Government of the People's Republic of Bangladesh
Local Government Engineering Department

Project Completion Report
2003 – 2014

Sunamgonj Community Based Resource management Project
(IFAD Loan No. 567 – BD)

Table of Contents

Currency equivalents

Currency Unit	Taka (BDT)
US$1.0	Taka 79 (May 2014)
US$1.0	Taka 55 (at start-up of the project, 2003]

Weights and measures

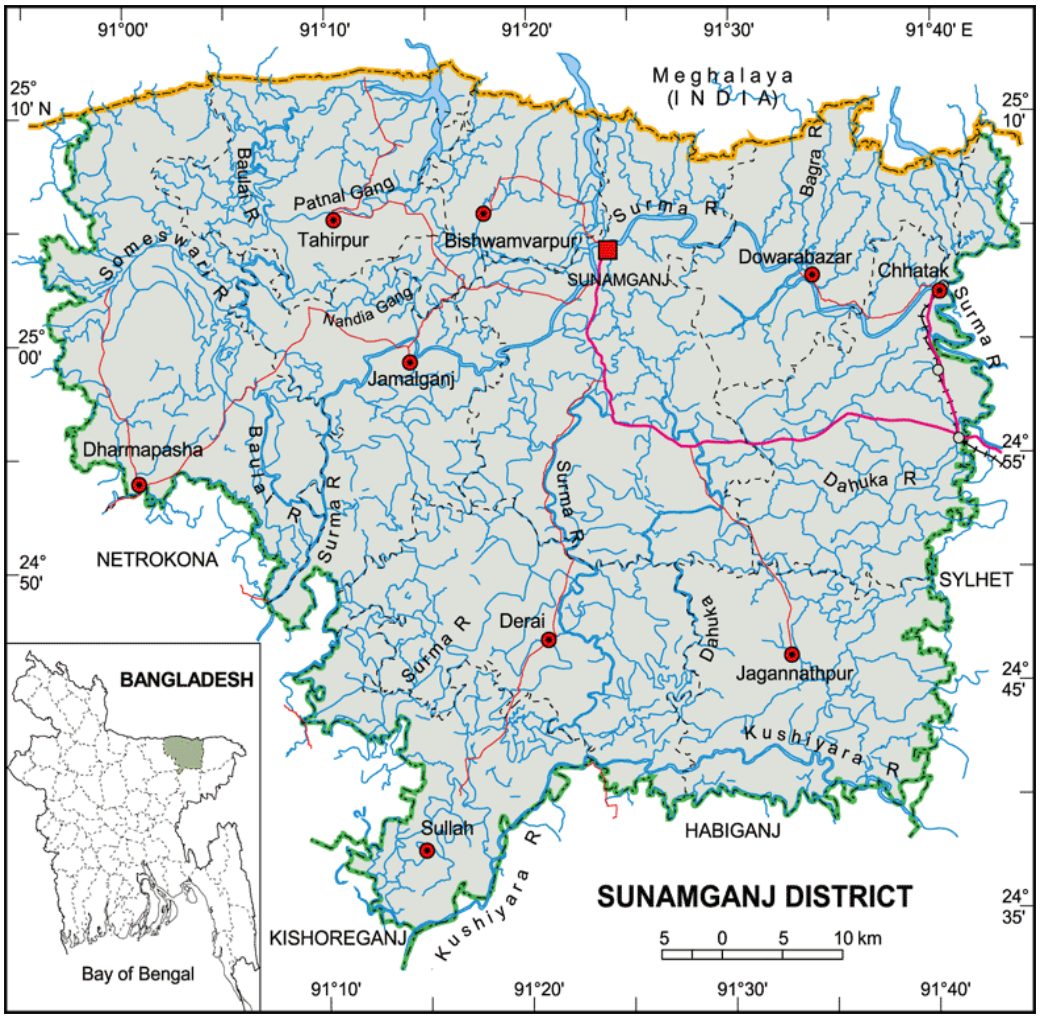
1 kilogram	1000 g
1 000 kg	2.204 lb.
1 kilometre (km)	0.62 mile
1 metre	1.09 yards
1 square metre	10.76 square feet
1 acre	0.405 hectare
1 hectare	2.47 acres

Abbreviations and Acronyms

Abbreviation and Glossary

AI	Artificial Insemination
BARI	Bangladesh Agricultural Research Institute
Beel	A saucer-like depression that generally retains water throughout the year. Other way can say - deeper part of Haor
BMC	Beel management Committee
BRRI	Bangladesh Rice Research Institute
BUG	Beel User Group
CBRMP	Community Based Resource Management Project
CDF	Community Development Facilitator
CO	Credit Organization
CTA	Chief Technical Advisor
Dakhin	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
IMC	Infrastructure Management Committee
IGA	Income Generating Activities
Kandha	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
MVC	Multi-purpose Village Centre
MTR	Mid-term Review
IMED	Implementation, Monitoring and Evaluation Department
Khal	Canal
UCC	Union Coordination Committee
UNO	UpazialNirbahi Officer

Map of the Project Area



Year-wise Project Intervention:

Sunamganj Sadar:	2003
Dakhin 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)

The Project at a Glance					
Country	Bangladesh				
Project Name	Sunamgonj Community Based Resource Management Project				
Key Dates					
IFAD Approval	**Signing**	**Effectiveness**	**Mid-Term Review**	**Original Completion**	**Actual Completion**
12 September 2001	14 November 2001	14 January 2003	April 2007	31-03-14	31-03-2014
Mid-term Review	**Interim Evaluation**	**Original Loan Closing**	**Actual Loan Closing**		
April 2007	July –August 2010	30-09-14	30-09-14		
IFAD Financing					
Loan	**SDR million**	17,550,000	**% disbursed**	98.10%	
Grant	**SDR million**	00	**% disbursed**	00	
Actual Costs and Financing (USD '000)					
Component	**IFAD**	**Co-financing**	**Beneficiaries**	**GOVT**	**Total**
Infrastructure development	14073.20	0	618.20	3,368.15	1,8059.55
Fisheries development	3,739.50	0	19.7	0	3,769.20
Agriculture & Livestock development	1,510.86	0	0	0	1,510.86
Micro credit	1709.96	0	0	0	1,709.96
Institutional development	6,489.19	0	0	308.72	6797.91

Number of Beneficiaries

Total	**Direct**	**Indirect**	**Women**	**Other**	**Other**
143,032	93,619	49,413	79,425		

Project Objective
Increasing the assets and income of 90000 - 135000 households by developing self-managing grass-roots organizations and facilitate group members' access to primary resources, credit, technologies and employments; and Supporting the development of available national institutions and replicate the project approach in other areas of Bangladesh.

Partners

Ministry of Land (MoL)

Bangladesh Krishi Bank (BKB)

Bangladesh Agriculture Research Institute (BARI)

Bangladesh Rice Research Institute (BRRI)

Bangladesh Livestock Research Institute(BLRI)

Department of Agricultural Extension (DAE)

Department of Livestock Services (DLS),

Department of Fisheries (DoF)

The WorldFish Center (an international organization)

Executive Summary

Poverty and Vulnerability: Sunamganj, the project area, was one of the most underdeveloped districts in Bangladesh. The district consists of 11 (eleven) Upazilas comprising some 2,782 villages with 350,000 households and a total population is slightly more than 2 million. Out of the total households, 51% have no land and are wage labourers, and 35% are marginal farmers owning less than 2.5 acre of land. Some 2,46,000 households are eligible to get benefit from the project and of which project will cover 90,000 households from nine Upazilas (MTR revised): SunamganjSadar, Dakhin (south) Sunamganj, Biswamvarpur, Jamalganj, Tahirpur, Derai, Dowarabazar, Sullah, and Dharmapasha. Project also covered two more Upazilas with limited intervention on infrastructure and fisheries .

Rural Sunamganj is virtually one large drainage basin (haor). Most of the people live here in very tight-knit clusters under overcrowded conditions in elevated villages, which become islands for about six months during the monsoon time. Rural Sunamganj is quite rich in natural resources such as plain land for rice cultivation and beel for capture fisheries but that are highly controlled by a powerful elite the majority people have little access to that. The cropping intensity is much lower than the national average and the land is used for single crop mainly for boro. The poor have to live on very uncertain and short duration seasonal activities for their livelihoods. The men usually commute particularly during wet season to nearer cities to find employments, while women remain without any means of income. Malnutrition and high unemployment among the majority people are very prominently visible in all upazilas of Sunamganj.

The low lying land of Sunamganj is highly prone to flood particularly to flash flood rushes down the Meghalaya hill tracts during April and hits the standing boro rice awaits harvesting. Siltation of rivers and khalsis also a major problem in Sunamganj. Siltation leads to raise riverbeds and increase the intensity of flooding and other effects that have high impact on decreasing of fish production. To retain fish habitat it is necessary to re-excavate the canal, river and beels on urgent basis. The significant decline in fish production over the last 20 years can also be attributed to the current leasing system and absence of proper conservation measures which have largely contributed to overfishing, deforestation of swamp forestry and restricted easy migration of fish during the spawning season.

The communication in Sunamganj has long been lying underdeveloped. Maximum area was isolated from the main land road network. During monsoon they use boat but in dry season having no proper road network they have to depend on the traditional means of transportations. The poor communication has further negative impact on overall developments in this area such as education, water and sanitation, technology extension along with other essential support services. With all those limitations the socio-economic progress in Sunamganj is very slow.

Basic project information: The Community Based Resource Management Project (CBRMP) was preparedunder flexible lending mechanism and has been implemented in three phases:phase 1 from January 2003 to December 2007, phase 2 from January 2008 to December 2010, and phase 3 from January 2011 to March 2014. The project was approved by IFAD's Executive Board on 12 September 2001 and the IFAD loan became effective on 14 January 2003. The project completion and closing date were set at 31 March 2014 and 30 September 2014, respectively. MTR of the project was carried out in 2007, the first phase review. The total cost was initially estimated at USD 34.29 million, but it was revised to USD 26.74 million at MTR and then it was further revised to USD 31.86 million by the second phase review in 2010, including an IFAD loan of USD 27.53 million, government counterpart financing of USD 3.68 million and beneficiaries' in kind or cash contribution of USD 0.64 million.

Project Goal: The project aiming at increasing the assets and income of 90,000 households (revised from 135,000 at MTR). The log frame provides formal goal statement as 'Sustainable improvement in the livelihood and general quality of life of 135,000 poor households living in *Haor* areas in Sunamganj'.

Objective: The above goal is to be achieved by developing self-managed grass-roots organizations to improve their access to primary resources, employment, self-employment and credit. The project aims to achieve the goal by supporting the development of an institutional base to replicate the project approach in other areas of Bangladesh. Formal objective statement in the logframe is to 'Develop grass-roots organisations to improve access for poor people to primary resources and economic opportunities'.

Components and activities: The goal and objective are to be realized through the financing of five project components:

- Component 1- Labour intensive infrastructure development: The main activities under this component were construction of community led village roads, multi-purpose village center (MVC) and village protection walls (VPW), building of submergible dam for promoting irrigation and buried irrigation network to utilize surface water for agriculture, and installation of tube-wells and sanitary latrines;
- Component 2– Community fisheries development: The main activities were to transfer beels to poor fisher community, form and develop beel users groups (BUGs); increase productivity of beels through differentimproved technology and management practices such as re-excavation, establishment of fish sanctuary, introducing conservation measures, and stocking fingerlings where feasible.
- Component 3- Agriculture and livestock development: This component was to promote new and improved crops, small scale horticulture, swamp forestry, poultry and livestock and provide animal health and vaccination services;
- Component 4- Microfinance: Under this component the project a) created credit organizations (COs) as institutional platform for initiating development activities , b) mobilized savings, c) engaged Bangladesh Krishi Bank (BKB) to provide loans to CO members, and d) facilitated credit within the CO members from own savings.
- Component 5- Institutional support: This component built the capacity of project management and the partners of the projectthrough various training, workshop, and exposures visits – at home and abroad.

Area coverage: The project includedthe total 11 Upazilas of Sunamganj district but activities varied from upazila to upazila considering the needs, scopes and priority of the community. The upazilas included into operation also took phase by phase and went through growing learning.

Target population: The project after a revision targeted to reduce poverty and improve wellbeing of 90,000 HHs. The project has reached so far to 143,032 HHs of which 93,619 HHs are direct beneficiaries. In general these households belong to landless, marginal and small farmer categories. Among the enrolled target population to the project maximum are women and they have played very active roles in development activities of the project.

Implementation arrangement: The overall responsibility for the project has been with the Local Government Engineering Department (LGED). The Project has been operated under the overall guidance of an Inter-Ministerial Project Steering Committee (IMSC) headed by the Secretary of Local Government Division, Ministry of Local Government Rural Development and Cooperatives. A PMU headed by Project Director has implemented the project having its office at Sunamganj. The project had partnership with different line departments such as DAE, DLS, DOF, research agencies such as BRRI and BARI, local administration and independent monitor such as the WorldFishCenter.

Strategies: The overall strategy of the project was to build the capacity of the targeted community and ensure their access to resources and technologies to combat the povertywith a relatively improved infrastructure. The project has been from its very beginning undertaken activitiesin participation of the community and progressed based on learning. The project was quite comprehensive in terms of its components to make the strategy effective. Building infrastructure and facilities such as community group, community infrastructure, village protection walls, installation of tube-wells for safe water, sanitary latrines it created the fundamental basis for initiating various social and economic activities such as beelaccess, introducing improved agricultural and livestock technologies, providing organised training, giving access to credit, ensuring better supervision of work through community participation. All of those have given a wider scope to the community to own the project and get involved in project activities to change their situation in the areas of increased production, income and poverty status.

Approach: The project focussed on construction of village roads as opposed to upazila and union roads that directly improved communication within the village and connected the communities with main roads. It also used LCS groups to construct block and RCC roads, village protection walls, re-excavation of beels and canals that benefited the poor who received wage and profit and enhanced their confidence and skills for similar future works. The use of labour-intensive approaches to building the infrastructure has strengthened local employment-creation potential. The LCS approach provided the participating households with essential cash and enables them to accumulate significant savings. The project formed COs and used them not only for microcredit operation but also distribution of tube-wells and sanitary latrines. The CO members also received training on microcredit management, agriculture and livestock management, received inputs for agricultural demonstrations. Effectively COs became vehicle for service delivery and at least during project period grass-roots institutions for interacting with the project and other government departments.

Access to beels (natural resources) also quickly increased income the poor beels users and enabled them to increase production through suitable technologies and management practices. Strengthening of BUGs is an important approach of building sustainable management and lobbying institutions in favour of the poor. Introduction on new crops and horticulture products and poultry and livestock helped to diversify sources of income and reduce dependence on boro rice and open water fisheries and created immediate additional income for the participating households. Access to finance from bank and COs has helped increased production and increased income. Savings is also seen as an important service for the poor.

Gender strategy: This project has won the first IFAD Gender Award for the Asia region. The PD was acknowledged by LGED as the best project director in 2011 for his persistent and innovative efforts in rural poverty alleviation, ensuring increased women's participation in development and their outstanding success to become self-reliant. The project took the gender issues quite critically since Sunamganj was very backward in this area. In all activities the involvement of women was highly encouraged and emphasised was given on that. A total of 77 253 LCS members were involved in construction and maintenance work and of which 52 532, (68%) were women. Up to June 2014, the project support reached about 42 962 farmers, of which women accounted for 74%. In the 2 995 COs formed by the project, 2 145 were for women with 86 737 membership and that accounted for 71% of the total. The number of women borrowed from CO savings was 14852 and from project credit line was 15 842 and that accounting for 72.4% and 66.1% of total membership, respectively. The project has trained a total of 34 795 farmers in agricultural and livestock production, of which the proportion of women trainees were 26,240 or 75%. A total of 1 429 advanced farmers have been intensively trained as livestock vaccinators, for which 60% are women. In beel fisheries women enrolment was made compulsory with specific works and equal benefit along with the men and where the target of 30% enrolment of women fisher in BUGs has been achieved.

