# **Government of the People's Republic of Bangladesh**

# Climate Smart Agriculture and Water Management Project (DoF-Part)

# IDA Credit No. 6836-BD

Department of Fisheries, Matshya Bhaban, Ramna, Dhaka

**Project Management Unit (PMU)** 

December 2022

Project Implementation Manual

# Section-1 General declaration Article-I Version Control

This Project Implementation Manual (PIM) will be treated as a living document for the Project. It can be amended as and when required depending on the real situation and demeaned during execution of the Project. This document will be approved and endorsed by the Joint Project Steering committee (JPSC) as well as by the concern agency and administrative Ministry. [Ministry of Water resource (MoWR), Ministry of Agriculture (MoA) and Ministry of Fisheries and Live Stock. After approval of the document will finally effective by the World bank as financing agency.

# Article-II Revision Protocol

If and when any amendment is required during the Execution phase of the Project the concern implementing agency will immediately communicate with the World Bank with valid reason for amendment. Having due concurrence with the World Bank the agency will propose the clause of amendments and make necessary arrangement for approving by the competent authority.

## Article-III Approval Process

Any amendment proposed by the executing agencies will be reviewed by the World Bank and then submit to the JPSC for approval. All amendments will be made under agreement of all stakeholders and amendments clause will be furnished at Section-1 of PIM.

# Article- IV Sequence of version

Nome of the document	Version	Approving authority with Date		Comments
Name of the document	version	JPSC	World Bank	
Project Implementation Manual	1		Conditionally approved	
(PIM)			December 24, 2022	

# Section-2 Key Information of the Project

Project Title: Climate Smart Agriculture and Water Management Project (DoF-Part)

## Sponsoring Ministry/Division

- i) Ministry of Water Resources, Lead Ministry
- ii) Ministry of Fisheries and Livestock (MoFL)
- iii) Ministry of Agriculture (MOA)

**Project Components and Implementers** 

- I. **Component-1:** Improved Climate Resilience of Flood Control, Drainage and Irrigation Infrastructure Systems (PCU, BWDB) MoWR
- II. Component-2: Climate-Smart Agriculture and Fisheries Production and Marketing (PIU DAE and DoF) MOA and MoFL
- III. Component-3: Project Management Support
- IV. Component-4: Contingency Emergency Response

#### Project Objective (PDO)

The Project Development Objective (PDO) of National Agricultural Technology Program-Phase II Project (NATP-2) is to increase agricultural productivity of small holder farms and improve small holder farmers' access to markets in selected districts.

Project Implementation Period: 01 October 2021 to 30 September 2025

# Table of Contents

Section-1 General declaration	2
Article-I Version Control	2
Article-II Revision Protocol	2
Article-III Approval Process	2
Section-2 Key Information of the Project	
Project Title	
Sponsoring Ministry/Division	3
Project Components and Implementers	3
Project Objective (PDO)	3
Project Implementation Period:	3
Chapter-1: Project Background	
1.1 Project Context	13
1.2 Project Objective	15
1.2.1 Specific Objectives of the Project (CSAWMP-DoF Part)	15
1.3 Location of the project	15
Table:1 List of Sub Projects and Project command Area	15
1.4 Project Component	17
1.5 Project Implementation Manual	18
Chapter -2 Project Management and Coordination Arrangement	
2.1 Project administration and Implementation Arrangement	20
2.1.1 Project management Unit (Organogram)	22
Fig-1: The Project management Unit of the CSAWMP-DoF	
2.2 Inter-agency Coordination and Supervision Arrangement	23
2.2.1 National Committees	23
2.2.2 PIU Implementation Level Committees (at PIUs)	23
2.2.3 Field Level Committees (at districts and upazilas)	23
2.2.4 Composition and Terms of Reference (TOR) of the National Committees	24
2.3 Honorarium for Committee Members	26
Chapter-3 Financial management and Disbursement	27

3.1 Project Key Accounting Functions	27
3.2 Role of PCU in Financial Management	27
3.3 Bank Account	28
Table 2: List of Cost Center under CSAWMP-DoF (Where operating account will be opened)	30
Table 3:List of Activities that require operating Account for manage payment at Division/District/Upazila District Level.	
Note: The item of Scope can be Exclude or include base on the practical Situation during the Execution of Project	f the 32
3.4 Fund and Information Flow	33
3.4.1 General Guidelines	33
Fig-2: Schematic Diagram of Fund information flow	33
3.4.2 Procedure for Advanced to PIU	34
Table 4: Procedure for advances to the DA to PIU from IDA	34
3.4.3 Submission of Statement of Expenditure (SOE) by Operating Account	35
3.4.4 Procedures for Reimbursement/Replenishment and Reconciliation of the	35
Disbursed Amount	35
Table 5: Procedures for Reimbursement/Replenishment and Reconciliation of the Disbursed Amount	35
3.4.5 Transfer of Funds	35
3.4.6Treatment of Unutilized Advance by PIUs/IAs	36
3.4.7 Procedure for Foreign Currency Payment from DA	36
3.5 Accounting	36
3.5.1 Chart of Accounts	37
3.5.2 Accounting Systems	37
3.5.3 Accounting Centers	37
3.5.4 Accounting Records	38
3.5.5 Significant Accounting Policies	38
3.5.6 Vouchers	39
3.5.7 Payment of Bills and Issuing of Cheques	40
3.5.8 Cash Book	40
3.5.9 Verification of Cash Balance	41
3.5.10 Journal	41

Project Implementation Manual

3.5.11 Ledger	41
3.5.12 Bank Reconciliation	42
3.5. 13 Correction of Errors	42
3.5.14 Guidelines for Closure of Books of Account	42
3.5.15 Preservation & Destruction of Records	42
3.6 Backup Arrangements and Disaster Recovery Plan (DRP)	43
3.7 Budgeting	43
3.8 Reporting Requirements for CSAWMP-DoF	44
Table 6: Reporting Requirements for CSAWMP-DoF	44
All of the PIUs is required to submit above reports	45
3.9 Control	45
3.9.1 Internal Audit	45
3.9.2 External Audit	45
3.9.3 Fiduciary Review	45
3.9.4 Fiduciary Management Supervision	46
3.10 Defalcations, Losses, etc., Report of Losses	46
3.10.1 Report of Losses	46
3.10.3 Responsibility for Losses	47
3.10.4 Write of Losses	47
3.11 Policy on Delegation of Financial Authority	48
3.12 Government Regulations and Compliance	48
3.12.1 Deduction of Tax and VAT at Source	48
3.12.2 Income Tax (Subject to change from year to year)	48
3.12.3 Matrix for Tax and VAT Deduction at Source	48
3.12.4 Revenue Stamp	48
3.13 Financial Management Guidebook of the World Bank	49
3.14 Ineligible Expenditures	49
Chapter-4: Procurement Management	50
4.1 Institutional Arrangement for Procurement	50

4.1.1 Procurement Items	. 50
Table 7 : Packages of common goods and number of contracts	. 51
4.1.2 Procurement of pooled goods works and services	. 55
4.2. Procurement Plan	. 55
4.2.1 Procurement Guidelines	. 55
4.2.2 Due-diligence Measures	. 55
4.2.3 Electronic Government Procurement (e-GP)	. 56
4.2.4 Measuring Results and Performance Monitoring	. 56
4.3 Use of Standard Procurement Documents	
4.3.1 Procurement Risk Assessment and Management	. 57
4.4 Procurement Process - Planning, Requirement Definition, Sourcing and	. 57
4.4.1 Procurement Planning	. 57
4.4.2 Procurement Requirement definition	
4.4.3 Market Research	. 58
4.5 Mis procurement	. 58
4.6 Sustainable Procurement	. 59
4.7 Measuring Results and Performance Monitoring	. 59
4.8 Bank Implementation Support	. 59
4.8.1 Prior review Threshold	. 59
4.8.2 Post Review	. 60
Table 8: Prior Review Thresholds	. 60
Chapter-5 Formation of Water Management organization and production Group for fisheries	. 62
5.1.1 WMO Formation and Mobilization	. 62
5.1.2 General Consideration for CIG Farmers Selection	. 63
5.1.3 Criteria for CBO Farmer Selection	. 63
Table 9: Farmers category/criteria for CIG formation	. 63
5.1.4 Steps in CBO Formation	. 64
Table 10: Tools and techniques processes to be followed	. 65
Table 11: Processes to be followed for selection of potential CIG areas	. 66
Step 3: Holding general meetings	. 66
Table 12: Processes to be followed for holding general meetings	. 67
Table 13: Processes to be followed for checking of resource inventory for primarily selected CIG members	. 68
Table 14: Processes to be followed for finalization of lists of farmers for a CIG	. 68

5.1.5 Functions of CBO	69
5.1.6 Producer Organization (PO)	70
Chapter -6 Implementation Methodology and Approach for the Fisheries Intervention	71
6.1Classification of Water waterbodies:	71
6.2 Types of production models considered (Broadly classified)	71
Table 15: List of Subproject and Waterbodies with their location and indicative suitability	73
6.3 post-harvest management and strengthening of Value Chain	78
6.3.1 Key criteria of post-harvest management interventions	78
6.4 Technology Demonstration	
Table 16: The Summery of Technology Demonstration	79
6.4.1 Process for Conducting Technology Demonstration	80
6.4.2 Criteria for Selection of Demonstration Farmers	80
6.4.3 Criteria for Selection of Demonstration Plots	80
6.4.4 Scalable Technologies for Extension Support	81
Table 17: Technologies readily scalable under CSAWMP-DoF	81
6.4.5 Field-Days	82
6.4.6 Study/Exposure Visit	82
6.5 Establishment of Community Based Fisheries Management (CBFM) in beels	82
Fig 3: Steps before implementation of management measures	83
6.5.1 Selection criteria of reservoirs for establishment of Beel Nurseries:	84
6.5.2 Construction and Preparation of Beel Nursery:	84
6.5.3 Species to be Stocked	84
6.5.4. Production Target:	85
6.5.5 Location and Time of Fingerlings stocking:	85
6.5.6. Collecting/Purchasing and Handling of Fingerlings:	85
6.5.7 Beel Nursery Program Implementation Committee:	85
6.5.8 Scope of Beel Nursery Program Implementation Committee:	86
6.5.9 Fish Fingerlings Quantity Assessment Committee:	86
6.5.10 Scope of work of the "Fish Fingerlings Quantity Assessment Committee"	86
6.5.11 Supervision of Beel Nursery activities	87
6.5.12 Monitoring and Evaluation of Beel Nursery Activities	87
6.5.13 Beel Nursery Program	88
Table 18: Estimated cost of Beel Nursery Re-excavation/per acre	88

Table 19: Estimated operational cost of Beel Nursery/per acre	
6.6 Establishment of fish sanctuaries & maintenance	88
6.6.1 Aims and objectives of establishing fish sanctuaries	89
6.6.2 Selection of Fish Sanctuary Site:	90
6.6.3 Determining the area of fish sanctuary	91
6.6.4 Expediency of waterbodies	92
6.6.5 Construction/Establishment of Physical Infrastructure of Fisheries Sanctuary	92
6.6.6 Fisheries Sanctuary Management	93
6.6.7 Release of small indigenous endangered fish fingerlings	93
6.6.8 Repair and maintenance	94
6.6.9 Security of Sanctuary	94
6.6.10 Conservation of Environment	94
6.6.11 Community Based Organizations and Committees for Sanctuary Management	94
6.6.12 Sanctuary Management Committee	94
6.6.13 Scope of Committee:	95
6.6.14 Upazila Sanctuary Management and Monitoring Committee	96
6.6.15 Scope of Committee	97
6.6.16 District Sanctuary Management and Monitoring Committee	98
6.6.17 Scope of Committee	98
6.6.18 Control of Sanctuary Areas and Conservation of Fishery Resources	99
6.6.19 Instructions Regarding Establishment/Construction Cost of Fish Sanctuaries	99
6.6.20 General Guidelines on Sanctuary Management	100
Table 20: Estimated cost of Sanctuary Re-excavation	101
Table 21: Estimated operational cost of Sanctuaries	101
6.7 Fry Release in 19 Sub project and one Upazila	102
6.7.1 Considerations for Selection of Water bodies for Release of Fingerlings	102
6.7.2 Selection of releasable fingerling	103
6.7.3 Period for Release of Fingerlings	103
6.7.4 Selection of Area for Release of Fingerling	
6.7.5 Fingerling Procurement Process	
6.7.6 Upazila level Water body Selection, Fingerling collection and Release Committee	104
6.7.6.1 Outline of the Committee	104
6.7.6.2 Scope of Works of the Committee	105

6.7.6.3 Scope of Works of Senior Upazila/Upazila Fisheries Officer	
6.7.6.4 Supervision of Fingerling release activities	
6.8 Cage and pen culture	
Table 22: Cost breakdown for Cage Culture	
6.9 Establishment fish drying demonstration	
Table 23: Specification of Fish Drying Demonstration	
Table 24: Costing of Fish Drying Demonstration	
Table 25: Specification of Mechanical Fish Dryer with Solar Panel	
Table 26: Costing of Mechanical Fish Dryer with Solar Panel	
6.10 Value Chain Development and Fish Marketing	
Fig 4: Mini Fish Processing Plant Value Chain	
Chapter-7: Human Resource Development, Training, Communication and Public Awareness	
7.1 Human Resource Development (HRD)	
7.2 Training on aquaculture and fisheries management	
Table 27: Summery of Training Cost	
7.3 Exchange visit program for DoF/project staff & beneficiaries	
7.4 Overseas study tour of DoF officers, planning & policy makers and project staff	
7.5 Alternate Income generating Activities (AIGAs)	
7.6 Workshop/Seminar	
Table 28: Summery of total cost for the Workshop of the Project	
7.7 Communication and Public Awareness	
7.7.1 Communication	
7.8 Establishment of Aquaculture Extension Agent through LEAF	
7.8.1 Duties and Responsibilities of LEAF	
7.9 Communication Channels	
7.9.1 Demonstration, Field-Day, Exposure Visit, etc.	
7.10 Preparation and Distribution of Extension Materials, Booklets, Brochures, Training Course	
7.10.1 Public Awareness	
7.10.2 Public Awareness Raising in CSAWMP:	
7.11 Existing Training Facilities of DoF	
Chapter-8: Environmental and Social Management	
8.1 Environmental and Social Perspectives of the Project	

8.2 Social Management	127
8.3 Involuntary Resettlement	127
8.4 Gender mainstreaming	127
8.5 Social Impact Assessment, Baseline Surveys and Mitigation Measures	128
Chapter-9: Monitoring & Evaluation (M&E)	129
9.1 M&E Responsibility	129
9.1.1 Responsibility of PCU	129
9.1.2 Responsibility of PIU	129
9.1.3 M&E Responsibilities of the External M&E Agency	129
9.2 Major M&IE Activities	130
Table 29: Log frame for Climate Smart Agriculture and Water Management Project (DoF-Part)	131
Program Goal:	131
Chapter-10: Governance and Accountability Action Plan	134
10.1 Perspective of Governance and Accountability Action Plan	134
10.2 Risks in CSAWMP Implementation and Mitigation Measures	135
Table 30: Risks and mitigation measures	135
10.3 Grievance Redress Mechanism	137
10.3.1 Possible Grievances/Complaints	137
10.3.2 Grievance Redress Mechanism	137
10.3.3 Grievances/Complaints Handling Mechanism	
Table 31: Grievance redresses arrangements at different tiers	139
10.3.4 Mobile Phone-based Grievance and Redress System	139
Appendix: 1 Time Based (Quarterly) Work Plan for the whole Project	140
Appendix: 2 Gantt Chart for the Major Activities of the Project	152
Annexure II (e): List of individual consultants for PIU (CSAWMP-DoF)	153
Annexure II (f): Qualification and Experience for The Individual Consultants	154
Annexure II (g): List of Contractual Staff for PIU (CSAWMP-DoF)	158
Annexure 3.1 Statement of Expenditures (SOE)	159
Annex-3.2	
Annex-3.3	161
Annex-3.4	163
Annex-3.5	165
Annex-3.6	167

Project Implementation Manual

Annex-3.7	
Annex 3.8	
Annex-3.9	
Annex 3.10	
Annex 3.11	
Annex-3.12	

# Chapter-1: Project Background

## 1.1 Project Context

Bangladesh is predominantly an agricultural country and the growth rate of Gross Domestic Product (GDP) of the country still depends on the performance of the agriculture sector. As the single largest production sector of the economy, agriculture contributes about 11.70% to the total GDP of the country and the sector also accommodates around 42.7% of labor force. Bangladesh is one of the largest deltas (Ganges-Brahmaputra-Meghna Delta or GBM Delta) in the world which is highly vulnerable to natural disasters because of its geographical location, flat and low-lying landscape, population density, poverty, illiteracy, lack of institutional setup/linkages etc. In other words, the biophysical, the social as well as economic conditions of Bangladesh are very typical to any of the most vulnerable countries (prone to natural disasters) in the world. The total land area of the country is 147,570 sq km and it consists mostly of floodplains (almost 80%) leaving major part of the country (except for the north-western highlands) prone to flooding during the rainy season. Recently Bangladesh has attained self-sufficiency in fish production.

Bangladesh is a comparatively small landmass with diverse landscape, having (i) Widespread coastal plain across the south, (ii) high and moderately dry land in the north and mountainous trace along the north and south-east, (iii) depressed <sup>1</sup>haor basin in the north-east, and (iv) central flood plain. The deltaic landscapes are crisscrossed with rivers and wetlands spread over entire land mass and evolved into aquatic and terrestrial ecosystems including evergreen forest, deciduous forest, mangroves, swamps, reed lands and <sup>2</sup>beels, rivers and haors. The country is exposed to extreme weather events, with high rainfall during the monsoon season, extensive flooding occurs in lower-lying areas of the country, and this problem is compounded by slow drainage and high sea tides. There are both benefits and losses this situation brings: it allows for highly productive farming (increase land fertility) and fishing systems, but at the same time creates deep flooding, erosion and drainage problems which can cause serious crop losses, livestock deaths, salinity intrusion, and rural population displacement. They also take considerable areas of otherwise arable land out of production, thereby adversely affecting agricultural production and livelihoods. At the same time, during the dry season the availability of surface water is a significant constraint to agriculture. Droughts, especially in the northern parts of the country frequently lead to crop failure, livestock death, land degradation, and also undermine groundwater replenishment, which is critical to performance of irrigated agriculture in those areas.

Bangladesh is recognized worldwide as one of the most vulnerable countries to the impacts of global warming and climate change. The country has a history of observing extreme climatic events claiming millions of lives and destroying development gains. The people and social

<sup>&</sup>lt;sup>1</sup> Haor is a <u>wetland ecosystem</u> in the north eastern part of <u>Bangladesh</u> which physically is a bowl or saucer shaped shallow <u>depression</u>, also known as a <u>backswamp</u>. During <u>monsoon</u> haors receive <u>surface runoff</u> water from rivers and canals to become vast stretches of turbulent water

<sup>&</sup>lt;sup>2</sup> A beel is a billabong or a lake-like wetland with static water as opposed to moving water in rivers and canals.

system have knowledge and experience of coping with their effects to some degree and extent. Variability in rainfall pattern, combined with increased snow melt from the Himalayas, and temperature extremes are resulting in crop damage and failure, preventing farmers and those dependent from meaningful earning opportunities. Our national economy strongly depends on agriculture and natural resources that are sensitive to climate change and sea level rise. Moreover, the adverse effects of Climate Change – especially High Temperature, Sea-level Rise, Cyclones and Storm Surges, Salinity Intrusion, Heavy Monsoon Downpours etc. - have aggravated the overall Economic Development scenario of the country to a great extent. The effects of climate change pose risks for agriculture, fisheries, food and water supplies. A better understanding of the existing risk coping strategies may inform us about households' ability to adapt to weather-related risk, and, potentially, inform the design of policy in the context of increasing climatic stress on the smallholder farmers in a developing country like Bangladesh. In rural areas, livelihood and employment opportunities center on farming and fisheries; however, increased competition for land and resources narrows the economic opportunities for highly marginalized rural populations. High unemployment, climatic stress and low wages are driving migration to urban areas. In addition, approximately 80% of the population is under the age of 40. Plagued by poverty, unemployment, and marginalization, youth represent a tremendous and largely untapped resource.

Bangladesh is amongst top ten fish producing countries of the world. The vast flood plain of Bangladesh currently remains underutilized for fish production. The goal of the prospective plan is to meet the increasing demand for fishes of through efficient management of water bodies. Fish production has increased rapidly since the 1990s through (a) Pond aquaculture (fish raised in ponds) using hatchery-reared fish fingerlings; and (b) Conversion into fish ponds by raising embankments around low-lying lands. Embankments are also used as orchards and vegetable gardens. According to FAO statistics of 2020, Bangladesh is ranked 5<sup>th</sup> in world aquaculture production. However, fish production has declined in inland open waters during last three decades due to various man-made causes such as overfishing, implementation of flood control and drainage program, construction of roads and dams, indiscriminate use of insecticides and pesticides for agricultural crop production. In 1985-86, the contribution of inland capture and culture fisheries to total fish production were 55.7% and 18.2%, respectively; whereas in 2018-19, inland capture fisheries contribute only 28.19% and inland culture fisheries contributes 56.76% to total production (FRSS, 2019). Due to decline of fish species in open waters and obstructions of their migration routes, recruitment of fish in open waters has constantly declined and natural resources available in such water bodies remain vacant and unused. Productivity of inland open waters is still very poor due to a number of constraints like change of course of rivers and blockage of connecting canals between floodplains due to siltation, destruction of fish breeding and nursery grounds, indiscriminate use of pesticides and insecticides, overfishing, global warming and climate change, revenueoriented leasing system of water bodies, and unjustified harvesting of broods and young fish. To minimize problems and to increase fish production of inland open waters Community Based Climate Resilient Fisheries Management (CBCRFM) will be followed that will include - (1) Establishing fish sanctuary; (2) Stocking of fingerlings or fry (stock enhancement); (3) fish conservation (use of fisheries conservation Bangladesh Government acts and rules ); and (4) habitat restoration. In addition, paddy field for rice-fish farming during the wet season has

enormous potential in Bangladesh. At the same time, production from aquaculture sector can also be sustained and enhanced through introducing different culture practices, bringing innovations, and introducing climate smart or climate resilient farming systems/technologies. Both the capture fisheries and aquaculture sectors in Bangladesh need to be decarbonized and there is a huge possibility to do so.

## **1.2 Project Objective**

The Project Development Objective (PDO) of CSAWMP-DoF Part is to enhance climate resilience and productivity of irrigated agriculture and fisheries in targeted sub-projects.

#### 1.2.1 Specific Objectives of the Project (CSAWMP-DoF Part)

- To increase 20% of fish production and productivity base year 2018-19 by introducing climate smart aquaculture technology;
- To enhance market access of the relevant stakeholders through promoting businessfriendly supply chain and market network; and
- To ensure better livelihoods of the stakeholders and better understanding on sustainable fisheries resources management through capacity development.

In order to achieve overall objective following key interventions will be implemented.

- Enhancement of fish production through introducing Climate resilient and innovative Aquaculture Technologies.
- Community Based Climate Resilient Fisheries Management (CBCRFM) in open water fisheries.
- Improved Post harvest management and increased market access to the Producer group through market linkage.
- Storage and Transportation of fish using energy efficient and green technology.
- Capacity building for Sustainable fisheries and Aquaculture Development.

# 1.3 Location of the project

The project will be Executed at 19 Subproject at 29 Upazila Under 18 District of 8 Division of the Country. The list of Project Location as given bellow:

Sl no.	Divsion	District	Upazila	Name of Sub Project
1.	Dhaka	Dhaka	Narshingdi	Balushair Flood Embankment FCDI
	Dilaka	Dilaka	Sadar	Sub-project
2.	Dhaka	Consigni	Tungingro	Satla-Bagda FCDI Sub-project
	Dilaka	Gopalganj	Tungipara	(Polder-1)
3.	Dhaka	Constant	Votualinan	Satla-Bagda FCDI Sub-project
	Dhaka	Gopalganj	Kotualipar	(Polder-1)
4.	Dhaka	Daihari	Baliakandi	Modhukhali- Baliakandi Sub-project
	Dhaka	Rajbari	Danakandi	(Remaining work)

Table:1 I	List of	Sub	Projects	and Project	command Area

Sl no.	Divsion	District	Upazila	Name of Sub Project
5.	Chattagram	Lakshmipur	Lakshmipur Sadar	Tie Embankment FCDI Sub-project
6.	Chattagram	Chattagram	Rangunia	Karnafuli Irrigation (Ichamati Unit) Sub-Project
7.	Chattagram	Cox's Bazar	Cox's Bazar Sadar	Polder No. 66/3 Sub-Project
8.	Khulna	Narail	Narail Sadar	Chitra-Bhairab-Afra Sub-Project (Narail Part)
9.	Khulna	Narail	Kalia	Chitra-Bhairab-Afra Sub-Project (Narail Part)
10.	Khulna	Jeshore	Jhikargasa	Sonamukhi Banmander and other Beel Drainage Sub-Project
11.	Khulna	Jeshore	Sharsa	Sonamukhi Banmander and other Beel Drainage Sub-Project
12.	Khulna	Jeshore	Jeshore Sadar	Chitra-Bhairab-Afra Sub-Project (Jessore Part)
13.	Khulna	Jeshore	Bagarpara	Chitra-Bhairab-Afra Sub-Project (Jessore Part)
14.	Rajshahi	Rajshahi	Godagari	Chari-Shameshpur FCDI Sub-Project
15.	Rajshahi	Chapai Nawabganj	Nawabganj Sadar	Chari-Shameshpur FCDI Sub-Project
16.	Rangpur	Dinajpur	Birol	Dhepe-Punarbhaba Water Management Sub-Project
17.	Rangpur	Dinajpur	Kaharole	Dhepe-Punarbhaba Water Management Sub-Project
18.	Rangpur	Thakurgaon	Haripur	Tangaria-Gobindapur Sub-Project (FCDI)
19.	Rangpur	Pachagarh	Pachagarh Sadar	Ahamednagar Low Lift Pump Irrigation Sub-project
20.	Rangpur	Pachagarh	Debiganj	Telepara Low Lift Pump Irrigation Sub-project (Electrical Block-3)
21.	Barishal	Patuakhali	Dumki	Telepara Low Lift Pump Irrigation Sub-project (Electrical Block-3)
22.	Barishal	Patuakhali	Galachipa	Rehabilitation of Polder No. 55/1 Sub-Project
23.	Barishal	Patuakhali	Baufol	Rehabilitation of Polder No. 55/1 Sub-Project
24.	Barishal	Pirojpur	Nazir Pur	Nazirpur Upazila
25.	Barishal	Barishal	Bakarganj	Ragunathpur FCDI Sub-Project
26.	Barishal	Patuakhali	Patuakhali Sadar	Muradia-Kalagachia Sub-Project
27.	Sylhet	Sylhet	Jaintapur	Sarigoyain FCDI Sub-Project
28.	Mymensingh	Mymensingh	Nandail	Ujanpara-Komarbanga FCDI Sub project
29.	Mymensingh	Mymensingh	Iswarganj	Ujanpara-Komarbanga FCDI Sub- project

# 1.4 Project Component

The objectives of this project will be achieved through implementation of following three components.

# Component 1: Adoption of region-specific climate smart fisheries management and aquaculture technology

#### Sub-Component 1.1: Adoption of region-specific climate smart aquaculture technology

- i. Demonstration of seabass/tilapia/koi/pangas/carps/shing/ magur/golda-carp/bagda-carp polyculture
- ii. Establishment of cage/pen culture demonstration firm
- iii. Promotion of non-traditional aquaculture practices

#### Sub-Component 1.2: Adoption of region-specific climate smart fisheries management approach

- i. Community based climate resilient Fisheries fisheries resource management
- ii. Replenishment of endangered indigenous fish species through establishing fish sanctuaries in suitable schemes
- iii. Up scaling beel nursery practice in feasible schemes
- iv. Ecosystem/water body-based production model

#### Component 2: Improving fish value chain and facilitating market access

#### Sub-Component 2.1: Improving supply chain to reduce post-harvest loss

- i. Establishment of mini fish processing center in potential locations
- ii. Fish drying technology demonstration
- iii. Enhancement of market access and strengthen market networks
- iv. Fish transportation in insulated van
- v. Promotion of value-added products

#### **Component 3: Strengthening institutional capacity and knowledge development**

#### Sub-Component 3.1: Training on climate smart aquaculture technology

- i. Suitable different aquaculture technology
- Training on fish feed preparation and feed management, value addition, post-harvest management, group/Community mobilization, saving management
- iii. Exposure visits/Field trip/Field Day
- iv. Modules update/formation

# Sub-Component 3.2: Create awareness among the open water dependent people for its sustainable fisheries management

i. Environment and bio-diversity conservation

ii. Impact of climate change on fisheries and aquaculture along with fishers' livelihood

#### Sub-Component 3.3: Logistic supports and better understanding

- i. Provide aquaculture inputs (seed, feed, fertilizer etc.)
- ii. Provide aquaculture supports (insulated van, wooden boat, fishing nets exchange)
- iii. Provide AIGAs (Small village shop etc.)

# 1.5 Project Implementation Manual

The Climate Smart Agriculture and Water Management Project will be a coordinated comprehensive umbrella project with diverse objectives is to enhance climate resilience and productivity of irrigated agriculture and fisheries in targeted sub-projects covering climate adaptation, extension, value chains and marketing of crops, and fisheries. Climate Smart Agriculture and Water Management Project (CSAWMP) will support GOB's strategic priorities in Fisheries sub-sector and agriculture, i.e., increasing production, achieving food security and nutrition through safer and more diversified food production, and adaptation to climate change. All these will be achieved by increasing 20% of fish production and productivity by introducing Climate Smart aquaculture Technology, enhance market access of the relevant stakeholders through promoting business friendly supply chain and market network and ensure better livelihood of the stakeholders and better understanding of sustainable fisheries resource management through capacity development. Proper and correct implementation of the project activities/interventions are must to achieve the above objectives. Keeping this in view, the Project Implementation Manual (PIM) is prepared as a "Management Tool" and a "How-to Do" guide to help and ensure correct implementation of the Climate Smart Agriculture and Water Management project-DoF. The PIM is also a Communication Tool and it should be accessible by all.

The purpose of the Project Implementation Manual (PIM) is to provide detailed implementation guidelines to all implementing agencies (BWDB, DOF and DAE) of CSAWMP. The Project Implementation Manual (PIM) narrates briefly the project design and implementation arrangements; project administrative management, coordination and supervision arrangements, and summarizes the implementing procedures and guidelines for implementation manual is being prepared under the legal bindings of "Financial Agreement Schedule 2, Section 1 Clause- C" and has been prepared in alignment with the official documents- Project Appraisal Document (PAD) and Development Project Proforma (DPP); and it is a companion document to DPP, FA, PAD Guidelines where detailed description and information of the project are available.

Project Implementation Manual (PIM) has been prepared to guide CSAWMP-DoF implementation. However, it may require revision time to time based on the project needs in the context of real situation of implementation. The revision would be done through review

and in consultation with the Association and Development partner and PIUs (Project Implementing Units).

Project Implementation Manual (PIM) for Fisheries Part contains 10 (Ten) Chapters. Project contexts, CSAWMP-DoF objectives, project components with implementing units/agencies are given in Chapter one to enable the readers to understand the project and the purpose of the PIM. Chapter two contains Project Management and Coordination Arrangements. Chapter three is written on the Financial Management and Fund Disbursement Procedures while Chapter four is on the Procurement Management. Formation of Water Management organization and Community based Organization for fisheries are described in Chapter Five Standard Operating Procedures and Implementation Methodology and Approach for the Fisheries Intervention are described in Chapter Six. while Human Resource development, Training, Communication and public awareness are described in Chapter nine described the Environmental and Social Management and finally Governance and Accountability Action Plan are described in Chapter ten.

# Chapter -2 Project Management and Coordination Arrangement

#### 2.1 Project administration and Implementation Arrangement

The project implementation will be the joint and shared responsibility of the Ministry of Water Resources (MOWR), Ministry of Fisheries and Livestock (MOFL), and Ministry of Agriculture (MOA), respectively working through the Bangladesh Water Development Board (BWDB) and the Department of Fisheries (DoF) the Department of Agricultural Extension (DAE). Working jointly, each implementing entity - BWDB, DoF and DAE – will take the lead on project elements under their respective institutional mandate, capacity and skills endowment. Each agency will have separate DPPs approved by the Government having common project objectives to be achieved via working in close collaborative and integrated manner.

There will be a Project Coordination Unit (PCU) at BWDB, responsible for implementing BWDB-led activities as well as overall coordination across all project activities. The PCU will be headed by a Project Coordination Director (PCD) at the rank of Additional Chief Engineer/Superintending Engineer and will be staffed with professional of various disciplines. The DoF and DAE will each establish a Project Implementation Unit (PIU) responsible for implementation of their respective components and coordinating with the PCU. Short-term Technical Assistance/consultancy services will be sought to fill specific skill gaps during project implementation, as need arises. Separate financial disbursement arrangement should be operated by implementation agencies (BWDB, DAE, DoF). In this case DoF will operate separate account for disbursement.

Bangladesh Water Development Board (BWDB) under the Ministry of Water Resources is the lead implementing agency and will implement BWDB part of the project. Likewise, Department of Fisheries (DoF) under the Ministry of Fisheries and Livestock (MoFL) is the shared implementing agency and will implement DoF part of the project. At the field level, responsibility for implementing the project (DoF Part) will rest on the concerned Senior/Upazila Fisheries Officer under the supervision of the District Fisheries Officer and divisional Deputy Director. Senior/Upazila Fisheries Office will be responsible for implementing and supervising the interventions/activities and establishing accounting and detailed financial control with the assistance of Project Director or as per the provision laid down in the Project Appraisal Documents (PAD)/Agreement with the Development partner.

The CSAWMP-DoF part will be implemented by the Department of Fisheries (DoF) under the administrative control and guidance of the Ministry of Fisheries and Livestock (MoFL). DoF will provide administrative, management and technical support for smooth implementation of the project activities. A Project Implementation Unit (PIU), headed by a Project Director (PD) (Grade 5), with necessary support staffs will implement the planned project activities. The PD will be deputed from DoF and will be responsible for overall implementation, monitoring and supervision of the project. To assist PD, 01 (one) Monitoring and Evaluation Officer (Grade-9), 01 (one) Accounts officer & 01 (one) Assistant Engineer (Grade-9) will be deputed from DoF. For supporting PD, 04 (four) Monitoring and Evaluation Officer (Grade-9) 04 (four) Sub-Assistant Engineer (Grade 10), 02 (two) Support staff (Office Sohayok) and 2 (two) drivers will be engaged for smooth implementation of the planned activities. However, 01 (One) Drivers and 01 (one) Support staff (Office Sohayok) will be engaged as per the Government existing outsourcing policy. Existing officers and staffs of the DoF in the project command area will also be involved in smooth implementation of the project activities, and they will get

required logistic supports as per project provision. The project has the provision to recruit some local consultants and Contractual staffs for smooth functioning and implementation of the project. They will be recruited as per GoB recruitment procedures and World Bank guideline. *[Annexure II (e, f, g)].* 

The Extension Agents will support the Upazila Fisheries Team for proper identification and necessary motivation of target groups, organize fish farmers and assist in awareness campaign, training and other relevant function entrusted to them for successful implementation project targeted activities.

Providing technical and managerial support for achieving objective of the project, the PIU will be assisted by 05 (five) national experts/consultants and 3 Contractual staffs as support service following government and WB rules/guidelines from IDA finance [Appendix II (e, f, g)]. The project will deploy a Team Leader (Training and Communication Expert acts as Team Leader) with responsibilities to work with national experts/consultants to ensure all project management systems are in place and functioning, daily management of IDA staffs and consultant, monitoring, organize project progress reports, and relevant project activities in close cooperation, coordination and consultation with PD and PIU. The PCU recruited Procurement expert support the PIU unit procurement. PIU recruited all experts are accountable to the Project Director.

The project command area focused mainly on 19 sub-project schemes that have been selected by BWDB, and one upzila ie. total 29 upazilas under 18 districts of 8 divisions (*Table:1*). The upazilas included under this project have been selected on the basis of location of selected schemes.

The PIU will be located at Matshya Bhaban, Ramna, Dhaka and project personnel will be accommodated at PIU for implementing the project activities. For smooth execution, coordination and monitoring of the project activities, provision has been kept in the project for all day-to-day logistic supports. The project also facilitates vehicles/transport for PIU for smooth execution of project field activities. 01 Jeeps (One for PD), 01 Double Cabin Pick-Up (one for M&E, Accounts officer/PIU) and 01 Micro Bus (one for PIU) will be procured under the project and Hiring charge (Vehicles) for supervision and monitoring of the project activities.

The Project Implementation Manual (PIM) will be followed by institutional and implementation responsibilities, technical aspects of all components and activities, implementation guidance related to measuring results, monitoring and evaluation, financing and FM aspects, supervision and reporting provisions, applicable rules and plans. PIM will be updated as necessary during mid-term implementation review. It will include an indicative implementation plan guiding the sequence of project activities and investments at a level of details to ensure that there would be no capacity bottlenecks.

The project will be managed under the overall guidance of the PD. He/she will also co-ordinate and liaison with other related departments/agencies and development partners. The project personnel and the DoF personnel within the project command area will support the PD for smooth implementation of the project. Upazila level Officers and staffs will be involved for the selection of the farmers/fishers & formation of groups of farmers/fisher communities, training and other fisheries support activities. Department of Fisheries will take necessary initiatives to run the project timely and properly and to oversee and monitoring the project regular basis.

2.1.1 Project management Unit (Organogram)

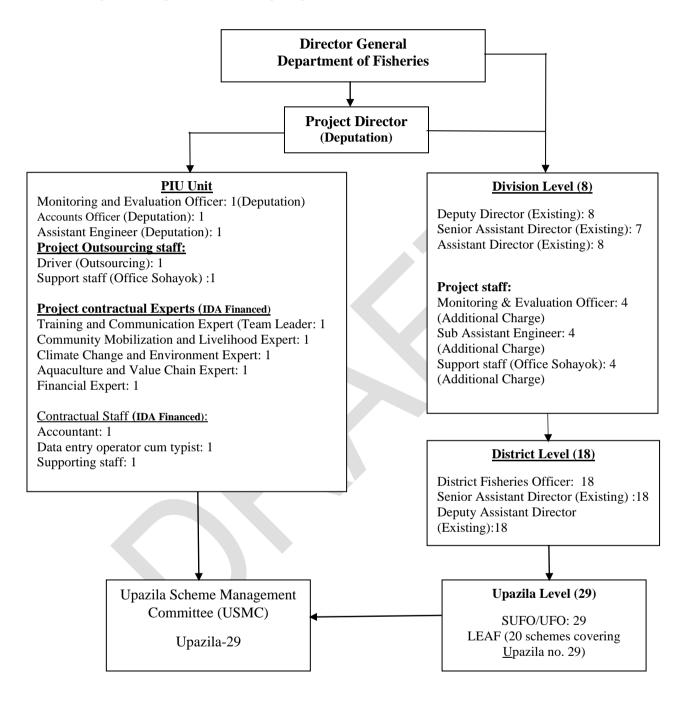


Fig-1: The Project management Unit of the CSAWMP-DoF

# 2.2 Inter-agency Coordination and Supervision Arrangement

The project implementation will be the joint responsibility of the Ministry of Water Resources (MoWR), Ministry of Agriculture (MoA) and the Ministry of Fisheries and Livestock (MoFL), respectively working through their implementing agencies, namely, BWBD, the Department of Agricultural Extension (DAE) and the Department of Fisheries (DoF). Each implementing entity - BWDB, DAE and DoF – will take the lead on project elements under their respective institutional mandate, capacity and skills endowment. In this case, BWDB will take the lead on activities related to project Component 1; DAE will be the lead entity on subcomponent 2.1; while activities targeting the improvement of fisheries production as defined under subcomponent 2.2 will be led by the DoF.

There will be a Project Coordination Unit (PCU) at BWDB charged with overall coordination across all project activities. The PCU will be headed by a Project Coordination Director and will be staffed with a Procurement Specialist, Financial Management Specialist, and M&E experts. The DAE and DoF will each establish a Project Implementation Unit (PIU) responsible for implementation of their respective components and coordinating with the PCU. Each of the PIUs will be headed by a Project Director (PD) and will also be staffed with a Financial Management Specialist, and a Procurement Specialist and M&E Specialist on an as needed basis. Both the PCU and PIU will be established within one month of project effectiveness. Short-term Technical Assistance/consultancy services will be sought to fill specific skill gaps during project implementation, as need arises.

A Project Steering Committee (PSC) with representation from different ministries/agencies (as per GoB directive) will be established to provide overall policy guidance during project implementation. The PSC will include members from MoWR, MoA, MoFL, Ministry of Land, Ministry of Local Government, Rural Development and Cooperatives, Irrigation Wing of Planning Commission, Implementation Monitoring and Evaluation Division (IMED) and ERD and will have the Senior Secretary/Secretary, MoWR as its Chair. The PSC will meet at least twice a year to review overall implementation progress and PCU will serve as its Secretariat. To ensure a fully integrated approach to implementation as envisaged in the design, there will be a Project Implementation Committee (PIC) overseeing the project technical functions including reviewing and integrating workplans and budgets, and reconciling tensions between crop and aquaculture land uses as is anticipated in some schemes. The PIC will be chaired by the Directors General of BWDB, DAE, and DoF on a rotational basis.

## 2.2.1 National Committees

- a) Joint Project Steering Committee (JPSC)
- b) Joint Project Steering Committee (JPSC)
- c) Inter-ministerial Mid-term Evaluation Committee (IMEC)

## 2.2.2 PIU Implementation Level Committees (at PIUs)

a) Project Implementation Committee (PIC) at PIUs

#### 2.2.3 Field Level Committees (at districts and upazilas)

- (a) District Coordination Committee
- (b) Upazila Scheme Management Committee (USMC)

# 2.2.4 Composition and Terms of Reference (TOR) of the National Committees

#### 2.2.4.1 Joint Project Steering Committee (JPSC)

To ensure smooth implementation of the project, a Project Steering Committee (PSC) will be formed comprising identified stakeholders, project partners and implementing agencies. The PSC will be convened every three months and will be chaired by the Senior Secretary/ Secretary, Ministry of Water Resources/Agriculture/ Fisheries and Livestock rotationally, to discuss project implementation and management. Necessary supports will be provided by the project for arranging PSC meetings. The PSC will meet at least twice a year to review overall implementation progress and PCU will serve as its Secretariat. The composition will be as follows:

1.	Senior Secretary/ Secretary, Ministry of Water	Chairperson
	Resources/Agriculture/ Fisheries and Livestock	1
2.	Director General, Department of Fisheries (DoF)	Member
3.	Additional Secretary (Planning), Ministry of Fisheries and	Member
	Livestock	
4.	Joint Secretary (Planning), Ministry of Fisheries and Livestock	Member
5.	Deputy Secretary (Planning), Ministry of Fisheries and	Member
	Livestock	
6.	Representative of NEC-ECNEC & Coordination Wing of the Planning	Member
	Division	
7.	Representative of the Forest, Fisheries and Livestock Wing, Agriculture,	Member
	Water Resources and Rural Institution Division, Planning Commission	
8.	Representative of IMED	Member
9.	Representative of the Programming Division, Planning	Member
	Commission	
10.	Representative of Economic Relation Division (ERD)	Member
11.	Representative of the General Economic Division, Planning	Member
	Commission	
12.	Deputy Director (Finance and Planning), of DoF	Member
13.	Project Director (PD), CSAWMP-DoF, BWDB of MoWR	Member
14.	Representative of the Planning Section of DoF	Member
15.	Representative of the Project Implementation Section of DoF	Member
16.	Project Director (PD), CSAWMP-DoF Part	Member
17.	Senior Assistant Secretary/Assistant Secretary/Desk officer,	Member
	MoFL	Secretary

Composition of Joint Project Steering Committee (JPSC), CSAWMP

#### **Terms of Reference:**

- (i) To review the recommendation of the project implementation committee for addressing problems that arises during project implementation and to take decision accordingly.
- (ii) To give guideline or to formulate policies which required for implementing project activities
- (iii)Any other matter related to project implementation
- (iv)The committee will meet at least once in every Six months.
- (v) The committee may co-opt members, if necessary.

