

Char Development and Settlement Project Phase IV Bangladesh

Progress Report No 13

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Government of Bangladesh / IFAD / Government of the Netherlands

Implementing Government Agencies:

- Bangladesh Water Development Board (BWDB)
- Ministry of Land (MoL)
- Local Government Engineering Department (LGED)
- Department of Public Health Engineering (DPHE)
- Department of Agriculture Extension (DAE)
- Forest Department (FD)

and NGOs

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List of Abbreviations/ Glossary

ADP	Annual Development Plan
AE	Assistant Engineer
AEO	Assistant Extension Officer
<i>Aman</i>	Monsoon season rice
<i>Bahini</i>	Armed gang
BC	Bitumen Carpeted
<i>Boro</i>	Winter season rice
BWDB	Bangladesh Water Development Board
CDS	Coastal Development Strategy
CDSP	Char Development and Settlement Project
DAE	Department of Agriculture Extension
DG	Director General
DC	Deputy Commissioner
DPC	Deputy Project Coordinator
DPHE	Department of Public Health Engineering
DPP	Development Project Pro forma
DTL	Deputy Team Leader
EKN	Embassy of the Kingdom of the Netherlands
EMG	Embankment Maintenance Group
FE	Field Engineer
FF	Farmers Forum
FO	Field Officer
<i>Ghat</i>	Landing place for boats
GMC	Group Management Committee
HBB	Herring bone bond
HFPF	Health and Family Planning Facilitator
ICS	Improved Cooking Stove
ICZM	Integrated Coastal Zone Management
IFAD	International Fund for Agricultural Development
IMED	Implementation Monitoring and Evaluation Division
IRRI	International Rice Research Institute
<i>Jamabandi</i>	Settlement case
<i>Jotdar</i>	Powerful person having big agricultural farm
KAP	Knowledge Attitude Practice
<i>Khabuliyat</i>	Deed of agreement
<i>Khal</i>	Canal, creek
<i>Khas</i>	Government owned land
<i>Khatian</i>	Record of right
<i>Killa</i>	Earthen raised field, used as shelter for cattle
LADC	Local Area Development Committee
LCS	Labour Contracting Society
LGED	Local Government Engineering Department
LGI	Local Government Institution
<i>Madrassa</i>	Religious school
MoL	Ministry of Land
<i>Mouza</i>	Small geographical unit

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MRA	Micro finance Regulatory Authority
NGO	Non-Governmental Organization
O&M	Operation and Maintenance
PA	Project Agriculturist
PC	Project Coordinator
PCD	Project Coordinating Director
PD	Project Director
PIM	Project Implementation Manual
PMC	Project Management Committee
PP	Project Pro-forma
PSF	Pond with Sand Filter
PTO	Project Technical Officer
PTPS	Plot To Plot Survey
PWD Datum	Public Works Department Datum (local topographical level)
(S) QCE	(Senior) Quality Control Engineer
QC team	TA Quality Control team
<i>Rabi</i>	Crop season from November/ December to March
RDC	Revenue Deputy Collector
RDPP	Revised Development Project Pro-forma
RFLDC	Regional Fisheries & Livestock Development Component (former DANIDA funded Project)
RIMS	Result and Impact Monitoring Survey
RMG	Road Maintenance Group
RPA	Reimbursable Project Aid
<i>Samaj</i>	Local community
SAE	Sub assistant Engineer
SDE	Sub divisional Engineer
SE	Superintendent Engineer
SFG	Social Forestry Group
SO	Sectional Officer
SLS	Social and Livelihood Support
TA	Technical Assistance
TBA	Traditional Birth Attendant
TL	Team Leader
ToT	Training of Trainers
TUG	Tube Well User Group
UP	<i>Union Parishad</i>
<i>Upazila</i>	Sub-district
WARPO	Water Resources Planning Organisation
WBM	Water Based Macadam
WMA	Water Management Association
WMF	Water Management Federation
WMG	Water Management Group
WMO	Water Management Organization
XEN	Executive Engineer
XO	Extension Overseer

1. Introduction

The fourth phase of the Char Development and Settlement Project, CDSP IV, started on 1 March 2011, with the mobilisation of the TA team. The financing agreement between IFAD and the Government of Bangladesh was signed in Rome on 9 May 2011, while the Administrative Arrangement between the Netherlands and Bangladesh was signed in Dhaka on 4 January 2012. The Inception Report of CDSP IV was submitted to the Embassy of the Kingdom of the Netherlands (EKN) and IFAD on 31 May 2011. The Inception Report serves as the Project Document, alongside the DPPs of the six project implementing agencies, which provide detailed information on the project. The Annual Work Plan and Budget 2017 – 2018 was submitted to EKN and IFAD in May 2017, and approved subsequently. The arrangement between GoN and IFAD regarding CDSP IV was amended in December to align the GoN contribution with the IFAD project implementation period till 31 December 2018. The TA contract between GoN and consultants was extended accordingly till 31 December 2018, with staffing reduced to those essential for project completion.

The focus of the activities of CDSP IV is on the development of five new chars: Char Nangulia, Noler Char and Caring Char (these three chars are contiguous to each other); Urir Char and Char Ziauddin. The total extent of these chars is now around 25,000 ha, with an estimated population of 170,000 in 29,000 households. The six components of the project are: protection from climate change; climate change resilient infrastructure and water supply and sanitation; land settlement and titling; livelihood support; institutional development; studies and surveys. The project continues support for CDSP I, II and III areas with Operation and Maintenance activities and land settlement (in particular in Boyer Char). It also looks to the future by conducting feasibility studies in areas where future char development programs might be undertaken.

Second Revision of DPPs of all six Implementing Agencies to cover the extended project period is completed, except for DAE: The Ministry of Agriculture did not agree to extend the project period for DAE.

Main activities and achievements during this half year reporting period were the completion of infrastructure development and other works as planned under the AWPB 2016 – 2017, in particular executing the major part of the remaining works.

For a table wise overview of overall project achievements and financial progress and planning, expenditure – and component wise, please refer to **Annex 4**, which presents the IFAD format.

After this introductory chapter, the present Progress Report No 13 deals in succession with the objectives of CDSP IV (next chapter) and the project areas and population (in Chapter 3). Chapter 4 gives an overview of the project activities during the reporting period, grouped under the six project components. Chapter 5 is on the project organization. The project finances are in Chapter 6. The concluding Chapter 7 pays attention to the risks facing the project and its manifestation during the reporting period.

2. Objectives of CDSP IV

The Logical Framework (see **Annex 1**) gives a clear indication of the objectives of CDSP IV at three levels: goal (or long term development objective), purpose (as intermediate objective between interventions and goal) and outputs (direct result of interventions).

The **overall objective** of the project is to reduce poverty and hunger for poor people living on newly accreted coastal chars, which will be achieved via improved and more secure livelihoods. The **purpose** is therefore to improve and enhance the security of the livelihoods of the settlers in the project areas. This applies in particular for the 29,000 households in the CDSP IV project areas. The purpose would be achieved through the following **outputs**:

- effective management of water resources, protection against tidal and storm surges, improved drainage;
- climate resilient internal infrastructure for communication, markets, cyclone shelters, provision of potable water and hygienic sanitation;
- provision to the settlers of a legal title to land;
- improved livelihoods and household resilience;
- institutional development in order to create an enabling institutional environment;
- knowledge management through undertaking and disseminating surveys and studies and by learning from and contributing to Integrated Coastal Zone Management (ICZM) efforts.

The objectives at output level directly follow the results of the actual project activities and do indeed address the major problems that exist in the chars. Major challenges can, in substance, be addressed independently from each other to a large extent. There are however interconnections at a practical level. For example, the number and size of bridges and culverts (part of output “climate resilient infrastructure”) have a direct bearing on the water management in the area concerned (output “water resources managed effectively”). Having a title to the land that a family occupies (output “secure land titles”), will substantially contribute to their socio-economic position and capability to cope with the vulnerabilities in the chars (output “improved livelihoods and household resilience”). And all these four outputs feed, for a large part via the Monitoring and Evaluation system, into the output “knowledge management and into lessons for ICZM”, and vice versa.

3. Project areas and population

3.1 Introduction

As stated in Chapter 1, the focus of the activities of CDSP IV is on five chars. The total area of these chars was estimated by the 2008 feasibility study to be about 30,000 ha, but recent calculations of the land lost to erosion has reduced this to about 25,500 ha. At the time of project design in 2009 the population of the five chars was estimated to be around 155,000 in 28,000 households. Consultations with WMG has now updated this to 29,000 households with 171,000 people (household size as per mid-term RIMS survey of 2014).

Table 3 - 1 Coverage of area and population

Char	Area hectares		Population estimate in 2009		Updated estimate 2017	
	2008	2017	Households	Population	Households	Population
Nangulia	8,990	8,530	12,000	67,000	15,113	89,167
Noler	2,690	2,560	6,000	33,000	6,152	36,297
Caring	6,850	2,200	6,000	33,000	2,638	15,564
Ziauddin	1,943	1,943	2,000	11,000	2,380	14,042
Urir	10,300	10,300	2,000*	11,000	2,725	16,078
Total	30,773	25,533	28,000	155,000	29,008	171,147

* For Urir Char, population as per survey of 2008

CDSP IV also continues attention for CDSP I, II and III areas. The main subject of this attention is Operation and Maintenance (O&M) of infrastructure involving WMGs. For the CDSP III area (Boyer Char), considerable efforts have still to be directed to the completion of the land settlement program. **Annex 2** provides an overview map of all CDSP IV areas.

3.1 Char Nangulia, Noler Char, Caring Char

The area consists of the following three main chars:

- Char Nangulia, with an area of about 8,530 ha (21,325 acres) and an estimated population of 89,000 in 15,000 households;
- Noler Char of about 2,560 ha (6,400 acres) and a population of approximately 36,000 in 6,000 households;
- Caring Char of about 2,200 ha (880 acres), with around 15,500 people in roughly 2,600 households.

The total area amounts to 13,290 ha (33,225 acres) with a current population of about 141,000 in 24,000 households. Nangulia and Noler Chars appeared around the 1970's. Present land levels for Char Nangulia are between 2.75 and 4.75 m PWD and for Noler Char between 2.25 and 3.75 m PWD. Caring Char appeared later and is less developed and inhabited (land levels between 2.00 m and 4.00 m PWD). Nangulia and Noler chars are next to each other, only separated by the Mamur Khal. To the south of these two chars is Caring Char, only separated from them by the Caring - and Mamur Khals. Nangulia Char is further bordered by polders 59/3B and Char Majid (in the north and west) and by a developing, yet to be named, char. Noler Char is further bordered by the Hatiya river in the west (with on the other side Boyer Char), the Meghna River in the southwest and by Caring Khal in the south and southeast, at the other side of which is Caring Char. Caring Char is for a greater part still an emerging char in the Meghna River, by which it is bordered in the south and east sides.

All three chars are located within Noakhali District. The whole area is part of two Upazilas (Subarnachar and Hatiya) and of three Unions (Char Clerk of Subarnachar Upazila, and Chanandi and Mohammadpur of Hatia Upazila).

3.2 Urir Char

In the Meghna Estuary, erosion and accretion along the boundaries of the chars or islands are very common morphological processes. Urir Char is a perfect example. Since its emergence in the early 1970s, Urir Char has shown a very dynamic character and developed through erosion, accretion and shifting of several kilometres. During the last 35 years the landmass of Urir Char increased from 12 km² to 100 km². At the same time the char shifted about 8 kilometres towards the north.

The land levels in Urir Char vary from 3.67 m to 4.78 m PWD in the north to south direction and from 3.85 m to 4.03 m PWD in the east to west direction. Average land level can be taken as 4.08 m PWD. The total land area of Urir Char including fallow and muddy land is about 10,824 ha (around 33,000 acres) of which about 36.8 % has been brought under cultivation. About 48.7 % of the area is fallow and muddy land. At present the fallow lands are partially used for grazing. Mangrove forestland has been developed and is occupying 7.8% of the total area. The estimated total population is 16,500, distributed over 2,725 households.

There are two parts of the area broadly known as “Urir Char”. One part falls under Urir Char Union of Sandwip Upazila of Chittagong District, comprising an area of approximately 21,694 acres (*mouzas*: Char Lakshmi, Piadogi, Shamaserabad and Char Badu). Another part of 10,760 acres is located in Char Elahi Union of Companiganj Upazila under Noakhali District (*mouzas*: Char Umed, Char Rahman, Char Balua and Char Gazi Mijan).

3.3 Char Ziauddin

Char Ziauddin accretion was started in 1970 and people started living there in 2001. It is named after a district magistrate. The char is under the jurisdiction of Char Jubilee Union. The char is located west of Char Mora Dona near Boyer Char, in the southwest corner of Subarnachar Upazila under Noakhali District. Boyer Char lies to the south, CBD-1 to the north and the Baggardona River to the west. The area is on an average about 5 km in length and 3 km wide approximately. Present land levels vary from 3.20 m to 3.71 m PWD.

Settlers of Char Ziauddin mainly came from Ramgati (50%), South Hatia (25%) and the mainland (25%). The estimated total population is 14,000 and the number of households 2,380. However, some new squatters (around 200 households) have moved in and are occupying the Matua and Elahi’s fish project in this char. According to the survey and information from Department of Forest, the size of the area is 1,943 hectares (4,799 acres). The settlers occupied 2,114 acres land without official title. Six big fishery projects occupy approximately 1,000 acres. Of these six, the two biggest projects each occupy 300 acres.

4. Implementation status per component

4.1 Introduction

This chapter gives an overview of the status of project interventions on 30th June 2017. It sums up the activities that have taken place during the reporting period, grouped under the six project components: protection from climate change (4.2), climate resilient infrastructure and water supply and sanitation (4.3), land settlement and titling (4.4), livelihood support (4.5), institutional development (4.6) and knowledge management (4.7).

4.2 Protection from climate change

This component concerns construction of water management infrastructure in CDSP IV by the Bangladesh Water Development Board (BWDB) for protection from climate change, consisting of embankments, drainage sluices, drainage channels (khals) and closures. Also, provisions are made for buildings for Water Management Groups (WMGs) and for maintenance of water management infrastructure in CDSP I, II and III areas, and for maintenance during construction in CDSP IV areas.

In addition, this component concerns social forestry activities by the Forestry Department (FD), including establishment of shelter belts to protect chars from storms and cyclones (see 4.2.2).

4.2.1 Construction of water management infrastructure by BWDB

For a complete overview of BWDB activities reference is made to the Inception Report paragraph 4.2.1. Up to 30th June 2014, construction work was completed for all of the sea facing embankment (16.762 km) both in Char Nangulia and Noler Char. But during the past few years the sea dyke from the Mamur khal outlet in the direction of sluice DS-2 has been eroded over a length of 10 km by a transverse current of the Hatiya/Sandwip Channel; bank erosion is also severe along the Meghna river bank at Caring Char and Noler Char. To construct a retired sea facing embankment safely, the alignment of the embankment has been shifted inside the polder, both at Nangulia and Noler Char; consequently, the embankment length increased from the original length of 16.762 km to 32.28 km, which was proposed in RDPP-2. A second revision of Development Project Proforma (DPP) was approved by the Planning, and concerned, Ministries, including the extension of the project to the end of 2018, as suggested by the Mid Term Review (MTR) of March 2015. Construction work started on 3.5 km of retired dyke at Noler Char and 9.5 km at Char Nangulia out of a new target of 23.78 km; overall 70% progress has now been achieved. Construction for carried over work from 2016-17 and new construction of 4.0 km are expected to be started by November 2017 and completed by June 2018.

Interior dyke construction (31.3 km) is completed for all sections at Char Nangulia, Noler Char and at Char Ziauddin.

Construction work of dwarf embankment at Noler Char is completed, but the dwarf embankment construction along the retired dyke (borrow-pit khal) is required at Noler Char for making a separate hydrological polder and may be constructed from GoB maintenance funds.

For an overview of progress and planning of works under BWDB, see **Annex 3**, Table 1. For a summary of achievements and financial progress and planning of the same, see **Annex 4**, Table A1, which presents the IFAD format.

Up to 30th June 2017 overall physical progress in BWDB activities was 90%, against 86% planned. A major change was made in quantity and budgeted amounts in RDPP2.

Monitoring of coastal erosion along Meghna River East bank and Hatiya /Sandwip Channel

In December 2013 the Institute of Water Modelling (IWM) completed their Assessment of Erosion Vulnerability of the East Bank of Meghna River; the study recommended a relocation of DS-3, which was done accordingly. The study also gave an indication of the stability and rate of erosion of the coast from Jarirdona River in the north along Boyer Char and Noler Char up to Caring Char in the south. As a follow up to the erosion study and in line with discussions and advice of the 2014 Supervision Mission, TA Project Engineers have installed benchmarks along the coast line of the project for regular monitoring of the erosion. The latest measurement was taken late in May 2017 and it was found that present erosion is still alarming from the location of Chatla khal sluice at Boyer Char to the north-east of drainage sluice DS-2 and in the meantime sluice DS-2 is engulfed. Erosion is also still alarming along the full periphery of Caring Char. Erosion at sluice Gabtali in Boyer Char has reduced significantly.

Average erosion at **Boyer Char** during the last five months was found to be about 7.5 m with maximum 14 m near Chatla sluice at the south part of the polder and at Gabtoli sluice erosion during last five months was 11 m at North side and 1 m at South side where average erosion per year is 23 m.

Average **Noler Char** erosion during the last five months was found to be about 64 m, with maximum 153 m at Killa Bazar. Erosion at Musapur Mosque, close to proposed DS-3 was 27 m. The Forest Department (FD) has already completed dyke plantation here, and plantation is completed close to sluice DS-3 and at the mouth of Hatiya River.

At **Caring Char**: Since measurement started in September 2014 up to late May 2017 total erosion at sluice DS-1 is 699m; in the last five months, it was 68m. At the southern part near Bathankhali ghat it is 999 m in total and 195m during the last five months. At the eastern side near Gour Nitai Mondir road it is 1,957m in total. The Forest Department constructed an earthen dyke for foreshore protection on the river side of DS-1 enclosing 15 ha including plantation. The envisaged construction sites of cyclone shelters in the southern part of Caring Char have been relocated further away from the coastline, but because of the severe recent erosion three cyclone shelters at Bathankhali Bazar, Dhanshiri Samaj and Gour Nitai Mondir became vulnerable. However, the decision was taken not to stop construction work as more than 90% of work is completed and local people can get refuge during cyclones until these structures are engulfed.

In an unexpected development from monsoon July/August 2014 onwards at **Char Nangulia**, at the coastal stretch from sluice DS-2 to Bashar Bazar, more than 10 km length of foreshore and embankment has been immersed in the Hatya/Sandwip Channel. The most likely cause of this severe erosion is the formation of a new char in the Hatya/Sandwip Channel in front of this location, diverting the river flow towards the bank. A revised alignment for construction of a retired embankment was adopted for the eroded part of the embankment. Further development of the erosion is closely monitored by the project. Since measurement started in September 2014 up to late May 2017 the average erosion was 605 m per year, with a maximum of 1,007m in total at Sluice DS-2, which was engulfed by the river in August 2016. Average erosion in the last five months was 46 m.

Construction of peripheral embankment

Construction work was completed for the full RDPP-1 mentioned length of 16.762 km (12.22 km at Char Nangulia and 4.542 km at Noler Char) of sea facing embankment along the Meghna River and Hatya/Sandwip Channel by June 2014. But due to Sandwip Channel erosion and shifting of the alignment to a safer place, the total length of sea dyke increased to 32.28 km (Char Nangulia: 23.78 km and Noler Char: 8.50km). During the reporting period construction was started for 11.30 km of retired sea dyke in 9 packages at Char Nangulia and Noler Char. Work already started and has achieved 75% physical progress up to end of June 2017.

Construction work is completed for the length of 19.585 km interior dyke (13.828 km in Char Nangulia and 8.76 km in Noler Char) as per RDPP-1/ RDPP-2 planning along the eastern bank of the Hatiya River, southern bank of Caring khal and at the northeast side of Char Nangulia.

Physical work is complete for 8.73 km in five schemes for retired dyke at Char Ziauddin proposed along Jarirdona and Baggardona River in Char Ziauddin and Boyer Char as per RDPP-2.

Overall physical progress achieved for Interior dyke up to 30th June 2017 was 95% against planned 96%.

Construction of dwarf embankment

Construction work of 13.88 km of dwarf embankment stated in RDPP along Caring khal and Mamur khal in Noler Char is already completed in full length. A few portions may be reconstructed along the retired dyke opposite the borrow pit khal, which will be done from GoB maintenance funds of the project in FY 2017 - 2018.

Construction of drainage sluices

DS-1 (10v-1.5x1.8m) over Caring khal for Char Nangulia: Construction work was completed including gate fabrication and installation by June 2015, the sluice is now functioning since May 2017 draining the Char Nangulia water through Mamur khal -2/Caring khal and the borrow-pit khal via Noler Char.

Sluice DS-2 (5v-1.5x1.8m) over Katakhal khal-2 at Char Nangulia: Construction work was completed including gate installation by June 2015 and it was opened before monsoon in 2015. By this sluice drainage congestion and salinity intrusion were fully controlled at Katakhal khal -1 catchment area. But due to severe erosion of Sandwip channel the structure was lost in the 2016 monsoon.

Sluice DS-3 (7v-1.5x1.8m) over Hoar khal-1 at Noler Char: Construction work started last year and achieved 90% physical progress including flap gate installation and opened in June 2017. The structure was shifted to a safe place against Meghna river erosion as per instruction of IFAD MTR Mission in March 2015. 100% construction work will be completed by February 2018.

3 Sluices over Dighir khal, Mutuki khal and Baggard khal at Char Ziauddin: Construction work was completed including gate fabrication and installation by June 2015. The sluices are functioning well.

Overall physical progress for all 6 sluices is 97%.

Construction of closures

Construction work was completed for Mamur khal-1 closure at Char Nangulia in FY 2012 - 2013. Construction of closure over Katakhal khal-2 was completed within the contract of sluice DS-2 in May 2015. Closure over Millon khal at Noler Char was completed in May 2016.

BWDB reviewed the location of Mamur khal-2 closure following the recommended option of IFAD MTR Mission, as the river bank erosion at Char Nangulia and Caring Char is very severe. Design, estimate and tender procedure for the closure over Mamur khal-2, the closure over Caring khal in Char Nangulia and 2 closures over Hoar khal-1 & 2 at Noler Char were completed and a work order issued by December 2016. Physical work started in January 2017 and was completed by June 2017. As per recommendation of IFAD Supervision Mission held during the period 17-23 March a second closure was constructed at 400 m inside the closure over Hoar khal-2 as the first was threatened by the Meghna river bank erosion.

Initial excavation and final re-excavation of drainage khals

In RDPP-2 there is a program for 145 km initial excavation of drainage khals in the 5 chars. On a priority basis in relation to drainage congestion, initial excavation is going on. Up to 30th June 2017, initial excavation of drainage khals was completed for 59 km including major Nangulia khal and Bhuiyar khal at Char Nangulia, 37 km at Noler Char including the major Millon khal, Hoar khals 1 & 2, Adarsha khal, Masjid khal etc. 18.5 km at Char Ziauddin, 1.85 km at Caring Char and 10.0km in Urir Char, in total 127 km, has been completed.

Overall physical progress is 85% against planned 91%. During the reporting period, initial excavation was completed for Nangulia khal 14 km, Bhuiyar khal 4 km, Bhuiyar branch khal 6 km in Char Nangulia, Hoar khal-2 with link khal at Noler Char and 10.00 km at Urir Char.

Re-excavation of drainage khals of 12.00 km in Noler Char, as mentioned in RDPP-2, will be started when initial excavation will be mostly completed, i.e. to remove silt in the 2nd stage, if required.

Construction of WMG Centre Buildings

In RDPP 2 there is provision for 24 WMG centres. Construction work is completed for 11 WMG Centres at Char Nangulia, 3 at Noler Char, 2 at Urir Char and 2 at Char Ziauddin by WMGs as Labour Contracting Societies (LCSS).

During the reporting period construction started for 2 at Noler Char and 3 at Caring Char and achieved 19% physical progress. Overall physical progress is 82%.

Acquisition/ purchase of land and landed properties or assets

In total 376.58 acres are included in the land plan proposal which has been submitted to the Deputy Commissioner's (DC's) office along Jarirdona khal in Char Ziauddin and at Boyer Char and for retired dyke at Noler Char and Char Nangulia. The process is still ongoing and the experience shows that it will not hamper the implementation program.

Rehabilitation of affected households

Selection and listing of affected households during construction of embankment and sluices were done and 92 families have already received compensation. All processing is completed for 16 more families and expected to be done by December 2017. During the ongoing construction of retired dyke at Noler Char and Char Nangulia there is less possibility of this type of compensation as most of the construction will be done on acquired land and compensation is included with acquisition. Until today, 28% of the target of 384 acres has been fulfilled and there is limited possibility of increasing this amount. However, the budget will be there if it is required.

O&M of infrastructure of CDSP I, II, III & IV areas

Since inception, maintenance work has been completed of Tk.925.74 lakh for the maintenance of sluices, embankments and drainage khals in the CDSP old areas under CDSP IV (Sluices: Tk. 303.64 lakh, embankments: Tk. 417.49 lakh and re-excavation of khals/channels: Tk. 204.61 lakh). During the reporting period maintenance work was completed for Tk. 280.15 lakh for the re-sectioning of embankment and re-excavation of khals in CDSP old areas. BWDB officers' quarter maintenance, contract amount Tk. 60 lakh is completed by June 2017 under the item Maintenance during Construction Period

Maintenance of Gabtali sluice

Protective work of Gabtali sluice up-stream and down-stream diversion canals was completed from CDSP-IV maintenance fund at cost Tk. 269 lakh since March 2014 and protection from erosion of the Meghna left bank at the mouth of the outlet channel of Gabtali sluice was completed by June 2015 for a contract amount of Tk. 597 lakh, from the GoB Climate Change Trust Fund (CCTF), providing concrete block placement and dumping. The erosion rate at the outlet of the Gabtali sluice along the Meghna left bank is no longer alarming.

