enable fisher households to bring under social networks with government and private service providers. However, more attention is needed to develop institutional strength e.g. democratic practice, regular meeting, fiscal discipline and equity of distribution. Improvement is also required in marketing, participatory planning, and greater transparency in safety net programmes.

#### 1. Introduction

#### 1.1. Background

The Community Based Fisheries Management (CBFM) initiatives in Bangladesh have been implemented by a partnership of the WorldFish Center, Government Departments, NGOs and Advance Research Institutes like Universities, and have been funded by different international donors. Sustainability of CBFM initiatives will continue to be assessed and the approach will be extended throughout a range of waterbodies and social conditions. Likewise, the WorldFish conducted a CBFM research funded by the International Fund for Agricultural Development (IFAD), which offered major incremental gains to:

- expand pilot CBFM activities from isolated Beels and wetlands to the deeply flooded *haor* basin, especially *haor* area of Bangladesh;
- link with and influence a major new development project in Bangladesh the Sunamganj Community Resource Management Project (SCBRMP) and Comanagement project in Char Livelihood Project areas (CBFM-CLP);

After successful completion of IFAD funded CBFM-SSEA project, a new partnership with a specific research agenda commenced with the SCBRMP. As a result, Fisheries Research Support Project (FRSP) – funded by SCBRMP of the Local Government Engineering Department (LGED) in Sunamganj District – has been initiated to support impact monitoring of the SCBRMP in Bangladesh. The overall objective of SCBRMP is to alleviate poverty of 90,000 households of Sunamganj through ensuring their access to resources and building their other livelihood capitals (Figure 1). The project comprises five components: a) Labor Intensive Infrastructure Development; b) Community Based Fisheries Management; c) Agriculture and Livestock Development; d) Microfinance Services; and e) People Centered Institution Building. The project commenced in January 2003 and will end in June 2014. The total funding of the project is BDT 20,046.63 Lk.

The Community Based Fisheries Management is an important component and has a plan to access a large number of water bodies of different sizes and bring those under community based sustainable resource management. The project has the obligation to maintain conservation and biodiversity of Beel fisheries in its process of intervention. Along with other activities the intervention includes some studies for assessing the impacts of project activities on biodiversity of Beel fisheries and livelihood impact on BUG member households. In this connection SCBRMP invite WorldFish Center for conducting some of those studies in the project's working area.

The objectives of the fisheries component are:

- i) assessing the impact of community based fisheries of SCBRMP on fish catch (by volume and value) and biodiversity through a regular catch survey at 60 project sites;
- ii) estimating and simulating sustainable level of yield and corresponding fishing efforts and developing management models for scaling up;
- iii) livelihood impact analysis of Beel User Group (BUG) members in beel fisheries involved in 25 project sites; and
- iv) Disseminate findings to a wider level; national and international audience.

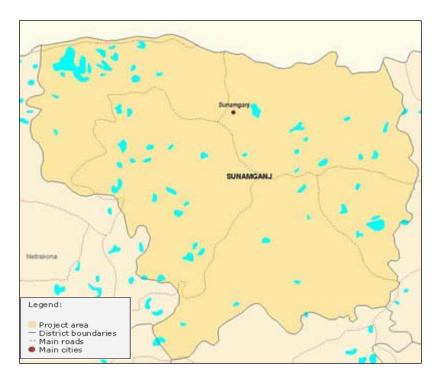


Figure 1: Sunamganj Community-Based Resource Management Project area.

#### 1.2. The Livelihood Monitoring of BUG Members

In order to monitor changes in livelihoods it is important to identify livelihood indicators that enable SCBRMP to understand how fisheries management programs impact upon the lives of the project participants. These indicators need to be verified at different stages of the project to ascertain impact of fisheries management on the poor participants.

#### 1.3. Scope of work

The WorldFish Center will collect data through a randomized sample of BUGs members. The Center will also analyze these data and prepare a comprehensive report. A random sample of members shall be taken from the list of existing profiles and impact shall be measured by reinterview to obtain updated values of the profile indicators.

The WorldFish Center shall be responsible for drawing the samples from the lists (prepared by SCBRMP) of BUGs and BUG members for interview. The samples shall be drawn by two-stage sampling. The first-stage sample consists of 25 BUGs selected by Linear Systematic Sampling and the second-stage sample consists of 125 BUG members selected by Simple Random Sampling from the members of the BUG selected in the first stage. The second-stage sample shall consist of 5 members per first-stage BUG.

#### 2. Methodology

#### 2.1 Analytical framework

This framework was developed to guide the impact monitoring process by the IFAD review mission of the SCBRMP. The monitoring has considered to measure changes in the indicators over the project period. The WorldFish Center developed a questionnaire to measure the present status of the livelihoods situation, giving maximum attention to securing comparability with other stages of monitoring. It captures a number of factors influencing livelihood changes, measured by both quantitative and qualitative indicators.

#### 2.2 Quantitative surveys

Livelihood study of BUG members of the SCBRMP will provide essential and appropriate information of livelihood changes. The study draws upon a quantitative assessment conducted by the WorldFish. The impact monitoring study will captures the main trends and characteristics of the BUG members' livelihoods. This overview categorizes: sources of income. housing status, sanitation, education. occupation, ownership of assets, land holding, agriculture, food security, sources of finance. institutional involvement, women mobility and human capacity building. The contextual studies will provide deeper understanding of the issues underlying livelihoods in the project beneficiaries. These findings



provided a basis for drafting the questionnaire and to identify issues that require future exploration.

The quantitative survey in the FRSP was initiated in March 2008. A pre-coded questionnaire was used for data collection (Annex 1). The study was designed to collect data on livelihood indicators.

#### 2.3 Sampling

Two stage sampling design was introduced to make the sample representative at the potential participant level.

<u>First stage</u>: A list of potential waterbodies was selected for livelihood surveys following the waterbodies number.

<u>Second stage</u>: Five BUG member households were randomly selected from each waterbody in the project area.