# 2.2.4.2 Project Implementation Committee (PIC) at PMU, CSAWMP-DoF

The Project Implementation Committee (PIC) will be formed with the representatives from relevant agencies. The DG, DOF or his representative will chair these meetings; which will be held as needed, at least on a quarterly basis. Meetings will also be conducted using teleconferencing and virtual technology. Necessary supports will be provided by the project for arranging PIC meetings. The composition will be as follows:

-		
1.	Director General, Department of Fisheries (DoF)	Chairperson
2.	Principal Scientific Officer (Fisheries Survey and Planning), DoF	Member
3.	Representative from the Planning Wing of MoFL	Member
4.	Representative of the Forest, Fisheries and Livestock Wing,	Member
	Agriculture, Water Resources and Rural Institution Division,	
	Planning Commission	
5.	Representative from the Programming Division of the Planning	Member
	Commission	
6.	Representative of NEC-ECNEC & Coordination Wing of the Planning	Member
	Division	
7.	Representative of IMED	Member
8.	Representative of Economic Relation Division (ERD)	Member
9.	Representative of the General Economic Division, Planning	Member
	Commission	
10	Deputy Director (Finance and Planning) of DoF	
11	Representative of CSAWMP, BWDB Part	Member
12	Representative of the Planning Section of DoF	Member
13	Representative of the Project Implementation Section of DoF	Member
14	Project Director (PD), CSAWMP-DoF Part	Member
15	Concerned Desk Officer of the Implementation Section of DoF	Member
		Secretary

#### Terms of Reference (TOR) of the PIC

- (i) To give necessary assistance or suggestion for implementing project activities.
- (ii) If any problem arises during project implementation, then to give necessary decision
- (iii)The committee will meet at least once in every three months.
- (iv)The committee may co-opt members, if necessary.

# 2.2.4.3 Inter Ministerial Mid-term Evaluation Committee

#### **Composition of the Committee.**

1	Joint Chief (Planning), Ministry of Agriculture	Chairman
2	Joint Chief/Deputy Chief, MOFL	Member
3	Joint Chief/Deputy Chief, (Crop wing), Planning Commission	Member
4	Concerned Desk Officer, Ministry of Fisheries and Live stock	Member
5	Representative of Programming Division, Planning Commission	Member
6	Representative of, IMED, Planning Commission	Member

7	Project Director	Member-
/	Project Director	Secretary

## **Terms of Reference**

- Field visit, evaluation and give guideline during implementation of the project.
- Give necessary advice to solve problem during implementation of the project.
- During implementation of the project work, committee will sit in meeting at least once in a year and submit the evaluation report to the Secretary, MoFL giving copy to Project Director CSAWMP-DoF

**N.B.:** Divisional Chief, Agriculture, Water Resource & Rural Institution Division, Planning Commission will be the adviser of this committee.

## 2.2.4.3 Upazila Scheme Management Committee (USMC)

The Upazila Scheme Management Committee (USMC) will be formed with the representatives from relevant agencies.

1.	Upazila Nirbahi Officer (UNO)	Chairperson
2.	Upazila Agriculture Officer	Member
3.	Upazila Social welfare Officer	Member
4.	Upazila Youth Development Officer	Member
5.	Upazila Women Affairs officer	Member
6.	Local representative BWDB	Member
7.	Concerned Senior/Upazila Fisheries Officer	Member Secretary

#### **Composition of Upazila Scheme Management Committee (USMC)**

#### Terms of Reference of Upazila Scheme Management Committee (USMC)

- (i) Beneficiary selection according to Project Implementation guideline.
- (ii) CBO group formation.
- (iii)The committee will meet at least once in every three months.

## 2.3 Honorarium for Committee Members

Members of Joint Project Steering Committee (JPSC) will get Tk. 3000/- per person per meeting as honorarium. Members of Tender Evaluation Committee (TEC), Proposal Evaluation Committee (PEC), Expert Member(s) for preparation and evaluation of technical specification, Members of Tender Opening Committee (TOC), Receiving Committee, Joint Financial Monitoring Team, Inter-ministerial Monitoring and Evaluation Committee, Committee for recruitment of contractual staff, Project Implementation Committee (PIC), any other committee formed by the competent authority for the project related activities will get Tk. 2000/= per person per meeting. The members of District Coordination Committee Upazila Scheme Management Committee (USMC) and similar committees will get Tk. 500/- per person per meeting as honorarium. It may be noted here that as per the Financial Agreement (FA) donor funds cannot be used for sitting/meeting allowances and honorarium for attendance of civil servants.

# Chapter-3 Financial management and Disbursement

The accounting policies and procedures of the project will be governed by the existing GOB system outlined in the Project Accounting Manual of the Ministry of Finance. All project related transactions i.e., all sources (IDA, and GOB Fund) will be accounted for separately in PIU following double-entry book keeping principles and on a cash basis.

All financial Expenditure made by the respective drawing Disbursement officer (DDO) will strictly follow the Existing General financial Rule (GFR) of the Government and payments will be made on accordance with the Delegation of Financial Power (DoFP) applied for the Development Project publish by the Government on 2016.

Disbursement of IDA Fund and fund flow will be complied with signed Financial Agreement and agreed PAD.

If and when any conflict raised between PIM and Financial Agreement the condition of the financial agreement will be prevail.

To ensure Better financial management and improve capacity and internal controls, and thereby mitigate FM-related Appointment of experienced FM consultants at PIUs (with ToRs acceptable to the Bank) along with adequate staff to support such functions in cost centers. All consultants and staff with fiduciary duties will be provided regular training to ensure compliance with necessary requirements. Mainstreaming Integrated Budgeting and Accounting System (iBAS++) with separate Budget and Accounts Classification System (BACS) codes for fund flow (CSAWMP fund component agreement) budgeting and accounting (economic sub-category and line-items), and preparation of quarterly interim unaudited financial reports (IUFRs) will be maintained.

## 3.1 Project Key Accounting Functions

**The key project accounting functions for which PIU would be responsible are as follows:** (i) budget preparation and monitoring; (ii) payments for eligible project expenditure to third parties; (iii) disbursement of project funds to various cost center as per approved work plan; (iv) maintenance of books and bank accounts; (v) cash flow management including advance reconciliation among DAs and Operating Accounts; (vi) consolidation of financial reports from PIUs and submission to GOB, World Bank and other stakeholders; (vi) preparation of Withdrawal Application to claim funds from the World Bank. and (vii) assistance to external auditor and ensuring appropriate follow up of audit.

# 3.2 Role of PCU in Financial Management

PCU for CSAWMP is expected to monitor and co-ordinate with the implementing agencies and PIUs to provide support in Financial Management issues, in particular, by performing the following roles.

- Providing guidelines for financial, accounting, reporting and audit aspects through facilitating preparation of Standard Operating Procedure (SOP) required time to time during the implementation of project
- Guide/monitor and provide support on adherence to fiduciary guidelines and financial management arrangements by working in close coordination with the World Bank.
- Provide support to the financial management/accounting staff for issues related to financial management aspects of the project.

- Prepare annual estimates and budget for the project and play an important role in release of funds.
- Facilitating implementation of the project and providing advisory services and support for financial management and other allied issues.
- Prepare Withdrawal Applications based on Statement of Expenditure (SOE) of PIUs and submit to the development partners for reimbursement
- Prepare consolidated project Un-audited Financial Monitoring Reports (UFMR) and ensure timely submission of UFMR to the World Bank.
- Coordinate receipt of annual audit reports from FAPAD & Internal Auditors and ensure timely resolution of audit observations.
- Prepare and implement a plan for capacity building in financial management of the FM staff in and review the capacity building requirements of FM staff at all levels on a regular basis.
- Act as a leading support and reference point for all project-related financial management tasks
- Revision of Financial Management Manual if required.
- Any other specific issues in resolution of financial matters.

# 3.3 Bank Account

## 3.3.1 Designated Accounts

There will be three separate Designated Accounts (DA), in each PIU, in the form of Convertible Taka Special Account (CONTASA), which will be opened with a nationalized commercial bank to receive the credit funds for implementation of the relevant components of the Project. IDA funds will flow to the DAs based on submission of withdrawal applications, in the Client Connection, by the authorized signatory for the project. An alternative signatory arrangement will be made for submission of withdrawal applications to ensure unhindered flow of funds for project execution. The disbursement applications, to be submitted to the Bank, will be based on actual Statements of Expenditures (SOEs), incurred by the Project. The PIUs in DoF will be responsible for submitting the disbursement applications as often as once per month.

Each PIU will send yearly cash flow projections by June 30 of each year and this projection will be updated on a quarterly basis. Separate sets of accounts using BACS would be maintained in **iBAS**<sup>++</sup> for each financing to ensure charging of expenses related under the appropriate financing. The project will prepare a separate Interim Unaudited Financial Report (IUFR) from iBAS<sup>++</sup>, in formats agreed with the Bank, on a quarterly basis and submit to the World Bank for review and clearance within 45 days from the end of each quarter.

The DAs ceilings are specified in the Disbursement Letter USD 10.00 million for IDA, The Project may request for advances up to the ceilings based on the project needs. The applications for uses of the advances will be supported by SOE, and records (e.g., invoices) evidencing eligible expenditures for identified contracts in accordance with the disbursement letter. This would be converted to IFR-based disbursement at the option of GOB and the Ministry after the project successfully demonstrates capacity to generate quality and timely IFRs.

# 3.3.2 Operating Account

For Fisheries components of DOF, activities would be carried out in 29 upazilas, under 18 District and 8 Division separate bank accounts will be opened in the name of the project in all

cost centres and will be operated by the designated Drawing and Disbursing Officers (DDOs) of DOF. These DDOs will operate the accounts and maintain books of accounts. PIUs will be responsible for transferring funds to bank accounts of the cost centres of DOF on the basis of three-month estimated expenditure and approved work plan of these agencies.

The Operating account will not involve any disbursement at all. It will only manage the payment on preapproved activities at field level. It will solely perform a payment booth or gateway at field level.

The field level officer will open operating account in schedule commercial bank preferably in the same bank where Designated account will operate. The name of the account will the same of the project and the respective field Level officer will be the Signatory of the account. After completing the account opening procedure the PIUs will provide the detail of the operating account to the World Bank.

#### 3.3.2.1 The modality of the Operating Account:

The respective field office will submit the activity plane with required budget to the PIU. After reviewing the workplan the PIU will reallocate the fund to the operating field office. Along with the Re-allotment order The PIU will send an advice to the Bank where the DA account opened. Then the Fund will transfer from DA account to operating Account against approved work plan.

All the budget transferred to the field level offices will be prepared against significant activities. And every month they will submit progress report against physical and financial targets with bank statement. They will fully accountable to the PIU for successful implementation of the project activities. On the basis of the workplan proposed by the field office performance monitoring will be done by the PIU.

The PIU will issue allotment order as followed for GoB fund. Then the PIU send an advice along with the allotment order to the DA account holding Bank. The Bank will transfer the advised amount to the respected DDO of the Field office from DA account to operating accounts. Then the field office will execute the work following all the legal procurement directives of the government "Public Procurement Rule" (PPR) and General financial Rule (GFR) as well. The existing Delegation of Financial power (DoFP) will also be followed on making any payment up to the Field Office. Every cost center must produce all the procurement and expenditure documents against each of the expenditure and then issue check against the Bill to manage payments with prior approval by the competent authority if required. In case of RPA through GoB; fund will be managed following the rule same as the GoB fund. Here payment will be made by the local account's office through iBas<sup>++</sup> System. Every month each of the cost center oblige to send statement of Expenditure (SoE) to the PIU with valid documents counter signed from operating account holding Bank and as well as counter signed by concern Accounts Office.

All Expenditure and payment made from the Field Level Office will supposed to be audited by the Foreign Aided Project Audit Department and also by the internal audit team of the Project. All The cost center will

be obliged to furnish all necessary documents before the Audit team both of FAPAD and internal Audit.

After completing the project activities, the Closing balance of the Operating Account will naturally be the part of Consolidate cash and will be pool back to DA.

At the end of the Project the operating account will be closed and the Zero balance Certificate; counter signed by the respective Bank authority will be submitted to the WB.

Name of Division	Name of District District	Name of Upazila/ Sub District		
1	2	3		
	(1) Narsingdi	(1) Narsingdi Sadar		
(1) Dhaka	(2) Gopalgonj	(2) Tungipara, (3) Kotalipara		
	(3) Rajbari	(4) Baliakandi		
(2) Mymensingh	(4) Mymensingh	(5) Nandail, (6) Ishwarganj		
(3) Sylhet	(5) Sylhet	(7) Jaintapur		
(1) Doichabi	(6) ChapaiNawabganj	(8) ChapaiNawabganj Sadar		
(4) Rajshahi	(7) Rajshahi	(9) Godagari		
	(8) Thakurgoan	(10) Haripur		
(5) Rangpur	(9) Dinajpur	(11) Birol, (12) Kaharole		
	(10) Panchagarh	(13) Panchagarh Sadar, (14) Debiganj		
	(11) Patuakhali	(15) Patuakhali Sadar, (16) Dumki		
(6) Domishal	(11) Patuakilali	(17) Galachipa, (18) Bauphol		
(6) Barishal	(12) Barishal	(19) Bakerganj		
	(13) Pirojpur	(20) Najirpur		
	(14) Laxmipur	(21) Laxmipur Sadar		
(7) Chattogram	(15) Cox's Bazar	(22) Cox's Bazar Sadar		
	(16) Chattogram	(23) Rangunia		
	(17) Narail	(24) Narail Sadar (25) Kalia		
(8) Khulna	(18) Jashore	(26) Jhikargacha, (27) Sharsa		
		(28) Jashore Sadar, (29) Bagharpara		
Division: 8	District: 18	Upazila: 29		

Table 2: List of Cost Center under CSAWMP-DoF (Where operating account will be opened)

# Table 3:List of Activities that require operating Account for manage payment at Division/District/Upazila or Sub-District Level.

		Upazila or Sub-District L		D		ount in BDT I		
				Buc	Budgetary Allocation As per DPP			
Sl. No.	Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA)	Total	
1	2	3	4	5	6	7	8	
(	A) Operatin	g Expenditure						
1.	3255102	Printing and binding	LS	10.00	5.00	15.00	30.00	
2.	3255105	Other stationery	LS	5.00	3.75	11.25	20.00	
3.	3211125	Advertising expenses (Tender, Recruitment etc.)	LS	5.00	6.25	18.75	30.00	
4.	3211125	Advertising expenses (Advertising, electronic & print media coverage etc.)	LS	5.00	13.75	41.25	60.00	
5.	3211126	Audio- video production (Project Documentations, Video, etc)	7	5.00	7.50	22.50	35.00	
6.	3211111	Local Exchange visits/Field visits	29	6.00	17.74	53.21	76.95	
7.	3211111	Farmers' Field Day	100	5.00	12.50	37.50	55.00	
8.	3231301	Domestic training	7040	105.00	163.21	489.62	757.83	
9.	3211111	Seminar and conference expenses (Project Inception, Closing, Module Formulation)	22	7.00	20.70	62.09	89.79	
10.	3211131	Labour wages to non- employees LEAF	54	0.00	54.00	162.00	216.00	
11.	3211110	Legal expenses (Fish act implementation)	2175	0.00	27.19	81.56	108.75	
12.	3254101	Fingerlings Stocking in sub-project (On basis of DoF guideline)	105	40.00	95.15	285.45	420.60	
13.	3257301	Ceremonies/Festivals (Fish fair, rally etc.)	LS	5.00	4.76	14.29	24.05	
14.	3821126	Alternative income generating activities (AIGA) for poor fishers)	600	0.00	37.50	112.50	150.00	
15.	3221109	Management Charges (Contingencies for field offices & project HQ, project evaluation, etc.)	LS	10.00	11.75	35.25	57.00	
16.	3251104	Demonstration of different technologies for 20 schemes covering all upazila	1950	170.00	476.02	1428.07	2074.09	
17.	3251104	Fish Drying Demonstration	26	4.50	8.62	25.88	39.00	

Project Implementation Manual

				Buc	lgetary Allo	ocation As per	DPP
Sl. No.	Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA)	Total
1	2	3	4	5	6	7	8
18.	3251104	Mechanical Fish Drying Demonstration	3	0.00	7.50	22.50	30.00
19.	3258102	Machineries and equipment repair & maintenance (Boat, furniture & fixture, etc)	LS	5.00	3.75	11.25	20.00
20.	3258105	Photocopier, etc Repair & maintenance	LS	2.00	3.05	9.19	14.24
21.	3258103	Computer, Printer, etc Repair & maintenance	LS	2.00	3.49	10.46	15.95
22.	3631199	Matching Grant support for Live Fish Carring (Entrepreneur)	20	0.00	35.00	105.00	140.00
23.	3258108	Fish sanctuary repair and maintenance with Guards	49	10.00	40.79	122.35	173.14
		<b>B.</b> Capital Expenditure					
24.	4112102	Water vehicle (Wooden country boat-	29	0.00	15.23	45.68	60.91
25.	4111317	Re-excavation of pond/water body for establishment of beel nursery	145	50.00	83.56	250.69	384.25
26.	4111317	Establishment of beel nursery	145	20.60	31.98	95.93	148.51
27.	4111317	Re-excavation of water body for establishment of fish sanctuary	49	40.00	22.46	67.39	129.85
28.	4111317	Establishment of fish sanctuary	49	50.00	39.56	118.69	208.25
29.	4114102	Provide Fish-friendly fishing nets for fishers (in lieu of destruction of Illegal fishing nets among fishers	145	48.00	33.31	99.94	181.25
30.	4112314	Furniture (PIU and Field Office)	LS	5.00	2.44	7.35	14.79
31.	4112306	SS covered Styrofoam Box (For fish Carrying)	1450	0.00	29.00	87.00	116.00

Note: The item of Scope can be Exclude or include base on the practical Situation during the Execution of the Project

## 3.4 Fund and Information Flow

#### 3.4.1 General Guidelines

General gguidelines for fund and information flow are:

- PIU will maintain one Designated Account (DA) where IDA funds will flow under agreed terms and conditions Convertible Taka Special Account (CONTASA) in Nationalized Commercial Bank of Bangladesh.
- PIU will be responsible for transferring project fund to the operating accounts on the basis of three month estimated expenditure and approved work plans received from cost centers.
- PIU will show fund transfer as advance from DA to the operating accounts which will need to be accounted for preferably within 30 days but in no case beyond 90 days.
- The implementing agencies will send monthly Statement of Expenditure in an agreed format to PCU. No second advance or additional fund requisition will be allowed unless 80% of the previous advance is adjusted or submitted.
- Project budget will be dominated with the fund allocations as per components and categories and in compliance with the financing agreement; along with GOB contributions. The budget allocation will be guided as per approved DPP. PIU would initiate approvals of project funds allotment and issuance of its letter from the Budget Section/Subsection of the Ministry of Finance by the end of July every year, and thereafter, at each quarter/half year end.

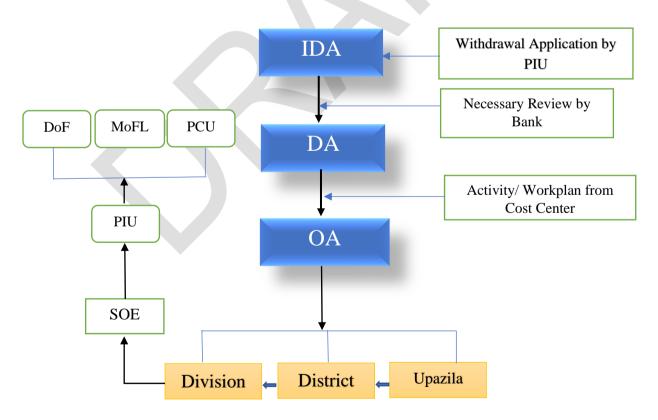


Fig-2: Schematic Diagram of Fund information flow

# 3.4.2 Procedure for Advanced to PIU

The fund in the DA is limited and accordingly the initial deposit of US\$ XXX million, based on three-four months estimated expenditures of the entire project, has been made available by IDA. With this limited amount majority of the project's local currency expenditures are expected to be made by all the PIU. The fund in the Operating Account (OA) of the PIU is also limited since replenishment to the DA is based on reimbursement by IDA against the actual expenditures incurred. Therefore, advances to the DA to PIU from IDA shall be made on the basis of the activities indicated below:

Item	Description of Activities	Responsibility	Timeline	Method of
No.	<b>P</b>			Communication
а	Submission of advance request to	Project	Within 10	By Courier/
	World Bank on the basis of three	Director	(ten) days of	Messenger
	months estimated expenditures as	CSAWMP-	approval	_
	per approved work plans. (Format	DoF	of work plan	
	1).			
b	Subsequent advance request to	Project	Immediately	By Courier/
	IDA may be made when 80% of	Director	or as and when	Messenger
	the advance is utilized; claim to be	CSAWMP-	required	
	supported by copy of SOE.	DoF		
c	Advise DA account holding Bank	PIU	Within five	By Messenger
	as the case may be for transferring		days on receipt	
	funds to the OA at field Level		of advance	
	offices.		request	
d	Collection of Monthly Statement	DDOs from	Within 5 <sup>th</sup> of	By Courier/
	of Expenditure (SoE) including	the Field	each month	Messenger
	Bank Statement and Bank	Offices		
	reconciliation from the Field			
	Offices			
e	Submission of monthly Statement	PIU	Within 10 <sup>th</sup> of	By Courier/
	of Expenditure (SOE) including		the following	Messenger
	Bank Statement & Bank		month, except	
	Reconciliation Statement to		for June.	
	World Bank. (Format 2 & 3).		.1	
f	Reconcile the advance(s) in Excel	PMU	Within 15 <sup>th</sup> of	Email
	Spreadsheet.		the following	
			month	
g	Close monitoring of the advances	PIU/PMU/IA	As and when	By visit/meeting
	for correctness and rectification, if		required, but	from either side
	any.		once in every	
			six months	

#### Table 4: Procedure for advances to the DA to PIU from IDA

## 3.4.3 Submission of Statement of Expenditure (SOE) by Operating Account For the purpose of timely and easy compilation of the project expenditure at PIU and Field Level on a monthly basis, it is important that all DDOs at field Level and the PIU follow a standardized format for this purpose and accordingly the monthly expenditure statement is to be submitted to Bank (As per Annex-3.1, 3.2 & 3.3).

# 3.4.4 Procedures for Reimbursement/Replenishment and Reconciliation of the

## Disbursed Amount

PIU will submit a withdrawal application to the world Bank for replenishment of DA on the basis of actual expenditure. In accordance with the provision of the disbursement letter dated XXX reimbursement application should normally be submitted to the World Bank Chennai Office on a monthly basis, irrespective of the value of a reimbursement application. Reimbursement applications should be prepared on the basis of the activities and timeline given in the table below.

Item No.	Description of Activities	Responsibility	Time (working days)	Method of Communication
a	Prepare reimbursement/ replenishment application(s) by consolidating all project expenditures together with copies of all relevant document as per instruction in the disbursement letter	PIU	Within 22nd of the following month	-
b	Submit reimbursement application to the World Bank Chennai Office through client connection for IDA part.	PIU	Within 26th of the following month	By DHL/EMS
с	Reconcile reimbursed amount by the World Bank using Excel Spreadsheet or in the ledger book.	PIU	Immediately after the payment is made by the World Bank	-

Table 5: Procedures for Reimbursement/Replenish	ment and Reconcilia	tion of the Disbursed
Amount		

# 3.4.5 Transfer of Funds

Fund transfer between DA and Operating account would be faster if they can open Operating Bank Account in the same commercial bank. In such instance the transfer of funds may be made telegraphically/electronically. The fund transfer from DA account to Operating Account will be based on the work plan of the filed level and the amount allocated against specific activities approved by the PIU.

# 3.4.6Treatment of Unutilized Advance by PIUs/IAs

Advances will be allowed to the PIU for utilization over a period of time. Therefore, request for advance by the PIU should be made with extreme caution. Advance given to any PIU in a particular fiscal year should be accounted for on or before 10th of June of the same fiscal year. PIU should not spend from the balance amount, if any, in the DA unless a new annual authorization is issued by the Ministry of Finance. While the PIU requesting advance under a new fiscal year, the balance available in its DA should be taken into consideration. Any bank charge for refund of unutilized advance amount will be the responsibility of the respective PIU.

## 3.4.7 Procedure for Foreign Currency Payment from DA

For payment of the foreign currency expenditures under the project the designated official of the respective PIU shall forward two original approved bill/invoice to the world Bank following the information. For the purpose of payment through Letter of Credit (LC) or through Special Commitment request of the PIU to be issued by the World Bank. PIU shall obtain permission from Bangladesh Bank (Forex Reserve Department) in this regard.

#### 3.5 Accounting

- The Project Implementing Units are required to maintain a Financial Management System including adequate accounting and financial reporting, to ensure that it can provide to the World Bank and the GOB, accurate and timely information regarding the project resources and expenditures.
- Financial reports generated from the above accounting system require to be comparable to program allocations, yearly budgets, forecasting and utilization of funds relating to physical and academic achievement as targeted under the program.
- The maintenance of accounts of the CSAWMP-DoF should be governed by the principle that no expenditure is incurred align with the objectives of the project and every item of expenditure which is incurred is in accordance with the prescribed procedures of Financial Propriety.
- In accordance with these canons of Financial Propriety, it shall be the duty of each official of the project to ensure that:
  - Every official is expected to exercise the same vigilance in respect of expenditure incurred from public money as a person of ordinary prudence would exercise in respect of expenditure of his own money;
  - (ii) The expenditure should not be prima-facie more than the occasion demands;
  - (iii) No authority should exercise its powers of sanctioning expenditure to pass an order which will be directly or indirectly to its own advantage;
- It shall be the duty of the financial management of PIU to ensure strict observance of these accounting principles.
- The Treasury Rules and General Financial Rules of the Government and existing chart of accounts/economic codes followed by the PD, PIU will be contextualised to component wise allocation of credit proceeds. There are clear guidelines prescribed by the Ministry of Fisheries and livestock (MoFL) for the authorization and approval of financial transactions. Ministry of Finance MOA & MOFL's existing financial powers,

authority and payment responsibility outlined for the development projects will be followed meticulously by PIU for this project.

#### 3.5.1 Chart of Accounts

The GOB classification chart is comprehensive and allows analysis of budget and expenditures in several dimensions. The classification system enables segregation of expenditures in a systematic manner and is adaptable for computerized accounting system. The DPP cost tables have been prepared based on existing classification chart of GoB which is treated as the ultimate Chart of Accounts for this project. All of the cost canters will follow the Chart of Accounts of DPP. For ensuring consistency of accounting and reporting between DPP and Financing Agreement the Chart of Accounts has also been categorized following the Categories of Financing Agreement (Works, Goods, Non-Consulting Service, Consultants services, Training and Operating costs, matching Grants etc.) and also included in Table:3

**The key accounting function for which PIUs would be responsible are as follows:** (i) fund requisition to PMU on the basis of six months estimated expenditure and approved work plan; (ii) transfer of funds to bank accounts of selected upazilas of DOF on the basis of 3-month estimated expenditure and approved work plan of these Field level Offices; (iii) preparation of standard reporting format (fund utilization report) for spending units; (iv) consolidation of reports from spending units together with bank statements; (v) submission of reports to PIU; and (vi) assistance to internal and external audit and timely response to audit.

- ✓ All cost centers (Region/Division, Districts, Upazilas will send SOE as per Annex-3.5 to PIUs within three days of the following month.
- ✓ PIU will submit reports to World Bank and respective stakeholders.

#### 3.5.2 Accounting Systems

- The "double entry method based on cash system" of accounting shall be followed in CSAWMP-DoF
- The Project Accounts will be maintained on the agreed format. Based on monthly data captured at PIU with back up documentations for every entry of cash Books, PIU (FM, Manager) of will prepare summary accounting receipts and payments with due reconciliations to the project bank accounts in every month and submit quarterly financial statement through soft/printed version to the Project Director.

#### 3.5.3 Accounting Centers

The accounting centers are the offices where the basic accounting in respect of expenditure on the project activities shall be carried out. These accounting centers shall be responsible for maintaining the relevant books of account and shall account for all the financial transactions entered into by each of them.

The accounting centers for the project shall be as follows:

(a) Each administrative unit which receives budget from the project fund will be treated as a cost center or accounting canter or accounting unit. Accounting for all the components will be completely maintained by PD, PIU while PD will be responsible to book recurring operational expenditure incurred for all cost centers which will be submitted to PD, PIU on a monthly basis for the consolidation of project financial report. The PIU will receive

monthly SOE from all cost centers. The Cost Centers/Accounting Centers in CASWMP-DoF are categorized as follows:

- ✓ PIUs
- ✓ Regions/Divisions
- ✓ Districts
- ✓ Upazilas
- (b) The books of accounts will be initially maintained manually. These financial reports will be used for the preparation SOE and IFR.

The project will procure a suitable web-based accounting software to record, report and manage accounting functions in PIU so that the FM staff may have real time accounting information and audit trail, timely financial reports and budget analysis for monitoring and decision making. However, the process is expected to take one year for transition to automated software. The Manual Accounting Process will be continued along with the web-based accounting.

#### 3.5.4 Accounting Records

The following primary books of accounts and registers shall be prepared and maintained at each accounting unit.

- (i) Cash Book
- (ii) General Ledger/Subsidiary Ledgers (including subsidiary ledgers relating to advances and contractors)
- (iii) Journal Register
- (iv) Register of Temporary Advances
- (v) Fixed Assets Register
- (vi) Advance Register
- (vii) Register of Cheques & Bank Drafts received and remitted to Bank
- (viii) Cheque Issue Register
- (ix) Classification Accounts of the Project
- (x) Monthly Accounts of Receipts and Payments
- (xi) Bill Register
- (xii) Dispatch Register
- (xiii) File Register
- (xiv) Claim Register
- (xv) Withholding Tax and VAT Register
- (xvi)

Additional records shall also be maintained at the instruction / approval of the Project. At the close of each month each accounting unit will prepare an SOE (Annex-3.1 & 3.2) with accompanying invoices as per disbursement letter, Designated Bank statement and Bank reconciliation statements (Annex-3.3).

## 3.5.5 Significant Accounting Policies

- 1. All advances to employees, including travel advances, are to be accounted for as advances and treated as expenditure on submission of statements of expenditure with supporting bills/vouchers. These payments can be claimed from the Bank only when expenditure is accounted for on receipt of bills/voucher.
- 2. Advances, if any, paid to contractors according to the terms of contract to be accounted for as advances and expenditure accounted on submission of invoices / receipt of goods services as per agreed standard. For reimbursement from the Bank, these can be claimed on payment basis and need not be delayed till expenditure is accounted for. However advances other than mobilization advances should be claimed after expenditure is accounted on submission of invoices / receipt of goods services as per agreed standard.
- 3. Fixed Assets should be accounted for under the heads mentioned in the DPP.
- 4. Expenditures should be claimed from the Bank net of retention money/security deposits, if any. The retention money/security deposits should be claimed from the Bank after they are actually paid.

## 3.5.6 Vouchers

- All receipts/invoices/supporting documents pertaining to the project shall be systematically filed and made available for inspection by the Auditors, project authorities, Government of Bangladesh and the World Bank.
- Every payment including repayment of money previously lodged with the project office must be supported by a voucher mentioning clear particulars of the claim and its classification in accounts including those of deductions made from the bill.
- Every voucher must bear a pay order signed or initialed and dated by the Finance Manager (Accountant, where finance manager is not available) and approved by the DDO and should specify the amount payable both in words and figures; all pay orders must be signed by hand and in ink.
- Every voucher should also bear an acknowledgement or receipt of the claimant or payee, this receipt should be taken at the time of payment.
- Receipts for net payments exceeding BDT. 399/- (or as per GOB rules) must be stamped under the BD Stamps Act unless they are exempted form stamp duty.
- All paid vouchers must be stamped "Paid & Cancelled".
- Stamps affixed to vouchers must also be cancelled so that they may not be used again.
- Whenever cash memoranda are obtained from the dealers or suppliers they are not considered as valid receipts under the provisions of BD stamp act, unless they contain details in prescribed format, acknowledgement of receipt of money from the person named therein.
- It is responsibility of the finance cell of the Project to comply with all formalities as per the agreement signed by the concerning authority regarding the payment of vehicle hiring, photocopy charges, office support agencies, rent etc.

# 3.5.7 Payment of Bills and Issuing of Cheques

- Printed forms of bill should preferably be accepted.
- The Project Director should attest all corrections and alterations in the bills. Such corrections and alterations should be clearly initialed and dated.
- When the bills cover charges incurred under special order or sanctions, copies of orders or sanctions should be attached to the bills as far as possible, else reference of such order or sanctions should be mentioned in the bill.
- The budget provision i.e. sanctioned allotment and the expenditure incurred up to date including the bill and the balance should be mentioned in appropriate columns in each bill.
- The full account classification of account should be included in the bill.
- Charges against two or more heads of accounts should not be included in one bill.
- Rounding lines should cover any space left blank either in the money column or in the column for particulars of the bill.
- A note to the effect that the amount of the bill is below a specified amount expressed in whole Taka, which is slightly in excess of the total amount of bill, should be recorded in the body of the bill.
- Bills should be rounded off to the nearest BDT.
- All bills should be accompanied by a payment voucher.
- The Head of the office will be the authority for the financial sanction of the expenditure and the Drawing and Disbursing Officer (DDO) will be the signatory of the cheques and all bank advices.

## 3.5.8 Cash Book

- 1. Cash book is the principal record of all money transactions which take place every day and all other registers are subsidiary to it.
- 2. Cash book should be maintained under double entry system.
- 3. The narrations for each entry of Receipt, Payment, Journal and Contra should be descriptive but brief in nature.
- 4. Each voucher entered in accounting software should be assigned a serial number which should be noted on the physical voucher.
- 5. At the end of each day a printout of the transactions entered in the software will be taken and each entry printout should be attested by the Head of Office/Drawing and Disbursing Officer (DDO). While manual accounting is followed, the Head of the office/DDO should sign the Cash book at the end of each month.
- 6. All cash /cheque/demand drafts etc. received should be deposited into the bank as far as possible on the same day itself or next day positively so as to avoid cash in transit for long periods. If any cash is retained on hand that should be verified physically by the Head of Office/DDO and recorded in the cash book (printouts) and the cash in hand deposited in bank next day.
- 7. When cash /cheque/DD is paid to the bank, the counterfoils of the pay-in-slip should be verified with the cashbook by the Head of Office/DDO.
- 8. Only Crossed Account Payee Cheque should be issued to third parties/firms.
- 9. The issue of bearer cheque should be avoided.
- 10. When payments are made through cheque, the number of the Cheque should invariably be noted in the narration of the accounting entry in software for cross checking.

11. During the absence of Head of Office / DDO, the responsibility of attesting the entries in the cash book shall be entrusted to a sub-ordinate officer but on his return the Head of Office/DDO should satisfy himself that there is no irregularity and in token of this check, he should sign the cash book immediately on return.

## 3.5.9 Verification of Cash Balance

- The contents of the cash cheque/ cash book should be counted by the Head of Office / DDO or the senior most official in-charge at least once in a month and the account compared with the cash book balance.
- The result of verification should be recorded in cash book each time as under:

"Cash balance verified by me today and found to be Taka. ..... (in words) on actual count as correct"

Date .....

Signature

(Designation of the Officer)

- In case the cash balance is not found to be as per cash book, the fact should be recorded in the cash book and report submitted to the next higher authority unless the error can be set right at once.
- The excess or shortage should be rectified by making the necessary receipt or payment entry "cash found excess" as miscellaneous revenue or "cash found short" as a loss.

## 3.5.10 Journal

Journal is one of the important account books. Its use is restricted to only recording adjustment entries other than cash transactions. Vouchers shall support each adjustment entry passed through a Journal. Brief narration of each entry shall be given in the voucher and it shall be signed. The accountant will check each entry of the Journals with the vouchers and put dated initials against the entries checked.

## 3.5.11 Ledger

- The Ledger is a register in which all transactions recorded in the cashbook or Journal shall be classified under different heads of accounts or objects of expenditure or any sub-unit thereof.
- The nomenclature of Ledgers will be based upon the approved heads of Annual Work Plan and Budget and is also detailed in the chart of accounts.
- Ledgers are to be opened for each item of expenditure.
- The Ledger accounts shall be arranged and grouped in such a manner that the desired information is promptly secured.
- Minimum Information Requirements for Ledgers Annex-3.4
- List of common accounting entries- Annex-3.5

## 3.5.12 Bank Reconciliation

- Monthly bank reconciliation should be carried out on a regular basis and signed by the Head of the Office.
- Any discrepancy will be rectified and difference explained in the bank reconciliation Statement.

## 3.5. 13 Correction of Errors

If any item of receipts or cheques belonging to one head has been wrongly classified under another head, the error shall be corrected in the following manner:

- 1) If the error is discovered before the close of the day's accounts, necessary correction should be made in the original entry before the accounts of the day are closed.
- 2) If the error is discovered after the close of the day's accounts but before 31<sup>st</sup> March, the correction should take the form of a fresh entry in the cashbook. Note: Errors affecting only classification i.e. receipts or payment on one side of the cash book without any change in monetary value shall be corrected in the manner prescribed above, if the same has been detected before the close of the month's account.
- 3) If the error is detected after the account for March has been closed, the correction should be carried out through a journal entry.
- 4) In all such cases, the correcting entry should be supported by a transfer entry memo approved by the Head of the office and a note of correction shall be made against the original entry in red ink.

## 3.5.14 Guidelines for Closure of Books of Account

- 1) All the accounting centers under this project shall close their books of account on 30th June of each financial year. To facilitate the transaction closure all June payments, target date for settlement should be communicated at 25 June each year.
- 2) Complete printout of its accounts comprising Trial balance, Balance Sheet/ Notional balance sheet with schedules, Receipts and Payments Account, Fixed Assets Register, General Ledger and Subsidiary Ledgers, Cash Book and Bank Reconciliation Statement and Budget vs. Actual Statements should be taken at the end of each quarter.
- 3) After the audit of the accounts, journal voucher shall be passed for any adjustment entry recommended by the auditors and it shall update the trial balance and the annual accounts.
- 4) All the vouchers relating the project should be readily identifiable preferably with a distinguishable color.

#### 3.5.15 Preservation & Destruction of Records

The following record should on no account be destroyed:

- i. Record connected with expenditure of Project work not completed although beyond the period of limit.
- ii. Records pertaining to cases in which litigation is in progress.

- iii. Records connected with claims to service, personal matters affecting persons in the service.
- iv. Order and sanctions of permanent character until revised.

For other records, the directives of the Government shall be followed.

## 3.6 Backup Arrangements and Disaster Recovery Plan (DRP)

Backup arrangements and disaster recovery plan (DRP) are as follows:

- 1. Disasters are disruptions that cause critical information resources to be inoperative for a period of time adversely impacting operations. The disruption could be several hours to several days, depending upon the criticality of the information resource. Most importantly, disasters require action to recover operational status.
- 2. A disaster may be caused by natural calamities, such as earthquakes, floods, thunderstorms and fire, terrorist attacks, attacks by remote perpetrators. A disaster also include and insider attacks, system malfunctions, accidental file deletions, intrusions and viruses.
- 3. These events may require prompt action to recover operational status. Actions may necessitate restoration of hardware, software and/or data files. Therefore, a well-defined, risk-based classification system needs to be in effect.
- 4. The DRP is generally the plan followed by information systems to recover an IT processing facility or by business units to recover an operational facility.
- 5. To ensure continuous service, a business continuity plan will be established in each accounting center.
- 6. To maintain the integrity and security of data, all the Accounting Centers will ensure:
  - i. Physical security: Measures to provide physical security may include the installation of alternate power sources, physical access controls to the systems, etc.
  - ii. Contingency plan: If a disaster does occur, the all the Accounting Centers must be able to accounts processing in its required timescales.
  - iii. Access control: User defined access controls will be used for the making the data entries as well for generation of reports. The Data Owner, Data Administrator and Data Entry Operator should have separate user identification and password for accessing Tally and generating the reports.
  - iv. Training and awareness: Accounts and Finance Personnel must be adequately trained in protective and preventive measures.

## 3.7 Budgeting

61. DPP cost allocation table and the category wise budget allocation of financing agreement sets the budget for the entire term of the project. However, detailed budgets for each fiscal year on each project component and cost category will also be produced to provide a framework for FM purposes which is also required for the Annual Development Program (ADP). The annual budget, by source of funding and application of funds, will be prepared on the basis of the procurement plan and any other relevant annual work plans. These budgets will be monitored periodically to ensure actual expenditures are in line with the budgets, and to provide input for necessary revisions. The project budget will be included in line departments' overall budget. Given that resources are scarce and designated, it is important to stay within the budget and to ensure that cost and physical performance are well synchronized. Failure to stay within budget could result in unnecessary costs associated that may be incurred

if liabilities are not settled as they fall due. The proposed accounting software would include budgetary control feather that will enable project accurate tracking of actual expenditure on a similar chart of accounts as the budget, and the preparation and review of regular budget monitoring reports.

Yearly Project budget will be prepared for the project following standard procedure of GOB for ADP and RADP. Guidelines for Fund release procedure for Development Projects approved by the Finance Division, Ministry of Finance will be treated as an integral part of this manual for preparation of budget and release of GOB and RPA fund.

For ensuring budgetary control, PIU of CSAWMP-DoF will prepare following report each month:

- a. Monthly progress report (Financial & Procurement) based on ADP/RADP allocation
- b. Monthly IMED report based on DPP allocation (As per Annex-3.7)

#### 3.8 Reporting Requirements for CSAWMP-DoF

The project financial procedure does not and indeed cannot, prescribe a universal reporting format which meets the requirements of different reporting authorities, it serves as a fundamental tool in capturing financial and management information which can in turn be utilized to produce different formats of required returns. The mainstream reporting requirements have been identified as follows:

Name/Type of	Related	Period/	Submission	Reference/
Report	Stakeholder(s)	Duration	deadline	Format
-		covered		Remark
SOE	Development	Monthly	10 <sup>th</sup> of the	Annex-3.1,
	Partners		following month	Annex-3.2 &
				Annex-3.3
ADP Review	MoFL	Monthly	30 <sup>th</sup> of the	Annex-3.6
Report (Financial			following month	
& Procurement)				
Implementation	MoFL/ IMED	Monthly/	30 <sup>th</sup> of the	Annex-3.7
Monitoring and		Quarterly	following month	
Evaluation				
IUFMR	Development	Quarterly	45 days from the	Annex-3.8
	Partner-WB		end of a quarter	
<b>RPA</b> progress	Office of the Chief	Monthly/	5 <sup>th</sup> of the	Annex-3.9
Report-	Accounts Officer,	Quarterly	following month	
	MOFL			
Financial	Foreign Aided	Yearly	30 days from the	Annex-3.10
Statement (FS)	Projects Audit		end of Financial	
	Directorate		Year	
	(FAPAD)			

#### Table 6: Reporting Requirements for CSAWMP-DoF

Foreign Aid Utilization Report	Economic Relations Division (ERD),	Quarterly	15 days from the end of a quarter	Annex-3.11
Monthly Audit Report	Audit Cell, Ministry of and Fisheries and livestock	Monthly	7 days from the end of a quarter	Annex-3.12
Other reports	Project management/ Other stakeholders	(As and when required)	(As and when required)	

All of the PIUs is required to submit above reports.