4.2.2 Social forestry by Forest Department

The Forest Department is responsible for all plantation activities, except on homesteads. NGOs look after homestead forestry and provide support to private nurseries. Training is organized for staff of the Forest Department, NGOs, SFGs, WMGs, Local Government Institutions and others. Also, information and awareness campaigns are organized under the social forestry program. For an overview of achievements and financial progress and planning by FD, see **Annex 4**, Table A2, which presents the IFAD format.

By following the Social Forestry approach, the settlers are involved in planning and implementation. Through a benefit sharing agreement, the forestry component of CDSP IV has a poverty reduction impact as well. During the reporting period, the Social Forestry Adviser and the Social Forestry Coordinators jointly with the FD personnel contributed to the implementation of AWPB 2016 - 2017.

Formation of groups for social forestry

At the core of the social forestry approach is the Social Forestry Groups (SFG). Such groups are formed for every 2 km of roadside plantation, 1-1.5 km of embankment plantation, 1 km of canal plantation, 10 ha of foreshore plantation and 25 ha of mangrove plantation. Each group has about 20-25 members, with roughly 70% men and 30% women. The formation itself is implemented by a team consisting of staff of the Forest Department. Before the formation of SFGs is taken up, the population of the different chars is informed about the social forestry program through mass meetings and motivational workshops.

In the reporting period 168 meetings have been organized in Char Nangulia, Nolerchar, Caring Char, Musapur and in Char Ziauddin to introduce the social forestry approach and explain about plantation activities, the modalities of the program and the roles and responsibilities of the different parties, including the beneficiaries themselves. During the reporting period 84 SFGs have been formed following the approved format in consultation with local people, NGOs, field staff of the Forest Department and the TA team. The cumulative number of SFGs up to 30 June 2017 is 568.

Land lease and benefit sharing workshop

On the basis of the number of SFGs formed land lease and benefit sharing agreement workshops are conducted. The process of establishing such agreements between the Forest Department, land owning agencies (for instance Ministry of Land, LGED, BWDB), the SFGs, the Union Parishad and, if applicable, the community based organization as WMOs, is taken care of. For the long-term sustainability and successful implementation of the social forestry plantation program, the appropriate and proper sharing of benefits among the stakeholders is essential. The agreements create a sense of ownership and ensure the rights on government land and usufruct rights on trees and produces that will be derived from the plantation programs, both in the short and in the long run. In addition, they stipulate the plantation activities, the modalities of protection, maintenance, management and harvesting.

During the reporting period 42 SFGs (1,050 members) have received tri-party signed agreements and the cumulative number of agreements received by SFGs is 421 out of 468.

Establishment of nurseries

For all kinds of plantations, the Forest Department is ensuring quality seedlings from their own existing nurseries, from newly established nurseries or from other sources. Nurseries have been established at various locations for 650 ha mangrove plantations in Char Akram and Char Nur Islam. In these nurseries, around 3,250 seed beds have been raised, the seed bed size is 40 ft x 4 ft. Also soil collection and preparation has been done for raising seedlings for non-mangrove species in polythene bags. Seedbeds have been raised for non-mangrove species in bags for 6 km roadside, 14 km embankment-, 110 ha foreshore, 30 km canal, 5 ha non-mangrove block , 10 killa and 2 institutional plantations.

Road, non-mangrove block, canal, institutional and killa plantations

As per 2nd RADP, the FD had a plan for 6 km roadside, 14 km embankment, 05 ha non-mangrove block, 30 km canal-, 2 institutional and 10 killa plantations in 2016 - 2017. In the reporting period, all plantation works has been done.

Foreshore plantations

In this year 110 ha (Noler char 15 ha, Nangulia 40 ha and Musapur 55 ha) of foreshore plantation was planned. Before tendering for making the dykes, FD discussed the issue with the local leaders and in the District Coordination Meeting, which was presided by the DC. PD, FD issued a letter to DC for land requisition. FD floated a tender for 110 ha dyke construction. All dyke construction for foreshore and plantation has been completed in the reporting period. Under the rehabilitation program, a total of 33 households (Noler char-19, Caring-6 and Nangulia-8) living in the foreshore areas were provided with house shifting costs in the reporting period.

Mangrove plantations

Mangrove contributes to improving coastal areas as natural habitat for birds and fishes and for protection against natural hazards like cyclones and tidal waves. As indicated above, in 2016 - 2017 there was a plan

for 650 ha of mangrove plantations. As per plan, site selection and nursery establishment had been done. In the reporting period plantation work has been completed. This will play an important role in providing breeding grounds and habitats to a variety of fishes and other marine species of high commercial value, including mud crabs, molluscs and prawn.

Plantation Maintenance

Mangrove forestation, predominantly with Keora, Gewa and Baen species, was established on 1,750 ha in Char Nurislam, Char Nangulia (char Amin) and Tengar Char in 2015–2016 and on 1,000 ha in Char Balua and Char Nur Islam in 2014 - 2015. The maintenance work of the above-mentioned mangroves has been done. The maintenance of strip, canal, block and Institute plantations established in 2015 - 2016 and 2014 - 2015 were also done in the reporting period.

Watcher Recruitment

To make the plantations a success in the reporting period 33 new watchers have been deployed for a period of 6 months for mangrove plantation.

Capacity building

In order to familiarize them with the CDSP IV program and in particular with the social forestry methodology and to enhance the capabilities of the SFGs for the year 2016 – 2017, FD has provided 100 batches of participants with two day duration training courses and 100 batches with one day duration benefit sharing agreement workshops in this reporting period. The FD has also provided one day duration follow-up training for 250 SFGs in 2016 - 2017. A total of 20 batches of one day duration workshops with LGIs, NGOs and the Public have been conducted in 2016 - 2017. The FD has also provided two day duration training courses for the 11 batches of watchers; each batch contains 25 members.

Outcome of forestry plantations

- 6,337 Beneficiaries received ownership of 871,360 non-mangrove trees from embankment, road, canal, foreshore and block plantations. Trees are also protecting the embankment and habitats inside the embankment from tidal floods and cyclone surges.
- 3,650 SFG members collected 18,26,250 kg fuel wood (tree branches) from the plantations of 2012-2013, 2013-2014 and 2014-15 which provided additional supply of cooking material for the settlers, which is very scarce in the chars, especially in the lean season. From Arhar (Pigeon pea) of 60 km areas, settlers collect seeds as pulse, which is rich in protein. The leaf of the pigeon pea is used as fodder crop for the live-stock and the branches for fuel wood. It has also an ecological impact through nitrogen fixation into the soil.
- Mangrove forests are rich in biodiversity providing a habitat for a wide variety of animal and plant species. It helps in sediment deposits through burial as well.
- Embankment, roadside, canal and mangrove forests provide protection and shelter against extreme weather events, such as storm winds and floods as well as erosion.
- Storage of carbon in plants takes place through accumulation in living biomass.
- FD produced a documentary film on plantation activities done under CDSP-IV Plantation and it has been provided to the M&E section for necessary action.

CDSP-IV Plantation in Charbata range under Noakhali Coastal Forest Division received a National award from the Honourable Prime Minister Sheikh Hasina in the National Tree Fair 2017. Mr. Md. Saiful Islam Dewan, Beat Officer, Charbata Range office received the award from the Prime Minister.



4.3 Climate-resilient infrastructure and water supply and sanitation

This component concerns construction of climate-resilient infrastructure by LGED, including (rural) roads, bridges and culverts, cyclone shelters, killas, and markets. In addition, in the water supply and sanitation program, DPHE is providing test tube wells; deep tube wells and single pit latrines (see 4.3.2).

4.3.1 Construction of internal infrastructure by LGED

At the start of LGED activities progress was hampered due to several tender failures for abnormal quoted rates and price hike of construction materials and labour with respect to the LGED scheduled rate. This problem was solved in June 2013 by joint assessment of market prices by LGED and the TA team. Now, up to 30th June 2017, overall physical progress achieved by LGED is 86% over planned progress of 96%. During the reporting period, the physical progress achieved was 8%.

Benefits/outcomes from construction of internal infrastructure by LGED

Thanks to the construction of over 315 km of paved/earthen roads and a large number of culverts and bridges, a huge improvement in the road communication system has been realised for the 155,000 people of the five project chars. At present, Char Nangulia and Noler Char are connected to Boyer Char and Noakhali mainland by roads and may be travelled without river or khal crossing, using all kinds of vehicles in all seasons.

Since the completion of 32 cyclone shelters the char dwellers of the five project chars have scope to take shelter during any disaster and also to use the buildings as schools.

Paved Roads (BC paved width- 3.70m)

Out of 25.61 km paved roads as proposed in RDPP-2, work is completed for 25.16 km (11.7 km in Char Nangulia, 7.39 km in Noler Char and 6.07 km in Char Ziauddin).

Up to 30th June 2017 overall physical progress was 99% where 100% was planned. During the reporting period 3% progress was achieved.

Paved Roads (BC paved width- 2.40m)

15.00 km paved roads, as proposed in RDPP-2, has been completed (10.4 km in Char Nangulia, 3.60 km in Noler Char and 0.90 km in Char Ziauddin).

All work completed by 31st December 2016

HBB Roads (paved width- 3.70m)

Out of 32.19 km HBB roads, as proposed in RDPP-2, work is completed / ongoing / work order under process, for 25.90 km (Noler Char 11.95, Caring 6 km and Urir Char 7.95 km).

Up to 30th June 2017 physical progress achieved was 69%, where planned was 81%. Only 3% physical progress was achieved during the reporting period as further work cannot be started before completion of BWDB Mamur khal closure-2, Caring khal closure with approach embankments and Noler Char retired dykes, as these remaining roads are planned to be built over the BWDB embankments.

Herring Bone Brick (HBB) Roads (paved width- 3.00m)

Out of 93.00 km HBB roads as proposed in RDPP-2, work is completed/ on going or tender floated for 93.1 km (42.92 km in Char Nangulia, 20.35 km in Noler Char, 4.00 km in Caring Char, 10.58 km in Char Ziauddin and 12.65 km in Urir Char).

Up to 30th June 2017 physical progress achieved is 88% where planned was 93%. 16% physical progress was achieved during the reporting period.

Earthen roads (5.50m/ 4.3m crest width)

Out of 148 km earthen roads as proposed in RDPP-2, work is completed, ongoing, work order under process or tender floated for 141.33 km (63.45 km in Char Nangulia, 24.30 km in Noler Char, 16.66 km in Caring Char, 13.32 km in Char Ziauddin and 23.6 km in Urir Char).

Up to 30th June 2017 physical progress achieved was 82%, where planned was 93%. 6% physical progress was achieved during the reporting period.

Construction of RCC Girder Bridges

Out of 4 RCC Girder Bridges (Bridge length: 20 m - 36 m) as proposed in RDPP-2 work is completed for all 4; 2 in Char Nangulia and the other 2 in Char Ziauddin.

Up to 30th June 2017 over all physical progress was 100%.

Out of the other 3 bridges as proposed in RDPP-1 the bridge over Mamur khal in Noler Char was designed and construction completed as a 4 vent box culvert, considering no navigation, low cost and time-saving for construction. The bridge over Caring khal was dropped for budget saving for BWDB and the bridge over Bhuiyar khal is also planned to be built as a multi vent box culvert for the same reasons as mentioned above; construction will start after completion of BWDB Mamur khal Closure-2 and its link khal.

Construction of Box Culverts

In the original DPP only 18 RCC box culverts were proposed, which were increased to 69 in RDPP-1 and again to 93 in RDPP-2 as per field necessity and replacement of RCC girder bridges. Out of these 93 RCC box culverts work is completed/ ongoing or tender floated for 80 (35 in Char Nangulia, 23 in Noler Char, 6 in Caring Char, 6 in Char Ziauddin and 10 in Urir Char).

Up to 30th June 2017 over all physical progress was 81% against planned 89%. 9% Progress was achieved during the reporting period.

Construction of U-drains/ Pipe Culverts

In original DPP 70 U-drains / pipe culverts were proposed, which were increased to 123 in RDPP-1 and again to 140 in RDP-2 as per field requirement. Out of these 140 U-drains / pipe culverts, work is completed, ongoing or tender floated for 135 (68 in Char Nangulia, 22 in Noler Char, 2 in Caring Char, 18 in Char Ziauddin and 25 in Urir Char).

Up to 30th June 2017 over all physical progress was 92% against planned 95%. 11% Progress was achieved during the reporting period.

Construction of Cyclone Shelters

Due to abnormal price hike of construction materials and labour in the present market the number of cyclone shelters was reduced from 60 to 42 in the revised DPP. Out of 42 cyclone shelters cum primary schools proposed in RDPP-1 and later in RDPP-2, work is completed/ ongoing / work order issued/ tender floated for all 42 (16 in Char Nangulia, 9 in Noler Char, 2 in Char Ziauddin, 4 in Urir Char and 2 in Char Maximul Hakim; one at Char Mozammel, one at Dhal Char and the other at Char Kolatoli, which is designed as a 3 storied building considering office/ lodging facilities for the possible CDSP-V period.

Up to 30th June 2017 over all physical progress was 87% against planned 95%. 6% Progress was achieved during the reporting period. Still today 32 cyclone shelters are fully complete for taking refuge during natural disaster or to be used as schools. Cyclone shelter field raising started for 35, and has achieved 62% physical progress.

Construction of Public Markets

Out of 7 village markets as per RDPP, work started/ work order issued/ tender floated for all 7, with 3 by LCS (1 at Janata bazaar in Char Nangulia- completed, 1 at Thanarhat Bazar in Noler Char – 80% done and one at Boyer Char- construction done); and for the other four through contractors; work is completed at Zia Bazar in Char Ziauddin, at Kaladur Bazar in Char Nangulia, and at Bathankhali Bazar in Caring Char; and work started and achieved 10% physical progress at Urir Char.

Up to 30th June 2017 over all physical progress achieved was 91% against planned 100%, where 6% progress was gained during the reporting period.

Construction of Union Parishad Complexes (UPCs)

Out of 2 UPC as per RDPP, work is completed for Chanandi Union Parishad Complex at Janata bazaar in Char Nangulia and work is on-going for Horoni Union Parishad Complex at Mainuddin Bazar in Boyer Char, which achieved 90% physical progress.

Up to 30th June 2017 over all physical progress achieved is 95% against planned 100%, where no progress was achieved during the reporting period.

Construction of Cluster Villages (CVs)

In RDPP-2 Cluster Village construction is planned at Char Nangulia and Noler Char. A new concept is adopted here to make the CVs sustainable by giving allotment of 50 decimal of agricultural land along with the allotted homestead for livelihood purpose. Both cluster villages are proposed to be constructed at Char Nangulia considering availability of free Khas land. Design and estimate are under process for construction of these cluster villages, but the land allocated for the construction of both the CVs at Char Nangulia close to drainage sluice DS-2 is under threat by Sandwip Channel erosion.

Progress is delayed in search of a new location following the severe erosion of Sandwip Channel at Sluice DS-2 location.

Construction of Killas (earth mound refuges)

There is program for construction of 17 *killas* in RDPP-2: 7 at Caring Char, 6 at Urir Char and 4 in surrounding chars. Work is completed/ for 7 *killas* at Caring Char and 6 at Urir Char (3 Noakhali District & 3 Chittagong District). Work order was issued for 2 *killas* at Dhal Char and Char Mozammel.

Up to 30th June 2017 over all physical progress achieved was 76%, against planned 86%. 5% progress was achieved during the reporting period.

Construction of Ghats (jetties)

Construction of 1 *ghat* was in RDPP-1, which was dropped in RDPP-2 as low cost ghats are not feasible in char areas and to save money for BWDB/ LGED other Items.

Construction of bus stand

There is a program for construction of a bus stand at Char Nangulia in RDPP-1, which is dropped in RDPP-2 as there is no necessity at present and to save budget for BWDB.

Widening of bus road

This item is dropped in RDPP-2, as there is no field necessity at present and to save budget for BWDB.

Roads and culverts in Other Chars

Up to 30th June 2017 over all physical progress achieved was 80% against planned 90% where 44% progress was achieved during the reporting period. As per RDPP-2 revised budget is Tk 338.4 lac in place of Tk. 120 lac mentioned in RDPP-1. Actually RDPP-1 mentioned work was completed by June 2016.

Women staff shed

Construction of women's accommodation at Kaladur Bazar in Char Nangulia was shifted to Janata Bazar close to Chanandi UP.

Achieved 80% progress against planned 100%, no progress was achieved during the reporting period.

O&M of infrastructure CDSP I, II, III & IV area

From the road pavement maintenance and periodic maintenance of road items under CDSP IV, work is completed for the following sections:

- i) Char Jabbar–Steamer Ghat– Boyer Char road chainage 00-5,500m.
- ii) Hatiya Bazar- Moyinuddin Bazar-Tankir bus-stand road ch. 00-5000m at Boyer Char in CDSP-III area.
- iii) RHD (Totar Bazar)-Shantirhat-Kazir Dokan road from ch. 00-3000m in 1st contract and
- iv) Ch. 3022m- 4813m in the 2nd contract at Char Majid in CDSP-I area.
- v) Maintenance of paved road RHD-Bhuirhat-Banshkhali sluice-Kazir shop road ch 00-3022 at Char Majid in CDSP-I area.
- vi) Char Laxmi-Boyerchar road at Boyerchar ch 6092m-10150m.
- vii) Mobile maintenance of emergency work at CDSP old areas and CDSP-IV.
- viii) Periodic maintenance of Char Majid Janata Bazar via Bhumihin Bazar road –ch 00-3450m.
- ix) Periodic maintenance of Manjumiar Bazar-Kazir Dokan road from ch. 00-3845m.
- x) Periodic maintenance of Jubair Miar Raster Matha-Banshkhali sluice –Manumiar Bazar-Bhumihin Bazar road from ch 1000-3900m.
- xi) Periodic maintenance of Chiyakhali Bazar-Bhuiyarhat Bazar-Kanchan Bazar-Pariskar Bazar-Atkopalia Bazar GC road from ch 10231-12811m.

Total expenditure was made for Tk. 757.60 lac.

During the reporting period Work started for the maintenance work of HBB road Part A: Banshkhali sluice-Darbesb Bazar-Chamoaghat road Ch. 1990-7856 m and Part B: Thanarhat Bazar-Champaghat Ch 00-2600 m at Noler Char through two LCS groups.

From the road off-pavement (earth) maintenance, work is completed for:

- xii) RHD –Bhuiyarhat- Banshkhali sluice-Kazir shop road ch 00-3022 at Char Majid in CDSP-I area.

Total expenditure made for road off pavement maintenance is Tk. 20.16 lac.

From the repair and maintenance of buildings and structures, work is completed for:

- xiii) Maintenance work of cyclone shelter cum primary school at A) Ali Bazar, B) Hatiya Bazar, C) Nabinagar, D) Mainuddin Bazar in Boyer char, CDSP-III area by 1st contract.
- xiv) Maintenance work of cyclone shelter cum primary school at A) Tankir Bazar, B) Mohammadpur bazaar in Boyer char, CDSP- III area by the 2nd contract.
- xv) Maintenance work of cyclone shelter cum primary school at A) Jalil Commander Bazar, B) Nabipur Bazar, C) Didar Bazaar and D) Dasdag Bazar in Boyer char, CDSP-III area by the 3rd contract.
- xvi) Maintenance work of cyclone shelter cum primary school at A) South Char Clerk, B) Noapara and C) South Char Laxmi- Polder 59/3B in CDSP-II area at Subarnachar by the 4th contract.

Total expenditure made for building maintenance is Tk. 61 lakh.

- xvii) Maintenance work of cyclone shelter cum primary school at for 5 at Char Vatirtek polder and one at Char Majid CDSP-I,II,III old area at Subarnachar. Total Contract amount Tk. 42.00 lakh.

Overall progress achieved for maintenance work is 83% up to 30th June 2017. Total expenditure was made for Tk. 829.63 lakh. During the reporting period Tk 11 lakh was spent mainly for road maintenance. In RDPP-2 maintenance budget is reviewed from Tk. 904.73 lakh to 1004.73 lac, considering necessity of maintenance at CDSP-IV areas during construction.

4.3.2 Water supply and sanitation by DPHE

One deep tube well is provided for 15 to 20 households and one for each cyclone shelter will also be installed. Test tube wells are sunk to get advance information on the aquifers of the project area. One latrine is given to each individual household, which will take care of the superstructure itself. For an overview of progress and planning of works under DPHE see **Annex 3**, Table 3. For an overview of achievements and financial progress and planning of the same, see **Annex 4**, Table A4, which presents the IFAD format.

Up to the end of June 2017 overall physical progress for DPHE was 80% against planned 91%, where 7% progress was achieved during the reporting period.

DPHE activities are discussed below in detail.

Benefits from water supply and sanitation activities

Due to sinking and installation of around 1,300 DTW in the five project chars and also in the surrounding chars, most of the population are getting the benefit of pure drinking water. And in combination with the installation of around 19,900 sanitary latrines contamination leading to diarrhoeal diseases has reduced to a minimal level, which can be concluded e.g. from the PNGO statistics of saline packet demand and distribution, which saw no demand of saline packets during the reporting period, while it was 2,00,000 on average during the early days of the project.

Deep hand Tube Wells

Since inception of the project in March 2011, out of 1,532 DTWs as per RDPP-2, sinking and installation is completed for 1,296 (Char Nangulia 648, Noler Char 321, Caring Char 171, Char Ziauddin 75, Urir Char 66 and 15 at Teliar Char). Platform construction is completed for 1,281.

Up to 30th June 2017 overall physical progress of deep tube wells was 85% against planned 89%, 11% physical progress was added during the reporting period.

Test Tube Wells

Sinking and installation of 6 test deep tube wells as mentioned in RDPP was done: 3 at Char Ziauddin and 3 at Char Nangulia including platform construction.

Total progress achieved is 100%, as per RDPP allotment.

Single pit latrines

Since inception of the project in March 2011 till the end of December 2016 construction was completed for 20,900 single pit latrines (SPLs), 19,627 were distributed and 19,270 installed.

Up to 30th June 2017 physical progress achieved was 75% over planned 83%, work order has been issued for 650 SPL and Tender procedure under process for 6,000 more.

Pond with sand filter

If required, as per RDPP-2, 2 ponds with sand filter will be installed where ground water is found unusable due to salinity or other reasons at Char Nangulia. There is a plan for PSF construction in AWPB 2016 – 2017, if required.

Rain water harvesting schemes

If required, as per RDPP, 2 rain water harvesting schemes will be installed where ground water is found unusable due to salinity or other reasons at Char Ziauddin. There is no plan for RWHS construction in AWPB 2016 – 2017.

O&M of infrastructure of CDSP I, II and III

Work is completed for maintenance of 12 public toilets at Boyer Char from GoB maintenance funds under CDSP IV amounting to Tk. 3.88 lakh. Sinking and installation of 9 non-functioning tube wells at the cost of Tk. 6.95 lac are already sunk and all give good water. Field survey is ongoing for selection of deep tube wells' maintenance in CDSP I, II & III and also in CDSP-IV areas. In the 55 PMC meeting it was decided that DPHE will replace the open latrine which was dismantled during the Netherlands Minister's visit as a public nuisance, providing a sanitary latrine instead.

4.4 Land settlement and titling by Ministry of Land (MoL)

As per DPP of CDSP IV (Land part), the Ministry of Land is involved in the following activities of the project:

- i. Completion of the residual settlement activities of CDSP III

- ii. Settlement of the landless households in government khas lands of CDSP-IV areas of Hatiya and Subarnachar Upazilas of Noakhali District
- iii. Modernization of the Land Records Management System (LRMS).

The Deputy Commissioner Noakhali acts as the Project Director of the Land part of the project on behalf of the Ministry of Land. The Additional Deputy Commissioner (Revenue) acts as the Additional Project Director. RDC and UNOs act as the Deputy Project Directors while the AC (Land)s act as the Assistant Project Directors of the project in their respective Upazilas. Land settlement is an essential component of the CDSP IV project. According to Government regulations, newly emerged land has to be distributed to the landless (Policy for settlement of agricultural khas land of 1997), including a title on the land to a maximum of 1.5 acres per household. It is the task of the Government to apply the law and initiate and complete the process of land settlement, i.e. providing eligible households with a title. The Ministry of Land is one of the six partner implementing agencies of CDSP. In the project, innovative procedures are followed which brings the whole settlement process closer to the people, is more transparent, shortens the duration and makes it far less costly for the settlers. During the reporting period, Deputy Commissioner of Noakhali as well as the Project Director of land part have been replaced by new ones. The incumbent ADC (Revenue) who also acts as Additional Project Director has changed twice during the reporting period. In the meantime, a new UNO of Hatiya Upazila and New AC (Land) of Subarnachar Upazila have joined after the transfers of their predecessors. Currently the post of AC (Land) in Hatiya falls vacant.

In the month of March 2017, a formal Khatian (Title deed of land) distribution program was held during the visit of the IFAD supervision mission. On 14th March 2017, the festive and colorful land title (Khatian) distribution ceremony was held at Saddam Bazar, Noler Char area. IFAD supervision mission members were present and distributed as many as 300 land titles (Khatians) among the landless families. Mission members were Team Leader, Mr. Julian Abrams, Land Tenure Specialist, Ms Sherina Tabassum, Agriculture Specialist, Mr Alban Bellingues, and Gender Specialist, Ms Wanaporn Yangyuentham. 1st Secretary of EKN, officials of implementing agencies and other distinguished guests were also present in this auspicious gathering. The Khatian distribution meeting was conducted by the District Administration, Noakhali and chaired by the Additional Deputy Commissioner (Revenue) Mr. Subrata Kumar Dey. Progress on the various stages of settlement activities is presented below. For an overview of achievements and financial progress and planning of MoL, see **Annex 4**, Table A6, which presents the IFAD format.