The households sample size for this study was recommended by the IFAD mission. A total of 125 households from a list of 25 BUGs have been covered in this livelihoods monitoring.

#### 2.4 Quality control

The questionnaire included a guideline for each question. The livelihoods monitoring maintained data quality through cross checking of questionnaires. The SCBRMP management provided continuous feedback on filled in questionnaire to ensure data quality. The monitoring personnel

monitored data collection, provided on-the-spot training, feedback after reviewing the filled-in questionnaire on a sample basis, and shared experiences during team meetings. The FRSP management also closely monitored all interviews and provided specific feedback to the Research Assistants (e.g., questioning style, use of probing questions). As a follow up to cross check survey enumeration, the FRSP team leaders checked at least 30% of the sample households to identify the missing links, ambiguous answers, and digital errors, and provided feedback to the team.

#### 2.5 Data management and analysis

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

#### 2.6 Livelihood profiles

Human capital covers 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. Household profile is represented as a summary of different characteristics of the sample households within a certain period of time. In this livelihood monitoring, total number of sample households was 125 from 25 waterbodies of which 48 households are fulltime fisher led, 55 are part-time fisher led and the remaining 22 are non fisher households in the BUG list.

#### 2.7 Definitions of Sample Household Categories

#### **Fulltime Fisher**

 Household head that fishes for income or both for income and food. Catches fish all year round, and has no other occupation than seasonal laboring. Possesses a small amount of agricultural land and its prominent source of income is fishing.

#### Part-time Fisher

Household head that fishes for income or both for income and food. Catches fish for a
few months (4 to 5 months) during the year and has other occupations like laboring or
petty trading. Possesses a small amount of agricultural land and income from other
sources is greater than that from fishing.

#### Other

o Household head that does not fish for income and has other occupation types like petty trade, business, service or professional jobs. Have more than 0.4 ha (100 decimal) of land. Housing conditions are better than the other two categories, and has more leisure time for using push net or other small gears to catch fish in nearby waterbodies for own consumption. This category of people is not rich; other members of the household might catch fish for income.

#### 3. General Demographic Characteristics

#### 3.1 Household size

The status of different categories of respondents is given in table 1. The population profile of surveyed households was found to be 6.6 which, is slightly higher than the national statistic (5.8) for *haor* area.

Table 1: Status of different household categories and size of household

	Full-time Fisher	Part-time Fisher	Other	Total
Household sample	48	55	22	125
People per household	6.5	6.5	7.2	6.6

#### 3.2 Beel User Group membership

Table 2 shows membership status (including executive committee) and number of fulltime and part-time fishers of sample households in the executive committee of BUGs, which is smaller in fulltime and part-time fisher. However, number of BUG members in executive committee from the part-time fisher is 14% compared to 6% in fulltime fisher; on the other hand it is 9% in non fisher members. It is also apparent in all sample households that more than 85% are general members. Although this may simply reflect the comparativeness of lower hierarchy of the households targeted by the SCBRMP intervention, it can also be a reflection of increased social capital for those households.

Table 2. Membership types of sample households by membership status

		Full-time Fisher	Part-time Fisher	Other	Total
Position	President	1	1	0	2
	Secretary	0	3	2	5
	Cashier	0	4	0	3
	Member	47	47	20	112
Total		48	55	22	125

#### 3.3 Education and literacy

Education level depends on geo-physical location especially communication with the educational institutes. In the project area 20% of people are illiterate, 18% are below 5 years of age, 41% are literate and 21% can sign only (Tables 3 and 4). In the study area, literacy rate among female (39%) is less than male (42%) while more male members of the society can only sign compared to females. Absolute illiteracy among female is about 9% higher than male, excluding children up to age five.

Table 3: Level of education (Col % people) in sample households (All members)

	Se	Total	
Education	Male (%)	Female (%)	(%)
Children up to 5 years	17.9	18.3	18.1
None	16.1	24.9	20.2
Can Sign only	23.8	18.0	21.1
Level 1-4	14.5	19.3	16.7
Level 5-10	27.2	19.0	23.4
>= Level 11	0.5	0.5	0.5

Table 4: Level of education (No. of people) in sample households (All members).

Education		Total	
	Male	Female	
Children up to 5 years	79	71	150
None	71	97	168
Can Sign only	105	70	175
Level 1-4	64	75	139
Level 5-10	120	74	194
>= Level 11	2	2	4
Total	441	389	830

#### 4. Household situation of Natural Capital

#### 4.1 Land holding pattern

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. Part time fishers in the study area are close to average (12 decimals). However, fulltime fishers own an average of 7.2 decimals of homestead; while on the other extreme, other non professional fishers have an average homestead area of 22.2 decimals (Table 5). All categories of people used to cultivate portions of land from local landlords. As most of them do not cultivate their own land, they usually give their land out on one year fixed lease or to sharecroppers. Some of them are absentee land owners who reside in the district town. There is variation in terms of landholding among fulltime fisher, part-time fisher and other but it is not significant (P=0.755). Details of land ownership status patterns of different categories of sample households are given in table 9.

Table 5. Total land possess by households in decimals

	Full-time Fisher	Part-time Fisher	Other	Total
Own homestead land	7.2	12.0	22.2	12.0
Homestead land owned by someone else	0.7	0.8	0.3	0.7
Own pond or ditch	0.5	0.4	12.4	2.6
Land owned and cultivated by the household	17.3	51.9	50.0	38.3
Land cultivated last year but owned by others	85.3	110.0	128.3	103.7
Land owned but cultivated last year by others	0.5	3.7	8.4	3.3
Khas land	2.2	3.5	3.6	3.0
Land owned but mortgaged out	9.2	8.1	0.0	7.1
Own non-cultivated land	2.6	2.7	13.6	4.6
Total Land	125.4	193.1	239.0	175.2

Table 6: Land ownership pattern of different categories

	Full-time Fisher%	Part-time Fisher%	Other%	Total %
	n = 48	n = 55	n = 22	n = 125
Own homestead land	94	98	95	96
Own pond or ditch	10	18	18	15
Land owned and cultivated by the household	23	42	36	34
Land cultivated last year but owned by others	71	73	73	72
Land owned but cultivated last year by others	2	5	18	6
Khas land	4	7	14	7
Land owned but mortgaged out	2	7	0	4
Own non-cultivated land	6	9	23	10

#### 5. Physical condition of household, housing, sanitation and asset ownership

#### **5.1 Housing Condition**

Non fisher lead households have average 2 dwelling houses. Fisher families have less dwelling area 235 Sqm (Table 7) than other two categories of people in study households. Thus fisher households spent less money to repair their houses.