## 3.9 Control

## 3.9.1 Internal Audit

PIU will preserve all types of accounts related documents and procurement records for internal audit. Internal audits will be carried out by an external professional auditing firm (recruited by PIU) at least three times over the lifetime of the project. The first internal audit will be due by the end of the second year of implementation. The subsequent audits will be carried out on a yearly basis. In each case, the project must submit the internal audit reports to the Bank within fifteen days from the receipt of the report. The internal audit activities should include prepayment audits as well as independent appraisals of the financial, operational, and control activities in the sector. The responsibilities of the internal auditors should include reporting on the adequacy of internal controls, the accuracy and propriety of transactions, the extent to which assets are accounted for and safeguarded, and the level of compliance with financial procedures and government laws and regulations.

An Action Plan to address recommendation of the internal audit will be made by the PIU within two months from the submission of Final Audit Report by the internal auditor. PIUs should update the action plan each half yearly basis and updated action plan to auditor.

#### 3.9.2 External Audit

6The Foreign Aided Projects Audit Directorate (FAPAD) of the Comptroller & Auditor General (CAG) would conduct an audit of the project's annual financial statements within six months from the end of the fiscal year. Project Director will be responsible for audit followup and taking remedial actions. Meetings to resolve audit objections must be held within three months of the receipt of the external audit report from FAPAD. The quarterly status report of audit observation with action/remedial measures taken to resolve audit observations would be sent to World Bank and concern Ministry by the PIUs.

### 3.9.3 Fiduciary Review

Integrated fiduciary review that includes procurement post review and forensic audit will be carried out by the Bank on a regular basis. PIUs would send reply to the Bank within two week from receiving any observation. If the matter is considered significant by the bank, PIU will arrange meeting with the Bank, by three weeks from receiving any observation.

## 3.9.4 Fiduciary Management Supervision

In addition to the internal audit, the FM staff from the PIU will visit the cost Centers of the PIUs will be visited regularly. The key check list for the Fiduciary Management Supervision is as follows:

- ✓ Examine relevant vouchers/documents to verify that they are in line with the conditions laid down in the Agreements
- ✓ Examine that the latest agreed Delegation of Financial Power has been followed properly
- ✓ Check that the payments were made on the basis of original vouchers and authorized by personnel vested with such authority
- ✓ Check all related books of accounts to verify the accuracy, reliability and actual status of running accounts
- ✓ Check that procurements were made in line with the agreed procurement rules and procedures
- ✓ Check physical targets planned and achieved
- Check that proper warehouse/store inventories have been kept, inconsistencies have been followed up, and adequate measures taken to address these.
- ✓ Check that all operating Bank Accounts are regularly reconciled
- ✓ Ensure existence of fixed assets by conducting physical verification once in a year
- Check that customs duty, VAT, and tax deductions were made according to the rules and regulations of the Government of Bangladesh

#### 3.10 Defalcations, Losses, etc., Report of Losses

In case of defalcations, losses, etc., and report of losses, rules regarding General Financial Rules (GFR) are to be followed. The relevant Rules (Rule-22 to rule-26) are presented below:

#### 3.10.1 Report of Losses

With the exceptions noted below, any loss of public money, departmental revenue or receipts, stores or other property held by or on behalf of Government, caused by defalcation or otherwise, which is discovered in a treasury or other office or department, should be immediately reported by the officer concerned to his immediate official superior as well as to the Chief Accounts Officer concerned even when such loss has been made good by the party responsible for it. Such reports must be submitted as soon as a suspicion arises that there has been a loss; they must not be delayed while detailed inquiries are made. When the matter has been fully investigated, a further and complete report should be submitted of the nature and extent of the loss, showing the errors or neglect of rules by which such loss was rendered possible, and the prospects of affecting a recovery.

If the irregularity be detected by Audit in the first instance, the Audit Officer will report it immediately to the administrative authority concerned, and if he considers necessary, to Government as well.

#### Exception 1

In the case of Customs, Excise and VAT Revenue, (a) mistakes in assessments which are discovered too late to permit of a supplementary claim being made, and (b) under-assessments

which are due to the interpretation of the law by the local Customs authority being overruled by higher authority more than three months after the assessment was made, need not be reported to the Accounts Officer. A record should, however, be kept of such cases for examination by the Auditor General at the time of Audit.

#### **Exception 2**

Petty cases, that is, cases involving losses not exceeding amounts prescribed by the Government in each case need not be reported to the Chief Accounts Officer unless there are, in any case, important features which merit detailed investigation and consideration. The officers receiving a report submitted to him under Para 22 must forward it forthwith to Government through the usual channel with such comments as may be considered necessary. He should also submit a detailed report, after completing such departmental investigations as may be necessary or expedient on the causes or circumstances which led to the defalcation or loss, the steps taken to prevent its recurrence and the disciplinary or any other action proposed as regards the persons responsible.

#### 3.10.2 Accidents

Any serious loss of immovable property, such as buildings, communications, or other works, caused by fire, flood, cyclone, earthquake or any other natural cause, should be reported at once by the departmental officer to the head of the department and by the latter to Government. When a full inquiry as to the cause and extent of the loss has been made, the detailed report should be sent by the departmental officer concerned to the head of the department, a copy of the report or an abstract thereof being simultaneously forwarded to the Chief Accounts Officer concerned.

#### 3.10.3 Responsibility for Losses

Every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or negligence. Detailed instructions for regulating the enforcement of such responsibility are embodied in Annex-1 of GFR.

#### 3.10.4 Write of Losses

The powers delegated to different authorities to write off the irrecoverable value of public money or stores lost through fraud or negligence of individuals or other causes are indicated in Chapter 4. Provision for losses should not ordinarily be made in the budget. If, however, the nature of the work of a department is such that some losses must be regarded as inevitable each year, provision may be made with the special sanction of the Finance Division in each case.

## 3.11 Policy on Delegation of Financial Authority

PIU: The financial authority of PIU will be vested with the Project Director (PD). He will exercise financial power as conferred in the Delegation of Financial Power of the Government and as modified by the Finance Division, Ministry of Finance from time to time.

PIUs and other Accounting Centers: PIUs and other Accounting Centers shall follow the financial power/authority as conferred in the Delegation of Financial Power of the Government of Bangladesh for such organizations as well as covenants laid down in the contract signed by them with SDCMU.

All of the accounting/cost centers under this project are core/established Government Unit for which DDO has already been assigned except the PIU.

#### 3.12 Government Regulations and Compliance

#### 3.12.1 Deduction of Tax and VAT at Source

Tax and VAT are required to be deducted from its vendors as per requirements set forth in the Income Tax Ordinance 1984 and amendments thereof through Finance Acts. The rates applicable for deduction of Tax/VAT at source and vendors from whom the deduction is mandatory are described as follows:

#### 3.12.2 Income Tax (Subject to change from year to year)

As per section 48 of Chapter VII of Income Tax Ordinance 1984, each payer has to deduct income tax on behalf of Govt. from certain payments. All tax deducted at source must be deposited to the credit of the Govt. within the prescribed time. Failure to deduct or pay tax to the credit of the Government, the Principal Officer and the Organization shall be deemed to be an assesses in default and shall in addition to such tax, pay an amount at threat of 2% per month (subject to change year to year) of such tax for the defaulted period. The head of payments from which tax is deducted at source are given in section 49 of the Ordinance.

#### 3.12.3 Matrix for Tax and VAT Deduction at Source

Tax and VAT at source shall be deducted in applicable cases against payment of goods and services as per rate prescribed from time to time by NBR.

#### 3.12.4 Revenue Stamp

84. Revenue stamp is required in the following cases:

When acknowledged receipt of payment revenue stamp shall be affixed in applicable cases in accordance with the Stamp Act.

• Stamp duty will not be applicable to reimbursement of expense.

Following are the other Core Rules that should be followed for project implementation:

- ✓ Public Procurement Act (PPA) 2006 and Public Procurement Regulations (PPR) 2008;
- ✓ General Financial Rules (GFR);
- ✓ Treasury Rules (TR)

## 3.13 Financial Management Guidebook of the World Bank

The FM unit of WB has officially publish a Financial Management Guidebook by January 2016, for administering all operational issues financial management in World Bank funded projects in Bangladesh. The main areas covered by the guidebook are Financial Management, development budget preparation and management, purchases, money withdrawal and deposit into government accounts, taxes (including VAT and SD), project planning and auditing and disbursement. At the same time, the FM part of this PIM will followed by outlining the steps and activities of refund in light with the latest Government's rules for non-compliance of general condition.

## 3.14 Ineligible Expenditures

As per the Financing Agreement, the Bank may determine that any amount from the financing account (RPA) has been used to pay for expenditures that are not eligible, the Bank may, at its discretion, require the borrower within a specified period to (a) refund the amount to the Bank. The appropriate course of action shall be decided by the Bank, and the borrower must take immediate action to resolve the issue when notified by the Bank.

Ineligible expenditures include, among others, the following:

- 1. Expenditures outside the scope of definitions in the financing agreement
- 2. Expenditure declared ineligible on account of audit or review by the Government, or the World Bank
- 3. Items not covered by the project and category descriptions in the financing agreement
- 4. Items not procured in accordance with the procurement strategy and procurement plan and agreed procedures
- 5. Payments made before the financing agreement date or effective date of retroactive financing, where applicable
- 6. Expenditures for which the borrower has been unable to provide sufficient and appropriate evidence
- 7. Payments made or due for expenditures incurred after the closing date

In parallel, the project will exercise the recourse for recovery of the amount ineligible expenditure and deposit it to government treasury.

## Chapter-4: Procurement Management

## 4.1 Institutional Arrangement for Procurement

The Director Generals of DOF will be the Heads of Procuring Entity (HOPE) for PIU- DOF. The CSAWMP project related procurement approval will be given by the approving authority as per Delegation of Financial Powers (DOFP) for development project.

PIU will employ one financial Expert. The PCU will employ one Procurement Specialist will support the PIU when and as required. The procurement consultant team will be responsible for handling all contract management issues and will provide systematic knowledge transfer to PIUs and agencies for long term organizational capacity development.

#### General:

Procurement will be carried out in accordance with the World Bank Procurement Regulations for IPF Borrowers, Fourth Edition, and the provisions of the Project Procurement Strategy for Development (PPSD) and procurement plan that may be updated from time to time with the Bank's approval. The project will be subject to the World Bank's Anticorruption Guidelines, dated October 15, 2006, revised in January 2011, and July 1, 2016. The project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record and track procurement transactions

#### 4.1.1 Procurement Items

- The Project Implementation Unit (PIU) of CSAWMP will initiate the procurements as mentioned in the Procurement plan of DPP.
- There are will be 25 packages under the CSAWMP-DoF out of them 17 for good 1 for works and 7 for procurement of services contracts for the pooled procurements. contracts to be executed by PIUs DoF are presented in the following tables



Sl. No	Contract Title, Description and Category	Estimated Cost (EC) US\$ and Risk Rating (RR)	Bank Oversight	Procurement Approach/Competition	Selection Methods	Evaluation Method
	Category: Goods					
1.	CSAWMP-DoF-GD-01 Supply of Jeep (4WD)	86363.64	N/A	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
2.	CSAWMP-DoF-GD-02 Supply of Motor vehicle (Double Cabin PickUp)	54545.45	N/A	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
3.	CSAWMP-DoF-GD-03 Supply of Motor vehicle (Micro Bus)	50000.00	N/A	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
4.	CSAWMP-DoF-GD-04 Supply of Motorcycles (125 cc) (for 42 schemes	55363.64	N/A	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
5.	CSAWMP-DOF-GD-05 Supply of Wooden Country boat	EC: 71647.06 RR: Substantial GoB: 0.00 RPA: 71647.06	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
6.	CSAWMP-DOF-GD-06 Supply of Insulated Van with icing facilities	EC: 818,823.53 RR: Substantial GoB: 0.00 RPA:818,823.53	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
7.	CSAWMP-DOF-GD-07 Supply of Desktop Computers with Printer (laser), UPS & Other Accessories, GPRS Modem, etc.) 37 Set	EC: 52,235.294 RR: Substantial GoB: 14117.647 RPA: 38117.647	Post Review	Single Stage One Envelope/ Open - National	RFB (Post qualification)	Lowest Evaluated Cost

 Table 7 : Packages of common goods and number of contracts

Sl. No	Contract Title, Description and Category	Estimated Cost (EC) US\$ and Risk Rating (RR)	Bank Oversight	Procurement Approach/Competition	Selection Methods	Evaluation Method
8.	CSAWMP-DOF-GD-08 Supply of Office equipment (For PIU and Field Office)	EC:41,176.47 RR: Substantial GoB: 17647.06 RPA: 23529.41	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
9.	CSAWMP-DOF-GD-09 Supply of Fax Machine	EC:2117.65 RR: Low GoB: 0.00 RPA: 2117.65	Post Review	Request for Quotation (National)	RFQ (Post qualification)	Lowest Evaluated Cost
10.	CSAWMP-DOF-GD-10 Supply and Installation of 5 nos. Air Conditioner (Split Type)	EC: 7,058.82 RR: Low GoB: 1411.765 RPA: 5647.06	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
11.	CSAWMP-DOF-GD-11 Supply of 49 nos. Soil and Water Testing Kits.	EC: 26,470.59 RR: Moderate GoB: 5882.353 RPA: 20588.24	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
12.	CSAWMP-DOF-GD-12 Supply of Fish-friendly fishing nets (exchange among fishers)	EC: 213,235.29 RR: Moderate GoB: 56470.59 RPA: 156764.71	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
13.	CSAWMP-DOF-GD-13 Supply of Binding Machine and other Office equipment	EC: 16,823.53 RR: Low GoB: 3529.41 RPA: 13294.12	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
14.	CSAWMP-DOF-GD-14 Supply of Furniture for (PIU and Field Office)	EC: 17,411.76 RR: Substantial GoB: 5882.353 RPA: 11529.41	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost

Sl. No	Contract Title, Description and Category	Estimated Cost (EC) US\$ and Risk Rating (RR)	Bank Oversight	Procurement Approach/Competition	Selection Methods	Evaluation Method
15.	CSAWMP-DOF-GD-15 Supply and Installation of LED TV for PD Office	EC: 1411.76 RR: Low GoB: 0.00 RPA: 1411.76	Post Review	Request for Quotation (National)	RFQ (Post qualification)	Lowest Evaluated Cost
16.	CSAWMP-DOF-GD-16 Supply Bicycle	EC: 3529.41 RR: Low GoB: 0.00 RPA: 3529.41	Post Review	Request for Quotation (National)	RFQ (Post qualification)	Lowest Evaluated Cost
17.	CSAWMP-DOF-GD-17 Mini Processing Unit machineries for Fisheries Value added Product (14 Set)	EC:65,8823.53 RR: Moderate GoB: 141176.47 RPA: 517647.06	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
	Category: Works					
18.	CSAWMP-DoF-WD-01: 14 nos. Mini Processing unit Construction (Deep Tube well, depuration, Grading Platform, overhead tank)	EC: 1,647,058.82 RR: Substantial GoB: 352941.18 RPA: 1294117.65	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
	Category: Consulting Services					
19.	CSAWMP-DOF-SD-01/A Consultancy (Pay allowances of National Consultants/Experts)- Individual Consultant: Training and Communication Expert	EC: 223470.59 RR: Moderate GoB: 0.00 RPA: 223470.59	Post Review	Open-National	ICS	Rated Criteria
20.	CSAWMP-DOF-SD-01/B Consultancy (Pay allowances of National Consultants/Experts)- Individual Consultant:	EC:94705.88 RR: Moderate GoB: 0.00 RPA: 94705.88	Post Review	Open National	ICS	Rated Criteria

Sl. No	Contract Title, Description and Category	Estimated Cost (EC) US\$ and Risk Rating (RR)	Bank Oversight	Procurement Approach/Competition	Selection Methods	Evaluation Method
	Community mobilization and Livelihood Expert					
21.	CSAWMP-DOF-SD-01/C Consultancy (Pay allowances of National Consultants/Experts)- Individual Consultant: Climate Change and Environment Expert	EC: 94705.88 RR: Moderate GoB: 0.00 RPA: 94705.88	Post Review	Open National	ICS	Rated Criteria
22.	CSAWMP-DOF-SD-01/D Consultancy (Pay allowances of National Consultants/Experts)- Individual Consultant: Aquaculture and Value Chain Expert	EC: 81176.47 RR: Moderate GoB: 0.00 RPA: 81176.47	Post Review	Open National	ICS	Rated Criteria
23.	CSAWMP-DOF-SD-01/E Consultancy (Pay allowances of Individual Consultant: National Consultants/Experts)-Financial Expert	EC: 119058.82 RR: Moderate GoB: 0.00 RPA: 119058.82	Post Review	Open National	ICS	Rated Criteria
24.	CSAWMP-DOF-SD-02 Development of Fishers Community Database (Non consulting Service)	EC: 23,529.41 RR: Low GoB: 11764.70 RPA: 11764.71	Post Review	Single Stage One Envelope/Open - National	RFB (Post qualification)	Lowest Evaluated Cost
25.	CSAWMP-DOF-SD-03 Auditing Through an Audit Farm (Non consulting Service)	EC: 29,411.74 RR: Low GoB: 0.00 RPA: 29411.74	Post Review	Open - National	FBS (Post qualification)	Lowest Evaluated Cost

55

## 4.1.2 Procurement of pooled goods works and services

- (i) Procurement personnel of PIU of CSAWMP, as a team, will prepare and update annual procurement plans;
- (ii) PIUs will prepare technical specification of goods and TOR of individual consultants and consultancy services (firms);
- (iii) The team will prepare bid documents for goods and request for application (RFA) for individual consultants and request for proposal (RFP) for consultancy services (firms);
- (iv) For procurement of goods, HOPE or Procuring Entity of PIU will form Tender Opening Committee (TOC) and Tender Evaluation Committee (TEC) for opening and evaluation of bids of pooled goods. Along with members of TEC and PEC, 3 (three) representatives from 3 (three) Implementing Agencies may be included as member/co-opted member and one representative from planning commission may be included as member in TEC and PEC;
- (v) Invitation for bids for goods and Request for Expression of Interest (REOI) for services will be published by PIU in newspapers and relevant web-sites Bids and EOIs will be received by the office of Project Director (PD) of PIU and opened by TOC/POC at one place.
- (vi) PD of PIU will send the relevant procurement document to the world Bank for necessary clearance. Before processing any procurement, the PIU will submit the documents to STEP for getting approval. After getting clearance of Each step PIU will proceed for the Next Step. The contract will approve by the authority as per delegation of financial power;
- (vii) After getting approval of approving authority, PIU will issue notification of award (NOA).
- (viii) PIUs will sign and execute contact agreements separately;

#### 4.2. Procurement Plan

Procurement plans for WB are to be prepared following SEPA. An 18 months procurement plan of all five project components has been entered in SEPA and submitted to the World Bank.

## 4.2.1 Procurement Guidelines

Procurement under the CSAWMP-DoF will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" (the Procurement Guidelines) and "Guidelines: Selection and Employment of Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" (the Consultant Guidelines), and the provisions stipulated in the CSAWMP Financing Agreement and PAD

## 4.2.2 Due-diligence Measures

The following steps will be followed as part of procurement and implementation arrangements:

- a. all bid evaluation reports will cover verification of recommended bidders' post-qualification information (for goods and works);
- b. all contract negotiations will be preceded by additional due diligence by line agencies on verification of recommended consultants' experience and curriculum vitae of key staffs (for consultancy services);
- c. make bidders generally aware about fraud and corruption issues;
- d. award of contracts within the initial bid validity period, and closely monitor the timing;
- e. take action against corrupt bidders in accordance with Section I of the Bank's Procurement/Consultant Guidelines besides provisions of PPA/PPR;
- f. preserve records and all documents regarding public procurement, in accordance with the Bank Guidelines and PPA/PPR, to facilitate smooth procurement audit or post-review;
- g. publish contract award information on CPTU and line agencies website within two weeks of contract award.
- h. ensure timely payments to the suppliers/ contractors/consultants; line agencies' procurement performance monitoring will use GoB's PROMIS format.

## 4.2.3 Electronic Government Procurement (e-GP)

All NCB procurement under CSAWMP-DoF will be done through electronic government procurement (e-GP) gradually. Until full capacity is achieved on e-GP, regular procurement procedures will be followed.

- (a) Assessment of its readiness and technical capacity to do e-GP and identify hardware, software and training needs. This readiness will include, among others, computer hardware, available of adequate bidders (list of bidders generally participating in concerned line agency) and robustness of internet connectivity.
- (b) Acquire necessary training on e-GP
- (c) Conduct a campaign to all its bidders in the past on move to e-GP
- (d) Pilot e-GP in each line agency and at PIU with one contract per procuring entity within 6 months after project effectiveness.
- (e) The Procurement Specialists of each line agency will function as main trainer for each line agency.

## 4.2.4 Measuring Results and Performance Monitoring

Line agencies' procurement performance monitoring will use Government's PROMIS format. This requires agencies' authorization from CPTU and registration with the online PROMIS tool. However, until the procedures with CPTU are complete, the PIUs and PMU will provide procurement performance monitoring reports off line using conventional procedure.

#### 4.3 Use of Standard Procurement Documents

For procurement through International Competitive Bidding and for selection of consultants, the Bank's Standard Bidding Documents (SBDs) and Standard Request for Proposals (SRFPs) will be used, including the form of contract attached with SBDs and SRFPs. For all NCB packages, the

implementing agencies will use tender documents based on model tender documents (MTD) agreed with the Bank.

### 4.3.1 Procurement Risk Assessment and Management

The four-line agencies have substantial procurement risk. Several measures to mitigate the risks are either in place or will be put in place as described below.

**Bid/Proposal Evaluation Committee:** All of the four implementing agencies shall ensure that the bid/proposal evaluation committees are formed in a manner acceptable to the Bank, and Bank's no objection shall be required on the formation of the bid/proposal evaluation committees.

Adopt contract implementation monitoring tool by PIU: This tool will project quarter-wise milestones for each contract under the Project and related disbursement, and will track its accomplishments. The agencies will report to the Bank on a quarterly basis on the accomplishment of milestones and related disbursement against the target set in this tool. Specific reporting requirements/milestones and related disbursement figures will be finalized during project implementation in agreement with the Bank.

## 4.4 Procurement Process - Planning, Requirement Definition, Sourcing and Market Research

#### 4.4.1 Procurement Planning

The key aspects of efficient procurement planning would consider:

(i) advance identification of suitable suppliers through market survey, (ii) development of standard specifications and TORs, (iii) key performance indicators in line with Government's procurement performance indicators (PROMIS), (iv) effective and timely completion of procurement and supply/completion of contract, (v) early identification of needs and right quantities, (vi) close monitoring of the plan, (vii) avoiding unnecessary exigencies and urgencies, enabling full compliance with Bank Procurement Guidelines and Government's PPA/PPR, (viii) examine alternative procurement approaches, and (ix) systematically and procedurally correct procurement performance based on PROMIS reporting outcome.

## 4.4.2 Procurement Requirement definition

Necessary requirement definitions are spelled out in the Bank's Procurement and Consultant Guidelines, as well as the in standard bidding documents, requests for proposals and contracts for goods, works and services.

The Procurement Specialist in each line agency will ensure: (i) no competition hindrance i.e., use of brand names, (ii) exact technical and quality needs, (iii) avoid over-/under-specifications, (iv) non-ambiguous and generic technical specifications and TORs, (v) advice line agency on completeness of procurement items, sourcing of supplies and determining most practical procurement methods. Key steps of this function in the following sequence: (i) requirement analyses; (ii) information gathering; (iii) writing specifications/TORs; and (iv) requisitioning and

58

process scheduling.

## 4.4.3 Market Research

This will be done in parallel with requirement definition above; technical market research is done while developing technical specifications and TORs. Market research identifies suppliers, products, long list of consultants etc. Open wide advertisement is a key way to collect market information, along with collection of information through internet, reference and other previous project database. Special skills are required for market research and developing specifications database. Agency officials would need to attend specific national and international training programs in order to develop the necessary skill set. The available sources of information to complete market survey of requirements under the procurement plan are provided below:

#### Internal

- Established rosters, shortlists
- Former contracts
- SPC, MPC and colleague consultation

#### **Internet References**

- Regional trade directories
- Yellow pages (local suppliers)
- Product-specific resources like Alibaba.com<sup>TM</sup>
- Professional networks like "LinkedIn" (consultants)

#### Others

- Commercial/specialized journals
- Chambers of commerce, trade delegations, permanent missions, Government procurement database
- Business seminars
- Published financial report

Through the market survey, line agencies may meet with prospective suppliers and consultants, within the following baseline on transparency and fairness:

- Maintaining the sensitivity of the supplier market, no biased specification or perception of favouritism;
- No bidder/consultant would be given an unfair advantage through up-front information, and any information provided will be published or sent in written to all suppliers/consultants;
- No bidder/consultant should get an impression that they have an increased opportunity to be awarded a contract, unless specifically advised by the Procurement Specialists about the relative commercial advantage of direct contracts and single source selection on a case-by-case basis.

## 4.5 Mis procurement

104. The Bank does not finance expenditures under a contract for goods, works, or non-consulting services if the Bank concludes that such contract: (a) has not been awarded in accordance with the agreed provisions of the Loan Agreement and as further elaborated in the Procurement Plan to

which the Bank provided no objection; (b) could not be awarded to the bidder otherwise determined successful due to willful dilatory conduct or other actions of the Borrower resulting in unjustifiable delays, the successful bid being no longer available, or the wrongful rejection of any bid; or (c) involves the engagement of a representative of the Borrower, or a recipient of any part of the Loan proceeds, in fraud and corruption In such cases, whether under prior or post review, the Bank will declare mis procurement, and it is the Bank's policy to cancel that portion of the loan allocated to the goods, works, or non-consulting services that have been mis procured. The Bank may, in addition, exercise other remedies provided for under the Loan Agreement. Even once the contract is awarded after obtaining a no objection from the Bank, the Bank may still declare mis procurement and apply in full its policies and remedies regardless of whether of the loan has closed or not, if it concludes that the no objection was issued on the basis of incomplete, inaccurate, or misleading information furnished by the Borrower or the terms and conditions of the contract had been substantially modified without the Bank's no objection.

## 4.6 Sustainable Procurement

Besides financial and commercial factors, the bidding documents to be used for NATP-2 will include as much as practicable, economic, social and environmental considerations in line with responsible and sustainable procurement. These are, but not limited to:

- (a) Value-for-money considerations including price, quality, availability and functionality;
- (b) Life cycle costing of certain products (sophisticated laboratory equipment, CCV/SUV, motorcycles, and others)
- (c) Green procurement principles, reducing pollution, waste and hazardous substances, using renewable energy, reliable, non-hazard and recyclable raw materials in supplied products.
- (d) Aspects of poverty reduction, eradication of inequality in gender and resource distribution, labour conditions, fair trade, human right, and others.

## 4.7 Measuring Results and Performance Monitoring

Line agencies' procurement performance monitoring will use Government's PROMIS format. This requires agencies' authorization from CPTU and registration with the online PROMIS tool. This registration needs to be completed before the first contract in NATP-2 is awarded.

## 4.8 Bank Implementation Support

## 4.8.1 Prior review Threshold

The Procurement Plan shall set forth those contracts which shall be subject to the Bank's prior review. All other contracts shall be subject to Post Review by the Bank. Initial Procurement Plan agreed with PMU and the line agencies indicates the following prior review thresholds which will be updated annually based on the review of the capacity and performance of the procuring entity and will be reflected in the updated procurement plan as appropriate:

60

### 4.8.2 Post Review

For compliance with the Bank's procurement procedures, the Bank will carry out sample post review of contracts that are below the prior review threshold. Such review (ex-post and procurement audit) of contracts below the threshold will constitute a sample of about 15 percent (fifteen percent) of the post-review contracts in the project. Procurement post-reviews will be done on annual basis depending on the number of post-review contracts.

Expenditure	Contract Value	Procurement	Contracts Subject to Prior Review
Category	(Threshold)	Method	
Goods	>=US\$ 2,000,000	ICB	All contracts
	<us\$ 2,000,000<="" td=""><td>NCB</td><td>First contract by the project regardless of value in NCB and thereafter, all contracts valued US\$ 1,000,000 or more</td></us\$>	NCB	First contract by the project regardless of value in NCB and thereafter, all contracts valued US\$ 1,000,000 or more
	<us\$ 2,000,000<="" td=""><td>Framework Agreement</td><td>All contracts</td></us\$>	Framework Agreement	All contracts
		DC	All contracts
	<=US\$ 6,000	RFQ/ National Shopping	Post review
Works	>= US\$10,000,000	ICB	All contracts.
	<us\$10,000,000< td=""><td>NCB</td><td>First contract by the project regardless of value in NCB and thereafter, all contracts valued US\$10,000,000 or more</td></us\$10,000,000<>	NCB	First contract by the project regardless of value in NCB and thereafter, all contracts valued US\$10,000,000 or more
	<=US\$ 12,500	RFQ/ National Shopping	Post review
		DC	All contracts
<u>Services</u>	>=US\$500,000	QCBS /QBS	First contract by the project regardless of value in QCBS/QBS and thereafter, all contracts valued US\$500,000 or more
	<us\$500,000< td=""><td>FBS</td><td>First contract by the project regardless of value in FBS and thereafter, all contracts valued US\$500,000 or more</td></us\$500,000<>	FBS	First contract by the project regardless of value in FBS and thereafter, all contracts valued US\$500,000 or more

Expenditure	Contract Value	Procurement	Contracts Subject to Prior Review
Category	(Threshold)	Method	
	<us\$< th=""><th>LCS</th><th>Post review</th></us\$<>	LCS	Post review
	US\$300,000		
	<us\$< th=""><th>CQ</th><th>Post review</th></us\$<>	CQ	Post review
	US\$300,000		
		IC	All contracts valued US\$200,000 or more
		SSS	All Contracts

**Note:** In case of contract package awarded in the form of lots or sub-packages, the combined estimated cost of all lots/sub-packages in a particular procurement package will determine whether it will be prior-or post-reviewed, in accordance with the thresholds given above.

The above threshold values are subject to the World Bank's review time to time.

# Chapter-5 Formation of Water Management organization and production Group for fisheries.

The success of the project mostly depends on the motivation and active participation of the community members. For this purpose, local staff and concerned PIU officer will be take the responsibilities of the formation of WMOs and organizing groups. The beneficiary selection and Community based Organization (CBO) group formation will be done by Upazila Scheme Management Committee (USMC). The CBO consists of fishers, fish farmers and all other representation from the resource users. The CBOs will look after the demonstration activities, beel nursery and stocked fingerlings for their livelihood development. The CBO consists 25 or more members and they also be motivated to establish a sanctuary in the suitable location of the beel and other mentioned activities. So that certain number of fish can take shelter there and become brood fish for future propagation. The details guideline is provided in the project implementation guideline.

# 5.1.1 WMO Formation and Mobilization **WMO Formation**

A WMO is a registered association of management of water resources and ensure the better utilization of water management infrastructures consisting of crops and fish farmers of the same socio- economic status and living preferably in Sub Project Area. The group members have a common interest in one major livelihood activity. Development and empowerment of WMO will be supported around livelihood activities of participating farming communities, with a focus on small and marginal and women framers. Using the agreed selection criteria and methodology WMOs will be formed by farmers through the facilitation of Upazila Scheme management committee will play key role in formation and mobilization of groups to play an increasing role in planning, budgeting, implementation and monitoring of extension activities. There will be 2 types of farmer-groups (POs): (i) Crops Farmers, (ii) Fish Farmers and The water Development Board will take lead form the WMO with coordination and consultation with Upazila Fisheries Officer and Upazila Agriculture Officer. For the intervention of Fisheries and Agriculture activities Fisheries group or CBOs or producer group and Farmers Field school will be formed from the members of WMO.

CSAWMP-DOF will deliver complementary extension support in each of the Sub Project areas by Local Extension Agent for Fisheries (LEAF). The number of farmers for each new CBO or producer Group would be 25 members for fisheries. Each CBO will consist of about 80% small and marginal farmers and 20% medium and large farmers. However, about 35% separate women CBO /women participation is to be ensured in CBO membership on an average.

For fisheries, focus would be given in formation of fisheries group for pond aquaculture as well as adoption of community-based fisheries management, beel nursery & fisheries management, establishment of fish sanctuary, habitat restoration and stock enhancement programs within the Sub Project Areas. Besides, fisheries relevant facilities like- four quality fish seed multiplication farms

to support for introduction of good quality seeds, fish feed development, fish processing and preservation along with value chains which would include setting up of two fish landing centers close to fish production clusters.

## 5.1.2 General Consideration for CIG Farmers Selection

CSAWMP-DoF will provide comprehensive support packages to the Fish farmers and Fisheries community within the subproject area for vertical scaling up the productivity of Fisheries and sustainable management of Fisheries resources. Success of activities to a large extend will mostly depend on the interest, attitude and potential contribution of farmers to be selected and mobilized into a common group. Recognizing this, the important consideration for farmer identification and mobilization would be: (i) interested in adoption of new/improved technologies, (ii) willing to make available suitable plot, pond, etc for demonstration setup, (iii) committed to assist in spill over technologies to the non-CBO farmers, (iv) interested to produce market oriented high value commodities, (v) agree to include 35% women farmers in new CIGs and focus on small and marginal farmers.

## 5.1.3 Criteria for CBO Farmer Selection

Decentralization of extension services will be group-based delivery while, CBOs are the primary counterparts at field level. CBOs would strengthen the ability of farmers to formulate demand, prepare annual activity plan, enhance responsiveness of the public service and negotiate with other stakeholders. All components will put value on the common interest and willing to perform under group approach. Various scale of operation, like areas of waterbodies fishpond, may be considered as identification criteria for small, marginal and landless farmers. The farmers conversant with knowledge of husbandry practices for cultivation of crops and fisheries would be considered as added quality for selection. The following criteria (Table 5.1) may be considered in identification of the farmers for CBO formation.

Sl. No	Sl.     Criteria     for     CBO/farmers Field School types       No     consideration			Remarks
110	consider auon	Сгор	Fisheries	
1	Beneficiary selection	80% small and marginal farmers, and 20% large and medium farmers	Farmers having ponds/ water bodies	-
2	Gender issues	Minimum 35% women participation in CIG membership in new upazilas	Minimum 35% women participation in CIG membership in new upazilas	<ul> <li>Promote gender mainstreaming</li> <li>women empowering</li> </ul>
3	Group size	30 members/ CBO	20 members/CBO	For new CBOs

#### Table 9: Farmers category/criteria for CIG formation

64

Sl. No	Criteria for consideration	CBO/farmers F	ield School types	Remarks
INU	consider ation	Сгор	Fisheries	
4	Education	Any level	Any level	
5	Mixed group or not	Mixed group of men & women in the same CBO not admissible	Mixed group of men & women in the same CIG admissible	-
6	Age limit	Minimum 18 years	Minimum 18 years	-
7	Membership	<ul> <li>One CBO member from one household</li> <li>One CBO farmer cannot be the member of more than one CBO (crop and fish</li> </ul>	<ul> <li>One CBO member from one household</li> <li>One CBO farmer cannot be the member of more than one CBO for fish</li> </ul>	-

#### 5.1.4 Steps in CBO Formation

Several steps are involved in surveying participatory farmers and finally formation of effective CBOs as the program beneficiaries. The survey includes human resources (farmers' inventory), agricultural resources (crops/land, water, livestock, etc.), cropping pattern, incidence of natural calamities, institutional facilities, etc. All activities will be within the Subproject area or Polder based. Therefore, tools and techniques for identification of resources of a union should be sampled first. The principal steps for mobilization of farmers and formation of CIGs are described below.

#### Step 1: Collection key information of the union

A Sub Project or Polder may made up of several villages, and is the lowest and smallest rural administrative unit of the local government system. In detailing of planning and making decision on production activities, simple and participatory feasibility survey should be conducted within the program. A number of measures and indicators exist to measure the resources in a Subproject area. The members of Upazila Scheme management committee are the key informants for selection of area and farmers of a CBO. Upazila Fisheries officer with the assistance of LEAF should conduct feasibility survey on homesteads, farm families, land and soil types, livelihood activities around crop, livestock and fisheries, socio-economic status of farm families, communication, access to market, etc. The Upazila Scheme management committee members should use simple PRA tools to collect key information of the union including the Household Census Checklist. Training on PRA tools may be conducted by Training and Communication Specialists of PIUs and other resource persons.

Many tools and techniques can be used for CBO formation of which Participatory Rural Appraisal (PRA) is recommended. It is recommended that a menu of techniques like physical mapping, social mapping, transect walk, resource inventory preparation, problem census, and collating information in planning should be used according to the context of locality. Tools and techniques process are described in details in the table below.

SI.	Process	Method	Responsibility	Back- stopping
1	Training on PRA tools and techniques for URT members by PIUs	Lecture and practical orientation	PIUs	Other organizations
2	Training on PRA tools and techniques for LEAF and Local Staff members	Lecture and practical orientation	USMC	PIUs
3	The respective member of USMC as in-charge of the Subproject area will conduct a simple PRA in his/her working area	Traditional PRA method	SAAOs/AFO/FA LEAF/	USMC
4	The key information gathered from the PRA will be collated and analyzed	Statistical package/computer	SAAOs/AFO/FA	USMC
5	The outcomes of the PRA survey will be preserved as the database for the project at the bottom level	Computer/CD	SAAOs/AFO/FA	USMC

Table 10: Tools and techniques processes to be followed

#### Step 2: Selection of potential CIG areas

Initially, the field staff- SAAOs of DAE, Field Assistant/Assistant Fisheries Officer of DoF will select the areas for CBO formation on the basis of collected data and information considering the potentials of areas in terms of farmers' interest, agricultural diversity, communication, market access, etc. This could be done by respective member of USMC through individual farmer contact or group discussion. Respective upazila officer will review and finalize the CBO areas which will be approved by USMC.

SI.	Process	Method	Responsibility	Back- stopping
1	Respective field staff will sit in a meeting and analyze facts and figures collected	Open discussion	Respective field staff	USMC.
2	Tentatively decide about 15 sites for 15 CIGs (through randomization) on the basis of the collected data, facts and figures	Open discussion	Respective field staff	USMC.
3	Concerned respective field staff will go around the paras/villages observing physical features and making informal talks with village people for checking the validity of the data; local representative should also consult, if necessary	Visit/individual contact	Respective field staff	USMC.
4	Respective field staff initially select same number of paras/villages for formation of required CBOs	Open discussion/ meeting	Respective field staff	USMC.

## Step 3: Holding general meetings

Once the operating area (s) of a CBO is initially identified, the next task of the Upazila Officer and LEAF is to make the community people aware on the project activities, its objectives and interventions of farmers for formation of a potential CBO. They should also be informed about their involvement- responsibility and gains from the project. General meeting may be conducted for individual CBO or for all CBOs Under the Sub Project area collectively. However, arranging meeting for selection of individual CBO should be preferred than arranging meeting for all CBOs in a Subproject Area for useful thoughtful sharing of understanding.

SI.	Process	Method	Responsibility	Back- stopping
1	Respective field staff will arrange meetings in different selected paras/villages inviting community farmers. The meeting will be village/para based and should ensure that most of the potential farmers attend the meeting and share their views	Mass contact or with the help of local leader or public representative	Respective field staff	USMC
2	In the meeting, respective field staff member should introduce to the farmers the project objectives, benefit, roles and responsibilities of the CBO and the CBO members.	Discussion/open question and answer	Respective field staff	USMC
3	Find out whether there is a common understanding among the farmers about the goal and objectives of the project.	Wrap-up session	Respective field staff	USMC
4	If necessary, more than one meeting at this stage is recommended for clear understanding of the project objectives	Same as above	Respective field staff	-
5	After meeting, respective field staff will initially select 40/30 farmers for each CBO from which finally 30/20 members will be selected for each crops and fisheries CBO	Through open consensus/voting	Respective field staff	USMC
6	Wrap-up and close the meeting with appreciations.	Participatory	Respective field staff	USMC

Table 12: Processes to be followed for holding general meetings

#### Step 4: Checking of resource inventory for primarily selected CIG members

Respective field staff including respective CBO would cross-check the household census (completed during PRA) of the potential farmers (40/30) for a CBO formation who were invited in the general meeting. The household census should be checked very carefully so that all required data are available for further follow up.

SI.	Process	Method	Responsibility	Back- stopping
1	Read the Household Census form carefully and internalize what was done during PRA	Read and discuss	Respective field staff	USMC
2	Find out important aspects in it and mark them	Read and discuss	Respective field staff	USMC
3	Select and number the villages, which are under the Household Census program and start from 1 to last number using pencil	Individual contact	Respective field staff	USMC
5	Check the collected data again, make copies for URT, concerned CIG and preserve it for future use.	Sharing	Respective field staff	USMC

Table 13: Processes to be followed for checking of resource inventory for primarily selected CIG members

## Step 5: Finalization of lists of farmers for a CIG

In the pre-arranged meeting of USMC, the information collected on households should be reviewed and a list of 25 fisheries CIG members should be finalized. Farmers' willingness and interests reflecting the common interest in group-based delivery of extension services should be given priority in selecting the CBO members. The CBOs for value chains interventions from selected subproject area will be finalized by USMC giving special focus to strengthening linkages between smallholders and markets access. Respective upazila officer will review and finalize the CBO list which will be approved by UECC.

Table 14: Processes to be followed for finalization of lists of farmers for a CIG

SI.	Process	Method	Time	Responsibility	Back- stopping
1	Arrange a meeting for each	Contact	-	SAAOs/Field	
	village/para under Household	through		Staff	
	Census (inform the farmers at	village			
	least 7 days before the date of	leader			
	the meeting).				
2	Arrange a participatory	Open	1hours	SAAOs/Field	USMC
	discussion among the farmers	discussion		Staff	
	about their resources and				

	accordingly to be listed as member of CBO.				
3	Finalize the list of CBO members.	Interest basis	30 min.	SAAOs/Field Staff	USMC
4	Declare the final list of the CBO farmers by a local village leader/UP chairman/UP Member.	Open declaration	15 min.	SAAOs/Field Staff	USMC
5	Wrap-up and close the meeting.	Participatory	10 Min	SAAOs/Field Staff	USMC
6	Follow-up the reaction and internalization of the project objectives.	Individual contact		SAAOs/Field Staff	USMC
7	Display the approved list of CBO members in Sub Project area.	Notice Board		SAAOs/Field Staff	USMC

#### Step 6: Formation of an Executive Committee of CIG

An Executive Committee (EC) for the management of a CBO needs to be formed by secret voting or open selection method holding general meeting following memorandum of article (s) of byelaws. The composition of the 9-member EC of a CBO will be as follows:

- i. President : 1
- ii. Vice-President : 1
- iii. Secretary : 1
- iv. Treasurer :1
- v. Members : 5

As CBOs are resource-oriented organizations to enhance productivity based on water resources they will govern and manage themselves following the byelaws approved by the Department of Cooperatives. Byelaws will provide clarity to an organizational structure, functions of office bearers, mode of fund raising and fund management procedures, etc. However, there extension/field activities will be managed by the line departments.

#### 5.1.5 Functions of CBO

At Sub Project areas, CBOs are the main interlocutors for all field activities. CBOs will perform the following major functions.