Completion of the settlement cases of CDSP III

Due to the court case No.4/2009 regarding boundary issue of Noakhali and Lakshmipur districts all residual works have been stopped in the CDSP III areas for the last several months. So, during the last six months, no progress has been achieved here. The stage wise activities so far achieved before the status quo imposed by the court are as follows:

Table 4 - 1 Status and progress of land settlement activities in CDSP III area

Stages of work	Total CDSP IV Target (HHs)	Target for 2016 - 2017 (HHs)	Progress during the period (HHs)	Overall progress (HHs)
Hearing & landless selection	1,000	0	0	393
Jamabondi preparation	1,885	0	0	1,181
Jamabondi approval by:				
Upazila Committee	1,885	0	0	1,181
District Committee	2,272	0	0	1,609
Kabuliyat:				
Execution	2,630	0	0	1,093
Registration	2,698	0	0	1,130
Khatian Preparation	2,883	0	0	1,144
Khatian Distribution	3,842	0	0	2,138

Land Settlement in CDSP IV areas

The stage wise activities of the land settlement program have been performed during the period under review as detailed hereunder:

Table 4 - 2 Status and progress of land settlement activities in CDSP IV areas

Stages of work	Total CDSP IV Target (HHs)	Target for 2016 - 2017 (HHs)	Progress during the period (HHs)	Overall progress (HHs)
Hearing & landless selection	14,000	1,950	1,305	14,700
Jamabondi preparation	14,000	1,800	1,250	14,389
Jamabondi approval by: Upazila Committee	14,000	1,800	1,250	14,389
District Committee		1,800	1,250	14,389
Kabuliyat: Execution	14,000	2,400	1,499	12,374
Registration		2,163	1,454	12,144
Khatian Preparation	14,000	3,994	1,102	10,859
Khatian distribution	14,000	3,994	1,092	10,801

Eventualities in PTPS and other settlement activities**I. Meetings of the Monitoring and Management Committees**

During the reporting period 1 PMC MoL (Project Monitoring Committee of Ministry of Land) meeting was held on 25/04/2017 in the Ministry of Land. Six DPMC (District Project Management Committee) monthly meetings were held at the Deputy Commissioner's office as well as PD office in Noakhali. In these meetings month-wise project progress and target were reviewed thoroughly and many contemporary important issues were discussed and disposed of. Land Settlement Advisor and ALSA of TA Team regularly attended these meetings.

II. Court Case related to boundary dispute

Judgement of the court case No.330/94, related to the boundary dispute between Noakhali and Lakshmipur districts, has gone against the Noakhali district administration's interest. Noakhali district administration has filed an appeal case in the higher court. Till the disposal of the appeal case stalemate will continue in the settlement activities of Baggar Char Mouza (1,559.50 acres) under Char Ziauddin.

Training and Workshop

The following training programs/ workshops have been conducted on land settlement and management during the reporting period.

- The district administration conducted a day long (12/06/2017) training program on Land Settlement Process under CDSP-IV for the officers and support staff, who are associated with the implementation of CDSP IV in Hatiya and Subarnachar Upazilas. The training included all the subjects relating to the conduct and management of the land settlement activities, and emphasized the sustainability of the CDSP procedure in the concerned Upazilas. Land Settlement Adviser and the senior officials of the district administration acted as the resource persons of the program.
- A workshop on expansion of the government line agencies activities into CDSP IV areas was arranged on 22nd June 2017 by the district administration. Representatives of all the six implementing agencies of CDSP IV, relevant departments and journalists were present at the seminar. Deputy Commissioner, Noakhali and PD, CDSP IV MoL (Part) presided over the

workshop while Land Settlement Advisor presented the latest progress and overall CDSP-IV activities by a power point presentation.

Outcome of Khatian (Land title) distribution

Since inception of CDSP IV 10,801 Khatians (land title documents) have been distributed and received by the landless families. In each Khatian husband and wife have equal share over the land and women's name is written first in the Khatian with a view to empowering her. Monitoring exercises indicate that providing this title has directly contributed to the main objective of CDSP: already the women and men beneficiaries have improved their livelihoods, since this process considerably broadens the asset base of the households. The families are now eligible to take loans from banks, keeping the land titles as mortgage security. The legal security that the documents are giving to the settlers is certainly stimulating them to invest in their newly acquired land, which has a positive effect on the agricultural production. Being legal landowners, the social status of the households has been enhanced and the self-confidence of the settlers has increased. In addition, when the wife's name is mentioned first in the legal document, landless women are feeling more honoured, illegal selling of land has become harder and empowerment of women has been raised.

4.5 Livelihood support

4.5.1 Agricultural support by DAE

The unprotected coastal chars are vulnerable to regular flooding and have saline soils. Only one rice crop is possible in the Kharif season, when heavy rains temporarily decrease the salinity of the higher layers of the soil. In the winter (Rabi), an additional crop is possible at some places. The agriculture benchmark survey revealed that the overall cropping intensity in the CDSP IV project area was 127%, which is very low compared to the national average of 191%. Crop yield was also low at 1.5-2.0 tons per hectare. The salinity will gradually decline over the years when the area is protected. Introduction of high yielding crop varieties is an important element of the extension development strategy in CDSP IV.

Agricultural support in CDSP IV has the following sub- components:

- strengthening of agricultural extension services;
- support for homestead agriculture and agro-forestry by contracted NGOs;
- surveys and monitoring.

For an overview of achievements and financial progress and planning of DAE, see **Annex 4**, Table A5, which presents the IFAD format. For homestead by contracted NGOs and agro-forestry, see the paragraph on social and livelihood support (4.5.2).

Status of RDPP- 2 revision of DAE

The IFAD Midterm Review Mission 2015 recommended a second revision of DPPs of all CDSP IV implementing agencies by recasting unspent money for an extended period up to December 2018. Accordingly, DAE submitted its RDPP-2 to the concerned authority for approval. But the Ministry of Agriculture has regretted it cannot extend the proposed RDPP- 2 a second time and advised to complete the project activities of DAE within 31st December 2016 vide MoA memo 270 dated 30th August, 2016 and memo 367 dated 22nd November, 2016. Hence the present report is prepared based on project target and cumulative progress up to December, 2016 and follow up of activities by the DAE from January-June, 2017. After the phase out, the Deputy Director deployed 5 Sub- Assistant Agricultural Officers in 5 project chars. The field officers are engaged to implement the DAE activities as per their Annual Development Programme (ADP) with the support of TA team. Also, they are closely monitoring the Farmers Organization for sustainability which is reflected in the report.

Strengthening and development of extension services

In line with the New Agricultural Extension Policy of 1996 and 2014, the formation of Farmers Forums (FF) is a core approach of extension services. In the initial years of the project, i.e. from 2011 to 2013, formation of FF started with an average number of 30 members in a group and 90 FFs had been formed; after

formation 106 orientations were organized. A total of 2,700 farmers were involved in these 90 FFs with 38% female representatives. In 2013 - 2014 a strengthening of Farmers Forums was launched and 30 more 30 farmers (30+30=60) were included in each FF group with 42% females, hence a total of 5,400 farmers are involved in 90 FFs. The remaining farmers of the project area are reached through activities such as demonstration plots and field days. In 2014-15, 6 Farmers Associations were formed and on 22nd November, 2016 a Farmers' Federation as per the Guidelines for Participatory Farmers Organization (GPFO). All management committees at all tiers of farmer's organization were elected by the general members.

The char wise distribution of the Farmers Organizations (FO) is as follows:

Table 4 - 3 Char wise distribution of Farmers Organizations

Name of Char	Farmers Forums	Associations	Federation
Char Ziauddin	7	1	1
Char Nangulia	37	2	
Noler Char	25	1	
Caring Char	15	1	
Urir Char	6	1	
Total	90	6	

DAE field officers with the support of the TA team have been continuing a strengthening program of FF groups to develop institutional capacity, record keeping and refresh their individual tasks and responsibilities. In these meetings, detailed discussions were held on objectives of FF formation, stakeholder's participation, GPFO, AWPB 2017 - 2018, involvement of NGOs and project interventions by DAE. A total of 185 female members of FF have been trained on Gender Development and awareness rising during the period. A total of 15 batches of FF, 20 FA and 4 Farmers Federation meetings were held in the area.

Training of Trainers (TOT) and technical update of project staff

A total of 13 ToT training courses of project staff and field staff (FO & SAAO) of DAE and Agriculture Coordinators of PNGOs working in the project area were organized as per project plan. A detailed technical training module was developed and agricultural experts of various organizations, BADC, DAE, SRDI, BRRI, BARI, BWDB, ATI and Private Entrepreneurs contributed to the trainings as resource persons, with the support of TA team. Duration of the training was 14 days.

Guidelines for Farmers Organizations

The draft "Guidelines for Participatory Farmers Organizations" (GPFO) were developed in Bengali and English in line with the New Agricultural Extension Policy 1996 and approved in a seasonal workshop held on 22nd January, 2013. As per decision of PMC, DAE is now practicing these in the project area.

Technology dissemination

One day technical training

DAE with the support of TA team conducted at field level one day technical training of FF members in Kharif-I, II and Rabi seasons for 1,100 batches (Char Ziauddin 106, Char Nangulia 475, Noler Char 303, Caring Char 104 and Urir Char 102) as per project target. To conduct this program season wise, three separate training modules have been developed. The contents of training are covering the three seasons. Hand-outs of topics were provided to the participants. A total of 5,400 farmers (30 per batch) participated in the trainings in different events and contents as per project target. Training contents covered all technologies of crop production, IPM, processing and post-harvest technology of 3 seasons. Various technological posters, leaflets, booklets, banners and festoons were presented and also inputs were distributed such as seeds, fertilizers as practical training materials.

Four days technical training (residential)

Four days technical trainings (residential) on Kharif-I, Kharif-II and Rabi season were conducted by DAE for 95 batches, as per project target, at N-RAS training centre, Noakhali. There were 20 participants in each batch, so a total of 1,900 participants attended the trainings. Officers of related departments such as DAE, BARI, SRDI, Bina, BADC, ATI, Market actors and TA team were the resource persons on their respective subjects. Practical hands-on training was organized in the fields of BADC agro-service centre, BADC seed processing centre Feni, BADC Horticulture centre Comilla, Horticulture centre DAE Feni, 3 private farms in Noakhali and Feni. Hand-outs of topics and HYV seeds/ saplings were provided to the participants.

Motivational tours

In total 72 events (batches) motivational tours were organized with 15 members (farmers and market actors) in each group, as per target. Hence a total of 1,080 FF members/ market actors participated from all the chars.

The participants visited the following places:

- BADC Agro service centre, Noakhali
- BADC/ DAE Horticulture centre, Comilla/ Feni
- BADC Seed processing centre, Feni and BADC Seed Multiplication farm, Feni
- Individual farmers plots at CDSP areas
- Private agro-farms, Noakhali/ Feni
- Nimshar Bazaar of Comilla for value chain market linkage
- Shitakundu, Mirersorai of Chittagong country bean production and value chain area
- Private Mushroom centre, Feni /Comilla.

Demonstration plots

A total of 1,080 demonstrations have been established at farmer's fields in the 5 chars in all cropping seasons during the entire project period. Out of these 360 were of high value crops (HVC) and 720 of low value crops (LVC). These demo activities have resulted in significant changes in technology and variety adaptation in the project area. These changes are reflected in the following paragraphs i.e. on field days and yield performance of different crops. During the period 4 demos on Kharif-I and 6 demos on Kharif II have been established on different crop varieties.

Introduction of Boro crop

Boro crop has been introduced and is practiced by the farmers in the last 3 - 4 years in Char Nangulia, irrigated by pond water, shallow tube wells etc. It covers about 2,000 ha, where earlier no crop was cultivated during rabi season; they are harvesting 6.5 -7.5 tons/ ha.

Organizing field days

As planned for the entire project period, 84 field days were organized during Rabi, Kharif-I and II seasons for showing the success of adaptability and technology dissemination through demonstration among the farmers of the project. Some new crops and varieties of rice, pulses and oil crops were introduced in the area such as short duration (105-110 days) variety BADC hybrid -2 in T.Aman season, which yielded 4.5-6.5 ton/ha, BRRIdhan 52 (yielded 4.5-5.0 tons/ha), BRRIdhan 62 a zinc fortified variety (yielded 3-3.5 tons/ha), SL-8 hybrid (yielded 7.2 tons/ha) and hybrid Hira (yielded 7.3 tons/ha) and varieties of other crops. Regarding hybrid vegetables in Rabi and Kharif I season, it was found that the farmers harvested 2-3 times higher yields than from their existing traditional varieties. More than 6,720 farmers, market actors, agri-entrepreneurs, FLI representatives and local elites attended the result demos and technology transfer ceremonies of the area. They all showed their interest to cultivate these HYVs, hybrid varieties, saline tolerant, short duration, submerging tolerance and nutritional support varieties, which were introduced, and adaptable from following cropping seasons onwards.

Yield performance of main crops (tons/ ha)

Rice:	Aus: HYV	3.2-3.9
	T.aman: HYV	4.0-5.2
	Hybrid	4.5-6.5
	Boro: Hybrid	6.0-7.3
Vegetables:	(Cucumber, Okra,	

Bitter gourd, Country bean, Tomato, Cabbage etc)	10-30
Potato:	30-35
Water melon:	20-30.

Seasonal workshops

Twelve seasonal workshops were organized by DAE in the project period, following the 3 cropping seasons: Kharif-I, Kharif-II and Rabi. DAE officers and field staffs, representatives of related departments such as BADC, BARI, BRRI, Bina, SRDI, ATI, Seed Certification, NGOs, TA team members and farmers' representatives of all chars participated in these workshops. After each presentation, a general discussion and group exercise was held. Recommendations of the workshops were incorporated in seasonal and annual reports.

Value chain workshops

Six value chain workshops were organized as planned. Representatives of related departments, market actors, and wholesalers, agricultural entrepreneurs from outside project/ districts, loan giving agencies, producers, NGOs and farmers representatives of all chars participated in these workshops. After each presentation, a general discussion and group exercise was held. Recommendations of the workshops were recorded properly for future implementation. Of these, some issues such as linkages between local and up market actors, provision of training and support of inputs for weighing materials, establishment of collection centre, supply of plastic crates etc. have been established from the project. Financial support from banks and other financial institutions are essential for continued future development of value chain in the CDSP-I, II, III and IV areas.

Annual workshops

Three annual workshops were organized during the project period. All DAE officers and staffs, representatives of all research organizations, all members of farmer's federation, concerned departments, value chain market actors and PNGOs attended the workshops. In the workshop detail activities of DAE were discussed including bottlenecks and recommendation for future potential technology.

Seasonal reports

During the project period 48 seasonal reports have been published by DAE with the support of TA team up to December 2016, containing the implementation status of project interventions. In these reports the details of all activities of DAE are documented and presented with supporting pictures.

Annual report

In total two Annual reports have been published during project period, containing all aspect information on project objectives, activities, progress, performances, constraints, char-wise salinity status and results in the project chars.

Awareness raising technical leaflets, festoons etc

A total of 9,000 posters, 27,000 folders/booklets and 1,600 festoons were published and distributed among the farmers for awareness building and used as materials in above mentioned practical trainings. These are containing various adapted technologies on modern agricultural practices, applicable for coastal areas. These training materials were distributed to the farmers in various trainings and orientations and also used as training materials.

Input distribution

Input support to the farmers is an effective tool to disseminate technology for immediate implementation of field activities. Hence, 18 tons of HYV seed, 149 tons non-urea fertilizer, 140 hand sprayers, 1,500 plastic drums, 180 rice threshing machines, 20 digital balances and 3,900 sex pheromone traps have been distributed among the farmers of the area. During input distribution ceremonies among others PD, DAE, Upazilla Chairman, UNO, Upazilla officials of Subarna char and TA team members attended. During the period 2.7 t of HYV T. Aman seed have been distributed to the farmers of the area.

Surveys and adaptive research

Monitoring of soil salinity is a regular activity of the DAE field officers and the average comparative test results are given below:

Table 4 - 4 Salinity monitoring test result (ECe, ds/m)*

Name of char	Nov 2011	April 2012	Dec 2012	April 2013	Nov 2013	April 2014	Nov 2014	April 2015	Nov 2015	April 2016	Nov 2016
Char Nangulia	11.2	25.3	5.3	16.1	2.0	7.2	1.7	6.3	2.9	7.6	2.0
Noler Char	4.8	28.0	4.2	13.0	4.0	9.8	3.7	13.0	4.7	7.6	6.0
Caring Char	6.6	32.2	3.9	15.1	4.5	11.0	4.0	11.0	4.7	10.1	6.0
Char Ziauddin	10.6	14.2	2.3	3.1	1.6	2.8	1.1	1.6	1.5	2.5	1.6
Urir Char	8.5	16.1	7.1	11.1	4.6	10.3	2.3	14.0	4.1	10.9	3.7
Average	8.2	23.2	4.6	11.7	3.3	8.2	2.6	9.2	3.6	7.7	3.8

*ECe, dS/m= Electrical conductivity, deci Siemen/ meter. Top soil=0-10 cm.

Through different studies and research findings and from the above test results of CDSP IV, it is observed that salinity in char areas is lowest in November - December and highest in April. From the above test results it is revealed that average salinity levels show a declining trend from the previous year's except in Caring Char and Urir Char as these chars are unprotected. However it will take more time to draw a conclusion on the salinity trend in the future after completion of all project interventions such as embankments, canal re-excavation and construction of sluices.

Soil nutrient status in the project area

Soil nutrients of the area were surveyed by SRDI and it was found that the overall status of the soil fertility is poor in the project chars, except sulphur, which is abnormally high compared to the optimum level. To improve the soil health, a number of activities have been undertaken, like Daincha cultivation for green manuring, quick compost and vermi-compost preparation.

Table 4 - 5 Nutrient status of soil in the CDSP IV areas

Sl No	Component	CZ	CN(S)	CN(H)	NC	CC	UC	Optimum
1	Nitrogen (%)	0.09	0.1	0.09	0.08	0.09	0.1	0.27
2	Phosphorus (ppm)	14.14	12.78	11.17	6.26	16.41	7.45	22.5
3	Potassium (me/100g)	0.21	0.29	0.17	0.18	0.17	0.24	0.27
4	Sulphur (ppm)	173.37	143.25	127.86	45.82	87.68	156.01	22.5
5	Zinc (ppm)	0.86	0.85	0.92	0.91	0.85	0.85	1.35
6	Boron (PPM)	0.11	0.1	0.09	0.1	0.1	0.15	0.45
7	PH	7.63	7.79	7.72	8.16	8.03	7.97	-
9	O.M	1.87	2.1	1.82	1.53	1.87	1.93	5%

Note: ppm = parts per million, me=mili equivalent, CZ-Char Ziauddin, CN(S)-Char Nangulia Subarna char, CN (H)- Char Nangulia Hatiya, NC-Noler Char, CC-Caring Char.

Rain water harvest technology

Rain water harvest technology was introduced at farmer's fields for pit crop irrigation during the dry period Rabi and Kharif-I season to combat salinity. Resulting in above mentioned cultivation of Water melon, Cucumber, Sweet gourd contributes in increasing cropping intensity of the area.

Findings of surveys in 2015 - 2016

Following a decision of the Project Management Committee (CDSP IV) DAE part meeting held on 5 April, 2016 at DG, DAE conference room, the Planning, Project Implementation & ICT Wing of DAE has formed a team consisting of seven members headed by Director (PP&ICT wing) DAE to monitor the on-going project activities and to measure the impact of the project interventions. The objective of the study is to know the present status of the farmers' living standard and how many technologies or approaches are adopted, practiced and implemented by them. Also to ascertain what the changes are in the socio-economic development of the project area and to know the percentage increase of crop production from irrigation facilities and other infrastructural facilities.

The monitoring team completed the study from 19 to 23 May 2016 at Char Nangulia, Noler Char, Caring Char and Char Ziauddin of Noakhali district. The monitoring report revealed that about 55% of households are in the category small, 28% in marginal and the remaining 17% in the medium category. Land under cultivation indicator measured that field crops covered the maximum cultivable land at 56%, followed by vegetables 35%, orchards 2% and others 7%. The M&E report stated that the average cropping intensity in all chars has increased from (MTAS) 172% to 184%. The maximum cropping intensity was found to be 206% in Char Ziauddin (same as before) followed by 183% (3% increase) in Caring Char, 180% (+5%) in Noler Char and 165% (+6%) in Char Nangulia. Cropping intensity increases indicate improved cropping pattern and introduction of a new pattern in the project area.

For irrigation pond and canal water are the main source. Farmers adopted modern production technologies learned by various extension activities such as one day training, four day training, motivational tour, demonstrations and field days. Farmers cultivated modern rice variety BRRI dhan 27, 48, 55, 65 Bina dhan 14 in Kharif-I season and BRRI dhan 40, 52, 56, 57 and 62 in Kharif-II season. It was found that these farmers harvested 2-3 times higher yields than that of their existing traditional varieties. All the farmers have shown their interest to cultivate these HYVs. Majority of the farmers collect their seed from seed dealers which was rated 44%, followed by farmers own seed 23%. Farmers also collect seed from other farmers 17% and other seed sources 16%. For the livelihood development of project beneficiaries six government agencies work together. The sample farmers were evaluated on agricultural and non-agricultural income versus expenditure indicators to observe the overall progress at individual level. Of the sample farmers 91% responded "Yes" to the comments on changing living pattern. They claimed that the project contributed positively to bring a dramatic change in their lives.

Project yield contribution

During the pre-project period farmers used their traditional local rice varieties such as Rajashail, Kajalshail etc, with unknown quality seeds and they harvested only 1.5-1.8 ton/ ha. After introduction of HYV/ hybrid varieties and modern technologies the yield with ensured quality seed became 3.5-7.5, depending on the different seasons. Hence total rice production increased from 31,079 to 98,490 ton and vegetables from 4,400 to about 10,000 ton. Yield of other crops such as water melon, pulses and oil seed crops also increased significantly.

Publications of DAE in the context of CDSP IV

- Technical Report 2 and 3
- Guidelines for Participatory Farmers Organization (GPFO)
- Coastal Agriculture Resource Book "Coastal Agriculture under Unfavorable Ecosystem"
- Training Modules - 3
- Seasonal Reports - 48 volumes
- Periodic Agriculture Survey Report, 2014
- Mid-Term Agriculture Survey Report, 2015
- Monitoring and Evaluation report, 2016
- Strategic plan for value chain development
- Annual Reports – 2.

Inter-agency coordination

Support to BADC for appointment of seed dealers in project chars

Six seed dealers were appointed by BADC and they are active to make HYV seeds available in different locations of the project with the support of DAE and TA team. In addition, the project has active co-ordination with all the NARS (National Agricultural Research Systems) agencies under the MoA.

Support to Bangladesh Jute Research Institute (BJRI)

Continued support was given to BJRI for conducting a trial research project in Boyer Char and Noler Char to develop a saline tolerant variety. The institute is planning to extend their activities to Caring Char as well, to be sure of sufficiently extreme saline conditions.

4.5.2 Social and livelihood support

The focus of the Social and Livelihood Support (SLS) component of the project is on social and economic development of households in the five chars, especially women and children. Approximately 28,000 households live in these five chars. So far 27,654 households have been identified in the whole project area. The sub-component is implemented at field level by partner NGOs. Four PNGOs were selected to perform the assignment. The selected partner NGOs with their working areas are given in the table below:

Table 4 - 6 PNGOs' assigned areas

SI #	Name of NGO	Number of branches	Name of working chars
1	Brac	2	Char Nangulia, , Char Ziauddin
2	Sagorika Samaj Unnayan Sangstha (SSUS)	2	Char Nangulia, Noler Char
3	Dwip Unnayan Songstha (DUS)	1	Noler Char
4	Society for Development Initiatives (SDI)	1	Urir Char,

Human resources and management set up of the NGO component

Each PNGO has deployed a program coordinator to supervise its activities in the various branches. The higher management of the PNGOs are providing management support and at the same time the TA team is providing both technical and management support. In each branch there are: one Branch Manager, six Credit Officers, an Accountant and an Assistant Accountant cum office assistant, Coordinators: 2 for WatSan, 6 for Homestead Agriculture & Value Chain Development, 6 for Fisheries, 6 for Poultry & Livestock and for the Health and Family Planning Program; 6 Medical Assistants and 3 Health and Family Planning Facilitators. The Branch Manager is responsible for coordination of all the activities of the social and livelihood component in the branch. The Credit officers take care of the base line survey, group area demarcation, group formation, group meetings, borrower selection, loan disbursement, savings and loan instalment collection and other project activity related issues. The Accountant and Assistant Accountant are responsible for the microfinance and financial transactions in the branch and they prepare the financial reports. Coordinators and other staff are responsible for implementation of the sector programs.

The recruitment of staff in the project was completed in 2012. Staff were recruited as per design and need of the project. Among recruited staff the male female ratio is 3:1. In the month of October 2014 two new sub-components were started. For this purpose, TA team recruited one NSS for Fisheries and another for Poultry & Livestock. Moreover, PNGOs recruited 6 coordinators for Fisheries and 6 for the Poultry & Livestock programs to cover the five chars through 6 branches. The status of the staff of PNGOs by end June 2017 is given in the table below.

Capacity building and skill development of beneficiaries

To involve beneficiaries in income generating activities and at the same time to increase knowledge and awareness of different income generating sectors, trainings and refresher courses are offered to group members of PNGOs. The participants have already taken loans from the PNGOs to utilize the loan as per learning from the training. The training on IGAs is continuing and all beneficiaries will receive training on various courses during the remaining project period. In the reporting period 74 beneficiaries received training on non-farm income generating activities. The cumulative number up to June 2017 is 22,076 (farm 21,902; non-farm 174).

