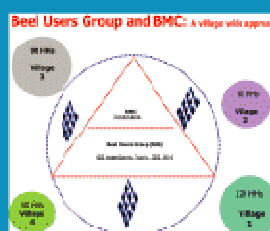
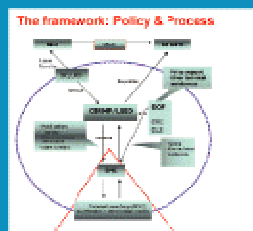




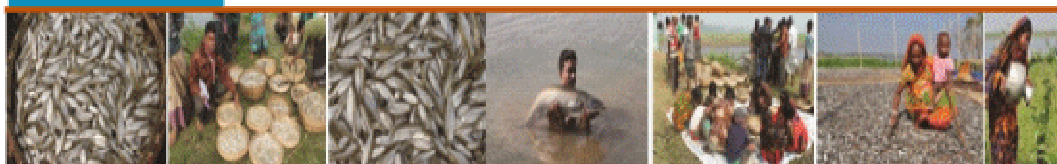
**Government of the people's Republic of Bangladesh
Local Government Engineering Department**



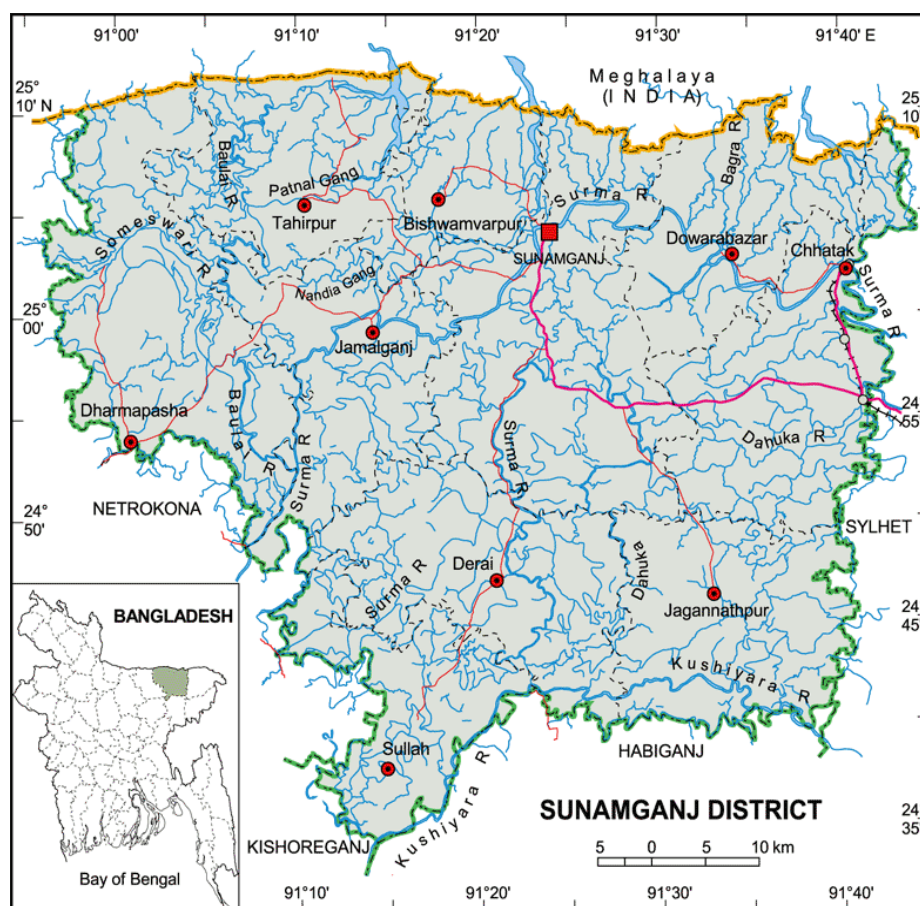
**Component Completion Report of
Fisheries Development**

**Community Based Resource Management Project
(IFAD Loan No. 567 - BD)**

May 2014



Project Location Map



Year-wise Project Intervention:

Sunamganj Sadar	2003
<i>Dakhin</i> Sunamganj	2003
Biswamvarpur	2003
Jamalganj	2004
Tahirpur	2005
Derai	2006
Sullah	2007
Dowarabazar	2007
Dharmapasha	2007
Chhatak	2010 (with limited work)
Jogonnathpur	2010 (with limited work)

Abbreviation and Glossary

Beel	A saucer-like depression that generally retains water throughout the year. Other way can say - deeper part of Haor
BMC	Beel management Committee
BUG	Beel User Group
CBRMP	Community Based Resource Management Project
CDF	Community Development Facilitator
CTA	Chief Technical Advisor
<i>Dakhin</i>	South
DCC	District Coordination Committee
Haor	A bowl shaped depression between the natural levees of a river mostly found in the north-eastern region of greater Mymensingh and Sylhet districts
GOB	Government of Bangladesh
HH	Household
IFAD	International Fund for Agricultural Development
IGA	Income Generating Activities
<i>Kandha</i>	Higher levees in haor basin
LCS	Labour Contracting Society
LGD	Local Government Division
LGED	Local Government Engineering Department
PIC	Project Implementation Committee
PRA	Participatory Rural Appraisal
SMS	Subject Matter Specialist
SO	Social Organizer
MOL	Ministry of Land
MTR	Mid-term Review
IMED	Implementation, Monitoring and Evaluation Department
Khal	Canal
UCC	Union Coordination Committee
UNO	Upazia Nirbahi Officer
DoF	Department of Fisheries

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Executive Summary

Community Based Resource Management Project (CBRMP) is being implemented by Local Government Engineering Department (LGED) under Local Government Division of Ministry of Local Government, Rural Development and Cooperatives with funding from IFAD. The project is for a period of 12 years started in January 2003 and will end in June 2014 in three phases. The first phase was for around 5 years that ended in June 2007, second phase was for 4 years ended in June 2011 and the last phase is for the rest of the project period.

The project's objectives are to be realized through financing of five components. These are:

Microfinance;
Labour-intensive infrastructure development;
Fisheries development;
Crop and livestock production development; and
Institutional support.

Fisheries development is one of the challenging component of the project. The major objective of this component is to provide the poor fishers access to water-bodies, ensure a community based resource management and develop the fish habitat and production with physical and conservation measures. The component has a plan of access to 300 beels (revised). The project has a target of accessing to 300 beels. Total 293 beels are being received from Ministry of Land under a Memorandum of Understanding (MoU)

The report covers the accomplishment of the fisheries component from the project inception to May 2014. In fisheries component project has able to access 257 waterbodies of different types. Total 265 beel user group (BUG) have been organized comprising 9061 members of which 2244 are women. Physical target of the component has been achieved almost 100%.

There are significant impact has been found by the project intervention. There were two types of fish catch monitoring firstly catch from floodplain during monsoon, secondly major fishing or organized fishing in post monsoon. Monitoring result shows average production project waterbodies (open & organized catch) in CBRMP sites were found 663 kg/ha, 659 kg/ha, 720 kg/ha, 670 kg/ha, 670 kg/ha and 701 kg/ha in 2008, 2009, 2010, 2011, 2012 and 2013 respectively. Up to now project has achieved significant progress in different areas of fish conservation, bio-diversity, production and diversification of income. Household income has increased nearly three times compare to inception year. The project has made remarkable progress to people involve in fisheries resources, their livelihoods and access to other common services under different agencies in this area.

In fisheries component of the CBRMP about 25% women members included, different training programs organized for women members to empower and improve skills to involve in social issues and diversifying income sources. Women mobility has significantly increased than before project intervention. Women can come out of family and take part in different social activities, able to give speech in huge gathering ceremony in presence of MP and Government high officials. Despite of women inclusion, the project has also carried out a gender sensitization study through gender

courses for staffs. In addition project also observed different national and international days, organized rallies and distributed gender awareness materials.

Project has accomplished many activities including training, workshop and discussion to build the capacity of the project staff and partners for effective service delivery. A good numbers of institutions including DoF, Local Administration and WorldFish have been associated with project for project's capacity building. The local Government Engineering Department has been playing a central role in capacity building and guiding the project in its implementation process.

The project has been well documented with all reports, guidelines, manual, training modules and promotional materials of the fisheries component and these documents are available for sharing with the stakeholders and LGED website <http://www.lged.gov.bd/ProjectLibrary.aspx?projectId=6>. Even the BUGs are also being found good in keeping records. Project has generated a detailed yearly audit report for each BUG.

Fisheries development is one of the major components of CBRMP aims at poverty alleviation of the poor community in Sunamganj through improved management of beel resources and thereby increased income of them.

The project has innovatively established its partnership with the WorldFish for the monitoring and assessment of sustainable management of water bodies. It has demonstrated positive results on the conservation of rare fish species and promotion of nutrient-rich species, such as mola to improve the nutrition of local habitants.

The introduction of the low-cost bamboo structure cage fish culture may have also considered an innovation for the project; this technology is very useful for the project target groups to culture fishes in the water bodies around the villages either for income generation or for their own consumption.

All BUGs are smoothly sustained in long terms based on strong M&E system that was provided by CBRMP for CBFM.

Project has a good BUG auditing system. The audit was conducted by a team of project staff included from different Upazilas, where one Upazila staffs were engaged to other Upazila to ensure transparency and reliability in the audit process,.

The component's total progress until March 2014 is highly satisfactory. The activities of the component have been concluded with comments of satisfaction by IFAD. **IFAD on general rated the Component highly satisfactory (rated 6).**

The project has many successes and some failures too, and all those have enriched the project with substantial learning and that might help it to an effective end.

Recommendations

The component has many successes and that mainly attribute to its innovative and dynamic approaches, persistent commitment of staff and increased participation of the people. Cooperation and timely support from donor and other development partners are to be highly acknowledged too for making such a comprehensive project successful.

Introduction

Community Based Resource Management Project (CBRMP) has been being implemented by Local Government Engineering Department (LGED) under Local Government Division of Ministry of Local Government, Rural Development and Cooperatives with funding from IFAD. The project is for a period of 12 years (MTR revised), started in January 2003 and will be end in June 2014 by three phases. The first phase was for around 5 years that ended in June 2007, second phase was for 4 years that ended in June 2011 and the last phase is for the rest period ended in June 2014. The time-period of phases has been revised by MTR to make the project implementation further justified with an effective ending. The total cost initially estimated was USD 34.3million, but that was revised by project MTR to USD 29.27 million of which IFAD provides USD 24.94million, GOB provides 3.68 million and the rest USD 0.65 million is contributed by the beneficiaries.

The main objectives of the project are to:

- i) Increase the assets and income of 90000 households by developing self-governed grass-roots organizations to improve their access to primary resources, employment, self-employment and credit; and
- ii) Support the development of an institutional base to replicate the project approach in other areas of Bangladesh.

The project's objectives are to be realized through financing of five components. These are:

- iii) Microfinance;
- iv) Labour-intensive infrastructure development;
- v) Fisheries development;
- vi) Crop and livestock production; and
- vii) Institutional support.

The project approach is demand-driven attempting to address the difficulties of the communities and assisting them in searching better livelihoods for them. All components are being implemented towards that end.

2. The Objective of the Component

The major objective of this component is to provide the poor fishers access to water-bodies, ensure a community based resource management and develop the fish habitat and production with physical and conservation measures. The component has a plan of access to 300 beels (revised).

The project is being implemented in partnership with Ministry of Land, Ministry of Youth and Sports, Local Administration, Department of Agriculture and the WorldFish Center (WFC) formed by mutual Memorandum of Understanding (MoU).

The approach follows by the component is participatory. From planning to monitor- in all areas the fisher and the other stakeholders have extended involvement to implement the activities of this component.

3. The Context of the Component/Activity

Concept: The project introduced a Community based approach for beel fisheries management. It is a co-management process involves stakeholders from different levels with defined responsibilities and roles. The fishers are the main actors and the ultimate beneficiaries. The Department of Fisheries has been engaged in this process and provided technical training and back-stopping supports to Beel Users Group (BUG) for sustainable fisheries management. Local Administration assists in processing and handing over the beels to BUG and demarcating beel area, the WorldFish provides research and study supports in surveying fish biodiversity and socio-economic impact of fisher community.

Beels are selected primarily based on the information of digital resource mapping and later PRA is carried out to understand the social context, location of command villages and fisher households, and some other issues related to fishers management, and finally an inventory of the interested fishers were made for including them in BUG. BUG members become trained in group management, accounts and book keeping, group dynamics and conflict resolution, fish conservation and biodiversity, fishery management, beel re-excavation, raising swamp tree nursery and beel side plantation, improved fish drying and fish marketing. Each BUG has an executive committee of 7-9 members elected by direct secret ballot by the BUG members for a period of two years. The committee leads BUG following a set of rules developed in the line of government Jalmahal Management Guidelines and standard democratic good practices. The BUG has its account and books for record keeping of financial transactions and other data such as fish catch, sales, income and expenditures. The unique part of the beel management is that all works related to beel resource management including area demarcation, re-excavation, sustainable harvesting, guarding, and conservation; the community fishers themselves plan, implement and monitor in a participatory manner.

Approach of Community Based Fisheries Management

CBFM project implemented in Bangladesh with 3 approaches which are as follows:

Approach 1: Fishers Managed Fishery

The first approach includes stakeholder identification through household census, identification of fishers, and forming groups by NGOs with fishers only. Community activities will then be identified by the group representatives (through consensus among the group members and among the groups), and these group representatives will be the members of the Beel or River Management Committee (BMC or RMC). The NGO role is to facilitate the community participation and to give direct support (training, guide, monitor, credit, etc.) to the group members and the Department of Fisheries (DoF) will assist technical aspects of management.

Approach 2: Community Managed Fishery

The second approach starts with stakeholder analysis, informal grouping according to livelihood characteristics, building consensus among the livelihood category and then among all stakeholders

on the natural resource problems and constraints, and possible solutions, analysis of social, economic and ecological/environmental impacts of the possible solutions and finalization of an action plan. Waterbody Management Committee will be formed according to the suggestions of all stakeholders to successfully implement these plans. Direct NGO support to groups of poor people is not the basis of the approach but the project has a component where it would help to compensate for their adoption of fishing limits.

Approach 3: Women Managed Fishery

The third approach involves all stakeholders but separates women as the main stakeholders or lead agent in establishing CBFM. The NGO will form groups with the women or form mixed groups with men and women. Other stakeholders in the community will participate in the management committee either as committee members or as members of the advisory committee. Generally this approach is a mixture of the other two approaches, using the same planning process as Approach 2, but providing direct NGO support and capacity building for poor women so that they can perceive a leading role in CBFM.

Approach of CBRMP

CBRMP has been implementing its fisheries component combining with the above mentioned 3 approaches in Sunamganj, diagrammatic figures of the approach are stated below:

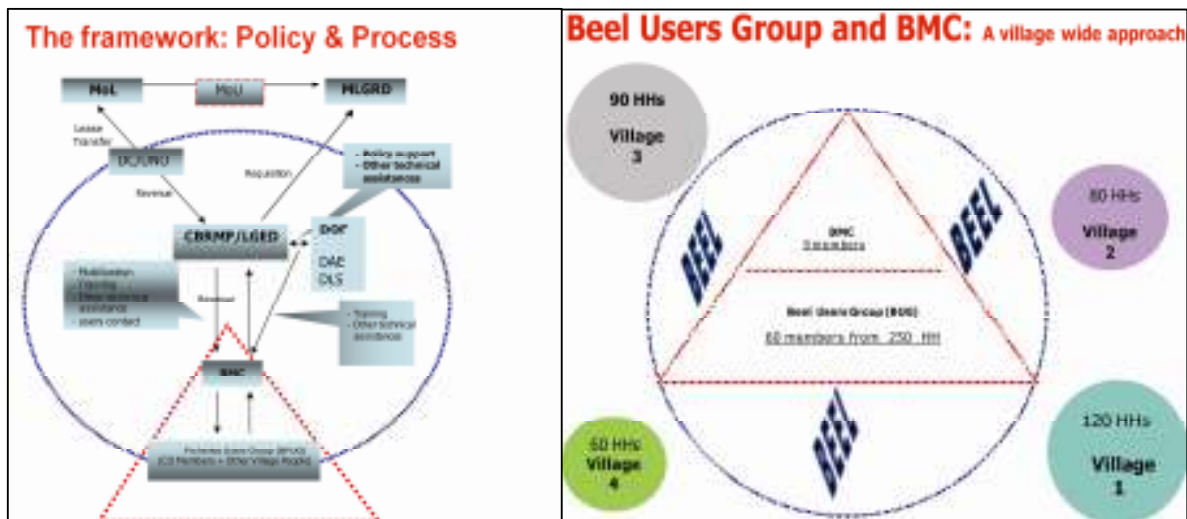


Figure 1-2. Approach of CBRMP Fisheries component

Target

The major target of this component is to provide the poor fishers access to water-bodies, ensure a community based resource management and develop the fish habitat and production with physical and conservation measures. The component has a plan of access to 300 beels (revised). Table 1 illustrates a statistical target of beels activities:

Table 1: Statistical target of beels activities

Items	Indicators	Project target (2nd revised)
BUG formed and member enrolled	BUG No.	300
	Member No.	9500
	Women No. in BUG	2375
Beel accessed by BUG	No.	300
	Acres	6500
Beel demarcated	No.	300
Beel Developed	No.	300
	Acres	1300
Khal excavated/re-excavated	No.	63
	Km.	63
Ponds excavated/re-excavated	No.	64
	Acres	30.83
	No. of Indigent women	284
Conservation campaign undertaken	No.	1200

System Monitoring for CBFM of CBRMP

Monitoring & Evaluation (M&E) system has been developed around the project logical framework. The primary stakeholders, staffs of the project, and finally the senior level officials and experts from LGED and other concerned departments have consulted upon different issues related to M&E components and process. The project has been practicing an M&E system since inception and that was mostly deal at activity level. Presently in the need of assessing further higher levels of results, critically and systematically, this M&E system is developed. Although the system covers all levels of performance from activity to goal but major focus was given on result level 1, i.e. output; and its effect, i.e. purpose which was defined as result level 2.

In the **table2** and by the subsequent flow-chart the reporting formats, frequency of their uses, responsibilities and information collecting process have been described:

Table 2: Formats/Questionnaire for monitoring and evaluation

SL	Description	Form Code	Frequency	Use	Responsibility	Location
1	BUG Supervision Report	BUG-M/UZ	Monthly	Collection	SMSs /SO	Grassroots
2	Monthly Progress Report	BUG-M/UZ	Monthly	Collection	SMSs /SO	Grassroots
3	Beel Profile and Summary	BUG-Y/PMU	Yearly	Project Compilation	FSC	PMU
4	BUG Audit Report	BUG-Y/PMU	Yearly	Project Compilation	FSC	PMU
5	Excavation Report (seasonal)	BUG-W/UZ	Weekly	Summary Analysis	FSC	PMU
6	Beel Harvesting Report (seasonal)	BUG-W/UZ	Weekly	Summary Analysis	FSC	PMU
7	Development and Socio Economic Report	BUG-Y/PMU	Yearly	Project Compilation	FSC	PMU
8	Quarterly Compiled Fisheries Report	PR-Q/PMU	Quarterly	Project Compilation	FSC	PMU
9	Yearly Compiled Component wise Physical & Financial Report	PF-Y/PMU	Yearly	Project Compilation	M&ES	PMU

The project monitoring system of CBFM has effectively been in place. Project's performance has been monitored on monthly, quarterly, half yearly and annual basis. Quarterly and half yearly workshop has been arranged for progress review and one annual workshop has been arranged for progress review and preparing the next year activity plan for CBFM. A detail AWOB has been drawn based on the project log-frame and which works as the basis of project implementation. The Project Steering Committee and District Project Coordination Committee sat for at regular interval to review the yearly progress of the CBFM. Upazila Project Coordination Committee also reviews the progress of the CBFM activities regularly.

In the BUG supervision report covered the indicators of member savings, meetings attendance, group fund, leadership rotation are the valuable part of a CBFM. Beel profile summary covered the indicator of members' information, expenditure of beel development purpose, beel purpose other investment, income and net profit information.

Apart from above, the internal audit is an independent appraisal set in project's M&E system to examine and evaluate the performance of some core activities of BUG. Every year the internal audit was conducted by the project staff included from different Upazilas and one Upazila staff audited other Upazila to make the audit more transparent and acceptable. The internal audit was support the project management to make decision and to promote good governance in BUG management. This audit is being assisted to establish reliability and integrity of information, compliance with policies, plans, procedures, laws and rules, safeguarding of assets and efficient use of resources. In the internal audit of BUG rating is one of the most important parts of M&E system to assess the stage of sustainability of CBFM.

4. The Performance of the Component

Fisheries are the most challenging component of the CBRMP. The major activities of this component are accessing beels and establishing community based sustainable management system. The project with assistance of Land Ministry, Local Government Division of Ministry of Local Government, Rural Development and Cooperative and Local Administration has been undertaking that challenge and yet the result is satisfactory in terms of access and introducing community based management by the fisher community.

Fisheries Development component till to date has accessed to 250 numbers of beels. A total of 250 BUGs have been formed comprising 9061 members of which 2244 are women (25%). The beel management by BUGs has become stronger and the conservation measures of the resources have become more systematic and brought good results in fish production and species diversity. The fish catch and diversity monitoring report that has been being carried out every year by the WorldFish. The monitoring result shows that the overall production, species diversity and income are progressing in sustained manner. The **table 3** shows the overall performance of the fisheries component:

Table 3: Overall performance of the fisheries component

Sl.	Items	Indicators	Project target (2 nd revised)	Project total as of May 2014	
				Achieved	%
1	BUG formed and member enrolled	BUG No.	300	265	88
		Member No.	9500	9061	95
		Women No. in BUG	2375	2244	94

Sl.	Items	Indicators	Project target (2 nd revised)	Project total as of May 2014	
				Achieved	%
2	Beel accessed by BUG	No.	300	250	83
		Acres	6500	6015.53	93
3	Beel developed	No.	250	242	97
		Acres	1300	1160.24	89
4	Khal excavated/re-excavated	No.	63	69	110
		Km.	63	69.95	111
5	Ponds excavated/ re-excavated	No.	64	64	100
		Acres	30.83	30.83	100
		No. of Indigent women	284	284	100
6	Conservation campaign undertaken	No.	1200	1200	100

Status of Beel access

The project has an ultimate plan of access to 300 beels. Phase-wise beel accessed plan is given in the **table 4:**

Table 4: Phase-wise beel access plan

Type of MOU with signing date	Area of Beel	Handed over from Ministry	Drop out From Project	Total Existing Beel	Handed over to Community	Handed over by May 2015
First phase (12/9/2006)	Above 20 acre	22	4	18	18	0
	Below 20 acre	0	0	0	0	0
	Sub-total	22	4	18	18	0
Second phase (6/05/2010)	Above 20 acre	53	8	45	40	5
	Below 20 acre	136	16	120	118	2
	Sub-total	189	24	165	158	7
Third phase (10/11/2011)	Above 20 acre	18	0	18	13	5
	Below 20 acre	51	0	51	46	5
	Sub-total	69	0	69	59	10
Fourth phase (14/08/2013)	Above 20 acre	16	0	16	9	7
	Below 20 acre	25	0	25	6	19
	Sub-total	41	0	41	15	26
Total		321	28	293	250	43

4 (four) Memorandum of Understanding have been signed so far between Ministry of Land and Local Government Division on transferring 293 beels of which 97beels are above 20 acres and 196 beels are below 20 acres. Of which 250 beels have come under the project and have been distributed to the fisher community.