Poverty focus: The project target was to reach 90,000 households and most of them were landless and marginal farmers with holding land less than 2.5 acres. The project has so far benefited about 143,032 rural households, of which 86,737 households were membership of COs. About 10% of those households were categorized as landless and about 89% were marginal farmers with less than 2.5 acres of land and 1% was of other categories.

Cost estimate and actual disbursements: The total approved cost of the project after undergone two revisions of DPP stood to USD 31.855 million, which has been shared by three financiers of the project – IFAD loan (USD 27.532 million), GoB (USD 3.684 million) and beneficiaries (USD 0.637 million) and that accounting for 86.43%, 11.56% and 2.01% respectively. Up to 30 June 2014 (WA 100) the overall disbursement was USD 31.505 million (98.10% of total). IFAD's actual disbursement up to June 2014 stood USD 27.533 million (100.% of approved loan), and counter disbursement of GoB'swas USD 3.677 million (99.79% of total commitment). The beneficiary contribution was 100%. The remaining fund from both IFAD and GOB are expected to be utilized within the project period. The project made significant foreign exchange gain over a period of 10 years with an escalation from USD equal to BDT 55 in 2003 toBDT 79 inJune2014. This gain utilized largely to construction of more roads and agricultural activities. The project has shown high level of management efficiency to consume that vast amount of gain within the project period.

Components and Outputs: All activities under Component 1 Infrastructure development have completed: a) Construction of village roads and structures to connect villages with mainstream road network (352.15 km); b) Construction of village protection walls (VPW) for protecting villages from wave action (6.3 km); c) Construction of multipurpose village centre (MVC) for using as seed storage, flood shelter, training, meeting, social gathering and other activities required for socio-economic development of the community (21); d) Employment of rural poor in infrastructural construction and maintenance for increased income (77,253 LCS members); e) Installation of water sealed ring latrine to promote hygienic environment for the community (78,406); f) Installation of tube-well for safe drinking water (2,595); g) Construction of submersible dams (3); and h) Construction of buried pipes for irrigation water distribution (8) locations to irrigate 407.6 hectares of land).

Under Component 2, fisheries development, the government handed over 293 water bodies to community management where 265 BUGs formed. The project has completed re-excavation earthworks in 242 beels, constructed 40 beel connecting roads of about 16 km, re-excavated 69 beel connecting canal/khal of about 70 km, established fish sanctuaries in 50 beels, set up boundary pillars in 118 beels, and planted 250,000 saplings of swamp tree in and around 115 beels. Over the project period the fishers made Taka 93.73 million profits from the beels.

Most the project activities under Component 3 Agricultural and livestock development either completed 100% or exceeded targets. The project organized 8 168 demonstrations of field rice, wheat and vegetables and poultry and livestock with impress results. A total 77 757 farmers have been trained in crops, vegetables, fisheries and livestock technologies in collaboration with BRRI, BARI, DAE and DLS. These efforts have led to adoption on new varieties, new technologies and diversification of sources of income for the poor families.

Under Component 4 – microfinance the project formed 2,995 Credit organizations (COs) with 86,737 members (61,543 women and 25,194 men) who saved Taka 122.3 million. The COs lent Taka 126.9 million from savings to 20,506 members and BKB lent Taka 227.1 million to 23,960 members. The project has successfully winded up the microfinance operations by repaying all loans to the bank and all savings/profits to CO members.

Impacts: The development of community infrastructure contributed to overall economic growth, especially on agriculture and informal sector. The project has certainly increased the annual income of BUG members. In the project period the members received Taka 7 core as profits that might have contributed to improved food security, nutrition status and household assets. The members, particularly women members of BUGs and COs have socially and economically been empoweredthrough their participation in various activities and getting the scope of accessing into resources and technologies including credit, beel, LCS, agricultural and livestock knowledge.

The increased mobility of people, women especially, following the infrastructural improvement have also brought a significant impact on socioeconomic wellbeing of the people in and beyond the project area.

The RIMS 2014 report which gives a comparative projection of three studies (baseline 2006, mid-term 2010 and final survey 2014) offers mixed picture of impacts: a) 96% of participating HHs have got access to safe drinking water; b) while sanitation situation significantly improved between 2006 to 2010 but dropped during following years probably HHs did not repair or replace sanitary latrines distributed by the project and therefore those were gone out of use; c) physical assets have increased mainly mobile phones and other consumer durables such as television, but land ownership status remained unchanged; d) although food security has improved food shortages remain exist: an average household was found to have had food shortages for 3 months in a year; and e) although the absolute value is high chronic malnutrition was 16% lower from baseline figure against the project target of 10%.

Innovation and up-scaling: The project has a few innovations and up-scaling. The two important innovations have been made by the project; construction of CC block roads by LCS members that has reduced the construction costs by 20% per km; and b) handing over of water bodies (beels) to community management, and beel management practices developed by BUGs/CBRMP. In up-scaling the project has remarkable success. The beel management is going to be up scaled by two projects, HILIP and HFMLIP and the CC block road is also by these projects. In terms of replication of project's practices the project is very successful to influence two new major projects designated for Haor area, of which one has gone into operation and another one has got approval for implementation.

Lessons learned:

- *Infrastructure*: Construction of concrete block road by LCS groups has been proven viable and sustainable and reduced cost per km by almost 20%. Construction of irrigation structures by LCS and buried pipe technology arefound very effective approach in terms of cost effectiveness, people's ownership, community based management and to improve irrigation and thereby the productivity of land.
- *Fisheries development*: Administrative support from the relevant Ministries (Ministry of Land, Ministry of Fisheries and Ministry of Establishment) and an accountable and responsible coordination at all levels including elected representatives are vitally necessary for ensuring users rights on water bodies by the poor users and fishers. However adequate policy support is yet in place or enforcement for giving longer term entitlement of this model of fisher institution.
- Poor fishers have proved that they are viable to meet all the regulations and criteria in order get access to beel resources and ensure better sustainable management if they go for that in an organised form.
- Biodiversity of fishes including other aquatic organism can be conserved and their production can be enhanced through re-excavation of water bodies, restoration of migratory routes, establishment of sanctuaries, plantation of swamp trees and application of fish act for prohibiting use of detrimental gears and harvesting of brood fishes and juveniles.
- Stocking of nutrient-rich small fishes in feasible beels(e.g. mola, *Amblypharyngodonmola*) and high value fishes (e.g. pabda, *Ompokpabda*) may improve the nutritional benefit to the households and increase income as well.
- *Agriculture and livestock development*: Bringing diversification in field crops, vegetables, poultry and livestock production has been crucial in enhancing household income. The process needs technology transfer, access to good quality inputs such as seed, and access to market. Improvement in infrastructure is a major contributing factor to improve the backward and forward links for agriculture and livestock development.
- *Microfinance*: This component provided important lessons. Formation of group creates the basis of group based approach that helps in reaching beneficiaries with project supports such as technologies dissemination, providing training on capacity development more organised and effectively. Microfinance is a specialized service that requires right type of organisation, policies and staff to implement. State owned banks such as Krishi Bank may not be appropriate institution for implementing supervised credit like microfinance.
- *Project design and management*: Flexibility and innovative attitude in project implementation had been the main factors in success of CBRMP. The management was very participatory in realizing the people's problems and seeking assistance from concerned partners to address those efficiently. The success of concrete block road, submersible dam, buried irrigation, community based fisheries management many agricultural and livestock initiatives and most challenging successful closing of microfinance operations attributed to that norms and practices.
- Implementing development programme through community organisation such as BUGs for beel management, farmers groups for irrigation structure management, village groups for maintenance of village walls proven effective and may be sustainable approach.

Recommendations:

Scope should be in place to transfer knowledge from CBRMP to its replicated projects for better management particularly for beel resources management and concrete block road building. Beels that have been handed over to HILIP are to be considered for its institutional sustainability with necessary policy support towards community management. For concrete block roads, a concrete policy should be in place for its effective and appropriate implementation with scope of maintenance. The learning of community management of CBRMP in programme implementation may critically be considered in government investment where sustainability issue is concerned.

A .Introduction

Project Description and Implementation Arrangement

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 was 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 time-period of phases has been revised by MTR to make the project implementation process further justified and for an effective ending. The total cost was initially estimated at USD 34.29 million, but it was revised to USD 26.74 million at MTR and then it was further revised to USD 31.86 million by the second phase review in 2010, including an IFAD loan of USD 27.53 million, government counterpart financing of USD 3.68 million and beneficiaries' in kind or cash contribution of USD 0.64 million.is the contribution from the beneficiaries in cash or kind or service.

Project Area and Target Group

Sunamganj, the project area, is one of the most underdeveloped districts in Bangladesh. The district consists of 11 (eleven) Upazilas comprising some 2,782 villages with 350,000 households and a total population is slightly more than 2 million. Out of the total households, 51% have no land and are wage labourers, and 35% are marginal farmers owning less than 2.5 acre of land. Some 2,46,000 households are eligible to get benefit from the project and of which project will cover 90,000 households from nine Upazilas (MTR revised): SunamganjSadar, Dakhin (south) Sunamganj, Biswamvarpur, Jamalganj, Tahirpur, Derai, Dowarabazar, Sullah, and Dharmapasha.

Rural Sunamganj is virtually one large drainage basin (haor). Most of the people live here in very tight-knit clusters under overcrowded conditions in elevated villages, which become islands for about six months during the monsoon time. Rural Sunamganj is quite rich in natural resources such as plain land for rice cultivation and beel for capture fisheries but that are highly controlled by a powerful elite the majority people have little access to that. The cropping intensity is much lower than the national average and the land is used for single crop mainly for boro. The poor have to live on very uncertain and short duration seasonal activities for their livelihoods. The men usually commute particularly during wet season to nearer cities to find employments, while women remain without any means of income. Malnutrition and high unemployment among the majority people are very prominently visible in all upazilas of Sunamganj.

The low lying land of Sunamganj is highly prone to flood particularly to flash flood rushes down the Meghalaya hill tracts during April and hits the standing boro rice awaits harvesting. Siltation of rivers and khalsis also a major problem in Sunamganj. Siltation leads to raise riverbeds and increase the intensity of flooding and other effects that have high impact on decreasing of fish production. To retain fish habitat it is necessary to re-excavate the canal, river and beels on urgent basis. The significant decline in fish production over the last 20 years can also be attributed to the current leasing system and absence of proper conservation measures which have largely contributed to overfishing, deforestation of swamp forestry and restricted easy migration of fish during the spawning season.

The communication in Sunamganj has long been lying underdeveloped. Maximum area is isolated from the main land road network. During monsoon they use boat but in dry season having no proper road network they have to depend on the traditional means of transportations. The poor communication has further negative impact on overall developments in this area such as education, water and sanitation, technology extension along with other essential support services. With all those limitations the socio-economic progress in Sunamganj is very slow.

Objectives and Scope

The main objectives of the project are to: (i) increase the assets and income of 90,000 households by developing self-managed 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:

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

As community mobilization and institution building is a long process, the project was chosen to be financed under Flexible Lending Mechanism (FLM) to allow the project a sufficient time in pursuing longer-term development objectives. The project will be implemented over 12 years in three phases with a predetermined exit strategy.

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

Components

Labour-Intensive Infrastructure Development:

The objective of this component is to build basic infrastructures and provide employment to the poorest population group particularly during the slack period. Under this component four activities are being implemented: village roads, village protection wall, village multipurpose centers, installing tube-wells, and setting latrines. Except large packages for roads and village multipurpose centers those are being implemented by LGED's enlisted contractors through open tender all other works are being implemented by Labour Contracting Society (LCS) formed by the community. The works are demand-driven. From planning to supervision and in maintenance community participation is highly ensured.

Fisheries Development:

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.

Crop and Livestock Production:

The objective of this component is to promote livestock and crop production and thereby increase income and scope of food security for the community. In context of limited opportunities of agriculture due to many externalities including excessive flooding, heavy soil type, flash flood and so on the project started with a bit cautiously. In the first few years, the project became familiar with the farmers' problems and priorities through participatory rural appraisals (PRAs). PRAs were conducted by Upazilatechnical teams under assistance of external experts. Once the problems were identified and needs prioritized, solutions were tried to give based on the results of research trials and that were further been taken into extension by demonstration field-days, training and other supports. This component is being implemented with collaboration of BARI, BRRI, DAE and DLS for initiating research, material development and providing training to staff and farmers.

Microfinance:

The objective of this component is to deliver credit services to Community Organization (CO) members. Two categories of credits are being delivered to the CO members. One, against their savings and the other from the project credit line channeled through BKB against 10% security deposit. CO Manager and president are being trained by the project to maintain the books and accounts and regular internal audit is being conducted to ensure accountability and transparency of the overall management. Primarily the CO members starts to take loan against their savings and upon demonstration the ability of better managing the credit operations, maintaining recovery of the savings loan and keeping proper records the project loan is given. The loan is granted for all purposes with priorities on increasing primary production, access to resources and investing to practice of new technologies for increased income and food security. Trainings on different IGAs are given to CO members by concerned Subject Matter Specialists and other training staff with the support of Department of Agricultural Extension (DAE), Department of Livestock Services (DLS) and Department of Fisheries (DOF).The component being reviewed after phase one has ceased the scope of project credit line following the poor performance of BKB and introduced the provision of CO graduation with a view that the CO will continue their activities afresh clearing all liabilities, closing all transactions, opening new books of records and without any support from project's end.

Institutional Support:

Institutional supports have been conceived on three important considerations: (i) limitations of staff in line departments in Sunamganj; (ii) severe limitations in communication and transportation, which add cost in delivering services to beneficiaries; and (iii) the need for appropriate technologies with proper modes of dissemination.

In the first phase, a Project Management Unit (PMU) has been set-up in Sunamganj, and project has established field offices at each working Upazila and a liaison unit in Dhaka. All project offices have been deployed with sufficient number of staffs to implement all activities.

At grassroots, COs have been being formed with a total target of 3000 (MTR revised) that will be completed by the end of second phase of the project. COs are formed man and woman separately with provisions of savings and regular group meeting. Each CO comprises maximum 30 members led by two office bearers, president, manager and one alternative leader, assistant manager, under a set of duties and responsibilities stipulated in the bye-laws with an aim to make the CO self-reliant in the course of time.