Table 7: Average housing, area and expenditure of the sample households by categories

	Full-time Fisher	Part-time Fisher	Other	Overall Average
Number of houses	1	1	2	1
House area (sq m)	235	264	293	258
Expenditure on repair (Tk/hh)	969	4324	4555	3076

Wall materials of dwelling houses are almost similar for fulltime and part-time fishers whereas, only 14% of households in other categories have straw or leave walls. Non fishing households have slightly increased percentage of brick wall compared to the other two categories i.e. 4%, 3% and 9% respectively for fulltime fisher, part-time fisher and other households in the community (Table 8). On the other hand, non fishing households use lowest tin material for their dwellings. Housing quality has improved within the project period and on an average more than 80% has tin (corrugated iron) roof houses and this ratio is highest (92.7%) for part-time fishers' households (Table 9).



A typical house made of straw roof and wall

Table 8: Material of walls by different household categories

		Full-time Fisher (%)	Part-time Fisher (%)	Other (%)	Total (%)
Wall	Straw/leaves	33.3	36.40	13.60	31.2
	Grass	31.3	25.5	40.9	30.4
	Bamboo	10.4	7.3	18.2	10.4
	Tin	10.4	10.9	4.5	9.6
	Earth	10.4	16.4	13.6	13.6
	Brick	4.2	3.6	9.1	4.8
Total		100	100	100	100

Table 9: Materials of roofs in dwelling houses of the sample households by categories

		Full-time Fisher (%)	Part-time Fisher (%)	Other (%)	Total (%)
Roof	Straw/leaves	14.6	3.6	4.5	8.0
	Grass	4.2	3.6	9.1	4.8
	Tin	81.3	92.7	86.4	87.2
Total		100	100	100	100

#### 5.2 Household sanitation

Low laying water borne diseases are very prominent in *haor* areas, due to the traditional use of hanging latrine near the flowing river adjacent to each residence. Table 10 presents changes in water and sanitation in the project area. Access to quality drinking water is a prime need to minimize ill health.

Table 10: Changes in water and sanitation in project area

		Full-time Fisher (%)	Part-time Fisher (%)	Other (%)	Total (%)
Latrine	None	8.3	16.4	4.5	11.2
Type	Not water sealed	14.6	7.3	13.6	11.2
	Water sealed	77.1	76.4	81.8	77.6
Total		100.	100	100	100

#### 5.3 Household asset ownership

There are similarities of household assets across the categories of BUG members - overall 78% of households have beds, 73% fishing nets, 48% boats, 66% poultry birds and 62% possess gold ornaments and cattle. It is notable that 75% of fulltime fisher households have fishing nets while it is 55% in other member categories. Fulltime fishers also have more fishing boats (60%) than part time fishers. 50% of "other" category members own boats, but these are probably used mostly for non fishing purposes. The study also reveals that fewer luxury assets such as radio, television, gold, cabinet, etc. are possessed by fulltime fishers than by the other two categories. Precious items like rickshaw, bicycle, mechanized boat, shallow machine, power tiller and sewing machine have been possessed by either other member of the BUG or by part-time fishers. However, only few households own them and their value is much higher than other assets. Table 11 presents the status of asset ownership across different categories of participants.

Table 11: Total no. of household valuable assets by categories

	Full-time	e Fisher	Part-tin	ne Fisher	(	Other	Т	otal
	(n=	48)	(n:	=55)	(1	n=22)	(n:	=125)
Rickshaw/van	1	(0%)	1	(2%)	-	(0%)	1	(1%)
Bicycle	-	(0%)	3	(5%)	4	(18%)	7	(6%)
Boat	32	(67%)	17	(31%)	11	(50%)	60	(48%)
Mechanized Boat	-	(0%)	3	(5%)	-	(0%)	3	(2%)
Fishing Net	36	(75%)	43	(78%)	12	(55%)	91	(73%)
Plough	11	(23%)	14	(25%)	13	(59%)	38	(30%)
Shallow machine	-	(0%)	4	(7%)	2	(9%)	6	(5%)
Power tiller	-	(0%)	1	(2%)	-	(0%)	1	(1%)
Radio/cassette	4	(8%)	6	(11%)	1	(5%)	11	(9%)
TV	4	(8%)	5	(9%)	5	(23%)	14	(11%)
Gold (sonar gahona)	25	(52%)	37	(67%)	15	(68%)	77	(62%)
Sewing Machine		(0%)	2	(4%)	2	(9%)	4	(3%)
Beds / Cots (khat)	35	(73%)	44	(80%)	18	(82%)	97	(78%)
Show Case (glass)	8	(17%)	22	(40%)	8	(36%)	38	(30%)
Cattle/Buffalo	19	(40%)	30	(55%)	13	(59%)	62	(50%)
Goat/Sheep	4	(8%)	7	(13%)	3	(14%)	14	(11%)
Poultry	28	(58%)	39	(71%)	16	(73%)	83	(66%)
Other	6	(13%)	5	(9%)	-	(0%)	11	(9%)

#### 6. Household financial situation

#### 6.1 Household income profile

Natural resources have always been the basis of the local economy in the Sunamganj *haor* areas. Fisher led households were expected to earn more from fishing than non fisher led households. The present study reflects that fishing contributed 45% of fulltime fishers' income compared to non fisher led households (6%), in which case fishing is mostly a part time income. Remittances also contributed as income by 2% and 5% for fulltime and part-time fisher households respectively. Those non fisher led have highest income from business (12%) compared to fulltime and part-time fishers. Table 12 shows present status of income by categories.