However, following the MOU few beels could not be accessed as the lease tenure of previous lessees is yet to complete and few are involved with some local disputes.

To enhance the capacity and skill of the BUG members the project has continued special training for the BUG members in assistance with WorldFish and the Department of Fisheries. In line with the present 'Government *Jalmahal* Management Guidelines 2009' the modules of the training have been revised to make it more effective.

The trainings included:

- Leadership development and group management
- Account & book keeping
- Open water fisheries management/ Beel management: policy and process
- Resource conservation: acts and rules
- Establishing and management of fish sanctuaries
- Swamp tree nursery raising and plantation
- Fish processing & marketing
- Cage fish culture
- Re-excavation/ LCS based earth work implementation
- Familiarization with NJMG and its implications

After receiving training, BUGs are utilizing their acquired knowledge and skill in different beels resource development activities, including:

- Raising nursery
- Swamp tree plantation in beel areas
- Fixing demarcation pillar accompanied with swamp plants for live and sustained marking
- Establishing katha and fish sanctuary
- Re-excavation for beel habitat restoration and promoting better water connectivity
- Mass conservation campaign
- Raising cage fisheries, and so on

Profit Distribution Ceremony of Beel Users Group, Tedala Huglia Chatol Beel, South Sunamganj, Sunamganj.



The ceremony was attended by .Mr. Mohammed Yamin Chowdhury, Deputy Commissioner of Sunamganj, Mr.Md. Sultan Ahmad, District Fisheries Officer, Sunamganj , Project Director, CBRMP, Executive Engineer of LGED , Upazila Fisheries Officer , UNO South Sunamganj, AC(Land),South Sunamganj , Upazila Engineer along with others. In 2011-2012 a total of 15118 kg fish was harvested from this beel valued of Tk. 1646678 and from that after setting aside all the expenses each of total 53 members got Tk. 17000. In 2009 -2010 they got Tk.11600 each. Both the fish production of the beel as well as the diversity has increased under responsive Community Based Resource Management. During 2012-13 they got 30000.00 per members.

The following shows the statement of Tedala Huglia Chatol Beel, regarding production, income, expenditure, wage, profit etc. up to the year of 2013-2014:

Bengali year	Fish production (Kg)	Total income (Tk.)	Wage distributed (Tk)	Total Profit distributed (Tk)	Total member	Per head distributed (Tk)	Remarks
1413	13201	895450	204000	240000	40	6000	
1414	11764	667614	171382	246000	60	4100	
1415	5770	408358	114697	108300	60	1800	
1416	12273	1214219	353363	556800	48	11600	
1417	15089	1314723	312320	770000	55	14000	
1418	15118	1646678	418000	901000	53	17000	
1419	22825	2546425	652430	1530000	51	30000	
Total	96040	8693467	2226192	4352100		84500	

Initially the BUG of this beel faced many problems in accessing to resources and establishing management in midst of vested interest group pressure, encroachment, poaching, their own leadership crisis and so on, but with their organized efforts and improved management they have overcome those successfully. Financially the beel is

Beel development

An extensive development activity was undertaken for beels development. The activities included earthwork, swamp tree plantation, setting of demarcation pillar and establishing of fish sanctuaries. All the activities implemented in consultation and collaboration of respecting district and upazila committees formed for overseeing the fisheries management activities of the project.

Under the beel development activities, earth work was done in 242 beels; constructed 40 numbers of total 15.85 km of beel connected roads; excavated 69 no of beel connecting khal of total 69.95 km, planted 250000 saplings of swamp tree in 115 beels; Set boundary pillars in 118 beels, established fish sanctuaries in 50 beels.

All the development activities were physically supervised by concerned government officials including DC, LGED's XEN, DFO and UNOs, UEs, and UFOs and gave input for quality work.

Through beel excavation work around 426081 labour-days employment was generated during the project period.



Lease value, Fish Production and Benefit

All those activities have been being implemented by project support and in collaboration with different relevant departments and institutes, particularly the Local Administration, Department of Fisheries, and Local Government Institutions.

By this time the BUGs have given revenue (lease value) to the government amounting to Taka over 35 million. They were regular in paying the lease fee and still have done it very systematically and faced no problem to meet that by their own source of funding. The **table 5** shows the year-wise lease fee payment from 2005 to 2013.

Table 5: Lease value payment status

Items	1 st year (Bengali) 1412	2 nd year (Bengali) 1413	3 rd year (Bengali) 1414	4 th year (Bengali) 1415	5 th year (Bengali) 1416	6 th year (Bengali) 1417	7 th year (Bengali) 1418	8 th year (Bengali) 1419	8 th year (Bengali) 1420	Total
Revenue (Tk.)	499696	1011638	1802263	1802263	1982233	5262217	7275089	7419252	7965000	35019651

The BUG members get benefit from beel fisheries by selling fish and from wages earned by giving labour in catching fish. The profit from selling fish is equally distributed to BUG members, but wages for catching is given on work basis.

During the reporting period, total fish production was 1667.57 ton and total sale price was taka 162.24 million. Distributed profit taka 70.00 million among the BUGs members. Moreover, BUGs members earned taka 37.21 million as wages.

The overall progress of the beel fisheries is good, and it is expected with improved management skill of BUG the trend of the progress would be sustained. The progress is attributed to increased better management of beel resources. The **table 6** shows the results of the overall direct benefits from beel resources in a summary form over the last nine years:

Table 6: Summary results of beel fisheries

Sl.#	Particulars	Unit	As of May 2014	Remarks
1	Fish Production	Kg	1622478	
		Tk	166757517	
2	Profit distributed among BUG members	Tk	70005176	
3	Wage earned by BUG members	Tk	37213013	

The BUG members have utilized their earning from beels in different areas including small trade, buying/leasing in land, releasing land from mortgage etc. Out of all investments trading rice (paddy husking and selling) has been being found quite lucrative and popular to them. Besides, the trends of investment in insurance along with other different new sectors are being observed.

Profit distribution

Profit distribution is the vital part of beel fisheries and a very transparent and accountable method has introduced by CBRMP. In every year after completing of fish harvest the profit were distributed formally in presence of MPs, concerned high officials from government departments and local representatives. The system as increases the transparency in profit distribution, it encourages the interest and commitment as well of the fisher community to better beel management for the participation of the MPs and others in their process of work. The following pictures show the participation of MPs and others in profit distribution ceremony arranged by BUGs.



Figure 3. State minister of Finance, Md. Abdul Mannan distributing profit among BUGs, which was held in South Sunamganj



Figure 4. Former Minister, Mr. Suronjit Sengupta distributing profit among BUGs.

Internal Audit of BUGs

Project has a good BUG auditing system. It has been done in every year. The audit was conducted by a team of project staff included from different Upazilas. To ensure transparency and reliability in the audit process, one Upazila staffs were engaged to other Upazila. For FY 2012-13, A total of 42 staff in three groups participated in the audit and it took around 3 days for each group to complete the assigned audit work. The total audit activity was guided by Project Management Unit (PMU) of CBRMP.

The major findings of the last audit are as follows:

- Regular savings during the audit period was Tk. 1,106,355 Savings was quite regular in maximum BUGs.
- During the audit cash in hand was found Tk. 29250. Maximum cash in hand was found in one individual BUG Tk. 27940 and minimum Tk. 1,310.
- The financial statement states that total receipt amount was Tk. 8,91,86,555 and a total expenditure was Tk. 8,09,74,383 cash in hand was Tk. 7,66,744 and cash at bank was Tk. 83,04,060.
- A difference of Tk. 3,77,786 was found upon reconciliation with bank, which was occurred following credited a transfer to communities (CO) accounts for beel development activities. This transfer was made upon a prior decision of the project. The cash book rightly reflected the transactions.
- During the audit period the total wage earned by BUG members was Tk. 85,18,868 from beel fishing and the received profit from catch was about Tk. 18,027,726. Most of the transactions were done in time and maintaining the agreed rules.
- The attendance of BUG members in BUG meeting was on an average 83% and thereby it is rated satisfactory. Few members who could not attend BUG meeting was mainly for seasonal migration during the slack period of fishing.
- The record keeping of most BUGs was found satisfactory and quite well maintained, particularly, all documents related to development activities were found updated and very well kept.
- The process documentation and all the background papers, like PRA works, master list of households of beel command villages and other inventories were found updated and well preserved at all BUGs.
- Byelaws/rules of governance were introduced to 182 BUGs and found being followed by all except few those were newly formed.
- Of 239 BUGs, 139 were found to maintain the books and records efficiently, 63 partially and the rest 32 were relatively poor in doing that.

- It was found that 132 BUGs were able to conduct the regular group meeting independently, 24 were partially and the 73 were not able to conduct the meeting without assistance from project staff (SO or CDF).
- Training for capacity building was undertaken for 893 BUGs members and that has impacted well.
- Women enrollment in BUG so far reached 25%, where the performance of Sadar, Tahirpur, Sullah, Chatok and Dowarabazar was not satisfactory. During the last audit the rate of women involvement was 25% and in few BUGs it has already reached.
- The leadership rotation took place in 113 BUGs and all elections carried out on the secret ballots basis.
- 36 BUGs developed some assets valued to Tk. 1,47,251 and some BUGs contributed to various social causes such as assisting very poor in treatment; undertaking essential ritual activity and so on.
- The audit rated the BUGs based on a set of criteria and graded 98 BUGs (42%) at A, 96 (41%) at B and the rest 39(17%) were at C. Last year that status was 48% at A, 37% at B and 15% at C respectively.

The overall performance of BUGs was quite good. In a few areas particularly in financial management some further improvement is required. Financial transactions of BUG through bank have largely progressed. However, regularity in meeting, members' attendance, and savings need to be further improved. (For details please see the separate BUG audit report).

Conflict Management

The project has been facing many conflicts against local bidders (local influential) who usually used to take benefits from beels without thinking the interest of real poor fishers and aquatic resources users from the beginning of project intervention. Many local conflicts are resolved by taking strong initiatives in times. Moreover, several cases are filed against the project beels by those local bidders to establish right on the beel resources. In the project period a total 23 cases are filed by them, of which 11 are in local court and 12 are in high court.

5 cases are resolved/ dismissed in the local court by the strong initiatives of local staffs out of 11, the rests 6 are in running which are expecting to be dismissed within couple of months. Local staffs of CBRMP had to stand in the court against cases.

12 cases are running in the high court which are dealing strongly of which 10 are role pending but stay vacate. The access of the beels is under project and well management being done also. The project director had to stand in the court to fight the cases.

Section-I: Effectiveness

Management efficiency has been analyzed for 10 best and 10 least profit (production) contributing beels in 6 Upazilas, namely- Sunamganj Sadar, South Sunamganj, Derai Upazila, Jamalganj, Biswambherpur and Tahirpur. The production profits of 10 best beels in the base year (2007-08) were found Tk. 578488, 482748, 566000, 52770, 481992, 137000, 19990, 2500, 103792 and 87000 for Tedala Huglia, Chatol Udaytara, Abua nodi, Boiragimara beel, Thapna GJ, Boro Medi beel, Babonpoi beel, Lomba-Gol beel, Terajani balir duby and Langol Kata respectively. The profits from

production have increased gradually through proper and efficient management over seven years and in 2012-13 (impact year), which have raised Tk. 2182430, 1375000, 1129840, 940000, 897139, 895800, 291717, 230800, 156000 and 149500 for Tedala Huglia, Chatol Udaytara, Abua nodi, Boiragimara beel, Thapna GJ, Bro Medi beel, Babonpoi beel, Lomba-Gol beel, Terajani balir duby and Langol Kata respectively. The highest cumulativenet profit contributor beels over the seven years were Tedala Huglia, Thapna GJ, Chatol Udaytara, Abua Nodi, Bro Medi beel, Boiragimara beel, Langol Kata, Babonpoi beel, Terajani balir duby and Lomba-Gol beel and contributed Taka 6452141, 5349396, 5269230, 5122367, 2983878, 2656770, 1198400, 883357, 705072 and 660550 respectively. *Figure 7* shows the 10 best profit contributed beels compared with the base year.

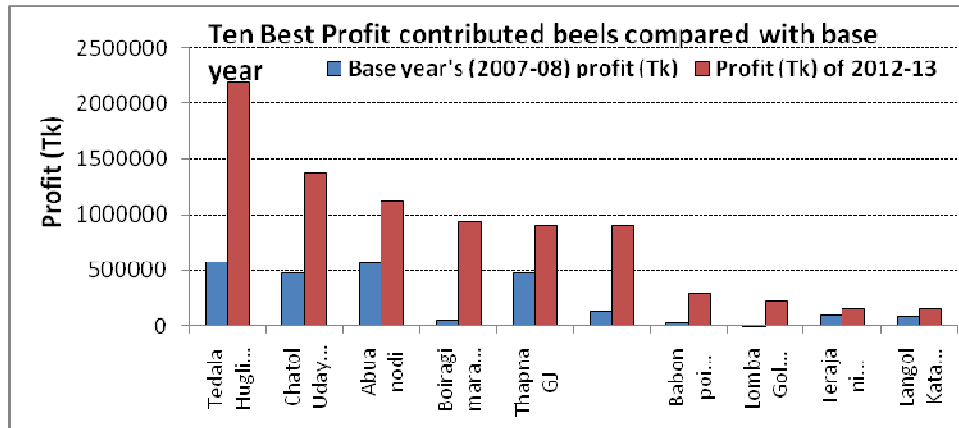


Figure 7. Comparison of profit of ten best contributed beels with base year (2007-08) to (2012-13)

On the other hand, the least 10 production profits contributing beels of base year (2007-08) were recorded Taka 3580, 16420, 20000, 8022, 12000, 4200, 51703, 8000, 14000 and 33976, which were raised after seven years (2012-13) and contributed Taka 11500, 24500, 27200, 54100, 58400, 68800, 72680, 86000, 96600 and 131000 for Issubpurer khal, Monikamarerkuri, Lal purer Jai, Tear beel Lamba beel Goal beel, Chato beel, Sreenathpurer dhola, Chinamara beel, Aung gung beel, Aislauni beel and Sunduikka group beel respectively. However, among the 10 least profits contributing beels the cumulative **net profit** over the seven years were Taka33160, 119200, 152079, 193258, 203438, 229600, 230268, 303313, 374134 and 380358 for Issubpurer khal, Sreenathpurer dhola, Lal purer Jai, Monikamarerkuri, Tear beel Lamba beel Goal beel, Chatol beel, Chinamara beel, Aung gung beel, Aislauni beel and Sunduikka group beel respectively. *Figure 8* shows the 10 least profit contributed beels compared with the base year:

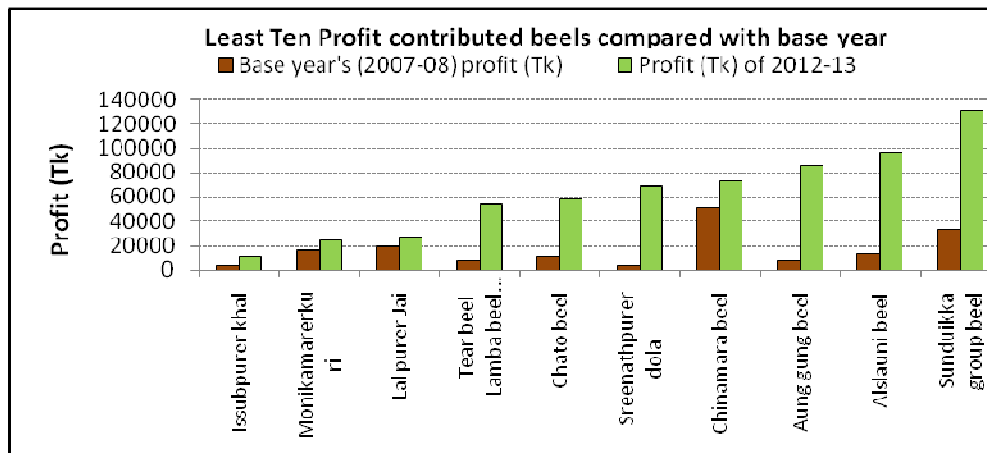


Figure 8. Comparison of profit of least ten contributed beels with base year (2007-08) to (2012-13)

Section-II: Efficiency

Management efficiency/cost effectiveness has been analyzed based on 30 study beels. In these beels, there are several management expenditures items (sanctuary establishment & maintenance, swamp tree plantation, sanctuary guarding etc.) exist against only the fish production income. So, Management efficiency/cost effectiveness completely depends on the net profit which is accrued from major fishing (bulk fishing by BUG). If the management cost is very high, the cost effectiveness becomes very low in ranking. However, percentage of management cost is calculated by multiply 100 with total costs (management cost and operational cost) and then divided into the total production sale value (Tk) with it.

Management cost of 43.33% beels are staying in between 10 to 30 values, which is 22% management cost shown, which is indicated 78% cost effectiveness; Management cost of 33.33% beels are staying in between 31 to 40 values, which is 31.7% management cost shown and these are indicated 68.3% cost effectiveness. And the rests 33.33% beels remain in between 41 to 55 values, which is shown 46.14% management cost, which is indicated 53.86% cost effectiveness. *Figure 9* shows the cost effectiveness (%) of beels.

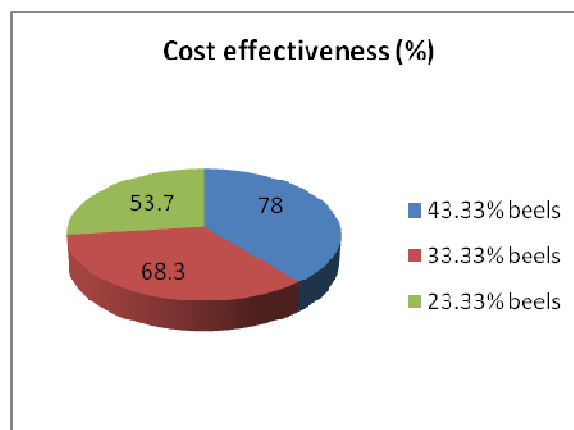


Figure 9. Cost effectiveness (%) of beels

Section-III: Poverty Impact

a) Livelihood development

After the inception of the project significant progress have been achieved in different fields of diversification of income. Household income has increased nearly three times compare to the national level income. The project area has made remarkable progress in the fisheries management and development of its infrastructure, especially in the development of paved roads. This part of the report provides a preview of the general household income contributed from different economic activities. Each, income activity represent the total percentage of households' income derived from each particular source, in which contribution from fishing is highest in all studies. Study reveals that average income increased by about 28% in 2013 compared to 2010 livelihoods study. However, income increased by 180% in 2013 when compare with base income among the participating households. Fishing is the income source with the highest contribution in all study periods but there are differences amongst the other categories. Study reveals that in 2004, 43% of income derived from fishing but in 2012 income diversified and only 27% income contributed from fishing.

Achieving the MDG targets securing food security for the poor is a prime task for all development projects. In this connection project provided development services improved food security status of the sample households. About 64.8% has no food crisis at all throughout the year and 31.2% households' has food shortage for 1-3 months in a year which reflects that about 42.4% households have better food security. While, baseline reported, only 12% had no food crisis throughout the year and 80% households' had food shortage for 1-3 months in a year which reflected that about 15%

households had better food security. 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 CBRMP. So far description of information suggest better livelihood situation in the project area however, to achieve sustainable poverty reduction need long term comprehensive development programs supported by government agencies.

About 59% households have access to livestock which is the preferred rearing activity at the household and adjacent area, while in 2004, 42% households had livestock. The study also reveals that luxury assets such as radio, television, gold and mobile phone has increased notably. Assets such as fishing nets, mobile phones, ornaments, furniture (beds/chair/tables/showcase), radios, televisions, and bicycles are most commonly held by households. Comparing four sets of data from the BUG members' households, there are positive changes in most of the items. On the other hand fishing net and boat ownership decreased within project period. Biodiversity study report and livelihood study report are enclosed in *annex-iv*.

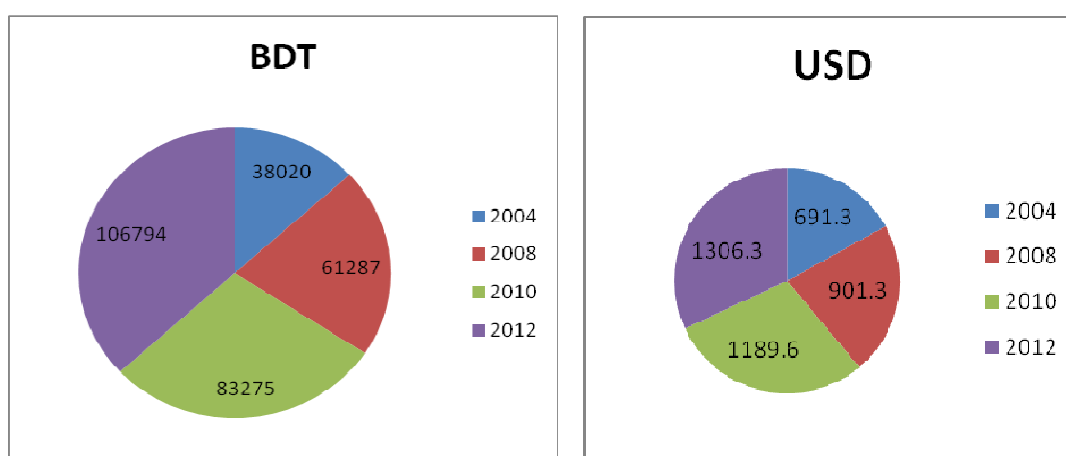


Figure9-10: Comparative incomes over different study years (1USD=60Tk.BD)

[Reference: THIRD ROUND LIVELIHOOD IMPACT MONITORING REPORT OF BEEL USER GROUP (BUG) MEMBER]

Changing story of Nikhil Chandra Barmon

Nikhil Chandra Barmon of 50-year-old lives in Khola chandpur village of Biswambherpur Upazila in the district of Sunamganj. He is head of the family with 9 members. Due to financial crisis and lack of awareness and motivation he completed only five classes. He is an important member of Abua BUG (Beel User Group). He had only 75 decimals of agric land in the deeper portion of haor and he had no homestead land, because his homestead land was crashed by the river. Among other assets, he had a



boat and a few nets which he used to buy each year by lending of money from the money lenders (locally called *mohajan*) with a high interest (10% in each month). He had food security only for 5 to 6 months with the yields he got from his agricultural land. It is important to state that in some years, the yields were damaged by sudden flash flood and he suffered indescribable food crisis in whole the year round. He used to catch fish for livelihoods rests of the months as a fisher, but it was very difficult to fish in the beel because there was no access to beel for fishing, money lenders used to get the access from district/Upazila administration through open lease holding system by the dint of money. Moreover Taka 10,000 to 12,000 was needed to collect a token for getting fishing access in the beel for only operating of 1unit of fishing gear. He had to expense a lion share of his income for food and repaying of interest to the money lenders. So, he could not able to meet his family needs properly, moreover, he had a deficit of taka about 25,000 to 30,000 in each year end and had to lend loan again about taka 30,000-40,000 to meet the family needs and loan repayment. Before the SCBRMP, he had a house of 1 room where entire family members were lived, his family members used hanging latrine and open field, didn't wash their hands after used of latrine and even before taking meals.