1) Group management and CBO registration;

70

- 2) Regular CBO meeting and identification of their problems in production, marketing of produces, technical service needed (like problem-solution, technology, inputs, training, etc), access to financial services;
- 3) Preparation and implementation of CBO Micro Plan (CMP) incorporating optimal production planning, demonstration, training, marketing, etc;
- 4) Adoption of new/improved technology and production& post-harvest practices and their diffusion to non-CBO farmers;
- 5) Support to Homestead Gardening CBOs to address some elements of the gender dimension in agriculture and contribute to improving nutrition at household level;
- 6) CBO fund raising (CIG savings and other sources) and its profitable investment;
- 7) Forming and supporting POs to identify domestic markets at upazila, district level or outleting to the supermarket chains and primary processing enterprises.

## 5.1.6 Producer Organization (PO)

173. Producer Organizations (POs) are the federation of CBOs, and are seen as the useful farmers' organization for mobilizing farmers' collective self-help action aimed at improving their own market economy at the "Production Clusters". CSAWMP will promote such collective efforts to cover high value crops production and marketing. Project will take lesson learned from previous projects including NATP2 for successful establishment of POs sustainable at the "Production Clusters".

# Chapter -6 Implementation Methodology and Approach for the Fisheries Intervention

## 6.1Classification of Water waterbodies:

Based on the Geographic location of each of the Subproject/Polder has different types of waterbodies with different levels of potentials. Based on the nature, characteristic and size the waterbodies will be classified by the following categories.

- i. River
- ii. Canal
- iii. Pond
- iv. Beel
- v. Baor
- vi. Haor Paddy Field
- vii. Brackish water Shrimp farms
- viii. Lake

Considering the potentialities of the different types of waterbody production model will be designed and adopted. Fish production will be strictly based on **waterbody/Eco-system**. In some cases, more than one combination of production models will be applied in single water body depending on the suitability.

## 6.2 Types of production models considered (Broadly classified)

As the project are is situated different climatic area. So, Base on the climatic condition and suitability of waterbodies the different production models will be considered. Such as

- Semi intensive Aquaculture in pond
  - Demonstration of (a) Seabass Culture (b) Tilapia Culture (c) koi Culture (d) pangas Culture, (e) Culture of Indian Major Carps. (f) Culture of Shing/ Magur (g) golda-carp/bagda-carp polyculture (h) Semi- intensive Culture of fresh water and brackish water Prawn. (i) other suitable latest validated technology developed by BFRI or other organizations.
- Cage Culture
- Pen culture
- Innovative & climate resilient Fish culture demonstration
  - Integrated Fish culture in paddy field. (Paddy cum Fish Culture) South and south west part of the Country.
  - Crab fattening in the coastal region (cox's Bazar)
  - Shrimp with Golda (Fresh water Prawn-) South and Northern part of the country.
  - Prawn with Pabda/Gulsha Southern part of the country

72

- Introducing Fast growing Species and indigenous high valued Species. North and North west part of the Country
- Improved Fish Seed and feed production
- Fish Nursery enterprise for improved seed production
- Replenishment of endangered indigenous fish species through establishing fish sanctuaries in suitable schemes
- Up scaling beel nursery practice in feasible schemes

#### CSAWMP-DoF

SL	Name of the	Area of	Division	District	Upazila	Total Are	· · ·	No. of	Fisheries	Overall
No.	Polder	the Polder (Ha)				Dry Season	Rainy Season	beneficia ries	Management Pattern in Place	Remarks
1	2	3	4	5	6	7	8	9	10	11
1.	Ujanpara- Komarbhanga FCDI sub- project (FCDI)	1556	Mymensingh	Mymensingh	Nandail, Ishwarganj	105.00	425	500	Open water management & other suitable activities	-
2.	Balushair Flood Embankment FCDI	11500	Dhaka	Narsingdi	Narsingdi Sadar	360.00	1036.00	92000	Enhancing natural fish by implementation of fisheries management is not suitable for this area. Suitable activities can be applied here.	Water of the seasonal cultured water bodies (paddy fields/flood plains) and floodplains are contaminated by the industrial effluents from dying factories of Narshingdi.
3.	Satla-Bagda FCDI (Polder-1)		Dhaka	Gopalganj	Tungipara, Kotalipara	368.00	30.30	1045	<ul> <li>Carp polyculture,</li> <li>Monosex tilapia &amp; other suitable activities</li> </ul>	-
4.	Modhukhali- Baliakandi Sub-	9448	Dhaka	Rajbari	Baliakandi	1000.00	4035.0 0	15000	• Culture of small	Here have some

 Table 15: List of Subproject and Waterbodies with their location and indicative suitability

SL	Name of the	Area of	Division	District	Upazila	Total Are	ea (ha)	No. of	Fisheries	Overall
No.	Polder	the Polder (Ha)				Dry Season	Rainy Season	beneficia ries	Management Pattern in Place	Remarks
1	2	3	4	5	6	7	8	9	10	11
	project (Remaining Work)								<ul> <li>indigenous fish</li> <li>Carp polyculture in food plain of canal etc. &amp; other suitable activities</li> </ul>	potential of culturing fish successfully.
5.	Tie Embankment FCDI Project	4000	Chittagong	Lakshmipur	Lakshmipur Sadar	51.07	80.00	2700	Do	Total canal= 906.0 ha; Cage culture unit=361 nos; Fish Sanctuary= 01 (proposed=02 ) nos.
5.	Polder no. 66/3	2280	Chittagong	Cox's Bazar	Cox's Bazar Sadar	30.00	65.00	510	Do	-
7.	Karnafuli Irrigation (Ichhamati Unit) Project	2280	Chittagong	Chittagong	Rangunia	195.00	220.00	3500	Community based Management & other suitable activities	-
8.	Sarigoyain FCDI Project	5385	Sylhet	Sylhet	Jaintapur	35.00	50.00	1500	1.Fish Act 2.Fish Fingerling	
₹.	Chari- Shameshpur	9844	Rajshahi	Rajshahi	Chapai Nawabganj	26.85	1166. 00	2500	Kata Fishery,	Suitable for: Beel Nursery,

SL	Name of the	Area of	Division	District	Upazila	Total Are	ea (ha)	No. of	Fisheries	Overall
No.	Polder	the Polder (Ha)				Dry Season	Rainy Season	beneficia ries	Management Pattern in Place	Remarks
1	2	3	4	5	6	7	8	9	10	11
	FCD Sub- Project			Chapai Nawabganj	Sadar Godagari				Pen culture & other suitable activities	Fingerling release. Pen Culture establishment
10.	Tangaria - Gobindapur Sub-Project (FCDI)	5000	Rangpur	Thakurgaon	Haripur.	02.00	05.00	140	Beel nursery and fish culture & other suitable activities	Suitable for beel nursery and fish fry release
11.	Dhepa- Punarbhaba Water Management Project	7200	Rangpur	Dinajpur	Birol, Kaharole	281.80	1017.80	11200	Fish sanctuary was established by DoF beside this capture fishery by local fishers is going on all the year round. any suitable activities can be implemented	Suitable for a permanent fish sanctuary establishment and community based fisheries management and training.
12.	Ahamednagar Low Lift Pump Irrigation	1015	Rangpur	Panchagarh	Panchagarh sadar	150.00	245.00	193	Open water management & other suitable	Suitable for fish sanctuary and
13.	Telepara Low Lift Pump Irrigation Scheme (Electrical Block -3)	1012	Rangpur	Panchagarh	Panchagarh sadar Debiganj				activities	fish fry release

Project Implementation Manual

SL	Name of the	Area of	Division	District	Upazila	Total Are	ea (ha)	No. of	Fisheries	Overall
No	Polder	the Polder				Dry Season	Rainy	beneficia	0	Remarks
		(Ha)				5	Season	ries	Pattern in Place	
1	2	3	4	5	6	7	8	9	10	11
14.	Rehabilitation of Polder No. 55/1	10325	Barisal	Patuakhali	Galachipa	5300.00	7800.00	6000	Crab, Carp, Pangus, Tilapia culture and Community Based Fisheries Management & other suitable activities	Productive area for fish culture (Galachipa Pourashava, Galachipa Union, Panpatti Union, Ratandi- Taltali Union and Dakua Union)
15.	Muradia- Kalagachia Sub- project & Polder No. 55/2e	2100	Barisal	Patuakhali	Patuakhali Sadar, Bauphal & Dumki	4915.00	5890.00		Carp – polyculture and community Based Fisheries Management & other suitable activities	Productive area for fish culture Laukhathi & Muradia union under the Patuakhali Sadar & Dumki Upazila
16.	Ragunathpur FCD Project	3500	Barisal	Barisal	Bakerganj	6500.00	8800.00	7000	Carp – polyculture and community Based Fisheries Management &	Productive area for fish culture

SL	Name of the	Area of	Division	District	Upazila	Total Are	ea (ha)	No. of	Fisheries	Overall
No.	Polder	the Polder (Ha)				Dry Season	Rainy Season	beneficia ries	Management Pattern in Place	Remarks
1	2	3	4	5	6	7	8	9	10	11
									other suitable activities	
17.	Penakhali Beribadh/ suitable place	100	Barisal	Pirojpur	Najirpur	30.00	100.00	1500	Carp – polyculture and community Based Fisheries Management & other suitable activities	Productive area for fish culture
18.	Chitra-Bhairab- Afra Sub- Project (narail part)	1500	Khulna	Narail	Narail Sadar, Kalia	1097.00	1290.00	7700	Galda-carp mixed culture after paddy & other suitable activities	Do
19.	Chitra-Bhairab- Afra Sub- Project (jasshore part)	14200	Khulna	Jassore, Narail	Narail Sadar, Kalia, Jessore Sadar Bagarpara	709.00	1004.85	5340	Galda-carp mixed culture after paddy, Fish culture & other suitable activities	Do
20.	Sonamukhi banmandar and other beel drainage sub- project	9070	Khulna	Jassore	Jhikargachh a, Sharsha,	705.00	1000.00	5300	Galda-carp mixed culture after paddy & other suitable activities	Do
	Total	126253 ha	Division: 8	Districts: 18	Upazila: 29	20795.72	3809.95	168093		

#### 6.3 post-harvest management and strengthening of Value Chain

To maximize the benefit from the improved fish production, better postharvest management and strengthening value chain are essential factors. Several interventions will be designed and executed in the subproject areas for post-harvest management and value chain development. These include establishment of mini fish processing center; insulated fish transport vehicles; linkage with online fish markets; mobile fish marketing; live fish marketing; and promotion of value-added fish products. Throughout supply chain energy efficient green energy technology will be considered to ensure environmentally friendly operation with zero waste emission.

#### 6.3.1 Key criteria of post-harvest management interventions

Following three criteria will be considered post-harvest management interventions

- (i) Relatively more concentrated fish production areas
- (ii) Access to road/rail connectivity to market.
- (iii) Resources availability and sustainability. (Availability of electricity, fresh water supply land availability etc;)

The Producer organization will be formed with representatives of various cluster or groups. The Post-harvest management Infrastructure will be operated and managed by POs with accredited/certified operational guidelines. The intervention will be targeted to group of Beneficiaries e.g., WMO, WMG, CBO, and POs. Post-harvest service center will be strategically located to ensure the maximum benefit to the farmers.

#### 6.4 Technology Demonstration

The purposes of technology demonstration are technology validation, scaling-up and transfer. The process includes: appropriate technology identification, training on the selected technology, setup of demonstrations, organize field-days, adoption & diffusion of demonstrated technology, etc. In CSAWMP-DoF, total 1950 demonstrations will be demonstrated and transferred to the CBO farmers and adopted by the non-CBO farmers. Among them, more prominent technologies are: Monosex Tilapia culture, Carp polyculture, Carp-Golda mixed culture, cage culture, pen culture, Crab Culture, Seabass culture, Golda Carp poly culture etc, CSAWMP will provide adequate extension and technical advisory support and training for new CBOs for participatory demonstration and adoption of proven low-cost, climate resilient aquaculture productivity-enhancing and postharvest loss-reducing technologies for rapid dissemination to the farmers of new upazilas. More emphasis would be given to demonstrate the climate-smart good aquaculture practices (GAP), stock enhancement of indigenous species in line with national initiatives for nutritional security, and gender sensitive technologies for scaling-up and validation in the subproject areas. CSAWMP will liaise with Bank-funded other projects to identify relevant technologies and assess their scalability and also closely work with BFRI to adopt latest available suitable technologies. CSAWMP will give a particular attention fish seed rearing, fish feed preparation for aquaculture; to address some elements of the gender dimension and contribute to improving women empowerment and nutritional security at household level.

Sl. No	Name Technology	No of Upazila	No of demonstration farm	Total demo per year	total numb er for 5 years	Fixed Cost for 1 years	Fixed Cost for 5 years	Operation cost for one year	Operation cost for 5 year (One demo)	Total Cost for one demo	Total Cost for All demo (lac BDT)
1	2	3	4	5	6	7	8	9	10	11	12
1	Mono-sex Tilapia culture	29	58	2	290	5845.00	5845.00	84,875.00	424375.00	430220.00	249.53
2	Pangas culture	29	87	3	435	9275.00	9275.00	106,725.00	533625.00	542900.00	472.32
3	Galda/Bagda-carp polyculture	29	15	-	75	12595.00	12595.00	152,955.00	764775.00	777370.00	116.61
3	Seabass/Golda/Ba gda-carp polyculture	29	10	-	50	1600.00	1600.00	153,255.00	766275.00	767875.00	76.79
4	Koi fish culture	29	29	1	145	1600.00	1600.00	112,500.00	562500.00	564100.00	163.59
5	Carp Polyculture	29	87	3	435	1600.00	1600.00	42,005.00	210025.00	211625.00	184.11
6	Magur/shing fish culture	29	29	1	145	1600.00	1600.00	89,255.00	446275.00	447875.00	129.88
7	Pen culture	29	15	- /	75	180050.0 0	180050.0 0	73,250.00	366250.00	546300.00	81.95
8	Cage culture	29	29		145	107700.0 0	107700.0 0	242,700.00	1213500.0 0	1321200.0 0	383.15
9	Gulsa-Carp poly culture	29	29	1.00	145	1600.00	1600.00	124,655.00	623275.00	624875.00	181.21
10	Crab Culture	29	2	-	10	37000.00	37000.00	40,500.00	202500.00	239500.00	23.95
	Total		390	-	1950	360465.0	360,465.0	1,222,675.0	6113375.0	6473840.0	2,075.0
						0	0	0	0	0	9

## Table 16: The Summery of Technology Demonstration

#### 6.4.1 Process for Conducting Technology Demonstration

The process for technology identification, implementation and support to demonstration will be as follows:

- 1) CBO farmers will identify the technology to be demonstrated in close consultation with extension officers within the suggested framework of PIUs, the identified technology will be included in the CBO micro plan.
- 2) Number of demonstrations against each CBO will be based on the area of Sub Project, availability of water resources and skill and capacity of the farmers in the respective area of production.
- 3) If one specific technology is demonstrated in more than one location, it will count as two demonstrations with one technology.
- 4) All the technologies will be demonstrated in the farmers' fields.
- 5) Project will provide all input costs for all demonstrations under CSAWMP, while the farmers will provide the labors and land preparation where necessary.
- 6) The demonstration farmers will encourage other farmers for adoption and use of demonstrated technology.
- 7) The demonstration farmers will assist LEAF in organizing field days, exchange visit or any other activities related to demonstration and technology transfer in the areas.
- 8) One to three field days against each demonstration, as a group extension event will be conducted at the demonstration site during key times, like planting, maximum growth stage, harvesting, etc.
- 9) Demonstration plots should have well written visible colored signboards.

#### 6.4.2 Criteria for Selection of Demonstration Farmers

Demo-farmers will be selected/nominated by the CBOs. However, important considerations for the selection of demo-farmers would be: (i) demo-farmers should be progressive, permanent resident and well-known in the locality, (ii) be able to read and write Bangla, (iii) should have cultivable land, pond, etc and willing to make those available for demonstration setup, (iv) have relevant experience, leadership quality and motivating capacity, (v) interested in adoption of new/improved technologies and commercial agriculture, (vi) committed to assist in spill over technologies to the non-CBO farmers, (vii) agree to include 35% women farmers and focus on small and marginal farmers, (viii) fully agree with demo terms and conditions under the project.

#### 6.4.3 Criteria for Selection of Demonstration Plots

Demo-plots will be selected on the basis of following important considerations: (i) demonstration sites must be visible as well as well accessible place for farmers and general public- road side plots are preferable, (ii) demo-plot/pond/farm should be high land- free of natural flooding and usable round the year, (iii) size and shape of plot should be suitable to a particular demo (iv) demo plot owner should very cooperative.

#### 6.4.4 Scalable Technologies for Extension Support

The objectives of sub component 1.1, 1.2, 2.1, and 3,.3 of section 1.4 chapter 1 are to increase productivity, quality and output through the enhanced transfer of improved technologies, as well as better market access, service delivery of crops, fisheries. CSAWMP will provide financing supports to promote climate resilient innovative aquaculture technologies and fisheries management approach, reduce post-harvest losses, promote market linkage; as well as, newly emerging technologies in order to address the food & nutritional security, health hazards (pesticide risk reduction) as well as adaptation to climate change.

SL	Features of	Fisheries
no.	technology	
1	Productivity	GIFT mono culture
	enhancing	Carp polyculture
	technologies	Carp-Tilapia mixed culture
	C	• Pangas monoculture
		Carp-pangas mixed culture
		• Koi Polyculture
		• Freshwater prawn culture
		• Cage culture: (a) GIFT
		(b) Pangus
		• Pen culture (a) polyculture of carp and GIFT (b) Pangus
		• Application of formulated pellet fish feed prepared using locally
		available ingredients suitable to different production models.
2	Post-harvest loss	Low-cost insulation/cold storage facilities
	reducing	Promotion of Styrofoam boxes for transportation
	technologies	<ul> <li>Establishment of Mini Fish Processing Centre</li> </ul>
		<ul> <li>Improved transport equipment for live fish</li> </ul>
		Fish drying Technology demonstration.
3	Agro-food	• Depuration to remove off flavor of <i>pangas</i> , tilapias,
	processing	• Dressed fish ( <i>koi</i> , tilapia, major carps) packaging and marketing
		• Production of fish fillet, fish balls, fish nuggets
4	Others (e.g.,	Brackish water Prawn culture for salinity prone areas
	adaptation	Crab Culture, SeaBass culture
	to climate	Short-cycle aquaculture for draught/flood prone areas
	change)	Beel nursery technology development and management
		Establishment and maintenance of Sanctuary

Table 17: Tecl	nnologies res	adily scalable	under CS	$\Delta W MP_D OF$
	mologics ice	iuny scalable	under CDI	

#### 6.4.5 Field-Days

Several events of field days will be organized each year by PIUs on their respective demonstration activities as the tools for technology publicity and transfer to the end users. Generally, field days are organized on the harvesting days as the larger show for demonstrating the outputs of technology-based production system. In addition, the CBO farmers, local non-CBO farmers participate in the event. A field day focuses on the cultivation system, management of inputs, process adopted during the production periods and finally systematic harvesting including postharvest management. The events are good sources of aquaculture information dissemination, as organizers invite local elites, public representatives and guest speakers to talk on a range of topics. Following guidelines should be followed in organizing field days:

(i) Field days will be organized on the basis of technology demonstrated at the upazila

level,

- (i) Preferably two to three field days in the phases of the demonstrations with participation of different stakeholders (CBO and non- CBO farmers) including departmental higher officials and local public representative will be organized,
- (ii) During the field days the technologies demonstrated must be displayed and briefed to the participants in order to scaling-up technology,
- (i) Field days should have satisfactory level of participation of 80 to 100 farmers from the locality, etc.

#### 6.4.6 Study/Exposure Visit

Study or exposure visits expedite technology transfer and diffusion process. Study or exposure visits are to be organized as the practical and effective tool to foster learning and knowledge sharing events between the CBO farmers of two different working locations and technology generating centers. Generally, more sustainable and innovative CBOs and/or CBO farmers of one area had the scope to visit the area/s having significant result-based outputs of production for educating and sharing of some sound practices to adopt. Exposure or exchange visits will benefit CBO farmers through an open exchange of ideas, knowledge, and improved practices. It will also build good network and coordination among the CBO farmers or groups. Exposure visits will be arranged in research organizations, universities, established Government/private farms, farmers' innovated sites to see improved technologies and practices to gain/share knowledge.

#### 6.5 Establishment of Community Based Fisheries Management (CBFM) in beels.

The beels are known for its richness in biodiversity and each water body differed in physical, hydrological and biological conditions and thereby significantly differed in the nature of ecosystem. The carrying capacity of the water bodies also varied from each other. The modern fisheries management tool is to assess the carrying capacity and the nature of the ecosystem first and then develop a production model based on the specific difference or uniqueness of the water

body. The community living around this ecosystem heavily depend on these fisheries resources. Professionally managed beel fisheries is a successful commercial enterprise which could provide a rich dividend to the dependent communities. Modern interventions envisaged can be classified into three main parts including technical, administrative, and social/cultural aspects.

As several families depended on beel resources, community-based fisheries management (CBFM) is suitable for a successful operation. Any interventions implemented will be transparent showing full justification for the investment. The steps before implementation of management measures are :(I) relevant data collection to fully understand the beel profile; (II) preparation of detailed project report; (III) preparation of comprehensive implementation plan and PD approval; and (IV) implementation of the activities. The implementations will follow government guidelines and include modern technical and management tools and bring more transparency in the procedure as it is a public resource with several families dependent on it. Ecosystem based production model will be implemented.

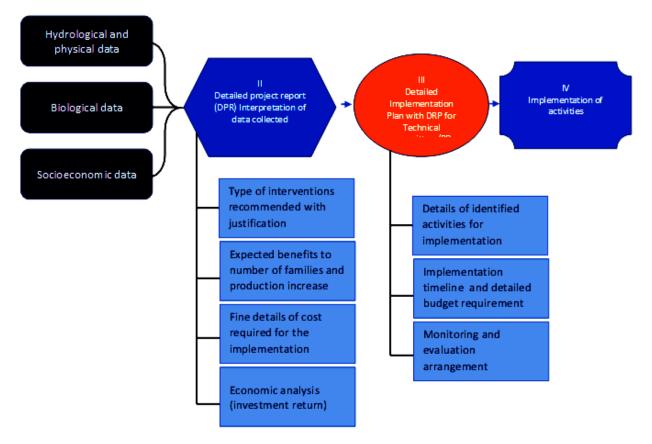


Fig 3: Steps before implementation of management measures

Five interventions for *beel* management will be considered depending on the suitability of the water body in sequential manner.

(i) CBFM including Preparation and Implementation of Fishing Code

84

- (ii) Habitat Improvement
- (iii) Establishment of Beel Nursery
- (iv) Stocking of indigenous species
- (v) Establishment of Fish Sanctuaries

The selection process and methods are described below.

#### 6.5.1 Selection criteria of reservoirs for establishment of Beel Nurseries:

From the project, beel nursery will be established near the bank side of the potential beels of project command areas. In the nursery, fingerlings will be raised up and when the water level of the beel grown up during the monsoon the nursery will be inundated and the fish fingerlings will spontaneously release into the whole beel. The beel will be selected according to the vulnerability of the fishers and suitability of the beel. The beel nursery activities will be maintained by CBO/WMO group. The detail guidelines for establishment of Beel Nursery are as bellow

- (1) The nursery reservoir should be naturally suitable for fish breeding and conservation of biodiversity or connected to any other suitable reservoir.
- (2) Ponds or nurseries flooded by monsoon water, at the ditch or nursery where native carp fish can be reared for at least 60 (sixty) days after stocking and then finger-sized fingerlings are carried out by monsoon water to the entire beel or the surrounding floodplain through connection canals would be selected.
- (3) Government/semi government/private or privately owned etc. all types of reservoirs can be selected during the selection of reservoirs.
- (4) The reservoir should be identified at a location suitable for fingerling transport, transportation and other subsidiary facilities.
- (5) In the case of selection of private/privately owned reservoirs, the "Upazila Beel Nursery Program Implementation Committee" should execute a non-judicial stamp agreement with the said private organization/person/group to ensure that the fingerlings produced from the fish fries are not used for the benefit of private individuals. The terms and conditions of the MoU will be determined by the respective "Upazila Beel Nursery Program Implementation Committee" in accordance with the local conditions.

#### 6.5.2 Construction and Preparation of Beel Nursery:

- (1) To make the selected reservoir suitable for beel nurseries, excavation of the bottom of the beel, construction/renovation of banks and necessary earthworks to make it suitable for fry stock should be completed.
- (2) The connection canals associated with the selected reservoir through which the produced fingerlings will spread to the floodplain or other waterbodies should be renovated.
- (3) In order to make the selected reservoir suitable for nursery, the nursery should be prepared by applying necessary fertilizers and other production materials to improve its bottom for fry stocking.

#### 6.5.3 Species to be Stocked:

**Project Implementation Manual** 

1.5 kg/ha fry of Carp should be stocked in selected reservoirs for beel nursery. The species ratio will be: Katla 20%, Rui 50% and Mrigel/Kalbaus/Gania 30%.

#### 6.5.4. Production Target:

10-15 cm sized 80,000 Eighty thousand fingerlings

#### 6.5.5 Location and Time of Fingerlings stocking:

During the dry season, waterbodies or parts of waterbodies where the bottom of the waterbodies have water at a depth suitable for nursery or where the water can be retained at the edge of the waterbodies and not washed away early; can be selected for beel nursery.

#### 6.5.6. Collecting/Purchasing and Handling of Fingerlings:

"Beel Nursery Program Implementation Committee" may take necessary measures for purchase/collection of fingerlings from Government fish seed multiplication farms where applicable. No tender or quotation shall be required for procurement and purchase of fingerlings from Government fish seed production farms. In this case the price fixed in the government farm production plan will be applicable.

#### 6.5.7 Beel Nursery Program Implementation Committee:

"Beel Nursery Program Implementation Committee" has been formed in the concerned Upazila for the implementation of Beel Nursery Program as follows:

#### Adviser: concerned Upazila Parishad Chairman

(1)	Upazila Nirbahi Officer	President
(2)	Upazila Agriculture Officer	Member
(3)	Upazila Livestock Officer	Member
(4)	Farm Manager, Fish Seed Multiplication Farm (if any)	Member
(5)	<sup>4</sup> Upazila Youth Development Officer	Member
(6)	Respective UP Chairman of the beel nursery area	Member
(7)	Representative of selected waterbody associations/	Member
	groups/beneficiaries (Upazila Fisheries Officer will	
	nominate representative in discussion with Upazila	
	Nirbahi Officer)	
(8)	Concerned Senior Upazila / Upazila Fisheries Officer.	Member-Secretary

#### 6.5.8 Scope of Beel Nursery Program Implementation Committee:

- (1) The committee will select suitable wetlands for stocking of fish fry.
- (2) The Committee shall take necessary steps for the implementation of water reservoir renovation, procurement of goods and other activities as per the rules within the allotted funds.
- (3) Will decide quantity of fish fry and goods need to be purchased as per the instructions.
- (4) Shall ensure that healthy and strong fry are supplied as per the demand and conditions by the supplier individual/farm.
- (5) Will arrange the stocking of fish fries in the respective waterbodies within the specified date and time.
- (6) Will perform such other duties as may be required by the rules for the implementation of the beel nursery program.
- (7) Take necessary measures to implement the Fisheries Conservation Act with the cooperation of the local administration for the conservation and prevention of fish fingerlings.
- (8) This committee will inform the concerned Upazila Fisheries Resources Conservation and Development Committee from time to time about the progress of beel nursery.

#### 6.5.9 Fish Fingerlings Quantity Assessment Committee:

A 'Fish Fingerlings Quantity Assessment Committee' will be formed to determine the number/quantity of fish fingerlings produced after the stocking of fish fry.

(1)	Senior Upazila Fisheries Officer / Upazila Fisheries Officer	Convener
(2)	Officer nominated by Upazila Chairman	Member
(3)	Farm Manager, Fish Seed Multiplication Farm	Member
	(Unless Farm Manager Upazila Statistics Officer)	
(4)	President/Editor/Representative of Private Hatchery/ Nursery	Member
	Owners Association	
	(If there is no association)	
(5-6)	Beneficiary representative of concerned Beel area- 2 persons	Member
(7)	Concerned UP Chairman/ his nominated representative of Beel	Member
	Nursery Area	

Committee can co-opt maximum 2 members if necessary.

#### 6.5.10 Scope of work of the "Fish Fingerlings Quantity Assessment Committee"

- 1) Fish Fingerlings Quantity Assessment Committee will perform all the responsibilities of determining the number/quantity of fish fingerlings after the production of juveniles from fry.
- 2) Member Secretary (Senior/Upazila Fisheries Officer) on behalf of Beel Nursery Program Implementation Committee will inform the Fish Fingerlings Quantity Assessment Committee after the production of fingerlings.

- 3) The committee will take measures to assess the amount of fish fingerlings as soon as possible after being informed.
- 4) Committee will verify/assess the fish fingerlings produced in numbers from the stocked fish fry as per target when the size becomes 10-15 cm.
- 5) After assessing the size and quantity of fingerlings, a written report on this will be provided to the Upazila Beel Nursery Program Implementation Committee.
- 6) The Committee shall give a clear opinion in the said report on the usefulness of release of fish fingerlings.
- 7) In the event of any unexpected/natural calamity, the committee will take necessary measures on an urgent basis.
- 8) The waterbody/monsoon inundated paddy field/floodplain where the fish fingerlings will be released as beel nurseries for rearing in natural environment, committee shall keep the account of the number of beneficiaries and the total number of released fish fingerlings and send the copy of the saved report to the District Fisheries Officer and Divisional Deputy Director.

#### 6.5.11 Supervision of Beel Nursery activities

The concerned Deputy Director of Fisheries and District Fisheries Officers, will overall look after and supervise the beel nursery activities of respective divisions and districts. Whether selection of water bodies / wetlands / monsoon inundated paddy fields / floodplains for fingerling release is suitable or not, ensure the implementation of fingerling release activities.

#### 6.5.12 Monitoring and Evaluation of Beel Nursery Activities

The overall monitoring and evaluation of beel nursery activities will be carried out through a committee. Committee will collect information on: Beel nursery setting up activities are/were properly completed as per the instructions, Impact of beel nurseries/fishes in selected waterbodies/wetlands/monsoon flooded paddy fields/floodplain areas for poverty alleviation as well as public welfare, actual fishermen/ beneficiaries adjacent to wetlands/monsoon flooded paddy fields/floodplains at field level, including the assessment of the rationale/problems and obstacles of continuing such Beel nursery activities for the socio-economic development of the community and the increase of additional fish production in the country. The Committee will be formed as stated below:

(1)	Divisional Deputy Director of Fisheries of the	President
	concerned department	
(2)	An officer nominated by the Deputy Commissioner of the	Member
	concerned district	

- (3) Deputy Director Agriculture Extension
   (4) Executive Excision of Development Member
- (4) Executive Engineer of Bangladesh water Development Member Board
- (5) Concerned District Fisheries Officer Member-Secretary

87

#### 6.5.13 Beel Nursery Program

After the completion of beel nursery establishment activities, the relevant Senior Upazila/Upazila Fisheries Officer will send the information regarding the activities carried out to the project Director, Climate Smart Agriculture and water management Project (DoF Part) through the appropriate authorities in the table prescribed by the Fisheries Department.

#### Table 18: Estimated cost of Beel Nursery Re-excavation/per acre

(Target to produce 80,000 fry per acre- above 2 inches size)

In case of one bill nursery 1250 cubic meters of soil per acre can be re-excavated.						
Estimated cost for Per cubic meter Soil Re-excavation is=	212.00	Taka				
Estimated cost for 1 beel nursery Soil Re-excavation is=	2.65	Lac Taka				
Estimated cost for 145 beel nursery Soil Re-excavation is=	384.25	Lac Taka				

SL No.	Items details	Amount	Unit Price (Tk)	Beneficiary Cost (Tk)	Project Cost (Tk)	Total Cost (Tk)
1	Waterbody preparation					
	Lease	1	30000.00	10000.00	17000.00	27000.00
	Drainage / Rotenone (kg)	LS	7000.00	1000.00	6413.00	7413.00
	Weed removal and embankment repair/fencing	LS	LS	5750.00	5000.00	10750.00
	Liming (Kg)	100	20.00	1000.00	1000.00	2000.00
2	Fertilizer			·		
	Urea (Kg) 3 times	50.00	25.00	250.00	1000.00	1250.00
	TSP (kg) 3 times	30.00	50.00	500.00	1000.00	1500.00
	Dipterex (ML)	1000.00	1.00	500.00	500.00	1000.00
	Fish Fry (Carp) (Kg)	1.50	3000.00	0.00	4500.00	4500.00
3	Feed			·		
	Nursery Feed (Kg)	100.00	100.00	4000.00	6000.00	10000.00
	Pillete Feed (Kg)	1200.00	60.00	22000.00	50000.00	72000.00
	Others (Labour, fishing, signboard etc)	LS	LS	10000.00	10000.00	20000.00
Total				55000.00	102413.00	157413.00

#### Table 19: Estimated operational cost of Beel Nursery/per acre

#### 6.6 Establishment of fish sanctuaries & maintenance

Fish production in floodplain area is found highly profitable. The number of fish sanctuaries should be increased during dry season to get more profit from natural fish species. To stop the degradation of aquatic biodiversity specially species diversity of fish and other aquatic species in open water, a set of technical interventions like establishment of fish sanctuaries, fish habitat restoration has been undertaken during the last few years. Establishment of aquatic sanctuary is one of the effective tools for conserving fish stock, protecting biodiversity and increasing fish production. After setting up of fish sanctuaries, it is very important to carry out proper maintenance, maintenance and management of the sanctuaries. Fish sanctuaries will be guarded and maintained by CBO/WMO group members.

Upazila Scheme Management Committee (USMC) will form a CBO-Community Based Organization in collaboration with the local people's representatives with the beneficiaries of the water bodies in which the sanctuary will be set up. In this case, at least 80% of the beneficiary fishermen /fishermen in all the communities dependent on the sanctuary will be represented and the social group will work for the sustainability and maintenance of the fishery sanctuary with all other people concerned with the water bodies.

A committee will be constituted by the community-based group or community-based organization for the proper maintenance and management of the fish sanctuary. With the cooperation / advice of the concerned Senior Upazila Fisheries Officer / Upazila Fisheries Officer, a committee consisting of 20 members including a minimum of 25% women members will be formed by the community-based organization. The community-based organization (CBO) will arrange for the savings of the members in collaboration with the Senior Upazila Fisheries Officer / Upazila Fisheries Officer. In this case a special fund (savings account) will be formed and the amount of subscription of the members will be determined. The collected contributions will be deposited in a special fund and will continue as a revolving fund. After the completion of the project, the community-based organization will continue the activities of maintenance and management of the sanctuary through a special fund (savings account) or revolving fund.

After completion of the project Fish sanctuaries will be managed by a community-based organization. The project implementation guideline includes maintenance and the fish-sanctuary maintenance by the community-based organization. During the project period a total of 49 Fish sanctuaries will be Established. The detailed guideline for establishment and maintenance of Statuary are as below

#### 6.6.1 Aims and objectives of establishing fish sanctuaries

- 4.1 Conservation and extension of fish breeding and migration areas in a waterbody or a specific part of the waterbody with the aim of free reproduction of native fish species and protection of endangered fish species as well as increase of fish production;
- 4.2 To continue the sustainable production of fish in open waterbodies and to ensure nonthreatening habitat for fish with the aim of conservation, development and protection of aquatic biodiversity;
- 4.3 To regulate the harvesting of fish in particular size and species with a view to ensuring reproduction through unhampered breeding of fish;
- 4.4 Conservation of species and genetic diversity of fish;

- 4.5 Restoration of ecosystem by generating favourable aquatic environment and ecology;
- 4.6 Creating opportunities for conservation and management of fisheries through community-based management and improving the livelihood of the desired population;
- 4.7 Enhancement of natural fish stocks and resources.

Keeping the mentioned goals and objectives in cognizance, for the effective implementation of this program, with the participation of the sanctuary management committee consisting of the fishermen and the folks of the coastal and adjacent areas of the waterbody, the fishery management plan of the sanctuary should be formulated, the management activities should be conducted, monitored, evaluated and the future action plan should be determined.

#### 6.6.2 Selection of Fish Sanctuary Site:

In selecting the site of the fish sanctuary, floodplains, beels, rivers, dead rivers, haors, baors, river bows or the deepest parts of other waterbodies or any other place suitable for spawning so that a variety of reproductive fish species roam and use as breeding grounds, have relatively low flows, do not obstruct navigation and agricultural irrigation, should be selected for the establishment of sanctuaries. Areas of tributaries/flowing rivers identified as breeding grounds for various species of fish may be selected for sanctuary declaration. In order to establish a fish sanctuary, a plan must be taken after spot assessment and implementation measures should be taken accordingly.

- a. The location of the sanctuary should be selected from the learnings of past experience of local fishermen and concerned communities. In this case, the place and boundaries of Jalmahal and Sanctuary should be marked precisely. Sanctuaries must set up in lease-free government Khas waterbodies. At the time of lease of Jalmahal(s), the portion of the fish sanctuary should be reserved free from lease. At least 5% of the total water area of the leased waterbodies must be reserved for fish sanctuaries, this area could be increased on the recommendation of the Upazila Monitoring Committee.
- b. The deepest part of the reservoir where the current is relatively low and used as a breeding ground for various species of reproductive fish (Parent Fish/Brood Fish), which is used as a nursery for Spawn/Fry/Fingerling or Juvenile, either those places may be identified and selected for conservation for the whole year or at a particular season or time of the year;

- c. In case of rivers, separate sanctuaries may be established in each of the different sections of the river, particularly in streams/flowing river areas known as breeding grounds for various species of fish- such places may be selected as fish sanctuaries;
- d. Different species of fishes have different habitats, reproductive behavior, movement and migration and their behavioral characteristics. Considering all these issues, different types of sanctuaries can be established in floodplains, beels, rivers, dead rivers, haors, baors, river bends, small waterbodies, etc. depending on the species diversities;
- e. The site of sanctuary should be selected considering the navigation route or any ferry in the reservoir, the source of water pollution and other related environmental conditions;
- f. Attention should be paid to the potential harmful effects of fish sanctuaries on waterbodies such as siltation, obstruction to navigation and agricultural irrigation, and to the nature and biodiversity of waterbodies;
- g. Fisheries sanctuaries should preferably be close to the population or locality concerned so as to be easily monitored and easily accessible;
- h. In case of selection of site No Objection Certificate (NOC) should be obtained from the competent authority/ local administration of the concerned waterbody for establishing fish sanctuary. The validity of NOC should be at least 5 years. Local administration will issue NOC for effective management of both leased and lease-free waterbodies.
- i. Feasibility study of the respective waterbody should be done in selecting the location of the sanctuary. In this case, a preliminary survey (Baseline Survey) of the proposed shelter should be conducted.

#### 6.6.3 Determining the area of fish sanctuary

The area of the fish sanctuary should be determined based on the size of the waterbody. Sanctuary generally constructed in inland reservoirs the water area may be set at 0.50 to 1.00 hectares. In large reservoirs, 5-10% of the existing water area may be selected for fish sanctuary. During the dry season, 40-50% of the area of the respective waterbody can be reserved as sanctuary.

- a. The size of the sanctuary established in different waterbodies can be increased or decreased depending on the aptness of the waterbody, the diversity of fish species and their life cycle, situation, the characteristics of the waterbody and the availability of adequate budget;
- b. While determining the size of the sanctuary, the livelihood of the fishermen in the reservoir area should be taken into consideration;
- c. The size and boundaries of the fish sanctuary should be well defined. The boundaries of the established sanctuaries shall be declared as protected areas by placing red flags on thick bamboo poles and the boundaries shall be clearly marked and the respective waterbodies

may be demarcated with the required number of RCC pillars of the prescribed design; If the habitat is large in size and the habitat is long lasting, it will have a positive role in increasing fish production and conserving aquatic biodiversity;

- d. According to the nature and usefulness of the waterbody, sanctuary may be permanent, long-term, medium-term (annual) or short-term (seasonal);
- e. Additional 20-30% area of the established sanctuary shall be marked as 'neutral space' or 'buffer zone' and visually marked with yellow flags. Fishing will be prohibited 100-200 meters upstream and downstream of the sanctuary established in rivers or closed canals;
- f. If necessary, multiple sanctuaries can be established in relatively large reservoirs. For multiple sanctuaries in the same waterbody, the existing state of affairs should be reviewed to specify which of the fish sanctuaries will be permanent, which will be annual and which will be seasonal. Long-term sanctuaries are more effective than temporary or seasonal sanctuaries. However, seasonal sanctuaries can be established during the breeding season of native small fishes in floodplains or estuaries.

#### 6.6.4 Expediency of waterbodies

- i. In case of establishment of fish sanctuaries, nature of reservoir, depth of sanctuary, fish species diversity and life pattern, waterbody characteristics etc. should be considered;
- ii. Whether the proposed waterbody has been identified as a fish sanctuary in the past, is being used as a breeding and spawning ground for various species of fish, whether water is retained during the dry season, etc. and
- iii. Whether the proposed sanctuary is close to the concerned community or locality, easily accessible and reachable etc. should be considered.

#### 6.6.5 Construction/Establishment of Physical Infrastructure of Fisheries Sanctuary

- i. Establishment of sanctuaries by imposing restrictions and controls on fishing only in closed area and closed season should be considered on a priority basis;
- ii. Based on the nature of the Jalmahal, a brush pile should be set up using bamboo, bamboo branches, tree branches, tree bark, wood, rope etc. in a suitable manner. However, in this case, Siltation/Silt Sedimentation should be taken into consideration so that the reservoir is not filled up;
- iii. In the establishment/construction of fish sanctuaries, permanent (concrete) construction materials should be avoided and locally available, durable and effective materials should be used, up-to-date techniques and activities should be coordinated to make the sanctuaries sustainable;

- iv. Sanctuary construction materials must be bio degradable and all dried out materials must be used;
- v. Establishment of "No Fishing Zone" concept by demarcating sanctuary areas in flowing rivers to be placed;
- vi. To create public awareness, signboards regarding fish sanctuaries should be placed at spectacular places on the bank of sanctuaries/Jalmahal. Funds should be allocated for this work in the budget;
- vii. Necessary excavations may be carried out to ensure adequate water supply;
- viii. Use of water for irrigation may be stopped if necessary;
- ix. The construction work of sanctuary should be started and completed in dry season.

#### 6.6.6 Fisheries Sanctuary Management

- i. Harvesting of fish from fisheries sanctuaries shall be completely prohibited, but harvesting of fish outside the buffer zone may be allowed in a controlled manner. Monster/predatory fish can be caught with large seine nets at three-year intervals. In this case, the committee can provide incentives to the beneficiaries as they stop fishing from the sanctuaries established in the waterbodies of the area at certain intervals and to encourage them to preserve the sanctuaries. The remaining brood or harvestable fish can be harvested by keeping the necessary brood to ensure the required recruitment of fish in the reservoir. Local management committee can start sports fishing/recreational fisheries in the case of sanctuary management;
- During water availability crisis or in dry season, fishing should be stopped even in seasonal shelters. Fish in the sanctuary should be preserved by providing irrigation water if necessary;
- iii. In case of accumulation of silt/filling at the bottom of the sanctuary or due to other reasons, excavation/re-excavation shall be done considering the condition of the reservoir.

#### 6.6.7 Release of small indigenous endangered fish fingerlings

Breeding of native endangered fish species through stocking/maintenance of brood or large fingerling should be undertaken, in preparation for establishment of sanctuaries. Funding should be provided for the release of endangered small indigenous fish fingerlings. The fingerlings or brood must be produced from brood fishes collected from local waterbodies to maintain qualitative genetic purity.