Households were asked to estimate their income from different sources for the 12 months prior the survey. While such recall based estimates cannot be expected to be exact or completely reliable, especially for variable daily income sources such as fishing or labouring, the same method will be used in following impact monitoring, so comparison of differences and changes between years should be valid. The BUG members were expected to have slight different incomes across household categories. Fishing is the income source with the highest contribution in all the categories, however there are differences amongst them. It is revealed from table 21 that 45% of fulltime fishers' income comes from fishing, whereas this source contributes only 20% and 26% of part-time and non fisher led households' incomes respectively. On the other hand business income of non fisher led households is much higher than fulltime and part-time fisher led households. Overall contribution of fishing income (30%) of the surveyed households is significantly higher than other sources.

Table 12: Average household Income (Taka) of different categories by sources

Source of income	Full-time (n=4		Fis	-time her :55)	Other (n=22			tal 125)
E: 1:	00717	(450()			10510	(0.00()	10050	(0.00()
Fishing	26717	(45%)	11670	(20%)	18516	(26%)	18653	(30%)
Agriculture labor	3612	(6%)	3857	(6%)	6060	(9%)	4151	(7%)
Non-agriculture labor	4574	(8%)	7347	(12%)	6784	(10%)	6183	(10%)
Handicrafts/petty trade	2147	(4%)	2258	(4%)	6280	(9%)	2923	(5%)
Fish and fish related trading	1373	(2%)	1623	(3%)	1288	(2%)	1468	(2%)
Income from Major Fishing	1214	(2%)	1171	(2%)	859	(1%)	1133	(2%)
Aquaculture	115	(0%)	47	(0%)	773	(1%)	201	(0%)
Business	2083	(4%)	1549	(3%)	8636	(12%)	3002	(5%)
Service (private/NGO/government)	1267	(2%)	1718	(3%)	1523	(2%)	1511	(3%)
Sale of goats/sheep, poultry birds, milk and eggs	1438	(2%)	4320	(7%)	2195	(3%)	2839	(5%)
Sale of agricultural by products and other assets	532	(1%)	1780	(3%)	0	-	988	(2%)
Remittances	1042	(2%)	2927	(5%)	0		1688	(3%)
Previous savings	0	(0%)	1455	(2%)	0		640	(1%)
Agricultural income	4012	(7%)	9613	(16%)	10148	(14%)	7556	(12%)
Other	8839	(15%)	8126	(14%)	7860	(11%)	8353	(13%)
Overall	58962	(100%)	59461	(100%)	70923	(100%)	61287	(100%)

#### 6.2 Household expenditure

Impact monitoring survey reveals that about 59% of households' expenditures are spent on food, and 41% of it is spent on rice or wheat (Table 13). Despite the high cost for food grain, the households' expenditure is similar across the three categories, where main expenditures are on food items (Figure 2). For fulltime fishers healthcare and clothing are also on the priority expenses, whereas the second highest expense for the other two categories is house repairing.

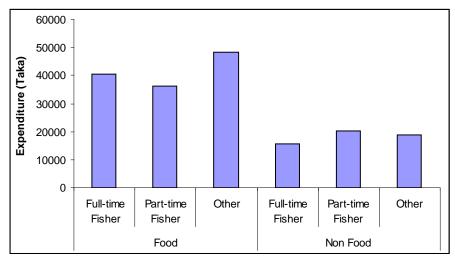


Figure 2. Households' expenditure of Full-time, half-time fishers, and other households for food and non food items

Table 13: Average household expenditure by different items

	Full-tim	e Fisher	Part-ti	me Fisher		Other	Grou	up Total
		(n=48)		(n=55)		(n=22)		(n=125)
Rice/wheat	25940	(46%)	21215	(38%)	24601	(37%)	23625	(41%)
Health	3597	(6%)	3633	(6%)	3961	(6%)	3677	(6%)
Vegetables	3010	(5%)	2850	(5%)	4027	(6%)	3119	(5%)
Clothing	2938	(5%)	3473	(6%)	3016	(4%)	3187	(5%)
Land (purchase, tax, mortgage)	2342	(4%)	60	(0%)	227	(0%)	965	(2%)
Spices	2221	(4%)	2609	(5%)	3527	(5%)	2621	(4%)
Soap, Shaving, cosmetics, beel toll etc	1871	(3%)	2207	(4%)	3410	(5%)	2290	(4%)
Festivals, ceremonies, marriage etc	1775	(3%)	1567	(3%)	1955	(3%)	1715	(3%)
Edible oil	1712	(3%)	1679	(3%)	2304	(3%)	1802	(3%)
Loan repayment	1654	(3%)	3727	(7%)	1301	(2%)	2504	(4%)
Fish, Meat and Egg	1617	(3%)	2290	(4%)	3619	(5%)	2265	(4%)
Fuel	1337	(2%)	1310	(2%)	945	(1%)	1256	(2%)
Fruits	1084	(2%)	1036	(2%)	1211	(2%)	1085	(2%)
Betel leaf, smoking & entertainment	1024	(2%)	451	(1%)	4323	(6%)	1352	(2%)
House repair/building	969	(2%)	4324	(8%)	4555	(7%)	3076	(5%)
Education	787	(1%)	1178	(2%)	825	(1%)	966	(2%)
Travel	742	(1%)	1337	(2%)	1320	(2%)	1106	(2%)
Savings	683	(1%)	961	(2%)	687	(1%)	806	(1%)
Livestock	571	(1%)	167	(0%)	236	(0%)	334	(1%)
Dal	389	(1%)	423	(1%)	701	(1%)	459	(1%)
Furniture and equipment	21	(0%)	38	(0%)	330	(0%)	83	(0%)
	56284	(100%)	56535	(100%)	67081	(100%)	58293	(100%)

#### 6.3 Source of credit and uses

Non formal sources of credit still play a vital role in the rural economy; households take an average of 9,000 Tk loans from these sources for their activities. Although Micro Finance institutions and projects like SCBRMP have been dominating in supplying micro credit, still 63% are non formal loans coming from *mohajon* and 17% from relatives (Table 14).