After the intervention of Sunamganj Community Based Resource Management Project (SCBRMP), he joined to Abua BUG which was formed by the project in his village in 2008 and gained access to the beel as a real fisher. He paid taka 3000 as lease money during obtaining his membership which was deposited in the BUG fund. He elected the chairman for 2 times through the BUG secret ballot election and till now he is existing chairman. He has been doing the organizational activities very well. He received training in various events like Institutional development, fisheries management, agricultural, sanitation and gender awareness. Due to active involvement in the project, he could diversify the income sources, such as agriculture, individual fishing, from the profit of BUG and income from reinvestment of fish related trading. Now he has an annual income of taka 1,50,000 of which taka 30,000 from fishing in the project beel by getting fishing license from BUG, taka 5000 from yearly profit of BUG, 30,000 from nearby beel-haor during monsoon, taka 50,000 from profit reinvestment in fish related petty trades dry (sutki) fish, fish selling and rests of from own agric products and others. He has bought a shallow machine with taka 17000 for cultivation of own agricultural land and rented out for irrigation purpose. He has made a house of 4 rooms with earthen wall and tin roof, and a kitchen with same materials on own homestead land of 7 decimals. He has set a solar panel on the roof of the house for an alternative of electricity. He has bought 1 showcase, chairs, table and ceramics also. Sanitary latrine, tube well provided by the SCBRMP has removed his sanitation problem and crisis of pure drinking water. He has no risk to lose his house in from sudden flash flood due to village protection wall made by the project. His 2 babies are going to school now for better future. Now, he has no food insecurity, he makes surplus about taka 20000 in each year. He is looking a better life in near future.

b) Fisheries Production and Biodiversity

A total of 139 species of fish and prawn were recorded (from both open and major catches in 2013-14) of which 120 species was recorded in open catch and 131 species was recorded in major catch, where 73 species were recorded from both open and major catches in 2007-08.

Using IUCN status and based on open catch of 7 Critically Endangered species, 6 (*Clupisoma garua*, *Labeo pangusia*, *Puntius sarana*, *Rita rita* and *Tor tor* and *E. vacha*) found in the Abua nodi in 2012 which reveals that Abua is the home of 'Critically Endangered' species. Besides Thapna, Sondukka,

Kachma beel, Matian haor, Langol Kata, Boro Medi, Lomba beel, Tedala and Basker Khal are also the home of critically endangered species. In 2008 only four Critically Endangered species were found in the Abua and Sondukka, and only one Critically Endangered species (*Tor tor*) was found in Thapna Group Jalmohal. The study clearly shows Abua nodi, Thapna, Sondukka, Kachma beel, Matian haor, Langol Kata, Boro Medi, Lomba beel, Tedala and Basker Khal are the habitat of Critically Endangered species. Among 15 Endangered species 10 species shows increasing trends during study periods. Study reveals that six endangered species namely; *Chaca chaca*, *Crosschellius lalius*, *Labeo bata*, *Notopterus chitala*, *Silonia sinondia* and *Rasbora elanga* appeared near to Critically Endangered in haor areas and found only few water bodies.

Comparison with National Production:

Average national production of Inland open water capture fisheries were reported 263 kg/ha, 279 kg/ha, 256 kg/ha, 262 kg/ha and 244 kg/ha in 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12 financial year respectively (DoF 2013). However, average national production of River fishery (including estuary) were reported 160 kg/ha, 162 kg/ha, 180 kg/ha, 169 kg/ha and 171 kg/ha in 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12 respectively. At the same time average production from only River fishery in CBRMP sites were found 192 kg/ha, 199 kg/ha, 267 kg/ha, 199 kg/ha and 192 kg/ha respectively. Simultaneously, average national production of only Beel fisheries were reported 616 kg/ha, 694 kg/ha, 615 kg/ha and 714 kg/ha and 746 kg/ha in 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12 respectively. Though, average production from only Beel fisheries (pooled both open and organized catch) in CBRMP sites were found 663 kg/ha, 659 kg/ha, 720 kg/ha, 670 kg/ha, 670 kg/ha and 701 kg/ha in 2008, 2009, 2010, 2011, 2012 and 2013 respectively. **Figure 11** presents a comparison of national and SCBRMP production. A detail on biodiversity is enclosed in **annexure-iv**.

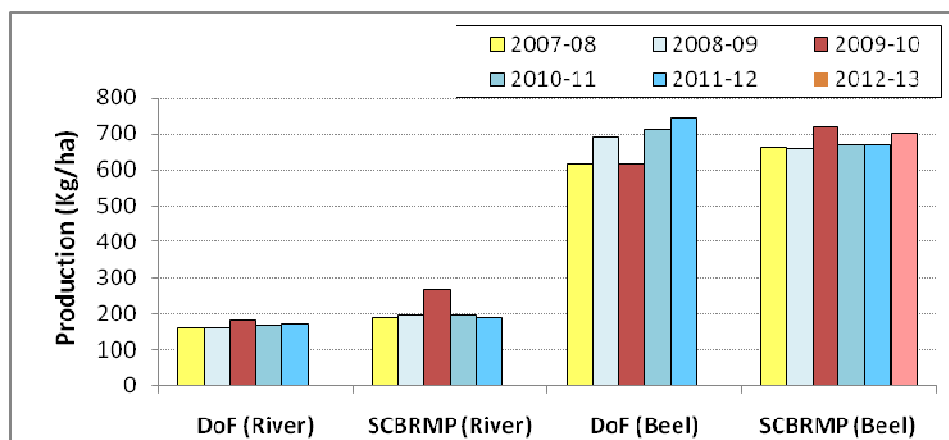


Figure 11. Comparison of national production with SCBRMP's water bodies (River and Beel)

Stocking Mola fish in beel: a new inclusion to beel fisheries

It was an inclusion to beel fisheries program of CBRMP. The broader objective of Mola (*Amblypharyngodon mola*) stocking is to increase production and diversity of indigenous fish species and meet the protein deficit of the haor people as well as to increase income by selling it. Mola is a sweet water small indigenous fish variety. It is very delicious in taste and rich in vitamin A, Calcium and other nutrients that largely lack by the poor people in the haor region. The programme has been initiated with technical support of WorlFish. The Mola stocking program included 15 beels from three Upazilas- Sunamganj Sadar, South Sunamganj and Derai, of which 5 in Derai Upazila (*Mangolpurer Dubi Beel, Lomba Dair Bocha Chatol, Juri Panjuri Beel, Roa Beel and Boro Medi Beel*), 5 in Sadar Upazila (*Boiragimara Beel, Aislauni Beel, Kaima Beel Koiya Beel, Piranagar beel and Aung Gung*) and 5 in South Sunamganj (*Tedala Huglia Chatol, Chinamara Beel, Srinathpurer Dhola, Chatol Udaytara and Rajghori Beel*) and lays within the fish study area of WorldFish. Five fishers from each beel have been trained on Mola Fish Mangement in haor area and a total of 343 kg Mola has been stocked in 14 beels against a target of 506 kg though 15 beels are selected. Following unavailability of brood and communication problem the target of stocking could not be achieved. The fishers have taken the Mola brood stocking with great interest. They are meeting all the cost involved in procuring the brood, its transportation and rearing. For raising awareness of the villagers about Mola culture and conservation, awareness meeting and billboard with essential promotional information have been posted at each beel selected for Mola stocking. Total production is measured in terms of organized catch (bulk catches made by organized groups) and open catch monitoring (individual catches during flooding season) to validate the total catch at each water body. During this reporting period, only open catch is finished and major harvesting is being continued and it will be completed by April 2014. The total baseline production (before stock) was obtained by combining estimated catch from open catch monitoring and harvest from organized catch. The total fish production was found 1686 kg in 14 sampled waterbodies in 2012-13, of which 903 kg from organized catch and 783 from open catch monitoring.

After stocked, the total production was obtained by combining estimated catch from open catch monitoring and harvest from organized catch. The total Mola fish production was found 6,714kg in 14 sampled waterbidies in 2013-14, of which 4,807kg from organized catch and 1907 kg from open catch. Some pictures of awareness meeting regarding Mola (Figures 13 and 14) and Mola harvesting (Figures 15 and 16) and graphical representation of production status (Figure 17) are given bellow.



Figure 13. The Project Director meeting with BUG in an evening during first releasing of Mola broods to create awareness



Figure 14. A BUG female member describing and sharing her knowledge about nutritional value of Mola fish during awareness meeting; project leader, FRSP-WorldFish and FSC, CBRMP-LGED were attended in the meeting



Figure 15-16. Some pictures of harvested Mola

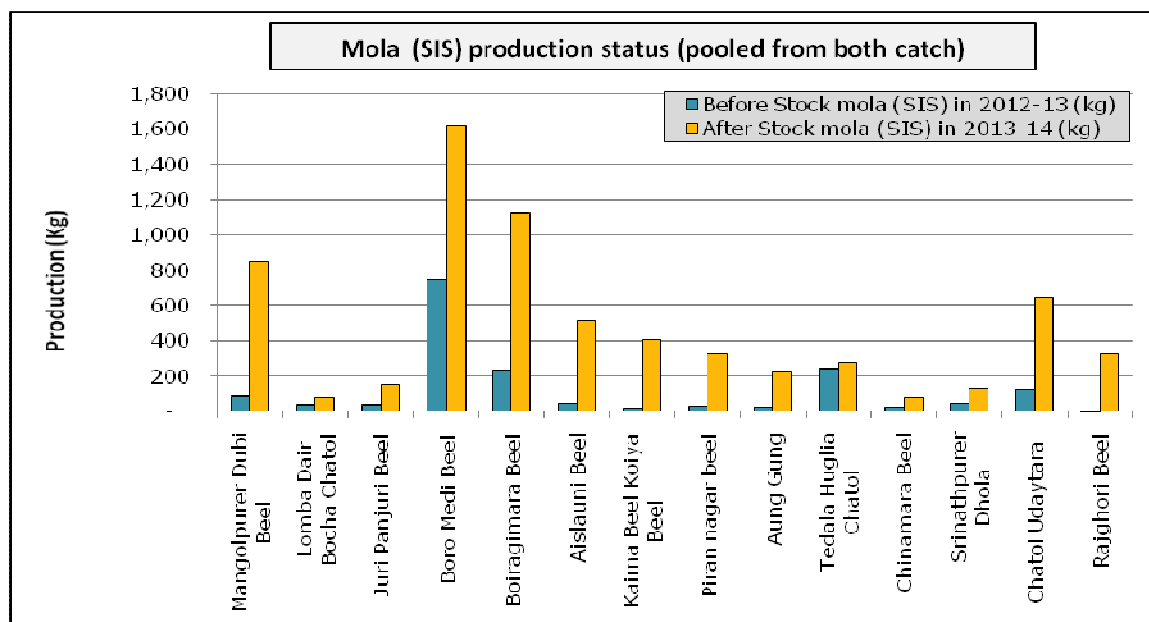


Figure17. Mola fish production status

5. Sustainability

After the project over, access right establishment to water bodies would be the key event through access to leases. This would require that the leases are available to the beneficiaries for the period of at least 10 years after completion of the project. To avoid conflicts with larger lessees the project would start with leases on smaller water bodies and in areas in which the larger lessees are known to be community friendly.

1. **Institutional sustainability:** The project has adopted an innovative and sustained community-based resource management by establishing BUGs. These results have brought in supports from all concerned agencies including Local MPs, Ministries, line-departments, local administrations, and that has built a sustained partnership in promoting community based approach for resource management. BUGs' access to the water bodies has been guaranteed by MoL's decision, extending the contract period up to 2019. So, the sustainability of the institutions' (BUGs) operation is anticipated. Furthermore, all beels/BUGs of the project have been formally included in the succeeding project, HILIP for further strengthening of sustainability.
2. **Social sustainability (Empowerment):** Social sustainability is reflected in two aspects: (i) the project-formed BUGs have been operating well. Their execution has enhanced the community cohesion and built up the social capital. Enhanced capacity of those farmer groups will also contribute to improving their capability in planning and managing community development projects through participatory approach; (ii) technical training and credit lending activities have empowered the beneficiaries, particularly women, through improved capacity and income. Total 8,419 farmers have been trained up on fisheries.
3. **Economic and financial sustainability:** Sustainability of Economic and financial for the beneficiaries is anticipated: (i) improved capacity would be the basis for the beneficiaries to sustain their production and income generating activities; (ii) improved household assets and

enhanced access to resources have created potentials for the beneficiaries to sustain the increase of income; (iii) a large number of project beneficiaries have significantly increased their income by participating in the project activities, such as fisheries, which indicated an enhanced self-financing capacity of the beneficiaries;

4. **Technical sustainability:** The project partnership with DoF and WorldFish has actually created a potential of technical sustainability for the project. These institutions would continue their devotion to the development fisheries in the project area, which is an integrated part of rural development strategy in the country.
5. **Environmental sustainability:** Environmental improvement for sustainable development has been properly concerned by the project. Beels development and swamp forestry have the attributes of environmental improvement.
6. **Biological sustainability:** Fish catch and biodiversity monitoring study reveals that fish biodiversity sustainably increased at project waterbodies and the management approaches validate the attributes of biological sustainability.
7. **Exit strategy:** The project have included: out of the 293 beels transferred from MoL to LGED, the project aimed at developing 250 beels and the remaining has been handed-over to the follow-up project, HILIP, for development. Meanwhile, MoL has decided to extend the contract period of beels up to 2019, which has ensured the post-project access of BUGs to the water bodies. Arrangement has been drawn for hand-over of BUGs formed by CBRMP to HILIP for follow-up and further support as required.

Ideas of further Sustainability for CBFM Principals of CBRMP

To reach in a consensus regarding **BUG sustainability**, a workshop is organized in April 16, 2014 in LGED Conference Room, Sunamganj, where BUGs' members, District Commissioner, Project Director, SCBRMP-LGED, Executive Engineer, Sunamganj, District Co-operative Officer, District Fisheries Officers, WorldFish's Scientist, other GO-NGO officials were present. After several presentations and discussions, couples of recommendations were made for sustainability of BUG which is stated below:

Recommendation -1

BUGs are considered to be given registration under Co-operative Act 2013 as primary co-operative after over the lifetime of HILIP. In this regards, a MoU may be drawn with Co-operative Department as small water resource project which is being implemented by LGED.

Recommendation -2

Clearly stated in Jalmahal Management Act 2009, Article-5(11), Para 7(1): With above 20 acres of limited numbers of closed Jalmahals to be leased to registered real fisher co-operative by the approval of MoL for fisheries resources development, poverty alleviation and socio-economic development of real fishers under development project.

BUGs can get that facility after, while, they will have registered from Co-operative.

Recommendation -3

Propose to be made for giving registration under Co-operative Department of “A” and “B” grade obtaining jalmahals after project life over; and extra nursing to be undertaken for “C” grade obtaining jalmahals under HILIP to raise them into “A” and “B” grade status.

Recommendation -4

Jointly, the mentioned primary co-operatives will be formed as non-registered Upazil Federation.

Recommendation -5

District level Central Co-operative will be formed taking representatives from Upazil level Federation which will be registered under Co-operative Act 2013.

Recommendation -6

2 representatives from Central Co-operative will represent in District Jalmahal Committee which may be ensured by MoL.

Recommendation -7

Primary Co-operatives will give a fixed amount of subscription to the Central Co-operative for maintaining its operational expenses, and the Central Co-operative will assist to primary Co-operatives regarding all sorts of legal and institutional aspects.

Recommendation -8

Finally, a piloting may be executed in **HILIP** regarding as mentioned above.



Figure 19. Sustainability workshop of CBFM in CBRMP

6. Innovation

1. The project has been well documented with all reports, guidelines, manual, training modules and promotional materials of the fisheries component and these documents are available for sharing with the stakeholders and LGED Website.
<http://www.lged.gov.bd/ProjectLibrary.aspx?projectId=6>. Even the BUGs are also being found good in keeping records. Project has generated a detailed yearly audit report for each BUG.
2. Regularly updated project information in the LGED website and shared all annual reports (till 2012) through the IFADASIA website. The project also published two research documents

“Introduction to Fish Species Diversity’ and “Fishing Gears Diversity in Sunamganj’ in June 2013 which are the first instance in the fisheries sector of Bangladesh.

3. The project shared its research publication conducted by WorldFish with all the universities, development agencies and other stakeholders, and most importantly conducted 30 meetings to disseminate the findings to the community people. The mission interviewed some of the beneficiaries who were present in the dissemination meetings appreciated those meetings and showed fruitful attitudes. Other activities for knowledge sharing included: (i) PD and M&E officer attended a Writeshop Workshop’ held in July, 2013 in Philippine and wrote two articles which were published in IFADASIA; (ii) the IFAD national newsletter has published its February Edition (2013) focusing on the SCBRMP including an interview of the project director; (iii) the project has been organising ‘Profit Distribution and Experience Sharing’ ceremony regularly where BUG members share their experiences with the policy makers and the community people;
4. The project has contributed a lot of its experiences to a number of official statements of Government and relevant ministries as well as other stakeholders and the development of new projects such as the ‘Haor Infrastructure and Livelihood Improvement Project (HILIP)’ including four more districts in addition to Sunamganj. The Government of Bangladesh has principally agreed to adopt the approach of Community Based Resource Management in its ‘Haor Master Plan’, a policy for long-term development of haor region. Japan International Cooperation Agency (JAICA) is in the process of designing a similar type of project in this area.

The efficient project management and implementation by the dedicated team resultant several innovations which can be concluded for the project, of which some are highlighted below:

- Community-based water resources management through BUGs is an innovation of the project. This innovation has ensured the secured access of fisher folks to the water bodies for income generation through increased production and sustainable management. It has been scaled-up in the country and adopted by the succeeding project HILIP, which covers five districts in the haor area.
- The project has innovatively established its partnership with the WorldFish for the monitoring and assessment of sustainable management of water bodies. It has demonstrated positive results on the conservation of rare fish species and promotion of nutrient-rich species, such as mola to improve the nutrition of local habitants.
- The introduction of the low-cost bamboo structure cage fish culture may have also considered an innovation for the project. This technology is very useful for the project target groups to culture fishes in the water bodies around the villages either for income generation or for their own consumption.

7. Gender Aspects

On gender aspects in CBRMP, women’s progresses are notably recognized at locally and nationally, women for their exceptional performance in becoming economically solvent have been rewarded nationally. Sheikh Muhammad Mohsin, the Project Director who was acknowledged by LGED as the best project director in 2011 for his persistent efforts in rural poverty alleviation, ensuring women’s active and inclusive participation in development and their improved livelihoods. Women have been

involved in all components of the project in order to empower them through skill improvement, income generation, leadership development and active involvement in making decision at family and community level. Poor women have been enabled to earn money through involvement with construction related works and excavation of the beels and canals.

The project formed 250BUGs with 8870 members, where 25% women members existed. A total 36 cage culture schemes have been extremely executed by women, of which 16 are low cost.

Besides, due to direct inclusion of women in project activities, the project has also carried out a gender sensitization, through gender courses for project staff. Observed International Women's Day and distributed of gender sensitization materials. The **table 7** illustrates the participation/involvement in the project performance as a whole:

Table 7. Participation/involvement in the project performance

Components	Name of the trainings	Category of trainees	Batches	Number of trainees			Female to male ratio(%)
				F	M	Total	
Fisheries	Orientation and Lesson Sharing on Good Practice	BUG Member	7	266	725	991	27:73
	Resource Conservation	BUG Member	15	94	298	392	24:76
	Fish Sanctuaries	BUG Member	8	45	165	210	21:79
	Swamp Tree Nursery	CO/BUG Member	0	0	0	0	0
	Swamp Tree Plantation	BUG Member	16	115	324	439	26:74
	Fish Processing & Marketing	BUG Member	6	114	280	394	29:71
	Open Water Fisheries Management	Project Staff	1	0	25	25	0
	Orientation on Beel Re-Excavation Method	LGED & Project Staff	0	0	0	0	0
	Re-excavation Method	BUG Member	46	455	1067	1522	30:70
	Leadership Dev., Acc. & Beel Management.	BMC Leader	12	64	223	287	22:78
	Cage Culture	Women BUG Member	0	0	0	0	0
	Ref. BUG Audit	Project Staff	1	1	40	41	2:98
	Exposure Visit	Project Staff & BUG Member	1	0	24	24	0
	Small Fish Production & Mgt. Technique	BUG Member	3	5	68	73	7:93
	Total:		169	1817	3924	5741	32:68

8. Roles of Partners

Project has accomplished many activities including training, workshop, and discussion to build the capacity of the project staff and partners for effective service delivery. A good numbers of institutions including DAE, DoF, Local Administration and WorldFish have been associated with project for project's capacity building. The local Government Engineering Department has been playing a central role in capacity building and guiding the project in its implementation process. The **table 9** revealed the supports to Project from different types of Departments & Partners.

Table 9: Role of partners

Sl.No.	Departments/Partners	Support
1	MOL	Ministry of land has the mandate to handover the beel to the project. It is necessary to mention that, they took very encouraging

Sl.No.	Departments/Partners	Support
		role to do this. Several times they visited field level activities of the component; even responsible state minister of land has visited one BUG profit distribution program and expressed his worm opinion about the management.
2	DoF	Department of Fisheries officials are very cordial about the project. They were closely involved of the habitat restoration activities of the project and capacity building of the BUG.
3	Local Administration	Handover the beel to the project, administrative support to conflict mitigation, administrative supports, assess beel development activities and poverty alleviation of beneficiaries for sending a compile report to MoL, policy influence, provides essential fisheries related training.
4	WorldFish	<ul style="list-style-type: none"> i) Assess the impact of community based fisheries of SCBRMP on fish catch (by volume and value) and biodiversity through a regular catch survey at 60 sites; ii) Estimate and simulate sustainable level of yield with corresponding fishing effort and develop management models for scaling up; iii) Livelihood impact analysis of BUG members in beel fisheries in 25 sites; and iv) Disseminate findings to a wider level of national and international audience.

9. Overall Achievement

Tables 9a and 9b present overall log frame and achievement.