#### 6.6.8 Repair and maintenance

Every year Funds will be provided from the Project to maintenance of the sanctuary during the establishment of the shelter, some money (20-30%) from the sale of fish should be taken out which can be used as a revolving fund for the sanctuary management; For the management of shelters, funds should be kept in the repair and maintenance sector.

#### 6.6.9 Security of Sanctuary

- a. Attaching flash lights to floating buoys for remote viewing of sanctuary boundaries at night;
- b. A new clause should be added in the 'Fisheries Conservation Act, 1950', related to "prohibition of fishing from fish sanctuaries" and provision of punishment should be made if necessary.
- c. For the Security of the Sanctuary a guard among the CBO members with pay of Tk 2000 per month will be engaged for duration of six month/year.

#### 6.6.10 Conservation of Environment

- i. The materials used for setting up the sanctuary must be environmentally friendly, no activities or materials can be used in the setting up of the sanctuary which will be harmful to the overall environment;
- ii. Special attention should be paid to the preservation of aquatic plants, animals, birds etc. in the sanctuary area.

# 6.6.11 Community Based Organizations and Committees for Sanctuary Management

In each waterbody associated to the sanctuary, community-based groups should be formed through the beneficiaries to manage the sanctuary. Sanctuary Management committees must be constituted at the local level for the proper execution and coordination of fish sanctuaries establishment, maintenance, monitoring and evaluation work.

#### 6.6.12 Sanctuary Management Committee

For effective management of fisheries sanctuaries, sanctuary management committees consisting of local beneficiary communities and fishermen should be formed which will be considered as Fisheries Community Based Organizations (FCBOs). In this case, at least 80% representatives of the fishermen and communities dependent on the reservoirs and 20% members of the public

representatives of the reservoirs and eminent individuals should be included. The following directions are to be followed in forming the Sanctuary Management Committee:

- The Upazila Fisheries Office will form the committee consisting of at least 80% of the representatives of the actual fishermen and interested persons in the coastal/side areas of the respective waterbodies;
- Upazila Sanctuary Management and Monitoring Committee will approve the said committee based on the opinion of the majority of members;
- The scope of the management committee may be small or large based on the size of the reservoir and the number of beneficiaries;
- A maximum of 3 members can co-opt in the committee if necessary with the permission of the Upazila Fisheries Officer.

President	1 person
Vice President	2 persons (fisherman)
General Secretary	1 person (fisherman)
Joint Secretary	2 persons
Organizing Secretary	1 person
Treasurer	1 person
Member	10-12 people (80% fishers)
Total =	18-20 people

The structure of the Sanctuary Management Committee will be as follows:

#### 6.6.13 Scope of Committee:

- Providing assistance in the overall management activities including the location of the sanctuary to be constructed for proper construction;
- A Maintain and manage, repair and provide security/guarding of fisheries infrastructure;
- If there is a problem in sanctuary management, it should be resolved, if necessary, it will be sent to the Upazila sanctuary management and monitoring committee to solve the problem;
- Maintain records of overall management/activities, materials provided for the use of beneficiaries;

- To provide assistance in governmental fingerling stocking, fertilization, fish feed supply as per waterbody requirements;
- Strictly enforce the provisions of Fisheries Act;
- Preventing all, including beneficiaries, from harvesting fish within the boundaries of the sanctuary;
- Provide assistance to Upazila Monitoring Committee;
  - The report of the activities is sent to the Upazila Sanctuary Monitoring Committee.

#### 6.6.14 Upazila Sanctuary Management and Monitoring Committee

The Technical/Monitoring Committee will work for the proper establishment, maintenance, inspection and evaluation of fish sanctuaries along with approving all the "Sanctuary Management Committees" of the upazila and supervising the activities of said committee. The said committee can be formed by combining the local administration, public representatives, law and order forces, fisheries officers and fishermen representatives.

The structure of the Upazila Monitoring Committee will be as follows:

1) Honorable Member of National Parliament (Constituency	Chief Advisor
concerned)	
2) Chairman of Upazila Parishad	Advisor
3) Upazila Vice/Women Vice Chairman	Advisor
4) Mayor Municipality	Advisor
5) Upazila Nirbahi Officer	President
6) Upazila Agriculture Officer	Member
7) Assistant Commissioner (Land)	Member
8) Upazila Livestock Officer	Member
9) Upazila Social Service Officer	Member
10) Police Officer in charge	Member
11) Upazila Women Affairs Officer	Member
12) Upazila Ansar VDP officer	Member
13) Upazila Youth Development Officer	Member
14) Upazila Cooperative Officer	Member
15) Chairman of the concerned Union Parishad / Ward Councilor in	Member

16) Representative of local fishermen	Member
(Nominated by/Upazila Fisheries Officer)	
17) Senior Upazila/Upazila Fisheries Officer	Member-
	Secretary

#### 6.6.15 Scope of Committee

The constituted committee shall meet at least 1 (one) time in every 03 (three) months and shall mainly perform the following functions:

- a) Provide assistance in the implementation of laws, regulations and government instructions relating to fisheries;
- b) To review the fisheries conservation and development program of the concerned upazila, identify problems and provide necessary recommendations to the district committee to solve them;
- c) Collection of data related to upazila sanctuary management and its use and dissemination to higher authorities if necessary;
- Captivating the necessary activities to identify, accumulation and mobilize the public for the conservation and development of aquatic biodiversity including increasing the production of small indigenous species of fishes;
- e) Making recommendations to the District/Upazila Jalmahal Management Committee for the purpose of generating partnership and ownership with the fisherfolk of the sanctuary;
- f) Provide advice and support in the formulation, implementation of programs/projects at the local level regarding conservation and development of fisheries resources.
- g) Providing recommendations for the formulation and implementation of short- and long-term plans for the development of fishery resources;
- h) Create awareness and sensitize the beneficiaries about technical skills of sanctuary management activities;
- Providing inspiration to all those concerned with the establishment of sanctuaries and management activities at appropriate places for conservation and protection of fish resources of the upazila;
- j) To encourage all concerned to carry out social awareness programs to create favorable environment including construction of fish friendly facilities;
- k) Report of activities to be sent to the 'District Sanctuary Monitoring Committee'.
- Providing assistance in the running of Mobile Courts, issuing any kind of leaflets/circulars as required;
- m) Carrying out the activities of proper establishment, maintenance, monitoring and evaluation of fish sanctuaries;

6.6.16 District S	Sanctuary Management and Monitoring Committee	
1)	Honourable Member of National Parliament	Advisor
	(Constituency concerned)	
2)	Deputy Commissioner	President

#### CC1CDistrict Construction Management 1 3 7 • . .

3)	Superintendent of Police	Member
4)	Executive Engineer, Water Development Board	Member
5)	Deputy Director, Department of Agricultural Extension	Member
6)	District Livestock Officer	Member
7)	Additional Deputy Commissioner (Revenue)	Member
8)	Assistant Director, Department of Environment	Member
9)	Deputy Director, Department of Social Services	Member
10)	District Ansar VDP Officer	Member
11)	Deputy Director, Department of Social Services	Member
12)	District Ansar VDP Officer	Member
13)	District Cooperative Officer	Member
14)	Ward councilor in case of municipality	Member
15)	Representative of local fishermen	Member
	(Nominated by the District Fisheries Officer) Two	
	persons	
16)	District Fisheries Officer	Member
		Secretary

#### 6.6.17 Scope of Committee

The constituted committee shall meet at least 1 (one) time in every 04 (four) months and shall mainly perform the following functions:

- a) Providing assistance in the implementation of laws, regulations and government instructions relating to fisheries;
- b) Reviewing fisheries conservation and development activities of the respective districts, identifying problems and giving necessary recommendations to solve them;
- c) Reviewing the activities of District Fisheries Conservation and Development Committee, providing necessary advice and assistance;
- d) Reporting of the activities to the District Sanctuary Establishment and Management Advisory Council where applicable;
- e) Actions aimed at increasing the production of indigenous species of fish including identification, collection and public awareness of aquatic biodiversity;.

- f) Encouraging all concerned to carry out social awareness programs to create favorable environment including construction of fish friendly facilities.
- g) Coordination of inter-departmental activities related to fisheries conservation and development;
- h) Providing recommendations to the District Jalmahal Management Committee for the conservation, development and creation of partnership and ownership of the watershed's biodiversity;
- i) Supervising the activities of all Sanctuary Management Committees/Upazila Monitoring Committees of the district; Providing assistance in the running of Mobile Courts, issuing any kind of leaflets/circulars as required ;
- **j**) Carry out the activities of properly establishing, maintaining, monitoring and evaluating fish sanctuaries;

#### 6.6.18 Control of Sanctuary Areas and Conservation of Fishery Resources

- a) Baseline data as per Annexure-1 before establishment of shelters and impact assessment data as per Annexure-2 after establishment of shelters shall be collected and stored;
- b) Restrictions and controls should be imposed on fishing in closed areas and closed seasons
- c) Sanctuary areas in flowing rivers should be established and managed as a No Fishing Zon
- d) Fishing in the sanctuary must be completely stopped; And
- e) Prohibition on fishing in the sanctuary area may be executed by gazette notification if necessary, by specifying the period.

#### 6.6.19 Instructions Regarding Establishment/Construction Cost of Fish Sanctuaries

- a) The cost of establishment/construction and management of fish sanctuaries shall be calculated based on the size, type and materials used of the sanctuaries;
- b) Government revenue and development sector or local funds (District/Upazila Parishad) will incur funds for the establishment and management of shelters;
- c) Revolving Fund or Endowment Fund, as applicable, may be constituted for the management of sanctuaries established under project financing so that the program continues even after the completion of the project;
- d) All activities of management and maintenance of sanctuaries established under project financing will be managed from the revenue sector.

#### 6.6.20 General Guidelines on Sanctuary Management

If there is a problem in the management of the fish sanctuary and the problem cannot be resolved in the upazila sanctuary management and monitoring committee, it should be forwarded to the concerned district sanctuary management and monitoring committee. The decision of the Upazila Sanctuary Management and Monitoring Committee will be considered final;

No person shall harvest fish in the waterbody without the permission of the community-based organization (CBO) formed for fish sanctuary ;

- a) As a result of the implementation of fish sanctuary, the reservoir will be partially fished every 3 (three) years by large gill nets in order to prevent predatory fishes;
- b) The FCBO on behalf of the listed beneficiaries will take over the reservoir from the concerned District Fisheries Officer on behalf of the Department of Fisheries/ Project Authority by signing an agreement. The FCBO will be responsible to harvest fish in the accepted waterbodies without harming the habitats, to collect and consume other resources in the waterbodies including fish marketing, to provide assistance in other related activities and to improve the socio-economic conditions of the beneficiaries and to maintain constant communication with the District and Upazila Fisheries Offices regarding the overall activities for the welfare of the beneficiaries;
- c) Organizations (FCBOs) maintain and manage the infrastructure of fish sanctuaries established in waterbodies to prevent the beneficiaries from harvesting fish within the waterbody sanctuary boundaries. In addition, the committee will ensure that the next generation of fish in the reservoir is not threatened, including the increase of fish stock and breeding activities;
- d) In order to keep the biological environment of the fish sanctuary established during the project period intact, the fisheries community-based organization (FCBO) will maintain it after the completion of the project in coordination with the listed authorized beneficiaries along with bearing the cost of tree branches, bamboo and other related accessories;
- e) Running Community Based Organization (FCBO) will ensure that the registered beneficiaries maintain the fisheries management program of the reservoir strictly in compliance with the provisions of the Fisheries Act;
- f) The FCBO shall continuously instruct the beneficiary communities concerned with the fisheries efforts on the technicalities of fisheries management activities and provide full cooperation to the concerned District/Upazila Fisheries Authorities in promoting fisheries management;
- g) FCBO shall identify the unauthorized fishermen to prevent non-fishermen encroachment into the waterbodies and provide assistance to the concerned District/Upazila Fisheries Officer for further action in this regard;

- h) The implementation of sanctuary activities should be done from the project headquarters or through funding at the field level following PPA 2006 and PPR 2008. In case of implementing activities at the field level, financial approval must be obtained from the project manager before paying the bill;
- i) If no sanctuary can be established in a selected waterbody, subject to obtaining a suitable waterbody with the help of local public representatives and other concerned, it can be placed elsewhere by notifying the project director based on the opinion of the district fisheries officer, subject to the recommendation of the upazila jalmahal management committee, and including it in the DPP of the project according to the rules;
- j) Fingerlings can be stocked with government funds in sanctuaries.

#### Table 20: Estimated cost of Sanctuary Re-excavation

In case of one Sanctuary 1250 cubic meters of soil per acre can be re-excavated.					
Estimated cost for Per cubic meter Soil Re-excavation is=	212.00	Taka			
Estimated cost for 1 Fish Sanctuary Soil Re-excavation is=	2.65	Lac Taka			
Estimated cost for 49 Fish Sanctuary Soil Re-excavation is=	129.85	Lac Taka			

#### Table 21: Estimated operational cost of Sanctuaries

SL	Items	Numbers	Unit Price	Total Cost				
No.			(Taka)	(Lac taka)				
1	2	3	4	5				
1	Boundary Pillar (RCC) (0'-6''x 0'-6''x	12	7500	0.90				
	15')							
2	Branched bamboo	350	500	1.75				
3	Bamboo twigs and other suitable dried stalks	LS	LS	1.20				
4	Others (flags, ropes, labour, signboards - made of RCC)	LS	LS	0.40				
	4.25							
	Total for 1 Sanctuary Total = 49 x 4.25							

#### 6.7 Fry Release in 19 Sub project and one Upazila

During execution of the Project a sum of 105 metric ton of Fish Fry will be stocked in the Subproject areas to replenish the productivity of the natural waterbodies. According to the Department of Fisheries The general guideline of fish fry release is as below

#### 6.7.1 Considerations for Selection of Water bodies for Release of Fingerlings

Water bodies having the following characteristics may be selected for release of fingerling-

- i. Khas and Government appropriate water bodies such as canal, beel, haor, baor, dead river, polder, gher, boropit, doba-nala etc.;
- ii. Appropriate Khas and Government water bodies under the control and ownership of Government/Semi-Government Departments/Institutions;
- iii. Appropriate water bodies under the control and ownership of various educational, religious and public welfare-oriented institutions or societies;
- iv. Water bodies covered by cluster villages, shelters, housing schemes or government rehabilitation areas;
- v. Private and public water bodies and floodplains/institutional water bodies suitable for fish farming and management where water at a depth of at least 3 feet exists for minimum of 4 (four) months throughout the year or during the monsoon season or after release of fingerlings;
- vi. Fingerlings can be released under this program in the inland flowing rivers of the country, but in this case, the fingerlings must be produced from fertilized eggs or eggs of fish obtained through natural breeding in the local rivers, and in any way fingerlings artificially produced in hatcheries cannot be released;
- vii. Purchased fingerling not more than 30% of the total allocated money can be released in the water bodies of Government/Semi-Government Offices/Institutions;
- viii. The number of selected/identified water bodies in each district/upazila may be more than one due to availability and suitability of water bodies/floodplains/institutional water bodies;
- ix. No privately owned water body shall be selected for the release of fingerling;
- x. After releasing, the concerned institution shall bear the necessary expenses of aquaculture management from its own funds and distribute at least 10% of the harvested fish to local needy families/orphans/handicapped families/old age homes/government or government approved orphanages;
- xi. The water bodies under the development project of the Department of Fisheries, which are under fingerling release program or have already released fingerling or are planning to release fingerling, fingerling cannot be released under the budget in the same financial year; and
- xii. The number of beneficiaries and their socio-economic conditions should be considered in selecting and delineating water bodies for fingerling release.

103

xiii. The concerned Senior Upazila/Upazila Fisheries Officer and District Fisheries Officer shall arrange for the collection and preservation of baseline information of water bodies considered for the release of fingerlings under his jurisdiction.

#### 6.7.2 Selection of releasable fingerling

- a) Genetically quality, healthy, vigorous and inbreeding free live fingerlings should be released;
- b) About10-15 cm sized major carp fingerling (Rui, catla, mrigel, kalibaus and gonia) shall be released in the selected water body;
- c) About 5-10% other native species (Shing, Magur, Foli, Chital, Meni, Pabda, Gulsha and Golda juveniles etc.) of the total weight of released fingerlings may be released in the selected water body;
- d) A maximum of 25 kg fingerlings per hectare in inland open water body and a maximum of 150 kg fingerling per hectare in case of institutional water bodies can be released; and
- e) Based on the existing aquaculture management system, the concerned committee at the district and upazila level can determine the species-wise proportional rate of fingerlings of different species for stocking.

#### 6.7.3 Period for Release of Fingerlings

The fingerling release activity should be completed during the monsoon season. This activity can continue even after monsoon, but in that case, the selected water body will produces fish for at least four months having at least three feet deep water retaining capacity.

#### 6.7.4 Selection of Area for Release of Fingerling

A suitable area (stocking point) should be identified in the selected water body for release of fingerlings where the fingerlings are safe for transportation, travel and other necessary activities.

#### 6.7.5 Fingerling Procurement Process

For the purchase of releasable standard quality fingerlings, a tender schedule will be developed mentioning the terms and conditions.

- i. On priority basis fingerlings will be purchased or collected from the Government fish seed multiplication farms/hatcheries/nurseries under the concerned district. In this case, there will be no need to call for tenders or quotations for the purchase and collection of fingerlings;
- ii. If fingerlings are not available from the government fish seed multiplication farms/hatcheries/nurseries, taking non-availability certificate of fingerlings from the concerned farm manager/officer, fingerlings can be purchased/collected by following the existing procurement rules and regulations;
- iii. Districts where there is no government fish seed multiplication farm/hatchery/nursery; fingerling can be purchased/collected from the government fish seed multiplication farms/hatcheries/nurseries in neighboring/adjacent districts;
- iv. In case of collection of fingerlings from the government seed multiplications farms/hatcheries/nurseries, the transportation cost will be provided to the concerned Senior Upazila/Upazila Fisheries Officers.

Project Implementation Manual

104

- The overall process of fingerling purchase will be implemented by the office of the v. concerned District Fisheries Officer and Senior Upazila/Upazila Fisheries Officer.
- vi. For procurement of releasable quality fingerlings, the allocated fund will be spent following the Public Procurement Act 2006; Public Procurement Rules 2008 and financial powers vested in the Government subject to the approval and sanction of the appropriate authority.
- vii. Considering the number of beneficiaries and their socio-economic conditions, the water bodies will be selected for release of fingerling;
- The concerned Senior Upazila/Upazila Fisheries and District Fisheries Officer shall viii. arrange for the collection and preservation of baseline information of water bodies considered for the release of fingerlings under their jurisdiction.

### 6.7.6 Upazila level Water body Selection, Fingerling collection and Release Committee

Each upazila shall have a committee called 'Water body Selection, Fingerling collection and release Committee'.

5.7	7.6.1 Outline of the Committee	
	(a) Hon'ble Member of the National Parliament:	Chief Adviser
	(b) Upazila Chairman:	Adviser
	(c) Upazila Vice Chairman:	Advisor
	(d) Upazila Women Vice Chairman:	Advisor
	(e) Municipal Mayor:	Advisor
	(f) Upazila Nirbahi Officer:	President
	(g) Upazila Agriculture Officer:	Member
	(h) Upazila Livestock Officer:	Member
	(j) Upazila Social Service Officer:	Member
	(j) Upazila cooperative officer:	Member
	(k) (one) social worker/dignified person nominated by the President:	Member
	(l) Representatives of local fishers/CBO 2 (two) persons:	Member
	(m) Senior Upazila/Upazila Fisheries Officer:	Member Secretary

#### 6.

#### 6.7.6.2 Scope of Works of the Committee

(a) Selection of suitable water bodies for release of fingerlings;

(b) Receive specified quantity and size of healthy, vigorous and live fingerlings from fingerling suppliers/institutions and release them in the specific water body;

(c)Keeping record of the area of the water body, the number of concerned beneficiaries and the quantity (kg) and number of fingerlings released;

(d) At the end of each consignment of fingerlings release, the Senior Upazila/Upazila Fisheries Officer and Member Secretary of the Committee shall take a certificate from the fingerling supplier mentioning his address, weight (kg) and number of quality fingerlings released in the selected water body properly where signed by the other members of the committee present in the program and keep the original copy in his office and send the duplicate to the office of the concerned District Fisheries Officer and Divisional Deputy Director;

(e) In the presence of local public representatives (Hon'ble Member of Parliament, Upazila Chairman, Vice Chairman/Municipal Mayor, Municipal Councillor, UP Chairman and Members), local dignitaries and representatives of civil society, release of fingerlings can be arranged with encouragement and enthusiasm.

#### 6.7.6.3 Scope of Works of Senior Upazila/Upazila Fisheries Officer

- a) Preliminarily determine the list of possible water bodies and species-wise fingerlings quantities for release of fingerlings for presentation at the meeting;
- b) Make arrangements for the purchase or collection of fingerlings in accordance with the rules and keeping it within the budget limit;
- c) Ensure that the selected fingerling suppliers/institutions supply healthy, vigorous and live fingerlings of specified quantity and size according to demand and conditions;
- d) The concerned Senior Upazila/Upazila Fisheries Officer shall arrange for the collection and preservation of baseline data of water bodies considered for the release of fingerlings under his jurisdiction.
- e) Keep records of the area of the water bodies, the number of adjacent beneficiaries and the quantity (kg) and number (t) of fingerlings released and assess the impact;
- f) Fix the date of the meeting and call the meeting in consultation with the Chief Adviser and the President of the committee; and
- g) At the end of each consignment of fingerlings release, the Senior Upazila/Upazila Fisheries Officer and Member Secretary of the Committee shall take a certificate signed by the other members of the committee present in the program and keep the original copy in his office and send the duplicate to the office of the concerned District Fisheries Officer and Divisional Deputy Director;
- h) In the presence of local public representatives (Honorable Member of Parliament, City Mayor, Chairman or members of Zilla Parishad, Upazila Chairman, Vice Chairman, Municipal Mayor, Municipal Councillor), local dignitaries and representatives of civil society, release of fingerlings can be arranged with encouragement and enthusiasm.

#### 6.7.6.4 Supervision of Fingerling release activities

The concerned Deputy Director and District Fisheries Officers, Department of Fisheries -

(a) Supervise the fingerling release activities of each division and district;

(b) Monitor and inspect locally whether the selection of water bodies for fingerling release is correct and the fingerling release program is being carried out properly and ensure the implementation of the fingerling release program is being carried out properly;

(c) Take appropriate steps to implement the Fisheries Protection and Conservation Act with the cooperation of the local administration for conservation and protection of the released fingerlings;

(d) Deputy Director of the concerned division, Department of Fisheries shall send the compiled report of released fingerlings to the Director General by 31 January every year.

#### 6.8 Cage and pen culture

There are excellent opportunities in Bangladesh to engage thousands of unemployed rural people on long-term basis in aquaculture in existing large number of potential water-bodies which were hitherto completely neglected. Various types of water bodies, seasonal or perennial could be made productive by applying cage and pen culture techniques. Cage and Pen culture technology will be perfected to be used by farmers/fishers throughout the country for increasing fish production by utilizing various categories water-bodies like river, sub-river, dead rivers, irrigation canals, boropit, floodplain and other shallow water-bodies.

Water-based systems involve stocking fish directly in enclosures or attaching them to substrates in water bodies such as rivers, lakes, reservoirs, canal and floodplain. Water-based systems may provide an entry point for landless people and poor fishers to culture fish. Models for producing, nursing and farming in suspended cages at farm household, rivers and canals have been developed and already practicing in some areas of Bangladesh. Therefore, water-based systems such as cage and pen culture, enhanced farming fishes in river, canal, lake, reservoir and large communal ponds or water bodies may be the only options for aquaculture for the landless and for underemployed fishers and farmers.

S1		Unit	Amount	Cost (Tk)		
No.	Expenditure statement	price (Tk)	/Quantity (Kg/No.)	Farmer cost	Project Contribution	Total
1	2	3	4	5	6	7
Categ	gory-A: Fixed Cost					
1	Cage net (20'×10'×6')	2800.00	10 nos	5,000.00	23000.00	28000.00
2	Plastic Barrel	1400.00	22 nos	5,500.00	25300	30800.00
3	GI pipe (1 inch dia) for frame	60.00	720 feet	18,000.00	25200.00	43200.00
4	Frame connected angle	100.00	70 feet	3,500.00	3500.00	7000.00
5	Anchor (each 12-15 Kg)	1350.00	6 nos	-	8100.00	8100.00
6	Kachi (Nylon Rope)	4000.00	1 bundle	-	4000.00	4000.00

#### Table 22: Cost breakdown for Cage Culture

Project Implementation Manual

107

7	Strait		350.00	20 nos	-	7000.00	7000.00
	Bamboo						
8	Brick		5.00	80 nos	400.00	-	400.00
9	Signboard (3.0'>	<2.5')	-	LS	-	1600.00	1600.00
10	Boat		10000.00	1 nos	5000.00	5,000.00	10000.00
11	Guard Shed		5000.00	1 nos	-	5,000.00	5000.00
Total	l				37,400.00	107700.00	145100.00
Categ	gory-B: Operationa	al Cost					
9	Pillet Feed	(floating	50.00	3000 kg	50000.00	100000.00	150000.00
	feed)	-		_			
10	Fingerling	(20-30	5.00	10000	20,000.00	30000.00	50000.00
	gm)each piece			nos			
11	Fish Harvesti	ng &	-	LS	3000.00	-	3000.00
	Marketing	-					
15	Labour & Misce	llaneous	-	LS		5000.00	5000.00
Tetal Orangi and Cest				72000.00	125000.00	208000.00	
Total	Operational Cost				73000.00	135000.00	208000.00
Total					110,400.00	242700.00	353100.00

Fixed Cost for 1 years (from Projects cost) -107700.00

Fixed Cost for 5 years (from Project cost)- 107700.00

Operation cost for 1 year (from Projects) - 242700.00

Operation cost for 5 years (from Projects) -1213500.00

Total cost for one cage culture demonstration for 5 years1321200.00

Total cost for 29 cage culture demonstration for 5 years 383.15 Lac BDT

#### 6.9 Establishment fish drying demonstration

Fish is an important component of the daily diet and the dried fish is an important source of protein in Bangladesh. Traditionally, people of Bangladesh like to eat fresh fish. Chilled and dried fish are also marketed now a day in large quantities in the towns and cities. Drying of fish is very common in the entire coastal areas as well as some parts of Bangladesh and these dried fishes have demand both in domestic and international market. The nutritional quality of dried fish remains intact, sometimes retains higher quality standards compared to fresh fish (as per unit weight). Special flavor is highly relished by different ethnic people. Considering the high demand of quality and safe dried fish in the country, this project will support the fish drying technology to the poor fishers through mechanical fish dryer. Fish drying technology through mechanical fish dryer will be demonstrated within the project command area. The produced dried fisheries product will be packaged completely airtight by food grade celluloid polythene. This product will be marketed by labeling in the local and international markets. By this project value chain of dried fish will be developed. About 29 fish drying demonstration will be established in 29 upazila. Among 29 drying demonstrations both mechanical and solar dryer technology will be used. For drying demonstration technical help will be hired from research organization. As per demand and suitability nos. of demonstration will be change among the project area.

The long-term sustainability of dried fish marketing, this project will support the technology to the poor fishers ensuring the safe food and quality foods, establish market value chain and transport facilities, credit facilities, institutional support and extension services along with knowledge of dried fish marketing by establishing Fish drying demonstration in suitable project area. The specification and Estimated cost for Fish drying Demonstration is as bellow:

Characteristics	Specification	Comments
Size (Length, width and height)	5 x 1.6 x 2 m (should be placed in an open space above the ground during installation)	Suitable for use in all seasons
Construction Materials: SS bar or metal bar, steel sheet (deck), polythene sheet (1-1.5 mm), nylon net (2 mm diameter), wood / bamboo, high speed fan, exhaust fan, heater and heater controller	SS bar (1 * 1.5 inch), 30 m polythene sheet, nylon net, 10-12 inch exhaust fan, 800-1000 watt heater and autostop heater controller	
Fish holding capacity	200-300 kg fish per lot depending on the size	Big or small fish
Drying method	Drying the fish by hanging it on a wooden or bamboo pole with the help of hooks and wires	
Additional equipment	Thermometer and humidity meter	To measure temperature and air humidity

Table 23: Specification of Fish Drying Demonstration

(N.B: It's indicative. Model will be strictly dependent on the demand and latest available cost and energy efficient technologies)

#### Table 24: Costing of Fish Drying Demonstration

		Unit	Amount	Cost (Tk)		
Sl No.	Expenditure statement	price (Tk)	/Quantity (Kg/No.)	Farmer cost	Project Contribution	Total
1	2	3	4	5	6	7
1	SS Bar (1×1.5 Inch)	200.00	200 Kg	4,000.00	36000.00	40000.00
2	Stracture making and welding cost	LS	LS	2,000.00	6000	8000.00
3	Steel sheet (2-2.5 m, 1.8 mm dia) for frame	16000.00	2 nos	4,000.00	28000.00	32000.00
4	Celluloid polythene (food Grade) (1-1.5mm)	6000.00	1 Roll	1,000.00	5000.00	6000.00
5	Nylone Net (2mm Dia)	1500.00	3 m	500.00	4000.00	4500.00

Project Implementation Manual

01		Unit	Amount		Cost (Tk)	
Sl No.	Expenditure statement	price (Tk)	/Quantity (Kg/No.)	Farmer cost	Project Contribution	Total
6	Wooden Frame (For polythene binding)	1500.00	3 sifty	500.00	4000.00	4500.00
7	Wooden Frame, Net & polythene attachment	LS	LS	3,000.00	6000.00	9000.00
8	High Speed Fan	7000.00	1 Nos	500.00	6,500.00	7000.00
9	Exost Fan	2400.00	1Nos	500.00	1900.00	2400.00
10	Heater (800-1000 watt)	3000.00	1 Nos	1,000.00	2000.00	3000.00
11	Heater Controller (circuit breaker, scoket, wire with box), Thermometer, Humiditi meter	5,500.00	3	3500.00	13,000.00	16500.00
12	Steel made tray (For small fish), Metal Hook and wood/bamboo bar)	LS	6 tray, 400 hook & 100 bar	4000.00	8,000.00	12000.00
13	Packaging Mechine (Auto celler) & Poly Bag (100 nos)	LS	1	2000.00	23,000.00	25000.00
14	Signboard (3.0'×2.5')	-	LS	-	1600.00	1600.00
15	Labour	10000.00	1 nos	10000.00	-	10000.00
16	Miscellaneous	-	LS		5000.00	5000.00
	Total			36500.00	150000.00	186500.00

## Table 25: Specification of Mechanical Fish Dryer with Solar Panel

Technical Specification of Mechanical Fish Dryer with Solar Panel				
Capacity	50 kg/batch			
Power	0.45 kw			
Trolley Quantity	1 unit			
Tray Quantity	24 pcs			
Size	1400*1200*2000 mm			

N.B: It's indicative. It may be vary as per demand.

1.	No. of Mechanical Dryer with Solar Panel	3 Nos.
2.	Total cost	15,00,000 BDT
3.	Project Contribution (2/3 portion)	10,00,000 BDT
4.	Farmer Contribution (1/3 portion)	5,00,000 BDT
5.	Cost for single Mechanical Dryer with Solar Panel from Project Contribution	10,00,000 BDT
6.	Total Cost for three Mechanical Dryer with Solar Panel from Project Contribution	(10,00,000 × 3) BDT
		= 30.00 Lac BDT

Table 26: Costing of Mechanical Fish Dryer with Solar Panel

# 6.10 Value Chain Development and Fish Marketing

Establishment of Mini Processing unit Construction with different value addition machineries will be introduced under this project. About 14 Mini Processing units will be established in the proposed subprojects within the project area for fisheries value chain development in competitive and grading basis among the CBO's. These processing units will be operated by CBO members. Mini Processing center can be constructed on khas land /land contributed in favor of community organization/land provided by the Bangladesh Water Development Board (BWDB). In some case BWDW existing building will be used as mini processing center through vertical or horizontal expansion.

The proposed project will introduce implementation and adoption of the E-Supply Chain, through promotion and marketing initiative and activities. To implement a digital distribution and regulation platform for the DoF and this will be known as the e-Fisheries Platform which have web linkage with the DoF Web site. Facilitate and Regulate middlemen (Aratder) and ensuring they have evolved and be a value-added service provider in the e-Fisheries Supply Chain. The e-Fisheries Supply Chain combines physical and virtual zones, with added online and digital services to facilitate e-Commerce and spur Internet-based innovations. There is a provision of live fish marketing in a limited scale one piloting basis.

In the project period forward and backward linkage of fisheries value chain will be implemented. Production inputs like- quality seed, feeds will be monitored by the local upazila office. The project has the provision of providing mini truck for advance entrepreneurs group for live fish carrying. 20 Entrepreneur groups are selected as grading system and got support from project fund as matching grant 50-50. From the project maximum supports will be 7.00 lac for one entrepreneurs' group. By the development of value chain consumer can get the fresh and quality fish direct from the pond side with ensuring the appropriate price.

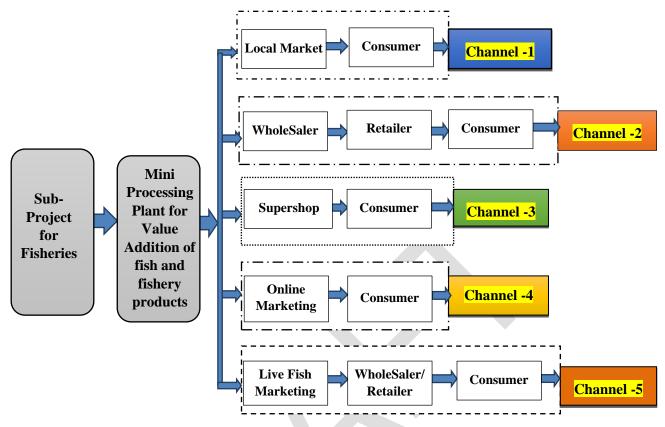


Fig 4: Mini Fish Processing Plant Value Chain

# Chapter-7: Human Resource Development, Training, Communication and Public Awareness

#### 7.1 Human Resource Development (HRD)

During the formulation of CSAWMP, weaknesses of implementing agencies in the field of skilled man power were identified, particularly in extension, research management, fiduciary and administrative management, communication and public awareness, and over all governance of the organizations. Training is the important tool to develop the capacity of the people. The project will take the initiative to develop the technical skills of the community people to manage the beel nursery and also aware the local people to protect the stocked fingerlings and climate smart aquaculture technologies practices. As a result, the productivity of water body will increase. Short-term skills development training, seminar, workshop, study visits, etc. at home and abroad are included for human resources development. The project also supported need based and location specific farmer-trainings and exposure visits to minimize knowledge and skill-gaps.

CSAWMP included need-based human resource development and capacity building programs in order to build human capital and enhance their competency to achieve the desired objectives. In addition, Project has training and exposure visit programs for WMO/CBO farmers/leaders and extension service providers at grass root level. The need-based human resource development (HRD) would be achieved through establishing the good governance and the implementation of:

- In-country training, workshop, exposure visit programs on various need-based subjects for officers, policy makers, farmers, traders, entrepreneurs, and other relevant persons;
- Foreign training, seminar attendance and study visit programs for scientists, officers, consultants, managers, policy makers and farmers;

**HRD Impacts:** It is expected that the trained officers will be able to provide better extension services with higher knowledge and skills. Training to the officers and staff will keep them updated about the new technologies and production practices. Trainings will enhance the capacity of WMO/CBO farmers to adopt the technologies increasingly and play an advocating role to other farmers for adoption of new technologies.

#### 7.2 Training on aquaculture and fisheries management

To contribute to the project objectives and scaling up previous achievements, CSAWMP design will rely on a comprehensive program of training activities; this will be implemented at various levels and cover skills development, knowledge sharing and learning. During the project period stakeholders will get 7 types of training including value chain development and value addition fish & fishery products and climate smart aquaculture and fisheries management. The main aim of this training is to increase skill of people so that they can run the aquaculture and fisheries management activities efficiently. On the other hand, farmers will learn culture technique of some newly introduced fish species. The project will organize four days training on technology-based skill development for the community members on aquaculture and fisheries management. For each

demonstration beneficiaries CBO members, 10 or more beneficiaries will be trained for the skill development. The number of trainees will vary according to the number and area of the beel and number of beneficiaries. CBO members will be trained together in each batch on two or three technology packages.

Training module will be prepared before the training start. Training schedule for each training will be mentioned in the training module. Training of LEAF and Project/DoF staffs will be conducted in local training centers of DoF/BFRI. Departmental Trainers (DT) will conduct the training. Training of Result Demonstration/Fellow Farmers will be conducted at upazila office, local schools, Union Parishad complex or DoF training centers. SUFO/UFO will facilitate the training process. To bring more participation of local beneficiaries, RD and FF will visit successful RD's pond site to show the result on hand and sharing the result in demonstration for the trainees. Respective DFO, project personnel etc. will be invited in the training as resource person. Hall room/classroom rent if required will be met up from project fund. The direct beneficiaries covered by other projects or programe will be excluded from this project. However, farmers with new intervention will be included in the project. The Summery of cost for training is given bellow: Detail Cost breakdown are shown in Appendix-D

				Training		<b>Cost in BDT</b>	
Sl No.	Title of Training	No. of Trainees	No. of Batch	cost per batch (Tk)	GoB	IDA	Total
1	2	3	4	5	6	7	8
1	Total cost 5 days training for SUFO/UFO/DAD/ AFO/FA	480	24	3,60,275.00	49,80,000.00	36,66,600.00	86,46,600.00
2	Total cost 5 days training for SUFO/UFO/DAD/ AFO/FA (Refreshers)	480	24	2,68,525.00	36,02,400.00	28,42,200.00	64,44,600.00
	Cost of Training for DoF & Project staff	960	48	-	85,82,400.00	65,08,800.00	150,91,200.00
3	Total cost of Skill development residential training course of LEAF (10 days)	20	1	4,85,150.00	97,000.00	3,88,150.00	4,85,150.00
4	Total cost Skill Development Residential Refreshers Training Course of LEAF (7 days)	20	1	2,64,820.00	57,900.00	2,06,920.00	2,64,820.00
5	Technology based Skill Development for demonstration beneficiaries	4600	230	2,05,240.00	82,34,000.00	3,89,71,200.00	4,72,05,200.00
6	Skill Development for value chain development	280	14	2,06,840.00	5,29,200.00	23,66,560.00	28,95,760.00

Table 27:	Summerv	of Training Cost

				Training	Cost in BDT		
Sl No.	Title of Training	No. of Trainees	No. of Batch	cost per batch (Tk)	GoB	IDA	Total
	and Value Addition Fish &						
	Fishery Products						
7	Total cost 4 days training	800	40	1,70,140.00	11,24,000.00	56,81,600.00	68,05,600.00
	for WMOs						
0	Total cost 3 days AIGA	2.00	10	1 60 500 00	5 05 000 00		20.24.440.00
8	Training on Activity	360	18	1,68,580.00	5,95,800.00	24,38,640.00	30,34,440.00
	Based						
	Cost of Training for DoF	6080	304	-	1,06,37,900.00	5,00,53,070.00	6,06,90,970.00
	& Beneficiaries						
	Total Cost of Training	7040	352	-	1,92,20,300.00	5,65,61,870.00	7,57,82,170.00

No. of total trainees: 7040 Total batches of trainings: 352 Total GoB cost for 352 batches: 192.20 Lac BDT Total IDA cost for 352 batches: 565.62 Lac BDT **Total training cost for 352 batches: 757.82 Lac BDT** 

The honorarium for the government official as trainer or resources person will be incurred form the GoB Budget and other cost of the training will covered by IDA fund.

# 7.3 Exchange visit program for DoF/project staff & beneficiaries

Group tour will be arranged for the successful farmer. Successful farmer will show their achievement through result demonstration. 29 (12 members in a batch) no's, field tours will be arranged during the project period. Beneficiaries of one socio-ecological area will be selected to visit another socio-ecological area to share and exchange of experience and skill. Thus enriching each other through close observation and sharing of experience. Considering the strong cooperation among the fish farmers regarding fish culture information the exchange visit will be residential for 3 days. The participants of exchange visits will stay and gather experiences in DoF training center or any other govt. organization.

# 7.4 Overseas study tour of DoF officers, planning & policy makers and project staff

A provision for overseas Study Tour in Southeast Asian Countries with similar climatic conditions for policy makers, MoFL officers, planning commission officers, DoF officers and project staff have been included to get better understanding of the modern aquaculture extension system and project related improved climate smart aquaculture technology practicing in those countries, which will be helpful to skill development of officers and policy makers. By using acquired knowledge modern aquaculture extension system, improved fisheries resource management, aquaculture technology, and postharvest management will be introduced in our country.

# 7.5 Alternate Income generating Activities (AIGAs)

The project will provide 3 days training on AIGAs. The AIGAs training will include net making, bamboo basket making, fish trading, fish drying, fish dressing, poultry rearing, Rickshaw Van pulling, plant nursery, goat rearing, etc. After getting training each of the members will get support for their AIGAs activities from the project.

## 7.6 Workshop/Seminar

The project has the plan to organize 22 seminars/workshops at district level with the participation of all stakeholders. The project will also arrange 3 seminars at central level. The cost breakdown for workshop and seminar are furnishes here. Detail Cost Breakdown are shown in Appendix- E

Sl	Name or workshop	No of	Cost per	Total Cost of Workshop (BDT)		
No		workshop	workshop (In BDT)	GoB	IDA	Total
1	2	3	4	5	6	7
1	Central workshop (Inception)	1	1,141,300.00	469,500.00	671,800.00	1141300.00
2	Central workshop (Mid-term & Closing)	2	579,300.00	489,000.00	669,600.00	1158600.00
3	Divisional workshop	8	463,280.00	1,592,000.00	2,114,240.00	3706240.00
4	Module formation workshop	11	270,300.00	1,512,500.00	1,460,800.00	2973300.00
	Total	22	-	,063,000.00	,916,440.00	8979440.00

Table 28: Summery of total cost for the Workshop of the Project

No. of total participants: 1725

Total events of workshops: 22

Total GoB breakdown for 22 workshops: 40.63 Lac BDT

Total IDA breakdown for 22 workshops: 49.16 Lac BDT

## Total cost for 22 workshops: 89.79 Lac BDT

Note: The honorarium for the government official as trainer or resources person will be incurred form the GoB Budget and other cost of the training will covered by IDA fund.

# 7.7 Communication and Public Awareness

# 7.7.1 Communication

## i. Knowledge Sharing and Communication Strategy

Communication is an important component of agricultural extension and extension agents utilize various methods to deliver messages to their target farmers/clients. To facilitate two-way flow of information between farmers and other stakeholders (local government, extension, the private sector, NGOs), the project would assist with demonstration, exposure visits, field trip, field day and workshop on key technologies.

The local community is the key actor in this particular project. The success of the project mostly depends on the motivation and active participation of the community members. For this purpose local staff and concern PIU officer will be take the responsibilities of formation of CBOs and organizing groups. The beneficiary selection and CBO group formation will be done by Upazila Scheme Management Committee (USMC). The CBO consists of fishers, fish farmers and all other representation from the resource users. The CBOs will look after the demonstration activities, beel nursery and stocked fingerlings for their livelihood development. The CBO consists 10 or more members and they also be motivated to establish a sanctuary in the suitable location of the beel and other mentioned activities. So that certain number of fish can take shelter there and become brood fish for future propagation. Use of communication technologies covering both the print (e.g. publications, newsletters and posters) and electronic (e.g. radio, television and internet) media will be increased. This would help to disseminate information quickly, reinforce technical messages, and help to spread new ideas and successful activities of particular farmer groups.