Table 1: Detail Estimation of project beneficiaries

Component	Beneficiary typesand unit	Direct beneficiaries		Indirect beneficiaries (HHs)		Remarks
Component 1: Infrastructure		HHs				
Community roads	Number of HH within the road command areas or users			139,342		All Hhs in the villages where roads are built. Beneficiaries of roads are indirect beneficiaries but 86,737 COs members are direct beneficiaries.
Village protection walls	Number of HH within the villages protected by the walls	3,600				
Irrigation dams	Number of HHs benefited by irrigation and land area irrigated	1420	450 ha land area			
Buried piped irrigation	Number of HHs and land area	1,862	407.59 ha land area			
Tube-wells distributed	HHs take water from the wells	77,850				
Sanitary latrines distributed	Number of HHs	78,406				
Multipurpose village center users	Number of HHs				13,500	Hhs in 29 villages where MVCs built
		Direct beneficiaries				
		Men	**Women**	**total**		
LCS members		24,721	52,532	77,253		Some of the members may not belong to COs and BUGs
Component 2: Fisheries Dev		**Men**	**Women**	**total**		
BUG members	Number of BUG members	6,817	2,244	9,061		
BUG members Trained	Number of BUG members	6,709	2,160	8,869		
Component 3: Agriculture and Livestock		**Men**	**Women**	**total**		
Total number of rice, wheat, vegetables etc demonstrations	Number of persons	1,495	2,063	3,558		
Total number of livestock demonstrations	Number of persons	1,328	2,076	3,404		
Total number of food processing demonstrations	Number of persons	457	749	1,206		
Number of people trained in crop technology	Number of persons	10,880	31,427	42,307		
Number of persons trained on horticulture	Number of persons	9	646	655		
Number of persons trained on poultry and livestock	Number of persons	8,555	26,240	34,795		
Number of activists/ vaccinators/advance farmer trained	Number of persons	572	857	1,429		
Component 4: Microfinance		**Men**	**Women**	**total**		
CO members	Number of persons	25,194	61,543	86,737		

B. Project description and Implementation Arrangement

The project was governed by three committees one at secretariat level called Project Steering Committee headed by the Secretary of Local Government Division; second one was at district level called the District Coordination Committee headed by the Deputy Commissioner and another one was at each Upazila level called Upazila Coordination Committee headed by Upazila Nirbahi Officer (UNO). All committees comprised members from concern ministries, divisions, departments and development agencies.

Apart from that, for implementing day to day activities and administrative works, there was a Project Management Unit (PMU) headed by Project Director.

Besides, there were some inter-ministerial, District and Upazila Committees to monitor and supervise the activities of transferring water-bodies from Ministry of Land.

C. Project Strategy and Approach

Strategy:

The project has been undertaking activities from the very beginning that addressed the main sources of vulnerability, as well as responding to opportunities to enhance income and assets of the beneficiaries, especially the very poor and marginalized households. It followed two prong strategies: reduce vulnerability; and grab business and income generating opportunities. For example, in one hand, the community infrastructure, village protection walls, installation of tube-wells for safe water, sanitary latrines to ensure basic sanitation, introduction animal health service and vaccination to reduce animal mortality etc are designed to reduce social and financial cost and strengthen human, social and physical capacities. On the other hand, microcredit, crop and livestock development, submersible dam and buried irrigation system, access to beel by the poor fishers and associated training and capacity building activities etc directly increase income of the beneficiaries. Some activities have complementary benefits. For example, road construction provides access to markets and other facilities as well as increases farm prices, reduces transportation cost and encourages more investments, microcredit finances agricultural investment etc. All four components neatly support each other to achieve the main goal of the project: poverty reduction. The strategy inherently promotes sustainable development that benefits the poor most. The project strategy promotes resilience by including vulnerability-reducing measures as well as by enhancing adaptive capacity to participate in the economic opportunities in the locality and beyond.

Approach

Project in its implementation process practiced a community centred participatory approach. The project focussed on construction of village roads as opposed to upazila and union roads that directly improved communication within the village and connected the communities with main roads. It also used LCS groups to construct block and RCC roads, village protection walls, re-excavation of beels and canals that benefited the poor who received wage and profit and enhanced their confidence and skills for similar future works. The use of labour-intensive approaches to building the infrastructure has strengthened local employment-creation potential. The LCS approach provided the participating households with essential cash and enables them to accumulate significant savings. LCS groups, which comprise of the poor and destitute women and men, were recruited and trained by the project. The project developed and institutionalized the LCS approach in terms of forming LCS groups, training members in construction works and social issues with management and assistance from LGED, and profit sharing.

The project formed COs and used them not only for microcredit operation but also for distribution of tube-wells and sanitary latrines. The CO members received training on microcredit management, agriculture and livestock management, and inputs for agricultural demonstrations. Effectively COs became vehicle for service delivery and at least during project period grass-roots institutions for

interacting with the project and other government departments. Some members of COs acted as members of IMCs that helped improve quality of works of contractors and LCS groups.

Access to beels (natural resources) also quickly increased income for the poor beels users and enabled them to increase production through suitable technologies and management practices. Strengthening of BUGs is an important approach of building sustainable management and lobbying institutions in favour of the poor.

Introduction on new crops and horticulture products and poultry and livestock helped to diversify sources of income and reduce dependence on boro rice and open water fisheries and created immediate additional income for the participating households. This approach was complemented by creating access to irrigation and finance (see below). The agricultural and livestock component established linkage with DAE, DLS, DOF and research agencies such as BARI and BRRI.

Access to finance from bank and COs has helped increased production and increased income. Savings is also seen as an important service for the poor.

Targeting strategy: The geographical targeting at design stage focussed rightly on rural areas in Sunamganj district, one of the poorest regions in the country.Most of the people live in very cramped housing and under overcrowded conditions in elevated villages, which become islands for about six months each year. The women, the children and the aged people suffer most due to the limited access to safe drinking and cooking water, sanitation and health facilities, crammed housing and difficulty in mobility within and outside villages. The project used landholding (less than 2.5 acres) and gender as criteria for forming COs, BUGs and LCSs. The very poor and female-headed households are given priority in LCS activities. Implementation of project activities through the COs, BUGs and LCSs have well targeted the poor households. The project targeting approach is effective and has come out with good results.

Gender strategy: This project has won the first IFAD Gender Award for the Asia region. The PD was acknowledged by LGED as the best project director in 2011 for his persistent efforts in rural poverty alleviation, ensuring increased women's active participation in development and their improved *livelihoods*. Women have great involvement in all components of the project in order to empower them through skill development, income generation, leadership and active participation in decision making at household and community level. Through involvement with construction related works and excavation of the beels and khals, poor women have been enabled to earn money and in some cases had a share of the profit made in the contract. Many women have emerged as entrepreneurs, such as nursery runners, poultry raisers, mini-hatchery owner, and livestock vaccinators.

Table 1 provides break down of men and women participants to June2014. The number of the trainedInfrastructure Management Committee(IMC) members was 3 966 with 2 023 women, that is, 51% of all IMC members. A total of 77 253 LCS members were involved in construction and maintenance of which 52 532, (68%) were women. Up to April 2014, the project implementation had reached about 42 962 farmers, of which women accounted for 74%. In the 2 995 COs formed under the project, 2 145 were for women and their membership accounted for 71% of the total, 61 543 vs. 86 737 memberships. The number of woman borrowers from CO savings was 14,852 and from project credit line was15,842, accounting for 72.4% and 66.1% of total membership, respectively. The project has trained a total of 34 795 farmers in agricultural and livestock production, of which the proportion of women trainees were 26,240 or 75%. A total of 1 429 advanced farmers have been intensively trained as livestock vaccinators, for which 60% are women. The project-formed 265 BUGs included 9 061 members, with 25% women holding the membership. All 20 cage culture systems have been mostly executed by women. In addition, due to direct inclusion of women in project activities, the project has also carried out gender sensitization through gender courses for project staff and CO members, observance of International Women's Day and distribution of gender sensitization materials.

Poverty focus: The project target was to reach 90,000 households; most of them are landless and marginal farmers (with less than 2.5 acres). So far the project has benefited about 143,032 rural households, of which 86,737 households had the membership with COs. About 10% of those households are categorized as landless and about 89% are marginal farmers with less than 2.5 acres of land and 1% in the other categories. Many of these households have improved their livelihoods through increased production and income after participating in the project activities**.** All COs members have the opportunity to run their household business and income generating activities by receiving credit as well as technical support from the project. Full-time fishers, who are usually landless, have acquired secure access to beelsfor fish production through forming of BUGs. The very poor are given priority to participate in the LCS for construction activities. Farmersbenefited from the introduction of improved technologies for soil fertility, pest control, new crop varieties, seed treatment, animal feeding, improved animal breeds and livestock vaccination. Due to the project-built village roads new income generating activities have generated such as drivers/businessmen of motorised/non-motorized vehicles. All these opportunities have helped the poor people to reduce their food insecurity through developing alternative income generating activities for throughout the year.

D.Assessment of SCBRMP relevance

The project has been in full alignment with IFAD's strategic framework and policies, and the government policies for rural development, poverty reduction and inclusive development. The project was designed under the IFAD COSOP 1999-2005 and implemented during same and the following COSOP 2006- 2012. Both COSOPs identified IFAD's strategic niche in Bangladesh as development of the more marginal areas such as haors and chars. The project was further in line with IFAD's Strategic Framework for Poverty Reduction and the Regional Poverty Strategy for Asia, which calls for a focus on the less favoured areas and the development of rural infrastructure, providing improved access to opportunities for the rural poor through development of agricultural productivity and income generation. Targeting of the poor and rural smallholders, support to farmers and their organizations, socio-economic capitalization for the target groups, gender sensitivity are the highlights of the alignment with the IFAD policies and current strategic framework.

During the project design and implementation period, Bangladesh's political governance had changed hands multiple times. Although the rhetoric and documentation had changed with change of governments the main development challenges, preferred solutions and mode of implementations and implementing agencies remained the same. Two documents are most relevant during the project period: The National Strategy for Accelerated Poverty Reduction (the Poverty Reduction Strategy Paper – PRSP) and Sixth Five Year Plan both outlined similar strategies for eradication of poverty and rural and agricultural development, provided priority for women's development, more equitable development of the country with emphasis on vulnerable areas such as haor, low lying river areas, coastal areas, and emphasised measures against adverse effects of climate and environmental changes and so forth.

The main tools for rural poverty reductions recommended by the government are agricultural development and diversification, improving rural infrastructure, access to finance, development of rural enterprises, development of women, provision for education and primary health care, almost of them have been in the core activities of SCBRMP.

Overall project relevance: SCBRMP is highly relevant for Sunamganj and its beneficiaries. The project was probably the most significant intervention beginning 2003 that systematically addressed vulnerability and acute poverty of one of the poorest districts of the country. Its multi-dimensional interventions – although LGED being an organization specialized in infrastructure, directly solved poor community infrastructure problems by building 352.152 km of roads, provided access to safe water to 77,850 HHs, and basic sanitary latrines to 78,406 HHs, and introduced where ever practicable. Besides, other components such as agricultural development, fisheries development and microfinance together

helped increase income in areas where the poor people were involved as well as many of them were assisted to diversify income.

Infrastructure: The infrastructure development component is highly relevant and played a pivotal role in achieving project objectives from the beginning of project implementation since January 2003. Lack of road connectivity has been on of the most critical challenges for the isolated villages (hati) in the middle of haors, which has been addressed by constructing 352.152 km of village roads. Rural infrastructures contributed towards achieving project objectives directly as intended by contribution through the individual items, combined effects of all items included under this component as a whole and by facilitating contribution of other components.

Fisheries development: The fisheries development component in the SCBRMP through ensuring access rights of the government owned natural water resources to the fishers' families and the poor households living in the vicinity of the water bodies who are dependent on aquatic resources for their livelihood was high relevant in the context of national poverty reduction strategy as well as IFAD's focus on the less favoured areas providing opportunities to the poor for contribution to the agricultural production.

The fishers, mostly lack agricultural land and own only homestead in cramped island-like places (called hati) live in extreme poverty with open water fishing as the only income for almost six months of the year. Access to 293 beels (water bodies) that provided a lifeline to about 9,000 households with 54,000 family members (@ 6 per family) is one of the most relevant initiatives that brought hope to these households for involving them in productive activities that ensured employment and income, increased production of fish and other food crops and helped in their food and nutrition security. Through formation of Beel Users Groups (BUGs), both men and women members of the households have involved them in re-excavation of beels, canals, setting up of sanctuaries, developing swamp tree nurseries, and increased their income from selling fish and profit distribution. The project has been very relevant in empowering the women in the haor areas, who was still holding the old ideas of conservativeness, and they have now proved themselves income earners of the family and thus they have raised their status in the society and now they are able to send their children to schools.

During meetings with several BUGs, the members openly described their past conditions and changes taken place over a decade of SCBRMP implementation. The fishers strongly felt that the CBRMP has been very relevant in changing their livelihood through increased income, increased production of fish and food and having water and sanitation facilities.

Relevance of agricultural and livestock development: The agricultural and livestock development is highly relevant component as almost 100% of the Sunamganj population depends mostly directly or indirectly dependent on agriculture, mainly rice and water fisheries. About 15% of national rice production comes from haor districts. The dependence on agriculture and livestock is more acute for the poor families who work as wage labour, and small and marginal producers of rice and other field crops, horticulture products, poultry and livestock producers, and catch fish during the wet season and engage in other incidental activities such post-harvest processing, irrigation, seed production and trading. During the design of the project in 1999 the dependence on agriculture of Sunamganj population was even more acute, probably the single economic activity the whole population and the poor depended on for livelihoods and survival. Two obvious and the most relevant broad activities the project had undertaken were: a) improve productivity of existing crops and other income generating activities through training, technical assistance, provision of irrigation and improved extension services through the government line departments; and b) diversification of agriculture by introducing new varieties of rice, new field crops such as potatoes, introduce high value vegetables, and more importantly introduced poultry (broiler, layer and Sonali variety of poultry birds) which was non-existent in Sunamganj in 2001. Besides, expansion of sheep production and duck farms, vaccination

camps and development of paravets/vaccinators are highly relevant activities. The effects of these interventions are a number of Upazilas such as Biswambarpur and Sadarupazilas are important sources of vegetables and poultry and livestock for the whole district. A part of production even serves bigger market such as Sylhet.

Relevance of microcredit operations: Access to credit is critical for agriculture and other income generating activities during the design as well as now. At the time of design in 1999 Sunamganj was least served district by the microfinance institutions due to inaccessibility of villages and risks of flash floods and main demand for loan in one season only. The intervention by the project to develop credit organizations and mobilize savings was an obvious choice and relevant to support agriculture and livestock activity. The loan demand was complemented by linking the COs with a state owned bank, Bangladesh Krishi Bank (BKB), probably because there was no other choice. However, over the years the microfinance sector expanded in Sunamganj manifolds where CO members have been found to join in large numbers. Besides, BKB was found not so efficient to serve the poor but the project continued to form COs and mobilize savings as per decision of MTR mission to keep the groups intact and provide other support of the project – distribution of tube-wells and latrines, formation of LCS, continue demonstration of new crops and provide training to members. So the COs remained not so much as supplier of credit but an effective platform for implementation of almost all activities the project.

E. Project Cost And Financing

Cost estimate and actual disbursements. The total approved cost of the project after two revisions stood to USD 31.855 million, which has been shared by three financiers of the project – IFAD loan (USD 27.532 million), GoB (USD 3.684 million) and beneficiaries (USD 0.637 million). That makes contributions of three financiers 86.43%, 11.56% and 2.01% respectively by IFD loan, GOB and beneficiaries. Up to 30 June 2014 (WA 100) the overall disbursement was USD 31.848 million (99.98% of total). IFAD's actual disbursement up to Junel 2014 stood USD 27.533 million (99.98% of approved loan), and corresponding GoB's disbursement was USD 3.677 million (99.976% of total commitment). The beneficiary contribution was 100%.. The project made significant foreign exchange gain over a period of 10 years when USD to Taka exchange rate in 2003 was one USD equal to Taka 55 which reached to Taka 79 in June 2014. This gain contributed to construction of more roads and undertaking of various infrastructural developments.
Component-wise financing. The project was undergone two times of revision and finally budgeted to invest USD 17.34 million (54.42%), USD 3.886 million (12.20%), USD 1.57 million (4.93%), USD 1.834 million (5.76%) and USD 7.229 million (22.69%) in infrastructure development, fisheries development, agriculture and livestock development, microfinance and management (institutional support) respectively. It is clear from Table-2 that the main investment has been made in infrastructure and ofthat community roads got the highest allocation of USD 11.685835 million. The actual expenditure has been similar to the planned allocation as almost all resources are to be spent by the end of the project.