Log frame table-9a

Narrative Summary	Variable Indicators	Target and Progress		Means of verification	Assumption
Goal	Indicators	Project Target	Cumulative Actual (%)		
Purpose (project objective)					
1. Develop grass-roots organisations to improve access for poor people to primary resources and economic opportunities.	2.1 No. of beel users receiving increased fishing income	M-7125 F-2375 T-9500	M: 6817 F: 2244 T: 9061 (95%)	Beel profile	Service provision becomes more appropriate for risk-prone <i>haor</i> areas. Synergy among government and village organisations is enhanced and institutionalised.
	2.2 No. of beels with increased fish production	300	257	Beel profile	
	2.3 No. of poor women getting increased income from fish ponds/cage fish culture	284	284 (100%)	Project performance report	
Outputs/Deliverables					
2. Fisheries Development	4.1 No. / area of waterbodies under	300 nos	250 nos. (83%)	Beel profile	Severe flooding and/or other

Narrative Summary	Variable Indicators	Target and Progress		Means of verification	Assumption
Goal	Indicators	Project Target	Cumulative Actual (%)		
Fisheries production programme implemented	community management	6500 acres	6015.53 acres (93%)		natural disasters do not severely disrupt or change local livelihood systems. DOF, DCC and UNO office and project staff coordinate effectively
	4.2 No. of members of beel user groups	M-7125 F-2375 T-9500	M: 6817 F: 2244 T: 9061 (95%)	Project performance report	
	4.3 No. / area of leased ponds under control of poor women	64 nos 30.83 acres	64 nos. 30.83 acres	Project performance report	

Log frame table-9b

Sl. No	Items	Unit	Project Target (2nd revised)	Status as of May 2014			Remarks	
				Target	Achieved	%		
Fisheries Development:								
1	BUG functional	No.	300	250	250	100		
2	Beel resources under improved management	No.	300	250	250	100		
3	Fishers reported production/yield increased	Male	HH	7125	7125	6837	96	
		Female	HH	2375	2375	2224	94	
		Total	HH	9500	9500	9061	95	
4	Pond fishers adopted technology (female)		HH	284	284	284	100	
5	Water bodies operational	Beels	No.	300	250	250	100	
		Ponds	No.	64	64	64	100	
6	Increased fish production	Beel	No.	300	250	250	100	
		Pond	No.	64	64	64	100	
7	HH received increased income	Beel	HH	9500	9500	9061	95	
		Pond	HH	284	284	284	100	

10. Conclusion

Community Based Beel Fisheries introduced by CBRMP is viewed as a unique and replicable approach for sustainable open water fisheries management. It has given access of real poor fishers to productive resource that was not possible earlier for local vested interests. Now, although there are some social and other problems in the process of their access, it is persistently being challenged by them collectively, and those problems are getting declined. For better management it would be required to have a comprehensive cooperative policy in favor of fisher community that will enable them to hold their use on Beel resource and assist them in building their capacity for better management. Access management has been completed but the process of sustainability is required to give more focus for institution building in the near future.

The project's total progress until February 2014 is satisfactory. The project activities by IFAD and IMED both have concluded with comments of satisfaction. IFAD on general rated the project satisfactory.

The project has many successes and some failures too, and all those have enriched the project with substantial learning and that might help it to an effective end.

11. Recommendations

The component has many successes and that mainly attribute to its innovative and dynamic approaches, persistent commitment of staff and increased participation of the people. Cooperation and timely support from donor and other development partners are to be highly acknowledged too for making such a comprehensive project successful.

The main challenges to achieve that would be:

How BUG will it be institutionalized and thereby will be functional after the project end, and for that what will be the roles and tasks of the project to accomplish during the rest period of the project that will make successful ending of the project on building institution of fisher community.

Annexes

Annex–I. SWOT Analysis

Fisheries Component

Strengths	Weakness
<ul style="list-style-type: none"> • Support achieved from concern ministries and departments. • Seriousness of LGED to implement the project. • Strong project's commitment. • Clearly understanding the issues related with access to beel. • Community based approach including wide range of stakeholders in support of different activities. • High acceptance to the community. • Built strong interest among the community. • Rules and laws developed in participation of the fisher and the CBFM experts and put in practice. • Proper selection of BUG members. • Demarked the beel before access. • Provisions of development of the habitat. • A participatory culture in selecting and implementing activities. • A system in place to monitor catch, income and expenditure by BUG. • Scope of independent monitoring/studies for impact assessment. • Regular internal audit. • Scope of training to develop the skill of BUG members. • Growing development of BUG. • Women involvement. • BUG able to keep record properly. • Developed a comprehensive regular monitoring system. 	<ul style="list-style-type: none"> • Unavailability of saplings for plantation in time • Sometimefew BUGs arenot following byelaws. • Internal conflicts in highly profitable BUGs. • Intension of some BUGs in not following the rules in financial transaction such as depositing money in bank in time and holding cash in hand. • Efforts in habitat restoration (beel excavation/plantation etc.) and conservation yet to achieve at quality level. • Gender sensitivity further to develop. • Inefficient marketing system of fish.
Opportunities	Threats
<ul style="list-style-type: none"> • National policy in support of promoting community based fishers. • Increased donor support to community based fisheries. • Increased support from administration such as to demarcation, conservation campaign and so on. • More resource bases available to access. • Scope of adding value by effective marketing. 	<ul style="list-style-type: none"> • Policy changed with changing of government. • Vested interest group/allies. • Irrationallyhigh lease value of few beels in comparisons with production. • Encroachment on beel area by surrounding farmers • Poaching. • Delayed transfer of beels.

Strengths	Weakness
<ul style="list-style-type: none"> • Scope of increasing production by improved management of resources. • Scope of increasing income through further use of resource base such as cage culture, pen culture, floating garden, beel side cultivation and so on. • Scope of independent monitoring/studies on impact assessment. • Scope of infrastructural support such as market, beel connecting road to promote fisheries. 	<ul style="list-style-type: none"> • Increased siltation. • Seasonality. • Legal status of BUG yet to decide.
Recommendations	
<ul style="list-style-type: none"> • Preparatory work such as selecting Beel, BUG members should be comprehensively done ensuring community's participation. • Lease value should be rationally set comparing with estimated production. • Local committee should have the authority to set the lease value. • Beel recourse management should be done in context of concerned haor system. • BUG should be recognized as a legal institution. • More training required to develop the skill of BUG in the areas like marketing, using resource base for other productions to increase income. • Management system should be diverse/unique considering the nature, size and location of the beel/haor. • More appropriate methods to be sought for re-excavation of beel and its connectivity such as canal, river etc. • Better marketing of fish and products from beels/haor should be developed for increased income. • Long-term transfer of beel to fisher community should be ensured. • A legal process should be developed to transfer the beel to BUG during post project time. 	

Annex–II. Operation Guideline

ANNEX 6-6: GUIDELINES FOR BEEL USER GROUP (BUG)

Local Government Engineering Department (LGED) under Local Government Division of Ministry of Local Government, Rural Development and Cooperative is implementing Community Based Resource Management Project (CBRMP) with financial assistance from the International Fund for Agricultural Development (IFAD) and Government of Bangladesh (GOB) in targeted hoar areas of Sunamganj covering 11Upazilas. About 300 water bodies will be transferred to CBRMP for community resource management by fishermen and women, under a MOU with the Ministry of Land of Bangladesh Government.

The objectives are to increase the sustainable income of fishers and ensure sustainablebeel resource management through institutional, infrastructural and technical support.All through the efforts to resource management, a community based approach is beingfollowed.

These guidelines have been developed for the Beel Users Group (BUG) of CBRMP to assist them in building viable institution of their own and in practicing sustainable resource management.

These guidelines have been developed through the values and the rules of the Government's Jalmohal Policy Guidelines have been followed.

ARTICLE I: Name, Address and Territory

Name of the Organization: (Beel User Group)

Address:

Territory:

Village: Union:

Upazila: Beel Area: Mouza:

District: Sunamgonj

ARTICLE II: Values, Goals and Objectives

Section1: Values

This organization is formed with the assistance of Community Based resource Management Project (CBRMP) of LGED based on a MoU signed between the Local Government Division of the Ministry of LGRD&C and the Ministry of Land (MOL). This is to be implemented following the Clause 3 (Ka) of Government Guidelines and rules for Jamohal Management 2009.

Section 2: Goals

To ensure long term rights to use beel resources by the genuine fishers, landless, distressed man and women or having land of less than 2.5 acres and living in or around the beel for increased fish production in a sustainable management to improve the wellbeing of the targeted group.

Section 3: Objectives

1. Ensure access of local fishers to beel resources.
2. Improve the ecological condition of the beel and its restoration.
3. Increase production of the beel resources at maximum level.
4. Ensure increased income & benefit following Fish Acts by catching fish in a tolerable way.
5. Develop skills of fishers for beel management through training on technology, social and institutional development.
6. Ensure participatory approach in all decision making processes for beel resource development.
7. Develop skills of the fishers through haor based jalmohal management for establishment of sustainable jalmohal management.
8. Ensure women participation in the mainstream of beel resource management
9. Necessary support for Jalmohal management through haor based Jalmohal management.

ARTICLE III: Activities

1. Developing of institution of fishers through mobilization.
2. Ensuring payment of yearly lease fee and initiate development of beel resources through institutional savings and members' contribution.
3. Arranging and attending BUG meeting regularly
4. Drawing of long and short term plan for beel resource development and implementation in an organized manner through participatory discussion.
5. Improving fish habitat through re-excavation of beel and canal.
6. Arranging training for better management.
7. Arranging training in technical skill development for better beel resource management
8. Demarcating the beel area and retain properly.
9. Establishing fish sanctuary and secure properly from any adverse situation.
10. Planting swamp trees and protect them for restoration.
11. Introducing comparable cost effective fish harvesting techniques.
12. Assisting for restoration of aquatic environment of the beel.
13. Taking initiative to add value of fish harvest for sorting, drying & processing and so on.
14. Taking initiative to ensure more income by using the beel shore for agricultural activities
15. Initiating welfare activities for the BUG members and for others in the society in special cases.
16. Taking efforts to ensure more participation of women along with men in beel resource management.
17. Taking initiative for better marketing of the beel produces.
18. Keeping communication with the concerned departments such as Fisheries, Agriculture, and Environment for improved management of beel resource.
19. Taking initiative to resolve conflicts of interest in beel resource access/management.

20. Initiating efforts to follow and practice the rules of the Government's Jalmohal management policy guidelines.
21. Observing the social and environmental days.
22. Protecting the beel resources from any illegal and harmful activities.
23. Ensuring fair distribution of the benefit among the BUG members.
24. Taking initiative to give the BUG a sustainable institutional structure.
25. Taking initiative to raise capital of BUG through income generation activities.
26. Ensuring transparent account management through regular systematic documentation of all transactions.

ARTICLE IV: Structure of the Organization

The Beel User Group (BUG) will be formed with the genuine fishers from nearby villages of the jalmohals and they will be the members in the executive committee. There will be 9 members from this BUG in the executive committee who will be directly elected by voting to form Beel Management Committee (BMC).

ARTICLE V: Membership

Section 1: Eligibility for Membership

1. Should be the permanent resident in the working area or be living within nearby villages of the beel and holding own land below 2.5 acres.
2. Should be genuine fisher according to the criteria of Government Jalmohal Management Policy Guidelines.
3. Should be elected from the list of genuine fishers prepared by HILIP and approved by the Government official and should be the genuine fishers as per existing Government Jalmohal Management Policy Guidelines.
4. Should not be convicted by Court.
5. Should be 18-60 years of age.
6. Not more than one member from one family can be the member of BUG.
7. Defaulter or expelled from other organization or ousted CIG cannot be the member of BUG.
8. Members of the CIG of the project will get preference to be the member of BUG.

Section 2: Admission procedures

1. For the new BUG, the genuine fishers shall have to apply to HILIP to become the member and should be in the list of fisher prepared by HILIP for that concerned beel.
2. For membership to ongoing BUG the intended fisher shall have to apply to concerned BUG and should be in the list of fisher prepared by HILIP for that concerned beel.
3. An admission fee of Tk. 50 shall be paid.
4. To get enrolled in an ongoing BUG, the applicant shall have to pay all the dues that others members have already paid.
5. Shall have to give a signed undertaking (given in annex 1) that he/she shall abide by all the rules of the BUG guidelines.

Section 3: Rights, Roles and Responsibilities of the Members

1. Shall enjoy the full user right on the concerned beel.
2. Shall agree to pay all fees/dues being BUG members
3. Shall take part in 80% activities of beel fishing. It is relax-able for women member.
4. Should be gender proactive.
5. Shall be regular in attending BUG meeting.
6. Shall have to take part in planning, implementation and supervision of beel management.
7. Shall be prepared to take part in training.
8. Shall have to provide full support and active roles in protecting the beel resources.
9. For enjoying any benefit from beel resources at least 90% attendance in BUG meeting shall have to be ensured.
10. For guarding beel any family members can be substituted subject to the decision and approval of the BUG.
11. Shall have to consciously follow the rules of BUG byelaws and the Fish Conservation Acts.
12. Shall elect BMC members for beel management.
13. Assist and cooperate Project initiated research and monitoring activities related to beel resources and fisher community development.

Section 4: Resignation, Termination and Absence

1. May leave willingly.
2. If died.
3. Not obeying the decision like: Not paying dues, not participating in assigned duties, not attending meeting, not doing duties as per decision.
4. Absent in meeting for consecutive three times without any valid reasons.
5. If get convicted by court for reason.
6. Involved in anti-social/moral activities.
7. Migrated permanently.
8. Get involved in anti-BUG activities.
9. If become physically and mentally unfit.
10. If involved or proved for anti-interest or down mining the name of the organization.
11. At the time of membership termination, the member shall get back his/ her savings.
12. Any expelled member shall not be entitled to get benefit from group fund, except his/her savings, if he/she is expelled due to 3, 4, 5, 6, 7, 8, and 10 of Section 4 in Article V.

Section 5: Successor

1. Nominee of a BUG member shall be allowed to receive all benefits earned by him/her due to death/old/sickness. The successor nominated shall not be a member of BUG.
2. The name of the nominated person shall be in the register of the BUG.
3. BUG should be informed in writing in case of changing the nominee by virtue of succession and this should be placed in BUG meeting making a quorum.

ARTICLE VI: Beel Management Committee / Office Bearers

Section 1: Size and Composition

There shall be 9 members in the name of Beel Management Committee where 25-30% members shall be women.

The composition of the committee shall be:

President	1
Vice President	1
General Secretary	1
Assistant General Secretary	1
Accountant	1
Organizing Secretary	1
Member	1
Member	1
Member	1

Section 2: Tenure

BMC shall be elected for two years and no BMC member can be elected for the next consecutive 2 years.

Section 3: Election of BMC

All BMC members shall be elected by direct voting by the BUG members. Each member shall have one vote to cast against each candidate. Election of the organization shall be made through secret ballot method. Election shall be conducted following project's election procedure of election shall be followed. If the organization goes under any registration entity then the procedure of that entity will be followed.

Section 4: BMC Meeting

The meeting of BMC shall be held after 15 days of BUG meeting. President of BMC shall chair the meeting. In absence of the President, Vice-President shall take roles of president.

Section 5: General Roles and Responsibilities of BMC

1. Work as office bearers of the BUG.
2. Lead the BUG to achieve the objectives with values.
3. Initiate the plan and implement it for better beel resource management.
4. Organize the fortnightly meeting and review the implementation progress and issues of the decisions taken in earlier BUG meeting.
5. Take initiative to mobilize fund for beel development.
6. Set strategy for long term (06 years) development and implementation of the beel resources.
7. Collect lease value and pay all dues.
8. Implement Fishers Acts.

9. Issue license for individual fishing.
10. Arrange training for the BUG members.
11. Resolve conflicts in BUG members.
12. Arrange local shalish to resolve any court cases/conflicts.
13. Ensure unity and integrity among BUG members.

Section 6: Specific Roles and Responsibilities of BMC members

1. President

- 1.1 Invite the BUG, BMC and the Annual General meeting.
- 1.2 Represent the BUG to other organizations.
- 1.3 Prepare all beel management plans & give direction for implementation through participatory way.
- 1.4 Responsible for financial transactions and sign all check, deed and other documents in this regard.
- 1.5 Take vital role to resolve the conflict.
- 1.6 Take constructive effort to give the sustainability to BUG and also encourage others.
- 1.7 Contribute for beel development and encourage the BUG members for institution building.
- 1.8 Maintain liaison with Government and Non-Government organizations.
- 1.9 Approve all resolutions of the meetings.
- 1.10 Supervise all activities of the organization.
- 1.11 Responsible to implement any decision of the project management.

2. Vice President

- 2.1 Responsible to carry out the jobs in absence of the President.

3. General Secretary

- 3.1 Write and maintain all the documents and records.
- 3.2 Take the role for day to day management of BMC.
- 3.3 Prepare all the instruments of transaction and sign thereof.
- 3.4 Ensure the management of all development activities including fish harvest.
- 3.5 Call the meetings taking permission of the President.
- 3.6 Shall take the role of the organizing secretary in his/her absence.
- 3.7 Arrange training for the BUG members.
- 3.8 Assist in project initiated research and monitoring activities related to beel resource and fisher community development.

4. Assistant Secretary

4.1 Take the responsibilities of the Secretary in his/her absence.

5. Treasurer

- 5.1 Prepare and keep records of all transaction of income and expenditure of the organization.
- 5.2 Advice financial planning and control of the organization.
- 5.3 Place the financial report in the General meeting of the BMC.
- 5.4 All transactions will be made jointly by the President and the General Secretary.
- 5.5 Collect the bank reconciliation statement every month and place in BUG and BMC meeting.
- 5.6 Collect all dues and others from BUG members and make entry into the register (cash book, register etc.). In addition, pay lease value to concerned department /bank, receive contribution and arrange for the deposit in the bank. He will be responsible for implementation of all transactions.
- 5.7 Prepare half-yearly financial statement of different accounts and place it in Executive Committee meeting.
- 5.8 Assist in auditing.

6. Organizing Secretary

- 6.1 Make the organization strengthened and dynamic following the advice of the President.
- 6.2 Mobilize the members for taking sustainable development activities.
- 6.3 Ensure to protect beel resources based on field activities.
- 6.4 Take initiative to resolve conflicts as per advice of the President.
- 6.5 Arrange to observe social and environment days.
- 6.6 Take initiative to mobilize all BUG members to attend in regular meeting.
- 6.7 Assist President and Secretary to take initiatives for institutionalizing BUG as an institution.
- 6.8 Take necessary initiative to promote gender right and values in BUG.

7. Executive Members

7.1 Assist the members of the executive council of BMC in its works and take responsibilities entrusted by the executive board.

Section 7: Resignations, Termination, and Absence

Resignation from the BMC shall be in writing to the committee, which will be approved by the President or Secretary with a copy to concerned UPC. A BMC member shall be terminated from BMC if a member remains absent for more than two times in annual BMC meeting a year (section 4 of Article V). A BMC member may regain his/her membership by direct voting of the three-fourth BMC members, but in this case the decision shall be agreed upon by majority members present in monthly regular meeting of BUG.

ARTICLE VII: Meeting

Section 1: Regular Meeting

BUG members shall be together for meeting at a particular place, at a specific time and place in each month. In that meeting the minutes of the last meeting shall be reviewed and current and future plan of work are to be set. The meeting shall be conducted in a systematic manner ensuring participation of all members. Members attending the meeting should sign in the resolution register.

Section 2: Annual Meeting

Annual General Meeting shall be held once a year. A notice with specific agenda shall be served notifying to all BUG members before 30 days of the date of the meeting. In this meeting the overall yearly physical and financial progress including the internal audit reports shall be placed before the members and next year plan of activities shall be drawn.

Section 3: Special Meeting

Special meeting can be called by the President on emergency basis at any time by issuing a notice giving a minimum of 1 (One) week or 3 (Three) days.

Section 5: Quorum

For quorum of any meeting attendance of three fourth members shall be required to take any decision and at least half of the women members enrolled in any group/committees should be present.

Section 6: Voting

Any issues to be voted on shall be decided by a majority of those present at the meeting in which the vote takes place.

ARTICLE VIII: Rules of Fishing/Harvesting

Section 1: Collective/Organized Fishing

1. At least 80% members of BUG shall participate in fish harvesting.
2. Harvesting shall take place following a plan including day, date and time approved in BUG meeting.
3. All harvested fish shall be placed at specific place.
4. Women shall be encouraged to participate in harvesting with specific work suitable for them such as sorting fish, record keeping and so on.

Section 2: Individual Fishing

1. Individual fishing can only be done on gear permit basis.
2. The persons who will have specific gear permit from BMC, they will have right for individual fishing.
3. Permit value shall be categorized on gear types, season/time and place basis.
4. No harmful gear (as declared by Fish conservation Acts) shall be allowed for permitting.
6. No individual fishing shall be allowed during closed period and in the restricted zone such as fish sanctuary.

Section 3: Subsistence Fishing

Any villagers adjacent to beel may catch fish for own consumption under the following conditions:

1. Villagers adjacent to beel may catch fish during a particular season, time and with specific gears for consumption only as determined by the concerned BMC.
2. Villagers around the beel are allowed for subsistence fishing shall have to collect identity card from BUG for fishing.
3. Fees against subsistence fishing, if imposed, shall be used for village development activities.

Section 4: Compliances

1. Fish harvesting shall follow the rules of Fish Conservation Acts.
2. Local practice that does not conflict with fisheries act can be practiced.
3. BUG can apply new rules and that shall not be against fish conservation act.
4. BMC can apply specific fine for breaking any rules in harvesting fish.
5. Sanctuary shall be fully restricted for fishing.
6. Any Katha (harvest reserves), if selected for pile fisheries that shall be maintained according to the rules of pile fishing.
7. All records of fish harvest shall be recorded immediately in the books.

ARTICLE IX: Rules of Selling and Marketing

Section 1:

1. The harvested fish shall be placed at a specific location and be sold on open auction adjacent to beel area. For mobilizing maximum numbers of buyers in auction mass contact should be done prior to the date of auction informing the sellers of the date, time and place of auction.
2. For better price the fish shall be sorted out based on species and that shall be done by the women BUG members by paying the wages.
3. Fish cannot be sold on credit by any means.
4. BUG member can participate in buying fish on auction.
5. For earning more income the harvest may be marketed to other places as well such as bigger market at district town based on decision in the BUG meeting.
6. The sold money shall be deposited in Bank account on the day of selling or on the next day.
7. If the BUG members wanted to reduce the buying price directly or indirectly in the auction after making a syndicate and if proved they will be liable for punishment with penalty.

Section 2: Compliances

1. Fish harvesting shall follow the rules of Fish Conservation Acts.
2. Local practice that does not conflict with fisheries act can be practiced.
3. BUG can apply new rules and that shall not be against fish conservation act.
4. BMC can apply specific fine for breaking any rules in harvesting fish.
5. Sanctuary shall be fully restricted for fishing.
6. Any katha, if selected for pile fisheries that shall be maintained according to the rules of pile fishing.
7. All records of fish harvest shall be recorded immediately in specific books of record.