During preparation of DPP for this project, attention has been paid to follow the seven components of aquaculture extension sub-strategy namely, people's participation, Extension approach, Coordination, collaboration and linkages, Decentralization, Environment, Human Resource Development, Monitoring and Evaluation. In the context of Bangladesh and the lesson learned from the Fourth Fisheries Project (FFP), the concept of Local Extension Agent for Fisheries (LEAF) evolved for implementation. This is functioning well. This LEAF will be implemented under this project and employed for transfer of improved technology, engaged for project activities and work as a bridge, messenger and facilitator between service providers (Dep't) and client (farmer) and act as a representative of DoF in the respective Union. Thus, a sustainable and accountable communication process would be developed which will ensure community participation for the development of fisheries in the country along with other project staff.

#### 7.8 Establishment of Aquaculture Extension Agent through LEAF

In recent time, the activities of the DOF have expanded a lot to meet up the growing extension demand of the nation. Special attention has been taken to transfer the developed aquaculture technology up to village level through different development projects. However, it has become very hard to keep the pace of extension activities and follow up due to withdrawal of recruited manpower from the completed project. At present, DoF has only 5 staff (Senior Upazila Fisheries Officer/Upazila Fisheries Officer-1, Assistant Fisheries Officer-1, Field Assistant-1, Office Assistant-1, and MLSS-1) at upazila which is insufficient to meet up the demand of extension service. Moreover, due to limited resources, recruitment of additional work force under revenue budget has become impossible, the nature of culture practice and problems faced by fish farmers are diverse. Hence requirement of extension services are also diverse. Under such circumstances, the following alternatives local extension worker has been designed named as LEAF to reach the marginal fish farmers with extension services.

Local Extension Agent for Fisheries (LEAF) has been developed by the DoF with the support of the Fourth Fisheries Project and adopted in the field as pilot basis. This is functioning well. The same LEAF concept will be followed under this project. The proposed LEAF will work closely with the fish farmers hand-to-hand and facilitate to boost up fish production utilizing all the available resources. LEAF will not only be engaged for project activities but he will work as a bridge, messenger and

facilitator between service providers (Department) and client (farmer) and act as a representative of DoF in the respective union. Thus, a sustainable and accountable communication process would be developed which will ensure community participation for the development of the country. LEAF will be invited to attend training program organized by Upazila and District Fisheries Office to increase his knowledge and better understanding of the problems faced by the farmers. This LEAF will be extension agents of DoF and will continue to be so even after completion of the project. Continuous technical feedback between the LEAF and DoF extension staff at upazila and district level would be maintained as a matter of obligatory institutional arrangements. Thus, the LEAF will remain as a recipient outfit for transfer of locality appropriate technology and for any other message that need to reach the fish farmers at the grass root level. This LEAF will be selected under the project to work closely with the DoF, Union Parished and fish farmer community. One LEAF will be selected and make responsible for each sub-project. The arrangements of LEAF working place will be finalized by Project Director according to the work volume and situation. Thus 20 LEAF will be selected to work under the project in 20 sub-projects.

LEAF will be selected from the interested people with the following characteristics:

- Be a successful marginal fish/prawn culturist
- > Be acceptable to his fisheries community of the scheme
- Possess leadership criteria,
- Education back ground of LEAF must be 4 years Diploma in Fisheries.
- Eager to accept aquaculture or relevant work as profession
- Male/female equal opportunity
- Age within 18-35 years
- > Maintain a good linkage with Senior/Upazila Fisheries Officer and office.
- > Experienced candidate in related fields may be given preferences.

Upazila Scheme Management Committee (USMC) will select the potential candidate (with alternative candidates) for LEAF and forward to the PIU with recommendation. The PIU will present the list of the to the Project Implementation Committee (PIC). After doing necessary review the PIC will give the final Selection of the LEAF.

To obtain best performance from selected LEAF, the following facilities will be provided from the project:

- Comprehensive aquaculture training covering fish/prawn with integrated farming. They will also be trained on extension activities including fishery resource survey.
- Extension inputs will be supplied.
- > Conveyance allowances will be provided to the LEAF during training.
- For training and extension activities LEAF paid as incentive amount of 20000.00 Tk per month including local travel.
- A bicycle (free of cost) will be allotted to LEAF for tour and visit of sites where aquaculture activities are going on. Fund also will be allotted for repair and maintenance of bicycle.

After selection a LEAF will work under the supervision of SUFO/UFO in a scheme. If one scheme belongs to multiple upazilas then the respective scheme LEAF will report to the the maximum area covering upazila officer (base station). If the activities of LEAF remain unsatisfactory, his nomination will be cancelled by SUFO/UFO in consultation with USMC. Best LEAF will be awarded after proper evaluation of his performance in each district very year to create a competition among the LEAF of that district. This will LEAF will be responsible for his duties and responsibilities to SUFO/UFO/FA

of the project and work under their supervision. AFO/FA will look after the activities of LEAF and submit report to SUFO/UFO.

# 7.8.1 Duties and Responsibilities of LEAF

LEAFs will be the Local extension agents of DOF. LEAFs will be developed by DOF through institutional training. For one Subproject there will be one LEAF. The LEAF will have to perform the following activities:

- Providing technology and production related advices to fish farmers at CBOs and POs and outside CBO in subproject areas;
- Arranging and imparting trainings to CBO fish farmers at field Level as per USMC;
- Providing fish growers with information on availability and sources of quality fish fries, feeds etc;
- Developing and enforcing a day fixed visit schedule for CBOs;
- Attending calls of UFO for meetings, trainings and reporting.
- Conducting special surveys in case of natural hazards like flood, cyclone etc.
- Collecting information and maintaining records of ponds under fish cultivation, particulars of farmers cultivating fish in confined and open water bodies etc.
- Maintaining a daily diary of day-to-day work.
- Other activities assigned by SUFO/UFO from time to time.

# 7.9 Communication Channels

In CSAWMP, several communication channels will be used by extension agents. Major channels are briefly described below.

# 7.9.1 Demonstration, Field-Day, Exposure Visit, etc.

Demonstrations, field days, exposure visits- all these activities will provide a positive expression of technology to local farmers, carry positive messages about agriculture & farming system, and establish linkages among the technology demonstrators and adopters. Demonstrations, field days and exposure visits all together will impact on effective extension, wider adoption & diffusion, understanding the importance of technology, production enhancement, establishing beel nursery, sanctuaries, mini processing center etc.

(i) **Demonstration:** As a major tool of technology transfer and also to educate the farmers about the improved technologies and modern aquacultural practices, demonstrations will be customary at the field level on a regular basis. To introduce productive aquacultural technology, demonstrations on established 145 nos. beel nursery, 49 nos. fish sanctuary, 1950 nos. Fish culture will be conducted during the project period under close observation of field extension officials. Such demonstrations will teach how to improve practices and also convince the farmers why they should adopt new innovative technologies. 29 nos. of Fish Drying and 14 nos. Mini Fish Processing Unit will be established with value addition machineries for demonstration, 58 nos. insulated van with icing facilities will be procured and supplied.

118

(ii) Field-Day: Generally, a field day is an interacting meeting, whereby interested farmers, traders, input traders and extension agents gather and interact fully with each other about their common interest. Field day is one of the tools of communication. In CSAWMP field day, a group of farmers will gather together, on a successful demonstration and learn good aquacultural practices and observe successful production results organized by WMO/CBOs or fellow/lead farmers. During the project period there will be field days on all successful field activities.

(iii) Exposure Visit: Under exposure visit strategy a group of famers of particular area will visit to observe latest production technology/practices adopted in other areas to adopt those in their farming system.

# 7.10 Preparation and Distribution of Extension Materials, Booklets, Brochures, Training Course Handouts, etc.

Leaflet, booklet, poster and other printed materials are commonly used extension materials. These will be produced in simple language and design and will be distributed to the WMO/CBO farmers. As necessary part of extension program CSAWMP will develop and prepare extension materials and training course handouts (modules/manuals) related to project issues for the extension officials and CBOs/farmers to guide and support extension and training programs. Training/extension materials will benefit to:

- i) Officials & extension officers to work as skill trainers & manager for execution of training program and effective project management;
- ii) WMO/CBO members as guide to supervise field activities, and
- iii) Farmers to execute the CBO functions, management of demonstration and technology adoption.

#### 7.10.1 Public Awareness

Public awareness is a way to bring a certain issue to the attention of a group of people. Public awareness on an issue, say 'beel nursery', is the public's level of understanding about the importance and implications of beel nursery programme in order to enhance fish stocks in beels and floodplains. Raising public awareness is not the same as telling the public what to do - it is explaining issues and disseminating knowledge to people so that they can make their own decisions. High public awareness occurs when a significant proportion of society agrees that the issue (beel nursery programme) is of great importance to all citizens. Low public awareness occurs when a majority of people do not know or do not care about the issue (beel nursery). There are two main areas to focus on when raising awareness about an issue (beel nursery). First, there is general public awareness, which involves widespread understanding and acknowledgement of the issues; second, there is self-awareness, which occurs when individuals understand how the concept of beel nursery affects them personally.

## 7.10.2 Public Awareness Raising in CSAWMP:

There are different ways to raise public awareness. Public Awareness on CSAWMP objectives and activities, beel nursery, fish sanctuary, fish demonstration, fish drying demonstration, mini fish processing unit, good aquacultural practices, food safety, environmental and social safeguards, gender issues, etc. will be raised through specific planned events, poster campaigns, public-meeting/ workshop/seminar, radio, television, websites, documentaries/videos, newspaper articles, in schools and workplaces, and publishing and distributing booklets/brochures/leafletsany publicly available medium.

In Awareness Raising Programs, the first thing need to be done is to choose the topic about which others to be aware. It is usually more effective to create a coordinated, long-term awareness-raising campaign than to create large, short-term campaign. This is because when the concept of an issue (say, fish sanctuary) is talked about over time, its importance becomes normalized - it becomes a normal part of people's everyday lives. By contrast, if there is only one single campaign to address the issue (say, fish sanctuary), people may forget about the issues once the campaign is over. By taking different approaches at different times, awareness can be raised all over, using current events and issues as a backdrop for talking about.

## 7.11 Existing Training Facilities of DoF

Department of Fisheries (DoF) have some institutional arrangements for officer, staff and farmer training, with full facilities in terms of space, audio-visual equipment, training materials, furniture, office equipment, transport facilities, dormitory and related support services. DoF has a central training academy and regional training centers which would be used for conducting most of the ToT courses and other training courses for officials. Use of DoF training centers will be helpful for effective monitoring and supervision of training activities and for minimizing venue cost and residential cost for participants and trainers. List of DoF training centers suitable for conducting CSAWMP training are as follows:

- i. Fisheries Training Academy, Savar, Dhaka
- ii. Fisheries Training Center, ADB hatchery, Charpara, Cox's Bazar
- iii. Fish Seed Production Farm and Training Center, Kashipur, Barishal
- iv. Shrimp Culture Demonstration Farm and Training Center, Ellarchar, Satkhira
- v. Fisheries Training Center, Gollamari, Khulna
- vi. Fish Breeding and Training Center, Raipur, Laksmipur
- vii. Fisheries Training Center, Rangamati

# Chapter-8: Environmental and Social Management

#### 8.1 Environmental and Social Perspectives of the Project

- 1. Bangladesh is the floodplain delta of three major rivers, the Ganges, Brahmaputra and Meghna, and more than fifty other rivers flow into it. It is exposed to extreme weather events, with high rainfall during the monsoon season extensive flooding occurs in lower-lying areas of the country, and this problem is compounded by slow drainage and high sea tides. There are both benefits and losses this situation brings: it allows for highly productive farming and fishing systems, but at the same time creates deep flooding, erosion and drainage problems which can cause serious crop losses, livestock deaths, salinity intrusion, and rural population displacement. They also take considerable areas of otherwise arable land out of production, thereby adversely affecting agricultural production and livelihoods. At the same time, during the dry season the availability of surface water is a significant constraint to agriculture. Droughts, especially in the northern parts of the country frequently lead to crop failure, livestock death, land degradation, and also undermine groundwater replenishment, which is critical to performance of irrigated agriculture in those areas.
- 2. Bangladesh is a comparatively small landmass with diverse landscape having i) wide spread coastal plain across the south ii) high and moderately dry land in the north and mountainous trace along the north and south east iii) depressed haor basin in the north east and iv) central flood plain. The deltaic landscapes are crisscrossed with rivers and wetlands spread over entire land mass and evolved into aquatic and terrestrial ecosystems including evergreen forest, decidua's forest, mangroves, swamps, reed lands and beels, rivers and haors.
- 3. The economy of densely populated (over 1090/s.q.km) and majority of the population living in rural setting. The economy is predominantly agrarian and agriculture depends largely on natural endowment and vast majority of the rural poor depend highly on the natural resources like wetlands for their livelihood and food security.
- 4. Employment from the agriculture sector remains around 50% and food security of entire population practically depends on agriculture sector till date. Land for agriculture is limited and shrinking alarmingly every year because of other competing uses like housing, R&H ways, infrastructure, industries etc. In rural areas, livelihood and employment opportunities center on agriculture and fisheries; however, increased competition for land and resources narrows the economic opportunities for highly marginalized rural populations. Though the poverty level has declined in recent years, still over one fourth of the population lives under poverty line which is over 40 million people and again, poverty rates are higher in rural areas. High unemployment, climatic stress and low wages are driving migration to urban areas. In addition, approximately 80% of the population is under the age of 40. Plagued by poverty, unemployment, and marginalization, youth represent a tremendous and largely untapped resource.
- 5. Its national economy strongly depends on agriculture and natural resources that are sensitive

to climate change and sea level rise. Moreover, the adverse effects of Climate Change – especially High Temperature, Sea-level Rise, Cyclones and Storm Surges, Salinity Intrusion, Heavy Monsoon Downpours etc. has aggravated the overall Economic Development scenario of the country to a great extent. The effects of climate change pose risks for agriculture, fisheries, food and water supplies. A better understanding of the existing risk coping strategies may inform us about households ' ability to adapt to weather-related risk, and, potentially, inform the design of policy in the context of increasing climatic stress on the smallholder farmers in developing countries. The climate change threat for Bangladesh is related to development. On the one hand development could facilitate the introduction of adaptation measures.

- 6. The wetlands are converted into other land uses resulting in to ecosystem loss and degradation. Bangladesh is a signatory to the 1992 Biodiversity Convention. Bangladesh has ratified the 1971 RAMSAR Convention on wetlands of international importance and waterfowl habitat, the 1972 Convention concerning the protection of World Cultural and Natural Heritage, the 1973 Convention of International Trade in Endangered Species (CITES), the Convention of Biological Diversity (CBD), Bangladesh is active taking forward UNFCCC and ratified Kyoto Protocol on climate change
- 7. Impacts of climate change are already visible globally. Bangladesh is recognized worldwide as one of the most vulnerable countries to the impacts of global warming and climate change. This is due to its unique geographic location, dominance of floodplains, low elevation from the sea, high population density, high levels of poverty, and overwhelming dependence on nature, its resources and services. The country has a history of extreme climatic events claiming millions of lives and destroying development gains. The people and social system have knowledge and experience of coping with their effects to some degree and extent. Variability in rainfall pattern, combined with increased snow melt from the Himalayas, and temperature extremes are resulting in crop damage and failure, preventing farmers and those dependent from meaningful earning opportunities. In a changing climate the pattern of impacts are eroding our assets, investment and future. This stands for families, communities and the state. Global warming and climate change threatens settlements and the number of people displaced from their land due to riverbank erosion, permanent inundation and sea level rise is increasing rapidly every year. Climate change affects women and girls disproportionately, particularly poor and ultra-poor women, who bear the brunt of scarcity and competition for resources.
- 8. The changing climate regime is adding stress to our already stressed wetlands. The wetland functions and services such as regulation of stream flow, source for biological diversity, ecosystem services, carbon sink are exposed to the adversity of the climate change. Demand for land and resources are driving deforestation and over-exploitation of fisheries resulting in to degradation of resources and conversion of land use. Many households have very small holdings or no land, and depend on natural resources for their livelihoods.
- 9. The Government of Bangladesh (GoB) has mandated the Department of Fisheries (DoF) as chief implementing agencies of the policies for fisheries sector. Even so, GoB resources do not suffice to police and protect the country's wetlands. To do so will require stakeholder cooperation and a concerted government effort to enlist people living in and around the

wetlands as partners in protection.

- 10. The Bengal delta comprising the Ganges, Brahmaputra and Meghna flood plains is the world's largest flooded wetland, containing more than 400 species of fish. Bangladesh is amongst top ten fish producing countries of the world. The vast flood plain of Bangladesh currently remains underutilized for fish production. The goal of the perspective plan is to meet the increasing demand for fishes of through efficient management of water bodies. Fish production has increased rapidly since the 1990s through (a) pond aquaculture (fish raised in ponds) using hatchery-reared fish fingerlings; and (b) conversion of fish ponds by raising embankments around low-lying lands. Embankments are also used as orchards and vegetable gardens.
- 11. Fisheries resources in Bangladesh have great ecological, economic, commercial and socioeconomic importance. They contain very rich components of biodiversity of local, national and regional significance. Water bodies are unique for their rich biodiversity and cultural heritage. It is the combination of all these functions, yields and values that makes water bodies so important to the society.
- 12. Fish and fisheries are indispensable part in the life and livelihoods of the peoples of this country since immemorial time. It is the part of our cultural heritage. Fisheries sector has been playing a vital role in the socio-economic development of Bangladesh. This sector also has high potential for the perspective of economic development of the country. Department of Fisheries (DoF) is the main agency to conserve and develop the fisheries resources of the country. This sector is contributing significantly in food security through proving safe and quality animal protein, almost 60 percent animal protein comes from fish. In 2019-20, this sector contributes 3.52 percent to our national GDP and around one-fourth (26.37 percent) to the agricultural GDP. More than 12 percent of total population of Bangladesh are engaged with this sector on full time and part time basis for their livelihoods. Bangladesh earns a considerable amount of foreign currencies by exporting fish, shrimps and other fisheries products. Fish production in ponds lakes, borrow pits floodplains, oxbow lakes, and semi closed water bodies are increasing day by day through transfer of modern technology. Last 10 years average growth performance of this sector is almost 5.24 percent. Government is trying to sustain this growth performance which eventually ensures to achieve the projected production target of 4.55 million MT by 2020-21. According to FAO statistics 2020, Bangladesh is ranked 5th in world aquaculture production.
- 13. Bangladesh is blessed with its vast inland open water resources in the form of rivers, canals, beels, floodplains, etc., having a total area of 38,90,282ha providing 28.19% of the country total fish production in 2018-19 (FRSS, 2019). In addition, there are 8,21,923 ha of closed water bodies including ponds, baors, seasonal cultured water bodies and shrimp farms, pond & cage culture. There are 114,161ha of beels producing 99,890 MT fish and 26,75,758 ha of floodplains producing 7,81,481 MT fish in 2018-19 (FRSS, 2019). More than one third of the lands in Bangladesh remain under water every year for 4 to 6 months during the period of monsoon. Inundated floodplains are rich in nutrients and natural fish food and thus are excellent feeding, breeding and nursery grounds for fish and other aquatic organisms (De Graff, 2003; De Graff and Martin, 2003).

- 14. However, fish production has declined in inland open waters during last three decades due to various man-made causes such as, over fishing, implementation of flood control and drainage programme, construction of roads and dams, indiscriminate use of insecticides and pesticides for crop production. In 1985-86, the contribution of inland capture and culture fisheries to total fish production were 55.7% and 18.2%, respectively; whereas in 2018-19, inland capture fisheries contributes only 28.19% and inland culture fisheries contributes 56.76% to total production (FRSS, 2019). Though the total area of inland open waters (38,90,282 ha) is five times to ponds and lakes (8,21,923 ha) but fish production (24,88,601MT) is more than double than inland open waters which produces only 12,35,709 MT fish. Due to decline of fish species in open waters and obstructions of their migration routes, recruitment of fish in open waters has constantly declined and natural resources available in such water bodies remain vacant and unused. Productivity of inland open waters is still very poor due to a number of constraints-change of course of rivers and blockage of connecting canals between floodplains due to siltation, destruction of fish breeding and nursery grounds, indiscriminate use of pesticides and insecticides, over fishing, global warming and climate change, revenueoriented leasing system of water bodies, and unjustified harvesting of broods and young fish. To minimize problems and to increase fish production of inland open waters different strategies can be followed-(1) establishing fish sanctuary; (2) stocking of fingerlings or fry (stock enhancement); (3) fish conservation (use of fisheries conservation acts and rules); and (4) habitat restoration. In addition, paddy field has enormous potential in Bangladesh. DoF along with partners NGOs has taken initiatives to maximize fish production from rice fields and to extend the coverage area.
- 15. There is paramount importance of agriculture and rural sector in Bangladesh to meet its diverse development challenges. The agriculture sector is the major contributor to sustained food, nutrition and livelihood security of its large population to achieve self-sufficiency in food production, reduce rural poverty and foster sustainable economic development. Development of agriculture in Bangladesh is therefore accorded high priority by the Government with special emphasis on agriculture related policies, planning and informed decision making. In this process, the need for scientific measurement of changes in agriculture related indicators is duly recognized.

#### **Floodplain aquaculture practices**

- 16. Bangladesh is a country with vast floodplains (Ahmed, 1997) and one of the world's most important wetlands (Khan, 1997). These wetlands provide habitats to hundreds of fish, plants, birds and other wildlife species and most importantly, a source of income for millions of rural people (MACH, 1999; DFID, 2000). The floodplain provides habitat in the form of feeding, breeding and nursery ground for a wide range of wild life including fish (Tsai and Ali, 1997).
- 17. The floodplain aquaculture can conserve local biodiversity in better way. Floodplain aquaculture practices with floodwater from the neighboring rivers or canals, there happens automatic introduction of all kinds of natural fish available in local habitat. At the onset of monsoon, the fish can breed; spawn can grow and survive safely because of no public fishing takes place inside the beel/scheme. On the other hand, free access in open water allows fishing by using all types of gears. In case of floodplain aquaculture, the ditches are not dried

completely which allows some residual fish in the super market. koi, magur, shing, shol, foli etc. are the live fish variety sold in city market at 4-5 times higher price than the cultured fish.

- 18. Recent research also shows that most of the floodplains in Bangladesh are not cultured in a planned way as like as Daudkandi area. Floodplain aquaculture practice in Daudkandi areas has emerged as an advanced approach of aquaculture compare to the traditional practices, which ensures community participation through a well-set organization with possible best use of local resources. Other than its commercial importance, the model of floodplain has multidisciplinary involvement like, conservation of aquatic biota, socio-economic upliftment of the community people, environment, cropping pattern and food production etc.
- 19. Floodplain aquaculture practices tend to stock larger sized fingerlings to optimize growth from the short grow out period. Most of the projects kept over wintering fingerlings for the next year stock. The demand for larger sized fingerlings during the onset of monsoon become very high which has lead the growth of fingerling nursery business around the area. For stocking the floodplain projects, varieties of fish are chosen from the cultivable species available under current aquaculture in the country. Range of exotic fish species were generally dominant in the stocking list while native species were found about less than 25% of the total stocking.
- 20. Chandra et al.(2010) stated that a number of labors were appointed both for fish harvesting and marketing. The fish was marketed in the distant places such as, Chittagong, Sylhet and Dhaka etc. so it required high amount of money. The fish production obtained from the flood the floodplain aquaculture projects in and around Daudkandi area ranges from 1.5 to 2.9 ton/ha. It is very encouraging for the landowners and farmers to have the income coming additionally from their lands within 4-6 months period usually left fallow. The fish production obtained from the flood the floodplain aquaculture projects in and around Daudkandi area ranges from 1.5 to 2.9 ton/ha. It is very encouraging for the landowners and farmers to have the income coming additionally from the flood the floodplain aquaculture projects in and around Daudkandi area ranges from 1.5 to 2.9 ton/ha. It is very encouraging for the landowners and farmers to have the income coming additionally from their lands within 4-6 months period usually left fallow. There are some projects reported to produce exceptionally high ranging from 2.5 to 3 mt./ha. It was found that the average fish production from the study area was 2920.43 kg/ha Pankowri Fisheries in Eliotgonj and Shoibal Fisheries in Roypur are the examples of such exceptionally productive projects. Both cultured and naturally grown fish species were found in the study area, which yields a total of 27 different fish species. Total income from fish and other sources was Tk. 176385.49 /ha on average. Net returns were calculated considering full costs.
- 21. Chandra et al. (2010) also mentioned that the committee members were honored by additional money after calculating the final cost-benefit of the year. The committee members were responsible for the welfare of the project so the shareholders offered them that money willingly. Accountants were appointed to keep records and some of the projects also appointed Chartered Accountants to verify the calculations.

#### **Fish sanctuaries**

22. The Government has a number of projects to establish fish sanctuaries all over the country, and it was proven through different research activities. The Government is trying to implement fish laws, regulations, and habitat restoration also. Stock enhancement is also practiced through different projects, but beel nursery activity is recently emphasized intervention. The third fisheries project (TFP) and the second aquaculture development project (SADP) of the Government of Bangladesh implemented to enhance the fish stocks in the natural water bodies. The government of Bangladesh is continuously releasing fish fries in open water

125

bodies in every year. Recently the government has planned to implement beel nursery programme in order to enhance fish stocks in beels and floodplains in Bangladesh. In third fisheries project, fingerlings were found for stocking from two ways- beel nurseries and direct stocking, and beel nurseries were proven the most effective way by which fingerlings are dispersed automatically when beels are connected with the floodplains during monsoon (De Silva and Smith 2005). However, there is no effective research activity on the impact of beel nursery programme in Bangladesh. It was observed that beel nursery has influenced fish production in many ways. In 2009-2010, DoF spent only 3.401 million BDT to establish 80 beel nurseries and produced 24.73 million fingerlings. Whereas, it spent 33.783 million BDT for releasing 14.414 million fingerlings (MoFL, 2010).

The very nature and objectives of this Project have direct relevance with the national objectives of sustaining very recently attained self-sufficient in fish production, generation of rural employment, poverty alleviation especially for rural poorer section, creation of social & environmental balance and building economic infrastructures for the future generations to sustain.

Cage Culture: Cage Culture will be implemented in accordance with operational guidelines

for Sustainable Development for Bangladesh prepared under IAPP Project.

23. No environmental pollution will be evolved as a result of implementation of the project. No materials and inputs will be used that may cause pollution and hazards to environment under the project and natural resources will not be affected. Rather it will help to create a congenital environment in nature. Through this project farmers will get knowledge about environment & ecology which they might follow after on. Modern fish culture through re-excavation & development of ponds would develop the environmental aspects. Plantation and Napier grass production on the bank of the pond would produce food for cattle &fish. Through fish culture it would also create unpolluted aquatic environment, which could help public health. In every training course the environmental issues will be highlighted & it would-create consciousness & motivate farmer for environmental protection. As the project is designed to encourage fingerling production and establishment of demonstration Farm, it will discourage natural fish seed collection from natural waters and will protect aquatic biodiversity.

#### Future disaster management, climate change

- 24. Last few years the sea level increases remarkably due to the global warming and excess increases of heat level on earth. For that flood, storm, sliding and river bank erosion has been increased vulnerably due to the excess ice melting, heavy rain and land sliding. For this reason, co-existence of human and nature become difficult.
- 25. The overall assessment of the CSAWMP intervention proposals in terms of environmental and social considerations is positive. The assessment shows that while there is very low risk of negative environmental and social impacts, there are high positive social impacts and opportunities to enhance the social and environmental performance through the project. The CSAWMP project preparation team indicated that the project shall have no major adverse environmental and social impact. Because, the project does not involve any new construction of any sort like, housing, road, dam, water control structure, etc. Moreover, majority of the interventions proposed are not new, efforts are to improve the existing practices, so no

environmental and social adverse effects are expected.

26. The environmental and social safeguards will be applied to all the sub-projects and extension activities in different stages of the project cycle.

#### 8.2 Social Management

27. CSAWMP is not expected to have any significant adverse social impacts; it builds on the design and achievements of the previous implemented projects to adequately address Gender and Social Inclusion. The project does not involve any new construction of any sort like housing, road, dam, water control structure, etc. Therefore, the project interventions do not create issues related to physical displacement and consequently involuntary resettlement. The project interventions will not result in any adverse impact on the local communities, rather the project interventions will have positive impacts in terms of the increased accessibility to the market infrastructure and marketing facilities. It is expected that the project will operate in areas where Indigenous Peoples (IP) live in the geographic coverage of the CSAWMP. However, no adverse impacts on IPs are expected.

#### 8.3 Involuntary Resettlement

- 28. It has been determined that the Involuntary Resettlement social safeguards policy would not need to be triggered for CSAWMP. Limited physical construction is included in the project such as rehabilitation of the infrastructures of the sub-projects will be done to make them functional under this project. During implementation environmental clearance activities will be done as per rules & regulations.
- 29. In line with the Bangladesh Delta Plan 2100 (BDP 2100), Adaptive Delta Management (ADM) approaches- combining adaptation and flexibility based on a better understanding of local conditions and future scenarios- will be followed in infrastructure rehabilitation.
- 30. Re-excavation of pond/waterbody for establishment of beel nursery and re-excavation of water body for establishment of fish sanctuary are the prime activity of the project. The project will not include excavation or re-excavation of canals. In brief, in the CSAWMP interventions land acquisition and involuntary resettlement will be fully avoided. However, the screening process and community consultation will ensure that it is fully avoided in the case of mini laboratories and commodity collection centers.

#### 8.4 Gender mainstreaming

The project will promote gender mainstreaming and women's empowerment to ensure that a significant proportion of direct beneficiaries are female. In CSAWMP, a committee will be constituted by the community-based group or community-based organization for the proper maintenance and management of the fish sanctuary. With the cooperation / advice of the concerned Senior Upazila Fisheries Officer / Upazila Fisheries Officer, a committee (CBO) consisting of 20 members including a minimum of 25% women members will be formed. Women and children are most vulnerable to any types of disaster. Post project condition will create safe and healthy environment for women and children. Also, employment opportunity for women will be enhanced and women will also be included in the training programme to make them self-reliance. It would ensure their employment & income generation through participation in modern fish and prawn culture fish fingerling production & paddy cum fish culture result demonstration farm operation.

On the other hand distressed women might be included to operate their own farms. Beside women will get priority in fingerling and result demonstration training. Thus, the project will have positive impact on women and children.

The main measures to facilitate women empowerment and their participation in project activities have been identified are: (i) tailored extension services to address women's mobility issues and specific needs; (ii) activities specifically targeting women, including home gardening, goat rearing, and poultry farming, etc.; (iii) promoting women's leadership through female lead farmers, and (v) targeted efforts to promote women's participation, including in farmer field days, exposure visits, training events, CBO membership.

#### 8.5 Social Impact Assessment, Baseline Surveys and Mitigation Measures

In order to understand the socio-economic make-up of the communities in selected areas and of the specific target groups according to specific criteria and to identify social risks more accurately, a Social Impact Assessment (SIA) will be undertaken at the outset as part of a baseline survey. The SIA will describe the socio-economic baseline such as income, expenditure, employment, education, skills, living standards, utilities, health status and other socio-economic and cultural aspects (gender issues, religious practices, treatment of Small Ethnic Communities and other Vulnerable Communities, etc.), local power structures (elites, local government authorities, religious leaders) prevailing in the targeted areas. The findings of the baseline survey will directly inform the targeting process and help design strategies in a more contextualized and effective manner, keeping in mind the local capacities and constraints. This will be further sharpened by undertaking a need assessment among the targeted groups to understand what their expectations and interests are. A market assessment to understand the demand and supply of local goods and services is also important to design successful and sustainable livelihood strategies.

# Chapter-9: Monitoring & Evaluation (M&E)

CSAWMP-DoF will provide support multi-tier Results Monitoring and Impact Evaluation (M&IE) on sub-sectoral activities of capacity development, extension and market access. M&IE will assess the progress made against the set of Intermediary Indicators: (i) climate resilient Aquaculture technology development (ii) increase in the yield of fisheries in the subproject areas; (iii) magnitude post-harvest loss reduction (iv) infrastructures/facilities improved/developed for fish marketing and value chain; (v) performance of direct project beneficiaries; (vi) share of actively engaged female farmers in production; (vii) capacity building training programs for officers, staff, farmers, traders and entrepreneurs; etc. Results Framework and Monitoring Indicators are available in CSAWMP-DoF Log frame.

### 9.1 M&E Responsibility

#### 9.1.1 Responsibility of PCU

The overall responsibility of the project monitoring, evaluation, impact assessment and reporting will rest with the PCU. PCU will provide support for development, implementation and institutionalization of rigorous monitoring and evaluation mechanisms for project activities implemented Day-to-day duties will be carried out by the M&E Specialist of PCU supported by M&E Officers of PIUs. Close collaboration will be established between the M&E Specialist of PCU and the M&E officer of PIUs. Training & Communication expert of DoF part will carry out their M&E functions. PCU will hire the services of a Monitoring and Impact Evaluation Consultant to design & coordinate the stakeholders' analysis & impact survey, develop a comprehensive project M&E framework, process project data and compile all implementation of the Results Monitoring and Impact Evaluation system will be carried out by the M&IE Consultant.

#### 9.1.2 Responsibility of PIU

Day-to-day duties will be carried out by the M&E Cells of PIUs. In the PIU there will have M&E capacity and design its specific M&E plan to meet its own requirements as well as those of the project management. PIUs are primarily responsible for monitoring of the implementation of the individual activities of the component within the purview of the respective departments. The data would be consolidated and validated by the relevant PIUs. The PIUs are responsible for: (i) conduct baseline survey and measure baseline values of the all the indicators, (i) Consolidating and analyzing all M&E data provided by field level Officers (ii) Validating M&E data in the MIS entered at the PIUs/PCU as required; (iii) Monitoring field level activities and identifying corrective actions, if needed, as well as documenting success stories; and, (iv) Providing monthly reports to the PIU. Implementing agencies, through their upazial/district offices would assume the primary responsibility for collecting data to update the input/output indicators.

#### 9.1.3 M&E Responsibilities of the External M&E Agency

In the DPP the CSAWMP-DoF has a provision of conducting 5(Five) Assessment/study. At the beginning of the execution of the Project. The PIU of DoF will hire expertise from any University/farm or any individual to conduct baseline Survey.

the Responsibilities for that external M&E agency include creating an M&E strategy and framework for the project in consultation with the PCU and PIUs. This will include defining key process and performance monitoring indicators, data collection frequencies, and formats for collecting the relevant information. The external M&E agency will also: (i) conduct the Baseline Survey for project; (ii) monitor and evaluate the progress in the provision of critical project inputs and activities; (iii) undertake participatory monitoring and evaluation for relevant activities through the use of balance score card, focus groups' discussion, and participatory social auditing.; (iv) evaluate progress in achieving the project outputs and outcomes and evaluate the project's impact at key junctures during the project period to assess progress towards achieving project's objectives; (v) strengthen the capacity of the project implementing agencies to monitor project impacts and use the PMIS by providing on-the-job training; (vi) provide M&E reports to PIU which would summarize achievements of the performance, cross-cutting issues and recommendations, and updated project indicators; and (viii) provide three comprehensive reports- the baseline survey and two impact evaluation assessments at the time of the project midterm review and project completion.

#### 9.2 Major M&IE Activities

Major M&IE activities include technical, institutional, environmental, social, economic, financial, training, procurement status, etc. M&IE to help indicate actual achievement compared to the planned in DPP, PIM and other relevant documents. The major M&E activities are: (i) baseline survey to monitor the implementation and evaluate the performance of various activities under the project; (ii) monitoring of environmental and social safeguards to assess that activities implemented in compliances with the EMF and SMF avoiding risks; (iii) monitoring of fiduciary and governance issues; (iv) monitoring of training activities, (v) monitoring of policies and sector strategies; (vi) impact assessment to provide independent assessment of success and failure of the project activities; (vii) performance audit to supplement the annual project audit, and annual operational review; etc.

Tuble 29: Log fruite for clinic	te Smart Agriculture and water	0	
Narrative Summery	Objectively Verifiable Indicators (OVI)	Means of Verification (MOV)	Important Assumptions (IA)
Program Goal: To enhance climate resilience and productivity of irrigated agriculture and fisheries in targeted sub-projects.	• Increased fish production and productivity by introducing climate smart aquaculture technology;	<ul> <li>FRSS report</li> <li>DoF publications</li> <li>Project Evaluation Report</li> <li>BBS report</li> <li>Field visit</li> </ul>	• Project inception in time
<ul> <li>Program Purpose:</li> <li>To increase 20% of fish</li> </ul>	• Established beel nursery,	• Field office	<ul> <li>Project inception</li> </ul>
production and productivity base year	sanctuaries, mini processing centre etc.	report	in time
2018-19 by introducing climate smart aquaculture technology;	<ul> <li>Increased fish production up to 20% in the project command area during the</li> </ul>	• IMED Evaluation report	• Favorable condition and weather
• To enhance market access of the relevant stakeholders through	<ul><li>5th year of the project.</li><li>Established e-fisheries platform,</li></ul>	<ul> <li>Report of DoF</li> <li>Report of BWDB</li> <li>Report of DAE</li> </ul>	<ul> <li>Availability and market price raised of fish production inputs</li> </ul>
promoting business- friendly supply chain and market network; and	• Developed linkage between rural farmers and service providers up to 50% by the end of the project	<ul> <li>FRSS data</li> <li>Interviewing the farmers</li> <li>Field visit</li> </ul>	
• To ensure better livelihoods of the stakeholders and better	<ul> <li>Reduced vulnerability and enhanced livelihood opportunities for the beneficiaries</li> </ul>	Project reports	
understanding on sustainable fisheries resources management through capacity development.	<ul> <li>Provided better understanding on sustainable fisheries resources management</li> </ul>		
	• AIGA inputs distribution among 600 fishers,		

Table 29: Log frame for Climate Smart Agriculture and Water Management Project (DoF-Part)

Narrative Summery	Objectively Verifiable Indicators (OVI)	Means of Verification (MOV)	Important Assumptions (IA)
	<ul> <li>7040 DoF officers, staff and beneficiaries training</li> <li>Matching grant support for entrepreneurs,</li> </ul>		
Outputs:	Physical progress achieved 100% by September, 2025		
<ul> <li>Establishment of beel nursery</li> <li>Establishment of fish sanctuary</li> <li>Establishment of Mini fish Processing Unit with value addition machineries</li> <li>Procurement and supply of insulated van with icing facilities</li> <li>Procurement and supply of wooden country boat</li> </ul>	<ul> <li>Established 145 Nos. beel nursery</li> <li>Established 49 Nos. fish sanctuary</li> <li>Established 14 Nos. Mini fish Processing Unit with value addition machineries</li> <li>Procured and supplied 58 Nos. insulated van with icing facilities</li> <li>Procured and supplied 29</li> </ul>	<ul> <li>Project reports</li> <li>FRSS reports</li> <li>Monitoring Report;</li> <li>Report of the PMO and field office</li> <li>IMED Reports</li> <li>Annual reports</li> </ul>	<ul> <li>Provided training</li> <li>Active participation of the people</li> <li>Active participation of the respective organizations</li> <li>Project inception in time</li> <li>Favorable condition and weather</li> </ul>
• Fish Demonstration	Nos. wooden country boats		
J 0	<ul> <li>Established 1950 Nos. Fish Demonstration</li> <li>Established 29 Nos. Fish Drying Demonstration</li> <li>AIGA inputs distributed among 600 fishers.</li> <li>7040 beneficiaries trained</li> <li>Procured and supplied of 145 fish friendly fishing</li> </ul>		
<ul><li>distribution;</li><li>Matching Grant Support;</li></ul>	145 fish friendly fishing net.		

Narrative Summery	Objectively Verifiable Indicators (OVI)	Means of Verification (MOV)	Important Assumptions (IA)
	• 20 Live Fish Carrying Support among entrepreneurs' group		
<ul> <li>Inputs:</li> <li>Appointment of skilled manpower</li> <li>Training of project beneficiaries</li> <li>Procurement and supply of vehicles</li> <li>Procurement and supply of office equipment and machineries</li> <li>Procurement and supply fish friendly fishing net.</li> <li>Procurement and supply of Digital Soil and Water Testing Kit</li> <li>Procurement and supply of necessary office furniture</li> <li>Total Project Cost</li> </ul>	<ul> <li>Appointed 11 skilled manpower within 1st year</li> <li>Total 7040 officers, staff and beneficiaries trained.</li> <li>Procured and supplied of 1 nos. Jeep, 1 Double-cabin pickup, 1 microbus, 29 Motorcycle, 20 Bicycle; 58 nos. Insulated van with icing facilities and 29 Wooden country boat within 1st year</li> <li>Procured and supplied of 37 nos. smart Desktop/Laptop, 09 Photocopier; 9 nos. Fax Machine, 5 nos Air Conditioner within project period</li> <li>Procured and supplied of 145 fish friendly fishing net.</li> <li>Procured and supplied of 49 sets soil &amp; water testing kits</li> <li>Procured and supplied of 145 fish friendly fishing net.</li> <li>Procured and supplied of 49 sets soil &amp; water testing kits</li> </ul>	<ul> <li>Office documents</li> <li>Training register</li> <li>Final Study Report</li> <li>Report of the PMO and field office</li> <li>Physical verification</li> <li>Project record</li> <li>Interviewing farmers</li> <li>Bill register</li> <li>IMED reports</li> <li>Tender documents</li> </ul>	<ul> <li>Required ADP budget allocation and placing of fund on time.</li> <li>Approval process</li> <li>Active participation of the respective organizations</li> </ul>

# Chapter-10: Governance and Accountability Action Plan

#### 10.1 Perspective of Governance and Accountability Action Plan

Governance and Accountability Action Plan (GAAP) is a pre-requisite for foreign aided projects. The entire objective of the GAAP is to put in place systems which are transparent in functioning, information that is accessible by all and above all a governance mechanism which delivers as per the designed principles of the Project. GAAP is prepared in order improve the transparency in implementation and management of the project. Additionally, it ensures that the proceeds of any loan are used only for the purpose for which the loan was granted, without regard to political or other non-economic influences or consideration. The Borrower for such projects would be required to formulate procedures and institutional controls to guide project staff in guaranteeing that loan funds are properly and transparently utilized, and that the Borrower takes appropriate actions to reduce the chances of misuse. These procedures and controls also ensure that the cost of implementing the project (doing business) does not go up unnecessarily. PCU & PIUs need to establish procedures that avoid possible misuse and maximize value for money. Careful supervision is required to ensure that agreed procedures are complied with in letter and in spirit, as also to track the achievement, output and outcomes. Additionally, as communities come to trust the project, they will complain and demand more. These pressures must be anticipated and accepted as part of the price that must be paid for creating a more efficient system.

The GAAP has been integrated into the project design to ensure that project funds are used effectively and efficiently and key stakeholders are provided the mechanisms to give feedback and enable their grievances to be addressed in a responsive and accountable manner. Success of a project is very closely associated with efficient and responsive Risk Mitigation and Grievance Redress Mechanisms which are based on a responsive administration. Such systems would be in place in the project. In addition to this, the project, in line with the requirement of the Right to Information Act (2009) (RTIA) shall provide on demand to ensure free flow of information and people's right to information. Different aspects of Risk Mitigation and Grievance Redress Mechanisms are summarized below.

#### GAAP includes measures to:

- Ensure effective, transparent and timely implementation of project activities;
- Reduce risks of project implementation;
- Redress grievances;
- Guard against misuse of the project resources;
- Free and fair information flow- enables beneficiaries to receive and provide information about project inputs, outputs/outcomes and performance.

# 10.2 Risks in CSAWMP Implementation and Mitigation Measures

During implementation, the project may face several risks, so measures to mitigate these risks needs to be formulated and integrated into the project implementation plan. The success of a project implementation is closely associated with an efficient mitigation of risks. So, risk mitigation measures would be in place in the project. Probable risks and their possible mitigation measures are given below in Table 30.