Table 4 - 7 Status of staff of PNGOs

PNGO	NGO Coordinating Office Staff						Branch office Staff													Total Staff			% Female staff
	NGO Director	NGO Coordinator	Area manager	Accountant	Office assistant	Sub-Total	Branch Manager	Accountant	Assist. accountant-cum office assist	Credit Officer	LHR/ Disaster Coordinator	WatSan Coordinator	Agriculture Coordinator	Paramedics	HFPF	Support staff	Fisheries coordinator	Poultry Livestock coordinator	Sub-Total	Female	Male	Total	
BRAC	1	1	1	1	1	5	2	2	2	11	0	1	2	2	6	01	2	2	33	7	31	38	18
SSUS	1	1	1	1	1	5	2	2	2	20	0	1	2	2	6	01	2	2	42	15	32	47	32
DUS	1	1	1	0	1	4	1	0	1	06	0	0	1	1	3	01	1	1	16	3	17	20	15
SDI	1	1	1	0	1	4	1	0	1	05	0	0	1	1	3	01	1	1	15	3	16	19	16
Gr. Total	04	04	04	02	04	18	06	04	06	42	0	02	06	06	18	18	06	06	106	28	96	124	23

Sub components of the Social and Livelihood Support component

The Social and Livelihood Support component is divided into the following sub components:

- Health and Family Planning;
- Water and Sanitation;
- Homestead Agriculture and Value Chain Development;
- Fisheries (**started since October 2014**)
- Poultry & Livestock (**started since October 2014**)

Follow up continued of the Social and Livelihood Support component

- Legal and Human Rights;
- Disaster Management and Climate Change.
- Group Formation, Microfinance and Capacity Building;

The performance of the 8 sub components is briefly described below, for a more extensive description of the activities reference is made to Progress Report No 9.

Health and Family Planning program

Health forum is an important tool to make participants aware through imparting health education on various issues. In the health forum the HFPF creates awareness among the community on family planning, nutrition, hygiene, immunization, on pregnancy related care and on common diseases. During the reporting period **3,333** health forums were conducted and **43,986** forums were conducted up to June 2017. Medical Assistants of the health and family planning program have been paying visits to the health forums to monitor and develop the quality of the forum. **233** Health forums were visited in the reporting period and in total **3,820**. In addition, HFPF is paying visits to households. Normally a HFPF visits five households per day in an afternoon session. At the time of house visits they also monitor the oral pill consumption. 8813 Households were visited (repeated) in the reporting period and **146779** (repeated) up to June 2017.

In the **static and mobile clinics**, **9,008** patients received treatment during the reporting period and **172,313** beneficiaries received treatment up to June 2017. Medical Assistants of the clinics usually refer the patients, which they cannot diagnose or to whom they are unable to give proper treatment, to the doctors of Upazilla and District general hospitals. In the reporting period **213** patients were referred and so far in total **2,879** patients were referred. Usually the people in the project area had circumcision of boys performed by local unskilled people. After intervention of the project, the people are performing the same by the Medical Assistant (MA) of the clinic. In the reporting period **202** baby boys were circumcised and **869** up to June 2017.

90 TBAs (Traditional Birth Attendants) attended the refresher trainings **4** times and HFPFs and MAs have visited all TBAs 4 times in the reporting period. In the reporting period 584 **pregnant women** received **treatment and check-up** and in total 12,035. **91** Pregnant women and 85 lactating mothers were served iron tablets and **6901** and **5451** respectively were given tablets up to June 2017.

TBAs handled **572** deliveries in the reporting period, which makes in total **12,606**. During the reporting period no **extremely poor pregnant women** received financial support and **85** received support up to June 2017.

Contraceptive distribution: Reduction of the birth rate in the project area is one of the objectives of the Health and Family Planning program. Medical Assistants are discussing with male groups or individuals to make them aware of family planning and to convince them to adopt family planning methods; if the husband of the couple is convinced, the female can easily use the family planning method. **776** Group counsellings were performed in the reporting period and in total **4,707**; in the reporting period **11,279** cycles were distributed and in total **376,719** cycles of pills were distributed; **1,964** injections for the reporting period and **14,966** up to June 2017 were given. Family planning method user rate in the project stands at **89%**. (**Eligible couple by health baseline survey- 23,879**)

To reduce diarrhoea the Health and Family Planning Facilitators are working for raising awareness on safe drinking water, net and cleanliness. No Packets of ORS have been distributed among the households in the reporting period and **896,268** were distributed up to June 2017, which covered **27,654** households.

To create **awareness among the local influential persons** on the health and family planning program and various health issues, a daylong **orientation** is given to the local elite (imams, school teachers, UP chairmen and members, etc). They are involved in implementing the project activities. Medical Assistants and HFPPs conduct the orientation as per CDSP IV guidelines. No Local leaders received orientation in the reporting period and **2,342** up to June 2017. In addition, several meetings were conducted with Civil Surgeon, Deputy Director of family planning Noakhali, Upazilla Health & Family Planning Officer (UH&FPO) Subornachar Upazilla. CDSP IV interventions, achievements and future plans were discussed with them.

Training and practical session on food processing and cooking system: To develop the capacity of staff on methods of modern and hygienic food processing and cooking system, first the staffs of the program were given training on the subject. The duration of the training was 3 days. Two batches of training were completed with **48** participants, both Health and Family Planning Facilitators (HFPP) & Medical Assistants. Both theory and practical sessions were included in the training module. Trainers from BRAC conducted the training. In the reporting period refreshers training was given to all 48 participants at the time of field visits, through individual contacts.

Orientation on food processing and cooking system: The project char dwellers usually cook their food using traditional methods; huge nutrient loss occurs and there is misuse of food through this traditional food processing and cooking system. Most of the families do not prepare any special food for pregnant and lactating mothers, or special food for babies. To make the people aware about loss and misuse of traditional food processing and cooking system and to save nutrients especially for pregnant women, lactating mothers and babies, HFPPs of the program are conducting orientation sessions in the field and subsequently it is discussed in the health forum as an important issue. In the reporting period **35** orientation sessions were conducted in different Samaj, and up to June 2017. **100** sessions were held.

Height & Weight measuring of babies (0-5 years): The RIMS surveys revealed that stunting among babies and small children is a problem in the project area. Medical Assistants are measuring the height and weight of the babies/ children less than five years of age. The measurement is taken quarterly for each baby. **90** Babies are under observation and their height and weight are recorded.

Exploring patients' fee collection: For the sustainability of clinics in the project area even after phasing out of the project, TA team and partner NGOs are conducting mass meetings in the area with all stake holders. In the reporting period, no meetings were held with different groups and **48** up to June 2017.

Medicine sale by PNGOs: For the convenience of the beneficiaries, project management decided to create a revolving fund for medicines of BDT 10,000 for each PNGO branch. Medicines are purchased and sold among the beneficiaries with minimum profit made by PNGOs. In the reporting period PNGOs sold medicines worth **BDT 911,137** and cumulative it became **BDT 5,692,582** up to June 2017.

Outcome of the health and family planning program

Knowledge on health and family planning of staff and volunteers like Traditional Birth Attendant's has been developed significantly, resulting in good development of the program and eventually good practices among the beneficiaries in the CDSP project areas. Superstition regarding family planning methods has been reduced and use has gone up to 89%. Population is controlled as per suggestion and counselling by NGO staff and based on joint decision taken by husband and wife. The birth rate in the project area has reduced significantly, resulting in better health of mother and children in each family. Growth rate of babies is normal and stunting is becoming less as we are observing and collecting information. Rate of

immunization of 0-1 year babies is increasing and at the same time tetanus has been reduced significantly as women are given anti tetanus vaccination. Safe drinking water use is about 100%. Quality of home delivery is significantly improved, so that women seldom need to go to hospital or clinic for delivery. Infection and complication due to traditional circumcision has been reduced as it is now performed by the Medical Assistants. Treatment cost and monthly patient turnover in the project clinics is reducing.

Water and Sanitation Program

Access to safe drinking water and safe sanitation is a basic human right and essential for achieving, gender equality, sustainable development and poverty alleviation. But paucity of safe water and inadequate sanitation are the vector of water and excreta borne diseases. Improving water and sanitation is known to have significant beneficial impact on health and hygiene in families and households. Providing physically accessible safe water is essential for enabling women and girls to devote more time to the pursuit of education, income generation and even construction and management of water and sanitation facility.

Staff Capacity Building

The WATSAN sub-component of CDSP IV is under implementation at field level through the PNGOs. TA team has trained 13 coordinators and is providing on the job training and refresher courses with field finding issues for implementation and to enhance skills and capability of work for effective program activities.

Awareness meetings

WATSAN coordinators have conducted credit group meetings and, so far, there have been 2,241 (two or more times a group). Separately monthly follow-up meetings were held with TUG members and 11,280 took part up to June 2017. They discuss issues of sanitation and hygiene, for changing behaviour and attitude and to develop skills on DTW operation and maintenance.

TUG formation

The groups of 15 to 18 women that were involved in the location selection of tube wells are formed into a Tube-well User Group. The group is also involved in the collection of the contribution of the households to the installation of the tube well. The money is given to the NGO. The NGO transfers the funds to DPHE through the TA team. Only after the funds for a well are collected, DPHE would start the installation through local contractors. Attention should be given to the feedback mechanism from these TUGs to DPHE. There should be a proper way to channel the observation of the groups to DPHE. During the project period, the channel that is used is through the NGO or the member of the TA team. It is required to involve local government from the beginning of the process of group formation, since it then feels more responsible to keep the water supply functioning.

Tube well user groups (TUGs) are formed for each DTW. 66 TUGs were formed in the reporting period and 1,454 up to June 2017. 1,446 selected sites were submitted to DPHE. PNGOs collect beneficiaries' contribution money at the rate of Tk.4, 500 per tube-well. So far contribution money for 1,299 tube wells has been submitted to DPHE.

DTWs use and platform

DTW installation and platform construction update information from field is collected by PNGOs; if any kind of mismanagement takes place in the field during installation then the PNGO informs the TA team and DPHE takes necessary measures to solve the problems. Thus, a relation mechanism developed with PNGOs and community on water and sanitation issues. So far, 1,297 DTWs were installed and 1,291 functioning tube wells are being used. In the reporting period 54 platforms were constructed and 1,281 up to June 2017. Tube well management groups have maintained 22 platforms in the reporting period, in total 175, with 702 small repairs being done by CTF members at their own cost.

Care Taker Family training and Kit Box distribution

PNGOs have distributed tube well maintenance kit boxes to trained caretaker families 1,269 up to June 2017. 2,553 CTF members received training with focus on water and sanitation issues, repair and maintenance of tube well.

Single pit latrines

Through coordination with DPHE, PNGOs ensured distribution of 210 sets of latrines in the reporting period and 19,627 up to June 2017. 197 latrine sets were installed in the reporting period and in total 19,270.197 superstructures were completed in the reporting period and 19,217 up to June 2017.

The drive to ensure 100% Sanitation and Outcomes of the Activities

No open defecation, use of hygienic latrines by all, proper maintenance of latrines for continual use and improved hygienic practice are the factors of 100% sanitation. Special drives and campaigns were organized to meet this sanitation target. 243 Imams of mosques were mobilized to discuss awareness building on hygienic use of latrines.

578 school meetings were conducted (5 or more times) with students and teachers in which 31,224 participants attended. 237 adolescent orientation meetings were organized where 3,105 adolescent girls participated to create awareness on basic sanitation and hygiene. Water, sanitation and hygiene promotional activities progress, with focus on household water treatment, safe storing of water, hand washing with soap at critical moments and hygienic disposal of human excreta.

The key indicators of behavioural outcomes for the Water and Sanitation sub-component are:

Major intervention	Outcome/ Indicators
Availability of safe drinking water	86 % of HHs has access to safe water available within average 150-200 m distance from DTWs installed by the project.
Safe storage of water	100% HHs are used to store water in safe storage containers in safe places.
Access to basic sanitation service	77% of HHs has access to an improved sanitary facility.
Use of soap or ashes in the latrine	76% of HHs has soap and water at a hand washing point inside latrine.
Hand washing with soap at critical moments	73% of HHs with soap and water at a hand washing point commonly used by family members.
Changes due to safe water and sanitation	Significant reduction of water borne diseases like Diarrhoea, Hepatitis, Scabies etc. and 79% health improvement.

The following major activities were done in the Sub-component:

Ensured relation mechanisms with the line agency (DPHE)

The DPHE, CDSP-IV and PNGOs at times organize special issue meetings to solve problems arising in the sector sub- component especially in the DPHE part. Thus, a linkage mechanism has developed with DPHE NGOs, and beneficiaries.

NGO support for DTW site selection in Chars

In CDSP-IV, NGOs have taken responsibility for site selection in other Chars. This first step is that NGO staff raise the issues of tube wells in the groups that have been formed by NGOs themselves. Subsequently, discussions are made with the women of the groups of 15 to 18 household living close to each other. In these meetings, they fill up a group form and the location of the tube-well is decided upon. PNGOs have formed 60 TUGs in Char Kolatoli, Dhal Char, Char Muzammel and Telier Char, assisted DPHE to install 15 DTWs at Telier Char and trained 30 CTF members for DTW repairing and maintenance activities.

In the TUG, the selected site, the following DPHE criteria are taken into consideration. These are:

- no tube well should be located within the inner compound of any family or group;
- the location of the tube well should sufficiently far away from any source of pollution;
- the location of the tube wells should have proper drainage, and not be susceptible to normal flooding or any other influence that can cause damage to the platform

NGO assistance to DTW's Contribution ensured, deposit and provide to DPHE

The contribution money for DTW installation has collected to ensure the ownership of the same. After confirmation of the site, contribution money is collected with the consensus of the group formed to use the tube well. This contribution also generates a demand to DPHE for repairing and maintenance of the installed DTW. PNGOs collect beneficiaries' contribution money at the rate of Tk.4, 500 per tube-well. Up to the project period Tk. 58,45,500 contribution money for 1,299 DTWs was collected by PNGO and already provided to DPHE For water and sanitation infrastructure, development needs formal and informal women's organization and networks can play important and stimulating role in mobilizing resources for sustainable and equitable water and sanitation programs.

Key Success of the Sub- component

CDSP-IV through its Water and sanitation sub- component could ensure basic minimum level of service for the entire beneficiaries' of the project areas as follows:

1. **Water supply Service Level:** Ensured water point of DTW's for each household within 150 meter distance of household premise and collection time reduce within 20 minutes this is ensured through the project.
2. **Sanitation Service Level:** Project ensured one household one latrine to remove basic minimum sanitation service level, every household got separate hygienic latrine with appropriate fecal sludge management system and total family may share a hygienic latrine.
3. **Hygiene Service Level:** Ensured the basic minimum service level for hygiene that is hand washing with soap and promote menstrual hygiene management as it were developed a sustainable management system.
4. **Main streaming Gender:** Ensured involvements as like as Women are generally the Manager of Water and Sanitation and are also the guardian of hygiene enforcement also ensured by this sub-component.

Impact of Improved WatSan

Access to high impact especially preventive health services significantly reduces vulnerability of the poor households to illness-induced income erosion and expenditure crisis. Thus, reduction in fertility and improved health are important for poverty alleviation as well.

Healthy citizens are considered, as capital resource for a nation while people with ill-health are burden for that country. WatSan contributes to make the people healthy through a process of socialization that produces workable manpower and reduces unwanted treatment cost for a family and the country can give more attention to the development of its members and citizen for productive areas and could be ready to invest necessary amount of money.

It reduces women's burden and enhances their participation. Women have to collect water for drinking and other domestic purposes and they are to wait from dawn to dusk for defecation. Collecting water from a long distance and waiting for long for defecation affects seriously the physical and mental health of women. A safe water point, house hold latrine within their reach and adequate knowledge along with practices contribute in reducing their burden and healthy survival. It helps to save time for women which, they can use in productive and other social activities. It helps women to earn money and learn new things in terms of capacity building in social and economic areas that contribute directly to empowerment



Case Story: Now we are safe from all water and excreta borne diseases.

Sufia Begum. At the age 16, her parents arranged her marriage with Md. Monir Hossain, and in the year 2012 the Meghna eroded her home and land. Having no alternative, she went to Caring Char and purchased a piece of land worth tk.2,250/- from a local robber and. In June 2012 they built a hut started living there and finally shifted themselves to Caring Char.

She faced many problems earning a living, with no access to safe water for drinking, no sanitary latrine and no bath with privacy. In summer, she and her family took a bath after a week. Due to scarcity of water and sanitation facility various water and excreta spread diseases like skin disease, diarrhoea, and dysentery.

In 2011 she and her group was introduced to the WatSan Coordinator of CDSP-IV project during the formation of "Bidrohee Mahila Samity". She learnt a lot of things in the group meeting about benefits of safe water collection, storing and using drinking water besides how to use the sanitary latrine and ensure personal hygiene being free from various water and excreta borne diseases.

They formed a Tubewell User Group (TUG) in March 2012, and collected tube well contribution, providing this to DPHE through PNGO. Then DPHE installed the DTW as per TUG indication. PNGO trained two caretaker members from this



Sufia Begum collecting safe water from a clean DTW

TUG, on DTW repairing, maintenance and sanitation promotional activities. They used this water for drinking, bathing and clothes washing and even at the toilet. At present water borne diarrheal diseases are less in their community compared to the previous time and they reduced the need to consult the village doctor for water and excreta-borne diseases. Sufia Begum is happy with her family along with her neighbours to have such a water option. They are very grateful to CDSP-IV project and its activities.

Homestead Agriculture and Value Chain Development

CDSP IV is implementing a Homestead Agriculture and Value Chain Development program to reduce malnutrition and to increase the income of households by agricultural production of beneficiaries through technology transfer, using training, demonstration plots, motivational tour and distribution of input support.

Farmers training on fruits and vegetables: Homestead Agriculture and Value Chain Development program provided training to 13,520 beneficiaries up to June 2017. All trained farmers received inputs (seeds, saplings, fertilizer, etc.) through PNGOs.

Demonstration plots: During the reporting period 266 farmers received orientation on high value crop demonstration and in total 7,544 demonstration plots were established (1,600 mixed fruits orchards and mango orchard, 5,944 farmers received vegetable seeds/ mustard oil cake/ pheromone trap). 38,940 saplings of different fruits were distributed up to June 2017.

Demonstration plots (IPM): During the reporting period 61 farmers received orientation on integrated pest management (organic agriculture) for crop production and established a total of 61 demonstration plots, where farmers received vegetable seeds/ mustard oil cake/ vermi-compost/organic pesticide and fertilizer preparation technology/ pheromone trap etc.

Vermi compost: To encourage organic farming, reduce cost of production and improve soil health condition, 8 Vermicompost plants were established during the reporting period and 1,179 up to June 2017.

Motivation tours and field days: For extension of new technologies and introduction of best practices in the project area, two motivation tours for farmers were organized during the reporting period and 47 up to June 2017. 22 Field days were organized in the reporting period and 267 up to June 2017, with the aim to make farmers more knowledgeable and introduce new varieties to produce more fruits and vegetables.

Active nurseries: 125 Nurseries were developed in the project area of which 110 are actively involved with sapling production. In the reporting period 53,760 saplings were produced and 1,779,773 up to June 2017. In the reporting period 28,846 saplings were sold worth Tk.230, 385 and, so far 1,119,282 saplings sold worth Tk.8,708,641.

Collection Point Management Committees (CPMC): 11 CPMCs were formed earlier. In the reporting period 12 meetings were held with all committees and 45 up to June 2017. Each group consists of 11 members from 40 growers and 10 market actors, so in total 440 growers and 110 market actors are actively cooperating in the project area. They were trained on pre-season vegetable production and selling plan.

Rain water harvesting schemes: In the coastal area Rabi season crop production is very difficult because of major constraints such as i) scarcity of water, ii) drought, iii) soil salinity and iv) low water retention capacity of the soil. The Homestead Agriculture and Value Chain Development component has established 44 rain water harvesting schemes on a pilot basis for dry season irrigation. Each scheme covers 0.5 to 1.0 acres of land (depending on harvester's capacity) for drip irrigation of pit crop vegetables in Rabi season and early cultivation of e.g. cucumber in Kharif 1 season.

Outcome of the Homestead Agriculture and Value Chain Development program

After receiving training on cultivation of homestead vegetables and fruits, the project beneficiaries and farmers are now producing a huge quantity of vegetables for their family consumption and for selling in the retail and wholesale markets. A few production figures up to June 2017: country bean seed 6,916 ton, country bean 2,693 ton, cucumber 8,858 ton, bitter gourd 2,189 ton, sweet gourd 2,046 ton, yard long bean 2,664 ton, tomato 1,429 ton, snake gourd 2,459 ton, ridge gourd 1,806 ton, okra 1,670 ton and chilli 903 ton. In total 33,633 tons of product have been sold locally, in neighbouring districts and in Dhaka/ Comilla / Chittagong through value chain whole sale markets.

Women farmers are earning income from plant nurseries, established by them with the use of microcredit from PNGOs. They are investing their profit in secondary income generating activities like paddy thresher, 'Nosimon' local carriers and poultry farms. They are benefiting from a higher level of income and enjoying better livelihood in their families than before joining CDSP-IV. Project area beneficiaries are using vermi-compost in their fields. Some farmers are earning money by selling the vermi-compost and worms in the project area

Case Study: Poverty Removed by vegetable cultivation

Sahena Begum is the resident of Al-Amin Samaj, where she lives with three kids and her husband. Before migration into the char she lived in a hut with her father-in-law and her husband was a day labourer. So she migrated from Panditerhut of Subornochar to Noler char for a better life. But she fell into frustration to see the real socio-economic condition of the char. After the start of CDSP-IV she joined Bely Mohila Group of Azimpur Samaj.

Quick Compost preparation



Production of huge amount of vegetables



Carrying vegetables for sale



One day the Agriculture coordinator attended their weekly credit group meeting searching for good demonstrators and Sahena begum showed her interest. The Agriculture coordinator gave her good quality new varieties of hybrid and high yielding vegetable seed and also technology support for time to time. Sahena Begum was overwhelmed to see the production of vegetables. She earned Tk 17,100 from 0.06 acres of land and invested only Tk 3,200 (excluding her labour cost and organic fertilizer). Sahena produces vegetable regularly using modern technology and earns Tk 7,000-8,000 /month. Her husband helps her selling of vegetables and purchase of new varieties of seed from nearby seed dealer. Now she is the owner of three cows (one milking cow), and cultures fish in her pond and owns a share of Tk 3,0000. She sends her children to a madrasa (local educational institution) and is concerned that early marriage will destroy her daughter's health, now she is aware about this matter. She said now her financial condition is better than her previous position, and everybody honours her. She said that she is very happy with her family and hopes to build a better house. Sahena Begum and her husband are very grateful to Sagarika and CDSP-IV for the change in their livelihood.

Poultry and Livestock

CDSP IV started the Poultry and Livestock component in the project area in October 2014. Due to lack of service from government and non-government organizations, beneficiaries were demanding support from CDSP IV. Poultry and Livestock rearing is one of the important sources of livelihood for the settlers/ farmers in the project area. Livestock is a crucial part of household economy as a source of food and of financial and social security, while backyard rearing of poultry (chickens, ducks and pigeons) is an important source of subsistence. The average number of birds for each household is 10 chickens and 5 ducks (baseline survey, 2014). In case of livestock and poultry, productivity was affected by high levels of mortality, especially in chicken and ducks. Typically, 50-70% of each clutch of baby chicks /ducklings was lost by disease (probably Newcastle/Ranikhet disease and duck plague) due to lack of vaccination service. CDSP IV is now implementing the poultry and livestock program to reduce the poultry and livestock mortality and to increase the income of households by rearing poultry and livestock by proper management and care. During the reporting period the program activities were as follows.

Meetings with group members: The poultry and livestock coordinators (total 6 persons, one person for two branches) are conducting meetings with NGO group members. The purpose of the meetings is to make people aware through discussion about improved rearing system, veterinary health care and other technical issues related to poultry and livestock. The meetings are held after the end of the credit group meeting. In the reporting period 374 and in total 2,023 group meetings for awareness build up were held up to June, 2017.

Poultry Worker Refreshers Training: In the reporting period 147 Poultry workers received one day refresher training in the PNGO branch offices.

Fodder Cultivation and Management Training: In the reporting period 220 selected beneficiaries received training on saline tolerant fodder cultivation and management techniques to reduce shortage of quality green grass for livestock during dry and rainy season in the project area. Each trainee received grass seeds and fertilizer as input support from the project.

Poultry Vaccination Program:

To improve productivity and reduce poultry mortality CDSP IV started a poultry vaccination program from May 2015, which is implemented by PNGOs. During the reporting period 923 poultry vaccination programs were conducted and 3,017 up to June 2017. In the reporting period 100,726 and in total 3,34,523 poultry (both chickens & ducks) were vaccinated. 91,445 poultry were given vaccine for the first time, which indicates newly generated poultry flocks in the project area. The total use of vaccine is 87%, which indicates the satisfactory use of vaccine. The following table shows the PNGO wise poultry vaccination status.

Table 4 - 8 Poultry vaccination status in CDSP IV areas

PNGO	Poultry vaccination Programs (no.)	Used Vaccine dose / bird	Vaccinated poultry (no.)	Vaccination (%)	Total 1 st time vaccinated poultry (no.)
BRAC	434	43,400	37,580	87	37,580
SSUS	70	22,300	17,830	80	8,549
DUS	395	39,560	37,904	96	37,904
SDI	24	10,800	7,412	69	7,412
Total	923	116,060	100,726	87	91,445

Para-vet selection and training: To decrease prevalence of common diseases, ensure vaccination and veterinary care for livestock in the project area, 12 persons (1 person per branch) were selected for a Para-Vet development training program. The technical part of this training program was conducted by resource persons from the Department of Livestock Services, Bangladesh Livestock Research Institute (BLRI), and from the District Artificial Insemination Centre. After 15 days residential training participants were awarded a certificate on primary treatment and vaccination of livestock, authorized by District Livestock Officer, Noakhali. Para-vets also received a surgical bag as input.