ARTICLE X: Rules of Benefit Distribution

Section 1:

All members of BUG shall take part in activities that are equally distributed in terms of responsibilities and considering the competitiveness. The benefit shall be equally distributed to members irrespective of gender.

ARTICLE XI: Financial Management

Section 1: Sources of fund

1. Admission fee of the members.
2. Weekly/Monthly savings in BUG.
3. Member's contribution to BUG activities.
4. Gear license fee.
5. Sell from fish and other produces.
6. Loan taken by BUG.
7. Penalty.
8. From others activities as approved by BUG with the consent of HILIP.

Section 2: Heads of Key Expenditure

1. Office rent.
2. Office management and staff employment.
3. Books for account and record keeping.
4. Guarding.
5. Fish harvesting.
6. Establishing sanctuary.
7. Fixing demarcation, manufacturing and placement of pillars.
8. Setting Katha in the beel.
9. Maintenance of sanctuary, area demarcation, pillar & Katha.
10. Investing in income generation activities.

11. Arranging promotional activities, such as day observation, conservation campaign and so on.
12. Contribution to social causes
13. Training.
14. Inspection.
15. Others as approved by BUG with the consent of HILIP.

Section 3: Bank Account

1. There must be a BUG account with a suitable schedule bank.
2. The account will be operated with joint signatures of the President, General Secretary and the Treasurer.
3. All transactions of the BUG must be done through bank.
4. Any withdrawal shall be supported by BUG meeting resolution where it will have signature of 90% of BUG members and the expenditure shall be approved by concerned HILIP official.
5. Reconciliation of bank account shall be done on monthly basis.

Section 4: Internal Audit

1. Audit of BUG shall be done on yearly basis after beel harvest and completion of the beel development activities. This audit shall be done once per year.
2. The income and expenditure statement shall be prepared before the internal audit and that should be presented and approved by respective BUG monthly meeting.
3. The internal audit shall be placed in BUG annual meeting for approval
4. BUG members shall be trained for conducting internal audit.

ARTICLE XII: Sustainability

Section 1:

According to the MoU signed by the Ministry of Land the beels are transferred to project for the tenure of 6 (Six) years. During this period the management of these jalmohals shall be carried out by the project of LGED. The activities in this regard shall regularly be evaluated by district and Upazila administrations concerning to the jalmohals management and development. A proposal will be sent to Land Ministry for further extension of lease period for the beels that performed well. If the lease period is extended these beel shall have to be managed by the BUG themselves without any project's support and to be managed having registered with any suitable authority.

ARTICLE XIII: Amendment

Section 1:

These guidelines may be amended if found necessary by two-third majority in Annual General Meeting or in emergency meeting of the BUG. However, any amendments shall be subject to approval of Project Directo (HILIP).

ARTICLE XIV: Dissolution

Section1:

The organization can be dissolved by the project management following the Jalmohal management rule 5(4)(dha) of 2009 with all its committees may be dissolved. Beside this, if dissolution becomes necessary a written application with two-third members is addressed to the Project Director, CBRMP who order for dissolution. Under these circumstances the Project Director, CBRMP may dissolve the organization subject to the final settlement of all its financial liabilities.

ARTICLE XV: Certification

These guidelines were approved by the Project Director,on.....2013.

.....

Signature

Project Director, CBRMP

Undertaking

I do hereby sign and undertaking to abide by all rules and responsibilities mentioned in these Guidelines:

[illegible]

Name:

Signature:

Address:

Annex-III. MoU with Partners

A. MoU with Ministry of Land



৭৮৬৬৮০৭

কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা প্রকল্প (সিবিআরএমপি)

ভূমি মন্ত্রণালয় এবং স্থানীয় সরকার, পল্লী উন্নয়ন ও সমবায় মন্ত্রণালয়ের মধ্যে সমঝোতা স্মারক

গণপ্রজাতন্ত্রী বাংলাদেশ সরকারের সাথে ইফাদের সম্পাদিত ঋণচুক্তি মোতাবেক স্থানীয় সরকার প্রকৌশল অধিদপ্তরের আওতাধীন কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা প্রকল্পের আওতায় গঠিত সংগঠনের সুফলভোগীদের স্থানীয় সম্পদে প্রবেশাধিকার নিশ্চিতকল্পে প্রকল্প এলাকাধীন ভূমি মন্ত্রণালয়ের মালিকানাধীন নির্দিষ্ট সংখ্যক জলমহালের ব্যবস্থাপনা প্রকল্পের নিকট হস্তান্তরের জন্য ভূমি মন্ত্রণালয় এবং স্থানীয় সরকার বিভাগের মধ্যে সমঝোতা স্মারক।

স্থানীয় সরকার, পল্লী উন্নয়ন ও সমবায় মন্ত্রণালয়ের স্থানীয় সরকার বিভাগ কর্তৃক গৃহীত কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা প্রকল্পের উন্নয়নমূলক ব্যবস্থাপনা ও স্থানীয় সম্পদে দখলি বিত্তহীন জনগোষ্ঠীর প্রবেশাধিকার নিশ্চিতকরণের লক্ষ্যে প্রকল্পের চতুর্থ পর্যায়ের জন্য নির্ধারিত ২০ একরের উপরে ০৬টি ও ২০ একর পর্যন্ত ১০টি এবং ইতোপূর্বে বিভিন্ন সমঝোতা স্মারকের মাধ্যমে হস্তান্তরিত কিন্তু বিভিন্ন কারণে স্থানীয় পর্যায়ে উপকারভোগীদের নিকট হস্তান্তর করা সম্ভব হয়নি এমন ২০ একরের উপরে ১৫টি ও ২০ একর পর্যন্ত ১৬টি জলমহালের পরিবর্তে নতুন ২০ একরের উপরে ১০টি ও ২০ একর পর্যন্ত ১৫টি জলমহাল অর্থাৎ মোট ৪১(একচত্ব্বিশ)টি জলমহাল ইফাদের সাথে গণপ্রজাতন্ত্রী বাংলাদেশ সরকারের গত ১৪.১১.২০০১ তারিখে সম্পাদিত ঋণচুক্তির শর্ত মোতাবেক প্রকল্পে ন্যস্ত করার জন্য অদ্য ১৪.০৮.২০১৩ তারিখ রোজ বুধবার নিম্নবর্ণিত শর্ত সাপেক্ষে সাক্ষীগণের উপস্থিতিতে দুই পক্ষের মধ্যে সমঝোতা স্মারক স্বাক্ষরিত হল।

পক্ষসমূহ

গণপ্রজাতন্ত্রী বাংলাদেশ সরকারের ভূমি মন্ত্রণালয়ের পক্ষ হতে অতিরিক্ত সচিব

প্রথম পক্ষ।

গণপ্রজাতন্ত্রী বাংলাদেশ সরকারের স্থানীয় সরকার, পল্লী উন্নয়ন ও সমবায় মন্ত্রণালয়ের পক্ষ হতে অতিরিক্ত সচিব

দ্বিতীয় পক্ষ।

যেহেতু, দেশের বিভিন্ন অঞ্চলের নদী, খাল বিল, হাওড়, বাওড়, সরকারি খাস পুকুর ইত্যাদির মালিকানা ও কর্তৃত্ব ১ম পক্ষের (ভূমি মন্ত্রণালয়) উপর ন্যস্ত

যেহেতু, স্থানীয় সরকার, পল্লী উন্নয়ন ও সমবায় মন্ত্রণালয়ের স্থানীয় সরকার বিভাগ, ইফাদ (IFAD) এর সাথে বাংলাদেশ সরকারের ১৪/১১/২০০১ তারিখে সম্পাদিত ঋণচুক্তি নং- ৫৬৭ বিডি অনুযায়ী স্থানীয় সরকার অধিদপ্তরের মাধ্যমে সুনামগঞ্জ জেলার ৩০০(তিনশত)টি জলমহালে প্রকল্পের সুফলভোগীদের প্রবেশাধিকার নিশ্চিতকরণসহ ব্যবস্থাপনার উদ্দেশ্যে কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা শীর্ষক প্রকল্প বাস্তবায়ন করার দায়িত্বপ্রাপ্ত হয়েছে;



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যেহেতু, প্রকল্পটি জাতীয় অর্থনৈতিক পরিবর্নের নির্বাহী কমিটির গত ২৩.১০.২০০২ তারিখের সভায় অনুমোদিত হয়েছে;

যেহেতু, প্রকল্পের আওতাধীন জলমহালের উন্নয়নের মাধ্যমে মৎস্য সম্পদ উৎপাদন বৃদ্ধি, মৎস্য অন্তরাশ্রম স্থাপন, পরিবেশ উন্নয়ন ও জীব বৈচিত্র্য সংরক্ষণ করা হবে;

যেহেতু, প্রকল্পের আওতাধীন প্রকৃত দরিদ্র জেলা সম্প্রদায়ের সরাসরি ব্যবস্থাপনায় প্রকল্প পরিচালিত হবে বিধায় কর্মসংস্থান সৃষ্টিসহ দরিদ্র বিমোচন, আর্থসামাজিক অবস্থায় উন্নয়ন ও সরকারি রাজস্ব বৃদ্ধি পাবে;

এবং যেহেতু ইতিপূর্বে সমঝোতা স্মারকের মাধ্যমে প্রকল্পের ১ম পর্যায় ১২.০৯.২০০৬ তারিখে ২২টি জলমহাল, ২য় পর্যায় ১০.০৫.২০১০ তারিখে ১৮৯টি জলমহাল এবং ৩য় পর্যায় ২৮.০৭.২০১১ তারিখে ৬৯টি জলমহাল (মোট ২৮০(দুইশত আশি)টি জলমহাল ২য় পক্ষের নিকট জুন ২০১৯ সাল অবধি হস্তান্তর করা হয়েছে এবং স্বাক্ষরিত সমঝোতা স্মারক মোতাবেক মাত্র ১৭টি জলমহাল ব্যবস্থাপনা কার্যক্রম সম্ভাব্যজনক ভাবে চলমান রয়েছে;

সেহেতু প্রথম পক্ষ কর্তৃক দ্বিতীয় পক্ষকে সংযুক্তিক-ক অনুযায়ী প্রকল্পের চতুর্থ পর্যায়ের জন্য নির্বাচিত ২০ একরের উপরে ০৬(ছয়)টি ও ২০ একর পর্যন্ত ১০(দশ)টি এবং ইতোপূর্বে বিভিন্ন সমঝোতা স্মারকে হস্তান্তরিত কিন্তু বিভিন্ন কারণে স্থানীয় পর্যায়ে উপকারভোগীদের নিকট হস্তান্তর করা সম্ভব হয়নি এমন ২০ একরের উপরে ১৫(পনের)টি ও ২০ একর পর্যন্ত ১৬(ষোল)টি জলমহালের পরিবর্তে নতুন ২০ একরের উপরে ১০(দশ)টি ও ২০ একর পর্যন্ত ১৫(পনের)টি জলমহাল অর্থাৎ মোট ৪১(একচত্বিশ)টি জলমহাল নিম্নবর্ণিত শর্তাবলীর অধীনে সমাজভিত্তিক ব্যবস্থাপনার লক্ষ্যে অধিকার প্রদান করার জন্য এ চুক্তি সম্পাদিত হল।

শর্তাবলী

১। জমি মন্ত্রণালয় এবং স্থানীয় সরকার বিভাগের মধ্যে সমঝোতা স্মারক স্বাক্ষরিত হওয়ার আলোকে জমি মন্ত্রণালয়ের পক্ষে সংযুক্তি ক-তে বর্ণিত জলমহালগুলো জেলা প্রশাসক সুনামগঞ্জ ২য় পক্ষকে হস্তান্তর করবে;

২। ২য় পক্ষ আবশ্যিকভাবে বাৎসরিক অগণিত প্রতিবেদন জমি মন্ত্রণালয়ে অবহিত করবে। জেলা প্রশাসক আলোচ্য জলমহালের কার্যক্রম মনিটরিং করবেন;

৩। প্রকল্প ব্যবস্থাপনা ও মনিটরিং কমিটিতে জমি মন্ত্রণালয়ের প্রতিনিধি ও জেলা প্রশাসনের প্রতিনিধি অঙ্গভূত থাকবেন।

৪। হস্তান্তরিত জলমহালের সীমানা/আয়তন পরিবর্তিত হতে পারে এমন কোন কার্যক্রম ২য় পক্ষ গ্রহণ করবে না;

৫। প্রকল্পের নিকট ন্যস্তকৃত সরকারি জলমহাল এর মালিকানা প্রথম পক্ষ জমি মন্ত্রণালয়ের থাকবে এবং ২য় পক্ষ স্থানীয় সরকার বিভাগের পক্ষে কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা প্রকল্পে উপস্থিত জলমহাল উন্নয়নকল্পে সুনির্দিষ্ট সময়ের জন্য প্রকল্পের শীর্ষমালা মোতাবেক সমাজভিত্তিক টেকসই ব্যবস্থাপনা কার্যক্রম বাস্তবায়ন করবে;

(Signature)



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৬। সরকারি জলমহাল ব্যবস্থাপনা নীতি, ২০০৯ এর অনুচ্ছেদ ৩(ক) এর আলোকে হস্তান্তরিত জলমহালের ব্যবস্থাপনা পরিচালিত হবে;

৭। সুফলজোশী গ্রুপের তালিকা জেলা জলমহাল ব্যবস্থাপনা কমিটি কর্তৃক অনুমোদিত হতে হবে;

৮। 'উপজেলা জলমহাল ব্যবস্থাপনা কমিটি' ও 'জেলা জলমহাল ব্যবস্থাপনা কমিটি' বলতে সরকারি জলমহাল ব্যবস্থাপনা নীতি, ২০০৯ এ উল্লিখিত এরূপ কমিটি বুঝাবে;

৯। প্রথম পক্ষ কর্তৃক হস্তান্তরিত জলমহালগুলোর মেয়াদ হবে জুন, ২০১৯ পর্যন্ত। প্রকল্পের পিপি অনুযায়ী পরবর্তীতে মেয়াদ বৃদ্ধির প্রয়োজন হলে দ্বিতীয় পক্ষের প্রস্তাবের প্রেক্ষিতে প্রথম পক্ষ হস্তান্তরিত জলমহালগুলোর উন্নয়ন হয়েছে কিনা তা নিশ্চিত হয়ে সরকারি জলমহাল ব্যবস্থাপনা নীতি, ২০০৯ এর ৩(কক) এর অনুরূপে (মন্ত্রণালয়ের স্মারক নং ৩১.০০.০০০০.০৫০.৬৮.০২০.০৯-২২৩ তারিখঃ ১৪.০৩.২০১২) মেয়াদ বৃদ্ধির বিষয় বিবেচনা করবে। স্বাক্ষরিত সমঝোতা স্মারকের মেয়াদ শেষ হলে এবং নতুন করে তা নবায়ন করা না হলে জলমহালসমূহের মালিকানা ও ব্যবস্থাপনা স্বয়ংক্রিয়ভাবে প্রথম পক্ষ ভূমি মন্ত্রণালয়ের নিকট প্রত্যাশিত হবে। মেয়াদ শেষে হস্তান্তরিত জলমহালগুলো ভূমি মন্ত্রণালয়ে প্রত্যাশিত হবার পর যে সকল মৎস্যজীবী সমিতি প্রকল্প চলাকালীন জলমহালগুলোর সাথে সংযুক্ত ছিল তাদের কোন দায় দায়িত্ব ভূমি মন্ত্রণালয় বহন করবে না বা তাদের ব্যাপারে কোন দায়বদ্ধতা থাকবে না;

১০। সংযুক্তি-ক এ উল্লিখিত জলমহালের ৪১(একচল্লিশ)টি মধ্যে ইতিমধ্যে প্রথম পক্ষ কর্তৃক কোন জলমহাল ইজারা দেয়া হয়ে থাকলে সে সব জলমহালের ইজারা মেয়াদ শেষ হওয়ার পর পুনরায় ইজারা দেয়া যাবে না। উক্ত জলমহালসমূহের পূর্বের ইজারা মেয়াদ উত্তীর্ণ হওয়ার পর উহা কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা প্রকল্পে হস্তান্তর করা হবে।

১১। দ্বিতীয় পক্ষ প্রদত্ত জলমহালের মৎস্য সম্পদ সন্নিবেশ, মৎস্য উৎপাদন বৃদ্ধি, জীব বৈচিত্র্য রক্ষার উদ্দেশ্যে জলমহালের সম্পূর্ণ বা অংশ বিশেষ সংরক্ষিত মৎস্য অভয়ারণ্য গড়ে তুলতে পারবে। প্রয়োজনবোধে জলমহালের সীমানার অভ্যন্তরে ভরাট হয়ে যাওয়া অংশ দ্বিতীয় পক্ষ পুনঃ খনন বা সংস্কার করতে পারবে;

১২। দ্বিতীয় পক্ষ জলমহালের মৎস্য সম্পদের সর্বোত্তম ও সর্বোৎকৃষ্টভাবে উন্নয়ন নিশ্চিত করবে। জলমহালের উৎপাদনশীলতার বৃদ্ধির জন্য জলমহাল সংস্কার ও উন্নয়ন করতে হবে। তবে জলমহালসমূহে পানি প্রবাহ ও নৌ চলাচল ব্যাঘাত সৃষ্টি করতে পারে এমন কোন অবকাঠামো নির্মাণ করা যাবে না অথবা পানি দূষিতকরণসহ অনাকাঙ্ক্ষ্য পরিবেশ হানিকর কোন কর্মকান্ড পরিচালনা করা যাবে না। কৃষি কাজের জন্য পানি ব্যবহার করা যাবে, তবে মৎস্য চাষ যাবে ব্যাহত না হয় সে বিষয়টি নজরে রাখতে হবে।

১৩। হস্তান্তরিত তালিকাভুক্ত জলমহালগুলোর মধ্যে প্রথম পক্ষ কর্তৃক ইজারা দেয়া কোন জলমহালের ইজারা মেয়াদ কোন কারণে বছরের মাকামাখি/তৎপরবর্তী সময়ে উত্তীর্ণ হলে সংশ্লিষ্ট জলমহালটি সম্পূর্ণ বছরের নির্ধারিত ইজারা মূল্য প্রদান করে দ্বিতীয় পক্ষ তা গ্রহণ করবে;

১৪। প্রথম পক্ষ কর্তৃক হস্তান্তরিত জলমহালগুলোর ইজারা মেয়াদ বাংলা বর্ষের ১লা বৈশাখ হতে হবে। প্রথম বছরের সাকুল্য ইজারা মূল্য ইজারার তারিখ হতে ১৫(পনের) দিনের মধ্যে এবং পরবর্তী বছরগুলোর ইজারা মূল্য পূর্ববর্তী বছরের ১৫ চৈত্রের মধ্যে জমা প্রদান করতে হবে। জলমহাল ও পুকুর ইজারা ১/৪৬৩১/০০০০/১২৬১ নং কোডে জলমহালের ইজারা মূল্য পরিশোধ করে মন্ত্রণালয় এবং জেলা প্রশাসককে অবহিত করতে হবে। জলমহালের ইজারা মূল্য নির্ধারিত হবে সরকারি জলমহাল ব্যবস্থাপনা নীতি, ২০০৯ এর অনুচ্ছেদ ৫(৪)(খ) অনুযায়ী;

১৫। হস্তান্তরিত জলমহালগুলোর আয়তন ও পরিসীমা দ্বিতীয় পক্ষ কর্তৃক যথাযথ ভাবে সংরক্ষণ করতে হবে। হস্তান্তরিত জলমহাল কোন অবস্থাতেই উপ-ইজারা (Sub-lease) দেয়া যাবে না। প্রকল্পের হস্তান্তরিত কোন জলমহাল উপ-ইজারা দেয়ার প্রদান পাওয়া গেলে বা জেলা প্রশাসক থেকে এ ব্যাপারে প্রতিবেদন পাওয়া গেলে উক্ত জলমহালটির প্রকল্পে হস্তান্তরের আদেশ বাতিল করার এখতিয়ার ১ম পক্ষ সংরক্ষণ করবে;

১৬। প্রথম পক্ষ বা জেলা প্রশাসক জলমহালগুলো সময় সময় পরিদর্শন করবে, দ্বিতীয় পক্ষ এ ব্যাপারে প্রথম পক্ষকে সর্বাধিক সহায়তা প্রদান করবে;

১৭। এ প্রকল্পে ন্যস্তকৃত জলমহালগুলোতে প্রকল্প প্রস্তাবনা অনুসারে যথাযথভাবে উন্নয়ন কার্যক্রম গৃহীত হচ্ছে কী-না এবং সর্বশেষ মৎস্যজীবীদের দাবির বিমোচন, আর্থ-সামাজিক উন্নয়ন ও মৎস্য সম্পদ বৃদ্ধিতে জলমহালগুলোর ব্যবস্থাপনা সরেজমিনে পরিদর্শন ও মূল্যায়ন করে ২০ একরের উপরের জলমহালের ক্ষেত্রে সংশ্লিষ্ট জেলা জলমহাল ব্যবস্থাপনা কমিটি এবং ২০ একর পর্যন্ত জলমহালের ক্ষেত্রে সংশ্লিষ্ট উপজেলা জলমহাল ব্যবস্থাপনা কমিটি প্রতি বছর ৩০শে বৈশাখ মাসে একটি মূল্যায়ন প্রতিবেদন জমি মন্ত্রণালয়ে প্রেরণ করবে। কমিটিসমূহের মূল্যায়নের ভিত্তিতে পরপর দু বছর মুক্তিসংগত কারণ ব্যতীত প্রকল্পকৃত জলমহাল কাংখিত লক্ষ্যমাত্রা অর্জনে ব্যর্থ হলে উক্ত প্রকল্পকৃত সংশ্লিষ্ট জলমহাল জমি মন্ত্রণালয়ে প্রত্যাপিত হবে এবং মন্ত্রণালয় বিধি মোতাবেক উক্ত জলমহাল ব্যবস্থাপনা করবে। উল্লেখ্য যে, প্রকল্প এলাকার জেলা জলমহাল কমিটিতে নির্বাহী প্রকৌশলী, এলজিইডি এবং উপজেলা জলমহাল ব্যবস্থাপনা কমিটিতে উপজেলা পর্যায়ের উপজেলা প্রকৌশলী ও প্রকল্প কর্মকর্তা বর্ষিক কমিটিগুলোতে প্রকল্পের প্রতিনিধিত্ব করবেন।

১৮। জমি মন্ত্রণালয় হতে অতিরিক্ত সচিব/মুখ্যসচিব পর্যায়ের কর্মকর্তার নেতৃত্বে একটি কমিটি বছরে ন্যূনতম দুইবার প্রকল্প এলাকা পরিদর্শন করবেন। এক্ষেত্রে দ্বিতীয় পক্ষ পরয়োজনীয় সহযোগিতা প্রদান করবেন;