Table 2: Cost allocation and actual disbursement [in USD million, June 2014]

Component	Approved	Actual	Approved %	Actual %
Infrastructure Development	18059.55	18059.55	56.70	56.70
Fisheries Development	3769.20	3769.20	11.83	11.83
Agriculture & Livestock Dev	1510.86	1510.86	4.74	4.74
Micro credit	1709.96	1709.96	5.37	5.37
Institutional Development	6805.85	6797.91	21.36	21.34
Total	31855.42	31847.48	100	100

The project budget was revised for two times, one on 6 November 2007 (after MTR) and secondly on 20 October 2010. The major changes have been in allocation of infrastructure and microcredit components. Of the SDR 17.55 million of total project cost, infrastructure has been raised to SDR 9.3 million from during second revision compared to SDR 5.5 million allocated during the first revision. It happened due to massive demand for improvement of road connectivity in project areas. However, allocation to microcredit has been reduced considerably from SDR 2.135 million in first revision allocation to SDR 0.93 million in second revision. This has been due to lack of attitude and skill of BKB in self-help group model. The level of allocation of other components remained more or less similar between the two revisions. The relatively high management cost has been due to mobilizing a good number of diverse technical skills staff, intensive supervision and longer period of project duration.

Counter-part funding:The counterpart disbursement is fully satisfactory. GOB disbursed almost 99.97% of its total committed funds as of April 2014 and the process is in place to realize full funding according to PP.

Financial management and Compliances: The overall financial management and maintaining covenants of loan arerated very high in the project. The project supervision missions undertaken by IFAD in 2013 found both the financial management and compliance to loan covenants very satisfactory.

Procurement: For all categories of procurement, project followed the PPR 2010and in addition consulted with IFAD where required. The project supervision missions undertaken by IFAD in 2013 found the procurement satisfactory.

F. Assessment of Efficiency

Management efficiency: The project management all through its project implementation has performed very efficiently. The project was very complex considering its diverse components and activities, process of implementation and patchy difficult geographic setting. Communication is not easy and seasonality is very adverse, almost 7 months a year no construction work can be undertaken due to inundation. For its diverse activities the project had to mobilize a good number of specialized partner institutions and where coordination was a challenge. But project management could successfully coordinate in mobilizing the partners and realizing necessary deliverables from them.

P**roject efficiency:** The project has achieved all its physical targets, in some cases exceeded the targets, without any extension, disbursing almost 100% of their share of funds within the project period. The significant achievement of project was its success in utilizing the exchange gain of an amount of USD 3.50m within the project period.

Project, in many cases, such as construction of block roads, design and construction of dam and buried-pipe irrigation system, revolving of agricultural demonstration funds within the group members, closing the microfinance activities without any upset, has shown its efficiency in a very dynamic and innovative manner.

Overall unit cost: The project has directly reached 93,619 households (see Table 1 on break down of beneficiaries according to component) with USD 31.509 million, that is, unit cost is USD 337.65 per household. The long term impacts of the project, especially those of roads, dam, irrigation, water and sanitation, village protection wall which were absent in that area justifies not only these investments but also dictate for future investments to create scope of alternative livelihoods to alleviate poverty of thousands.

Infrastructure: The project used its resources very efficiently in implementing the activities. It maintained good control over expenditure and schedule of activities. All works and technical assistances were completed before the closing date of June 30, 2014. The outputs of infrastructures scheduled in RDPP have fully been achieved. The overall percentage of achievement of infrastructure component is 100%. Resource mobilization was adequate and managed timely, and thus all civil works were completed within schedule time. The efficiency in executing the project component is satisfactory and outputs were fully achieved. A study conducted by the project shows that, modes of transport have changed to human-haulers/small four wheel transport, 3-wheelers and motor bike; transport tcost has reduced from Taka 0.8 per kg to Taka 0.45 per kg; and mobility of people have made easy quicker and irrespective of time and that have social and economic benefit for the community.

The economic benefit of improved village roads and other infrastructures such as tube-wells and hygienic latrines has been appreciated by the project beneficiaries.

The selection of block road has reduced the cost by 20% compared to RCC road. Unit cost of one acre of irrigation by submersible dam and buried-pipe is Taka 1.961 and Taka 1.929million respectively. The project was quite efficient in providing sanitary latrines. It provided construction cost only, and the beneficiaries bore transportation, installation and fencing. All these costs are justified considering long-term social, economic, health and nutritional benefits of the beneficiaries.

Fisheries development: The fisheries component of the project achieved its all physical targets. The entire sales of fish up to harvest year 2014 (production 1,623 metric tons) was BDT 168.3 million against a total investments of BDT 74.57 million (Taka 36.14 million as lease money to the Government and BDT 38.43 million as expenses for beel management), that is, BUG members made a profit of BDT 93.73 million of which BDT 70 million has been distributed among members. The main expense in beel management, Taka 38.43 million, was labour cost that also went to the BUG members. The Beel fish productivity has increased significantly. The project surveyed the cost effectiveness in 30 representative beels and that indicated productivity of beels depends on management and some practices such as introducing sanctuaries, protection of juvenile fish during early monsoon time, restriction of gears and so on. The BUGs may maximize their profit further by reducing the cost of management including the process of harvesting.

Following the suggestions of review mission (2012), nutrient rich small fish *mola* was introduced in 15 beels on experimental basis and WorldFish data showed a six time increase in mola production during first year of stocking. Despite the fact that *mola* transportation is a critical task, the BUGs have shown remarkable efficiency in handling that.

Cage fish culture using relatively low cost bamboo structure introduced in flood water nearer of the BUGs homestead raising Tilapia. The productive performance has found cost effective and efficient management may enhance production and income further for women BUG members.

An accountable and transparent management of BUGs has contributed to increase the efficiency of governance, regular election of BMC; internal audit, detailed record of expenses, catch, price, and open distribution of profit made each BUG an institution. Besides, a systematic cooperation between PMU and the partners including MOL, local administration, DoF and WorldFish over a longer project period has produced aneffective co-management system for community based beel resource management.

Agriculture and livestock development: Agriculture and livestock development component carried out 3 558 demonstrations of field and other crops, and horticulture. Each demonstration of field crop yielded

higher than normal yield of local varieties. The main success came from field trials of Aman varieties where the project with assistance from BRRI carried participatory adoptive research of BRRI 33, 44, 46 and 51 varieties, the farmer later widely accepted them. The unit cost of poultry and livestock demonstration was around BDT 8 000. The unit cost of training on crops/horticulture has been low: BDT 14,100 (3 days) per batch of 24 persons to Taka 300,000 (12 days) training of 24 persons. Cost per batch on training in livestock has also relatively been low. The reduced cost has been due to use of project staff and trainers from GOB's line departments who charge much lower rate than private trainers. The project promoted sand-based low-cost incubation with assistance from local expert and the technology has successfully adapted by framers, particularly women.

Project was very successful in building relationship with line departments such as DLS and that made significant contribution by providing vaccines and producing vaccinators. The COs organized vaccination camps that dramatically reduced cost inan essential service delivery to farmers.

CO formation and microfinance: The project tried self-help approach of microfinance where poor men and women were organized into Credit Organizations (CO) who saved an amount of money every month to be used as a source of credit fund. Additional loan came from the BKB from line of credit provided by the project. The project completed nearly 100% of COs (2,995 out of project target of 3,000) with 86,737 members (96.4% of project target of 90,000). Of the total members 20,506 received loan from savings funds (average Taka 6,187 per loan) and 23,960 from BKB (average Taka 9,492 per loan). On an average each members saved BDT 1,410 over the project period. The income from loan from savings funds has been distributed as profit to the CO and small amount as honorarium to President and Secretary of CO for their services. Similarly, 5% of BKB interest has been divided as profit to the group and expenses for the President/Secretary. In that sense, all COs earned some income above their expenses. Other expenses such books of accounts, training, supervision costs etc have been provided by project expense. At the end of the project, all members repaid BKB loan in full and all savings and group profits have been collected and distributed within the members. In the final analysis, the project managed self-help style microfinance for few years and successfully repaid loans to BKB and savings/profit to the members. There was no loss of savings of the poor as often seen in this approach where poorer members lose savings when groups are dissolved with outstanding loans to some members.

G. Review of Project Output

It has completed all activities within time and achieved alltargets with quality.

Component 1.Activities included: a) Construction of village roads and structures to connect villages with mainstream road network; b) Construction of village protection walls (VPW) for protecting villages from wave action; c) Construction of multipurpose village centre (MVC) for using as seed storage, flood shelter, training, meeting, social gathering and other activities required for socio-economic development of the community; d) Employment of rural poor in infrastructural construction and maintenance for increased income; e) Installation of water sealed ring latrine to promote hygienic environment for the community; f) Installation of tube-well for safe drinking water; g) Construction of submersible dams; and h) Construction of buried pipes for irrigation water distribution. Table 3 presents quantitative targets and achievement of this component.

Table 3: Outputs and achievements of Component 1 [April 2014]

Description	Unit	Revised plan (DPP)	Target	Achievement	% achieved
Tube wells	No.	2,595	2,595	2,595	100

Sono filter	No.	1,261	1,261	1,261	100
Village protection cum road work	km.	350	350	352.152	101
Village protection wall	km	5.00	5.00	6.30	126
MVC	No.	29	29	29	100
Latrine	No.	78,406	78,406	78,406	100
Submersible dams	No.	3		3	100
Buried pipe	No.	8		8	100

Implementation monitoring committee (IMC) and labour contracting societies (LCS): Formation of LCS groups and IMCs is at the core of implementation of this component. The project planned for forming 423 IMCs and giving training to 3966 IMC members. That has achieved. Target for forming LCS was 5,176 which have been formed by June 2014. The project trained 77,253 LCS members on infrastructure implementation process against target of 34,665 members, which is 223% achievement against the target. Among the LCS members, 52% were female and 48% were male. In addition to that there were 349 LCS for road maintenance of which 199 (57%) were female LCS and 150 (43%) were male LCS.

Village Road construction: Target of constructing village road was 350 km and achievement under this category up to June 2014 was 352.125 km and number of road was 496 of which 304 were constructed by LCS and 192 were constructed by contractors. The project management has exceeded the target of completing village roads (achievement is 101%). Construction of village road using concrete blocks is an innovative idea and has proved to be successful. Quality of road constructed with concrete blocks is not inferior to RCC roads constructed traditionally by concerned departments while the cost for block roads is lower by about 20% compared to cost of traditional roads. Construction of block roads provided opportunities for income generation by LCS members.

Technical viability study of block road by the project, conducted by Department of Civil Engineering, BUET, Dhaka highlighted effectiveness of CC block roads by LCS under direct supervision of LGED. Technical viability and cost-effectiveness of constructing CC block roads under project conditions have been recommended by the study team. The study team also appreciated this innovative idea of village road construction involving LCS. Improvements suggested in the study report may be reviewed by LGED and positive suggestions and improvements suggested may be applied in the follow-on projects.

The future routine maintenance of community roads remains a big concern; although project has successfully included the community roads under LGED's maintenance annual budget for road maintenance is never adequate.

Village Protection Wall: The project constructed 6.30 km in 21 villages against revised target of constructing 5.0 km. Construction of village protection wall was a very important initiative by the project for protecting lives and properties of very poor community living in the interior area in haors. Project was quite innovative in constructing the wall, tried block as well brick to build the structure. This component is providing an ultimate safety to the poor community live in deep beel areas.

Submersible dams for water conservation: The project planned to construct 3 submersible dams for facilitating irrigation and other household purposes during dry season. This was a very effective and innovative initiative by project management for demonstrating low cost water conservation and using that most beneficially to increase production. It resulted in 100% increase of crop production and cropping intensity in the catchment areas of these three dams. Farmers being supported by irrigation are now cultivating high yielding varieties as cash crops in place of earlier cultivated local rice and vegetables and increased their income in some cases more than 100. About 1,420 families have been benefited by these three dams made by LCS.

Buried pipe for irrigation water distribution: This technology was new in the in haor areas. The project has introduced buried pipe system of irrigation in the project area since 2012. Transmission efficiency of irrigation systems has increased from 50% to 90% (Completion Report of Agriculture and Livestock Component). It may be observed from the Table-1 that about 407 ha can be irrigated with the support of buried pipe system giving benefit to 1,862 farm households. The project adopted buried pipe irrigation water distribution system from Barind Multipurpose Development Authority (BMDA) operating an irrigation system in Northern part of Bangladesh. This is a positive approach of the project for irrigation system development in the remote haor area. Demand for buried pipe irrigation water distribution is increasing and HILIP may consider to scaling up.

Tube-wells for drinking water and SONO Water Filter for Arsenic free water: The project had target of installing 2595 hand tube wells (HTWs) and that have been completed. The project intended to provide 1261 SONO water filters for arsenic mitigation and achieved that. Project has met the target of installing tube well. Arsenic problem is rampant in Sunamganj area. It is reported that out of total 2595 tubewells1261 HTWS are arsenic contaminated. Project provided SONO water filters for assisting beneficiaries to get arsenic free water. Depth of these HTWs varies from 350 to 450 feet, which is generally expected to provide arsenic free water but the hypothesis failed in the project area. Project negotiated with DPHE to provide 100 HTWs of about 1000 feet deep for drinking water purposes in the project area that may help hundreds of people to get arsenic free drinking water.

Latrines: The project installed 78,406 numbers of latrines and met the target. These are providing hygienic condition to the villagers and assisting them in maintaining healthy living environment. About 90% households has latrine of which 73% are hygienic. Due to project efforts, sanitary condition in the project area improved significantly and 78,406 members have got access to sanitary facility. However the maintenance of the latrine may be critical for retaining this good sanitary environment.

Multipurpose Village Center (MVC): Project management revised the target of constructing MVCs from 29 to 29 and has achieved 100% of the revised target. The centers have been using as meeting, training and venues for other social events by the community.

Component 2 Fisheries Development: Beel development included acquiring of user rights to 293 beels, formation of BUGs, establishment of sanctuaries, setting up of demarcation pillar, earthwork for re-excavation, re-excavation of canal to improve connectivity, and restoration of swamp forestry.

The project completed re-excavation of 242 beels, constructed 40 beel connecting roads of about 16 km, re-excavated 69 beel connecting canal/khal of about 69.95 km, established fish sanctuaries in 50 beels, set up boundary pillars in 118 beels, and planted 250,000 saplings of swamp tree in and around 115 beels.

The project target was to include 9,500 men and women in BUGs and it reached 95% of the target with a 25% participation of women members against the target of 30%. The project used PRA techniques to identify genuine fisher and poorer families within the fisher community. BUGs have formed in 265 beels and the rests will be done by HILIP. BUG members themselves did all the earth works in re-excavation of beels and khals and other physical activities from which they were paid wages from the project. Through beel re-excavation work about 426,081 labour-days employment was generated during the project period.

All proposed activities of the fisheries component of the project have been accomplished with 90-100% implementation outputs. However, the achievement has been low in beel demarcation and sanctuary establishment.

The outputs of the WorldFish as fish catch monitoring data, and biodiversity of fishes and gears in selected 60 beels are of high standard. They have produced yearly reports and developed two printed books on fish and gear diversity. The livelihood impact study, however, could have been further analytic

about the impacts of CBRMP intervention on the economic, social and household assets of the beel resource managers and users.