Livestock Vaccination and Treatment: During the reporting period 121 livestock vaccination programs were conducted in the project area and 441 up to June, 2017. In the reporting period 10,914 livestock (cattle & buffalo) were vaccinated and 36,614 up to June, 2017. During the reporting period 5,135 livestock were given primary treatment and 18,314 up to June 2017.

Special trial program on Sonali crossbreed poultry rearing:

A special trial program was undertaken on Sonali cross breed poultry rearing (one cock family including a single cock and nine hens) in semi intensive system in CDSP IV project area involving 30 families under three PNGO branches in char Nangulia. The average flock size of Sonali chicken is between 20-15 per family. The Sonali is a cross-breed of Rhode Island Red (RIR) cocks and Fayoumi hens and has a similar phenotypic appearance to that of local chickens. Sonali birds are well adapted to the country's environmental conditions so require less care and attention than other breeds, making them easier for women and children to rear. In the project area the Sonali birds in semi intensive system are housed with netting and a small shelter made by wooden boards or bamboo and corrugated iron (tin). The semi intensive Sonali birds are fed homemade unbranded feed made by local ingredients like broken maize, rice polish, soybean, broken rice, broken lentils, dried fish etc. Green vegetable waste or kitchen waste is also supplied with fresh drinking water. All birds are getting vaccination and other veterinary support from PNGOs branches as well as from project.

Technical support to beneficiaries: During the reporting period, poultry and livestock coordinators have provided technical and management support to 240 cattle rearers, 109 goat rearers, 243 homestead poultry rearers and 118 beef fatteners and in total 1414, 721, 1395 and 556 respectively up to June 2017.

Outcome of the poultry and livestock program

Due to implementation of the poultry and livestock program in CDSP IV, project area people have become more aware about improved rearing system of poultry and livestock, and about vaccination and treatment of animal diseases. About 75% of the HHs now has access to poultry & livestock vaccination and treatment service. The increasing number of treated livestock indicates easy access. Due to the vaccination program for poultry and livestock, reduced poultry mortality and prevalence of common diseases of poultry and livestock is visible in the project area.

Beneficiaries are getting necessary technical support and veterinary care for their poultry and livestock from our skilled persons (Poultry workers and Para-vets). The number of poultry and livestock is increasing day by day. People's income from the sector is increasing and they can invest additional income in production, family expenses and

education for their kids. In addition, there is creation of livestock based employment opportunity and improved family nutrition through increased consumption of milk, meat and eggs.



A linkage has been established between Para-vets and District Livestock Services which help them to become more technically sound. Para vets are also involved with veterinary medicine business with small dispensaries in local bazaars which ensure quality



veterinary products in char areas and it gives them Tk. 6,000 to 10,000 monthly income from primary treatment and medicine business.

Case Study: Economically empowered by Para Vet Profession (Monthly income tk.25,000-30,000)

About 12 years ago, Md. Emran Hossain came from Hatiya due to river erosion and started living with family at Noler Char. There was no other veterinary doctor or quack practitioner in this char. Sometimes sick animals are died due to lack of proper treatment and people have faced economical losses. There was prevalence of infectious diseases like anthrax, hemorrhagic septicemia, black quarter, foot and mouth disease (FMD) etc among livestock. But he was not able to provide the proper treatment and medicine for livestock and people had no faith in him due to his lack of knowledge.

Five years ago, when CDSP-IV project started activity in Noler char, his wife joined in Mollika Mohila MF group of SSUS-CDSP-IV branch and got information about the para vet training program of CDSP-IV. I contracted them and told them about my veterinary business. Due to my high interest they selected me for the para vet development training program and in November, 2015 I got 15 days long residential practical training with a certificate signed by DLO and a surgical bag from CDSP-IV.

From December,2015 I started my work in full strength and shared information about my services and vaccination facilities for livestock in different MF group meetings of SSUS with the help of PL coordinator. Within one month my business was spread enough and got a good response from char dwellers. I have access to use the solar refrigerator for vaccine preservation. At present, I already treated and vaccinated 65 rabies infected cases and performed several vaccination campaigns for livestock in the area. I got a loan tk.30,000 from SSUS for my vet medicine business expansion and I got profit of Tk 50,000 within 6 months. I invested the profit in the business and in December,2016 from earned money I bought one acre of land. From CDSP-IV I already received the khatian of my previously occupied land. I built a nice house for my family and in 2017 I brought a motorcycle to ensure vet treatment in far places from my local area. Now my monthly income is tk.25,000-30,000. I am very grateful to CDSP-IV project and always stay concerned about technical advices from them. In future, I have a plan to start a large dairy farm in the place beside my house.



Fisheries

Similar to the Poultry and Livestock Component, CDSP IV started the fisheries component in the project area in October 2014. The following activities were performed in the reporting period and up to June 2017.

Staff Training: TA team has provided 5 days training to the 6 Fisheries Coordinators on basic fish culture, feed and pond management. In addition, one day refresher on fish culture management was held with 6 fisheries coordinators. The objective of refresher was to review the knowledge gained in the training and at the same time to share modern knowledge and technology on fish culture.

Pond Selection: After completion of the baseline survey, NSS and Coordinators of fisheries selected 18,189 ponds (perennial 6,256 and seasonal 11,933), which cover 186 acres (77 ha) of water bodies for fish culture in CDSP IV areas.

Training on fish culture management of perennial ponds: The objective of training was to develop the knowledge and at the same time to share modern technology on fish culture management with the annual fish farmers. 4,418 Beneficiaries were trained on fish farming.

Training on fish culture management of seasonal ponds: The objective of the training was to develop the knowledge and at the same time to share modern technology on fish culture management with the seasonal pond fish farmers. 1,022 Seasonal pond owner beneficiaries were trained on fish farming.

Training on fingerling production management: To develop the capacity of the fish nurserers and to acquaint them with modern farming technology and management, a 3 day long training was organized by the TA team. Nursery management, quality fingerling production and management were the main objectives of the training. The training was facilitated by the NSS (fish). In the reporting period 42 farmers and a total 108 farmers were given training. The trained persons are in operation in the field and producing good quality fingerlings.

Meetings with group members and household visits by fisheries coordinators: The six fisheries coordinators are conducting meetings with NGO group members. The purpose of the meetings is to make people aware about improved fish culture technology and other technical issues related to fisheries. The meetings are held after the end of the credit group meeting. In the reporting period 515 group meetings were held and in total 2,774. 1,608 HHs were visited by the Fisheries Coordinators and in total 8,282 up to June 2017.

Spawn collection, Fingerling production and release.

38 Newly trained nurserers have collected 28 kg of fish spawn (Rui, Katla, Silver carp, Bighead, Mrigal, Kalibous, Sarputi and Grass Carp) from Rajlaxmi fish hatchery of Rajganj of Begumganj Upazilla, Noakhali and released these into the 38 prepared nursery ponds. So far 133 nurserers released 104.8 kg of spawn in 133 nursery ponds. 75% of the cost of the spawn was given as an input support from the project and remaining 25% was borne by the nurserer. In all the nursery ponds together approximately 60 lakh fingerlings will be produced. In the reporting period 1,90,000 fingerlings were sold by 133 nurserers to 6,550 annual and seasonal fish farmers in the project area; in total 32,17,202 fingerlings were sold (total price was Tk.49,29,500) up to June 2017. Nurserers' income range was Tk.15,000 to Tk.80,000.*****

Demo fish farmers training, input distribution and fish production

The objective of the training was to develop the knowledge and share modern technology on fish culture management. 2 Days training were held at the branch areas to establish model fish farmers and extend modern technology among the surrounding traditional fish farmers. In the reporting period 360 farmers and total 1080 model fish farmers were trained on fish farming. The trained farmers have received 6,21,800 fingerlings from 133 nursery farmers, 28.15 MT fish feed and 18,00,000 Mono sex tilapia up to June 2017 as an input support from the project. 145.355 MT fish was produced by 720 demo fish farmers and in total 166.612 MT, the total price was Tk 1,97,19,635 up to June 2017. Demo farmer's income range was Tk 15,000 to Tk.36, 000.



Fingerling harvesting



Money received by fingerling selling

Case Study

Mrs Anwara migrated to Uttar Urir Char in 2005 due to river erosion, where her husband purchased land but then died after 17 years of marriage. She has 3 daughters and 1 son. After her husband died, their economic condition was very bad and she could not manage. By these circumstances, she got admission in Jamuna Mahila Samitee of the PNGO SDI in 2009. Then she started to deposit Tk.10 per week, and at present her deposit money is Tk.6,000. In 2010, she received her first loan of Tk. 4,000/- from SDI in

weekly instalments for handicrafts and has now received loans (for cow rearing, poultry rearing and fish culture etc.) seven times from SDI.

She is earning a good profit from poultry and cow rearing and also received two days training on “Improved Fish Culture Management” as a model farmer. After receiving the training, she established a fish farm in her 0.20 acre pond. At that time, she received a loan of Tk 20,000 from SDI. Then she released 1,500 different fingerlings (rui, katla, mrigal, silver carp etc.) in her fish farm as an input with the project support as well as technical support. Her production cost was (dyke repair, fingerlings, lime, fertilizer and feed etc.) Tk.13,000. She produced 308 kg of fish and sold them locally. She earned a total of Tk 20, 880 (Tk 105/kg) from her farm after meeting family needs. She has decided that she will extend her fish farm in future. Now her economic condition is going very well and she is the role model for other fish farmers in that area.

Legal and Human Rights

The main objective of this sub-component is to provide group members access to information about law, disseminating the law through legal literacy classes, raising awareness about legal rights, and empowering the poor, especially women, both legally and socially by encouraging them to take legal action.

Meetings with group members: The LHR coordinators are conducting meetings with NGO group members. The purpose of the meetings is to make the people aware on LHR and social issues. The meeting is held after the credit group meeting. In the reporting period 170 meetings and 1,497 follow up meetings with NGO group members were held and 8,593 up to June 2017.

International Women’s Day observation: To make the project area people aware on Legal and Human Rights, International Women’s Day was observed in all branches of PNGOs. A rally and a discussion meeting were held on that day. People from all walks of society attended the occasions. 6 Events were observed in all branches in the reporting period and 70 events up to June 2017.

Child Rights Day observation: To make the project area people aware on rights of children, Child Rights Days were observed in all branches of PNGOs. Normally a rally and a discussion meeting are held on that day. People from all walks of society attend the occasions. Many events on Child Rights Day were observed and 62 events up to reporting period June 2017.

Human Rights Day observation: To make the project area people aware of Human Rights, Human Rights Day was observed in all branches of PNGOs. Normally a rally and a discussion meeting are held on that day. People from all walks of society attend the occasions. 62 events were observed up to June 2017.

Orientation meetings with local social leaders: An orientation meeting for local stakeholders such as Union Parishads involved UP Members, Imams, Marriage Registrars and other influential people in the community is annually organized to disseminate information on human rights and legal issues and to constructively engage them in minimizing unlawful activities in the society and developing a sustainable society. The orientation is provided to them in the branch office. After the orientation an action plan is prepared, and follow up is given by the LHR coordinators of the component. In total 1,575 persons received orientation up to June 2017.

Training of beneficiaries on legal and human rights: To raise mass awareness among the PNGO group members is one of the objectives of the LHR program. The program adopted various activities to perform the same. One of them is training of selective beneficiaries. 20% of the beneficiaries received training on legal and human rights on seven basic laws. This 20% are members of the group management committees, and they act as a **law implementation committee**, disseminating the message and taking action against any violation of human rights. 5,174 selected beneficiaries received training in 207 events from PNGOs to June 2017.

Legal courses for beneficiaries: Courses on LHR are conducted by the LHR promoters in each and every group in the project. The duration of the course is 22 days. Up to the reporting period 533 courses for 13173 beneficiaries were conducted. For completing each course, the LHR promoter receives Tk.2, 000 (Tk.1, 500 from the project and Tk. 500 from beneficiary contribution, course participants contribute Tk. 20 each for the course).

Law Implementation Committee (LIC) meeting: After completion of each course of LHR in the group, a law Implementation Committee is formed comprising 9 members, headed by the best performer in the LHR course. The committee makes linkages with all local level institutions including Union Parishads and assists to implement the program, disseminate and collect information regarding early marriage, dowry, divorce etc. in the Samaj. Each committee conducts a meeting once in a month and discusses about the progress and up dated information of social issues. In the reporting period 180 and a total of 4,501 meetings were held and 1,194 LIC committee meetings were follow up during March 2017 to June 2017. Soon after hearing information on an event the committee members try to solve the problem with the local people. Thus, for example, they are prohibiting early marriages in the project area. LICs stopped 3 early marriages in the reporting period and 93 were prohibited up to June 2017.

Marriage registration: The rate of marriage registration in the project area is very low compared to the main land. People in the area are not well aware of the need to perform this. In our LHR program special emphasis is given to registration of marriages. The staff of the program collect the information and undertake necessary measures in this regard. It is observed that the rate of marriage registration is increasing gradually. In the reporting period 18 marriages were registered including a few due in the previous period. Up to June 2017, 3,304 out of 3,264 were registered with a Kazi (marriage registrar) office.

Outcome of the Legal and Human Rights Activities

After successful implementation of the activities under the LHR sub-component of the SLS component, child marriage, multiple marriage, dowry and illegal divorce rates have reduced significantly compared to the pre-project status. Through observing the days of human rights, woman rights and child rights day the communities are more aware and have active involvement with the society as well as the country. PNGOs sustain continuous follow up of LHR activities in their scheduled group work and 91% of LIC committees are active in the Legal and Human Rights sub –component, so sustainability can be ensured.

Disaster Management and Climate Change

To enhance the implementation process and to involve the Union Disaster Committees, **meetings** are organized by PNGO's Disaster Coordinators with **Union Disaster Committees** and other (e.g. Red Crescent) stakeholders. The discussion matters of the meetings were various disaster issues and finding ways to build cooperation with each other and on how to coordinate activities. To strengthen the activities of union disaster committees, auxiliary disaster management committees were formed in the branches. These auxiliary disaster management committees hold meetings in the presence of Red Crescent and members UDMCs to make a formal relation with the Union Disaster Management Committee and other stake holders. Action plans were prepared on issues discussed in the meeting and follow up is given by coordinators. Up to February 2017, 64 meetings were held and 30 follow up meeting were held from March to June 2017. To make the group members aware about **disaster preparedness and mitigation**, the staff of the subcomponent are conducting meetings with group members. Gradually meetings were held in all groups. 138 Meetings were held during this period and 7,506 meetings up to June 2017

Training on disaster preparedness to selective group members: To raise mass awareness in the project area, selected group members are trained on disaster mitigation and preparedness. The trained members disseminate the issues to the other people in the community. In the reporting period 1,449 beneficiaries attended the refresher training and 3,397 up to June 2017.

House strengthening and plinth raising: This program is implemented on a pilot basis. The objective is to strengthen and raise the platform of a few houses, so that they survive during flooding caused by tidal surge so that people will observe the activity and replicate it for their own houses. This activity is targeting mainly Caring Char. No houses were strengthened and no plinths raised in the reporting period, but 417 of both were done up to June 2017.

Training on improved cooking system: To mitigate the crisis of fuel wood and to protect the house and environment from pollution, this activity is implemented in the whole project area. The project provided training to 260 (F-240, M-20) persons on improved cooking systems and is continuing campaigning and motivation to increase the number of users gradually. In the reporting period 250 cooking systems were established in all branches and 6,015 were established so far.

International Environment Day and National Disaster Preparedness Day observation: In order to raise awareness among the people, on the fixed days these are observed. People from the community, teachers, students, leader of different local level institutions and local elites are participating in the

occasions. A rally and a discussion meeting are held and materials and saplings distributed to mark the days. 62 And 64 events respectively were observed up to June 2017.

Bill board preparation: To disseminate and easily understand the message on Disaster Management and Climate Change, bill boards are prepared and put in places where many people are moving and watching. 13 such billboards were prepared up to June 2017.

Signal flag: To provide community people early warning of disaster, in each branch 3 locations were elected with the management committees, where flags and other materials were supplied and stored. At 117 locations flags and other materials were supplied so far.

Hand mike distribution: At the time of disaster the concerned coordinators will disseminate the message of disaster to take precautionary measures. 12 Hand mikes for danger signal broadcasting were distributed so far.

Outcome of the Activities of Disaster management: Thanks to the trainings, refreshers and group meetings on the issue all households in the project are aware about disaster preparedness and the signs of disaster signaling. In all areas Union Disaster Management committees are active during the pre and post disaster periods. Already 25% of the project households are using improved cooking system for their daily cooking purposes.

During the cyclonic storm “Roanu”, in May 2016, the volunteers of Union Disaster Management committees actively participated in signal flag hoisting, miking the community about the danger level of signaling and in mobilizing people to take shelter. As a result, about 6,500 people took shelter in the nearest project cyclone shelter and most of the people went to a safe place. During the cyclone “MORA” in May 2017, 32 cyclone shelters in the project areas were used and it was reported that about 7,100 people took shelter in these cyclone shelters. Thus we see that the trend of people’s mobility to cyclone shelters appears to be gradually increasing.

Group Formation, Micro finance and Capacity Building

As of 30 June 2017, there were 22,869 women members in 1,045 NGO groups, with an average of 22 members per group. Assuming one member per household, 79% of the total of 29,000 households in the CDSP IV chars are currently participating in NGO group activities.

PNGOs are collecting savings from the enrolled members on a weekly basis in the group meeting. Tk.73 million was collected during the reporting period (July 2016 to June 2017) and Tk.40.6 million refunded. The total balance in savings accounts with the PNGOs Tk.108 million. Average savings per member is Tk.4,726.

PNGOs are disbursing loans as per beneficiaries’ choice and skill. During the period 17,530 loans were disbursed amounting Tk.331 million, and in total 85,148 loans had been disbursed up to 30 June 2017, amounting Tk.1,402 million among 27,203 borrowers (all of them received at least one loan from the project). The average loan size in the reporting period was Tk.18,882. As of June 2017, Tk.315.7 million was outstanding in loans to 16,219 borrowers. Loan recovery is reported as being good, with only 2% of outstanding loans being classified as being at risk. All four PNGOs are operationally self-sufficient, with a ratio of income to operational costs of 1.96:1.

Three PNGOs (SSUS, DUS and SDI) that are using funds from PKSF are providing loans on different terms targeted at specific households. Of the total amount disbursed by these three PNGO, only 36% is regular micro-credit, with 24% being seasonal loans for farm activities, 22% being on advantageous terms for the poorest households (these loans are smaller in size and so cover over a third of all current borrowers), 16% for development of larger micro-enterprises and 2% to take land on a mortgage.

Death benefit: If any micro credit group member dies, the nominee of her family will get a financial benefit from the project amounting Tk.2,550. In addition, PNGOs are providing an equal amount of money from their organization’s own funds. In the reporting period 32 families have received death benefit from the project, making a total of 366 up to December 2016.

Outcomes of the Microfinance Program

So far **22,101 group members have been** trained on farm- and non-farm IGA, which is **79%** of the members. They have invested their microcredit loans in various income generating activities (see table below). The largest share (45%) has gone on livestock and poultry investment, followed by vegetables and crops with 28%. Compared with most micro-credit lending, the share for trading is relatively low, at

only 18%. This shows how micro-credit has complemented the other activities of CDSP IV in developing the farm sector

Purposes of loans disbursed by PNGOs

Purpose of loan	Total disbursed to June 2017	
	Tk. million	% of total
Poultry rearing	113.3	8.1%
Cow rearing	331.4	23.6%
Goat rearing	46.3	3.3%
Beef fattening	137.8	9.8%
Vegetable cultivation	236.7	16.9%
Agriculture (all crops)	153.8	11.0%
Fish Culture	91.6	6.5%
Motor Cycle/Rickshaw/Van purchase	33.2	2.4%
Trading enterprises	257.9	18.4%
Total	1402.1	100.0%

4.6 Institutional development

4.6.1 Field level institutions

It has been demonstrated in many parts of the world that development initiatives are more effective for poverty reduction when all stakeholders, especially citizens and marginalized communities are actively involved in the planning, implementation and monitoring of development programs. Moreover, effective development calls for the “ownership” of processes of change by those who will embody them in the future. In most cases, external interventions have negative implications at local level because they often lead to a lack of ownership on the part of local communities. For avoiding such a situation in future CDSP IV is adopting a multi-dimensional approach which requires an institutional basis at community level in order to promote a participatory process as well to make the efforts sustainable. Moreover community-owned processes would only be transformative if they are driven and self-organized by internal forces and dynamics of changes. In order to promote such a process in the project areas six implementing agencies and four PNGOs, with support from the Technical Assistance team, are working for strengthening and capacity development of field level institutions (FLIs), established to involve local people in planning and implementation of project interventions such as infrastructure development for better water management, social forestry, agriculture extension and livelihood and in operation and maintenance after the project is completed. The institutions formed are Water Management Groups (WMG); Water Management Associations (WMA); Water Management Federation, Tube well User Groups (TUG); Farmer Forums (FF); Social Forestry Groups (SFG); Labor Contracting Societies (LCS) and Women Credit and Savings Groups. In **Annex 9** a complete overview of FLIs is presented.

The formation of WMGs, LADCs and FFs was completed by the end of 2012 as per project target. The formation of WMA in Noler Char and Caring Char was completed in December 2015. The formation of TUGs is already completed, except for some additional DTWs, while formation of SFGs and LCS is still ongoing as these are to be formed on the basis of works to be implemented in the respective areas. For the status of the formation of the Social Forestry Groups please refer to paragraph 4.2.2, for Farmers Forums please refer to paragraph 4.5.1 and for the status of women credit and savings groups and TUGs by PNGOs, please refer to paragraph 4.5.2 above. In addition, the TA Team continued support to the WMOs in the CDSP-I, II & III areas.

Formation of Water Management Federation (WMF)

After long discussion held with BWDB, representatives of WMGs and WMAs it has been decided that one Water Management Federation (WMF) will be formed involving the representatives of Char Nangulia, Noler Char and Caring Char Water Management Associations (WMA), and representatives of Boyer Char Water Management Association (WMA). Accordingly planning meetings with those WMAs have been organized and it was realized that WMA of Char Nangulia and Boyer Char were formed in 2012 and 2013

in accordance with the cooperative procedures as no guidelines were yet approved then by Water Resources Ministry. But it is now mandatory, after the approval of Participatory Water Management Rules 2014 that all water management organizations need to be formed in accordance with that rules. Realizing this situation, an attempt has been made during the reporting period to reorganize the WMAs on priority basis and subsequently to form the WMF including the representatives of those reorganized WMAs. Nevertheless, in February 20, 2017, a 12 member committee of the WMF has been elected by secret voting by representatives of WMO members conducted by the election commission as per rules of 2014. Hence the WMF will act as the top body of the organization.

Formation of Water Management Association (WMA)

A WMA was formed in Noler Char and Caring Char in December 2015 which has 40 members with 5 representatives (Male 27 and Female 13) from each of the 8 WMGs. The Nangulia WMA met 4 times during the reporting period at the Kaladur Bazar CDSP IV site office. Average attendance in those meetings was 59%. Since its formation the WMA met 40 times and discussed issues such as: construction of a new sluice as DS2 has been eroded by river, payment of security money by BWDB as the WMG centres have been completed, providing furniture for the WMG centres in order to organize meetings in those centres, river erosion threat to the area, water management problems, particularly removal of water logging, audit of WMGs due to non-availability of relevant officials from BWDB, increase of membership in all WMGs, adopting participatory water management rules - 2014, land settlement issues, infrastructure development, e.g. excavation of khals, protective works required to stop the erosion, new earthen roads, construction of new cyclone shelter in Char Laxmi area as there is no cyclone shelter, construction of additional pit latrines, reconstruction of the road from Solaiman Bazar to Haji Idris Bazar.

Formation of Water Management Groups (WMG)

As per project design, all activities related to WMOs are primarily the responsibility of BWDB but only one Extension Officer (who is also very irregular) is available in Noakhali Division since September 2016, and no posting of a new AEO was done yet. During this reporting period, the TA team continued the strengthening and capacity building related activities of WMGs, WMAs, and WMF in the 5 chars (in Char Nangulia -11 WMGs & 1 WMA, in Noler Char - 5 WMGs, in Caring Char - 3 WMGs and 1 WMA, in Urir char-3 and in Char Ziauddin – 2 WMGs). But due to non-availability of BWDB extension officials on a regular basis, not all activities of WMOs are being discharged in an effective manner, like regular auditing of all registered WMGs, registration of rest of the WMGs, including organizing the training courses outlined in the Annual work plan for CDSP IV, although a detailed training program including required budget has been developed and has approval. As the training programs could not start yet due to shortage of extension officials, it will be challenging to complete the training courses included in the AWPB 2017 - 2018.

WMG registration by BWDB

As per agreement between PCD, CDSP IV, and Chief Water Management of BWDB, 21 WMGs (11 in Char Nangulia, 5 in Noler Char, 2 in Char Ziauddin and 3 in Caring Char) are registered by the BWDB as per Participatory Water Management Rules 2014. Three reconstituted WMGs in Urir Char are under process of registration from BWDB. Registration of 10 WMGs in CDSP-III has been completed, 12 in area II and 2 in area I have been completed. The process for registration of WMGs in CDSP-III, II and I areas is going slowly due to the procedure laid down in the rules (it is mentioned in Participatory Water Management Rules 2014 that at least 55% of the water users within the proposed operational area need to be enrolled in WMG as members). Detailed discussion was held with BWDB to find out a workable option to find out an easy way. But as no extension officials are available in Noakhali BWDB Division the process is taking more time than expected. Another point is that as there is no registration authority of BWDB available in Noakhali, so the WMO representatives have to travel to Feni to collect application forms and other documents required for registration. BWDB may develop some effective mechanism to expedite the registration process which will be less costly and less time consuming on the part of WMOs.

Construction of WMGs' office buildings

Construction of 11 Water Management office buildings was completed in Char Nangulia, 3 in Noler Char 2 in Char Ziauddin and 3 in Urir Char, in total 19 out of the target of 24, and 5 are under process. WMGs are now organizing their respective meetings in their offices on a regular basis. It is planned to provide furniture from savings on the budget, for WMG centres.