১৯। এই সমঝোতা স্মারকের কোন শর্ত লঙ্ঘন, নির্ধারিত সময়ে ইজারা মূল্য পরিশোধে ব্যর্থতা, সাব-লীজ প্রদান ইত্যাদি কারণে প্রথম পক্ষ দ্বিতীয় পক্ষকে যথাযথ ভাবে অবহিতকরণ পূর্বক একতরফা ভাবে এই সমঝোতা স্মারক বাতিল করতে পারবে এবং উক্তরূপ বাতিলের ক্ষেত্রে সংশ্লিষ্ট জলমহাল ১ম পক্ষের দখলে আনয়ন করতে পারবে;

২০। প্রকল্পের কোন উন্নয়নমূলক কর্মকাণ্ডে জটিলতা দেখা দিলে প্রথম পক্ষ ও দ্বিতীয় পক্ষ যৌথভাবে আলোচনা করে সিদ্ধান্ত গ্রহণ করবে;

২১। ইতিপূর্বে জমি মন্ত্রণালয় হতে বিভিন্ন সমঝোতা স্মারকে হস্তান্তর করা কয়েকটি জলমহালের পরিবর্তে নতুন জলমহাল প্রতিস্থাপিত হওয়ার সংযুক্ত তালিকা-খ-এ উল্লিখিত জলমহালগুলো জমি মন্ত্রণালয়ের নিকট প্রত্যাপিত মর্মে গণ্য হবে। এ জলমহাল সরকারি জলমহাল ব্যবস্থাপনা নীতি, ২০০৯ অনুযায়ী কার্যক্রম পরিচালিত হবে।

২২। হস্তান্তরিত সকল জলমহালে ডিসপ্রে বোর্ডে 'জমি মন্ত্রণালয় কর্তৃক হস্তান্তরিত জলমহাল' এবং হস্তান্তরের মেয়াদ সুস্পষ্টভাবে উল্লেখ থাকবে। উহা বর্তমান সমঝোতা স্মারকসহ ইতিপূর্বে হস্তান্তরিত সকল জলমহালের ক্ষেত্রে প্রযোজ্য হবে।


২৩। প্রয়োজনবোধে চুক্তির মেয়াদকালীন সময়ে উভয় পক্ষের সম্মতিক্রমে এ সমঝোতা স্মারক পরিবর্তন, পরিবর্তন ও সংশোধন করা যাবে;

২৪। যে সমস্ত জলমহাল নিয়ে মামলা মোকদ্দাসহ বিভিন্ন আইনী জটিলতা রয়েছে, উহা দ্বিতীয় পক্ষের নিকট হস্তান্তর করা হবে না।

২৫। প্রকল্প চলাকালীন সময়ে যদি কোন জলমহাল নিয়ে কোন মামলা মোকদ্দমা বা আইনী বিবাদ সৃষ্টি হয়, তা হলে দ্বিতীয় পক্ষ এক্ষেত্রে আইনী কার্যক্রমে প্রয়োজনীয় ব্যয় নির্বাহ করবে।

প্রথম পক্ষ

 (মোঃ নূরুল করিম হোসাইন)
 অতিরিক্ত সচিব
 জমি মন্ত্রণালয়
 বাংলাদেশ সচিবালয়, ঢাকা

দ্বিতীয় পক্ষ

 (জুয়েনা আজিজ)
 অতিরিক্ত সচিব
 স্থানীয় সরকার বিভাগ
 স্থানীয় সরকার পট্টা উন্নয়ন ও সমবায় মন্ত্রণালয়
 বাংলাদেশ সরকার সচিবালয়, ঢাকা
 অতিরিক্ত সচিব
 স্থানীয় সরকার বিভাগ
 বাংলাদেশ সরকার

সাক্ষী

Carman

(মোঃ ওয়াহিদুর রহমান) মোঃ ওয়াহিদুর রহমান
প্রধান প্রকৌশলী প্রধান প্রকৌশলী
স্থানীয় সরকার প্রকৌশল অধিদপ্তর স্থানীয় সরকার প্রকৌশল অধিদপ্তর
আশারগাঁও, ঢাকা বাংলাদেশ সরকার

Gopmone

(মোঃ আশোয়ারুল হক)
উপসচিব
ভূমি মন্ত্রণালয়
বাংলাদেশ সচিবালয়

25/4.08.2015

(সেখ মোহাম্মদ মহসিন) সেখ মোহাম্মদ মহসিন
প্রকল্প পরিচালক প্রকল্প পরিচালক
কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা প্রকল্প কমিউনিটি ভিত্তিক সম্পদ ব্যবস্থাপনা প্রকল্প
স্থানীয় সরকার প্রকৌশল অধিদপ্তর স্থানীয় সরকার প্রকৌশল অধিদপ্তর
আশারগাঁও, ঢাকা

18.08.2016

(এ টি এম নাসির মিয়া)
উপসচিব
ভূমি মন্ত্রণালয়
বাংলাদেশ সচিবালয়, ঢাকা।

18/8/16

জসীম উদ্দীন হাফিজ
সিনিয়র সহকারী সচিব
স্থানীয় সরকার বিভাগ
কম্পিউটার বাংলাদেশ সরকার

B. Department of Fisheries
MEMORANDUM OF UNDERSTANDING

between
Local Government Engineering Department
and the
Department of Fisheries

PRELUDE

Local Government Engineering Department (LGED) will be implementing the Haor Infrastructure and Livelihood Improvement Project (hereinafter referred to as the Project) with the development objective to improve the living standard and reduce vulnerability of the poor in Sunamganj, Habiganj, Kishoreganj, Netrakona and Brahmanbaria haor areas by reaching the outcomes, (i) enhanced access to markets livelihood opportunity and social services; (ii) enhance village mobility, reduction in production losses and protection against extreme weather events; (iii) enhanced access to fishery resources and conservation of biodiversity; (iv) enhanced production, diversification and marketing of crop and livestock produce; and (v) efficient, cost effective and equitable use of project resources.

This joint IFAD/GOB aided project will have five components; (i) communication infrastructure; (ii) community infrastructure; (iii) community based resource management; (iv) livelihood protection and (v) project management.

The project will work in close collaboration with various Ministries, Government Agencies and Technical Line Departments those include Ministry of Land, DOF, DAE, DOLS and Local Administration under particular Memorandum of Understanding (MoU).

Under Community Based Resource Management component the project aims at assisting the poor fisher mainly getting access into beel resources and in promoting other fisheries activities. The focus of that access will be on the community based management of the resources and the restoration of fish habitat with a view to increase fish and other aquatic production sustainably. To achieve that the communities will be trained in responsive fisheries management; cage and pen fish culture; improved fish drying technology and marketing; and besides that different development initiatives including demarcation of beel; re-excavation of beel and canal; establishing sanctuary and swamp forestry will be undertaken to improve the fish production and thereby the livelihoods of the poor fisher community.

In that context, project emphasizes a close cooperation between the project and DOF to deliver effective services to the poor. DOF has the technical expertise and a functioning system throughout the country that can assist in the implementation of the project successfully and which is entirely

within the scope and responsibility of DOF. DOF can play a very important role particularly in technology transfer and providing training support to the beneficiaries of this component. Now, as both the project and DOF are willing to cooperate with each other in training and technology transfer, a MOU is being signed between LGED & DOF.

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding entered into this (month, date), 2012 by and between:

The Local Government Engineering Department (hereinafter referred to LGED) and the Department of Fisheries (hereinafter referred to as DoF)

WITNESSETH that:

Whereas

- DOF has been assigned with the responsibility to increase and sustain fishery production through technology transfer and assist the project in enforcement of the various provisions in the Fisheries ACT, 1950.
- The project's responsibility is to assist the fisher in increasing the income of the rural poor in the project area,
- The project and DOF have agreed to enter into an understanding to cooperate in imparting training and providing technological support to the beneficiaries in the project area.

NOW, THEREFORE, in consideration of the afforested premises the LGED and DOF mutually agree as follows:

SCOPE OF OPERATION

The programmes of technical support between the project and DOF will include, to the extent made possible by the projects finances, the following:

- (a) Information and publication exchange :
- (b) Conducting training activities and workshops in fishery and resource conservation;
- (c) Technical advice and assistance as requested by the project, which fall within the objectives and jurisdiction of the project and within the scope and function of DOF.

TERM

The term of this understanding shall be for a period of 8 years from the date it is signed. Either party may terminate this Memorandum of Understanding by written notice to the other party. This Memorandum of Understanding, however, will remain effective for 180 days from the date of issue of such notice.

RESPONSIBILITIES OF THE PROJECT

- (1) The project and its employees will comply with all rules and regulation and will devote themselves diligently and vigilantly to support the provision of services by DOF to the beneficiaries.
- (2) The project shall interface with DOF in the development and design of training programmes and workshops.
- (3) The project will make physical arrangement for any training program to be conducted in the project area.
- (4) The project shall provide DOF with copies of all its publications relating to this project and findings of any research and adaptive trials undertaken.
- (5) The total training costs will be borne by the project.
- (6) The project will extend technological support and expertise to DOF as required.
- (7) The project will reimburse DOF for all travelling and other costs, as permitted under the project documents, for assisting in the implementation of the project.

IV. RESPONSIBILITIES OF DOF

1. DOF will facilitate in transferring the leases of all water bodies under MOU with Land Ministry and assist the project for establishing sustainable community based fisheries management by the fishers.
2. DOF will assist to ensure that the interests of the fisher/leases are protected.
3. DOF personnel will act as resource persons in the training programme and workshops conducted for the fisher and other target groups of the project.
4. DOF personnel will assist in making fishers aware of the contemporary fisheries policies in respect to the implementation of the component as well as the terms of the leases.
5. DOF personnel will impart training and advice to the project staff about any changes in Government procedures and policies.
6. DOF personnel will extend cooperation to the project staff for ensuring an atmosphere congenial to the development management of the resources in the project area.
7. Ensure compliance with the provisions of the Fisheries Act, 1950 by all leaseholders.

IN WITNESS WHEREOF, the parties hereto have affixed their signatures on the date first written above.

DEPARTMENT OF FISHERIES (DOF) LOCAL GOVERNMENT ENGINEERING DEPARTMENT (LGED)

BY :

BY :

Witness

Name :

Designation :

Date :

II. Witness

Name :

Designation :

Date :

Annex –IV.Supporting Study

Biodiversity and Livelihood Impact

The FRS project has been designed to monitor fish catch, bio-diversity and livelihoods of the fisheries component of the Sunamganj Community Based Resources Management Project (SCBRMP) in six Upazilas of Sunamganj district (Sunamganj Sadar, South Sunamganj, Derai, Jamalgonj, Biswambherpur and Tahirpur). The FRS project is being implemented through a MoA between the WorldFish and Local Government Engineering Department (LGED) of Bangladesh and funded through CBRMP. The core project (CBRMP) started its operation in 2003 and it is an 11 years project supported by the International Fund for Agricultural Development (IFAD).

The objective of the project is to generate impact information on community based initiatives specially Beel User Groups (BUGs) in the fisheries component of the SCBRMP. This will cover changes in fish catch, improvement of biodiversity and livelihood gains of the fisher households. Detailed objectives of this project component are:

- v) Assess the impact of community based fisheries of SCBRMP on fish catch (by volume and value) and biodiversity through a regular catch survey at 60 sites;
- vi) Estimate and simulate sustainable level of yield with corresponding fishing effort and develop management models for scaling up;
- vii) Livelihood impact analysis of BUG members in *beel* fisheries in 25 sites; and
- viii) Disseminate findings to a wider level of national and international audience.

1. Biodiversity Report

The SCBRMP water bodies are located in deeply flooded areas of the Sunamganj district, so all adjacent water bodies connected during monsoon were in fact treated as a single cluster. The FRS project targeted to work in 60 randomly selected water bodies of the SCBRMP. There are four types of water bodies included in this list for monitoring i.e. small *beels* (less than 8.09 hectares), bigger *beels* (more than 8.09 hectares) and river sections and confined ponds. Formal and informal meetings were conducted with SCBRMP fisheries component for choosing water body selection criteria and sampling methodology. For monitoring in the FRS project, 60 water bodies have been randomly selected (30 water bodies in the first round and 15 water bodies in the second phase and 15 water bodies in 3rd) of which 10 are in Sunamganj-Sadar, 12 in South-Sunamganj, 13 water body in Derai Upazila, 7 in Jamalgonj, 9 in Biswambharpur and 4 in Tahirpur. Besides 5 controls water bodies also have been selected in five Upazilas to compare findings from project water bodies. Each

Research Assistant was assigned a certain number of water bodies for monitoring work and supervision according to the remoteness and complexity of the water body.

The *haor beel* fisheries, as a source of income and employment for the rural poor can hardly be emphasized enough. Fishing is a key livelihood opportunity for thousands of households in *haor* areas and plays an important part in food security and poverty alleviation. In the past, the management of *haor* fishery has often excluded poor fishers and encouraged leaseholders to effectively 'mine' resources at non-sustainable levels of exploitation. To address these concerns, the CBRMP is implementing its activities in Sunamganj district of Bangladesh. The Fisheries Research Support Project (FRSP) has been designed to determine the relationship between management practices implemented under the Fisheries component of CBRMP and impacts on biodiversity.

Fish catch monitoring studies have been carried out in these 60 water bodies where fisheries are important and this report presents a consolidated result of the analysis carried out so far. The main findings include:

- Fisheries production – by water body and species
- Annual variation of production at water body level
- Comparison with national production
- Distribution of production at water body level
- Production variation through open and organized catch
- Gear efficiency and production
- Catch composition and major contributing species
- Impact on Biodiversity at water body level
- Status of Critically Endangered, Endangered and Vulnerable species in CBRMP sites

Fisheries production was measured in terms of organized catch (bulk catches made by organized groups) and open catch monitoring (individual catches during flooding season) to validate the total catch at each water body. The total fish catch was found at nearly 290 tons in all monitored sites (project) in 2013-14 of which organized and open catches comprised 48% and 52% respectively. The main effective factors that positively influence production from open catch may be habitat type (e.g., river, haor beel), water extension during monsoon, observing closed fishing seasons, developing fish sanctuaries, controlling & removing destructive fishing gears, controlling fisher access & fishing effort, higher species diversity, presence of professional fishers around water bodies and fisher's density.

National production (Kg/ha) of River and Beel fishery were considerably comparable with production from River and Beel fishery under CBRMP sites. National production of River fishery reported 180, 162, 180, 169 and 171 Kg/ha in 2007-08, 2008-09, 2009-10 and 2010-11 and 2011-12 respectively and at the same time production from only River fishery in CBRMP sites were found 192, 199, 267, 199 and 192 Kg/ha respectively. Simultaneously, national production of only Beel fisheries were reported 616, 694, 615, 714 and 746 Kg/ha in 2007-08, 2008-09, 2009-10, 2010-11 and 2011-12 respectively whilst, production from only Beel fisheries (pooled both open and organized catch) in CBRMP sites were found 663 kg/ha, 659 kg/ha, 720 kg/ha, 670 kg/ha, 670 kg/ha and 701kg/hac in 2008, 2009, 2010, 2011, 2012 and 2013 respectively. A total of 139 species of fish and prawn were recorded from both open and manor catches in 2013-14 of which 120 species was recorded in open

catch and 131 species was recorded in major catch. Both open catch and major catch revealed that Abua nodi, Langol kata, Thapna group jalmahal, Aung Gung, Basker khal, Tedala Huglia Chatol, Sonduika, Chatal Udaytara, Urail beel, Matian Haur Jolmohal, Boiragimara beel, Ghotghatia nodi, Digha Kochma Beel and Sudam Khali River are the home of highest biodiversity.

A total of 131 species of fish and prawn were recorded from Major catch in 2013-14 and number of species caught in the harvesting sites in 2013-14 revealed that the maximum number of species (83) were found in the Abua nodi, Tedala Hoglia Chatol (81), Boiragimara (69), Chatol Udaytara (68), Meda Prokashito Kachma (68), Aislauni (64), Thapna group jalmahal (63), Matian Haor Jalmohal (63), Urail beel (62), Aung gung (60), Langol Kata Ojur Beel (60), Basker Khal (60), Sonduika (59), Dewtan Beel (58) and Ghotghatia (58). The present study reveals that total number of species varies from 19 to 83 at the study sites which also highly correlation with the catch monitoring results.

Analysis of open catch reveals that 20 main species contributed to the maximum proportion of the catch, all together contributing 73%, 75%, 77%, 80%, 77.54%, 73.61% and 74.36% in 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. Annual contributions of all other species were 27%, 25%, 23%, 20%, 22.46%, 26.39% and 25.64% in 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively.

Annual catch reveals that 20 main species contributed to the maximum proportion of the catch, all together contributing 73%, 75%, 77%, 80%, 77.54%, 73.61% and 76.40% in 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. Annual contributions of all other species were 27%, 25%, 23%, 20%, 22.46, 26.39% and 23.60% in 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. The percentage compositions of catches of 20 main species in 2013-14 are presented in figure 12.b. The present study reveals that Jatputi, Boal, Chapila, Rui, Gol Chanda, Kalibaus, Gura Icha, Tit Puti, Baila, Meni and Bojuri Tengra are the highest resilient species in haor areas. These 11 species contributed by 43%, 49%, 51%, 61%, 48.85%, 53.38% and 52.38% in 2007-08, 2008-09, 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. Jatputi was the highest contributor species in 2007-08, 2008-09, 2009-10, 2011-12, 2012-13 and 2013-14 and contributed 11.6%, 11.26%, 21.03%, 13.73%, 16.52% and 14.37% respectively. Whilst Boal was the highest contributed species in 2010-11 and contributed 16.69% of the total production.

Analysis of open catch in 2013 reveals that Jatputi (*Puntius sophore*), Taki (*Channa punctatus*), Kalibaus (*Labeo calbasu*), Meni (*Nandus nandus*), Koi (*Anabas testudineous*), Tengra (*Mystus vittatus*), Chapila (*Gudusia chapra*), Boal (*Wallago attu*), Tit puti (*Puntius ticto*) Gura Icha (*Nematopalaemon tenuipes*) and Goinna (*Labeo gonius*) and contributed to 10.27%, 8.38%, 6.49%, 6.28%, 4.69%, 3.86%, 3.39%, 3.24%, 3.118%, 2.75% and 2.63% of overall catches, respectively. The study reveals that Jatputi is one of the resilient successor breeders' species in 2013. Abundance of fish species increased significantly at water body level and species diversity (range '30 to 83 species') were found at 83% sites in 2008, which increased at 97% sites in 2013. **Table- 10** presents number of species found at different water bodies during study periods.

Table 10. Number of species recorded at monitored water bodies during study periods.

Name of Upazila	Name of the Beel	Number of species							Comments
		Year 1 (2007-08)	Year 2 (2008-09)	Year-3 (2009-10)	Year-4 (2010-11)	Year-5 (2011-12)	Year-6 (2012-13)	Year-7 (2013-14)	
Sadar	Langol Kata	50	48	62	63	61	60	60	Upwards
	Boiragimara	58	60	61	61	63	62	69	Upwards
	Aung Gung	34	35	40	42	52	62	60	Upwards
	Urail Beel	32	52	52	53	61	62	62	Upwards
	Aislauni	42	42	43	44	45	51	64	Upwards
	Chota Beel	29	34	36	41	46	45	46	Upwards
	Lalpurur Jai	32	35	37	38	39	39	45	Upwards
	Kaima Beel Koiya Beel (NWB)				50	53	52	53	
	Noldeggha Bandor Kona* (NWB)				44	41	37	40	Downwards
South Sunamganj	Babonpai	25	39	43	57	56	54	55	Upwards
	Tedala Huglia Chatol	41	43	59	61	64	79	81	Upwards
	Chatol Udaytara	38	54	56	67	68	67	68	Upwards
	Nitai Goan	26	27	29	35	46	47	47	Upwards
	Pachgachiya	29	31	39	41	43	44	44	Upwards
	Moinpur Beel	30	32	32	39	49	49	55	Upwards
	Srinathpurur Dhola	-	20	32	34	37	38	38	Upwards
	Kochua Goan	21	35	42	40	41	41	43	Upwards
	Chinamara Beel	16	33	36	42	43	42	46	Upwards
	Terazani Balir Dubi	36	50	48	49	51	51	53	Upwards
	84/8, Surma Nodi* (NWB)				40	41	44	30	Upwards
	Rajghori Beel (NWB)					35	40	40	
Derai	Boro Medi	38	39	46	49	50	55	57	Upwards
	Guza Beel (NWB)				51	48	49	54	
	Najar Dighi (NWB)				23	23	32	37	
	Medha Prokashito Kachma Beel (NWB)				57	57	56	68	
	Juripanjuri Beel (NWB)				46	47	45	45	
	Bogadia Beel (NWB)					41	42	43	
	Roa Beel (NWB)					18	27	32	
	Kunijuri Beel (NWB)					19	31	38	
Jamaiganj	Sonduikka Group Jalmahal	32	45	53	55	55	59	59	Upwards
	Dewtan Beel	16	42	48	50	52	58	58	Upwards
	Basker Khal	40	48	51	57	60	60	60	Upwards
	Lomba beel Gol Beel		30	36	42	43	49	55	Upwards
	Basker Beel o Jolsuker Beel (NWB)				53	56	55	55	
	Dhola Pakna Jalmahal				39	43	43	52	
	Kaldohor* Beel (NWB)				40	34	46	48	Upwards
Biswambharpur	Moni Kamarer Kuri	31	38	37	45	45	46	45	Upwards
	Sudam Khali River	36	32	50	52	53	56	56	Upwards
	Ghotghatia Nodi	31	32	38	54	56	58	58	Upwards
	Tiar Beel Lomba Beel Gool Beel	14	27	42	46	47	51	52	Upwards
	Abua Prokashito Nainda Nodi	28	48	68	71	74	82	83	Upwards
	Tinbila Beel (NWB)				36	38	38	37	

Name of Upazila	Name of the Beel	Number of species							Comments
		Year 1 (2007-08)	Year 2 (2008-09)	Year-3 (2009-10)	Year-4 (2010-11)	Year-5 (2011-12)	Year-6 (2012-13)	Year-7 (2013-14)	
	Pondua beel* (NWB)				40	51	37	37	Downwards
	Gazaria (NWB)					30	55	57	
	Lomba Beel Group Fishery (NWB)					28	45	46	
	Sonatola Kaikar Dair (NWB)					29	41	41	
Tahirpur	Thapna Group Jalmahal	32	53	57	58	59	62	63	Upwards
	Choto Khal Boro Khal	17	44	46	52	53	54	54	Upwards
	Issubpurer Khal	10	-	11	26	32	30	47	Upwards
	Digha Kochma Beel (NWB)	-	-	-	52	54	56	57	Upwards
	Matian Haor Jalmahal (NWB)	-	-	-	56	57	61	63	Upwards
	Horuar beel o lomba beel* (NWB)	-	-	-	61	61	46	47	Downwards

NWB = New monitored sites; * Control sites

Using IUCN status and based on open catch of 7 Critically Endangered species, 7 (*Clupisoma garua*, *Labeo pangusia*, *Puntius sarana*, *Rita rita* and *Tor tor* and *E. vacha*) found in the Abua nodi in 2013 which reveals that Abua is the home of 'Critically Endangered' species. Besides Thapna, Sondukka, Kachma beel, Matian haor, Langol Kata, Boro Medi, Lomba beel, Tedala and Basker Khal are also the home of critically endangered species. In 2008 only four Critically Endangered species was found in the Abua and Sondukka, and only one Critically Endangered species (*Tor tor*) was found in Thapna Group Jalmahal.