Component 3 Agriculture and Livestock:The objective of this component was to improve crop and livestock production to increase the income and enhance the scope of food security in the communities. This component has been implemented in partnership with BARI, BRRI, DAE and DLS. The main activities were selection of crops for field trials, demonstration of new or improved field crops and horticulture, participatory demonstration trials, training and technology promotion. Most of the physical targets have fully been achieved.

The project through participatory appraisal identified the problems in crops production with assistance of BRRI and conducted a total of 58 field demonstrations of 16 rice varieties in 6 upazilas (58 plots with a total of 16 acres of land). The objective was to identify early varieties with relatively good yields. The process resulted in selection of 10 varieties, of which four (4) were found suitable for Sunamganj. All these varieties produced same or more than national average of production. The project later promoted 4 rice varieties in the project areas with 1,447 demonstration plots (2 560 acres). The project also organized field-days to project the performance of the selected varieties.

Besides, mustard, wheat, potato, sweet gourd, mung bean, sesame, Transplant aman rice were also tried in the project area through field demonstration (940 farmers with 1116.58 acres of land area). Mustard, sweet gourd, potato, sweet potato, onion showed good potential and got popularity to farmers in Sunamganj.

Table 4: Major activities under agriculture and livestock development component

Description	Target	achievement	% achieved
Field trials/demonstration of rice varieties	2,000	2,056	102
Field demonstration of oil seeds, other field crops and veg	1,000	1,440	144
Field trials/demonstration of fruits	64	62	97
Demonstration of poultry and livestock	3,300	3 404	103
Demonstration of food processing technologies	1,200	1,206	100
Number of persons trained on crops, fruits/veg etc	31,500	30,555	97
Number of persons trained on poultry and livestock	39,500	38,002	96
Number of persons trained in food processing	9,000	9,200	102
Number of livestock vaccinated		314,978	
Number of paravets/ vaccinators/advance framers trained		1419	

With assistance from BARI the project promoted vegetables in 7 upazilas that has changed winter scenery of Sunamganj Sadar, South Sunamganj Bishwambarpur, Jamalganj, Tahirpur, Derai and Dowarabazar upazilas. Vegetable productions introduced in fallow lands and farmers have been producing a wide variety of vegetables such as tomato, cabbage, cauliflower, several varieties of beans and gourds, which were rarely produced in these areas in commercial scale. Access to irrigation and finance completed to agricultural production.

All these demonstrations and field trials were followed by training of farmers. The project trained 77,757 farmers (19,444 men and 58,313 women) on rice and other field crops and vegetables. The trainings were in many cases hands on and were found effective as farmers applied knowledge gained through the training. It was also supported by extension services from the project staff and DAE field staff members. The trainees were provided with seeds after the training.

Livestock: The project introduced broiler, layer and Sonali chicken production in a number of upazilas, with excellent results. Back in early 2000s when there was no broiler farm in Bishwambarpur in 2014 more than 250 commercial farms raise chick birds and supply to nearby areas.

Within the livestock sector the project organized 1211 vaccination and 536 de-warming campaigns with the assistance from DLS successfully reaching 314,978 animals vaccinated and 107,265 animals de-warmed. Besides, the project and DLS provided technical support for livestock development including sheep, goat, duck, chick and cow rearing units, support in duck farming, model breeders, fodder cultivation, beef fattening, and wool shearing in sheep for disease prevention, as well as the establishment of 5 artificial insemination centers and veterinary pharmacists. To make the service sustainable the project has trained 214 local paravet/ vaccinators who are serving the community.

This component has been successful in introducing new activities that have been adopted in a large scale such as livestock vaccination and de-worming campaigns and Artificial Insemination (AI) services through locally trained vaccinators (highly profitable business), chick and duck hatcheries (newly introduced business in the area), commercial duck farming (egg demand is very high), broiler farms (newly introduced, and a large market accordingly developed), sheep rearing (sheep have simple requirement in housing, feeding, maintenance, less prone to diseases, and good market for meat), urea molasses straw (reducing cost of livestock feed), plant nurseries (newly introduced business in the area, high market potential), improved vegetable production (good market potential), and improved high yielding rice varieties (such as BRRI dhan 46, BINA 7, BRRI 52 and BIRRI 39).

Component 4 Microfinance: The project has formed 2,995 credit organisations (COs) (2,145 COs with women members and 850 COs with men members) with 86,737 members (61,543 women and 25,194 men) achieving the targetset for CO formation and achieving 96% of the target for member enrolment. As of April 2014 all 2,985 COs have been graduated withrepaying all BKB loans and distributing their savings and operating profits from their loan program to individual members. It means, the project has no liabilities regarding any future financial operations while some of the groups may decide to run their group activities by themselves.

Cumulatively, 84,091 CO members have been trained. A total of BDT 122.3 million has been mobilized from the CO members for savings, accounting for 101% against the target of BDK 121.4 million. The value of loans extended to CO members from the savings was BDT 126.9 million, about 70% of the lending went to women. The total value of lending from the project credit funds, that is, from BKB to CO members was BDT 227.1 million, representing a turnover rate of 2.5 for the value of credit funds extended to BKB.

Use of loan: A project study shows that the members utilized their funds mainly in five types of income generating activities: agriculture (28%), livestock (15%), food-processing (3%), fisheries (11%) and any array of various activities including petty trading (43%). It shows microfinance, agricultural and irrigation development activities implemented by the project that contributed increasing income of the households.

Performance of BKB in microfinance operation was found not satisfactory. It has turned out that BKB is an extremely inefficient organization to provide financial services to the poor and farmers and COs. At the same time self-help group type lending had other difficulties: lack of experienced and educated manager, staff shortage to ensure necessary supervision, low recovery rate, cash in hand due to distance of banks from the groups.

H. Assessment of Project Effectiveness

Project is effective while its activities achieve desire results. Considering that CBRMP is successful in terms of its effectiveness. The project was too complex for its diverse activities, but had wider scopes to serve its beneficiaries and that it could do very successfully.

The project reached directly 93,613 HHs against a target of 90,000. The total number of households however served by the project reached 143 032 until June 2014. Within the directly households each benefited from several services: savings and credit; water and sanitation; wage employment and profit from LCS works; wage employment and profits fish production from beels; and business and extension services in agriculture.

The project has been very successful in reaching the poor through its LCS works, participatory research, fisheries development, agricultural development activities as well as village protection wall. LCS works was the most effective pro-poor interventions where 77 253 poor women and men could increase their income. The project went through elaborate PRA process to select poor LCS members who later received training to become LCS workers. Similarly, almost all members of BUGs are poor fishers without any agricultural land who mainly depend on wage labour and open water fishing. About 25% of the members are women. CO members are mostly poor and marginal farmer's families who did not have access to finance at the time of design of the project. Tube-wells and sanitary latrines reached to the poorest families that led to access to safe water and basic sanitation. The poultry and livestock activities also have successfully reached the landless people who could then earn extra amount from the homestead.

Due to improved communication infrastructure, agricultural inputs are now available in local markets and output price of agricultural products are reasonable. Prior to improved infrastructure development outside buyers, especially traders for wholesale market were not interested to travel to the interior area. The situation has changed and outside traders are visiting markets and buying agricultural produces from the producers directly. Producers are also taking their products to nearby bigger markets and growth centres for better price. Therefore, competitive market price facilities have developed, which ensure fair price of input and output to the producers. Medical, health and education services are now easily accessible to the households.

The improvement of existing roads has increased the volume of motorized traffic and non-motorized (from baseline to terminal survey), which encouraged farmers to produce high-value crops and cash crops. The project increased economic and employment opportunities within the project area, particularly around the newly built facilities. The cost of transportation for goods has gone down from Taka 0.8 per kg to Taka 0.45 per kg.

The roads and infrastructure development through the CBRMP project has increased opportunity to market fish from the beels for better price. The fish *aratders* (large scale fish seller) can reach to the beel sides to purchase fresh fish at a fair price.

There has been impressive improvement of livelihoods in the project area through participation in LCS works or the training provided by PMU. Beneficiaries interviewed reported (Impact study) substantial improvements in their livelihoods, such as improved food security, better housing, and purchase of household assets and increase of savings. Impact survey indicates that training provided to beneficiaries by DAE and PMU was comprehensive as all the promoted technologies are known to almost all growers. All of the respondents who practiced one of the technologies did disseminate the knowledge within the group or within the locality that resulted to increase in output and farm incomes.

Field trials of rice and oil seeds led selection of rice varieties and later expanded in the area (about 4500 ha.). Demonstration of winter vegetables complemented by irrigation massively expanded vegetable production and brought in fellow land under cultivation. Poultry and Sonali bird, incubator and sheep rearing expanded due to demonstration, training and technical assistance. Animal de-worming and vaccination led to expansion of service and reduction of mortality.

The project contributed to improve financial viability of small holders and adoption of income generating activities resulting in increased incomes and improved livelihood.

Increased fish production and conservation of biodiversity led to improved livelihoods of more than 9 000 BUG members. The project reports increase of biomass of fish in 100% beels with varying degrees. About 1,622 metric tons of fish have been produced with a market value of over Taka 166.8 million. The fish production per ha has increased up to 701 kg in 2013, which was much higher than the base year. Regarding the biodiversity conservation, a number of new high value fish species has appeared in the beels, which were not seen in the catch over last some years. In total number of species has reached to 139 compared to only 73 in the base year in 2004.

Household income of fisher families has increased in 100% of HHs with varying degree as per annual profit. This enhanced income has diversified their capital assets like possession of new lands, purchase of livestock, and cultivation of horticultural crops in leased lands and start of small scale business.

Microfinance financed all crop/vegetable and poultry and livestock related income generating activities promoted by the project. COs have mobilized Taka 122.3 million as savings and disbursed Taka 354.35 million as loan from savings and BKB. The members invested the resources in various income generating activities to increase income, the goal of the project.

Improved community roads have helped improve primary education and primary health care and access to other public services. The improved communication has increased the mobility of the people and social security to a larger extent.

I .Assessment of Impact by RIMS

The following sections are primarily based on final RIMS study sponsored by the project. Overall there are some improvements in various indicators compared to baseline survey conducted in 2004.

Housing conditions: Housing conditions in the project area remained generally poor, housing conditions, though remaining poor, appears to have slightly improved since the baseline. Over 5% of households in the final follow-up were found to have their dwelling floor made with cement, while the proportion was less than 2% for those in the baseline. Slight improvements were also notable in the average number of sleeping rooms per household, emerging higher at 2.16 in the final follow-up instead of 1.87 in the baseline.

Table 5: Comparisons of households by types of dwelling

Characteristics of dwelling	**Baseline 2006**	**Mid Follow-up 2010**	**Final Follow-up 2014**
Main material of the dwelling			
(Floor)	98.2	98.0	94.4
Earth/sand	1.8	2.0	5.6
Cement			
Number of sleeping rooms			
1 – 2	81.2	77.8	70.3
3 – 4	16.7	18.9	27.4
5 +	2.2	3.3	2.3
Total	**100.0**	**100.0**	**100.0**
N[1]	**1,200**	**1,200**	**1,200**
Mean number of sleeping rooms	**1.87**	**2,01**	**2.16**

[1]N is the number of households included in the sample.

Water and sanitation: More than 96% of HHs drink tube-well water. The sanitation situation has deteriorated between 2010 and 2014 (see Table- 6). As shown in Table -6, nearly 90% of households in

the project area had a latrine, with 73% having an unhygienic latrine and only 17% a hygienic latrine. Most commonly used hygienic latrines were an improved pit latrine used by 12% of households. Sanitary conditions improved significantly over the interval between the baseline and the mid follow-up: possessions of household latrines spread to almost universal proportions after the baseline with many households having possessed a latrine thereafter. Only less than 2% of households reported not having had a latrine (a fixed place of defecation) in the mid follow-up, instead of at about 10% in the baseline. Other improvements included the increases in the use of improved pit latrine to 35%, from 24% in the baseline. Thus, a spectacular higher percentage of households in the mid follow-up, at 42%, were found to have had access to a hygienic latrine, compared to only 28% of those in the baseline.

In contrary to the improvements seen in the mid follow up, sanitary situations were surprisingly found to have deteriorated thereafter. The proportion of households having no fixed place of defecation, seen down to less than 2% in the mid follow up, jumped back to over 10% in the final follow up. The proportion of households using traditional pit latrines increased between the mid follow-up and final follow-up, from 57% to 73%, while the reversal was true for that of improved pit latrines, decreasing from 35% to only 12%. The observed negative associations were due to that many of the improved pit latrines were turned traditional pit latrines by breaking their water seal.

Table 6: Percent distribution of households by type of toilet facility and by its location

Type of toilet facilities	Baseline 2006	Mid Follow-up 2010	Final Follow-up 2014
Open pit/traditional pit latrine	62.1	56.8	72.6
Improved pit latrine (VIP)	24.3	35.2	12.3
Pour flush latrine	3.9	6.4	4.0
Flush toilet	0.2	0.1	0.2
No facility/bush/field	9.5	1.5	11.0
Total	**100.0**	**100.0**	**100.0**
N[1]	**1,200**	**1,200**	**1,200**
Location of toilet facility			
Within dwelling yard and	84.9	91.6	80.1
compound	15.1	8.4	19.9
Out-side the compound			
Total	**100.0**	**100.0**	**100.0**
N[2]	**1,085**	**1,182**	**1,068**

[1]N is the number of households included in the sample;
[2]N is the number of households having a toilet facility

Land ownership: Households in the project area were generally land poor, upholding that the project beneficiaries were mostly from the poor segment of the population. About 6 in 10 (58%) of the households had no agricultural land at all, with another 10% each owning less than 50 decimals only. Only 21% had 100 decimals or more of agricultural land, each. Possessing of non-agricultural land by households was even worse as expected, with 90% having had no such land at all. That the households were land poor was also evident in their ownership of homestead; more than one-tenth (11.2%) of households had no homestead at all, while another large proportion, nearly 60%, had a homestead worth less than 50 decimals.

Livestock rearing: Raising domestic animals is an important income generating activity in rural areas of Bangladesh. Domestic animals, usually raised in the project area, were chickens, cattle and goats, the chickens being the most common of them. In the final follow-up, 65% of households were found to be raising chickens, while cattle were raised in 43%, followed by goats with 9%. Sheep were rarely raised,

noted only 3% of households. The number of households raising cattle rose over the interval between the baseline and the mid follow-up from 40% to 48%. There were also indications of slight increases over the same interval in the numbers of households raising chickens, goats and sheep. But after the mid follow-up, the proportions of households raising domestic animals declined reverting to their baseline levels or even below. With the increases in the number of raiser households, there were increases in the number of animals raised by them over the interval between the baseline and the mid follow-up. While in the baseline, among households raising chickens, they, each, had on average about 12 chickens, the figure was higher at 13 chickens in the mid follow-up . Similar evidence of increases was noticeable in the cases of cattle, goats and sheep. But after the mid follow-up the numbers of animals raised declined, as did the numbers of their raisers. Thus, the number of chickens raised by their average raiser was found to be fewer in the follow-up, even compared to the baseline. Similar variations were noted in the cases of goats and sheep as well.

Table7: Comparisons of household possessing domestic animals

Domestic animals	Baseline 2006	Mid Follow-up 2010	Final Follow-up 2014
Chicken/other poultry	68.5	69.9	64.5
Sheep	5.4	5.8	3.3
Goats	8.8	10.1	9.3
Cattle	39.8	48.4	42.8
Others	-	-	2.5
N[1]	**1200**	**1200**	**1200**

[1]N is the number of households included in the sample.