Maintaining of books, registers and formats by WMGs was closely monitored and guided by the concerned Project Area Coordinators (PAC) and Gender Field Coordinators (GFC) during this period too as their routine task. Monthly meetings were also facilitated by concerned PACs and GFCs. The status and details of WMGs and WMA are shown in the following table:

Table 4 - 9 Status of WMOs in CDSP- IV areas (Jan –June 2017)

SL	Name of Char	FLIs: WMG	No. of Shamaj	No. of HHs	No. of members in WMG/ WMA			No of meetings held during the reporting period
					Male	Female	Total	
1	Char Ziauddin	2	13	2,180	39	40	79	5 meetings for each WMG 2 female member increased
2	Noler Char	5	28	7,020	104	73	177	6 meetings for each WMG
3	Caring Char	3	22	3,742	43	35	78	5 meetings held
4	Char Nangulia	11	83	13,837	251	199	450	5 to 6 meetings for each WMG held
5	Urir Char	3	21	2510	67	15	82	5 to 6 meetings for each
Total		24	167	29289	504	362	866	
Char Nangulia		1 WMA	83	13,837	31	13	44	4 meetings held
Noler Char & Caring Char		1 WMA	50	10,762	27	13	40	4 meetings held
Total		2	133	24,599	58	26	84	
		1 WMF	-		24	12	36	Orientation

In the table it is seen that, in Noler Char and Caring Char, all monthly meetings of the 8 WMGs were held. 10 meetings were held in Char Ziauddin. In Char Nangulia 63 meetings were held during this reporting period. Average attendance in those meetings was 50% in Noler Char, 64% in Caring Char, 57% in Char Ziauddin, 56% in Char Nangulia and 71% in Urir char. The WMGs enrolled only two new female members in Char Ziauddin. The effort is continuing to increase the enrolment of new members. It has been observed during meetings in Char Nangulia and Noler Char that river erosion, including the loss incurred by WMG centre construction and fish culture have restricted the local people and is demotivating them to be members of WMOs.

Four monthly meetings of Char Nangulia WMA were held in the reporting period and the average attendance in those meetings was 59%. In Noler Char all monthly meetings of the 5 WMGs were held i.e. 30 meetings as per target. Average attendance of these meetings was 50%. In Char Ziauddin 10 monthly meetings of the 2 WMGs were held during this reporting period and the average attendance in those meetings was 57%. In Caring Char a total of 15 meetings of the 3 WMGs was held during the period and the average attendance in those meetings was 64%. In Urir Char 17 monthly meetings of the 3 WMGs were held and the average attendance in those meetings were 71%.

WMOs in CDSP III

10 WMGs and 1 WMA were established in CDSP III area, i.e. in Boyer Char. Ten WMGs have 417 members out of which 244 are male and 173 female and 3 male members have been added during this reporting period. The WMA has 40 members of which 25 are male and 15 female. The WMA organized two meetings during this reporting period and the average attendance was 75%. A special meeting of this WMA was organized jointly by BWDB and the TA team to reorganize this WMA as it was established in accordance with the cooperative procedure. This initiative was taken to establish this WMA as per the procedure of Participatory Water Management Rules-2014 as part of a process of establishing a WMF with the representatives of the WMA. The ten WMGs organized 55 meetings during this reporting period. Male and female attendance in those meetings was 50% and 59% respectively, with the average attendance 54%. These ten WMGs have accumulated a capital of Taka 16,16,043 as their savings, share and profits from economic activities undertaken by them.

The following activities were undertaken by WMGs/ WMA/WMF during the reporting period:

1. WMGs continued their efforts in removing cross dams and fishing traps, with the support of Local Government Institutions (LGIs). from their respective canals to remove water logged in the area.
2. WMGs repaired road and embankment at Boyer Char.
3. WMA has been leading all operation, maintenance, social services and linkage and coordination with LGIs, other projects and implementing agencies independently in Boyer Char.
4. The issues discussed in the WMA and other WMGs meetings were:

Enrolment of new members, capital accumulation by local resources mobilization, resolving drainage problems by re- excavating khals at different locations, stop the river erosion in Tankir and Chatla area, operation maintenance of sluices and other structures during monsoon and scope to generate more employment opportunities particularly in the non-farm sectors like small and cottage industries.
5. The main issues raised by the local community during the interaction were: stop the river bank erosion, removal of water logging from their respective areas by making the existing canals wider and more operative and resolve the crisis created in demarcating the boundary lines between Hatiya and Ramgati.
6. One day orientation of WMF was held on May 9, 2017 to make participants aware about their role and responsibilities in the WMO.

WMOs in CDSP II

In CDSP-II areas, 39 WMGs, 7 WMAs and 2 WMFs were established under CDSP-II. But due to lack of regular monitoring and supervision by the BWDB extension officials 17 were found inactive. However, with the support of TA team 6 meetings of WMG, CBD-1 were organized during the reporting period with average attendance of 50% without support from BWDB.

Six WMGs in **Polder 59/3B**, Zillar, Montaz, Korim, Gopal, Nabagram and Kalmi, organized 23 meetings in this period. It has been reported by the WMG committee members that they normally organize meetings whenever they feel necessary like for the operation schedule of their sluice, repair of the embankment etc. The WMG representatives make liaison with BWDB and other implementing agencies whenever they feel necessary. The representatives suggested that if CDSP-IV can make some efforts to develop their capacities by providing formal training on group management and leadership development, book-keeping and account maintenance etc.; this would help them to continue their effective efforts in keeping their WMOs operational.

The community people in Zillar area raised the issue that the existing sluice is not in operation as one of the bands is completely damaged, they requested to repair the damaged sluice to help them in draining out the water during the rainy season. They also pointed out that a WMG centre is yet to be constructed in Zillar, Momtaz, Karim and Gopal. So they requested BWDB to take an initiative to construct a WMG office building in those areas, it will help them to organize their meetings on a regular basis and they can continue their WMO activities in a more effective way.

In Polder 59/3C-Bamni 11 WMG, 3 WMA and 1 WMF were established during CDSP-II period. During that phase only 3 WMAs were registered by Cooperative Department but no WMGs were registered at that time. Since the Participatory Water Management Rules-2014 are formulated by BWDB, the option was to register the WMGs first and then the WMA; the registration should be done by BWDB. So according to that procedure, previous registration of 3 WMAs has been cancelled by the cooperative department and 8 WMGs have already been registered by BWDB.

These 8 registered WMGs (Char Elahi, Char Lengta, Diarra Balua, Musapur Bagdara, Char Fakira, C.G.A, Sonadia and Jagdananda) have organized 45 meetings in total during this reporting period with an average attendance 81%. In those meetings they mainly discussed how to close the area which is now open due to wash out of the structure including the embankment in 2009. So their main concern is to close the area to save their crops and livelihoods from the intrusion of saline water.

WMGs-Gangchil 3 WMGs operate smoothly the 12-vent regulator, and met 17 times in the reporting period with average attendance 82%. A cross dam was constructed at the mouth of outfall channel in the post monsoon this year. They prepare a maintenance plan on a regular basis and all WMGs have already been registered by BWDB; one has been registered during the period.

In South Hatiya, 20 WMGs, 3 WMAs and 1 WMF were established during the CDSP-II period in accordance with the provision of Cooperative Rules but as Participatory Water Management Rules-2014 are approved by the Ministry of Water Resources, all these WMOs are abolished and three new WMGs have been organized following the PWMR-2014; they got the registration from BWDB. 3 WMGs organized 17 meetings in this reporting period and the average attendance was 68%. The embankment, sluices and canals and cyclone shelters are in many cases are illegally occupied by local squatters, as was reported by local people and WMOs. WMOs are frequently demanding the maintenance of cyclone shelters, re-excavation of canals and maintenance of earthen and paved roads which were all constructed during CDSP-II. The WMOs continued savings collection and deposition in the bank account through meetings. The WMOs are very much in the position to involve themselves in O&M activities, which can help them in streamlining their organizational basis and also encourage the local people to be involved in WMO activities. As a follow-up they requested BWDB to allocate some O&M activities in their respective areas.

WMOs in CDSP I

Four WMGs were established in CDSP-I areas (Char Majid, Char Baggardona-II, Nobagram and Kolmi).

The following activities were under taken by these WMGs:

1. WMGs continued maintaining linkages with government agencies particularly with BWDB and LGED.
2. Yearly audits were not accomplished by WMGs, as no officials of the registration authority (in case BWDB) are currently available.
3. All WMGs reviewed O&M status and requirement in their areas and prepared a draft maintenance plan.

Issues discussed in the regular monthly meetings of WMGs are as follows:

Construction of a cross-dam between Urir Char and Noakhali; land settlement to the people living in char areas needs to be formalized; construction of 4 more cyclone shelters in Urir Char, consistent with the current demand as soon as possible; improved law and order situation; removal of local drainage congestion by excavating canals in different locations; more deep tube wells and pit latrine installation.

Local people demand to include Urir Char as an operational area of forthcoming CDSP V.

- Local people are requesting to start land settlement and to take initiative to solve the court case of district boundary demarcation line.
- About 2 km. of homestead area in the south western part of the char has already been eroded by the river and the erosion is continuing. Local people requested to take measures in order to stop the erosion.
- Local people demanding additional 40 km earthen roads in Urir Char.

Labor Contracting Societies (LCS)

A Labor Contracting Society (LCS) is a group of adult persons, male or female, having homogeneity in respect to gender, physical strength, skill and socio-economic status, who come from the households of landless laborers or share croppers and who depend on manual labor as their main source of income. The main objective of LCS is involving local people in construction work (see also the Inception Report). The number of members in an LCS depends on the nature of the works to be carried out within a given time frame. It is formally recognized that LCS can be considered as a D-class contractor and eventually work orders can be issued to LCSs without inviting any tenders. Moreover, implementing agencies will make efforts to provide trainings (mostly on-the-job) in order to develop participants' capacities. The main

objectives of LCS are to generate additional employment opportunities in the slack period (when employment opportunity is limited at local level, resulting in people migrating to other areas for their employment) and encourage female members to get involved in economic activities.

Table 4 - 10 Status of LCS Jan – June 2017

SL	Name of Char	FLIs: LCS		Length of work	No. of members in LCS			Remarks
		Target	Achieved		Male	Female	Total	
1	Caring Char	9	7	3.5 km road	182	86	268	Male-5 Female-2
2	Noler Char	22	22	4.26 km road; 500 latrines; 1 market 2 field developments 2,268 m HBB road, (maintenance work 2,040m)	464	141	605	Female-2 Male-13 Mixed-7
3	Char Nangulia	40	37	6.465 km road; 1,350 latrines; 1 market; 11 field developments 1,000m HBB road.	560	255	815	Male-4 Female-7 Mixed-26
4	Char Ziauddin	2	2	1km road; 100 latrines.	63	3	66	Male-1 Mixed-1
5	Urir Char	2	2	1.2 km. road;	95	-	95	Male-2
6	Boyer Char	4	4	1 market	47	21	68	Male-3 Female-1
Total		79	74	16.425 km road; 1,950 latrines; 3 markets 13 others; 3,268m HBB road maintenance work.	1,411	506	1,917	Male-28 Female-12 Mixed-34

WMGs facilitate as affiliating institution the formation and mobilization of new LCS in all areas. The TA team set a target to form 74 LCSs in the jurisdiction of 24 WMGs so that each WMG can supply the required number of LCSs on the basis of works to be implemented in their operational areas. LCS can work on all activities related to earthen road construction / rehabilitation, canal re-excavation, all maintenance work including tree plantation, road carpeting, pipe casting, latrines production, culvert installation, market development and cyclone shelter compound development as independent male or female or as a mixed group. Char wise LCS information is stated given in the table above.

Agency wise LCSs

There are 58 LCSs for LGED work and 16 for DPHE work (latrine production). Respective implementing agencies are following their organizational guidelines as CDSP does not have its own guidelines. PMC through concerned XENs monitors directly the payment to LCS to smooth their payments. Gradually more LCSs are formed and 3 markets developed by LCSs. The staff of implementing agencies still need to be activated more for LCS purposes at field level. The TA team continued their efforts through one LCS Facilitator.

Outcomes of Labor Contracting Society (LCS)

The statistics shows that 1,917 LCS members (1,411 male and 506 female) received additional employment for 55,584 person-days so far in different infrastructure works initiated by CDSP IV. They received Tk. 1,83,67,241 as their wages from those works. These financial benefits encouraged them to start new economic activities (like cattle-rearing, garment selling, small trading etc, depending on the local conditions) in order to generate regular income round the year as the LCS works are not available round the year. This opportunity creates new avenues for male and female WMG representatives to develop

linkages with the traditional businessmen in Dhaka and Chittagong in order to ensure better prices of their commodities which are produced at local level. As these representatives are somehow advanced, they are now in the process of mobilizing the other members to invest their accumulated capital in feasible economic activities which will indeed provide additional employment as well as income.

It has been spelled out in the objectives of LCS that this program has two-fold objectives: to generate seasonal employment for the really deserving poor people and to create scope for womenfolk to get involved in economic activities, which will encourage them to interact with other social and economic forces at local level. It has been reported by the participants that they spent part of this amount for their survival and part of the amount they invested in other feasible income generating activities from which they will be able to receive regular income like low-cost garment selling, cattle rearing, fish culture and petty trading. It is visible in the locality that women are selling their products in the local markets. In many families, children are now going to school with a bright hope for their future.

It is now evident in the CDSP area that the involvement of poor people in economic activities is the most important means to accelerate the process of social and economic empowerment of the poor people in general and the women in particular. Empowerment is the scope and ability to influence decisions, so from that perspective it is now visible in the area that lot of women are playing a very important role in family decisions as well as at community level. It appears that most significant impact of LCS is to change the mind-set of the poor people realizing the fact that they can influence matters affecting their lives.

Outcomes of the Institutional component of CDSP IV

The Field Level Institutions (FLI) established by CDSP IV are not the end result of this endeavour; rather these are considered as effective means to promote a sustainable development process in the local areas even beyond the life of CDSP. It is demonstrated that these institutions are instrumental in providing government services in remote areas where these services were not visible in the past.

These institutions are now in the process of developing linkages with other market forces including their respective local government institutions as they feel by now that all problems encountered by them cannot be addressed only by them. So they are developing partnerships with other social and economic forces in order to reduce their dependency, which is the basic objective of all development initiatives. Previous phases of CDSP have also established that these institutions are contributing significantly in managing O&M of infrastructure, market development and management, ensuring basic services providing by public agencies and resolving local conflicts. As many field level institutions have been formed within the purview of the project like WMOs, FFs, SFGs, TUGs and micro-credit groups organized by the partner NGOs it is now the time to develop some form of community based organization (CBOs) involving the representatives of all FLIs so that a broader outlook of these institutions can be covered which will help in activating these institutions beyond the life of CDSP.

4.6.2 Local government institutions

During the reporting period the TA team continued the informal discussions and interactions with the Upazilla Chairmen, UP Chairmen and members concerned. Occasionally the UP Chairmen and members are participating in WMO's meetings, whenever their involvement is required, although many WMO members have been elected as LGI representatives. A process has started to formalize the participation of LGI representatives in particularly in WMA meetings and subsequently WMO representatives will participate in UP coordination meetings in order to deal with local issues. Specifically, water management issues require wider participation to be resolved jointly and to promote a process for developing partnership at local level.

Challenges for sustainable WMOs

The institutional development process is implemented in all phases of CDSP without major constraint or interruption. At this point of CDSP IV, few issues appear as challenges for the sustainability of the efforts made by the project.

- a) River erosion in the project areas

Although the rate of erosion seems to be reducing at present, river erosion in some of the project areas (Char Nangulia and Caring Char) poses a serious threat to all development initiatives including the community based organizations promoted by the project. It is observed that some WMG members are not in a position to continue their involvement with the respective institutions as they have to migrate to other

areas due to losing their homesteads by river erosion. On the other hand, river erosion is also affecting the trust of the local people in CDSP as they have the impression that CDSP is always with them whenever they have any need but now they are witnessing that river erosion is not only washing out their property but it is also damaging the resources and infrastructure which have been built by CDSP itself. From that point of view the local people expect that CDSP should intervene in river erosion in order to save the huge resources and infrastructure CDSP developed so far in the area.

b) Non-availability of BWDB Extension Officials

The project design of CDSP-IV requires the continuous input of BWDB Extension Officials for establishing, strengthening and capacity development of WMOs. Unfortunately, no extension officials are available at Noakhali Division since the beginning of 2016. Although TA members are trying to support those WMOs, the TA team is not in a position to provide all the services required by them like arrangement of funds for conducting training courses, auditing of WMOs in accordance with the provision made in Participatory Water Management Rules-2014 etc. Considering the life of CDSP IV, these activities are very much required to develop their capacities so that they can continue as a vibrant organization after the life of CDSP IV.

One extension overseer was posted in Noakhali Division in September 2016, but he has to keep himself busy with other activities outside of CDSP as well and he is reportable to his superior in Feni. So his deployment in the division will not solve the problems and give the efforts required by BWDB extension wing to strengthen the WMOs as per requirements.

4.6.3 Gender Action Plan (GAP)

This part of the report aims to make an assessment of the progress of gender and social related activities in CDSP IV during the reporting period January-June, 2017 including the challenges and constraints encountered by women in the project area. Since gender inequality poses a major impediment to development, the project aims to mainstream gender issues and concerns and to create equal opportunities for women through active participation of men and women in all stages of the project through establishing various field level institutions. These attempts and the activities so far and the progress on social and gender aspects are furnished below.

For the purpose of encouraging participation of women in all FLIs, separate group meetings and group discussions and individual contacts with women and mixed groups were organized as one of the effective strategies. The status of female membership and participation in meetings in the various FLIs is indicated below:

Table 4 - 11 Distribution of membership in WMOs their MC by gender

Name of Char	Name of FLI	No of FLI	Total members	No of females	Total in MC	No of females in MC	% of females	Remarks
Char Nangulia	WMG	11	450	199	132	56	42%	According to GPWM, the participation of women in MC to be at least 30% of the members
Noler Char	WMG	05	177	73	60	23	38%	
Char Ziauddin	WMG	02	79	40	24	9	38%	
Caring Char	WMG	03	78	35	36	12	33%	
Urir Char	WMG	03	82	15	36	11	31%	
Total		24	866	362	288	111	39%	
Char Nangulia	WMA	01	44	13	12	4	33%	
Noler Char	WMA	01	40	13	12	4	33%	
Total		02	84	26	24	8	33%	
	WMF	01	36	24	12	4	33%	

Participation of women in management committees, in leadership development and in group management and increased overall mobility of women are playing an important role in improving the position of women in society and minimizing social conflicts.

Table 4 – 12: Attendance of members in monthly meetings of WMOs by gender

Name of Char	Type of FLI	Number of FLIs	Number of meetings held	Attendance			% of female In WMG
				Male	Female	Total	
Char Nangulia	WMG	11	63	771	664	1435	46%
Noler char	WMG	05	30	330	205	535	38%
Char Ziauddin	WMG	02	10	111	116	227	51%
Caring Char	WMG	03	15	132	118	250	47%
Urir Char	WMG	03	17	269	61	330	18%
Char Nangulia	WMA	01	4	126	56	182	31%
Noler Char	WMA	01	4	98	35	133	26%
Total		26	143	1864	1255	3092	41%

Farmers Forum

The women members of FF are becoming knowledgeable on technical know-how through receiving training, orientation, demonstration etc. Most of the women are engaged in homestead vegetable cultivation, fish culture and poultry and livestock rearing. In absence of their husbands they are now able to perform their own activities. They are involved in marketing of their own products in the local market. They are skilled in post-harvest technology, seed preservation, weeding and harvesting on a limited scale too. Their participation in this forum has helped women significantly in developing linkages with other social and economic forces, e.g. the outside traders which can ensure a fair price for the commodities they are producing at local level.

Table 4 - 13 Distribution of membership in FF by gender

Name of Char	No of FFs	Male	Female	Total	% of female members	Comments
Char Nangulia	37	1,319	901	2,210	41%	According to the GAP Female membership in FF should be at least 33 %; present average is 42%.
Char Ziauddin	07	274	146	420	35%	
Noler Char	25	839	661	1,500	44%	
Caring Char	15	396	504	900	56%	
Urir Char	06	310	50	360	14%	
Total	90	3,138	2,262	5,400	42%	

There were no changes in female membership of FFs during the reporting period.

Outcome of Involvement of women in Farmers Forum (FF)

In general the wives of farmers in CDSP areas are considered as farmers and they are involved in many agricultural activities like homestead gardening, seed preservation, vermi-compost preparation and selling, including selling of their products in the local markets by themselves. This scenario created the scope for the char women to get involved in production processes as well as to interact with other market forces to sell and buy inputs and their own products. This situation allows the women to take decisions in order to make their investment operational and effective. In some cases, they discuss the issues with their family members, but still they have to take the decision themselves. So, the whole process is contributing significantly in empowering those women socially and economically.

Social Forestry Group (SFG)

Table 4 -14 Distribution of membership in SFG by gender

Name of Char	No. of SFG	Male	Female	Total	% of female members	Comments
Char Nangulia	215	3,092	2,283	5,375	42%	According to GAP, female membership in SFGs is supposed to be at least 33%.
Noler Char	95	1,309	1,061	2,370	45%	
Char Ziauddin	31	401	374	775	48%	
Caring Char	55	875	500	1,375	36%	
Urir char	74	1,495	355	1,850	19%	
Char Maksmul	14	177	173	350	49%	
Total	484	7,349	4,746	12,095	39%	Present average is 39%.

Women members' participation in SFGs and activities are given above. Women are involved in road site tree plantation, pit preparation, fencing, watcher, maintenance etc. Women are capable and getting benefits from social forestry activities. The following table provides their membership in the Management Committees (MCs) of SFGs.

Table 4 - 15 Distribution of membership in MC of SFGs by gender

Name of Char	No. of SFG	Male	Female	Total	%female in MC	
Char Nangulia	215	1092	843	1935	44%	According to the guideline of SFG, female membership in the Managing Committee of SFGs should be at least 33%; now it is 41%
Noler Char	95	514	341	855	40%	
Char Ziauddin	31	160	119	279	43%	
Caring Char	55	309	186	495	38%	
Urir char	74	448	218	666	33%	
Char Maksumul	14	67	59	126	47%	
Total	484	2,590	1,766	4,356	41%	

Outcome of SFG from women's perspective

Women are very involved in the social forestry activities like tree plantation, care taking of the planted trees and also maintenance of those trees. As beneficiaries of this program the women came to the contract agreement with forest department and the concerned local government institutions, specifying that the women will receive 55% benefit of the return when the trees will be harvested. Involvement of women in any kind of economic activities allows them to interact with other social and economic forces of the community and this is creating the scope to claim their due share from the concerned economic activities and also customizes them to raise their voices against any discrimination in the society.

Labor Contracting Societies (LCS)

Participation of the women as LCS members were created in different activities initiated by CDSP IV. Table 4 -12 provides a picture of the performance of LCS. The information collected from different chars revealed the fact that the women participating in the LCS works benefitted in many ways, like the money they received as wage and the profit they invested in other activities like tree plantation, poultry rearing, children's education and upgrading the house-compound by raising the level. It has been observed that many women invested their money in the areas where they feel comfortable and familiar. It was also visible that women purchased cultivable land, improved their houses and invested in fish culture, petty trading etc. In general, the LCS activity opened up the avenue for them to look forward to improve their social and economic position in the community.

Land settlement

MoL distributed a total of 10,881 khatians among the landless in the reporting period, out of which 1,088 have been received by women headed households with 100% ownership of land. The remaining khatians were received by wives and husbands having equal share (50%) of land ownership. FLIs as well as women beneficiaries have participated in the land settlement related activities like in hearing sessions and Khatian receiving.

Outcome of land settlement on women's position

Establishment of ownership rights on land allows the womenfolk to feel more empowered, manifested in active participation in family and society decision making like children's education / marriage, buying / selling of family assets, raising voice against any violence against women etc. Ensuring the ownership rights of productive assets on the part of the women contributed significantly to changing their mind-sets towards more equal partnership between wife and husband, which encourages them to take part in major family decisions as well as participating at the community level. Women are receiving more honour from society than before. Moreover, more decent houses are now visible in those remote areas instead of huts, as the ownership rights are now officially established. Hence in all stages of social activities gender empowerment is significantly functional in the project area

Various gender events:

- 10 one day training courses on Gender Orientation were organized during this reporting period where 300 members participated, including 110 women.
- An evaluation workshop on Gender Empowerment was organized by the Gender and Water Alliance of Bangladesh (GWAB) during this reporting period and it was discussed elaborately in that workshop how the supportive activities of GWAB can contribute in streamlining the gender issues in different projects supported by EKN, including the possible scope to continue the efforts by GWAB.
- Three discussion meetings were held on early marriage in three chars, where WMG women leaders, community elites, marriage registrars and school going girls were present. Early marriages in the community are reducing due to awareness created among the people. Three early marriages were stopped by the community people in the reporting period.

4.7 Knowledge Management

4.7.1 Monitoring & Evaluation

Comprehensive M&E and MIS systems are used in CDSP IV. These aim to:

- Generate information for impact monitoring at the project objective and goal level to measure the impact of the project against the log frame of the project.
- Generate information on project activities and outputs for project planning and management.

The M&E system consists of four elements:

- a. Activity monitoring
- b. Process monitoring
- c. Outcome monitoring and
- d. Impact monitoring.