Table 14: Households' loan sources

	No of loan per source	Total amount of Loan (Tk)	% of loan amount by source
Loan from fish trader	1	9000	1
Loan against sale of other produce	4	7000	1
Loan from <i>mohajan</i> (not fish trader)	78	703800	63
Loan from grocery shop	39	57100	5
Bank loan	3	18000	2
Loan from local society (samity)	6	48000	4
Loan from relative	33	194900	17
Loan from someone else - no interest	11	80000	7
Total	175	1117800	100

Table 22 indicates that 94% of BUG members received loans during the last 12 months. Overall, 68% of members took loans from SCBRMP. Fulltime fisher led households had the highest use of SCBRMP loans (71%), whereas non fisher led households were the category with the lowest percentage (59%). 22% of the total households received credit from other NGOs; non fisher led households made most use of their loans. The loan source used least was commercial Bank, where overall only 2% of the participants took credit from, and it was 4% of part-time fisher led household that used bank loan most. Table 15 presents the total amount of

credit in year 2007 from different sources.

These trends suggest better linkages and understanding with SCBRMP to secure their financial support during hardship.In addition, discussions were held with project participants about increased cooperation among SCBRMP members.

Table 15: Percentage of households that took credit from different sources in the last year

% of households	Full-time Fisher	Part-time Fisher	Other	Overall Average
	n = 48	n = 55	n = 22	n = 125
Using loans	96	96	86	94
Bank loan	2	4	0	2
CBRMP loan	71	69	59	68
NGO loan	21	22	27	22
Samity loan	4	5	5	5

Table 16: Total amount of credit from different sources

	Full-time Fisher	Part-time Fisher	Other	Table Total
Total Amount	16638	17975	12732	16538
Bank	104	236	0	144
CBRMP	5542	5491	3818	5216
NGO	2333	2082	3227	2380
Samity	208	582	273	384
Other	8450	9584	5414	8414

#### 7. Women mobility and food security

#### 7.1 Access of women to services

There is general acceptance that some women need to work outside the home; mainly poor women who have no other alternative. Even though the social barriers on women's mobility have been reduced slightly, a women's involvement in outside activities is still seen as non – prestigious for the household. The project contributed positively in encouraging women to participate in training and group meetings. In the study area, mobility of women to hospital or clinic is highest (81%) followed by 50% that go to Union Parishad, 42% to Upazila Parishad and 36% to agricultural field (Table 17). Within the home, household's chores are mainly carried out by women, including washing, cleaning, cooking and other domestic activities.

The most common outside involvement of women is fetching water, fuel wood collection and some women are involved in petty trading. The data does not suggest any major difference of women mobility across the stated different categories.

Table 17: Percentage of women (wife of HH head) mobility in following events by household categories

	Full-time Fisher	Part-time Fisher	Other	Total
	n = 48	n = 55	n = 22	n = 125
Market/Bazar	16.7	10.9	9.1	12.8
Bank	12.5	14.5	4.5	12.0
Land settlement office	-	1.8	-	0.8
Union Parishad	60.4	43.6	45.5	50.4
Upazila Head Quarter	33.3	54.5	31.8	42.4
Hospital/Clinic	77.1	81.8	86.4	80.8
Went to Beel	25.0	21.8	18.2	22.4
Went to Agri field	29.2	45.5	27.3	36.0
Other	35.4	18.2	13.6	24.0

#### 7.2 Household food and nutrition

It is crucial for households to attain food security. Social capital, especially women, play an important role in averting vulnerability and sustaining livelihoods. This is influenced by the access to common resources like waterbodies, landholding status and assets of the household. Women are now taking more responsibility in sustaining their livelihoods by engaging in economic activities, particularly Hindu fisher women and widowed or divorced women. They are mainly participating in different economic activities, as well as in different level of Community Based Organization (CBO) decision making. Social change has not eliminated gender disparities but the gender gap seems to be narrowing.

This section describes the household's nutritional status; data shows that non fisher lead households consume more protein compared to other two categories. Table 18 shows that meat consumption in fulltime and part-time fisher led households is about 33% less than non fisher ones. Analysis shows that milk consumption of non fisher led household is about 72% higher than in the other two categories.

Table 18: Average number of times food items are consumed in a year

	Full-time Fisher	Part-time Fisher	Other	Total
Meat	8	8	12	9
Eggs	27	58	46	44
Milk	46	44	79	51

Respondents were asked directly about their level of food security. Only 3% reported food deficit about 4-6 months per year. This scarcity had its largest claim from about 9% of the non fisher led households. Overall, 74% of the participants affirm suffering from food crisis 1-3 months in a year, which is the most common food shortage experience. It was part-time fishers who suffered from the 1-3 month shortage most (80%) (Table 19). Food security in the project area is heavily dependent on intensity of flood, water extension and duration of the monsoon. In order to improve household food consumption, it is necessary to reduce crop damage caused by the flash flood.

Table 19: Percentage of different household categories experiencing different food shortage periods

	Monti	Months Experience Food Shortage							
	None	1-3 Months	4-6 Months						
Full-time Fisher	25.0%	70.8%	4.2%						
Part-time Fisher	20.0%	80.0%	-						
Other	22.7%	68.2%	9.1%						
Total	22.4%	74.4%	3.2%						

#### 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 accessed institution/project is SCBRMP and other local NGOs. Duration of membership varies from 1 to 4 years and average membership per household is nearly above one. Savings accumulated per household is highest by SCBRMP members (1,958 Tk) followed by ASA members (1,646 Tk). Table 20 presents the involvement of different organizations within sample households. Average number of loans within the last 12 months is about 1 unit across all categories of participants in different organizations and the amount varied from 5,000 Tk to 10,000 Tk.