Table 8: Comparisons of average number of domestic animals possessedby a raiser household

Domestic animals	Average number (N[1])		
	Baseline 2006	Mid Follow-up 2010	Final Follow-up 2014
Chicken/other poultry	12.35 (822)	13.13(837)	8.67 (774)
Sheep	2.75 (65)	3.14 (69)	2.85 (40)
Goats	2.40 (105)	2.62 (121)	2.13 (111)
Cattle	2.73 (478)	3.00 (581)	2.96 (513)
Others	-	-	7.17 (30)

[1]N is the number of households possessing animals in the given category.

Asset ownership: Eighty percent (80%) of households in the survey reported having had mobile phones, 71% chairs/benches, 62% tables and 51% almirahs. Ownerships of any other assessed items was less common, indicating the generally poor economic conditions of the project's beneficiaries. Only 37% reported having tin trunks watches/ clocks, 26% push nets, 24% watches/clocks, 21% fans and 15% television sets. None of the remaining items was owned by more than 15%. While electricity from the national grid was available to 27% of the households, 32% reported having had electricity generated from their solar panels. While reading these two percentages, it should be remembered that some households might obtain electricity from both the sources.

Household expenditure and income: Households in the follow-up had each on average a monthly cash expenditure of Taka 9 064, with 48% of them spending over Taka 8,000 a month. The major sources of household incomes in the project area *were non-agricultural wage labour, own farming, sharecropping, agricultural wage labour,* and *petty trade (small scale)*.There were however variations in their importance. *Non-agricultural wage labour* appeared to be the most common source of incomes, accounting for 28% of households as the most important source and for 11% as the second most important source. Next most common sources were own *farming* (being with 16% as the most important source and with 13% as the second most important source), followed by *sharecropping* (with 9% as the most important source and 10% as the second most important source), *agricultural wage*

labour (with 9% as the most important source and 5% as the second most important source), and *petty trade* (with 11% as the most important source and 4% as the second most important source).

Food security: Nearly 70% of households in the final follow-up reported having experienced at least one hungry season, with 31% experiencing at least two. Data were also collected as to the number of hungry months a household suffered in the one year before the survey. About 19% of households reported having had shortages of food for 5-6 months and another 16% for more than six months, in the one year before the survey. Thus, an average household was found to have had food shortages for 3 months in a year in the final follow-up. Food availability has remained about unchanged over the intervals between the surveys, as suggested by the measures for the hungry seasons experienced by the surveying households. The proportion of households who had experienced at least one hungry season, found as 69% in the final follow-up, was only slightly lower than 74% in the mid follow-up and 72% in the baseline. Similar evidence of little changes in food availability was notable in the average number of hungry months experienced a household, being 3.55 in the final follow-up , which was practically same as in the baseline.

Table 9: Comparisons of hungry seasons

Hungry seasons/months	Baseline 2006	Mid Follow-up 2010	Final Follow-up 2014
Number of hungry seasons experienced	27.6	25.8	30.7
None	40.6	44.9	37.9
One	31.8	29.3	31.4
Two			
Total	**100.0**	**100.0**	**100.0**
N[1]	**1,200**	**1,200**	**1,200**
Number of hungry months experienced	27.6	25.8	30.7
None	9.5	11.7	14.2
01-02	23.8	34.0	20.2
03-04	21.6	21.1	18.7
05-06	17.5	7.4	16.3
07-12			
Total	**100.0**	**100.0**	**100.0**
N[1]	**1,200**	**1,200**	**1,200**
Mean number of hungry months	3.57	3.11	3.55

[1]N is the number of households included in the sample.

Child nutrition: In the final follow-up, over 40% of children under-five years of age were found to be short for their age, or stunted (<-2SD), suffering from chronic malnutrition; about 6% underweight for their height, or wasted (<-2SD), suffering from acute (current) malnutrition; and about 40% underweight for their age, suffering from chronic or acute malnutrition, or both. Although the absolute value is high chronic malnutrition was 16% lower from baseline figure against a project target of 10%. There were little or no variations in the proportions for stunting and underweight between the male and female children. The variations showing the proportion for wasting higher among male (7%) than female (3%) children should be treated with caution, since it is an unreliable indicator of malnutrition, depending on the current situations. While 57% of children under-five were short for their age, or stunted (<2SD) in the baseline, the proportion decreased to 48% in the mid follow-up and then to 40% in the final follow-up, revealing pronounced declines in prevalence of malnutrition in children in the project area since the base line. Similar evidence of declining trends was notable with the proportions for underweight and wasting, the underweight proportion decreasing from 59% to 40% and the wasting proportion from 15% to 6%. The declining trends were almost equally evident among both male and female children,

upholding the reliability of the estimates of malnutrition obtained in the surveys. The decreases in malnutrition may be taken in part, if not entirely, as an impact of the project benefits.

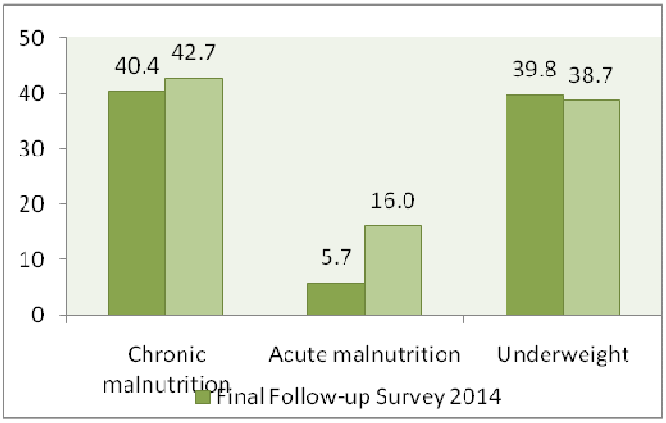
Figure 1 presents a comparison of the anthropometric estimates obtained from the final follow-up with those of the rural sample of the Bangladesh Demographic and Health Survey (BDHS) 2011. The comparison was appropriate in that the SCBRM project consisted of rural areas. There were virtually no variations in the stunted and underweight proportions of children between the final follow-up and the BDHS 2011 rural sample. The stunted proportion was only slightly different 40% in the final follow-up than 43% in the BDHS rural sample, while the underweight proportion was slightly different 40% in the final follow-up than 39% in the BDHS rural sample. Thus it seems that the SCBRM project was successful to have an impact enough to bring down the levels of chronic and overall levels of malnutrition in the project population to the rural national averages. However, the proportion of wasted children (depending on the current situations), found significantly lower in the final follow-up (6%) than in the BDHS rural sample (16%), is a temporary phenomenon and may not be reflecting the real variations in the level of malnutrition between the two surveys.

Table 10: Percentage of under-five children classified as malnourished according to three anthropometric indices by sex among the surveys

Anthropometric indices	Sex of the children						Total (95% confidence interval)		
	Male			Female					
	Base-line 2006	Mid Follow-up 2010	Final Follow- up 2014	Base-line 2006	Mid Follow-up 2010	Final Follow-up 2014	Base-line 2006	Mid Follow-up 2010	Final Follow-up 2014
Chronic malnutrition (height-for-age <-2SD)/stunted	56.0	48.6	41.1	57.6	47.2	39.8	56.7 (54- 60)	47.9 (45-51)	40.4 (37-44)
Acute malnutrition (weight-for-height <-2SD)/wasted	17.7	16.0	7.3	12.7	14.7	4.1	15.3 (13-18)	15.4 (13-18)	5.7 (4-7)
Underweight (weight-for-age <-2SD)/under-weight	58.8	55.6	39.5	58.4	53.5	40.1	58.6 (56-62)	54.6 (51-58)	39.8 (36-44)
N[1]	524	469	344	502	462	342	1026	931	686

[1]N is the number of children measured in the sample.

Figure 1: Comparison of anthropometric results between the Final Follow-up 2014 and the rural sample of BDHS 2011



Impact assessment by World Fish: The World Fish conducted an impact assessment with 125 sample households from within 25 BUGs. Besides their employment opportunities in LCS for re-excavation of beels and canals BUG members have received profits on selling of large fish catch on an average from Tk. 12,000 to Tk. 27,000 per year. Project in-house study reported that average income of the BUGs has increased by 180% in 2013, when compared with the base year. This income has changed their ability of spending on different items including better food, better housing and developing physical assets.

Household expenditure: The WorldFish study revealed that 51.18% of households' expenditure was spent on food of which 17.12% was spent on rice/wheat, whereas in 2004, 69% was spent on food and 49% on rice/wheat. At the same time fish, meat and egg consumption have significantly increased from base year 2004 to current year 2014, it was only 4% of total expenditure in the past but now it is 8%. The survey observed a proportionate decrease of about 20.82% household's expenditure on food items over the project years. Despite the high cost of food grain, the second highest expenditure was for repairing and improvement of houses, reflecting BUGs increased ability of seeking better living over the period.

Social impacts of BUGs: Community-based fisheries management approach through formation of BUGs has brought about a visible change in the social dynamics. All BUGs now sit together in monthly meetings and discuss various issues of common interest, besides they share their personal wellbeing as well. Both men and women interact and make decision democratically. This process has created a tolerance and respect for each other in the society. The poor people, especially fisher-folks, are age-old neglected people in the traditional haorsociety, now these fisher-folks consider themselves a social power and decision makers for their own benefit as well as for the common benefit of the society. The democratic practice for selection of office bearers of the BUGs through direct voting process help build a congenial atmosphere in the rural society.

Impact assessment by Multidimensional poverty Assessment tools (MPAT):

A study was conducted based on the multidimensional poverty Assessment tools (MPAT) in SunamganjNetrokona and Habiganj districts. Netrokona and Habiganj districts were taken as base control areas for Sunamganj. A total of 128 households were taken under study from control area those are of similar to Sunamganj in socio economic and geographical context and no such development support received so far as given by CBRMP in Sunamganj. From project area 480 households were taken for study.

From the analysis of the findings it is found that out of 10 components including Food & Nutrition Security, Domestic Water Supply, Sanitation & Hygiene, Housing , Clothing& Energy, Education, Non - Farm Assets, Exposure & Resilience to Shocks, Gender & Social Equality in 7 Components Sunamganj scored GOOD whereas only in 5 Habiganj&Netrokona are in good position. Out of total 10, in 8 Sunamganj is in better position than in Habiganj&Netrokona. In 2 where H&N are slightly better than Sunamganj are Health and Hygiene and Non-farm assets.

The study suggests that activities of CBRMP have impacted on improvement of majority areas of livelihoods, but could not do much to create non-farm assets and improve resilience to shock

Indicators	Scores		
	Sunamganj	Habiganj + Netrokona	Differences
Food & Nutrition Security	69.66	68.47	1.19
Domestic Water Supply	79	61.89	17.11
Sanitation & Hygiene	51.97	47.39	4.58
Housing , Clothing& Energy	65.71	58.04	7.67
Education	62.41	48.24	14.17
Farm Assets	78.69	80.06	-1.37
Non -Farm Assets	39.85	36.71	3.14
Exposure & Resilience to Shocks	54.89	51.56	3.33
Gender & Social Equality	77.59	70.1	7.49

			The survey covered 480 Sample housholds from Sunamganj .and 128 from Habiganj and Netrokona respectively
Above 60 points	7	4	
In-between	3	5	
Below 30 points	0	0	

J. Assessment of Sustainability

Institutional sustainability. The project-created institutions include the project management units at national, district and upazila levels and the BUGs, COs, and LCSs at field level. The project management has already become thin at the time of PCR mission.

BUGs are the most important institutions for sustained access to beel resources and continuity of production of fish and income to BUG member families. Up to now the government has agreed to lease the beels to the present BUGs up to 2019, end date for the follow-on HILIP project. The huge investment in management by the project has brought a big change in beel resources management in terms of ownership, benefit, conservation, habitat restoration and development. Through comprehensive training scheme on group management, financial management, open water resources management, and conservation, the BUGs have achieved substantial capacity in the area of leadership, financial management and entrepreneurial skills. However, the uncertainty amount right of access to the beels by the poor BUGs beyond project period cast doubt about long-term sustainability of BUGs. The present Jalmahal Baybsthapana Nitimala 2009 is very restrictive in terms of time period, and discourages long-term investment by any project or BUGs. The government by extending the lease contract for a much longer period, say 25 years, to the poor for community fisheries management can only sustain the BUGs as well as ensure sustained poverty reduction efforts.

LCS groups are not meant to be permanent institutions. Because of their skills and experience of construction works the members of LCS groups may be recruited in other civil works by, for example,

HILIP and other development projects and sometimes by contractors as seen in other areas. Some LCS and COs have joined micro-finance groups of national and local MFIs to access financial services for running other income generating activities.

Microfinance: The project has winded up microcredit operations of all COs by distributing savings/profit to members and repaying all loans to BKB. It is up to the COs if they want to run their self-help group microcredit operations. It has been reported that only 96 COs (3.2% of total) are running savings/credit program of their own showing little sustainability of such program. However many members from CO are in LCS and BUG and there they have the opportunity to continue their development under some institutional framework which assumed much sustainable.

Social sustainability/Empowerment: The huge amount of training courses on microcredit management, construction, agriculture and livestock mostly for women, exchange visits, numerous interactions with market actors by BUG, CO and LCS members over the last ten years has enhanced their skills and confidence to engage in gainful activities as well as social issues. This has been reflected in their diversity of income sources, social interaction and lobbying ability with government departments. All participants in meetings with the mission have confirmed this aspect of the project. This has been articulate in stakeholders workshops conducted by the project. The social sustainability aspect will remain as a permanent capital for thousands of beneficiaries who participated in the project in various capacities.

Economic and financial sustainability: All BUG members have increased annual income from beel and expect to receive increased income in future through better management of aquatic resources. The main livelihoods crop production during boro season, vegetable production, poultry and livestock are all profitable ventures. The products, technologies and services promoted under the project have varying degree of potential for sustainability. For example, production of winter vegetables and mustard, rearing of poultry, duck, sheep, goat etc will continue without the support of the project as these activities have been taken over by the market system. Farmers receive seeds and other inputs from market, apply their production knowledge to produce respective products and sell to the local markets. As long as these products remain profitable the farmers will continue to produce them and others may also go into production. Practice of vaccination and AI from private sources are gaining grounds but it is yet to become universal for all farmers in the areas. Full commercial provision of vaccination and animal health care service will take lot more time and effort to become successful. Irrigation and financial services from MFIs will continue to support the farmers.

Technical sustainability: The technologies and practices promoted by the project with the assistance from BRRI, BARI, DAE, DLS, and DoF have taken roots within the farmers' practices and knowledge base. Some aspects of the technologies are being provided by private sector, for example, low-cost incubation design and operations. Vaccination is also being partially provided by project trained individual vaccinators. Even though all national line agencies may not be able to provide same level of support to farmer groups but their permanent presence will reinforce knowledge and practices absorbed during the project period.

The BUGs have learned that establishment of sanctuary,and other management practices increases production manifolds they will continue the techniques for their own interest. Through the project, demand for agriculture support services and goods has increased, which is expected to further enhance the private and public supply for these services. However, the intensity of technical support to the farmers on cropping sector would be difficult to be maintained due to both fund and manpower constraints of the line-departments on technical extension.

Technically, the maintenance of project-constructed infrastructures can be ensured since it has been included into the maintenance inventory of LGED. Problem with the sustainability of infrastructures, if any, would be on the mobilization/allocation of funds for their O&M.