The study clearly shows Abua nodi, Basker Khal, Boro Medi, Chatol, Langolkata, Sondukka, Thapna, Matian haor, Tedala, Lomba beel and Kachma beel are the habitat of Critically Endanger species.

Study reveals that six Endangered species namely; *Chaca chaca*, *Crosscheliu laliu*, *Labeo bata*, *Notopterus chitala*, *Silonia sinondia* and *Rasbora elanga* appeared near to Critically Endangered in haor areas and found only few water bodies. Table 11 presents the distributions of Critically Endangered species.

Table 11: Distributions of Critically Endangered species at water body level.

Name of species	Number of water bodies					
	2008	2009	2010	2011	2012	2013
<i>Bagarius bagarius</i>	2	2	3	2	0	3
<i>Clupisoma garua</i>	5	5	6	9	9	13
<i>Eutropiichthys vacha</i>	3	6	17	16	15	19
<i>Labeo pangusia</i>	1	2	1	3	1	2
<i>Puntius sarana</i>	10	4	22	18	22	30
<i>Rita rita</i>	12	2	10	7	6	7
<i>Tor tor</i>	1	7	2	2	3	4

Fifteen Endangered species was recorded during study period (*Badis badis*, *Botia dario*, *Chaca chaca*, *Channa marulius*, *Crosscheliu latius*, *Ctenops nobilis*, *Labeo bata*, *Labeo calbasu*, *Labeo gonius*,

Mastacembelus armatus, *Notopterus chitala*, *Ompak bimaculatus*, *Ompak pabda*, *Silonia silondia* and *Rasbora elanga*). Among 15 endangered species Abua nodi, Basker Khal, Thapna, Sondukka and Matian haor are the home of more than 10 endangered species.

Increasing trends of endangered species at water body level:

Among 15 Endangered species 10 species shows increasing trends during study periods (Table 7). However, the endangered species - *Rasbora elanga* found only in Babonpoi beel in 2008, species *Silonia sinondia* also appeared in Dewtan beel and Basker beel in 2010 and 2011, also appeared in Meda Prokashito and Haruar beel in 2012, Abua and Matian Haor in 2013. The other Endangered species – *Crosscheliu latius* also appeared in three beels in 2012 and 2013.

Study reveals that six Endangered species namely; *Chaca chaca*, *Crosscheliu laliu*, *Labeo bata*, *Notopterus chitala*, *Silonia sinondia* and *Rasbora elanga* appeared near to Critically Endangered in haor areas and found only few water bodies.

Table 12: Status of Endangered species found at monitored sites during study periods.

Species name	Number of water bodies						Remarks
	2008	2009	2010	2011	2012	2013	
<i>Badis badis</i>	14	21	20	33	25	29	Increasing trends
<i>Botia dario</i>	11	12	39	41	37	38	Increasing trends
<i>Chaca chaca</i>	5	2	9	5	5	11	Increasing trends
<i>Channa marulius</i>	16	15	28	28	32	39	Increasing trends
<i>Ctenops nobilis</i>	18	16	22	20	17	19	Increasing trends
<i>Labeo bata</i>	1	4	7	4	3	5	This species was found in one site in 2008 and 7 sites in 2010, 3 in 2012, however in 2013 found in five sites.
<i>Labeo calbasu</i>	16	19	40	35	35	46	Increasing trends
<i>Labeo gonius</i>	18	18	41	37	34	47	Increasing trends,
<i>M. armatus</i>	22	24	41	40	41	52	Increasing trends
<i>N. chitala</i>	4	2	6	4	4	5	This species was found in Basker Beel, Dhola Pakna JL, Horuar Beel, Juripanjuri, Meda Prokashito, Thapna Gr JL in 2010, in 2011 and 2012 found in four sites, however in 2013 found in five sites.
<i>O.bimaculatus</i>	10	5	13	15	14	18	Increasing trends,
<i>Ompak pabda</i>	12	8	16	21	20	21	Increasing trends,
<i>Silonia silondia</i>	0	0	1	1	2	2	Found first time in Dewtan beel in 2010 and in Basker beel in 2011, Meda Prokashito beel and Horuar beel in 2012 and Matian and Abua in 2013, the species appeared as highly Endangered species in haor areas.
<i>Rasbora elanga</i>	1	0	0	0	0	0	The species was found only once in Babonpai beel in 2008

							and appeared as highly Endangered species in Haor areas.
<i>Crossocheli</i> <i>latius</i>	0	0	0	1	3	3	This species was found in 2011 in one beel and in 2012 and 2013 in three beels, and appeared as highly Endangered species in Haor areas.

Income derived from fishing activities (organized catches) are influenced by several factors (marketing linkage, high valued species, grading, distance from urban market etc.) which were reflected in variations of average prices (Tk) per kg of fish. The highest value (Tk 188 per kg) was found at Bogadia beel in Derai; whilst Issubpur Khal in Tahirpur had the lowest per kilogram value (Tk. 77 per kg). Using average value (Tk 126 per kg) in 2013-14, and by combining catches from project monitored sites (55 project water bodies) production (172 tons) were worth Tk 22 million in 2013. This daily catch rates per fisher is an indicator of fish abundance, income and food security. Present study reveals that average daily catch rates per fisher also significantly increased in 2013 compared to 2008.

Present study reveals that fish sanctuaries provides shelter and protection of resources and shows a significant role in increasing biodiversity of fish species that might ensure resource sustainability at water body level. Scale up of sanctuary program will reduce climate change threats through protection, and also ensure stability of small nutritional fishes, and these are the main nutritional security of the poor people.

The data generated during the study period also provided an opportunity to explore the response of catch to effort based upon site comparisons. Biodiversity at most water bodies showed higher species richness and the profusion of species appeared somehow higher in haor beel and river habitats. Sites of similar habitats in non-project sites had a lower biodiversity. This data suggests that the majority of CBRMP sites showed considerably healthier biodiversity than water bodies outside project boundaries.

Recommendations

The following recommendations are made based on the analysis of monitoring data:

- Given the importance of fish sanctuary in increasing biodiversity scale up of sanctuary program will ensure resource sustainability, reduce climate change threats and stability in nutritional security of the poor people.
- Less potential water bodies in terms of productivity and water extent can be assessed for seasonal stocking with native species. This will enhance income of the participating communities and create more women involvement in the production process.
- The study clearly shows Abua nodi, Thapna, Sondukka, Kachma beel, Matian haor, Langol Kata, Boro Medi, Lomba beel, Tedala and Basker Khal are the habitat of Critically Endangered species, so attempts should be made for conservation.
- The CBRMP has been provided evidence that community-based resource management approaches aimed for haor areas are effective in different types of beels and rivers, resulting in enhancements fish production and biodiversity.

Technical Recommendations – Specific to Waterbody

The need to manage haor fisheries has accelerated in recent years as scientific evidence has shown increasing numbers of fisheries resources becoming overfished. The present study shows that at most monitored water bodies the combination of fish sanctuaries; closed seasons and gear bans result in upward trends for enhanced fisheries management. Based on fisheries management performance at water body level some technical recommendations are given in **Table- 13**.

Table 13: Technical recommendations for each monitored site.

Name of Upazila	Name of Water body	Technical recommendation
Sunamganj Sader	Langol Kata Ojur Beel	Overall fish production and biodiversity increased remarkably. However, catch rate in 2013 decreased. Advised to reduce high fishing pressure and management should continue accordingly. This water body also habitat of Critically Endangered fish species, so attempts should be made for their conservation.
	Boiragimara Beel	Fish production and biodiversity increased. Ghonnia is the main species in 2012. BUGs maintain very good sale value.
	Aung Gung	Acceptable catch rate (Kg/ha) observed during study period with minor changes. Biodiversity also upwards. Advised to continue accordingly.
	Urail Beel	Biodiversity increased significantly and upwards. The BUGs are advised to continue fishery management accordingly.
	Aislauni Prokashito Mitar Dubi	Biodiversity appeared sustainable. However, catch rate (Kg/ha) not increased accordingly. Catch rate through organized catch increased. Advised to reduce high fishing pressure.
	Chota Beel	Advised to strengthen management and reduce high fishing pressure through open catch and responsible organized catch.
	Lalpurur Jai and Gozaria Dair	Biodiversity increased. The BUGs are advised to establish an effective fish sanctuary for resource sustainability.
	Kaima Beel Koiya Beel	The water body appeared habitat of Critically Endangered fish species, so attempts should be made for their conservation.
	Noldigha Bandorkona*	Control site
South Sunamganj	Babonpai Beel	Biodiversity increased significantly. The BUGs are advised to repair fish sanctuary and also responsible fishing during flooding season.
	Tedala Hugliya Chatol	Overall catch rate (Kg/ha) increased. Simultaneously number of species also increased. The BUGs are advised to continue accordingly.
	Chatol Udaytara	Overall catch rate (Kg/ha) and biodiversity increased. This water body also habitat of Critically Endangered fish species, so attempts should be made for their conservation. The BUGs are advised to continue with similar fishing effort and responsible fishing. The BUG earn good amount of money from organized harvest (sale value Tk 145 per Kg of fish).
	Nitai Gaon	Overall catch rate (Kg/ha) remain almost same. However, Biodiversity increased significantly. The BUG earn good amount of money from organized harvest (sale value Tk 154 per Kg of fish) .

Name of Upazila	Name of Water body	Technical recommendation
		The BUGs are advised to establish fish sanctuary and responsible fishing.
	Pachgachia Beel	Overall catch rate (Kg/ha) increased. Biodiversity also increased accordingly. However, biodiversity index decreased in recent year. The BUGs area advised to establish effective fish sanctuary and continue with responsible fishing especially for organized catch.
	Moinpur Beel Group	Overall catch rate (Kg/ha) increased and biodiversity also increased and upwards. The BUGs are advised to establish permanent sanctuary and continue fishing accordingly.
	Srinathpurer Dhola	Overall catch rate (Kg/ha) increased for both open and organized catches. Number of species increased significantly. The BUGs are advised to continue with similar fishing effort and responsible fishing.
	Kochua Gang	Overall catch rate (Kg/ha) remain almost same for both open and organized catches. In contrast, number of species increased and also upwards. The BUGs are advised to increase fishing effort for open catch and responsible fishing or organized catch. Also advise to establish fish sanctuary.
	Chinamara Beel	Overall catch rate (Kg/ha) increased significantly and for both open catch and organized catch. Biodiversity also increased significantly. The BUGs are advised to continue accordingly.
	Terazani Balir Dubi	Overall catch rate (Kg/ha) increased significantly and for both open catch and organized catch. Biodiversity also increased significantly. The BUGs are advised to continue accordingly. However, BUG might aim to get max profit from fish sale
	84/8 Surma Nodi*	Control site
Biswambharpur	Moni Kamarer Kuri	Overall catch rate (Kg/ha) and biodiversity increased. However, the BUGs are advised to bring this site under stocking program as this is a large pond type water body.
	Sudam Khali River	Overall catch rate (Kg/ha) and biodiversity increased. The BUGs are advised to continue accordingly.
	Ghotghatia Nodhi	Overall catch rate (Kg/ha) decreased in 2012. However, biodiversity increased. The BUGs are advised to continue with slightly lower fishing intensity and responsible organized catch.
	Tiar Beel Lomba Beel Gool Beel	Overall production increased. The BUG earn good amount of money from small harvest (sale value Tk 131 per Kg of fish) and CBRMP management might plan to share this BUG's experience regarding fish sale to other BUGs.
	Abua Prokashito Nainada Nodi	The study noted the highest abundance of Kalibaus (<i>Labeo calbasu</i>) in this river. According to IUCN (2003) Kalibaus is an endangered species. The River also habitat of six Critically Endangered fish species, so attempts should be made for their conservation.
	Tinbila Beel	New water body
	Pondua Beel*	Control site
Jam alga nj	Sonduikka Group Jalmahal	This water body also habitat of Critically Endangered fish species, so attempts should be made for their conservation.

Name of Upazila	Name of Water body	Technical recommendation
	Dewtan Beel	Overall catch rate (Kg/ha) remain same with little change for both open and organized catch. Biodiversity also increased. The BUGs are advised to slightly increase fishing effort and continue organized catch accordingly.
	Basker Khal	Appear Sustainable Fishing. However, BUG might aim to get max profit from fish sale. This water body also habitat of Critically Endangered fish species, so attempts should be made for their conservation.
	Lomba Beel Gol Beel	Overall catch rate (Kg/ha) and number of species has increased. However, biodiversity index decreased in recent year. Advised to strengthen fishery management accordingly.
	Basker Beel O Jolsuker Beel	New water body and need more data support
	Dhola Pakna Jalmahal	Rich ecosystem and habitat of high value fish species (Boal, Kakibaus, Goina, Rui, Shol, Gazar, Boro baim, Pabda) as main contributor's species and the BUG earned good amount of money from sale (Tk 104 per Kg of fish). The BUGs are advised to continue accordingly.
	Kaldohor Beel*	Control site
Derai	Boro Medi Beel	Rich biodiversity and also habitat of Critically Endangered fish species, so attempts should be made for their conservation.
	Guza beel	New water body and need more data support.
	Najardighi Beel	New water body and need more data support.
	Medaprokashito Kochma beel	New water body and need more data support.
	Juripanjuri Beel	New water body and need more data support.
Tahirpur	Thapna Group Jalmahal	Overall production (Kg/ha) remain almost same with increased through organized catch. BUG might aim to get max profit from fish sale. This water body also habitat of Critically Endangered fish species, so attempts should be made for their conservation.
	Choto Khal Boro Khal	The BUGs are advised to optimum and responsible harvest.
	Issubpurer Khal	Overall production (Kg/ha) remain same for both open and organized catches. BUG might aim to harvest more fish through organized catch.
	Digha Kochma Beel	High open catch and rich biodiversity. BUGs are advised to responsible harvest.
	Matian Haor Jalmahal	Rich biodiversity and high Organized catch. This water body also habitat of Critically Endangered fish species, so BUGs support should be made for biodiversity conservation.
	Horuar beel O lomba beel*	Control site. In fact naturally this water body shows higher Biodiversity and commercial fishes are the higher contributed species.

[Reference: Fifth Round Report of the FRSP on Fish Catch and Bio-diversity monitoring, SCBRMP-LGED/WorldFish- September 2014]

2. Livelihood Report

Third round livelihoods study prepared based on the comparative report of other accomplished impact monitoring changes over time, from baseline household profile information to third round monitoring has tried to identify livelihood indicators that enable CBRMP to understand how fisheries management programs impact upon the lives of the project participants from 2004 to 2012.

The WorldFish has been collecting data from the same sample of BUG member households that was randomly sampled in 2008 to make a comparison between the information of the two years; from the first round to second and third round monitoring. The WorldFish has intended to analyze this data and prepare a comprehensive report.

It was intended that the WorldFish will use the same set of sample households that had been drawn in the first round study from BUGs lists (prepared by SCBRMP). Initially, the samples had been drawn through a 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.

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 used the same questionnaire developed for the first round study to measure the present status of the livelihoods situation, giving maximum attention to securing comparability with the previous stage of monitoring.

Household income profile

After the inception of the project significant progress have been achieved in different fields of diversification of income. Household income has increased nearly three times compare to the much slower rate in national level income. The project area has made remarkable progress in the fisheries management and development of its infrastructure, especially in the development of paved roads. Most of the unions are well connected to the Upazilacenter and district headquarters through paved roads. The majority of project people are depends directly or indirectly on open water fisheries for its livelihood. Great success has been achieved in terms of increasing income from fishing. In all studies households were asked to estimate their income from different sources for the 12 months prior to the survey. It has been observed that natural resources have always been the basis of the local economy in the Sunamganj *haor* areas. This part of the report provides a preview of the general household income contributed from different economic activities. Each, income activity represent the total percentage of households' income derived from each particular source, in which contribution from fishing is highest in all studies. In 2012 the second highest income came from agriculture related activities followed by non-agricultural labor and fish related trading, whereas in 2004 the second highest income came from nonagricultural labor.

It is revealed that average income increased by about 28% from 2010 livelihoods study whereas, income increased by 180% compare with base income in among the participating households. Fishing is the income source with the highest contribution in all study periods but there are differences amongst the other categories. **Table 14** reveals that in 2004, 43% of income derived from fishing but in

2012, 27% income contributed from fishing which is about 76% higher than the base year. Current table also describe proportionate contribution of other sources of households' income. This scenario has been changed due to better access to resources, development of human capital, access to services and engagement in income activities. Comparative incomes in differ study years are shown in **figure 21**.

Table 14: Average household Income (Taka) of different categories by sources

Source of income	2004		2008		2010		2012	
	Total(n=125)		Total(n=125)		Total(n=125)		Total(n=125)	
		%		%		%		%
Fishing	16,314	43	18653	30	21184	25	28725	27
Agriculture labor	4,392	12	4151	7	7157	9	10957	10
Non-agriculture labor	4,791	13	6183	10	9447	11	15232	14
Handicrafts/petty trade	2,739	7	2923	5	3278	4	4995	5
Fish and fish related trading	1680	4	1468	2	7795	9	8155	8
Income from Major Fishing	0	0	1133	2	2593	3	3115	3
Aquaculture	0	0	201	0	24	0	376	0
Business	2,038	5	3002	5	1240	1	800	1
Service (private/NGO/government)	1,233	3	1511	3	2584	3	3477	3
Sale of goats/sheep, poultry birds, milk and eggs	1,889	5	2839	5	3125	4	3447	3
Sale of agricultural by products and other assets	166	0	988	2	120	0	827	1
Remittances	1,320	3	1688	3	320	0	4680	4
Previous savings	0	0	640	1	2486	3	0	0
Agricultural income	0	0	7556	12	13979	17	14680	14
Other (Boat, rickshaw, carpenter, mason and maid)	1458	4	8353	13	7943	10	7328	7
Overall	38,020	100	61287	100	83275	99	106794	100

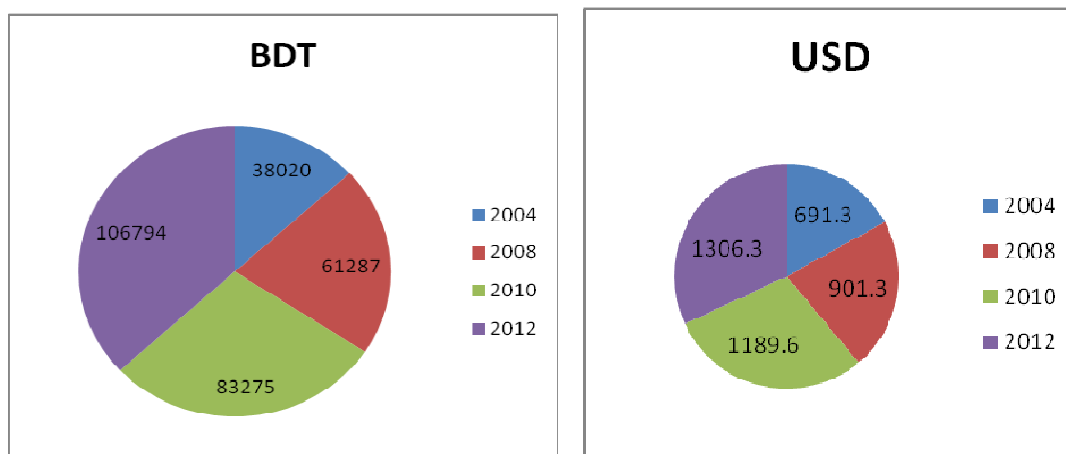


Figure 21: Comparative incomes in different study years

Role of Social and Human Capital in Livelihoods

Membership in local institutions is positively correlated with wealth across all the defined

membership categories within the community, especially membership in integrated projects like CBRMP. Present data shows that empowerment of general members have been shifted positively. Membership in BUG shows enhance ownership of resources, better empowerment in the society and improved status in the community. Women of participating households got more mobility to other financial places/institutions (Market/Bazaar, Banks and Waterbodies) than the first round survey.

The CBRMP has been continuously following community approaches (involving fisher and other non fisher) poor households, thus allowing increased numbers of waterbodies to increased number of fisher households in the project area. Increased participation provided access services and better linkages with government authorities and CBOs itself.

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. Lack of transportation and communication is one of the main problems in Haor area to access to educational institutions. The CBRMP interventions has established better road networks at the village level compare to the pre project period. In primary level overall schooling rate increased about 5% whereas, education above class V experienced an increase of around 3%. During baseline survey to statistics of 2012 enrollment to school has gradually increased and the proportion of old age and children below age 5 remain almost similar.

Productive assets

Use of total land holding (per household) is bigger in Sunamganj district than the national average which is 0.83 acres (Statistical Pocket Book 2008). Average homestead area is also higher among sample households than the national average of 7 decimals per holding. The current study data revealed that owner-operated area has reduced by about 7 decimals, while homestead area has increase by about 2 decimals per households, sharecropped area per household increased by about 20 decimals compare to base year. Average pond size has remained same within the project period. 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.

Although housing is considered to be a productive asset, the present study did not analyze the overall quality of housing, because in the study quality of housing has determined by household materials. Average area of dwelling increased by 27 sqft from the base year, wall material also improved as house with tin material has increase from 6% to 29% and brick was also increased in about 3% compare with the base year. Currently about 90% households has tin roof, 4% has brick roof, which is significantly higher than the base year.

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.

About 59% households have access to livestock which is the preferred rearing activity at the household and adjacent area, while in 2004, 42% households had livestock. The study also reveals that luxury assets such as radio, television, gold and mobile phone has increased notably. Assets such as fishing nets, mobile phones, ornaments, furniture (beds/chair/tables/showcase), radios,

televisions, and bicycles are most commonly held by households. Comparing four sets of data from the BUG members' households, there are positive changes in most of the items. On the other hand fishing net and boat ownership decreased within project period.