Table 20: Organizational involvement of sample households (average)

	Type of O	rganizatio	n								
	CBRMP	BRAC	PODOKYEP	BRDB	FIVDB	VARD	Islamic	ASA	Grameen	Sun	Krishi Bank
							Relief		Bank	creed	Dank
Number of households member	1	1	1	1	1	1	1	1	1	1	1
No of years in Project /Org	2	2	2	2	2	2	1	4	2	1	2
Savings (Tk/household)	1958	662	1088	1436	800	500	450	1646	999	980	0
No of loan received last 12 months	1	1	1	1	1	1	1	1	1	1	0
Loans (Tk/household)	5258	7300	6333	9417	5000	9500	10000	9714	6833	6000	0
Amount of loan repaid last 12 months Tk	2222	3510	3766	2947	660	6000	460	4849	2887	1040	0

The CBRMP distributed the most loans to participants (122), followed by BRAC and ASA (Table 21). Overall, 36% credit was used for daily need, 16% for cultivation, 12% for business and 9% for fishing gear purchase. Table 31 presents the sources of other loans from different stakeholders.

Table21: Use of loan by different sources

-	Type of	Type of Organization							% of		
	CBRMP	BRAC	PODOKYEP	BRDB	FIVDB	VARD	Islamic Relief	ASA	Grameen Bank	Suncreed	Use
Fishing gear	12	1	0	0	0	0	0	2	1	0	9
Meet daily needs(food etc)	41	6	1	4	1	1	1	3	3	0	36
Livestock	12	0	0	0	0	0	0	1	1	0	8
To buy land	2	0	0	0	0	0	0	0	0	0	1
Business/petty trade	14	1	0	1	0	0	1	1	1	1	12
Cultivation	20	3	2	2	0	0	0	0	1	0	16
Marriage	1	0	0	0	0	0	0	0	0	0	1
Medical costs	9	0	0	0	0	0	0	0	1	0	6
House repair/Buildings	3	0	1	0	0	0	0	2	0	0	4
Buy Beel	2	0	0	0	0	1	0	0	0	0	2
Loan repayment	4	1	0	0	0	0	0	1	0	0	4
Festivals/Ceremonies	0	1	0	0	0	0	0	0	0	0	1
Land Mortgage in	1	0	0	0	0	0	0	0	0	0	1
Boat Purchase	0	0	0	0	0	0	0	1	0	0	1
Lease value payment	1	0	0	0	0	0	0	0	0	0	1
Total:	121	13	4	7	1	2	2	11	8	1	

Table 22: Sources of other loan and different loan use (unit)

	Fishing gear	Meet daily needs (food etc.)	Livestock	Business/ Petty trade	Cultivation	Marriage	Medical costs	House repair	Loan repayment	Total
Loan from fish trader				1						1
Loan against sale of other produce		3								3
Loan from mohajan (not fish trader)	2	31	1	6	16	2	4	5	1	68
Loan from grocery shop		29								29
bank loan		1			1			1		3
Loan from local society (samity)		3		1	2					6
Loan from relative	1	19	1	1	1		8	1		32
Loan from someone else - no interest		4		1		1		1		7

In SCBRMP greater attention paid to develop BUG members to manage their own resources. During the project period fisheries management has been predominated, although SCBRMP has also taken a supplementary income generation skills training, human-development and

fisheries management. Table 23 shows average number of different training received by sample households from different sources.

Table 23: Average number of different training received by sample households from different sources

	Full-time Fisher	Partime Fisher	Other	Total
Occupational Skill training – SCBRMP	1.00	1.05	1.00	1.02
Management training – SCBRMP	1.13	1.38	1.25	1.27
Management training - Other Source	1.00	-	-	1.00
Human development training – SCBRMP	2.00	1.17	-	1.29
Human development training - Other Source	1.00		1.00	1.00
Occupational Skill training – SCBRMP & Other Source	1.00	1.76	2.08	1.64
Management training – SCBRMP & Other Source	1.13	1.38	1.25	1.27
Human development training - SCBRMP+Other Source	1.50	1.17	1.00	1.22

#### **ANNEX 1**

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

	RVIEWER TO e of the waterl											_ _
Name	of the HH head:				Fathe	r/Husba	nd	name: .				
Memb	er name:			N	1/F Rela	tion with	n HI	H head:			_	_
Village: Upazila												
Positio	on in BUG: Pres	ident / Manage	r / Sec	retary	/ Cashie	er / Men	nbe	er				
	occupation of he							Female	e headed	househo	old Yes/No	
SI	Name		Rela	tion	M-1	Age	Е	ducati	on	1st	2nd	Fish
no			to H	НН	F-2		F	inish	Cont.	occup	occup	-ing
1												
2												
3												
4												
5												
6												
7												
8												
2-wifi 3-son 4-grad 5-bro 6-bro 7-sist 8-son broth 9-fath 10-gr 11-da 12-so 13-oti	d of HH fe/husband //daughter ndchild ther/sister ther's wife ers husband //daughter of er/sister ner/mother andparent nughterinlaw on in law her (specify) nployee	Finish: 0-none 1 to 16 years of school complet 20-can sign nar only 21-can read newspaper Cont: tick if ye Fishing  1-professional 2-part time for income 3-just to eat 4-helping other 5-never	ed me	1-cu 2-cu share 3-sha 4-rer 5-fis 6-fis 7-fis 8-fis 9-fis	Itivate over the control of the cont	vn and d er only d ker sing		12-nor 13-ricl 14-boa 15-har 16-pet 17-bus 18-me 19-oth employ govern 20-tea	idicraft ty trade iness chanic/dri er yee/Non iment serv	ourer ver ice	22-paid homestead 23-housewi 24-livestocl 25- Poultry rearing 26 Carper Mason/blach 27- student 28- beggar 29- no activ other (speci	fe k  ater/ ksmit  rity fy)

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

	· · · · <u>·</u>				ı
SI no	Income source	Total no of people	Average no of months in year	Average person days per month	Average daily income Tk/day
1	fishing				
2	agriculture labour				
3	non-agriculture labour				
4	rickshaw/van				
5	boatman				
6	handicrafts/petty trade				
7	domestic service for others				
8	other daily income (specify)				