In line with the annual work plan 2016 -2017 the following activities were completed in the reporting period:

Annual Outcome Survey 2016

The report for the 2016 Annual Outcome Survey (the fifth conducted for CDSP IV) has been finalized. The AOS covered a sample of 578 households divided between the CDSP I/II, III and IV areas. Key findings of the survey are:

- (a) Land settlement activities show good progress, with 69% of households completing the settlement process - consistent with MoL progress reports of khatian distribution.
- (b) Principal occupation: the proportion of household heads reporting agriculture is decreasing across all CDSP areas, and in CDSP IV it has remarkably decreased from 37% in 2011 to 22%, while petty trade increased from 9% to 19%. Day labour is the most widespread occupation in all CDSP areas, 31% of CDSP IV household heads, but has changed little from 30% at baseline.
- (c) Housing: CDSP IV households are beginning to catch up with those in the older CDSP areas in terms of size of house and use of tin sheets for walls and roofs.
- (d) At baseline CDSP IV households collected safe drinking water from an average distance of 345m and 418m in the dry and rainy seasons respectively. Now the average distance is only 44m and 66m - similar to those in the older CDSP areas.
- (e) Immunization of children: more than 92% of the CDSP IV households ensure immunization of their children, a big improvement over 52% at baseline. CDSP IV is now similar to CDSP I, II and III, which have also improved.
- (f) The use of family planning methods has also increased significantly across CDSP, with virtually all eligible households taking up family planning.
- (g) The value of household and productive assets per household in CDSP IV has now increased by 6 times (503%), but is still significantly lower than in the older CDSP areas.
- (h) Compared to the CDSP IV baseline the average annual household income in the CDSP IV area has increased by 164%. Although overall average income for CDSP IV households has not yet caught up with those in CDSP I/II and III, total income from agriculture is now similar, but CDSP IV households still have significantly less non-farm income, especially from wages and salaries, petty trade and remittances.
- (i) The cropping intensity in CDSP IV is 111%, compared with 105% at baseline in 2011. Cropping intensity is around 150% in the older CDSP areas, with more non-rice crops being grown. Average paddy yield is 2.9 tons/hectare - 53% more than at baseline.
- (j) Production of homestead fruit and vegetables has tripled since the start of CDSP IV.
- (k) At least 90% of the households in all CDSP areas rear poultry. The average number of chickens per household has more than doubled in CDSP IV areas, with egg production being 85% higher than at baseline. Consumption of eggs at household level has more than doubled, and consumption of meat has increased to 10 times, with meat and egg sales up by 2.5 times. These indicators have largely caught up with the older CDSP areas.
- (l) Livestock rearing (mainly cattle) has slightly decreased in CDSP IV, but this activity is still significantly more widespread than in CDSP I, II and III. There has been a move from keeping draught animals to milk and meat production, and production and consumption of milk has more than doubled in the CDSP IV areas, with the value of milk sales going up by over three times. Indicators for milk production, consumption and sales now exceed those in the older CDSP areas.
- (m) The percentage of household with pond aquaculture has increased from 51% to 74% in CDSP IV areas. Fish production per household has more than trebled, with consumption of fish doubling, and sales increasing by 2.5 times.

- (n) In the CDSP IV area the proportion of households facing acute food crisis has reduced from 82% to 35% since 2011, but this is still higher than in the older CDSP areas.
- (o) Communications: CDSP IV has put significant resources into building a road communication network on the chars. This has resulted in most people are now being able to use brick or bitumen roads – which were completely absent before. The time taken to reach schools and markets has more than halved and is now similar to that in the older CDSP areas.
- (p) Household shocks and crises, such as those from natural disasters, ill health and lawlessness, have been greatly reduced in the CDSP IV area. Households in CDSP IV now face a similar level of shocks and crisis to those in the older CDSP areas.

Overall almost all indicators for outcomes in CDSP IV show substantial improvements since the baseline survey in 2011. Indicators where CDSP IV has now caught up with the older CDSP areas include water and sanitation, road communications, health services, family planning, and poultry and fish production, consumption and sales. Shocks and crisis reported by households are now broadly similar across all CDSP areas. Production, consumption and sales of paddy (by far the main crop grown) in CDSP IV have now almost caught up with the older areas. CDSP IV households now do better than those in CDSP I/II and III in terms of sales of homestead fruit and vegetables, and in milk production, consumption and sales. Indicators where CDSP IV households have made good progress, but still lag behind those in the older CDSP areas, include housing, asset ownership, food security, and overall household income (farm income has caught up, but non-farm income has not). Cropping intensity in CDSP IV is still significantly lower than in CDSP I/II and III, with less cultivation of non-rice crops.

It is also worth noting that indicators have continued to improve in the CDSP I/II and III areas, with significant changes since the first round of AOS in 2012. This provides evidence of the sustainability of CDSP interventions.

Review of data on agricultural productivity.

The Supervision Mission in March 2017 requested that the project check and confirm data on agricultural productivity from AOS and agricultural surveys. In response to this, there has been a detailed review of cropping intensity (ci) calculations in the 2016 AOS. For the CDSP IV area the draft AOS reported a ci of 171%, but this did not seem to be in line with data on total crop area and net cultivated area ($ci = \text{total crop area} \div \text{net cultivated area}$). Recalculation of this, including checking of all of the data on crop and land areas, gave a greatly reduced ci of only 111%. This compares with 184% for CDSP IV in the 2015 AOS1 and 172% in the 2015 mid-term agricultural survey of DAE. Observations from the field suggest that ci is much closer to 170 to 180% than to 110% - it was 105% in the pre-development baseline survey. Examination of the AOS questionnaires revealed two further sources of error. First, for some farms, the area of vegetables grown in the field (as against homestead) was not recorded in the total crop area. Correcting for this error increases ci to 116%. This is still less than expected.

The other apparent error is that farmers may not occupy all the land that they operate for a full year. Around one third of cultivated land in CDSP IV (half in CDSP I/II and 40% in CDSP III) is on some sort of lease (sharecrop, mortgage, cash rent) and farmers often do not lease land for an entire year, but report it as part of the area that they cultivate. Thus, land that is only leased for one season to grow one crop is shown as having a ci of 100% - even though someone else may use the land for another crop in the same year. For example, some farmers reported that they only grew boro on their land, even though this land will have almost certainly have also been used for aman.

The agricultural benchmark and other surveys asked farmers how much of the land that they farm (this may include land that they do not lease for an entire land) was single, double and triple cropped, and used this data to calculate ci. This seems a better approach and will be adopted in future surveys.

¹ Recalculation of the ci in CDSP IV for the 2015 AOS gives a figure of 120%

Data on paddy yields in AOS need to be treated with caution. This is calculated from data on area of paddy grown and data on total paddy production. This data comes from two separate questions so it is possible that respondents were not referring to exactly the same cropped area when reporting area and production. The agricultural surveys asked farmers area, production and yield in a single question and so would be more reliable. This seems to be a better approach.

Household Impact Survey

The 2016 Supervision Mission requested that the project carry out an impact assessment at the household level. This assessment has been based around Robert Chambers's five livelihood capitals: human, social, physical, natural and financial capital as the pillars of the sustainable livelihoods. Highlights of changes in livelihood capitals and their impacts on 18 sample case study households are:

- Natural capital has been improved - with households getting secure title to land, along with reduced flooding and salinity (via the development of the physical capital of water control infrastructure). Households have invested in making their land more productive - building fish ponds and fish-vegetable systems, raising land for homesteads and horticulture, and planting trees. As a result, land is now more intensively cropped, and it is possible to grow a greater range of high yielding and high value crops, and to cultivate fish ponds.
- Human capital has been strengthened with the development of the capacity, skills and knowledge of char dwellers. Along with a project training programme, the development of social capital with community organisations has disseminated information and advice. This knowledge and new skills have enabled people to take up new livelihoods, such as tailoring, and improve the productivity of crops and livestock. In addition, the physical capital of cyclone shelters is being used as schools to educate children. Clinics supported by CDSP IV have also provided health services - so reducing risk to people earning a livelihood and improving the welfare of the wider community.
- Physical capital has increased via the construction of water management and communications infrastructure. These have increased the productivity of natural capital, along with improved market access and social connectivity. Cyclone shelters and refuges protect people and animals at times of disaster, and the shelters also house schools, while tube-wells and latrines provide households with domestic water and sanitation. In addition, households have invested earnings from more productive natural capital and better access to financial capital, in housing and household assets, productive assets (farm and non-farm businesses) and in livestock.
- Social capital has been generated via a range of community institutions and by programmes to empower women and build human rights. These community institutions have in turn supported efforts to get secure access to land and have disseminated knowledge to build human capacity. Water Management Groups operate and maintain the vital water control infrastructure, Tube-well User Groups maintain water supply tube-wells, and NGO groups enable access to financial capital.
- Financial capital - savings and access to micro-credit loans have provided resources for investment in natural and physical capital, and provides a buffer against unexpected health expenses, which along with loans for education, has strengthened human capital.

These five capitals have combined to significantly increase household income and enable households to diversify their livelihoods into new farm and non-farm enterprises. However, many char households still do not have enough work at home year-round, and household members still migrate seasonally to find work in other parts of the country. There is therefore a need to continue to intensify agriculture and develop more off-farm income sources.

4.7.2 Knowledge Management

CDSP IV is maintaining strong compliance with the Knowledge Management Strategy of IFAD. As part of this strategy CDSP IV has developed a good practice database using the good practice template. During the January – June 2017 reporting period several good practice cases have been identified and reported by CDSP IV staff members. These were:

- A Case of Self Dependency Using Micro-credit by Hosneara-SDI
- Using environment friendly improved cooking system by NSS-LHR & DM
- Practicing: Feeding babies nutritious food by Dr. Arafat Rahman, Janata Bazar Branch, SSUS
- Adaptation of permanent method of family planning by NSS, H&HP

It is noted that CDSP IV has raised a total of 7800 ha plantation that includes 7400 ha of mangrove, 250 ha of foreshore and 100 ha of roadside and embankment plantations. For more interesting and relevant information, videos and pictures you may visit following links:

- www.cdsp.org.bd
- www.cdsp.org.bd/video.php
- www.vimeo.com/cdspiv
- www.photo.cdsp.org.bd

Training

During the reporting period only one new training on land settlement process and one 1-day workshop on expansion of the Govt. line agencies activities into CDSP-IV area by MoL have been conducted. Besides this, many follow-up and refresher events, along with demonstrations, were held on awareness and motivation, and on income generating activities. The details of the training activities are presented in Annex 8.

Linkages of CDSP IV to other development efforts

The following events concerning linkages of CDSP IV to other development efforts are still active as and when necessary. The researchers of Bangladesh Jute Research Institute (BJRI) are continuing their research activities and demonstrations in Boyer Char and Caring Char on research for improved and salt resistance jute. Gender and Water Alliance Program Bangladesh (GWAPB) has provided a set of full resource document in October 2016 that include brochures, fact sheet and flyer of GWA Bangladesh, policy brief of Gender in Africa, Why Gender matters in IWRM; A tutorial for water management (Bengali version), posters and booklet on 11 thematic areas of travelling exhibit.

5. Project organization

5.1 Project coordination

Five Project Management Committee (PMC) meetings, the 51st to 55th, were held during the reporting period, three in Noakhali and two in Dhaka. The meetings reviewed among others preparation of the IFAD Supervision Mission, agency wise progress, problems and bottlenecks, fund flow and management, reimbursement, social and livelihood progress by PNGOs, feasibility studies, trainings, DPP revisions, and maintenance in CDSP-I, II and III areas, as well as preparation for a possible CDSP V. Composition of the PMC is given in **Annex 5** of this report.

During the reporting period various discussions/ coordination meetings were held with EKN and IFAD.

The IFAD Supervision Mission took place during 11th – 23rd March.

A Draft Concept Note on a possible CDSP V was prepared by the Team Leader, discussed with the PCD, IFAD and EKN and circulated to all parties.

5.2 The governmental implementing agencies

CDSP IV is implemented by six implementing agencies: Bangladesh Water Development Board (BWDB), Local Government Engineering Department (LGED), Department of Public Health Engineering (DPHE), Ministry of Land (MoL), Department of Agricultural Extension (DAE) and the Forest Department (FD). For a description of their staffing for CDSP IV reference is made to the Inception Report paragraph 5.2.

5.3 The Technical Assistance team

In **Annex 6** the CDSP IV staffing per 30 June 2017 is presented, including the date of joining the project.

5.4 Reporting

During the reporting period the following CDSP IV reports were produced:

- CDSP IV Progress Report No 12, July – December 2016, March 2017.
- CDSP IV Technical Report No 12, Annual Outcome Survey 2016, March 2017.

6. Project Finances

6.1 Introduction

For an overview of overall project achievements and financial progress and planning, expenditure – component wise, please refer to **Annex 4**, which presents the IFAD format. Implementing agency wise achievements and financial progress and planning are presented in Annex 4 as well.

In line with the approved budget of AWPB 2016 – 2017, Withdrawal Applications No. 9A (for IFAD Loan) and 9B (for GoN Grant for Civil Works) were submitted to IFAD to account for expenditures incurred by the project during January to June 2016. The expenditures submitted for justification by IFAD were US\$ 6,692,215.10, against IFAD Loan, and USD 783,723.33 against GoN Grant. These were duly accepted by IFAD.

6.2 Project cost

Overall project costs are estimated at Tk. 5,833.98 Million (US\$ 83.34 Million) as per DPP which as per First Revision of DPPs (RDPP1) is Tk.6,120.15 Million (US\$ 81.70 Million) at an enhanced exchange rate of BDT 77 to US\$1 for first projection of project operation up to December 2016. Then there has been a second revision of DPPs (RDPP2) for the extended period of project operation up to December 2018. Total project cost as per RDPP2 (RDPP1 for only DAE component as it ended in December 2016) is US\$ Tk. 6,875.90 Million (US\$ 89.30 Million) at an exchange rate of BDT 77 to US\$ 1. The IFAD Loan remains the same at US\$ 47.35 Million as no additional funds were made available. GoN Grant increased with Euro 551,845 to cover the cost of the extended TA contract till 31 December 2018. Applying the exchange rate of BDT 77 the total GoN Grant amounts to US\$ 19.83 Million. There has been an increase in GoB cost from US\$ 13.71 Million to US\$ 15.66 Million mainly due to additional requirements for BWDB infrastructures and salary increase of government employees from July 2015. The contribution of the beneficiaries included in total project cost now is US\$ 6.50 Million which previously was US\$ 0.811 Million, because of more savings than originally expected by the beneficiaries, and some increase in the number of deep tube wells. It excludes the micro-credit provided by the NGOs.

The Project is financed by IFAD (53.02% of the total cost), the Government of the Netherlands (22.21%) and the Government of Bangladesh (17.55%) and by the contribution of the population in the project areas (7.22%). The detailed cost of the Project in Bangladeshi Taka and US Dollar for the original project period of six years up to December 2016 under the original DPPs is furnished in Annex 10 of the Inception Report. A Component wise summary of the total cost of the Project for the eight year period up to December 2018 under the second revised DPPs is presented in Error! Reference source not found. below.

Table 6 - 1 Cost component wise summary of project cost

No	Cost Components	Tk. Million	USD Million
01	Protection from Climate Change	2,382.01	30.95
02	Internal Infrastructure	2,715.72	35.27
03	Land Settlement and titling	76.91	0.99
04	Support to livelihood	381.25	4.95
05	TA and Management Support	823.12	10.69
06	Beneficiary Contribution	496.89	6.45
	Total	6,875.90	89.30

A summary of the total cost of the project and percentages of financing for the eight year period is presented in **Table 6 - 2** below.

Table 6 - 2 Project cost and percentages of financing

No	Financer	Tk Million	USD Million	Percentage
01	IFAD	3,646.27	47.35	53.02
02	GoN	1,527.14	19.83	22.21
03	GoB	1,205.60	15.67	17.55
04	Beneficiary Contribution	496.89	6.45	7.22
	Total	6,875.90	89.30	100.00

The detailed Component wise Cost of the Project and the Financing Plan of the Project are shown in Annex 11 and 12 of the Inception Report respectively.

6.3 Annual Budget 2016 - 2017

The budget for the period and the cumulative budget July 2016 – June 2017 are presented in **Table 6 - 3** below, the financing plan in **Table 6 - 4** below. The detailed, agency wise budget is presented in Annex A of Volume 2 Financial Tables of the Annual Work Plan and Budget 2016 - 2017.

Table 6 - 3 Budget 2016 – 2017 (Figures in Million)

Slab	Cost Components	Budget 2016 – 2017		Cumulative Budget up to 2016 – 2017	
		BDT.	US\$	BDT	US\$
01	Protection from Climate Change	780.81	10.14	1,975.05	25.65
02	Climate Resilient Infrastructure	462.54	6.01	2,395.47	31.11
03	Land Settlement and Titling	9.16	0.12	57.75	0.75
04	Support to livelihood	53.02	0.69	346.50	4.50
05	TA and Management Support	149.44	1.94	639.10	8.30
06	Beneficiary contribution	17.17	0.22	105.49	1.37
	Total budget	1,472.14	19.12	5,519.36	71.68

Table 6 - 4 Budget Financing Plan 2016 – 2017 (Figures in Million)

Slab	Cost Components	Budget 2016 – 2017		Cumulative Budget up to 2016 – 2017	
		BDT.	US\$	BDT	US\$
01	IFAD	813.45	10.56	3,123.12	40.56
02	GoN	291.23	3.78	1,272.81	16.53
03	GoB	350.29	4.56	1,011.78	13.14
04	Beneficiary contribution	17.17	0.22	111.65	1.45
	Total budget	1,472.14	19.12	5,519.38	71.68

Contribution of IFAD

Of the contribution from IFAD for the eight year project period of TK. 3,646.27 Million (US\$ 47.35 Million) a sum of TK 813.45 Million (US\$ 10.56 Million) was projected to be incurred during the financial year 2016 – 2017 against which a sum of TK 498.24 Million (US\$ 6.47 Million) has been spent during the half year from January to June 2017 and Tk 699.26 Million (US\$ 9.08 Million) during the financial year 2016-17.

Contribution of GoN

The contribution from the Government of the Netherlands for the eight year project period is TK.1,527.14 Million (US\$ 19.83 Million). A sum of TK 291.23 Million (US \$ 3.78 Million) was projected to be incurred during the financial year 2016 – 2017 against which TK 133.96 Million (US\$ 1.74 Million) was spent during the half year from January to June 2017 and TK 251.55 Million (US\$ 3.27 Million) was spent during the financial year 2016-17.

Contribution of GoB

The contribution from the Government of Bangladesh for the eight year project period is TK. 1,205.60 Million (US\$ 15.67 Million). A sum of TK 350.29 Million (US\$ 4.56 Million) was projected to be incurred during the financial year 2016 – 2017 against which TK 133.90 Million (US\$ 1.74 Million) was spent during the half year from January to June 2017 and Tk 185.78 Million (US\$ 2.41 Million) during the financial year 2016-17.

6.4 Procurement Plan 2016 - 2017

Procurement of goods and services follow the Public Procurement Regulations (PPR) of 2008, provided they are consistent with IFAD Procurement Guidelines. During the financial year 2016 – 2017 procurement of works and goods will be made to the tune of TK. 972.68 Million (US \$12.63 Million). The component wise summary Procurement Plan is presented in Table 6 - 5 below.

Table 6 - 5 Summary Procurement Plan 2016 – 2017

Slab	Cost Components	Tk million	US\$ million
01	Protection from Climate Change	621.23	8.07
02	Internal Infrastructure	351.45	4.56
	Total Procurement Plan	972.68	12.63

The detailed Procurement Plan is presented in Annex B of Volume 2 Financial Tables of the Annual Work Plan and Budget 2016 - 2017.

6.5 Funds received from IFAD

Withdrawal Application numbers 10A for IFAD Loan and 10B for GoN Grant for Civil works were submitted to IFAD in June 2017 asking for funds during the reporting period for reimbursement of US\$ 5.28 Million and US\$ 0.62 Million respectively to the Safe Account. These are the funds requisitioned for balance 50% against Annual Work Plan and Budget 2016-17. However, the payments we received in July 2017 of the IFAD Loan amount of US\$ 5.28 Million. The GoN Grant amount has not yet been received.

Funds have been distributed among IAs during the reporting period as indicated in Table 6 - 6 below.

Table 6 - 6 Status of IFAD Funds per Implementing Agency

Slab	Components	IA	Total AWPB for 2016 – 2017		Requisitioned		Received		Authorized amount by MOF	Advanced BDT (Million)	Balance BDT (Million)
			BDT	US\$	BDT	US\$	BDT (Million)	US \$			
1	Protection from Climate Change										
A	Water Resources Management	BWDB	425.60	5.53	425.60	5.53	212.80	2.76	383.10	233.50	149.60
B	Social Forestry	FD	73.97	0.96	73.97	0.96	36.99	0.48	66.80	50.10	16.70
	Sub-Total		499.57	6.49	499.57	6.49	249.79	3.24	449.90	283.60	166.30
2	Internal Infrastructure										
A	Protection from climate change	LGED	263.96	3.43	263.96	3.43	131.97	1.72	280.00	189.50	90.50
B	Water and Sanitation	DPHE	41.69	0.54	41.69	0.54	20.85	0.27	65.00	00.00	65.00
	Sub-Total		305.65	3.97	305.65	3.97	152.82	1.99	345.00	189.50	155.50
3	Land Settlement and Titling	MoL	2.08	0.03	2.08	0.03	1.04	0.01	2.10	2.10	0.00
4	Support to Livelihood										
	Agriculture Development	DAE	6.15	0.08	6.15	0.08	3.08	0.04	2.20	2.20	0.00
	Total		813.45	10.57	813.45	10.57	406.73	5.28	799.20	477.40	321.80

6.6 Expenditures from IFAD Funds

The expenditures from IFAD funds in the period 1st January 2017 to 30th June 2017 against the approved ADP budget allocation and payable against ADP and RADP for the financial year 2016-2017 are as detailed in **Table 6 - 7** below.

Table 6 - 7 Expenditures from IFAD Funds (Figures in Tk Million)

Slab	Component	IA	AWPB		Funds Received		Expenditure incurred Cumulative
			For 2016 - 2017	Cumulative	For the period	Cumulative	
1	Protection from Climate Changes						
a	Water Resources Management	BWDB	425.60	2,157.62	47.23	1,233.85	961.96
b	Social Forestry	FD	73.97	534.87	15.10	315.40	251.38
	Sub-Total		499.57	2,692.49	62.33	1,549.25	1,213.34
2	Internal Infrastructure						
a	Protection from climate change	LGED	263.96	2,627.47	50.50	1,662.03	1,432.44
b	Water and Sanitation	DPHE	41.69	217.90	00.00	97.95	138.48
	Sub-Total		305.65	2,845.37	50.50	1,759.98	1,570.92
3	Land Settlement and titling	MoL	2.08	41.69	2.10	24.08	29.43
4	Support to Livelihood						
	Agriculture Development	DAE	6.15	82.74	0.00	47.55	64.36
	Total		813.45	5,662.29	114.93	3,380.86	2,878.05

6.7 Expenditures from GOB Funds

The expenditures reported from GoB funds in the period 1st January 2017 to 30th June 2017 against the approved ADP and RADP budget/ allocation and payable against ADP and RADP for the financial year 2016 - 2017 are as detailed in **Table 6 - 8** below.

Table 6 6- 8 Expenditures from GOB Funds (Figures in Tk Million)

Slab	Component	IAs	ADP		Funds Received Cumulative by 30 June 2017	Expenditures Incurred Cumulative by 30 June 2017
			For 2016-2017	Cumulative		
1	Protection from Climate Change					
A	Water Resources Management	BWDB	181.00	535.40	281.73	281.73
B	Social Forestry	FD	2.90	15.40	14.20	14.20
	Sub-Total		183.90	550.80	295.93	295.93
2	Internal Infrastructure					
A	Protection from climate change	LGED	90.00	508.60	458.09	458.09
B	Water and Sanitation	DPHE	10.50	63.20	34.64	34.64
	Sub-Total		100.50	571.80	492.73	492.73
3	Land Settlement and titling	MoL	7.00	28.80	28.28	28.28
4	Support to Livelihood					
	Agriculture Development	DAE	1.00	9.40	5.01	5.01
	Total		292.40	1,160.80	821.95	821.95

6.8 Expenditures from GoN Funds

Expenditures from GoN funds for infrastructure development

So far BDT Million 122.91 has been spent from GoN funds for infrastructure for BWDB, BDT Million 15.93 for DPHE, BDT Million 187.58 for LGED, and BDT Million 0.24 for FD. The total amount spent for infrastructure development from GoN funds so far is BDT Million 326.67.

Expenditures from GoN funds for TA

Expenditures for Technical Assistance in the period 1 January – 30 June 2017 amounted to Euro 771,116 while total expenditures up to 30 June 2017 are Euro 8,893,458. The status of the Technical Assistance budget per 30 June 2017 is presented in **Annex 7**.

Financial Progress against budget

The gross financial progress from inception of the project till June, 2017 is about 73% with BDT 5,029.85 Million (US\$ 65.32 Million) spent out of a provision of BDT 6,875.90 Million (US\$ 89.30 Million) under 2nd Revised DPP. Agency wise and overall detailed financial - and physical progress is presented in the Financial Tables in Annex 4.

6.9 Development in Financial Operations

A two-day training on Tally Accounting and Financial Management Software was held at the premises of LGED at Comilla, Bangladesh on 15-16 February 2017. It was sponsored by LGED part of CDSP-IV Project. A total of nine (9) participants from all six agencies including TA Team were given a refresher training on the use of Tally Software with particular emphasis on Financial Reporting. It was a part of a IFAD recommended strengthening of automated financial management and capacity building of the financial persons in the project.

7. Assumptions and risks

In reference to the elaborate risk assessment in Chapter 7 of the Inception Report, the following assumptions/ risks are mentioned in the AWPB 2016 – 2017 in particular. Their status is as follows:

- *Sufficient quality staffing of the implementing agencies*

It is assumed that agencies will provide staffing for CSDP IV according to their respective DPPs. BWDB has to formalize the position of the present Assistant Extension Officer and make it full time, and arrange required extension overseers (XO), to ensure that farmer participation is more than just a TA activity.