E**nvironmental sustainability:** Many project activities, such as latrine installation, access to safe drinking water, beels' development, swamp tree plantation, and introduction of integrated pest management (IPM) technology have the attributes of environmental improvement. Reduced use of chemical fertilizer has been reported. Construction of village roads was carried out mainly on the existing earthen and gravel roads. Measureswere also taken to avoid potential negative environmental impact during road construction, which included the assessment of environmental impact before construction and the protection of trees and other vegetation.The biodiversity in project managed beels has increased (particularly the quantity and diversity of small floodplain species of fish). This is due to improved beel management as a result of long term leasing.

Exit strategy: The project has drawn a very articulate exit plan and that has put in place. All road infrastructures are being handed to LGED road inventory; management of dam and buried pipes has been put under the responsibility of registered farmer groups; c) tube-wells and sanitary latrines are being maintained by the households; d) crop and livestock management are the normal business responsibility of individual family and entrepreneurs and they have well contact with line departments; e) BUGs and beel have been handed over to the HILIP project.

K. Innovation Replication and Up-Scaling

Innovation: Introduction of block road is an important innovation for Sunamganj. The project has introduced LCS in construction of RCC and CC roads. SCBRMP has been successful in empowering destitute women through skills training in LCS related infrastructure activities.

MOL handed over 293 beels to the project under community management where BUGs have been successfully managing them that led to increase in production, family income and improvement biodiversity. More importantly the project has been able to develop beel management system Biodiversity conservation and stock enhancement with nutrient-rich (e.g. mola, *Amblypharyngodonmola*), high value (e.g. Pabda, *Ompokpabda, Foli, Notopterusnotopterus*) fishes can ensure increased fish production, and improvement of livelihood and nutrition of the natural resources users living in the low-lying areas.

The promotion of plantation of flood tolerant trees like Hizol(*Barringtonia acutangula*) and Koroch(*Pongamia pinnata*) along the periphery of the beels and open water bodies have been found an innovation when some BUGs have come forward to develop nursery of swamp forest trees.

The project did a number of innovative activities in agriculture: a) introduced crops such as BINA-7, BRRI-46, 33, and 29 and vegetables such as country bean BARI-1,2, Sweet Gourd- Sweety, Potato- Diamond, Cardinal, poultry and livestock production activities in the areas through preliminary field trials first and then replicated in other project upazilas; and b) vaccination and introduction of low-cost incubation for duckling production.

Replication: Construction of block roads has been tried by another IFAD funded project (MIDPCR) in other parts of the country. Farmers, not direct beneficiaries of the project, adopted poultry, duckery and livestock rearing, large scale vegetable production by observing activities of project beneficiaries.

Up-scaling: Construction of submersible roads (RCC) and block by LCS members road are being replicated and up-scaled in the HILIP project. Similarly, buried pipe irrigation will also be expanded by HILIP. The beel management practices developed under SCBRMP will be continued and expanded by HILIP and JICA funded project in five haor districts. The successes of SCBRMP in Sunamganj in agriculture and livestock are being expanded with further improvement and more systematically in five haor districts. Besides, some of the successful ideas have also influenced design of a number of IFAD projects that were designed later such as MFTSP, MFMSF, FEDEC and MIDPCR.

L. Performance of Partners

The Government of Bangladesh has provided full cooperation and performed its roles through relevant departments: Economic Relations Division of the Ministry Finance coordinated during design period; the Planning Commission revised the project two times; FADAD conducted audit as per government rules; and the Local Government Division of the Ministry of Local Government and Cooperatives steered the project. The level of cooperation of the MOL and its performance in beel transfer to the project was satisfactory. TheMinistry of Land (MOL) handed over 293 beels in four phases during project period. While the handing over of the government land, especially water bodies, is a lengthy and complex process, due to interference of multifarious interested groups, the project was able to successfully acquire the access rights of the beels for the community owing to the motivation and positive attitude of the MOL towards CBRMP. High Officials of the MOL visited the project sites several times.

IFAD on its part approved this loan under its flexible lending mechanism that enabled timely implementation and innovation. It conducted supervisions and provided both management support and technical support to this complex project.

The Sunamganj district administration assisted in handing over of the beels to the project. The district administration, especially the Deputy Commission (DC) was keen for beel development activities. The Additional Deputy Commission (ADC Revenue) provided supportive report to MoL, thus helped in policy influence in beel transfer. Their direct assistance in beel demarcation and support to the conflict mitigation were effective.

The District and Upazila Fisheries officials were closely involved in the habitat restoration, and establish of sanctuaries. They also participated in the training and capacity building of the BUGs and participated in their rallies and meetings. DoF officials provided training on the fish act and Jalmahal management rules and regulations to the project staffs as well as to the members of the BUGs. There was room for extensive collaboration with DoF for mutual benefits.

The project has formal partnership with several line agencies such as DAE, DLS and DOF, research organizations such BARI, BRRI and international agency such as WFC. Under MoUs with all these organizations the project and COs benefited mostly in technical assistance and gained access to local government resources. Because of linkage with DAE, the CO members and neighbours received common extension advice from upazila DAE offices. Similarly, DLS has provided important roles of animal vaccination and health services. The project field staff in collaboration with COs organized 1211 vaccination camps over the project period, a critical service almost inaccessible in Sunamganj due to poor communication. DLS also benefited from this arrangement because it does not have adequate field staff to conduct regular vaccination camps.

The promotion of new variety of rice varieties was conducted in collaboration with BRRI and vegetable field trials were with BARI. Both efforts resulted in identification of appropriate varieties of 115 for Sunamganj, which were later on promoted by the project.

WFC conducted independent monitoring of fish production and increase of varieties or species in selected 60 beels. It produced regular reports and made a number of publications. While this organization has selectively studied the biodiversity of 60 beels and produced quality data, there was room for extensive ecological study to develop statistical relations among the variables and the presence and absence of certain fish species as well as reasons for difference in productions among the beels.

Representatives of government departments acted as trainers in numerous training sessions organized by the project.

Although COs are treated as managers of microfinance and recipient of project services but they also acted as ‘partners’ as they monitored quality of construction, organized various vaccination camps, helped selection of community roads, organized land for construction of multi-purpose village centers etc.

BKB acted as the provider of loan service to CO members and disbursed taka 227.45 million to 23,960 members. BKB could have been much more effective partner if it simplified is lending process.

Union Parishad: Although Union Parishads were not formal partner of the project they supported the project activities in the Upazila coordination meetings and monitored quality of work. The UPs will be responsible for repair and maintenance of 43 km of community roads.

M. Lessons learned

- *Infrastructure*: Construction of concrete block road by LCS groups has been proven viable and sustainable and reduced cost per km by almost 20%. Construction of irrigation structures by LCS and buried pipe technology are found very effective approach in terms of cost effectiveness, people's ownership, community based management and to improve irrigation and thereby the productivity of land.
- *Fisheries development*: Administrative support from the relevant Ministries (Ministry of Land, Ministry of Fisheries and Ministry of Establishment) and an accountable and responsible coordination at all levels including elected representatives are vitally necessary for ensuring users rights on water bodies by the poor users and fishers. However adequate policy support is yet in place or enforcement for giving longer term entitlement of this model of fisher institution.
- Poor fishers have proved that they are viable to meet all the regulations and criteria in order get access to beel resources and ensure better sustainable management if they go for that in an organised form.
- Biodiversity of fishes including other aquatic organism can be conserved and their production can be enhanced through re-excavation of water bodies, restoration of migratory routes, establishment of sanctuaries, plantation of swamp trees and application of fish act for prohibiting use of detrimental gears and harvesting of brood fishes and juveniles.
- Stocking of nutrient-rich small fishes in feasible beels (e.g. mola, *Amblypharyngodonmola*) and high value fishes (e.g. pabda, *Ompokpabda*) may improve the nutritional benefit to the households and increase income as well.
- *Agriculture and livestock development*: Bringing diversification in field crops, vegetables, poultry and livestock production has been crucial in enhancing household income. The process needs technology transfer, access to good quality inputs such as seed, and access to market. Improvement in infrastructure is a major contributing factor to improve the backward and forward links for agriculture and livestock development.
- *Microfinance*: This component provided important lessons. Formation of group creates the basis of group based approach that helps in reaching beneficiaries with project supports such as technologies dissemination, providing training on capacity development more organised and effectively. Microfinance is a specialized service that requires right type of organisation, policies and staff to implement. State owned banks such as Krishi Bank may not be appropriate institution for implementing supervised credit like microfinance.
- *Project design and management*: Flexibility and innovative attitude in project implementation had been the main factors in success of CBRMP. The management was very participatory in realizing the people's problems and seeking assistance from concerned partners to address those efficiently. The success of concrete block road, submersible dam, buried irrigation, community based fisheries management many agricultural and livestock initiatives and most challenging successful closing of microfinance operations attributed to that norms and practices.
- Implementing development programme through community organisation such as BUGs for beel management, farmers groups for irrigation structure management, village groups for maintenance of village walls proven effective and may be sustainable approach.

L. Recommendations

Scope should be in place to transfer knowledge from CBRMP to its replicated projects for better management particularly for bell resources management and concrete block road building. Beels that have been handed over to HILIP are to be considered for its institutional sustainability with necessary policy support towards community management. For concrete block roads, a concrete policy should

be in place for its effective and appropriate implementation with scope of maintenance. The learning of community management of CBRMP in programme implementation may critically be considered in government investment where sustainability issue is concerned.

ANNEX

Project Logframe, CBRMP **Annex 1**

Goal	Indicators	Means of Verification	Assumptions
Sustainable improvement in the livelihood and general quality of life of 90,000 poor households living in *haor* areas in Sunamganj	* Reduced stunting of children * Household asset index No. of households with increased assets No. of women owning increased assets No. of hh with improved food security No. of hh with improved sources of livelihoods No. of hh with improved water and sanitation	***IFAD RIMS survey*** Outcome monitoring survey	Government policies and programmes and donor assistance continue to focus on the poorest and most vulnerable.
Purpose (project objective):			
Develop grass-roots organisations to improve access for poor people to primary resources and economic opportunities.	No. of *beel* users receiving increased fishing income (m/f) No. of *beels* with increased fish production No. of poor women getting increased income from fish ponds No. of households benefiting from improved road communications No. CO members with savings & using credit No. of CO members with increased agricultural and livestock production	Outcome monitoring survey Process monitoring	Service provision becomes more appropriate for risk-prone *haor* areas. Synergy among government and village organizations is enhanced and institutionalized.
Outputs/Deliverables			
1. Rural Infrastructure: Rural infrastructure schemes identified, constructed and maintained by beneficiaries on a demand-driven basis	Km of roads constructed and maintained No. of tubewells and other water supplies No. of CO members involved in construction, monitoring and maintenance No. of latrines constructed		LGED has sufficient capacity to implement projects effectively. Severe floods do not impact negatively on construction activities.
2. Fisheries Development: Fisheries production programme implemented	No. / area of waterbodies under community management No. of members of *beel* user groups (m/f) No. / area of leased ponds under control of poor women	Progress report	Severe flooding and/or other natural disasters do not severely disrupt or change local livelihood systems. DOF, DCC and UNO office and project staff coordinate effectively.
3. Crop and Livestock Development: Crop and livestock production programme implemented	No. of farmers with improved skills and knowledge No. of new technologies / crops / varieties introduced / disseminated	Progress reports	Effective coordination with DAE/DLS Research results are relevant to the target group's conditions.
4. Microfinance Savings and credit services component implemented	No. of COs managing credit and savings Repayments rates at least 95% Volume of credit disbursed Volume of savings Graduation / exit	Progress reports	Market trends and fluctuations do not adversely affect economic viability of on- and off-farm activities. Project staff are properly trained and motivated.
5. Institutional Support Establishment of grass-roots organisations, project management, including learning of lessons for policy and future projects	Project Management Unit offices operating at district and upazila levels. Project staff recruited and trained: Manuals prepared, M&E system developed and operating effectively	Progress reports	A close working relationship is established among the three types of institutions: government, SAPAP and VOs.
Activities (project components)			
1. Infrastructure development Establishment of IMC and PIC to manage infrastructure development. Construction of roads, water supply, latrines and multi-purpose centres.	**2. Fisheries development** Transfer of 300 *beels* to community management. Re-excavation and tree planting around *beels*. Re-excavation of fish ponds and leasing of ponds by women Studies on biodiversity, resource mapping and fish consumption.	**3.Crop and Livestock development** Training of farmers Contracting of research. Promotion of technology through demonstrations Dissemination of promotional material.	**4. Microfinance** Credit for on-and off-farm activities and fisheries Training of CO managers, presidents and auditors.	**5. Institutional Support** Establishment of PMU offices (district and 9 upazila offices) Recruitment of project staff and their training: Establishment of 3,000 COs and training of leaders and members.

Annex 2

Progress against Project Logframe Indicators (as of June 2014)

Narrative Summary	Variable Indicators	Target and Progress		Means of verification	Assumption
Goal	Indicators	Project Target	Cumulative Actual (%)		
Sustainable improvement in the livelihood and general quality of life of 135 000 poor households living in *haor* areas in Sunamganj	1.1 Reduced stunting of children	**10% reduced**	Chronic malnutrition – Baseline-2006 (56.7), Final-2014 (40.4) , Achieved-16.3%	RIMS Survey	Government policies and programmes and donor assistance continue to focus on the poorest and most vulnerable.
	Household asset index:				
	1.2 No. of households with increased assets	Electricity Baselie-2006 ,Final-2014 ((11.1%), 27.3%), Television (9.7%), (15.2%), Motorbike- (0.8%), (2.00%)		RIMS Survey	
	1.3 No. of women owning increased assets		Data on land ownership was not collected in the baseline	RIMS Survey	
	1.4 No. of hh with improved food security	Number of hungry experienced-Baseline-2006, Final -2014- none (27.6%), (30.7%), One- (40.6%), 37.9%), Two- (31.8%), (31.4%)		RIMS Survey	
	1.5 No. of hh with improved sources of livelihoods	90000	86737 (96%)	Member profile	
	1.6 No. of hh with improved water and sanitation	Water -90000 Sani -78406	Water: 77850 (87%) Sani : 78406 (100%)	Member profile/ Project performance report	
Purpose (project objective)					
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(96%) F: 2244 (94%) T: 9061 (95%)	Beel profile	Service provision becomes more appropriate for risk-prone *haor* areas. Synergy among government and village organisations is enhanced and institutionalised.
	2.2 No. of beels with increased fish production	300	250 (83%)	Beel profile	
	2.3 No. of poor women getting increased income from fish ponds/cage fish culture	284	284 (100%)	Project performance report	
	2.4 No. of households benefiting from improved road communications (from command villages)	92750	139342 (148%)	Project performance Report	
	2.5 No. CO members with savings & using credit	M-36000 F-54000 T-90000	M: 25194(70%) F: 61543 (114%) T : 86737 (96%)	CO credit monitoring report	
	2.6 No. of CO members with increased agricultural and livestock production	No target	M:17500 F: 52481 Total: 69981	Project performance (IGA) report	
Outputs/Deliverables					
Rural Infrastructure: Rural infrastructure schemes identified,	3.1 Km of roads constructed and maintained	335	352.56 (105%)		LGED has sufficient capacity to implement projects effectively.
	3.2 No. of tube-wells and other	2595	2595 (100%)	Project	