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

SI no	Income source	Total income Tk
1	fish and fish related trading	
2	income from major fishing	
3	fish fry selling	
4	aquaculture	
5	drying/processing fish	
6	business	
7	service (private/NGO/government)	
8	renting out fishing equipment not used by household	
9	hiring out draft power	
10	sale of goats/sheep, poultry birds, milk and eggs	
11	sale of agricultural by products (straw, jutesticks, dung) - total	
12	Remittances	
13	Other (specify)	

Do household members out-migrate for livelihoods: Yes/No If yes, how many persons: M F							
Q 3.1 House	ehold Assets						
Number of d	Number of dwellings owned by household  _						
Area of dwe	ellings owned by househol	d (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]							
What kind of	f latrine do you have? [1-	none, 2-not water sealed, 3-water sealed]					

### Q 3.2 Do you own any of the following assets? Number:

	Total No.	Owned by Male/Female	Price in Tk
Rickshaw/van			
Bicycle			
Boat			
Mechanized Boat			
Fishing Net			
Plough			
Shallow machine			
Power tiller			
Radio/cassette			
TV			
Gold (sonar gahona)			
Sewing Machine			
Beds / Cots (khat)			
Show Case (glass)			
Cattle/Buffalo			
Goat/Sheep			
Poultry			
Other			

Code: Male = 1, Female =2

## Q 4 Present land ownership and tenure

#### Q 4.1 Area of all household's land:

SI No	Land use	Area ( dec)
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	

Crop	Production (md	) price (Tk/md)	Total value (Tk)	Cash cost of	of
	,	, , ,	,	production*	
				+	
Total (Tk)					
` '	l fertilizer, seed, pe	esticide, and water +	L hired human labo	ur + hired draft ı	power.)
				_	
•		narecropped out, wh		•	`
xpenses on that land	)?			Tk   _	
Q 4.3 Fish Product	tion				
Source	Total no of	Average	Average no	Average	Total
Source	Total no of people involv	ve person days	Average no of months in	Average daily catch	Total Production
Source		•			
	people involv	ve person days	of months in	daily catch	Production
Pond Project waterbody	people involv	ve person days	of months in	daily catch	Production
Pond Project waterbody	people involv	ve person days	of months in	daily catch	Production
Project waterbody Other waterbody	people involv in fishing	person days per month	of months in year	daily catch Kg/day	Production Kg
Pond Project waterbody Other waterbody	people involv in fishing	ve person days	of months in year	daily catch Kg/day	Production Kg
Pond Project waterbody Other waterbody Food Security: numb	people involving fishing	person days per month	of months in year	daily catch Kg/day	Production Kg
Pond Project waterbody Other waterbody Food Security: numb	people involving fishing fishi	person days per month	of months in year	daily catch Kg/day	Production Kg
Pond Project waterbody Other waterbody  ood Security: numb	people involving fishing fishi	person days per month  en experience food shormally consume:	of months in year	daily catch Kg/day	Production Kg
Pond Project waterbody Other waterbody	people involving fishing fishi	person days per month  en experience food shormally consume:	of months in year	daily catch Kg/day	Production Kg

## Q 5.1 Expenditure

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

SI no.	Item	Expenditure (Tk)
1	Rice/wheat	
2	Vegetables	
3	Egg	
4	Fish	
5	Meat	
6	Dal	
7	Fruits	
8	Edible oil	
9	Others (specify)	
	Total	

## **Q 5.2** Expenditure on **non-food** items

SI no.	Item	Expenditure (Tk)
2	Clothing	
3	House repair/building	
4	Education	
5	Health	
6	Fuel	
7	Travel	
8	Loan repayment	
9	Savings	
10	Land (purchase, tax, mortgage)	
11	Livestock	
12	Furniture and equipment	
13	Festivals, ceremonies, marriage etc	
14	Spices	
15	Other (specify)	

Q 6.1 In the last 12 months has your household taken a loan? What were the uses of this money?

SI no	Source	No of loans	Amount Tk	Use of loans (code)
1	Loan from fish trader			
2	Loan against sale of other produce			
3	Loan from mohajan (not fish trader)			
4	Loan from grocery shop			
5	bank loan			
6	Loan from local society (samity)			
7	Loan from relative			
8	Loan from someone else - no interest			
	Total loans received			

[Use:	1-fishing gear, 2- meet daily needs (food etc.), 3-livestock, 4-to buy land,		
_	5-business/petty trade, 6-cultivation,7-marriage, 8-medical costs, Other codes later]		
What w	vere the main uses of this money? [Use of maximum to minimum amount of loans]		

1st use	_ , 2nd use	, 3rd u	se  _

#### Q 6.2 Organisational involvement

How many people of this household is the member of the SCBRMP project or a NGO, or a cooperative, or a fishing society, or Grameen Bank? For each organisation:

	SCBRMP project	1 (other NGO /organisation)	2 (other NGO /organisation)
Name of organisation (codes)			
No. members of organisation in household			
No. years member (maximum in household)			
Household savings held (Tk)			
Amount outstanding (Tk.) before last 12 months			
Loans received in last 12 months (no.)			
Loans received in last 12 months (Tk)			
1st use of loan (codes as above)			
2nd use of loan (codes as above)			
Amount repaid in last 12 months (Tk)			

Q 7.1 \* Women Mobility (wife of HH head):

Do Women Household go to:	How many times in a Month	How many times in a Year	Not at all
Market/Bazar			
Bank			
Post office			
Land settlement office			
Union Parishad			
Upazila Head Quarter			
Hospital/Clinic			
Went to Beel			
Went to Agri field			
Other (specify)			

## Q 7.2 Development Services Received to Date

Training (Please specify)	Number of courses	
	Project	Other Source
Occupational Skill training		
Management training		
Human development		
training		