- *Timeliness of availability of funds*

It is assumed that sufficient funds are made available to implement the planned project activities. *Care has to be taken that ADP and in particular RADP cover AWPB 2016 – 2017.*

- *Law and order situation in the project areas*

It is assumed that the project areas are sufficiently safe for access of project staff and for contractors, hired to execute the works. *At Urir Char the law and order situation has improved over the last few years.*

- *Weather conditions and natural calamities*

It is assumed that weather conditions are sufficiently normal to allow smooth implementation of construction activities during the construction season; works should start as early as possible after the dry season sets in. *There was very heavy early rain during the reporting period, which hampered the work to some extent. River bank erosion has drastically reduced part of the project area and destroyed important infrastructure. Plans have been adjusted to take this into account.*

- *Political support and stability*

Continued support from local politicians and bureaucracy is essential for implementation of the project.

- *Availability of construction materials*

Construction materials tend to be scarce on the market, in particular in the coastal areas; early tendering may help. *Availability and transport of materials was an issue at Urir Char, but the situation has improved.*

- *Successful selection of NGOs and quality staffing*

Selection of good quality local NGOs and their staffing is a condition for successful implementation of the livelihood support program. Performance of PNGO's is satisfactory, but continued proper supervision of staff by PNGO management is required.

- *Cooperation of all institutions and functioning coordination mechanisms*

It is assumed that cooperation between implementing agencies and coordination by PMC and IMSC continue to be adequate. *This certainly was the case; regular PMC meetings were held during the reporting period and functionality and attendance are high.*

Annex 1. CDSP IV Logical Framework

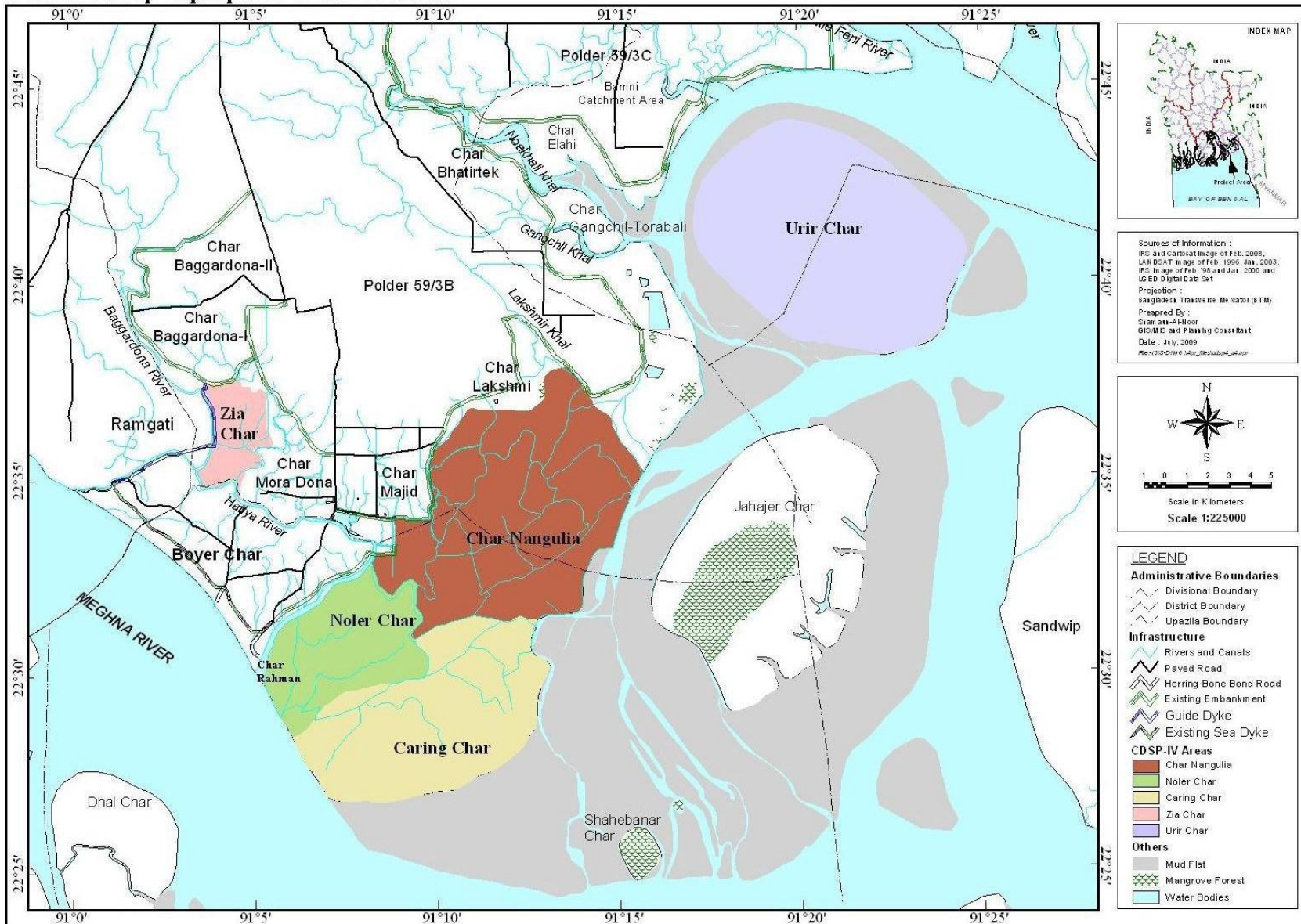
Narrative summary	Indicators	Means of Verification	Assumptions	Progress as of 31 December 2016
Goal Reduced poverty and hunger for poor people living on newly accreted coastal chars	<ul style="list-style-type: none"> - Reduction of 25% in number of children stunted and number under-weight - 50% increase in household Assets - No. hh with 5 months or more of food shortage reduced from 46% to 23%. 	Impact surveys at baseline, mid-term and completion (RIMS)	Real price of rice does not rise relative to wages	Stunted – No changes Under weight- 14% reduced Malnutrition- 4% reduced - 260% HH has increased assets - 24% HH with >5 months food shortage
Purpose Improved and more secure rural livelihoods for 28,000 households in coastal chars	<ul style="list-style-type: none"> - 20,000 hhs reporting increased agricultural production - 40,000 people* in income earning occupations; - 21,000 hh with access to improved water supply and sanitation 	Impact and outcome surveys undertaken by the M&E unit.	No major natural disasters Economic growth and stability Law and order in char Areas	<ul style="list-style-type: none"> - 13,600 (68%) - No data - 27,654 HH
Outcome				
1. Water resources managed effectively to protect land from tidal and storm surges, improve drainage, and enhance accretion	<ul style="list-style-type: none"> - 80% WMG rated effective/sustainable - 70% empoldered land has reduced soil salinity, flooding and improved drainage 	<ul style="list-style-type: none"> - Project progress report - Field surveys of soil salinity and drainage. - Outcome survey 	_ Possible to carry out successful foreshore plantation	<ul style="list-style-type: none"> - 82% WMO - 65%-68% - 4 Annual outcome surveys - 1MTR RIMS
2. Improved road communication, available infrastructure for multipurpose use and ensured safe water and hygienic sanitation	<ul style="list-style-type: none"> - Better communication in different places - No. of people having access to shelter - No. of children at school in shelter - No. of hh having access to safe water and hygienic sanitation - 	<ul style="list-style-type: none"> - Project progress report - PME report - Outcome survey 	_ No unexpected changes in groundwater quality due to sea water intrusion.	<ul style="list-style-type: none"> - 242 km road constructed - 14,000 have access to shelter - School started in 80% of 30 shelters - 27,654 HH access to safe drinking water and 19020 HH have access to hygiene latrine
3. Secure possession of land	<ul style="list-style-type: none"> - Nos. of households maintaining possession of land 	<ul style="list-style-type: none"> - Project progress report - PME and outcome survey 	Vested interests & elites do not disrupt land settlement.	<ul style="list-style-type: none"> - 16,351 HH - 9,709 HH received khatians
4. Improved livelihoods and household resilience	<ul style="list-style-type: none"> - 20,000 farmers report adoption of improved agriculture - Nos. of women involved with their own IGA 	<ul style="list-style-type: none"> - Project progress report - Outcome survey - PME report 	_ Appropriate technologies for salt affected land available. _ NGOs not subject	<ul style="list-style-type: none"> - 18,200 farmers (91% adoption) - 22,076 female farmers (farm & non-farm)

	<ul style="list-style-type: none"> - % hh using H&FP services - % of women are aware about legal rights 		to undue regulatory interference.	<ul style="list-style-type: none"> - 27654 HH using H&FP services - 13,173 women are aware about LHR
Outputs				
1. Area empoldered by embankment and foreshore protected through plantation	<ul style="list-style-type: none"> _ 10,000 ha of land empoldered. _ 50 km of embankment and 200 ha of foreshore protected by plantation _ 31 water management and 630 social forestry groups 	<ul style="list-style-type: none"> _ Project reports from BWDB and FD _ Participatory monitoring of community orgs. 	<ul style="list-style-type: none"> _ Sufficient allocations for O&M by the Government. _ Possible to carry out successful foreshore Plantation 	<ul style="list-style-type: none"> - 11,680 ha - 59 km - 21 WMG, 3 LADC, 2 WMA - 468 SFG
2. Climate resilient infrastructure for communications, markets, cyclone protection, potable water and hygienic sanitation.	<ul style="list-style-type: none"> _ 160 km road constructed _ 25 bridges & 72 culverts built _ 9 markets constructed _ Reduction in transport costs _ 60 cyclone shelters & 24 Livestock refuges constructed. _ 1380 water supply points Operational & no. of hh supplied. _ 26,735 hygienic latrines operational _ 17,600 women earning from LCS 	<ul style="list-style-type: none"> _ Project reports from LGED _ Participatory monitoring feedback and surveys _ Project reports from DPHE 	<ul style="list-style-type: none"> _ Sufficient allocations for O&M by Government. _ No unexpected changes in groundwater quality due to sea water intrusion. 	<ul style="list-style-type: none"> - 242 km - 4 bridges, 169 culverts - 6 market - No data - 30 shelters - None - 1,138 DTWs - 27,654 HH - 19,018 Operational - 1,782 LCS members (male-1,311 female-471)
3. Secure land title granted to 20,000 households.	<ul style="list-style-type: none"> _ 20,000 target group hh getting secure title to land 	<ul style="list-style-type: none"> _ Project reports from MoL 	Vested interests & elites do not disrupt land settlement.	<ul style="list-style-type: none"> - 16,351 HH - 6,812 HH received khatians
4. Improved livelihood support for the households	<ul style="list-style-type: none"> _ 5,400 farmers* attending agric. extension events _ 28,000 women in 1120 NGO group _ 234 health workers & 13 clinics _ 28,000 women trained in IGA _ 28,000 women attend rights based training and events _ 240 Fish Nurserers and _ 1680 model fish farmers _ 60 poultry workers & 12 paravets 	<ul style="list-style-type: none"> _ Participatory monitoring feedback and surveys _ KAP surveys _ Project reports from DAE and NGOs _ Project reports 	<ul style="list-style-type: none"> _ DAE able to post staff to implement agricultural development programme. _ Appropriate technologies for salt affected land available. _ NGOs not subject to undue regulatory interference. 	<ul style="list-style-type: none"> - 5,400 farmers (100%) - 26,373 women - 185 HW and 11 clinics - 22,076 women trained (farm-& Non-farm) - 13,173 women trained on LHR - 108 Fish Nurserers - 720 model fish farmers - 60 poultry workers & 12 paravets

<p>5. Knowledge management and lessons for Integrated Coastal Zone Mgt (ICZM).</p>	<p>_ Project reports, studies workshops and other events –</p>	<p>_ Project reports</p>	<p>Government continues to support coastal development</p>	<ul style="list-style-type: none"> - Progress Report-12 - Technical report-11 - Mission Report-9 - KAP report-8 - PME report- 8 - Feasibility Study- 3 - MTR RIMS- 1, baseline 1, Mid-term 1
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<p>Activities</p>	
<p>1. Protection from climate change: (a) sea dykes; (b) internal embankments; (c) drains and canals, (d) water control sluices, (e) Water Management Organisations; (f) water infrastructure maintenance; (g) formation of social forestry groups; (h) tree planting on embankments, roadsides, foreshores & mudflats roadsides etc; (i) plantation caretaking</p>	
<p>2. Climate resilient infrastructure: (a) village and union roads and bridges; (b) cyclone shelters & killas; (c) rural markets; (g) deep tube wells; (e) drinking water ponds and rainwater collection; (f) hygienic latrines; (g) Labour Construction Societies for construction. (h) O&M user groups; (l) market management committees; (j) infrastructure maintenance</p>	
<p>3. Land settlement and titling: (a) Surveys to assess availability of land and current ownership status; (b) selection of target group households; (c) process of land titling; (d) computerised land record management system.</p>	
<p>4. Livelihood support: (a) formation of groups; (b) identification of appropriate technologies; (c) capacity building of service providers; (d) crop training and demonstrations; (e) other skill training; (f) access to livelihood opportunities and markets; (g) promotion of better health and hygiene; (h) social support and rights; (i) disaster preparedness and climate change resilience.</p>	
<p>5. Technical assistance and management support: (a) support from TA team for implementing agencies; (b) quality control; (c) specialised training; (d) M&E system; (e) studies of development of new chars; (f) dissemination and sharing of experiences.</p>	

Annex 2. Map of CDSP IV areas



Annex 3. Status of Infrastructure Development

Table 1 BWDB

Table 2 LGED

Table 3 DPHE

Annex 4. Annual Plan and Achievements (IFAD Format)

Summary by Expenditure Account

Summary by Component

A1 BWDB

A2 Forest Department

A3 LGED

A4 DPHE

A5 DAE

A6 MoL

Summary Physical Plan and Achievement by Component

Annex 5. Composition of Project Management Committee of CDSP IV

1. Mr. Md. Shamsuddoha
Project Coordinating Director, CDSP-IV
BWDB, Dhaka.
2. Mr. Mahbub Alam Talukdar
Project Director, CDSP-IV
Deputy Commissioner, Noakhali.
3. Mr. M. A. Halim Khan
Project Director, CDSP-IV
DPHE, Dhaka.
4. Mr. Mohammad Rezaul Karim
Project Director, CDSP-IV
LGED, Dhaka.
5. Mr. Pranab Bhattacharjee
Project Director, CDSP-IV
DAE, Noakhali.
6. Mr. Md. Amir Hosain Chowdhury
Project Director, CDSP-IV and DFO
FD, Noakhali.
7. Mr. Andrew Jenkins
Team Leader, CDSP-IV
Member Secretary PMC.

Five PMC meetings (51st – 55th) were held during the reporting period, three in Noakhali and two in Dhaka

Annex 6. CDSP IV Staffing per 30 June 2017

Sl.	Name	Designation	Date of Joining
1.	Mr. Andrew Jenkins	Team Leader	15/5/2017
2.	Mr. Mihir Kumar Chakroborty	Deputy Team Leader (Infrastructure)	1/3/2011
3.	Mr. Md. Bazlul Karim	Deputy Team Leader (NGO & Livelihoods) and Agricultural Adviser	7/7/2011
4.	Mr. Md. Rezaul Karim	Land Settlement Adviser	15/9/2013
5.	Mr. Md. Mahfuzur Rahman	Quality Control / Design Engineer	2/5/2011
6.	Mr. Sajjad Ahmed Khan	Financial Adviser	1/1/2014
7.	Mr. Kiran Sankar Sarkar	Monitoring Evaluation & Knowledge Management Adviser	1/1/2015
8.	Mr. Md. Robiul Islam	Social Forestry Adviser	2/5/2011
9.	Mr. Yahiya Shawon	Accounts Officer	12/4/2012
10.	Md. Nurul Islam	Assistant Land Settlement Adviser	3/4/2011
11.	Md. Mijanur Rahman	Project Area Coordinator (Char Nangulia)	18/1/2016
12.	Md. Liaquat Ali Khan	Project Area Coordinator (Urir Char)	2/5/2011
13.	Md. Alauddin	Project Area Coordinator (Char Ziauddin)	2/5/2011
14.	Md. Basedul Alam Siddiqui	Project Area Coordinator (Noler Char, Caring Char)	26/5/2011
15.	Md. Zahirul Islam Chowdhury	Social Forestry Coordinator	2/5/2011
16.	Md. Zulfiker Ali	NGO Sector Specialist Micro Finance	4/5/2011
17.	Motaher Hossain	NGO Sector Specialist WATSAN	2/5/2011
18.	Mozammel Hoque Chowdhury	NGO Sector Specialist (Fisheries)	1/3/2015
19.	Ms. Jannatul Naim	NGO Sector Specialist (Livestock)	23/11/2014
20.	Zulfiquer Azeez	Project Engineer (West)	7/4/2011
21.	Sankar Chandra Saha	Project Engineer (East)	1/3/2011
22.	Md. Abul Hossain	Project Engineer (Urir Char)	18/9/2011
23.	Shajjadur Rahman	Project Engineer (Char Ziauddin)	14/11/2011
24.	Radheshyam Sutradhar	Project Agriculturist	2/5/2011
25.	Ms. Raka Monaem	Office Manager & Accounts Officer (Dhaka)	1/3/2011
26.	Md. Liakhat Ali	Agriculture cum Forestry Coordinator	21/7/2013
27.	Mesbahuddin Ahmed (Bahar)	Logistic Officer	2/5/2011
28.	Md. Mizanur Rahman	MIS & Computer Specialist	20/1/2014
29.	M.A. Kader	Monitoring & Evaluation Officer	2/10/2011
30.	Ms. Khaleda Akter	Monitoring & Evaluation Officer	2/10/2011
31.	Md. Sanaullah	Account Assistant (NPO)	15/5/2013
32.	Ms. Shilpi Regina Gonsalves	Administrative Assistant (Noakhali)	1/3/2011
33.	Zahidur Rahman	Administrative Assistant (Dhaka)	15/6/2011

Sl.	Name	Designation	Date of Joining
34.	Md. Rafiqul Islam	Data Collector (PCD Office)	15/6/2011
35.	Ms. Fatema Begum	Gender Field Coordinator	2/5/2011
36.	Ms. Nahid Farhana Akter	Gender Field Coordinator	2/5/2011
37.	Sazedul Kabir	Computer Operator	3/4/2011
38.	Abul Kashem	Computer Operator	30/6/2011
39.	Mohamed Ali	Surveyor (Engineering)	2/5/2011
40.	Nazrul Islam	Surveyor (Engineering)	1/4/2013
41.	Ziaur Rahman	Surveyor (Engineering)	1/12/2014
42.	MD Abdul Khaleque	Surveyor (Engineering)	1/11/2014
43.	Habibur Rahman	Surveyor (Land)	2/5/2011
44.	Md. Kamal Uddin	Surveyor (Land)	1/6/2011
45.	Md. Delwar Hossein	Consolidator (Land)	2/5/2011
46.	Md. Shodiul Islam	LCS Facilitator	1/1/2012
47.	Flavian Gonsalves	Driver	1/3/2011
48.	Md. Gaiz Alam	Driver	1/3/2011
49.	Abdul Latif	Driver	2/5/2011
50.	Md. Abdul Jalil Miah	Driver	2/5/2011
51.	Md. Akter Hossain	Driver	15/9/2011
52.	Md. Abdul Hai (Bahar)	Driver, DPO	1/3/2011
53.	Chandra Bushion Majumder	Driver	1/7/2014
54.	Md. Jahiruddin Shobuj	Peon	1/3/2011
55.	Gopal Chandra Roy	Peon	3/4/2011
56.	Md. Abul Hossain	Peon	12/7/2011
57.	Protap Daring	Peon, DPO	1/4/2011
58.	Md. Jewel	Guard, Boyer Char	1/11/2012
59.	Bino Fernandez	Guard, Noakhali	3/4/2011
60.	Mosharref Hossain (Manik)	Cook/ Manager, TL- & Guest- house	1/3/2011
61.	Md. Abdul Kader	Cook, Char Nangulia	1/3/2011
62.	Md. Shamsul Haque	Cook, Urir Char	2/5/2011
63.	Md. Waziullah	Cook, Char Majid (CM)	15/9/2011
64.	Mohammad Kabir	Speedboat Helper (Boyer Char)	2/5/2011
65.	Md. Jahir Uddin	Peon cum cook	1/2/2012
66.	Bashir Ahmed	Office Assistant (PCD Office)	15/4/2013
67.	Md. Shah Alam	Cleaner/Peon	18/05/2014
68.	Khalequzzaman	Day guard (DPO)	9/10/2012

Annex 7. Status of Technical Assistance Budget on 30 June 2017

Euro

Sl. No.	Budget Item	Total Budget	Previous Claims	Claim January-June 2017	Total claimed	Balance
1	Professional Staff	4,416,245	3,087,379	333,610	3,420,989	995,256
2	Technical/administrative Staff	1,086,299	723,693	109,610	833,303	252,996
3	Support and field Staff	924,129	605,449	78,842	684,291	239,838
4	Equipment/ Vehicles	191,546	125,669	307	125,976	65,570
5	Studies and surveys	414,872	335,587	2,262	337,849	77,023
6	Training and Workshops	116,750	57,386	5,214	62,600	54,150
7	Contracted services	65,000	26,413	4,372	30,785	34,215
8	Recurrent Cost	755,523	566,334	61,894	628,228	127,295
9	Office Construction	50,000	50,000	0	50,000	0
<i>Sub-total TA</i>		<i>8,020,364</i>	<i>5,577,908</i>	<i>596,112</i>	<i>6,174,020</i>	<i>1,846,344</i>
10	Contingencies	210,881	28,042	0	28,042	182,839
<i>Sub-total TA incl. contingencies</i>		<i>8,231,245</i>	<i>5,605,950</i>	<i>596,112</i>	<i>6,202,062</i>	<i>2,029,183</i>
11	Social and Livelihood support	3,076,749	2,516,392	175,004	2,691,396	385,353
<i>Sub-total Social & Livelihood</i>		<i>3,076,749</i>	<i>2,516,392</i>	<i>175,004</i>	<i>2,691,396</i>	<i>385,353</i>
Total TA contract		11,307,994	8,122,342	771,116	8,893,458	2,414,536

Annex 8. Training provided by TA Team, IAs and PNGOs January – June 2017

SL No.	Title of Training/workshop	Facilitated by	Duration	Batch	Participants		Total
					Male	Female	
1.	Awareness training on LHR	PNGOs	05 days	02	25	25	50
2.	Annual Refreshers training on Disaster & Climate change	PNGOs	01 day	06	75	75	150
3.	Refresher training on TBA	PNGOs	01 day	34	-	510	510
4.	Field Day Observation on Fruit & Vegetable cultivation	PNGOs	01 day	22	-	440	440
5.	Refresher training to Poultry workers	PNGOs	01 day	18	-	147	147
6.	DTW training to Care Taker Family (CTF)	PNGOs	3 days	16	-	312	312
7.	World Women's Day Observation	PNGOs	01 day	6 event	360	900	1260
8.	Demonstration on Food Processing & Cooking System	PNGOs	01 day	35	-	350	350
9.	Motivation Tour on Fruits & Vegetables cultivation	PNGOs	01 day	02	-	20	20
10.	Follow-up training on Social Forestry to Mitigate Climate change	FD	01 day	250	3800	2450	6250
11.	Training on Non-farm IGA (Cap Sewing)	PNGOs	03 days	01	-	25	25
12.	Training on Fingerling Management	PNGOs	02 days	06	-	42	42
13.	Improved Tilapia management	PNGOs	02 days	17	-	360	360
14.	Water Management Orientation (WMF)	TA Team	01 days	1	17	09	26
15.	Training Land Settlement process under CDSP-IV	MoL	01 day	01	35	-	35
16.	Workshop on expansion of the Govt. line agencies activities into CDSP-IV area.	MoL	01 day	01	41	09	50
17.	One day gender training to FFG	TA Team	01 day	07	119	98	217
18.	One day gender training to LCS	TA Team	01 day	03	60	38	98

Annex 9. Overview of FLIs 30 June 2017

SL	Name of Area/ Polder/ WMG/ LADC	No of FF	No of SFG	No of NGO group	No of TUG	No of LCS
1	Dorbesh Khal- WMG	4	21	37	63	4
2	North Nangulia Khal- WMG	3	3	44	71	3
3	South Nangulia Khal-WMG	5	15	71	97	6
4	Bhuiyar Khal-WMG	3	28	41	67	5
5	Nonar Khal-WMG	3	21	19	45	2
6	North Katakhal Khal-01 WMG	3	22	41	54	1
7	South Katakhal Khal-01	3	26	31	51	2
8	North Katakhal Khal-02 WMG	4	17	46	59	3
9	South Khatkhal -02 WMG	3	29	29	47	2
10	Boro Khal- WMG	3	51	31	55	4
11	Lakshmi Khal- WMG	3	21	33	51	3
	Total	37	254	423	660	37

Noler Char

1	Howar Khal-01- WMG	3	25	45	79	4
2	Rahamat pur Khal- WMG	7	19	51	79	7
3	Chanandi Khal- WMG	5	9	37	60	5
4	Milon Khal- WMG	5	13	40	59	2
5	Alamin Khal- WMG	5	39	44	76	4
	Total	25	105	217	355	22

Caring Char

1	Bathankhal-WMG	3	19	54	85	2
2	Shahabani Bazar- WMG	5	11	36	55	4
3	Mujib Bazar- LADC (drop out)	3	18	34	14	0
4	Caring Khal –WMG	4	9	56	48	1
	Total	15	57	180	202	7

Char Zia Uddin

1	Char Bagga Khal –WMG	4	13	45	40	1
2	Motobi Khal- WMG	3	24	35	70	1
3	Gabtoli Khal-1	0	2	0	0	0
	Total	7	39	80	110	2

Urir Char

1	Urir Char WMG-1	2	0	28	9	0
2	Urir Char WMG-2	2	0	35	33	1
3	Urir Char WMG-3	2	47	21	25	1
	Total	6	47	84	67	2
1	Boyer Char/Teliur, Char Muksumul, Bangchur, Kolatoli	0	66	0	60	4
26	Total (5-Chars)	90	568	984	1454	74