Sl. No.	Issue	Risk	Mitigation Measures	Responsible Organization
	WMO/WMG	WMO and WMG may not form in time. There may be conflict between various users of water resources	Department of Fisheries part may for CBO and DAE can form farmers field school based on the resources.	PIUs of BWDB, DAE and DoF
6	CBOs and POs	CBOs and POs are not sustainable and functional	<ul> <li>Proper farmer selection</li> <li>Providing training and technology support</li> <li>CBO registration and fund raising</li> <li>Linkage with local and urban markets for product marketing</li> </ul>	PIUs of BWDB DAE, and DOF,
9	Procurement	<ul> <li>Procurement not completed in time</li> <li>Inadequate capacity of PIUs</li> <li>Proper procedures not followed</li> </ul>	<ul> <li>Time bound procurement plan prepared and implemented</li> <li>Capacity building training provided to PIUs</li> <li>PPA/PPR-2008, WB guidelines and audit rules followed</li> </ul>	PIUs of BWDB DAE, and DOF,
10	Financial management	<ul> <li>Interruption in fund flow and disbursement</li> <li>Delay in receiving SoE from</li> </ul>	• Ensured fund flow and disbursement through proper budgeting and financial	PIUs of BWDB DAE, and DOF,

Sl. No.	Issue	Risk	Mitigation Measures	Responsible Organization
		upazilas/fields (cost centers) • Inadequate capacity of PIUs • Proper procedures and audit rules not followed	<ul> <li>management</li> <li>including timely</li> <li>receive SoE and</li> <li>submission of</li> <li>withdrawal</li> <li>applications</li> <li>Capacity building</li> <li>training provided to</li> <li>PIUs</li> <li>PPA/PPR-2008,WB</li> <li>guidelines and audit</li> <li>rules followed</li> </ul>	
11	Environmental and social safeguard	Non-compliance with environmental and social safeguards	<ul> <li>Screening matrix developed and used for CRG and PBRG sub-project selection</li> <li>Institutional focal points nomited and assigned for coordination of environmental and social safeguard issues</li> <li>Topics on environmental and social safeguard issues included in training program</li> <li>Good Agricultural Practices (GAP) promoted</li> <li>Special requirement for women CIG farmers identified</li> <li>On an average 35% women farmers are included in new CIGs</li> <li>Regular monitoring on environmental and social safeguard by PMU and PIUs</li> </ul>	PIUs of BWDB DAE, and DOF, recipient organizations

Sl. No.	Issue	Risk	Mitigation Measures	Responsible Organization
12	Monitoring and evaluation	<ul> <li>Weak internal monitoring systems in place</li> <li>Trained manpower and understanding of monitoring formats not equal at all levels</li> <li>Inconsistent data flow due to multidimensional project activities</li> </ul>	<ul> <li>Awareness building among the farmers</li> <li>Monitoring planned and incorporated in project implementation</li> <li>M&amp;E cells setup and trained</li> <li>Monitoring formats developed and used</li> <li>Monitoring conducted, reports prepared and shared</li> </ul>	PIUs of BWDB DAE, and DOF,
			with concerned stakeholders	

## 10.3 Grievance Redress Mechanism

#### 10.3.1 Possible Grievances/Complaints

The nature of Grievances/ complaints which may be envisaged to be received by the Grievance Redress Officers at different levels of project implementation can be enlisted as follows. The complaints may relate to the following or any other project related matter touching to CSAWMP. Grievance Redress Officers will have to deal with these complaints.

- (i) Complaints related to prioritization and selection of WMO and WMG in the subprojects;
- (ii) Complaints related to selection of candidates for higher studies and foreign training;
- (iii) Complaints related to mobilization of farmers and formation of CBOs and POs;
- (iv) Complaints related to selection of CBO/farmers for demonstrations;
- (v) Complaints related to selection of subprojects/CBOs for entrepreneur grants;
- (vi) Complaints related to procurements (goods, works, services);
- (vii) Complaints related to the fund flow and disbursement, bill payment, etc;
- (viii) Complaints related to the process and quality of delivery; etc.

## 10.3.2 Grievance Redress Mechanism

The project intends to implement a robust and responsive three tiers Grievance Redress Mechanism (GRM) by putting in place specific persons who shall be entrusted with the responsibility for the same, with provisions of online tracking and monitoring of the deliverance on this score. In case some conflicts arise between stakeholders (though not very likely) or in case

some stakeholders are deprived of participation or in case some stakeholders are adversely affected by any project activity, the aggrieved person will be able to complain and get remedy.

As the first tier of GRM, an officer will be designated as Grievance Redress Officer (GRO) at the upazila level who will be the first level contact for an aggrieved person. On a fixed date of every month, the Grievance Redress Officer (GRO) will visit the village/ CBOs where individuals / community will approach him/her. UAO, UFO will act as Appellate Officers for first tier at upazila level. This will be in addition to complaint book/box kept at the Upazila level office which will be entertained by the Grievance Redress Officer (GRO) the same day at the field level. Each upazila will have information board with the name of the Grievance Redress Officer (GRO) and Appellate Officer at upazila and district level along with the cell phone numbers of concerned officers. The concerned Upazila Grievance Redress Officer (UGRO) will prepare a monthly report on these cases, and submit to the District Grievance Redress Officer (DGRO). The Upazila offices of the concerned agencies will respond to the complaints and resolve cases on monthly basis and only those requiring higher level attention will be forwarded to the district or PIU level.

As the second tier of GRM, an Integrated Grievance Redress Mechanism (IGRM) will be established at the district level that will register user complaints using various mediums written, mobile or web based complaints and address them in a time bound system. The project will commit itself for proactive disclosure and sharing of information with the key stakeholders, including the communities/beneficiaries. Most grievances are expected to be resolved at this level including appeals. Deputy Director, Agriculture Extension Department, District Fisheries Officer and Executive Engineer, Bangladesh Water Development Board will act as Appellate Officers for second tier at district level. Complaints/appeals not resolved at upazila and district levels and those requiring higher level attention will be forwarded to the PIU-headquarters or to PCU as the case may be.

As the third tier, each PIU will have a central grievance redress committee at the PIUheadquarters which will have mainly oversight and monitoring role. The project will have a communication strategy focusing on efficient and effective usage of print and electronic media, bill boards, posters, wall writing, and adoption of any other method suiting local context, logistics, human and financial resources. As part of GRM, a Grievance Redress Cell (GRC) will be set up at PIU-headquarters under each component. PD, of PIUs would be the Appellate Authorities to decide upon the appeals not resolved at first and second tiers. All the names of the officers relating to grievance redress will be displayed on the project websites.

The Grievance Redress Officer and the Appellate Authority for the redress of the grievances for the components at different levels, along with the time period stipulated for addressing the complaints finally, are given below. The contact details will be disclosed on the project websites and will be updated regularly.

#### 10.3.3 Grievances/Complaints Handling Mechanism

Confidentiality and professionalism for all complainants would be ensured strictly and that no actions will be taken against innocent people. Additionally, complaints against project staff will be handled neutrally and transparently for the system to be credible. All the upazila/district level

offices of the line departments, viz. BWDB DAE and DOF will designate one senior officer, in each upazil/district office and at PIU-headquarters, as the Grievance Redress Officer (GRO), who will receive and redress complaints relating to the project matter (Table 13.2). The Upazila/District Head of the concerned line departments will be designated as the Appellate Authority relating to the grievance redress. The names and contact details of these officers will be published on the website of PMU and PIUs.

Sr.	Activity Area/Level	Grievance	Time	Appellate	Time
No.		Redress Officer	Period	Authority	Period
Compor	nent-1: Improved Clima	te Resilience of I	Flood Cont	rol, Drainage an	d Irrigation
2	Rehabilitation of	PD, PCU, BWDB	30 days	Executive	15 days
	FCD/FCDI Subprojects			Engineer,	
	and Water management			BWDB	
Compor	nents-2, Climate-Smart Agr	iculture and Fisheri	es Productio	on and Marketing	
1	Upazila	AAO/AEO, AFO	30 Days	UAO, S/UFO,	15 Days
2	District	ADD (crops),	30 Days	DDAE, DFO,	15 Days
		SAD,		Executive	
				Engineer	
3	PIU	M&E, PIU	30 Days	PD, PIU	15days

Table 31: Grievance redresses arrangements at different tiers

#### 10.3.4 Mobile Phone-based Grievance and Redress System

CSAWMP intends to setup a Grievance and Redress (G&R) system that will use the ICT platform to register grievances and provide notifications back to the concerned person. The underlying platform for the G&R system will be a web-enabled, mobile phone connected MIS system that will be based upon the open-source platform.

				Plan for Financial 2022-23 Quarater-1 Quarater-2 Quarater-3											1								
Economic				Alloca	tion as per	r DPP			Quarate	er-1			Quara	ter-2			Quara	ter-3			Quara	ter-4	
code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
3211107	Hiring charge (Vehicles) (for 2 vichele, 50 month/Vehicle)	100	100.00	0.00	0.00	0.00	100.00	0	5.00	0.00	5.00	0	7.50	0.00	7.50	10	6.25	0.00	6.25	10	6.25	0.00	6.25
3211110	Legal expenses (Fish act implementation)	2175	0.00	27.19	81.56	108.75	108.75	0	0.00	5.44	5.44		0.00	7.25	7.25	218	0.00	7.25	7.25	218	0.00	7.25	7.25
3211111	Local Exchange visits/Field visits	29	6.00	17.74	53.21	70.95	76.95	0	0.30	3.55	3.85		0.40	4.73	5.13	2	0.40	4.73	5.13	2	0.40	4.73	5.13
3211111	Farmers' Field Day	100	5.00	12.50	37.50	50.00	55.00	0	0.25	2.50	2.75		0.33	3.33	3.67	5	0.33	3.33	3.67	5	0.33	3.33	3.67
3211111	Seminar and conference expenses (Project Inception, Closing, Module Formulation)	22	7.00	20.70	62.09	82.79	89.79	0	0.35	4.14	4.49		0.47	5.52	5.99	2	0.47	5.52	5.99	2	0.47	5.52	5.99
3211117	Internet/Fax/Telex	LS	0.00	0.75	2.25	3.00	3.00	0	0.00	0.15	0.15		0.00	0.20	0.20	0	0.00	0.20	0.20	0	0.00	0.20	0.20
3211120	Telephone	2	0.00	0.88	2.63	3.51	3.51	0	0.00	0.18	0.18		0.00	0.23	0.23	1	0.00	0.23	0.23	1	0.00	0.23	0.23
3211125	Advertising expenses (Tender, Recruitment etc.)	LS	5.00	6.25	18.75	25.00	30.00	0	0.25	1.25	1.50		0.33	1.67	2.00	0	0.33	1.67	2.00	0	0.33	1.67	2.00
3211125	Advertising expenses (Advertising, electronic & print media coverage etc.)	LS	5.00	13.75	41.25	55.00	60.00	0	0.25	2.75	3.00		0.33	3.67	4.00	0	0.33	3.67	4.00	0	0.33	3.67	4.00
3211126	Audio- video production (Project Documentations, Video, etc)	7	5.00	7.50	22.50	30.00	35.00	0	0.25	1.50	1.75		0.33	2.00	2.33	1	0.33	2.00	2.33	1	0.33	2.00	2.33
3211127	Books & periodicals (Scietific Books, Jounals, Newsletter, Newspaper)	LS	1.00	1.50	4.50	6.00	7.00	0	0.05	0.30	0.35		0.07	0.40	0.47	0	0.07	0.40	0.47	0	0.07	0.40	0.47
3211131	Labour wages to non- employees LEAF (20*20000*54)	54	0.00	54.00	162.00	216.00	216.00	0	0.00	6.00	6.00		0.00	16.00	16.00	3	0.00	16.00	16.00	3	0.00	16.00	16.00
3221109	Management Charges (Contingencies for field offices & project HQ, project evaluation, etc.)	LS	10.00	11.75	35.25	47.00	57.00	0	0.50	2.39	2.89		0.54	3.12	3.67	0	0.54	3.12	3.67	0	0.54	3.12	3.67
3231101	Foreign training (Study tour/visit - overseas)	40	0.00	42.50	127.50	170.00	170.00	0	0.00	0.00	0.00		0.00	21.25	21.25	0	0.00	21.25	21.25	0	0.00	0.00	0.00
3231301	Domestic training	7040	105.00	163.21	489.62	652.83	757.83	0	5.25	32.66	37.91		7.00	43.52	50.52	352	7.00	43.52	50.52	352	7.00	43.52	50.52
3251104	Demonstration of different technologies for 20 schemes covering all upazila	1950	170.00	476.02	1428.07	1904.09	2074.09	0	8.50	95.20	103.70		11.33	126.94	138.27	150	11.33	126.94	138.27	150	11.33	126.94	138.27
3251104	Fish Drying Demonstration	26	4.50	8.62	25.88	34.50	39.00	0	0.23	1.73	1.95		0.30	2.30	2.60	3	0.30	2.30	2.60	3	0.30	2.30	2.60
3251104	Mechanical Fish Drying Demonstration	3	0.00	7.50	22.50	30.00	30.00	0	0.00	0.00	0.00		0.00	2.50	2.50	0	0.00	2.50	2.50	0	0.00	2.50	2.50
3254101	Fingerlings Stocking in sub- project (On basis of DoF guideline) 20 sub-project covering all Upazila	105	40.00	95.15	285.45	380.60	420.60	0	2.00	19.03	21.03		2.67	25.37	28.04	11	2.67	25.37	28.04	11	2.67	25.37	28.04

# Appendix: 1 Time Based (Quarterly) Work Plan for the whole Project

									Plan f	or Financ	cial 2022-	23											
Economic			<b>^</b>	Alloca	ation as pe	r DPP			Quarate	er-1			Quara	ter-2			Quara	ter-3			Quara	ter-4	
code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
3255102	Printing and binding	LS	10.00	5.00	15.00	20.00	30.00	0	0.50	1.00	1.50		0.63	1.33	1.96	0	0.63	1.33	1.96	0	0.63	1.33	1.96
3255105	Other stationery	LS	5.00	3.75	11.25	15.00	20.00	0	0.25	0.75	1.00		0.09	1.00	1.09	0	0.09	1.00	1.09		0.09	1.00	1.09
3257101	Consultancy	172	0.00	130.24	390.71	520.95	520.95	0	0.00	26.05	26.05		0.00	34.73	34.73	15	0.00	34.73	34.73	15	0.00	34.73	34.73
3257101	Contractual staff - Pay and allowances	130	0.00	18.11	54.34	72.45	72.45	0	0.00	3.62	3.62		0.00	4.83	4.83	6	0.00	4.83			0.00	4.83	4.83
3257103	Assessment/Study	6	5.00	13.75	41.25	55.00	60.00	0	0.25	2.75	3.00		0.33	3.67	4.00	1	0.33	3.67	4.00	1	0.33	3.67	4.00
3257104	Auditing through a Audit firm	LS	0.00	6.25	18.75	25.00	25.00	0	0.00	1.25	1.25		0.00	1.67	1.67	0	0.00	1.67	1.67	0	0.00	1.67	1.67
3257301	Ceremonies/Festivals (Fish fair, rally etc.)	LS	5.00	4.76	14.29	19.05	24.05	0	0.25	0.95	1.20		0.33	1.27	1.60	0	0.33	1.27	1.60	0	0.33	1.27	1.60
3258102	Machineries and equipment repair & maintenance (Boat, furniture & fixture, etc)	LS	5.00	3.75	11.25	15.00	20.00	0	0.25	0.75	1.00		0.33	1.00	1.33	0	0.33	1.00	1.33	0	0.33	1.00	1.33
3258103	Computer, Printer, etc Repair & maintenance	LS	2.00	3.49	10.46	13.95	15.95	0	0.10	0.70	0.80		0.13	0.93	1.06	0	0.13	0.93	1.06	0	0.13	0.93	1.06
3258105	Photocopier, etc Repair & maintenance	LS	2.00	3.05	9.19	12.24	14.24	0	0.10	0.60	0.70		0.13	0.82	0.95	0	0.13	0.82	0.95	0	0.13	0.82	0.95
3258108	Fish sanctuary repair and maintenance with Guards	49	10.00	40.79	122.35	163.14	173.14	0	0.50	8.16	8.66		0.67	10.88	11.54	2	0.67	10.88	11.54	2	0.67	10.88	11.54
3631199	Matching Grant support for Live Fish Carring (Entrepreneur)	20	0.00	35.00	105.00	140.00	140.00	0	0.00	3.50	3.50		0.00	10.50	10.50	1	0.00	10.50	10.50	1	0.00	10.50	10.50
3821126	Alternative income generating activities (AIGA) for poor fishers)	600	0.00	37.50	112.50	150.00	150.00	0	0.00	6.25	6.25		0.00	12.50	12.50	50	0.00	12.50	12.50	50	0.00	6.25	6.25
	Raveniew Expenditure		1169.00	1272.95	3818.85	5091.80	6260.80		57.10	235.08	292.18		79.74	355.13	434.86	0	74.99	355.13		0	74.99	327.63	402.61
	Capital Expenditure								0.00	0.00	0.00		0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00		
4111317	Re-excavation of pond/water body for establishment of beel nursery	145	50.00	83.56	250.69	334.25	384.25	0	2.50	16.71	19.21		3.33	22.28	25.62	5	3.33	22.28	25.62	5	3.33	22.28	25.62
4111317	Establishment of beel nursery	145	20.60	31.98	95.93	127.91	148.51	0	1.03	6.40	7.43		1.37	8.53	9.90	5	1.37	8.53	9.90	5	1.37	8.53	9.90
4111317	Re-excavation of water body for establishment of fish sanctuary	49	40.00	22.46	67.39	89.85	129.85	0	2.00	4.49	6.49		2.67	5.99	8.66	2	2.67	5.99	8.66	2	2.67	5.99	8.66
4111317	Establishment of fish sanctuary	49	50.00	39.56	118.69	158.25	208.25	0	2.50	7.92	10.42		3.33	10.55	13.88	2	3.33	10.55	13.88	2	3.33	10.55	13.88
4111317	Mini Processing unit Construction (Deep Tube well, depuration, Grading Platform, overhead tank)	14	300.00	275.00	825.00	1100.00	1400.00		0.00	0.00	0.00		37.50	137.50	175.00	0	37.50	137.50	175.00	0	0.00	0.00	0.00

#### CSAWMP-DoF

		S			13         14         15         16         17         18         19         20         21         22         2           23.75         0.00         23.75         0.00         0.00         0.00         1         0.00         0.00           15.00         0.00         15.00         0.00         0.00         1         0.00         0.00           13.75         0.00         15.23         0.00         15.23         0         0.00         0.00           0.00         73.95         73.95         0.00         33.35         3         35         4         0.00         0.00           0.00         0.00         0.00         15.23         15.23         0         0.00         0.00           120         0.00         0.00         0.00         17         0.00         0.00           121         120         0.00         0.00         0.00         17         0.00         0.00           14         10.28         0.00         0.00         0.00         1         0.00         0.00           0.00         1.20         1.20         0.00         0.00         1         0.00         0.00           0.00 <th></th> <th></th> <th colspan="2"></th> <th></th>																		
Economic					tion as per	DPP			Quarate	er-1			Quara					ter-3			Quara	ter-4	
code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	12				16			-				23	24	25	26	27
4112101	Motor vehicle (Jeep 4WD) Motor vehicle (Double	1	95.00	0.00	0.00	0.00	95.00	0	23.75	0.00	23.75		0.00	0.00	0.00	1	0.00	0.00	0.00	1	0.00	0.00	0.00
4112101	Cabin PickUp)	1	60.00	0.00	0.00	0.00	60.00	0								-			0.00	1	0.00	0.00	0.00
4112101	Motor vehicle (MicroBus)	1	55.00	0.00	0.00	0.00	55.00	0	13.75	0.00	13.75		0.00	0.00	0.00	1	0.00	0.00	0.00	1	0.00	0.00	0.00
4112101	Motorcycles (125 cc) (for 29 upazila	29	60.90	0.00	0.00	0.00	60.90	0	0.00	0.00	0.00		15.23	0.00	15.23	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Insulated van with icing facilities	58	0.00	174.00	522.00	696.00	696.00	0	0.00	73.95	73.95		0.00	33.35	33.35	4	0.00	33.35	33.35	4	0.00	33.35	33.35
4112102	Water vehicle (Wooden country boat-	29	0.00	15.23	45.68	60.91	60.91	0	0.00	0.00	0.00		0.00	15.23	15.23	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112202	Brand Computers with smart software and accessories	37	12.00	8.10	24.30	32.40	44.40	0	2.18	8.10	10.28		0.00	0.00	0.00	17	0.00	0.00	0.00	17	0.00	0.00	0.00
4112303	Supply and installation of Air Conditioner (split type- 2Ton)	5	1.20	1.20	3.60	4.80	6.00	0	0.00	1.20	1.20		0.00	0.00	0.00	2	0.00	0.00	0.00	2	0.00	0.00	0.00
4112303	Supply and installation of LED TV (PD) (Appendix-G)	1	0.00	0.30	0.90	1.20	1.20	0	0.00	0.30	0.30		0.00	0.00	0.00	1	0.00	0.00	0.00	1	0.00	0.00	0.00
4112306	SS covered Styrofoam Box (For fish Carrying)	1450	0.00	29.00	87.00	116.00	116.00	0	0.00	5.94	5.94		0.00	7.69	7.69	125	0.00	7.69	7.69	125	0.00	7.69	7.69
4112306	Mini Processing Unit Mercenaries for Fisheries Produces Value Added Products	14	120.00	110.00	330.00	440.00	560.00	0	0.00	0.00	0.00		15.00	55.00	70.00	0	15.00	55.00	70.00	0	0.00	0.00	0.00
	Office equipments (Photocopier & other) (PIU and Field Office)	LS	15.00	5.00	15.00	20.00	35.00	0	1.88	2.50	4.38		0.21	0.83	1.04	0	0.21	0.83	1.04	0	0.21	0.83	1.04
4112310	Fax machine (PIU- 1, Division-8)	9	0.00	0.45	1.35	1.80	1.80	0	0.00	0.45	0.45		0.00	0.00	0.00	5	0.00	0.00	0.00	5	0.00	0.00	0.00
4112310	Binding Machine, and other office equipment etc.	LS	3.00	2.83	8.45	11.28	14.28	0	0.38	1.42	1.79		0.13	0.47	0.59	0	0.13	0.47	0.59	0	0.13	0.47	0.59
4112310	Telephone sets with connection	2	0.30	0.00	0.00	0.00	0.30	0	0.08	0.00	0.08		0.00	0.00	0.00	1	0.00	0.00	0.00	1	0.00	0.00	0.00
4112312	Soil and water testing kits for LEAF & DoF officer/Staff (with additional reagent supply 2 times)	49	5.00	4.38	13.13	17.51	22.51	0	0.00	0.00	0.00		0.63	2.19	2.81	0	0.63	2.19	2.81	0	0.00	0.00	0.00
4112314	Furniture (PIU and Field Office)	LS	5.00	2.44	7.35	9.79	14.79	0	0.63	1.23	1.85		0.00	0.41	0.41	0	0.00	0.41	0.41	0	0.00	0.41	0.41
4112316	Bicycles (for 20 schemes	20	0.00	0.75	2.25	3.00	3.00	0	0.00	0.75	0.75		0.00	0.00	0.00	10	0.00	0.00	0.00	10	0.00	0.00	0.00
4113302	Online platform for fish marketing network for fishers community including apps and linkage with DoF Website (Non-consulting Service)	29	5.00	3.75	11.25	15.00	20.00	0	0.25	0.75	1.00		0.33	1.00	1.33	5	0.33	1.00	1.33	5	0.33	1.00	1.33
4113302	Development of fisher's community database (Non- consulting Service)	LS	10.00	2.50	7.50	10.00	20.00	0	0.50	0.50	1.00		0.67	0.67	1.33	0	0.67	0.67	1.33	0	0.67	0.67	1.33
4114102	Provide Fish-friendly fishing nets for fishers (in lieu of destruction of Illegal fishing nets among fishers	145	48.00	33.31	99.94	133.25	181.25	0	2.36	6.66	9.02		3.21	8.88	12.10	13	3.21	8.88	12.10	13	3.21	8.88	12.10
	B. Capital Expenditure		956.00	845.80	2537.40	3383.20	4339.20		68.77	139.26	208.03		83.60	310.56	394.17		68.38		363.71		15.25	100.65	115.90
	Sub Total (A+B)		2125.00	2118.75	6356.25	8475.00	10600.00		125.88	374.33	500.21		163.34	665.69	829.03		143.37	650.46	793.83		90.24	428.27	518.51
	C. Physical Contingency D. Price Contingency		0.00			0.00	10.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00
	Total (A+B+C+D)			2118.75	6356.25		10625.00			374.33				665.69			143.37			0.00		428.27	

						30         31         32         33         34         35         36         37         38           50         0.00         7.50         7.5         6.25         0.00         6.25         8         6.25         0.00           00         7.25         7.25         145         0.00         7.25         7.25         145         0.00         7.25           40         4.73         5.13         1.5         0.40         4.73         5.13         2         0.40         4.73																	
Economia			_ <b>.</b>	Alloca	ation as per	DPP			Quara	iter-5			Quara	ater-6			Quara	ter-7			Quara	ater-8	
Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
3211107	Hiring charge (Vehicles) (for 2 vichele, 50 month/Vehicle)	100	100.00	0.00	0.00	0.00	100.00		7.50	0.00	7.50	7.5	6.25	0.00	6.25	8	6.25	0.00	6.25	8	25.00	0.00	25.00
3211110	Legal expenses (Fish act implementation)	2175	0.00	27.19	81.56	108.75	108.75		0.00	7.25	7.25	145	0.00	7.25	7.25	145	0.00	7.25	7.25	145	0.00	27.19	27.19
3211111	Local Exchange visits/Field visits	29	6.00	17.74	53.21	70.95	76.95		0.40	4.73	5.13	1.5	0.40	4.73	5.13	2	0.40	4.73	5.13	2	1.50	17.74	19.24
3211111	Farmers' Field Day	100	5.00	12.50	37.50	50.00	55.00		0.33	3.33	3.67	7.5	0.33	3.33	3.67	8	0.33	3.33	3.67	8	1.25	12.50	13.75
3211111	Seminar and conference expenses (Project Inception, Closing, Module Formulation)	22	7.00	20.70	62.09	82.79	89.79		0.47	5.52	5.99	1.5	0.47	5.52	5.99	2	0.47	5.52	5.99	2	1.75	20.70	22.45
3211117	Internet/Fax/Telex	LS	0.00	0.75	2.25	3.00	3.00		0.00	0.20	0.20	0	0.00	0.20	0.20	0	0.00	0.20	0.20	0	0.00	0.75	0.75
3211119	Postage	LS	0.80	0.00	0.00	0.00	0.80		0.05	0.00	0.05	0	0.05	0.00	0.05	0	0.05	0.00	0.05	0	0.20	0.00	0.20
3211120	Telephone	2	0.00	0.88	2.63	3.51	3.51		0.00	0.23	0.23	0	0.00	0.23	0.23	0	0.00	0.23	0.23	0	0.00	0.88	0.88
3211125	Advertising expenses (Tender, Recruitment etc.)	LS	5.00	6.25	18.75	25.00	30.00		0.33	1.67	2.00	0	0.33	1.67	2.00	0	0.33	1.67	2.00	0	1.25	6.25	7.50
3211125	Advertising expenses (Advertising, electronic & print media coverage etc.)	LS	5.00	13.75	41.25	55.00	60.00		0.33	3.67	4.00	0	0.33	3.67	4.00	0	0.33	3.67	4.00	0	1.25	13.75	15.00
3211126	Audio- video production (Project Documentations, Video, etc)	7	5.00	7.50	22.50	30.00	35.00		0.33	2.00	2.33	0.5	0.33	2.00	2.33	1	0.33	2.00	2.33	1	1.25	7.50	8.75
3211127	Books & periodicals (Scietific Books, Jounals, Newsletter, Newspaper)	LS	1.00	1.50	4.50	6.00	7.00		0.07	0.40	0.47	0	0.07	0.40	0.47	0	0.07	0.40	0.47	0	0.25	1.50	1.75
3211131	Labour wages to non- employees LEAF (20*20000*54)	54	0.00	54.00	162.00	216.00	216.00		0.00	16.00	16.00	4	0.00	16.00	16.00	4	0.00	16.00	16.00	4	0.00	54.00	54.00
3221109	Management Charges (Contingencies for field offices & project HQ, project evaluation, etc.)	LS	10.00	11.75	35.25	47.00	57.00		0.54	3.12	3.67	0	0.54	3.12	3.67	0	0.54	3.12	3.67	0	2.50	11.75	14.25
3231101	Foreign training (Study tour/visit - overseas)	40	0.00	42.50	127.50	170.00	170.00		0.00	21.25	21.25	5	0.00	21.25	21.25	5	0.00	0.00	0.00	5	0.00	42.50	42.50
3231301	Domestic training	7040	105.00	163.21	489.62	652.83	757.83		7.00	43.52	50.52	528	7.00	43.52	50.52	528	7.00	43.52	50.52	528	26.25	163.21	189.46
3251104	Demonstration of different technologies for 20 schemes covering all upazila	1950	170.00	476.02	1428.07	1904.09	2074.09		11.33	126.94	138.27	137.5	11.33	126.94	138.27	138	11.33	126.94	138.27	138	42.50	476.02	518.52
3251104	Fish Drying Demonstration	26	4.50	8.62	25.88	34.50	39.00		0.30	2.30	2.60	1.75	0.30	2.30	2.60	2	0.30	2.30	2.60	2	1.13	8.63	9.75
3251104	Mechanical Fish Drying Demonstration	3	0.00	7.50	22.50	30.00	30.00		0.00	2.50	2.50	0.25	0.00	2.50	2.50	0	0.00	2.50	2.50	0	0.00	7.50	7.50
3254101	Fingerlings Stocking in sub- project (On basis of DoF guideline) 20 sub-project covering all Upazila	105	40.00	95.15	285.45	380.60	420.60		2.67	25.37	28.04	7.00002	2.67	25.37	28.04	7	2.67	25.37	28.04	7	10.00	95.15	105.15

									Plar	for Fina	ncial 2023	-24											
г ·			•	Alloca	ation as per	DPP			Quara	ter-5			Quara	ater-6			Quara	ter-7			Quar	ater-8	
Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
3255102	Printing and binding	LS	10.00	5.00	15.00	20.00	30.00		0.63	1.33	1.96	0	0.63	1.33	1.96	0	0.63	1.33	1.96	0	2.50	5.00	7.50
	Other stationery	LS	5.00	3.75	11.25	15.00	20.00		0.09	1.00	1.09	0	0.09	1.00	1.09	0	0.09	1.00	1.09	0	1.25	3.75	5.00
3257101	Consultancy	172	0.00	130.24	390.71	520.95	520.95		0.00	34.73	34.73	5.5	0.00	34.73	34.73	6	0.00	34.73	34.73	6	0.00	130.24	130.24
3257101	Contractual staff - Pay and allowances	130	0.00	18.11	54.34	72.45	72.45		0.00	4.83	4.83	10	0.00	4.83	4.83	10	0.00	4.83	4.83	10	0.00	18.11	18.11
3257103	Assessment/Study	6	5.00	13.75	41.25	55.00	60.00		0.33	3.67	4.00	0.25	0.33	3.67	4.00	0	0.33	3.67	4.00	0	1.25	13.75	15.00
3257104	Auditing through a Audit firm	LS	0.00	6.25	18.75	25.00	25.00		0.00	1.67	1.67	0	0.00	1.67	1.67	0	0.00	1.67	1.67	0	0.00	6.25	6.25
3257301	Ceremonies/Festivals (Fish fair, rally etc.)	LS	5.00	4.76	14.29	19.05	24.05		0.33	1.27	1.60	0	0.33	1.27	1.60	0	0.33	1.27	1.60	0	1.25	4.76	6.01
3258102	Machineries and equipment repair & maintenance (Boat, furniture & fixture, etc)	LS	5.00	3.75	11.25	15.00	20.00		0.33	1.00	1.33	0	0.33	1.00	1.33	0	0.33	1.00	1.33	0	1.25	3.75	5.00
3258103	Computer, Printer, etc Repair & maintenance	LS	2.00	3.49	10.46	13.95	15.95		0.13	0.93	1.06	0	0.13	0.93	1.06	0	0.13	0.93	1.06	0	0.50	3.49	3.99
3258105	Photocopier, etc Repair & maintenance	LS	2.00	3.05	9.19	12.24	14.24		0.13	0.82	0.95	0	0.13	0.82	0.95	0	0.13	0.82	0.95	0	0.50	3.06	3.56
3258108	Fish sanctuary repair and maintenance with Guards	49	10.00	40.79	122.35	163.14	173.14		0.67	10.88	11.54	3.75	0.67	10.88	11.54	4	0.67	10.88	11.54	4	2.50	40.79	43.29
3631199	Matching Grant support for Live Fish Carring (Entrepreneur)	20	0.00	35.00	105.00	140.00	140.00		0.00	10.50	10.50	1.5	0.00	10.50	10.50	2	0.00	10.50	10.50	2	0.00	35.00	35.00
3821126	Alternative income generating activities (AIGA) for poor fishers)	600	0.00	37.50	112.50	150.00	150.00		0.00	12.50	12.50	50	0.00	12.50	12.50	50	0.00	6.25	6.25	50	0.00	37.50	37.50
	Raveniew Expenditure		1169.00	1272.95	3818.85	5091.80	6260.80		79.74	355.13	434.86	0	74.99	355.13	430.11	0	74.99	327.63	402.61	0	292.25	1272.95	1565.20
	Capital Expenditure											0				0				0			
4111317	Re-excavation of pond/water body for establishment of beel nursery	145	50.00	83.56	250.69	334.25	384.25		3.33	22.283	25.62	11.25	3.33	22.283	25.62	11	3.33	22.283	25.62	11	12.50	83.5625	96.06
4111317	Establishment of beel nursery	145	20.60	31.98	95.93	127.91	148.51		1.37	8.5275	9.90	11.25	1.37	8.5275	9.90	11	1.37	8.5275	9.90	11	5.15	31.9775	37.13
4111317	Re-excavation of water body for establishment of fish sanctuary	49	40.00	22.46	67.39	89.85	129.85		2.67	5.99	8.66	3.75	2.67	5.99	8.66	4	2.67	5.99	8.66	4	10.00	22.4625	32.46
4111317	Establishment of fish sanctuary	49	50.00	39.56	118.69	158.25	208.25		3.33	10.549	13.88	3.75	3.33	10.549	13.88	4	3.33	10.549	13.88	4	12.50	39.5625	52.06
4111317	Mini Processing unit Construction (Deep Tube well, depuration, Grading Platform, overhead tank)	14	300.00	275.00	825.00	1100.00	1400.00		37.50	137.5	175.00	1.75	37.50	137.5	175.00	2	0.00	0	0.00	2	75.00	275	350.00

									Pla	n for Fina	uncial 2023	3-24											
		~	Scop of Wa		ation as pe	r DPP			Quara	ater-5			Quara	ater-6			Quara	ater-7			Quar	ater-8	
Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
4112101	Motor vehicle (Jeep 4WD)	1	95.00	0.00	0.00	0.00	95.00	20	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0		0	23.75	0	
4112101	Motor vehicle (Double	1	60.00	0.00	0.00	0.00	60.00		0.00	0	0.00	0	0.00	. 0	0.00	0	0.00	0	0.00	0	15.00	0	15.00
4112101	Cabin PickUp)	1	55.00	0.00	0.00				0.00	0		0	0.00	0	0.00		0.00	0		0	13.75	0	
	Motor vehicle (MicroBus) Motorcycles (125 cc) (for					0.00	55.00			0	0.00			0		0						0	
4112101	29 upazila	29	60.90	0.00	0.00	0.00	60.90		15.23	0	15.23	7.25	0.00	0	0.00	7	0.00	0	0.00	7	15.23	0	15.23
4112101	Insulated van with icing facilities	58	0.00	174.00	522.00	696.00	696.00		0.00	33.35	33.35	4.25	0.00	33.35	33.35	4	0.00	33.35	33.35	4	0.00	174	174.00
4112102	Water vehicle (Wooden country boat-	29	0.00	15.23	45.68	60.91	60.91		0.00	15.228	15.23	7.25	0.00	0	0.00	7	0.00	0	0.00	7	0.00	15.2275	15.23
4112202	Brand Computers with smart software and accessories	37	12.00	8.10	24.30	32.40	44.40		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	3.00	8.1	11.10
4112303	Supply and installation of Air Conditioner (split type- 2Ton)	5	1.20	1.20	3.60	4.80	6.00		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.30	1.2	1.50
4112303	Supply and installation of LED TV (PD) (Appendix-G)	1	0.00	0.30	0.90	1.20	1.20		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.3	0.30
4112306	SS covered Styrofoam Box (For fish Carrying)	1450	0.00	29.00	87.00	116.00	116.00		0.00	7.6875	7.69	100	0.00	7.6875	7.69	100	0.00	7.6875	7.69	100	0.00	29	29.00
4112306	Mini Processing Unit Mercenaries for Fisheries Produces Value Added Products	14	120.00	110.00	330.00	440.00	560.00		15.00	55	70.00	1.75	15.00	55	70.00	2	0.00	0	0.00	2	30.00	110	140.00
4112310	Office equipments (Photocopier & other) (PIU and Field Office)	LS	15.00	5.00	15.00	20.00	35.00		0.21	0.8333	1.04	0	0.21	0.8333	1.04	0	0.21	0.8333	1.04	0	3.75	5	8.75
4112310	Fax machine (PIU- 1, Division-8)	9	0.00	0.45	1.35	1.80	1.80		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.45	0.45
4112310	Binding Machine, and other office equipment etc.	LS	3.00	2.83	8.45	11.28	14.28		0.13	0.4675	0.59	0	0.13	0.4675	0.59	0	0.13	0.4675	0.59	0	0.75	2.82	3.57
4112310	Telephone sets with connection	2	0.30	0.00	0.00	0.00	0.30		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.08	0	0.08
4112312	Soil and water testing kits for LEAF & DoF officer/Staff (with additional reagent supply 2 times)	49	5.00	4.38	13.13	17.51	22.51		0.63	2.1888	2.81	6.25	0.63	2.1888	2.81	6	0.00	0	0.00	6	1.25	4.3775	5.63
4112314	Furniture (PIU and Field Office)	LS	5.00	2.44	7.35	9.79	14.79		0.00	0.4075	0.41	0	0.00	0.4075	0.41	0	0.00	0.4075	0.41	0	1.25	2.4475	3.70
4112316	Bicycles (for 20 schemes	20	0.00	0.75	2.25	3.00	3.00		0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.75	0.75
4113302	Online platform for fish marketing network for fishers community including apps and linkage with DoF Website (Non-consulting Service)	29	5.00	3.75		15.00	20.00		0.33	1	1.33	2.5	0.33	1	1.33	3	0.33	1	1.33	3	1.25	3.75	5.00
4113302	Development of fisher's community database (Non- consulting Service)	LS	10.00	2.50	7.50	10.00	20.00		0.67	0.6667	1.33	0	0.67	0.6667	1.33	0	0.67	0.6667	1.33	0	2.50	2.5	5.00
4114102	Provide Fish-friendly fishing nets for fishers (in lieu of destruction of Illegal fishing nets among fishers	145	48.00	33.31	99.94	133.25	181.25		3.21	8.8842	12.10	10	3.21	8.8842	12.10	10	3.21	8.8842	12.10	10	12.00	33.3125	45.31
	B. Capital Expenditure		956.00	845.80	2537.40	3383.20	4339.20		83.60		394.17		68.38	295.34	363.71		15.25	100.65			239.00	845.80	
	Sub Total (A+B)		2125.00	2118.75	6356.25		10600.00		163.34	665.69	829.03		143.37	650.46	793.83		90.24	428.27	518.51		531.25	2118.75	2650.00
	C. Physical Contingency		0.00			0.00	10.00																
1	D. Price Contingency		0.00			0.00	15.00					1	1	1	1	1	1	1	1				1

		s	Scop of Wa	urk										Plan	for Fina	ncial 2024	-25						
					ation as per	r DPP			Quara	ter-9			Quarat				Quarat	ter-11			Quara	ter12	
Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
3211110	Legal expenses (Fish act implementation)	2175	0.00	27.19	81.56	108.75	108.75	145	0.00	7.25	7.25	145	0.00	7.25	7.25	145	0.00	7.25	7.25	145	0.00	7.25	7.25
3211111	Local Exchange visits/Field visits	29	6.00	17.74	53.21	70.95	76.95	3	0.40	4.73	5.13	3	0.40	4.73	5.13	3	0.40		5.13	3	0.40	4.73	5.13
3211111	Farmers' Field Day	100	5.00	12.50	37.50	50.00	55.00	8	0.33	3.33	3.67	8	0.33	3.33	3.67	8	0.33	3.33	3.67	8	0.33	3.33	3.67
3211111	Seminar and conference expenses (Project Inception, Closing, Module Formulation)	22	7.00	20.70	62.09	82.79	89.79	2	0.47	5.52	5.99	2	0.47	5.52	5.99	2	0.47	5.52	5.99	2	0.47	5.52	5.99
3211117	Internet/Fax/Telex	LS	0.00	0.75		3.00	3.00	0	0.00	0.20	0.20	0	0.00	0.20	0.20	0	0.00	0.20	0.20	0	0.00	0.20	0.20
3211120	Telephone	2	0.00	0.88	2.63	3.51	3.51	0	0.00	0.23	0.23	0	0.00	0.23	0.23	0	0.00	0.23	0.23	0	0.00	0.23	0.23
3211125	Advertising expenses (Tender, Recruitment etc.)	LS	5.00	6.25	18.75	25.00	30.00	0	0.33	1.67	2.00	0	0.33	1.67	2.00	0	0.33	1.67	2.00	0	0.33	1.67	2.00
3211125	Advertising expenses (Advertising, electronic & print media coverage etc.)	LS	5.00	13.75	41.25	55.00	60.00	0	0.33	3.67	4.00	0	0.33	3.67	4.00	0	0.33	3.67	4.00	0	0.33	3.67	4.00
3211126	Audio- video production (Project Documentations, Video, etc)	7	5.00	7.50	22.50	30.00	35.00	1	0.33	2.00	2.33	1	0.33	2.00	2.33	1	0.33	2.00	2.33	1	0.33	2.00	2.33
3211127	Books & periodicals (Scietific Books, Jounals, Newsletter, Newspaper)	LS	1.00	1.50	4.50	6.00	7.00	0	0.07	0.40	0.47	0	0.07	0.40	0.47	0	0.07	0.40	0.47	0	0.07	0.40	0.47
3211131	Labour wages to non- employees LEAF (20*20000*54)	54	0.00	54.00	162.00	216.00	216.00	4	0.00	16.00	16.00	4	0.00	16.00	16.00	4	0.00	16.00	16.00	4	0.00	16.00	16.00
3221109	Management Charges (Contingencies for field offices & project HQ, project evaluation, etc.)	LS	10.00	11.75	35.25	47.00	57.00	0	0.54	3.12	3.67	0	0.54	3.12	3.67	0	0.54	3.12	3.67	0	0.54	3.12	3.67
3231101	Foreign training (Study tour/visit - overseas)	40	0.00	42.50	127.50	170.00	170.00	5	0.00	21.25	21.25	5	0.00	0.00	0.00	5	0.00	21.25	21.25	5	0.00	0.00	0.00
3231301	Domestic training	7040	105.00	163.21	489.62	652.83	757.83	528	7.00	43.52	50.52	528	7.00	43.52	50.52	528	7.00	43.52	50.52	528	7.00	43.52	50.52
3251104	Demonstration of different technologies for 20 schemes covering all upazila	1950	170.00	476.02	1428.07	1904.09	2074.09	138	11.33	126.94	138.27	138	11.33	126.94	138.27	138	11.33	126.94	138.27	138	11.33	126.94	138.27
3251104	Fish Drying Demonstration	26	4.50	8.62	25.88	34.50	39.00	2	0.30	2.30	2.60	2	0.30	2.30	2.60	2	0.30	2.30	2.60	2	0.30	2.30	2.60
3251104	Mechanical Fish Drying Demonstration	3	0.00	7.50	22.50	30.00	30.00	0	0.00	2.50	2.50	0	0.00	2.50	2.50	0	0.00	2.50	2.50	0	0.00	2.50	2.50
3254101	Fingerlings Stocking in sub- project (On basis of DoF guideline) 20 sub-project covering all Upazila	105	40.00	95.15	285.45	380.60	420.60	7	2.67	25.37	28.04	7	2.67	25.37	28.04	7	2.67	25.37	28.04	7	2.67	25.37	28.04