Narrative Summary	Variable Indicators	Target and Progress		Means of verification	Assumption
constructed and maintained by beneficiaries on a demand-driven basis	water supplies			performance report	Severe floods do not impact negatively on construction activities.
	3.3 No. of CO members involved in construction (cumulative)	M-27732 F-18488 T-46220	M: 36176 (130%) F :15793 (85%) T :52109 (113%)	Project performance report	
	3.4 No. of latrines constructed	78406	78406 (100%)	Project performance report	
Fisheries Development Fisheries production programme implemented	4.1 No. / area of water bodies under community management	300 nos 6500 acres	250 nos. (83%) 6015.53 acres (93%)	Beel profile	Severe flooding and/or other 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 (96 %) F : 2244 (94%) 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. (100%) 30.83 acres (100%)	Project performance report	
Crop and Livestock Development Crop and livestock production programme implemented	5.1 No. of farmers with improved skills and knowledge	M-20000 F-60000 T-80000	M: 19444 (97%) F :58313 (97) T: 77757 (97%)	Project performance report	Effective coordination with DAE/DLS Research results are relevant to the target group's conditions.
	5.2 No. of new technologies / crops / varieties introduced / disseminated	No target	115	Project performance report	
Microfinance Savings and credit services component implemented	6.1 No. of COs managing credit and savings	3000	2995 (100%)	CO credit monitoring report	Market trends and fluctuations do not adversely affect economic viability of on- and off-farm activities. Project staff are properly trained and motivated.
	6.2 No. of COs with repayments rates at least 95%	2651 Savings 1626 BKB	2651(100%) 1626 (100%)	Critical Indicator Monitoring	
	6.3 Volume of credit disbursed (LTk)	Savings-1268.27 Project-2270.66 T: 3538.93	S: 1268.84 (100%) P: 2274.52 (100%) T: 3543.36 (100%)	Project performance report	
	6.4 Volume of savings (LTk)	1213.81	1223.43 (101%)	Project performance report	
	6.5 No. of COs Graduated / exit	2995	2995 (100%)	Project performance report	
Institutional Support Establishment of grass-roots organisations, project management, including learning of lessons for policy and future projects	7.1 Project Management Unit offices operating at district and upazila levels.	11	11 (100%)		A close working relationship is established among concern institutions and grassroots people

Annex 3

Supervision, Follow-up and Support Mission

SI#	Date	Institution	Mission Purpose
1.	1-21 June,2014	IFAD	Project Completion Mission
2.	25 Sep- 07 Oct 2013	IFAD	Supervision Mission
3	6-18 Oct-2012	IFAD	Supervision Mission
4	14-20 Apr-2012	IFAD	Implementation support Mission
5.	7-21 Mar-2012	IFAD	M&E mupport Mission
6	11-26- Sep-2011	IFAD	Supervision Mission
7	19-26 Dec-2010	IFAD	Phase review follw-up Mission
8	11Jul-1st Aug -2010	IFAD	2nd phase review Mission
9	13-19 Mar-2010	IFAD	Implementation support Mission
10	10-17-Sep- 2009	IFAD	Follow-up Mission
11	Jan-2009	IFAD	Supervision Mission
12	June-2008	IFAD	Support Mission/ Follow-up Visit
13	Feb- 2008	IFAD	Supervision Mission
14	6-23 May-2007	IFAD	Follow-up Mission of MTR
15	Apr-2007	IFAD	MTR/ phase review Mission
16	11-27 July 2006	UNOPS	Supervision mission
17	26th Sep – 6th October 2005	UNOPS	Supervision mission
18	24th October – 8th November 2004	UNOPS	Supervision mission
19	5th – 15 Dec 2003	UNOPS	Supervision mission
20	13th – 19 Sep 2003	UNOPS	Supervision mission

Annex 4

Physical Progress Status

Component	Activities	Unit	Appraisal Target	Revised total Target	Achievement to date	Achievement against project total (%)
Infrastructure Development	No. of IMC formed	No	NT	335	423	126
	No. of LCS formed	No	NT	2311	5176	224
	IMC members trained	Member	NT	2345	3966	169
	LCS members trained	Member	NT	34665	77253	223
	No. of Tube-wells installed	No	1258	2595	2595	100
	SONO water filter distributed	Set	NT	NT	1261	
	Km of village road constructed	Km	125	350	352.152	101
	No. of village road constructed	No	125	350	496	142
	MVC constructed	No	50	29	29	100
	Village Protection wall	Km	NT	5.00	5.30	100
	Latrine installed	No	NT	78406	78406	100
Fisheries Development	No. of BUG formed	No	600	300	265	88
	No. of total BUG member enrolled	Member	19000	9500	9061	95
	No. of BUG women member enrolled	Member	4750	2375	2244	94
	No of Beel accessed	No	600	300	250	83
	Area of Beel accessed	Acres	NT	6500	6015.53	93
	Beel demarcated	No	600	300	118	39
	No. of Beel Developed	No	600	250	242	97
	Area of Beel Developed	Acres	NT	1300	1160.24	89
	No of Khal excavated/ re-excavated	No	10	63	64	100
	Area of Khal excavated /re-excavated	Km	10	63	63.95	101
	No. of pond excavated	No	1615	64	64	100
	Area of pond excavated	Acres	400	30.83	30.83	100
	No. of indigent woman involved	Member	8075	284	284	100
	Conservation campaign undertaken	No	NT	1200	1203	100
	Fish sanctuary established	No	NT	150	50	33
Agriculture and Livestock Production	No. of research trial Completed	No	128	287	287	100
	No of Demonstrations under taken	No	7380	7564	8168	108
	No of Village activist/advanced farmers trained	Member	6590	1432	1429	100
	No of vaccine campaign conducted	No	NT	1186	1211	102
	No of livestock/poultry vaccinated	No	NT	NT	314978	
	No of Agri. Infrastructure	No	NT	11	11	100

Component	Activities	Unit	Appraisal Target	Revised total Target	Achievement to date	Achievement against project total (%)
	constructed					
Microfinance	No. of total COs formed	No	4500	3000	2995	100
	No. of male COs formed	No	1800	1200	850	71
	No. of female COs formed	No	2700	1800	2145	119
	No of total members enrolled	Member	135000	90000	86737	96
	No of male members enrolled	Member	54000	36000	25194	70
	No of female members enrolled	Member	81000	54000	61543	114
	Total savings accumulated	LTk.	3341.25	1213.81	1223.43	101
	Total savings accumulated by male	LTk.	1336.50	485.52	361.30	74
	Total savings accumulated by female	LTk.	2004.75	728.29	862.13	118
	Value of loans extended from savings fund	LTk.	1670.63	1268.27	1268.84	100
	Value of loans extended to male from savings fund	LTk.	668.25	379.09	379.08	100
	Value of loans extended to female from savings fund	LTk.	1002.38	889.18	889.18	100
	No of CO receiving loans	No	4500	3000	2651	88
	No of members receiving loans	Member	18000	15000	20506	137
	% of loans recovered	%	100	100	100	100
	Value of loans extended from credit line	LTk.	12754.60	2270.66	2274.52	100
	Value of loans extended to male from credit line	LTk.	5101.84	732.24	733.74	100
	Value of loans extended to female from credit line	LTk.	7652.76	1538.42	1540.78	100
	No of CO receiving loans	No	4500	1626	1626	100
	No of members receiving loans	Member	86423	23960	23960	100
	% of loans recovered	%	100	100	100	100
	No of COs Graduation	No	NT	2985	2985	100

Annex 5

RIMS indicators

Period: 1 July 2013 to June 2014

Impact and Outcomes	Indicators (with global target if available)	Achievement (as per M&E data)	RIMS Rating	
			(by Project)	(by mission)
Impact level				
Overall Goal: Sustainable improvement in the livelihood and general quality of life of 90000 (revised from 135000 by MTR) poor households living in haor areas in Sunamganj.	% of stunting children reduced	Chronic malnutrition –Baseline-2006 (56.7), Final-2014 (40.4) , Achieved-16.3%		
	No. of HH with increased assets	Electricity Baselie-2006 ,Final-2014 ((11.1%), 27.3%), Television (9.7%), (15.2%), Motorbike- (0.8%), (2.00%)		
	No. of women owing increased assets	Data on land ownership was not collected in the baseline.		
	No. of HH with improved food security	Number of hungry experienced- Baseline-2006, Final -2014- none (27.6%), (30.7%), One- (40.6%), 37.9%), Two- (31.8%), (31.4%)		
	No. of HH with improved source of livelihood	86737 (96%)		
	No. of HH with improved water and sanitation	Water: 77850 (87%) Sani : 78406 (100%)		
Purpose (project objectives): Develop grass-roots organizations to improve access for poor people to primary resources and economic opportunities.	No. of beel users receiving increased fishing income (9500, revised)	9061(95%)	**6**	
	No. of beels with increased fish production (300, revised)	250(83%)	**5**	
	No. of poor women getting increased income from fish ponds/cage fish culture (284, revised)	284(100%)	**6**	
	No. of households benefiting from improved road communications (93940 revised - from command villages)	139342(148%)	**6**	
	No. of CO members with savings & using credit (90000 revised)	86737(96%)	**6**	
	No. of CO members with increased agricultural and livestock production (number not defined) only from Demo & Input support of Project.	69981	**6**	
Outcome level				
Component 1:Infrastructure Development	Rural infrastructure schemes identified, constructed and maintained by beneficiaries on a demand-driven basis	77850 HH has got access to improved sources of water by 2595 Nos tube well installed. From labour intensive rural infrastructure activities approximately 139342 HH benefited where 515250 man days generated & directly got benefit by involving labour intensive	**6**	

Period: 1 July 2013 to June 2014

Impact and Outcomes	Indicators (with global target if available)	Achievement (as per M&E data)	RIMS Rating	
			(by Project)	(by mission)
		work. During project duration almost 78406 HH received Sanitary latrine by which community people started using latrine and habituated with changing their previous traditional unhygienic open defecation. More than 3600 HH directly benefited from 21 Nos Village protection walls where people could save their house from Flood and their land property increased value by this Wall.		
Component 2: Fisheries Development	Fisheries production programme implemented	9061 Nos. (95%) of fishermen trained adopt recommended technologies, 9061 Nos (95%) of fishermen component beneficiary households report increased income from adopting production models or technologies, 250 No. (83%) of BUGs operational after 3 years by Project-support.	**6**	
Component 3: Agriculture and Livestock	Crops and livestock production programme implemented	77757 Nos. (97%) of farmers trained & adopt recommended technologies, 69981 nos (90%) of component beneficiary households report increased income from adopting production models or technologies, 115 nos (100%) of project-support technical support services operational after 3 years	6	
Component 4: Micro Credit	Savings and credit service programme implemented	96 nos.(3%) of CO operational after component exit/ Graduation .	6	
Component 5: Institutional Development:	Establishment of grass-roots organizations, project management, including learning of lessons for policy and future projects	2995 CO formed and 100% of the CO already graduated. 265 BUG formed and functioning. Community based fisheries management system established to ensure access of poor people in Natural resources in project area. Block road technology & implementation by LCS adopted in rural communication Development. From the learning of the existing project Block road technology, LCS model of implementation, CBFM system and also technology in Ag. & LS are adopted for up scaling in Haor Infrastructure and Livelihood improvement Project(HILIP)	**6**	

Annex 6

Disbursement by Components

As on30 June2014

(USD '000)

Component	Revised Budget	Total Expenses	IFAD		Govt		Ben	
				%		%		%
Infrastructure development	18059.55	18059.55	14073.20	100.00	3368.15	100%	618.20	100%
Fisheries development	3769.20	3769.20	3749.50	100.00			19.70	100%
Agriculture & Livestock development	1510.86	1510.86	1510.86	100.00			-	-
Micro credit	1709.96	1709.96	1709.96	100.00			-	-
Institutional development	6805.85	6797.91	6489.19	100.00	308.72	99%	-	-
	31855.43	31847.49	27532.72	100.00	3676.87	100%	637.90	100%

Annex 7

Disbursement by Categories

As on 30 June 2014

Table 3C IFAD Loan disbursements (SDR, as at 30-06 14						
Category	Category description	Original allocation	Revised allocation	Total (up to WA 100)	Balance	Disbursement %
	Initial advance					
I	Earth and Civil Works	5500000	9,300,000	10,365,952.33	(1,065,952.33)	111.46%
II	Equipment and Materials	335000	190,000	156,701.13	33,298.87	82.47%
III	Vehicles	265000	270,000	220,310.62	49,689.38	81.60%
IV	Technicla Assistance, Training and Studies	2160000	2,670,000	2,442,360.52	227,639.48	91.47%
V	Credit	2315000	930,000	900,170.53	29,829.47	96.79%
VI(a)	(a) Salaris and Allowiances	2295000	3,320,000	2,356,908.63	963,091.37	70.99%
VI(b)	(b) Operating Costs	680000	870,000	774,048.60	95,951.40	88.97%
	Phase III	3025000		0	-	
	Unallocated	975000		0	-	
	Total	17550000	17550000	17,216,452.36	333,547.64	98.10%

Annex 8

Results of project assessment by stakeholders, CBRMP-LGED

The key success factors of the project

- Participatory approach in planning and implementation of project
- Effective targeting for identifying fishers/farmer considering set criteria
- Ensuring women involvement all intervention of the project specially beel management
- Undertaking group approach and regular support in capacity building of the group
- Need based training for alternative livelihoods
- Good leadership in project management
- Strong staff commitment and integrity
- Effective partnership
- Community based beel fisheries approach
- Introducing new and improved technologies
- Introducing village vaccinator for livestock and poultry
- Appropriate innovations such as block road building, Village protection wall, Buried pipe based irrigation, submersible dam and community based fisheries management

What should have been done, but did not undertaken

- Building federation of groups for institutional sustainability
- Initiating community health and literacy programme
- Improving market infrastructure
- Working to improved participation of poor producer in value chain
- More village protection wall
- Fish culture
- Extended project period for intervening other areas in same name and activities

Key lessons

- Effective group management
- Introducing LCS at different community based work, other than road
- Effective mass vaccination programme in collaboration with line department
- Ensuring governance introducing participatory audit
- Community based water resource management
- Need based training for alternative livelihoods
- Participatory research and technology dissemination

What to do for sustainability

- Building federation of the group
- Ensuring continuous support to community through service sectors/line-departments after project end
- Ensuring scope of maintenance of the infrastructure built by the project
- Ensuring recognition of the BUG and given them long-term access to beel
- An effective cost-recovery system in participation of the community for maintenance of project work

Overall assessment by project stakeholders

Level	Not satisfactory		Moderately satisfactory		Satisfactory		Very satisfactory	
	Person	%	Person	%	Person	%	Person	%
District	0	0	0	0	29	52	27	48
Upazila	0	0	8	7	50	41	65	53

Annex 9

Sunamganj Community Based Resource Management Project (SCBRMP)
Audit log year 2002-2003 to 2012-2013
Table of Summary of Audit Observations

SL No	Financial Year	Audit observations as per Audit Report		Audit observations Settled		Audit observations Outstanding	
1	2002-03	5	4605667.00	5	4605667.00	0	0.00
2	2003-04	4	9213000.00	4	9213000.00	0	0.00
3	2004-05	5	40288920.00	5	40288920.00	0	0.00
4	2005-06	4	3416669.00	4	3416669.00	0	0.00
5	2006-07	6	55365998.00	6	55365998.00	0	0.00
6	2007-08	6	6119626.00	6	6119626.00	0	0.00
7	2008-09	8	11941995.00	8	11941995.00	0	0.00
8	2009-10	4	1947658.00	4	1947658.00	0	0.00
9	2010-11	3	4881735.00	3	4881735.00	0	0.00
10	2011-12	5	86324080.00	5	86324080.00	0	0.00
11	2012-13	2	3357024.00	2	3357024.00	0	0.00
	Total	52	227462372.00	52	227462372.00	0	0.00