Food Security

Achieving the MDG targets securing food security for the poor is a prime task for all development projects. In this connection project provided development services improved food security status of the sample households. About 64.8% has no food crisis at all throughout the year and 31.2% households' food shortage 1-3 months in a year which reflects that about 42.4% households have better food security. While, baseline reported, only 12% had no food crisis throughout the year and 80% households' had food shortage for 1-3 months in a year which reflected that about 15% households had better food security. 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 CBRMP. So far description of information suggest better livelihood situation in the project area however, to achieve sustainable poverty reduction need long term comprehensive development programs supported by government agencies. [Reference: HOUSEHOLD BASELINE REPORT OF BEEL USER GROUP (BUG) MEMBERS-2007 AND THIRD ROUND LIVELIHOOD IMPACT MONITORING REPORT OF BEEL USER GROUP (BUG) MEMBER-2012]

Annex –V. List of Beels and Accessed Status

Community Based Resource management Project LGED, PMU, Sunamgonj Above 20 acre beel handover status As of April 2014

Name Of Upazila	Sl no	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	4th Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
Sadar	1	Boiragimara Beel	46	13	59	1	0		1				Developed
	2	Gojaria Nodhi Group	76	26	102	1	0		1				Developed
	3	Koyea beel Kaima beel	29	10	39	1	0			1			Developed
	4	Shapela Boro Beel o Kuri Beel	30	12	42	1	0				1		Developed
	5	Pakhir ma beel	0	0	0	0	0	1				1	
Sub-total			181	61	242	4	0	1	2	1	1	1	
South Sunamgonj	1	Babonpoi Beel	28	8	36	1			1				Developed
	2	Boishgaon Beel	42	15	57	1			1				Developed
	3	Chatol Udoytara	40	10	50	1			1				Developed
	4	Panggaia Naoria Boalia	57	0	57	1			1				Developed
	5	Thedala Huglia Chatol	42	9	51	1			1				Developed
	6	Digabeel Jayor , Noldiga Gozaria	24	12	36	1			1				Developed
	7	Choto kayesma pikor dubi	33	23	56	1				1			Developed
	8	Gujauni group Jalmahal	31	15	46	1				1			Developed
	9	Laugang Prokashito laua nodi	30	2	32	1				1			
Sub-total			327	94	421	9	0	0	6	3	0	0	
Jagannathpur	1	Rotna nodi Dhopakhai	41	15	56	1				1			
	2	Vetu khali	28	9	37	1				1			
	3	Jahurkara group	18	10	28	1				1			Developed
	4	Roua Beel	26	8	34	1					1		Developed
	5	Salua Beel	35	10	45	1					1		Developed
	6	Beri Nadi O Digha Beel	15	10	25	1					1		Developed
	7	Gazir Kuler Dohor	25	8	33	1					1		Developed
	8	Farua Beel	19	10	29	1					1		Developed
Sub-total			207	80	287	8	0	0	0	3	5	0	
Bishwamvorpur	1	Rupsha Nadi Group	50	7	57	1			1				Developed
	2	Abuaprokashito Nainda Nadi	47	33	80	1			1				Developed
	3	Jamertala jolkorpunjo	43	15	58	1				1			Developed
	4	Tin beela beel	31	1	32	1				1			Developed
	5	Sonatola Kaikkar Dair beel	44	16	60	1					1		Developed
Sub-total			215	72	287	5	0	0	2	2	1	0	
Jamalgonj	1	Dholapakna Beel	36	10	46	1			1				Developed
	2	Chirmi beel (Chicraboni)	21	10	31	1			1				Developed
	3	BashkerBeel & Jolsukna Beel	30	10	40	1			1				Developed
	4	Kosma Group	40	10	50	1				1			Developed
	5	Upper part of jal boulay	33	4	37	1				1			Developed

Name Of Upazila	SI no	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	4th Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
	6	Boro chatua beel	0	0	0	0		1				1	
	7	Putia nodi	0	0	0	0		1				1	
	8	Doulota beel	0	0	0	0		1				1	
	9	Gongadhorpur nodi	0	0	0	0		1				1	
Sub-total			160	44	204	5	0	4	3	2	0	4	
Tahirpur	1	Kazir doba beel	0	0	0	0	1		1				
	2	Bolda group	102	18	120	1			1				Developed
	3	Thapna Group	39	9	48	1			1				Developed
	4	Matian Hour	200	53	253	1			1				Developed
	5	Terazani beel	50	20	70	0	1		1				
	6	Boro dop beel	20	5	25	1				1			Developed
	7	Kosma beel	30	10	40	1				1			Developed
	8	Katua ura beel	30	15	45	0	1			1			
	9	Mohalia beel	30	10	40	1				1			Developed
	10	Sonatola beel	0	0	0	0	1			1			
	11	Chatardoba O sundorboner beel	15	5	20	1				1			Developed
	12	Hamhamiar Beel	30	15	45	1			1				Developed & Drop out
Sub-total			546	160	706	8	4	0	6	6	0	0	
Derai	1	Kaima Beel	60	20	80	1			1				Developed
	2	Boromedi Beel	87	27	114	1			1				Developed
	3	Jogduba beel	21	9	30	1			1				Developed
	4	Kudalia beel	0	0	0	0	1		1				
	5	Hariar khal	29	17	46	1				1			Developed
	6	Juri panjuri	27	15	42	1				1			Developed
	7	Najor dighi	20	7	27	1				1			Developed
	8	Jenai gang	40	0	40	1				1			Developed
	9	Shaplar chor	0	0	0	0		1		1			
	10	Kunijuri goborgola nodi	40	19	59	1				1			Developed
	11	Pankouriar beel	57	24	81	1				1			
	12	Medha prokashito kosma beel	79	37	116	1				1			Developed
	13	Roua beel group	22	10	32	1				1			Developed
	14	Lobi Chatol Beel	16	10	26	1					1		Developed
	15	Buri Chatol Beel	0	0	0	0	1				1		
	16	Jalal Prokasito Kaita Beel	33	15	48	1			1				Developed & Drop out
Sub-total			531	210	741	13	2	1	5	9	2	0	
Dowarabazar	1	Chatoli beel amir khal & others	19	5	24	1				1			Developed
	2	Porodoho beel	14	5	19	1				1			Developed
	3	Bholakhali kasimpur nodi prokasito chilauni nodi & gujauni nodi	20	0	20	1				1			Developed
	4	Chela nodir natun dhala prokasito gadur dhala	0	0	0	0	1			1			
	5	Teli Khal	32	6	38	1					1		Developed
	6	Konoskhajai Jolmohal	64	0	64	1					1		Developed
	7	Khaigung Moragung	5	16	21	1					1		Developed
Sub-total			154	32	186	6	1	0	0	4	3	0	
Ch att ak	1	Tara beel	45	0	45	1				1			
	2	Boro beel bar mukha	11	8	19	1				1			Developed

Name Of Upazila	SI no	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	4th Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
	3	Bander kona	31	4	35	1				1			Developed
	4	Kuyadal Group Beel	56	0	56	1				1			Developed
	5	Alda nodi	25	0	25	1				1			Developed
	6	Hurua kurua prokashito hazuar beel	0	0	0	0	1			1			
	7	Kura Chatol Beel	16	5	21	1					1		Developed
	8	Sunui Beel	34	5	39	1					1		Developed
	9	Kakura Beel	31	5	36	1					1		Developed
Sub-total			249	27	276	8	1	0	0	6	3	0	
Darmopasha	1	Royche Beel	0	0	0	0		1		1			
	2	Naya beel	20	10	30	1				1			
	3	Sutliar fisheri	0	0	0	0	1			1			
	4	Bonder khaler khaw	0	0	0	0	1			1			
	5	Kalna kuree	0	0	0	0	1			1			
	6	Hirajaner khal	0	0	0	0	1			1			
	7	Soytankhai nodi khaw	0	0	0	0	1			1			
	8	Atler beel dolposhi beel & dayir	20	10	30	1				1			Developed
	9	Monai nodi prokashito mora manosh	15	12	27	1				1			Developed
Sub-total			55	32	87	3	5	1	0	9	0	0	
Sulla	1	Kasipur laira diga group-D 2nd part	27	10	37	1				1			Developed
	2	Gulma beel	19	8	27	1				1			Developed
	3	Chapta beel	0	0	0	1	0			1			Developed
	4	Kaloni nodir 2 dahor & 1 Dak band	30	16	46	1				1			Developed
	5	Godi nodi	0	0	0	0	1			1			
	6	Fen khai	25	8	33	1				1			Developed
	7	Chowka chatoli bagur bagapara group	20	8	28	1				1			Developed
	8	Chamti Nadi	20	5	25	1					1		Developed
	9	Kapna Beel	20	8	28	1					1		Developed
	10	Bahara nodi prokashito Vandanadi	30	8	38		1					1	
Sub-total			191	71	262	8	2	0	0	7	2	1	
Total			2816	883	3699	77	15	7	24	52	17	6	

Community Based Resource management Project
LGED, PMU, Sunamgonj
Bellow 20 acre beel handover status
As of May 2014

Name Of Upazilla	Sl No	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	Fourth Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
Sadar	1	Kata khal	18	7	25	1				1			Developed
	2	Hekani beel	20	8	28	1				1			Developed
	3	Jordubi lamardair ujdair	14	6	20	1				1			Developed
	4	Boiragimara dair & Piardubi beel	22	6	28	1				1			Developed
	5	Gang jera	20	0	20	1				1			Developed
	6	Nainda beel	20	2	22	1				1			Developed
	7	Digha beel	23	5	28	1				1			Developed
	8	Bahadur purer kur jolmahal	15	6	21	1				1			Developed
	9	Purail beel	40	10	50	1				1			Developed
	10	Puar Jahor	22	5	27	1				1			Developed
	11	Lalpur Jai and Gojaria Dair	15	5	20	1				1			Developed
	12	Langol kata ojur beel	25	8	33	1				1			Developed
	13	Aislauni Prokashito Mاتييا Dubi	21	5	26	1				1			Developed
	14	Aung Gung	23	7	30	1				1			Developed
	15	Khagail Beel	15	8	23	1				1			Developed
	16	Podda Beel	17	6	23	1				1			Developed
	17	Urail Beel	20	8	28	1				1			Developed
	18	Choto Beel	21	3	24	1				1			Developed
	19	Razar Kali Khal	15	6	21	1				1			Developed
	20	Kodalial Beel	17	8	25	1				1			Developed
	21	Kamartuk Mozar 860 Duger Pukur	15	6	21	1				1			Developed
	22	Botua nauria	0	0	0	0	1			1			
	23	Putir Dayer Group Fisheries	20	8	28	1				1			Developed
	24	Buri Dakua Boro Beel	18	7	25	1				1			Developed
	25	Sonar beel	0	0	0		1			1			
	26	Vati Nagor Beel	22	8	30	1				1			Developed
	27	Boro Kata Beel	18	7	25	1				1			Developed
	28	Della Beel o Kara	22	8	30	1				1			Developed
	29	Kalaruar , Gochilara o Cheknikara	23	7	30	1				1			Developed
	30	Sunapoi Beel	22	9	31	1				1			Developed
	31	Dewla Beel	20	5	25	1				1			Developed
	32	Hazira Beel	20	8	28	1				1			Developed
	33	Matiya Dubi	21	5	26	1				1			Developed
	34	Chatol Beel O Khasiakhali Beel	21	9	30	1					1		Developed
	35	Pirannagor Beel	30	7	37	1					1		Developed
	36	Hawakhai Beel	30	10	40	1				1			Drop out
Sub-total			705	223	928	34	2	0	0	34	2	0	

Name Of Upazilla	Sl No	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	Fourth Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
South Sunamgonj	1	Terajani beel group	21	9	30	1				1			Developed
	2	Kanglar jai	23	10	33	1				1			Developed
	3	Chaptir khal	25	15	40	1				1			Developed
	4	Boromasu khai	20	8	28	1				1			Developed
	5	Nobo sresto Sreenathpurer Dola	20	6	26	1				1			Developed
	6	Chinamara Beel	20	5	25	1				1			Developed
	7	Terajani Balir Dubi	25	5	30	1				1			Developed
	8	Pachgachia Beel O Kara	12	7	19	1				1			Developed
	9	Kabilakhai Khal	27	10	37	1				1			Developed
	10	Gozaria Eralia beel	23	0	23	1				1			Developed
	11	Kochua Gung	19	9	28	1				1			Developed
	12	Nainda Nodhi-1	12	10	22	1				1			Developed
	13	Moinpur Beel Group	16	9	25	1				1			Developed
	14	Boro Beel Kaisma	30	10	40	1				1			Developed
	15	Noya Bonder Dubi	20	8	28	1				1			Developed
	16	Gozaria Dahor	30	20	50	1				1			Developed
	17	Dhamai Beel	22	8	30	1				1			Developed
	18	Kunar Beel	24	5	29	1				1			Developed
	19	Nainda Nodhi-2	15	6	21	1				1			Developed
	20	Nitai Gung	20	7	27	1				1			Developed
	21	Talukgaoer Dola	20	10	30	1				1			Developed
	22	Pachkapania Beel	23	7	30	1				1			Developed
	23	Boro Latia Beel	20	10	30	1				1			Developed
	24	Singir dayer	24	7	31	1				1			Developed
	25	Sadarpurer Khal	30	10	40	1				1			Developed
	26	Putirjuri Elongjuri	0	0	0	0	1			1			
	27	Rajghori Beel	20	8	28	1					1		Developed
	28	Durbola Beel	20	7	27	1					1		Developed
	29	Kochua Beel	22	9	31	1					1		Developed
	30	Koiya Khali Beel	45	15	60	1					1		Developed
	31	Hekani Beel O Kara	30	15	45	1				1			Drop out
	32	Zamlabaz Mouzar 2056 Dager Beel	25	15	40	1				1			Drop out
Sub-total			703	280	983	31	1	0	0	28	4	0	
Bishwamvopur	1	Harua doba	12	10	22	1				1			Developed
	2	Mohishpurar beel	19	6	25	1				1			Developed
	3	Tinbeela	31	1	32	1				1			Developed
	4	Chatol beel	19	7	26	1				1			Developed
	5	Shahpur khal	30	10	40	1				1			Developed
	6	Ghotghotia Nadi	15	5	20	1				1			Developed
	7	Moranodir kara	19	2	21	1				1			Developed
	8	Moni Kamarer Kuri	18	15	33	1				1			Developed
	9	Alma Doharer Beel	17	2	19	1				1			Developed
	10	Sonar Hour Group Fisharies	20	8	28	1				1			Developed
	11	Sudamkhali Nodhi	18	6	24	1				1			Developed
	12	Lalargaon Khal	10	2	12	1				1			Developed
	13	Tiar Beel Lomba Beel	17	13	30	1				1			Developed

Name Of Upazilla	Sl No	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	Fourth Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
		Gool Beel											
	14	Kuri Beel	27	0	27	1				1			Developed
	15	Ramessorer kuri thakur dara	15	8	23	1				1			Developed
	16	Pondua beel	17	8	25	1				1			Developed
	17	Gozaria Haor singir Dair beel	30	15	45	1					1		Developed
	18	Chitolia beel Group Fishery	18	8	26	1					1		Developed
	19	Lomba beel Group Fishery	26	4	30	1					1		Developed
	20	Chatol Beel group Fishery	22	6	28	1					1		Developed
	21	Layek Potir doba	35	15	50	1			1				Drop out
Sub-total			435	151	586	21	0	0	0	17	4	0	
Jamalgonj	1	Lomba beel chandroghona	0	27	27	1				1			Developed
	2	Apartogia nodi	25	5	30	1				1			Developed
	3	Jinaria beel	30	5	35	1				1			Developed
	4	Noya khal nainda beel	12	5	17	1				1			Developed
	5	Kaimkota beel	18	2	20	1				1			Developed
	6	Horinagar nodi	25	15	40	1				1			Developed
	7	Fequar dubi	15	12	27	1				1			Developed
	8	Telakupir beel	20	10	30	1				1			Developed
	9	Diga beel	21	2	23	1				1			Developed
	10	Sanggang kalagang	40	15	55	1				1			Developed
	11	Datta uja	18	8	26	1				1			Developed
	12	Sunduikka Group Beel	30	10	40	1				1			Developed
	13	Dulta Nadi	23	1	24	1				1			Developed
	14	Lomba Beel Gulbeel	19	13	32	1				1			Developed
	15	Jani Beel	19	5	24	1				1			Developed
	16	Chatol Beel Group	20	5	25	1				1			Developed
	17	Bashkar Khal	20	5	25	1				1			Developed
	18	Dewtan Beel	18	8	26	1				1			Developed
	19	Kuralia gung group	0	0	0			1				1	
	20	Barir lama beel	0	0	0			1				1	
	21	Kazu doba	0	0	0		1					1	
	22	Suronger beel	0	0	0		1					1	
	23	Chatni beel	0	0	0			1				1	
	24	Rangia beel	0	0	0			1				1	
	25	Satbila beel	35	5	40	1						1	Developed
Sub-total			408	158	566	19	2	4	0	18	0	7	
Tahirpur	1	Digha kosma beel	25	7	32	1				1			Developed
	2	Digha beel group	25	10	35	1				1			
	3	Ghugurjan beel	58	30	88	1				1			Developed
	4	Digha kurshi beel	20	9	29	1				1			Developed
	5	Kosma beel	24	9	33	1				1			Developed
	6	Gongania beel	20	5	25	1				1			Developed
	7	Letrajuri & Babnar dubi	32	8	40	1				1			Developed
	8	Upaddal beel	39	2	41	1				1			Developed

Name Of Upazilla	Sl No	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	Fourth Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
	9	Upodhola	15	5	20	0	1			1			
	10	Rangua nodi	0	0	0	0	1			1			
	11	Vitor bonder doba	30	0	30	1				1			
	12	Kalirdep Beel	25	5	30	1				1			Developed
	13	Choto Khal Boro khal	25	3	28	1				1			Developed
	14	Issabpurar Khal	30	12	42	1				1			Developed
	15	Kukur kandi beel	30	10	40	0	1			1			
	16	Vaymara prokasito kyger beel	0	0	0	0	1			1			
	17	Koyer poth beel	20	5	25	1				1			Developed
	18	Mudibari Beel	0	0	0	0	1			1			
	19	Borokholar Dubi	40	10	50	1				1			Drop out
Sub-total			458	130	588	14	5	0	0	19	0	0	
Derai	1	Boro Khoiya beel	14	6	20	1				1			Developed
	2	Goja beel	15	9	24	1				1			Developed
	3	Chotto Khoiya beel	18	4	22	1				1			Developed
	4	1400 Mahal	24	6	30	1				1			Developed
	5	Kazua khew	0	0	0	0	1			1			
	6	Zayforpurer dohor	20	5	25	0	1			1			
	7	Jotichar beel	17	8	25	1				1			Developed
	8	Medi beel	19	11	30	1				1			Developed
	9	Lomba Beel Gool Beel	17	3	20	1					1		Developed
	10	Prokshito Kosra Beel	17	4	21	1					1		Developed
	11	Bogadia Beel	20	10	30	1					1		Developed
	12	Bare Bolod Mara Beel	25	11	36	1					1		Developed
	13	Vatilaurnajani Beel	23	7	30	1					1		Developed
	14	Pukurine Beel	15	12	27	1					1		Developed
	15	Bolaura Beel	18	5	23	1					1		Developed
	16	Ghaikata Beel	21	5	26	1					1		Developed
	17	Shingra O Jogduba Beel	19	9	28	1					1		Developed
	18	Prokasito Kunijury Beel	11	9	20	1					1		
	19	Pata Harua Beel	25	2	27	1					1		Developed
	20	Lomba Dair Bocha Chatol	39	11	50	1					1		Developed
	21	Bada Mara Beel	30	15	45	1					1		Developed
	22	Atarai Beel	15	5	20	1					1		Developed
	23	Mangalpurur Dubi	20	7	27	1					1		Developed
	24	Golardubi Beel	17	8	25	1					1		Developed
	25	Kauria Beel	23	9	32	1					1		Developed
Sub-total			482	181	663	23	2	0	0	8	17	0	
Dornopasha	1	Gozaria beel	11	6	17	1				1			Developed
	2	Mirchakuri beel	16	5	21	1				1			Developed
	3	Hingra beel	18	5	23	1				1			Developed
	4	Talka beel	12	6	18	1				1			Developed
	5	Kaismar beel	15	15	30	1				1			Developed
	6	Jobra beel	16	4	20	1				1			Developed
	7	Hargura Beel, Khal O Kur	15	6	21	1					1		Developed

Name Of Upazilla	Sl No	Name of Beel	Member Status			Number of beel Accessed up to 1420	Under process 1421	Under process 1422	Name of phase				Remarks
			Male	Fem ale	Total				1st Phase	2nd Phase	3rd Phase	Fourth Phase	
1	2	3	4	5	6	7	9	10	11	12	13	14	15
	8	Joydhona Beel	18	9	27	1					1		Developed
	9	Keuty beel	15	5	20	1					1		Developed
	10	Moricha uri kuri	16	5	21	1					1		Developed
	11	Chatuina beel	16	8	24	1					1		Developed
Sub-total			168	74	242	11	0	0	0	6	5	0	
Sulla	1	Chorkai (Borojai) beel	17	0	17	1				1			Developed
	2	Gora vanga beel	25	10	35	1				1			Developed
	3	Kara beel	16	6	22	1				1			Developed
	4	Chabbir beel	27	5	32	1				1			Developed
	5	Cytola duba	22	7	29	1				1			Developed
	6	Chatol beel	19	8	27	1				1			Developed
	7	Juarla beel	20	4	24	1				1			Developed
	8	Mukterpurer choto gang	25	11	36	1				1			Developed
	9	Diga beel	0	0	0		1			1			
	10	Vitornala	22	3	25	1				1			Developed
	11	Dadur Nadi Prokashito Monuer Dair	18	7	25	1					1		Developed
	12	Boro Khal	22	8	30	1					1		Developed
	13	Chhoto Digha Boro Digha	20	10	30	1					1		Developed
	14	Kalni Nadir Mora Bak	22	8	30	1					1		Developed
	15	Patoler Dhora	30	4	34	1					1		Developed
Sub-total			305	91	396	14	1	0	0	10	5	0	
Chattak	1	Sonua	25	5	30	1					1		Developed
	2	Jal Kunda	15	3	18	1					1		Developed
	3	Ranga Uti	30	8	38	1					1		Developed
	4	Chapra	25	5	30	1					1		Developed
	5	Dak Band Buki Chatol	19	4	23	1					1		Developed
	6	Deawa Chapra	23	2	25	1					1		Developed
Sub-total			137	27	164	6	0	0	0	0	6	0	
Dowarabazar	1	Amertola beel	20	5	25	1				1			Developed
	2	Hindu razar pukur	23	2	25	1					1		Developed
	3	Tram Line Khando	20	10	30	1					1		Developed
	4	Azom pur Moza Pukur	21	5	26	1					1		Developed
	5	Shantir Dal Beel & Khal	15	8	23	1					1		Developed
	6	Tebli khal	20	5	25		1				1		
	7	Nurpur kur beel	41	0	41		1				1		
	8	Purbo duba Beel	20	6	26	1					1		Developed
	9	Bamon Pushi khew	20	5	25	1					1		
Sub-total			200	46	246	7	2	0	0	1	8	0	
Jangnathpur	1	Golakata o gozaria	0	0	0		1					1	
	2	Bagurjay beel	0	0	0		1					1	
Sub-total			0	0	0	0	2	0	0	0	0	2	
Total	201		4001	1361	5362	180	17	4	0	141	51	9	171