#### **ANNEX 2**

Beel User Group member list for livelihood impact study

SL. No.	SL. No. Name of BUG Member   Name of Waterbody Upazilla		
SL. NO.	Name of Bod Member	Name of Waterbody	Opazilia
1	Md.Harun Miah		
2	Md.Nanu Miah		
3	Md.Abu Talib	Netai Gang	South Sunamganj
4	Md.Nasir Miah	rtotal Carig	Count Cunaringarij
5	Md.Forid Miah		
6	Md.Harun Miah		
7	Outul Biswas		
8	Md.Mokbul Ali	Tedala Hugliya Chatol Beel	South Sunamganj
9	Md.Abdul Sattar	roddia riagilya Orlator Boor	Count Canangan
10	Md.Lilu Miah		
11	Md.Aminur Rahman		
12	Md.Borhan Uddin	Kochua Goan	South Sunamganj
13	Md.Babul Miah	Rochua Goan	South Sunaniganj
14	Md.Rahmot Ali		
15	Md.Tajnur Ali		
16	Md.Ayub Ali		
17	Md.Isor Ali	Chinamana Baal	Cavith Company
18	Md.Chanfor Ali	Chinamara Beel	South Sunamganj
19	Md.Bazlu Miah		
20	Md.Al Amin		
21	Md.Sad Miah		
22	Md.Jamir Ali		
23	Md.Kabir Miah	Bamonpai Beel	South Sunamganj
24	Md.Md.Awal		
25	Md.Abdur Salam		
26	Md.Nazrul Islam		
27	Iro Miah		
28	Md.Mosahid Miah	Chatol Uday Tara Beel	South Sunamganj
29	Md.Tayob Ali		
30	Md.Sadir Ali		
31	Md.Monir Uddin		
32	Md.Abdul kahar		
33	Md.Azir Ali	Srinathpurer Dhola	South Sunamganj
34	Md.kamal		
35	Md.Foyzul Haque.		
36	Md.Sadek Ali		
37	Md.Adu Miah		
38	Md.Nazir Miah	Moinpur Beel Group	South Sunamganj
39	Md.Sofor Ali		
40	Jaydho Mala		
41	Sumesh Chandra		
42	Ashini		
43	Dip Choron Das	Boro Medi Beel	Derai
44	Md.Abdur Rouf		

45	Prema Biswas		
46	Md. Joynal		
47	Md.Shahanur Pathan		
48	Rokea Begum	Langolkata Ojur Beel	Sunamganj Sadar
49	Banesha Begum		Odrianiganij Oddai
50	Md.Sumon Chowdhury		
51	Md.Joynal Abedin		
52	Md.Farid Miah		
53	Md.Hafizur Rahman	Aislauni Prokashito Mitar Dubi	Sunamganj Sadar
54	Md.Jamal Miah	/ loldam r rokdomio wilai Babi	Canangan Cada
55	Md.Nachir Ali		
56	Md.Sohel Miah		
57	Md.Nazrul Islam		
58	Ashraf Ali	Lalerpurerjai & Gozaria Dair	Sunamganj Sadar
59	Md.A. Wahab	Laiciparcijai a Gozana Ban	Odrianiganj Oddar
60	Md.Abul Kalam		
61			
62	Md.Foyzur Rahman  Md.Akram Ullah		
63	Md.Sultan Miah	Chota Beel	Sunamganj Sadar
64	Md.Mosabbir Miah	Chota Beel	Suriamyanj Sauai
65	Md.Liakat Ali		
66	Md. Kamrul Islam		
67			
	Md. Eakub Ali Md.Nazrul Islam	Aung Gung	Sunamganj Sadar
68		Adily Guily	Suriarrigarij Sauar
69	Md.Nabi Hossen		
70 71	Md. Savadullah		
72	Md. Sayedullah Md. Aain Ullah		
		Urail Beel	Sunamaani Sadar
73	Md. Samad Miah	Orall Beel	Sunamganj Sadar
74	Md. Sendu Miah		
75	Md. Amir Uddin		
76	Md. Shah Alam		
77	Md. Sharif Uddin	Sanduikka Rool	lamalgani
78	Md. Fazlul Haque	Sonduikka Beel	Jamalganj
79	Md. Ancharul		
80	Md.Monir Hossain		
81	Md.A. Wahab		
82	Md.Ali Akbar	Basker Khal	lamalgani
83	Md.Shafiqul Islam	Daskei Kiidi	Jamalganj
84	Md.Hilal Uddin		
85	Sahera Khatun		
86	Sudhir Das		
87	Brojendra Das	Dowton Book	lomolassi
88	Akkhor Das	Dewtan Beel	Jamalganj
89	Hemendra sarker		
90	Ranjit Das		
91	Bimol Devnath		
92	Mohitosh Bormon	Chotabatia Nadi	Diougnahham
93	Nishi Biswas	Ghotghatia Nodi	Biswambharpur

94	Md.Astor Ali		
95	Nirmol Biswas		
96	Hena Akter		
97	Md.Abdul Jolil		
98	Begum	Tiar Beel Lomba Beel Gool Beel	Biswambharpur
99	Md.Abdul Haye		
100	Shofiq		
101	Sunil Bormon		
102	Rana Bormon		
103	Joyento Bormon	Abuaprokashito Nainda Nodi	Biswambharpur
104	Shila Rani Bormon	·	,
105	Milon Bormon		
106	Md.Zinu Miah		
107	Md.Abdul Hasim		
108	Md.Abul Hossain	Sudamkhali River	Biswambharpur
109	Md.Nasir Uddin		
110	Md.Zohura Begum		
111	Md.Wadud		
112	Md.Kabir Mollah		
113	Afia Begum	Monikamarer Kuri	Biswambharpur
114	Yearun Nesa		
115	Md.Motin		
116	Md.Alimuddin		Tahirpur
117	Md. Humayon		
118	Md.Amir Hamza	Thapna Group Jolmohal	
119	Ali Ahmod		
120	Md.Anamul Haq		
121	Md.Jhunu Mia		Tahirpur
122	Abdul Shohid		
123	Md. Samsul	Chotokhal-Borokhal	
124	Md. Nurullah		
125	Md.Anamul		