		5	Scop of Wa	ırk										Plan	for Finar	ncial 2024	-25						
Economic				Alloca	ation as per	DPP			Quara	ter-9			Quarat	er-10			Quarat	er-11			Quara	ter12	
code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
3255102	Printing and binding	LS	10.00	5.00	15.00	20.00	30.00	0	0.63	1.33	1.96	0	0.63	1.33	1.96	0	0.63	1.33	1.96	0	0.63	1.33	1.96
3255105	Other stationery	LS	5.00	3.75	11.25	15.00	20.00	0	0.09	1.00	1.09	0	0.09	1.00	1.09	0	0.09	1.00	1.09	0	0.09	1.00	1.09
3257101	Consultancy	172	0.00	130.24	390.71	520.95	520.95	15	0.00	34.73	34.73	15	0.00	34.73	34.73	15	0.00	34.73	34.73	15	0.00	34.73	34.73
3257101	Contractual staff - Pay and allowances	130	0.00	18.11	54.34	72.45	72.45	10	0.00	4.83	4.83	10	0.00	4.83	4.83		0.00		4.83	10	0.00	4.83	4.83
3257103	Assessment/Study	6	5.00	13.75	41.25	55.00	60.00	1	0.33	3.67	4.00	-1	0.33	3.67	4.00	1	0.33	3.67	4.00	1	0.33	3.67	4.00
3257104	Auditing through a Audit firm	LS	0.00	6.25	18.75	25.00	25.00	0	0.00	1.67	1.67	0	0.00	1.67	1.67	0	0.00	1.67	1.67	0	0.00	1.67	1.67
3257301	Ceremonies/Festivals (Fish fair, rally etc.)	LS	5.00	4.76	14.29	19.05	24.05	0	0.33	1.27	1.60	0	0.33	1.27	1.60	0	0.33	1.27	1.60	0	0.33	1.27	1.60
3258102	Machineries and equipment repair & maintenance (Boat, furniture & fixture, etc )	LS	5.00	3.75	11.25	15.00	20.00	0	0.33	1.00	1.33	0	0.33	1.00	1.33	0	0.33	1.00	1.33	0	0.33	1.00	1.33
3258103	Computer, Printer, etc Repair & maintenance	LS	2.00	3.49	10.46	13.95	15.95	0	0.13	0.93	1.06	0	0.13	0.93	1.06	0	0.13	0.93	1.06	0	0.13	0.93	1.06
3258105	Photocopier, etc Repair & maintenance	LS	2.00	3.05	9.19	12.24	14.24	0	0.13	0.82	0.95	0	0.13	0.82	0.95	0	0.13	0.82	0.95	0	0.13	0.82	0.95
3258108	Fish sanctuary repair and maintenance with Guards	49	10.00	40.79	122.35	163.14	173.14	4	0.67	10.88	11.54	4	0.67	10.88	11.54	4	0.67	10.88	11.54	4	0.67	10.88	11.54
3631199	Matching Grant support for Live Fish Carring (Entrepreneur)	20	0.00	35.00	105.00	140.00	140.00	2	0.00	10.50	10.50	2	0.00	10.50	10.50	2	0.00	10.50	10.50	2	0.00	10.50	10.50
3821126	Alternative income generating activities (AIGA) for poor fishers)	600	0.00	37.50	112.50	150.00	150.00	50	0.00	12.50	12.50	50	0.00	6.25	6.25	50	0.00	12.50	12.50	50	0.00	6.25	6.25
	Raveniew Expenditure		1169.00	1272.95	3818.85	5091.80	6260.80	0	74.99	355.13	430.11	0	74.99	327.63	402.61	0	74.99	355.13	430.11	0	74.99	327.63	402.61
	Capital Expenditure							0				0				0				0			
4111317	Re-excavation of pond/water body for establishment of beel nursery	145	50.00	83.56	250.69	334.25	384.25	11	3.33	22.28	25.62	11	3.33	22.28	25.62	11	3.33	22.28	25.62	11	3.33	22.28	25.62
4111317	Establishment of beel nursery	145	20.60	31.98	95.93	127.91	148.51	11	1.37	8.53	9.90	11	1.37	8.53	9.90	11	1.37	8.53	9.90	11	1.37	8.53	9.90
4111317	Re-excavation of water body for establishment of fish sanctuary	49	40.00	22.46	67.39	89.85	129.85	4	2.67	5.99	8.66	4	2.67	5.99	8.66	4	2.67	5.99	8.66	4	2.67	5.99	8.66
4111317	Establishment of fish sanctuary	49	50.00	39.56	118.69	158.25	208.25	4	3.33	10.55	13.88	4	3.33	10.55	13.88	4	3.33	10.55	13.88	4	3.33	10.55	13.88
4111317	Mini Processing unit Construction (Deep Tube well, depuration, Grading Platform, overhead tank)	14	300.00	275.00	825.00	1100.00	1400.00	2	37.50	137.50	175.00	2	0.00	0.00	0.00	2	37.50	137.50	175.00	2	0.00	0.00	0.00

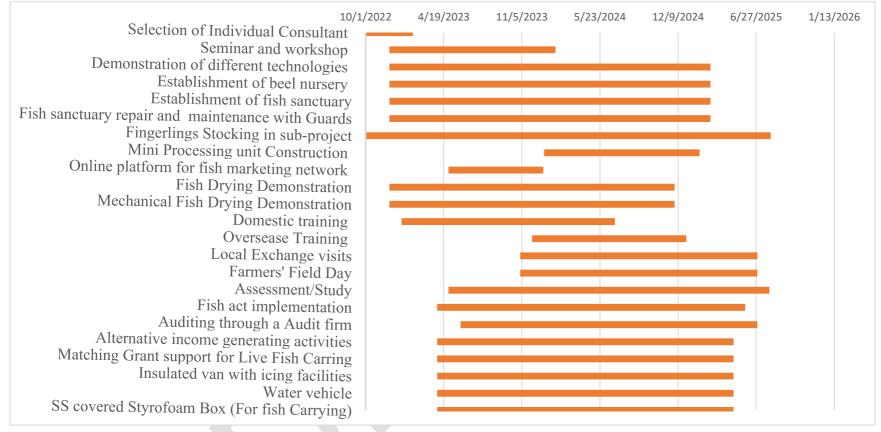
		5	scop of Wa	ırk										Plan	for Fina	ncial 2024	-25						
Economic			•		ation as per	DPP			Quara	ter-9			Quarat				Quarat	ter-11			Quara	ter12	
code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
4112101	Motor vehicle (Jeep 4WD) Motor vehicle (Double	1	95.00	0.00	0.00	0.00	95.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Cabin PickUp)	1	60.00	0.00	0.00	0.00	60.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Motor vehicle (MicroBus)	1	55.00	0.00	0.00	0.00	55.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Motorcycles (125 cc) (for 29 upazila	29	60.90	0.00	0.00	0.00	60.90	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Insulated van with icing facilities	58	0.00	174.00	522.00	696.00	696.00	4	0.00	33.35	33.35	4	0.00	33.35	33.35	4	0.00	33.35	33.35	4	0.00	33.35	33.35
4112102	Water vehicle (Wooden country boat-	29	0.00	15.23	45.68	60.91	60.91	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112202	Brand Computers with smart software and accessories	37	12.00	8.10	24.30	32.40	44.40	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112303	Supply and installation of Air Conditioner (split type- 2Ton)	5	1.20	1.20	3.60	4.80	6.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112303	Supply and installation of LED TV (PD) (Appendix-G)	1	0.00	0.30	0.90	1.20	1.20	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112306	SS covered Styrofoam Box (For fish Carrying)	1450	0.00	29.00	87.00	116.00	116.00	100	0.00	7.69	7.69	100	0.00	7.69	7.69	100	0.00	7.69	7.69	100	0.00	7.69	7.69
4112306	Mini Processing Unit Mercenaries for Fisheries Produces Value Added Products	14	120.00	110.00	330.00	440.00	560.00	2	15.00	55.00	70.00	2	0.00	0.00	0.00	2	15.00	55.00	70.00	2	0.00	0.00	0.00
4112310	Office equipments (Photocopier & other) (PIU and Field Office)	LS	15.00	5.00	15.00	20.00	35.00	0	0.21	0.83	1.04	0	0.21	0.83	1.04	0	0.21	0.83	1.04	0	0.21	0.83	1.04
4112310	Fax machine (PIU- 1, Division-8)	9	0.00	0.45	1.35	1.80	1.80	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112310	Binding Machine, and other office equipment etc.	LS	3.00	2.83	8.45	11.28	14.28	0	0.13	0.47	0.59	0	0.13	0.47	0.59	0	0.13	0.47	0.59	0	0.13	0.47	0.59
4112310	Telephone sets with connection	2	0.30	0.00	0.00	0.00	0.30	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112312	Soil and water testing kits for LEAF & DoF officer/Staff (with additional reagent supply 2 times)	49	5.00	4.38	13.13	17.51	22.51	6	0.63	2.19	2.81	6	0.00	0.00	0.00	6	0.63	2.19	2.81	6	0.00	0.00	0.00
4112314	Furniture (PIU and Field Office)	LS	5.00	2.44	7.35	9.79	14.79	0	0.00	0.41	0.41	0	0.00	0.41	0.41	0	0.00	0.41	0.41	0	0.00	0.41	0.41
4112316	Bicycles (for 20 schemes	20	0.00	0.75	2.25	3.00	3.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4113302	Online platform for fish marketing network for fishers community including apps and linkage with DoF Website (Non-consulting Service)	29	5.00	3.75	11.25	15.00	20.00	3	0.33	1.00	1.33	3	0.33	1.00	1.33	3	0.33	1.00	1.33	3	0.33	1.00	1.33
4113302	Development of fisher's community database (Non- consulting Service)	LS	10.00	2.50	7.50	10.00	20.00	0	0.67	0.67	1.33	0	0.67	0.67	1.33	0	0.67	0.67	1.33	0	0.67	0.67	1.33
4114102	Provide Fish-friendly fishing nets for fishers (in lieu of destruction of Illegal fishing nets among fishers	145	48.00	33.31	99.94	133.25	181.25	10	3.21	8.88	12.10	10	3.21	8.88	12.10	10	3.21	8.88	12.10	10	3.21	8.88	
	B. Capital Expenditure		956.00	845.80	2537.40	3383.20	4339.20		68.38	295.34	363.71		15.25	100.65	115.90		68.38				15.25	100.65	115.90
	Sub Total (A+B) C. Physical Contingency		2125.00 0.00	2118.75	6356.25	8475.00 0.00	10600.00 10.00		143.37	650.46	793.83		90.24	428.27	518.51		143.37	650.46	793.83		90.24	428.27	518.51
	D. Price Contingency		0.00			0.00	15.00				1												<u> </u>
	Total (A+B+C+D)			2118.75	6356.25				143.37	650.46	793.83		90.24	428.27	518.51		143.37	650.46	793.83		90.24	428.27	518.51

		5	Scop of Wa	ark								Plar	n for Finai	ncial 2025	-26								
Economic				Alloc	ation as pe	r DPP			Quarat	ter-13			Quara	ater-14			Quara	ter-15			Quara	ater16	
Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
3211107	Hiring charge (Vehicles) (for 2 vichele, 50 month/Vehicle)	100	100.00	0.00	0.00	0.00	100.00	8	6.25	0.00	6.25	8	6.25	0.00	6.25	8	6.25	0	6.25	8	6.25	0.00	6.25
3211110	Legal expenses (Fish act implementation)	2175	0.00	27.19	81.56	108.75	108.75	145	0.00	7.25	7.25	145	0.00	7.25	7.25	145	0	7.25	7.25	145	0	7.25	7.25
3211111	Local Exchange visits/Field visits	29	6.00	17.74	53.21	70.95	76.95	2	0.40	4.73	5.13	2	0.40	4.73	5.13	2	0.4	4.73	5.13	2	0.4	4.73	5.13
3211111	Farmers' Field Day	100	5.00	12.50	37.50	50.00	55.00	8	0.33	3.33	3.67	8	0.33	3.33	3.67	8	0.3333	3.3333	3.67	8	0.3333	3.33	3.67
3211111	Seminar and conference expenses (Project Inception, Closing, Module Formulation)	22	7.00	20.70	62.09	82.79	89.79	2	0.47	5.52	5.99	2	0.47	5.52	5.99	2	0.4667	5.52	5.99	2	0.4667	5.52	5.99
3211117	Internet/Fax/Telex	LS	0.00	0.75	2.25	3.00	3.00	0	0.00	0.20	0.20	0	0.00	0.20	0.20	0	0	0.2	0.20	0	0		0.20
3211120	Telephone	2	0.00	0.88	2.63	3.51	3.51	0	0.00	0.23	0.23	0	0.00	0.23	0.23	0	0	0.2342	0.23	0	0	0.23	0.23
3211125	Advertising expenses (Tender, Recruitment etc.)	LS	5.00	6.25	18.75	25.00	30.00	0	0.33	1.67	2.00	0	0.33	1.67	2.00	0	0.3333	1.6667	2.00	0	0.3333	1.67	2.00
3211125	Advertising expenses (Advertising, electronic & print media coverage etc.)	LS	5.00	13.75	41.25	55.00	60.00	0	0.33	3.67	4.00	0	0.33	3.67	4.00	0	0.3333	3.6667	4.00	0	0.3333	3.67	4.00
3211126	Audio- video production (Project Documentations, Video, etc)	7	5.00	7.50	22.50	30.00	35.00	1	0.33	2.00	2.33	1	0.33	2.00	2.33	1	0.3333	2	2.33	1	0.3333	2.00	2.33
3211127	Books & periodicals (Scietific Books, Jounals, Newsletter, Newspaper)	LS	1.00	1.50	4.50	6.00	7.00	0	0.07	0.40	0.47	0	0.07	0.40	0.47	0	0.0667	0.4	0.47	0	0.0667	0.40	0.47
3211131	Labour wages to non- employees LEAF (20*20000*54)	54	0.00	54.00	162.00	216.00	216.00	4	0.00	16.00	16.00	4	0.00	16.00	16.00	4	0	16	16.00	4	0	16.00	16.00
3221109	Management Charges (Contingencies for field offices & project HQ, project evaluation, etc.)	LS	10.00	11.75	35.25	47.00	57.00	0	0.54	3.12	3.67	0	0.54	3.12	3.67	0	0.5439	3.1217	3.67	0	0.5439	3.12	3.67
3231101	Foreign training (Study tour/visit - overseas)	40	0.00	42.50	127.50	170.00	170.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0	0	0.00	0	0	0.00	0.00
3231301	Domestic training	7040	105.00	163.21	489.62	652.83	757.83	528	7.00	43.52	50.52	528	7.00	43.52	50.52	528	7	43.516	50.52	528	7	43.52	50.52
3251104	Demonstration of different technologies for 20 schemes covering all upazila	1950	170.00	476.02	1428.07	1904.09	2074.09	138	11.33	126.94	138.27	138	11.33	126.94	138.27	138	11.333	126.94	138.27	138	11.333	126.94	138.27
3251104	Fish Drying Demonstration	26	4.50	8.62	25.88	34.50	39.00	2	0.30	2.30	2.60	2	0.30	2.30	2.60	2	0.3	2.3	2.60	2	0.3	2.30	2.60
3251104	Mechanical Fish Drying Demonstration	3	0.00	7.50	22.50	30.00	30.00	0	0.00	2.50	2.50	0	0.00	2.50	2.50	0	0	2.5	2.50	0	0	2.50	2.50
3254101	Fingerlings Stocking in sub- project (On basis of DoF guideline) 20 sub-project covering all Upazila	105	40.00	95.15	285.45	380.60	420.60	7	2.67	25.37	28.04	7	2.67	25.37	28.04	7	2.6667	25.373	28.04	7	2.6667	25.37	28.04

		S	Scop of Wa	ırk										Plan	for Finar	icial 2025	-26						
г ·					tion as pe	r DPP			Quarat	er-13			Quara	ter-14			Quara	ter-15			Quara	ater16	
Economic code:	Description of Activities	Quantity	GoB	RPA through GoB	RPA (CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
3255102	Printing and binding	LS	10.00	5.00	15.00	20.00	30.00	0	0.63	1.33	1.96	0	0.63	1.33	1.96	0	0.6253	1.3333	1.96	0	0.6253	1.33	1.96
3255105	Other stationery	LS	5.00	3.75	11.25	15.00	20.00	0	0.09	1.00	1.09	0	0.09	1.00	1.09	0	0.0924	1	1.09	0	0.0924	1.00	1.09
3257101	Consultancy	172	0.00	130.24	390.71	520.95	520.95	15	0.00	34.73	34.73	15	0.00	34.73	34.73	15	0	34.73	34.73	15	0	34.73	34.73
3257101	Contractual staff - Pay and allowances	130	0.00	18.11	54.34	72.45	72.45	10	0.00	4.83	4.83	10	0.00	4.83	4.83	10	0	4.83	4.83	10	0	4.83	4.83
3257103	Assessment/Study	6	5.00	13.75	41.25	55.00	60.00	1	0.33	3.67	4.00	1	0.33	3.67	4.00	1	0.3333	3.6667	4.00	1	0.3333	3.67	4.00
3257104	Auditing through a Audit firm	LS	0.00	6.25	18.75	25.00	25.00	0	0.00	1.67	1.67	0	0.00	1.67	1.67	0	0	1.6667	1.67	0	0	1.67	1.67
3257301	Ceremonies/Festivals (Fish fair, rally etc.)	LS	5.00	4.76	14.29	19.05	24.05	0	0.33	1.27	1.60	0	0.33	1.27	1.60	0	0.3333	1.27	1.60	0	0.3333	1.27	1.60
3258102	Machineries and equipment repair & maintenance (Boat, furniture & fixture, etc )	LS	5.00	3.75	11.25	15.00	20.00	0	0.33	1.00	1.33	0	0.33	1.00	1.33	0	0.3333	1	1.33	0	0.3333	1.00	1.33
3258103	Computer, Printer, etc Repair & maintenance	LS	2.00	3.49	10.46	13.95	15.95	0	0.13	0.93	1.06	0	0.13	0.93	1.06	0	0.1333	0.93	1.06	0	0.1333	0.93	1.06
3258105	Photocopier, etc Repair & maintenance	LS	2.00	3.05	9.19	12.24	14.24	0	0.13	0.82	0.95	0	0.13	0.82	0.95	0	0.1333	0.8208	0.95	0	0.1333	0.82	0.95
3258108	Fish sanctuary repair and maintenance with Guards	49	10.00	40.79	122.35	163.14	173.14	4	0.67	10.88	11.54	4	0.67	10.88	11.54	4	0.6667	10.876	11.54	4	0.6667	10.88	11.54
3631199	Matching Grant support for Live Fish Carring (Entrepreneur)	20	0.00	35.00	105.00	140.00	140.00	2	0.00	10.50	10.50	2	0.00	10.50	10.50	2	0	10.5	10.50	2	0	10.50	10.50
3821126	Alternative income generating activities (AIGA) for poor fishers)	600	0.00	37.50	112.50	150.00	150.00	25	0.00	6.25	6.25	25	0.00	6.25	6.25	25	0	6.25	6.25	25	0	6.25	6.25
	Raveniew Expenditure		1169.00	1272.95	3818.85	5091.80	6260.80	0	74.99	327.63	402.61	0	74.99	327.63	402.61	0	74.99	327.63	402.61	0	74.99	327.63	402.61
	Capital Expenditure							0				0				0				0			
4111317	Re-excavation of pond/water body for establishment of beel nursery	145	50.00	83.56	250.69	334.25	384.25	11	3.33	22.28	25.62	11	3.33	22.28	25.62	11	3.33	22.28	25.62	11	3.33	22.28	25.62
4111317	Establishment of beel nursery	145	20.60	31.98	95.93	127.91	148.51	11	1.37	8.53	9.90	11	1.37	8.53	9.90	11	1.37	8.53	9.90	11	1.37	8.53	9.90
4111317	Re-excavation of water body for establishment of fish sanctuary	49	40.00	22.46	67.39	89.85	129.85	4	2.67	5.99	8.66	4	2.67	5.99	8.66	4	2.67	5.99	8.66	4	2.67	5.99	8.66
4111317	Establishment of fish sanctuary	49	50.00	39.56	118.69	158.25	208.25	4	3.33	10.55	13.88	4	3.33	10.55	13.88	4	3.33	10.55	13.88	4	3.33	10.55	13.88
4111317	Mini Processing unit Construction (Deep Tube well, depuration, Grading Platform, overhead tank)	14	300.00	275.00	825.00	1100.00	1400.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00

		5	Scop of Wa	ark										Plar	for Finar	ncial 2025-	-26						
					ation as pe	r DPP			Quara	ter-13			Quara	ater-14	101 1 114	2020	Quara	ter-15			Quara	ater16	
Economic				RPA	RPA				<u>_</u>								<u>_</u>						
code:	Description of Activities	Quantity	GoB	through GoB	(CONTASA )	Total RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total	Quantity	GoB	RPA	Total
1	2	3	4	5	6	7	8	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
4112101	Motor vehicle (Jeep 4WD)	1	95.00	0.00	0.00	0.00	95.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Motor vehicle (Double Cabin PickUp)	1	60.00	0.00	0.00	0.00	60.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Motor vehicle (MicroBus)	1	55.00	0.00	0.00	0.00	55.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Motorcycles (125 cc) (for 29 upazila	29	60.90	0.00	0.00	0.00	60.90	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112101	Insulated van with icing facilities	58	0.00	174.00	522.00	696.00	696.00	4	0.00	33.35	33.35	4	0.00	33.35	33.35	4	0.00	33.35	33.35	4	0.00	33.35	33.35
4112102	Water vehicle (Wooden country boat-	29	0.00	15.23	45.68	60.91	60.91	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112202	Brand Computers with smart software and accessories	37	12.00	8.10	24.30	32.40	44.40	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112303	Supply and installation of Air Conditioner (split type- 2Ton)	5	1.20	1.20	3.60	4.80	6.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112303	Supply and installation of LED TV (PD) (Appendix-G)	1	0.00	0.30	0.90	1.20	1.20	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112306	SS covered Styrofoam Box (For fish Carrying)	1450	0.00	29.00	87.00	116.00	116.00	100	0.00	7.69	7.69	100	0.00	7.69	7.69	100	0.00	7.69	7.69	100	0.00	7.69	7.69
4112306	Mini Processing Unit Mercenaries for Fisheries Produces Value Added	14	120.00	110.00	330.00	440.00	560.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112310	Products Office equipments (Photocopier & other) (PIU and Field Office)	LS	15.00	5.00	15.00	20.00	35.00	0	0.21	0.83	1.04	0	0.21	0.83	1.04	0	0.21	0.83	1.04	0	0.21	0.83	1.04
4112310	Fax machine (PIU- 1, Division-8)	9	0.00	0.45	1.35	1.80	1.80	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112310	Binding Machine, and other office equipment etc.	LS	3.00	2.83	8.45	11.28	14.28	0	0.13	0.47	0.59	0	0.13	0.47	0.59	0	0.13	0.47	0.59	0	0.13	0.47	0.59
4112310	Telephone sets with connection	2	0.30	0.00	0.00	0.00	0.30	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112312	Soil and water testing kits for LEAF & DoF officer/Staff (with additional reagent supply 2 times)	49	5.00	4.38	13.13	17.51	22.51	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4112314	Furniture (PIU and Field Office)	LS	5.00	2.44	7.35	9.79	14.79	0	0.00	0.41	0.41	0	0.00	0.41	0.41	0	0.00	0.41	0.41	0	0.00	0.41	0.41
4112316	Bicycles (for 20 schemes	20	0.00	0.75	2.25	3.00	3.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0	0.00	0.00	0.00
4113302	Online platform for fish marketing network for fishers community including apps and linkage with DoF Website (Non-consulting Service)	29	5.00	3.75	11.25	15.00	20.00	0	0.33	1.00	1.33	0	0.33	1.00	1.33	0	0.33	1.00	1.33	0	0.33	1.00	1.33
4113302	Development of fisher's community database (Non- consulting Service)	LS	10.00	2.50	7.50	10.00	20.00	0	0.67	0.67	1.33	0	0.67	0.67	1.33	0	0.67	0.67	1.33	0	0.67	0.67	1.33
4114102	Provide Fish-friendly fishing nets for fishers (in lieu of destruction of Illegal fishing nets among fishers	145	48.00	33.31	99.94	133.25	181.25	10	3.21	8.88	12.10	10	3.21	8.88	12.10	10	3.21	8.88	12.10	10	3.21	8.88	
	B. Capital Expenditure		956.00	845.80	2537.40	3383.20	4339.20		15.25	100.65	115.90		15.25	100.65	115.90		15.25	100.65	115.90		15.25	100.65	
	Sub Total (A+B)		2125.00	2118.75	6356.25	8475.00	10600.00		90.24	428.27	518.51		90.24	428.27	518.51		90.24	428.27	518.51		90.24	428.27	518.51
	C. Physical Contingency		0.00			0.00	10.00																
	D. Price Contingency		0.00			0.00	15.00																
	Total (A+B+C+D)		2125.00	2118.75	6356.25	8475.00	10625.00		90.24	428.27	518.51		90.24	428.27	518.51		90.24	428.27	518.51		90.24	428.27	518.51

# Appendix: 2 Gantt Chart for the Major Activities of the Project



### No. Man VAT Consoli S1. Monthly Total Name of Position of (15%) Year 2 Year 3 Year 5 month dated Year 1 Year 4 Total No. Salary salary Salary (mm) post ) 2 3 4 5 7 8 9 10 11 12 13 14 6 1 Training and 1 Communication 189.75 37.95 1 2.75 60 165.00 24.75 37.95 37.95 37.95 37.95 189.75 Expert (Team Leader) Community 2 Mobilization and 28 70.00 10.50 80.50 1 16.10 16.10 16.10 16.10 80.50 2.50 16.10 Livelihood Expert 3 Climate Change and 80.50 1 2.50 28 70.00 10.50 16.10 16.10 16.10 16.10 16.10 80.50 Environment Expert Aquaculture and 4 2.50 24 60.00 9.00 69.00 13.80 13.80 13.80 13.80 69.00 1 13.80 Value Chain Expert Financial Expert 5 1 2.75 88.00 13.20 20.24 20.24 20.24 20.24 32 101.20 20.24 101.20 172 453.00 67.95 520.95 588.90 104.19 104.19 520.95 Total 5 104.19 104.19

### Annexure II (e): List of individual consultants for PIU (**CSAWMP-DoF**) **Consolidated Salary of Experts**

			xperience for The Individ	
SI. No.	Consultants	Educational qualification	Experience	Responsibilities
1	2	3	4	5
1		Minimum	• Minimum 20 years of	-
	Communication Expert (Team Leader)	Master Degree in any discipline of agricultural	work experience in Agricultural Research/ Agricultural Extension/ Training & Communication and extension or other	<ul> <li>Expert will have the overall technical, administrative and management responsibilities and will manage the day-to-day project activities under the guidance of the Project Director, DOF.</li> <li>Develop training, workshop,</li> </ul>
			<ul> <li>positions with demonstrated leadership and managerial skill of leading a team;</li> <li>Must have minimum 5 years work experience in planning, organizing &amp; managing training</li> </ul>	<ul> <li>and their implementation;</li> <li>Assists in hiring a consulting firm for execution of foreign training programs;</li> <li>Perform all functions of project related training and communication activities;</li> <li>Implementation of training and communication activities of PIUs in</li> </ul>
			<ul><li>and spoken English</li><li>and report writing</li><li>ability</li><li>Computer literacy</li></ul>	<ul> <li>Preparation of progress report on training and communication;</li> <li>Prepare and maintain database on training and workshop program;</li> <li>Work independently and maintain all relevant files and documents of PIU-DOF;</li> <li>Work closely with Training &amp; Communication Specialist of PMU and PIUs;</li> <li>Preparation of periodic and annual</li> </ul>
2.	Community Mobilization and Livelihood Expert 28 man months	Masters Degree in Agricultural Science/Social Science (Sociology, Anthropology) / Fisheries/ Development Studies/Relate d Science	• Minimum 15 years	<ul> <li>Responsible to Project Director;</li> <li>Coordinate the work of the firm engaged for the study of livelihood as well as community mobilization;</li> <li>Incorporate findings of the study and ensure provision of appropriate alternate livelihood opportunities for the fishers and the fisheries-dependent poor due to project interventions in the project documents;</li> <li>Assure the provision of safeguard measures covering social,</li> </ul>

Annexure II (f): Qualification and Experience for The Individual Consultants

SI. No.	Consultants	Educational qualification	Experience	Responsibilities
1	2	3	4	5
			<ul> <li>donor funded project is essential;</li> <li>Experience in the relevant field with IDA funded project will be an advantage.</li> <li>Fluency in English &amp; Computer literacy skills (MS Words, Excel, PowerPoint etc.) is desirable.</li> </ul>	<ul> <li>economic, demographic, cultural and other related aspects in the project activities;</li> <li>Support the organization of impact assessment identifying social impacts likely to occur as a result of intervention in proposed activities in the project areas and arrangement of monitoring and evaluation of social safeguard issues along with indicators;</li> <li>Development of simple screening matrix to evaluate social safeguard aspects and Social Management Framework (SMF) for effective management of social impacts;</li> <li>Accountable to Project Director &amp; Any other task assigned by the Project Director/ project management as and when required.</li> </ul>
З.	Climate Change and Environment Expert 28 man months		<ul> <li>environmental related activities in government/autonomous/semi-autonomous/private international organization</li> <li>Must have 05 years proven experience in natural resource management development project;</li> </ul>	<ul> <li>Responsible to Project Director;</li> <li>Assures the provision of safeguard measure in ecological and other related climate change and environmental aspects in the project;</li> <li>Oversee impact assessment identifying environmental impacts likely to occur as a result of intervention in the proposed activities;</li> <li>Develop simple screening matrix to evaluate environmental safeguard aspects of all project activities;</li> <li>Ensure adaptation of Environmental Management Plan/Framework (EMP/EMF) for effective management to closed water biodiversity, waste management, and sustainable livelihood activities in the project;</li> <li>Accountable to Project Director and Any other task assigned by the Project Director/ project management as and when required.</li> </ul>
4.	Aquaculture and Value Chain Expert		• Must have minimum 15 years of work experience in Supply chain/Agricultural	<ul> <li>Pr Review of project documents, previous reports and other relevant published documents;</li> <li>Collection of required field level</li> </ul>

SI. No.	Consultants	Educational qualification	Experience	Responsibilities
1	2	3	4	5
	24 man months	agricultural science or fisheries/agri cultural economics or related field.	<ul> <li>Extension/Agricultural Research/Faculty member in fisheries science in university level;</li> <li>Must have minimum 5 years work experience in planning, organizing &amp; managing market access, agricultural supply chain or similar activities in any government/autonomou s/non-government organization;</li> <li>Must have computer literacy (MS Word, Excel, PowerPoint etc.).</li> <li>imum 15 years work experience in managing fisheries /agricultural resources management and extension or other relevant fisheries/ agricultural related positions with demonstrated leadership and managerial skill of leading a team.</li> </ul>	<ul> <li>information using Focus Group Discussion (FGD) and other suitable Participatory Rural Appraisal (PRA) tools related to fisheries production systems, value and supply chains, and markets;</li> <li>identify, review and analyze the main fisheries production systems, supply/value chains of fish and fishery products in selected areas;</li> <li>Analyze the fisheries markets and functioning: structure, organization, pricing, etc;</li> <li>Identify strength and weakness of the aforesaid chains applying appropriate SWOT procedure.</li> <li>Recommend measures to recover or improve the chains;</li> <li>Organize and facilitate a Stakeholders' workshop for review of the draft report;</li> <li>Review the activities undertaken based on recommendation and recomment (If required).</li> <li>The Consultants will work under direct control of the Project Director. S/he will report directly to the Project Director and shall be</li> </ul>
5.	Financial expert 32 man months	Minimum M.Com/MBA major in Accounting or Finance	<ul><li>proven experience in financial management</li><li>Experience in</li></ul>	<ul> <li>Responsible to Project Director.</li> <li>The Accounts Manager will be responsible for the total Financial Management of the project.</li> <li>S/he will prepare budget and</li> </ul>
			management systems	<ul><li>disburse the project fund to the PIU</li><li>S/he will receive SOE from PIU</li></ul>

SI. No.	Consultants	Educational qualification	Experience	Responsibilities
1	2	3	4	5
			<ul> <li>and/or in operating grants/credit systems is desirable;</li> <li>Candidates having experience in IDA/Development</li> </ul>	<ul> <li>to claim fund from the World Bank</li> <li>S/he will prepare budget, control the budget &amp; accounting and keep record.</li> <li>S/he will assist Project Director in maintaining CSAWMP-DoF Designated Account and Operating Account;</li> <li>S/he will be responsible for all type of financial reporting and arranging auditing of the project</li> <li>S/he will prepare the financial management part of Project Implementation Manual for</li> </ul>

### Annexure II (g): List of Contractual Staff for PIU (CSAWMP-DoF) Contractual staff - Pay and allowances

(Taka in lac)

Sl. No.	Name of Position	No. of post	Consolidated salary	Man month (mm)	Total salary	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	Accountant	1	0.51	60	30.30	6.06	6.06	6.06	6.06	6.06	30.30
2	Data entry operator cum typist	1	0.40	60	24.03	4.81	4.81	4.81	4.81	4.81	24.03
5	Supporting staff	1	0.30	60	18.12	3.62	3.62	3.62	3.62	3.62	18.12
	Total	3		180	72.45	14.49	14.49	14.49	14.49	14.49	72.45

### Annexure 3.1 Statement of Expenditures (SOE)

Payments made during the period from \_\_\_\_\_ to \_\_\_\_\_

Date:

**Application No.:** 

Credit/Grant No.: \_\_\_\_\_

Category: \_\_\_\_\_

SOE No.: \_\_\_\_\_

1	2	3	4	5	6	7	8	9	10	11
Ite	Name and	Contract,	Brief	Curren	Total	Eligible	Expenditu	Amount	Date of	Remar
m	Address of	Invoice or	Descripti	cy and	amount	financin	re	Paid	Payme	ks
No.	Contractor/	Purchase	on of	Total	of	g % as	Amount	From	nt	
	Supplier/Servi	order No. &	Goods,	Amoun	expendi	per legal	Eligible	Designat		
	ce	Date (or	Works,	t of	ture	agreeme	for	ed		
	Provider/traini	other ref.).	Services	Contra	covered	nt	Financing	Account		
	ng	In case of	or other	ctor	by			(if any)		
		training,	Expendit	Invoice	applicat					
		please	ure		ion (net					
		mention			of					
		training date,			retentio					
		reference of			n)					
		IDA								
		approved								
		training plan								
		and payment								
		of								
		allowances								
		through								
		banking								
		channels, as								
		applicable.								
									1	

Supporting documents for this SOE retained at:(insert location)

Prepared by : Representative: Authorized

repared by :

### Annex-3.2

# Payments Made during Reporting Period Against Contracts Subject to the Bank's Prior Review Payments made during the period from \_\_\_\_\_\_ to \_\_\_\_\_ Date: Category:\_\_\_\_\_\_ No.:\_\_\_\_\_

Contract	Supplier/Consultant	Contract	Contract	Date of	Amount	Financing	WB's
Number		Date	Amount	WB's	paid to	Percentage	Share of
		description		Non	Supplier	as per legal	Amt
				Objection	during	agreement	Paid to
				to	Period		Supplier
				Contract			during
							Period

Prepared by :

Authorized Representative

### **Designated Account Reconciliation Statement**

	Credit/grant number
	Account number with (bank)
1.	Total advanced by world bank (or cofinancier)   bdt
2	less: total amount recovered by world bank - bdt
3.	equals present outstanding amount advanced to
	the special account (number 1 less number 2) = bdt
4.	Balance of special account per attached bank
	Statement as of date bdt
5.	Plus: total amount claimed in this
	Application no + bdt
6.	Plus: total amount withdrawn and not yet claimed
	reason: + bdt
	*
	This must also include the following:
	a.further advance from designated account to other operating accounts of the piu
	separately with period of advance, attaching the bank statements
	a.iadvance to bank accounts of selected upazilas of pius to be separately shown
	a.ii.advance under aifs to be separately shown with details
	b.advance other than the advance mentioned above to be shown separately
	with period of advance details and purpose.
7.	Plus: amounts claimed in previous applications
	not yet credited at date of bank statements
	application no. <u>amount</u> *
	subtotal of previous
P	roject Implementation Manual

	applications not yet credited	+bdt	
8.	Minus: interest earned -	bdt	*
9.	Total advance accounted for (	10. 4 through no. 9)= bdt	
10.		between the totals appearing on lines 3	
11.	date:	signature:	
	title:		

### **Minimum Information Requirement for Ledgers**

The **cash Book** should contain the following details:

- Under Receipt
  - Month & Date
  - Receipt No.
  - Particulars
  - o Head of Accounts
  - o L.F. No.
  - Amount (Cash column)
  - Amount ( Bank column)
- Under Payment
  - Month & Date
  - Voucher No.
  - Cheque No.
  - Particulars
  - o Head of Accounts
  - o L.F. No.
  - Amount (Cash column)
  - Amount ( Bank column)

### **General Ledger:**

The entries from Cash Book will be posted to General Ledger as the transactions occur. It will be balanced quarterly. The General Ledger shall contain the following in details:

- Date & month
- o Particulars
- V. No. / Receipt No. / J.V. No.
- Cash Book Folio / J.V. Folio No.
- Debit / Credit
- Balance

### **Stock Register:**

The Stock Register shall contain the following in details :

- o Date
- Particulars
- Bill No. / Indent No.
- o Quantity
- o Receipt
- o Issue
- o Balance

### **Fixed Asset Register:**

The PMU will maintain a separate Fixed Asset Register to record the assets acquired and created out of project funds. Individual asset-wise entries will be recorded in the Fixed Asset Register. The Fixed Asset Register shall contain the following in details:

- Serial No.
- Date of Purchase
- Voucher No.
- o Bill No.
- Supplier's name
- Details of Asset
- Type & Make
- o Quantity
- o Amount
- o Location
- o Identification
- Date of Physical Verification
- Signature
- o Remarks

### **Advances Register:**

The PMU shall maintain advances register separately, which shall contain the following entries:

- Date of advance paid
- Amount of advance
- o Adjustment made Amount / Bill No. / Voucher No.
- Amount paid
- Amount Recovered

### **Common Accounting Entries for CSAWMP-DoF**

### 1. Expenditure under the project

Debit [Respective Project Activity Head as per credit allocation] A/c

Credit to Bank A/c

Explanation: All the expenditure incurred under the project shall be debited to respective project activity head as detailed in the chart of accounts.

### 2. Advances for goods

Debit [Advances for goods - supplier's name] A/c

Credit to Bank A/c

Explanation: Payment made as advance of goods.

### 3. Advances for services

Debit [Advances for services – service provider's name] A/c

Credit to Bank A/c

Explanation: Payment made as advance for the services.

### 4. Advances for works

Debit [Advances for works - package/contractor's name] A/c

Credit to Bank A/c

Explanation: Payment made as advance for the works.

### 5. Advances to staff

Debit [Advances to staff – staff's name] A/c

Credit to Bank A/c

Explanation: Amount of advance paid to the staff for incurring expenditure under the

Project.

**6.** Adjustment of advances for goods / services / staff Debit [*Respective Project Activity Head*] A/c

Credit to [*Respective Advance Account*] A/c

Explanation: Amount of advance for goods/services/staff adjusted against receipt of

Goods/service or expenditure reported by staff vide statements of expenditure and invoices/bills.

### 7. Regular payment of work / adjustment of advances

Debit [Respective Project Activity Head] A/c

Credit to Bank\* A/c

To Retention Money A/c

To Security Deposit A/c

To [Respective Tax Deducted Account]

To [Advances for works – package/contractor's name] A/c

Explanation: Entry made for payment to the contractor (net after deduction of taxes/retention money/security deposit) and part/full adjustment of advances given earlier.

\* paid net of taxes

### 8. Regarding interest income

Debit Bank A/c

Credit to Interest Earned A/c

### 9. Regarding Stale cheques

### a. When case of stale cheque is identified and recorded

Debit Bank A/c

Credit To Stale Cheques A/c

### b. When stale cheque is revalidated/reissued

Debit Stale Cheques A/c

Credit to Bank A/c

### 10. Regarding fund transfer from PD, PMU to Director, PIUs

Debit [Respective Project Institution] A/c

Credit to Bank A/c

Explanation: This entry is to be passed whenever PD, PMU releases funds to the Director-PIUs for recurring operational expenditure.

### 11. Adjustment of expenditure against funds released as depicted in entry (10) above

Debit [Respective Project Activity Heads] A/c

Credit to [Respective Project Institution] A/c

Explanation: This entry shall be passed whenever PD-PMU submits statement of expenditure for their operational expenditure.

### গণপ্রজাতন্ত্রী বাংলাদেশ সরকার প্রকল্প পরিচালকের কার্যালয় ক্লাইমেট স্মার্ট এগ্রিকালচার এন্ড ওয়াটার ম্যানেজমেন্ট প্রজেক্ট (মৎস্য অধিদপ্তর অংশ) মৎস্য অধিদপ্তর, মৎস্য ভবন, রমনা, ঢাকা

সংস্থার নাম ঃ কৃষি মন্ত্রণালয় প্রকল্পের নাম ঃ ক্রাইমেট স্মার্ট এগ্রিকালচার এন্ড ওয়াটার ম্যানেজমেন্ট প্রজেক্ট (মৎস্য অধিদপ্তর অংশ)

ক্রমিক নং	প্রকল্পের নাম বান্তবায়নকাল অনুমোদিত কি না উন্নয়ন সহযোগির নাম প্রকল্প পরিচালকের নাম টেলিফোন নং-	প্রকল্পের প্রধান কর্মকান্ডের নাম ও পরিমাণ		প্ৰাক্বলিত ব্য	য়		রু হতে জুন ক্রমপুঞ্জিত ব্যয়		২৩ অর্থ ব উপি বরাদ্দ		জির্থা অবমুক্তি (জি আরপি	২২ পর্যন্ত ব টাকা র পরিমাণ ওবি ও এ টাকা র পরিমাণ		২২ সালে জ্বন্দ অগ্রগতি (বরা	া/২২ সময়ে ব্যয় দ্দের %)	২০২২-২৩ সালের টার্গেট এ নিরীখের ভৌত অগ্রগতির শতাংশ
	נטפונידויז יוני		মোট	জিওবি	প্রকল্প সাহায (আরপিএ)	ক্রমপুঞ্জিত বাস্তব অহাগতি (%)	* ক্রমপুঞ্জিত আর্থিক অহাগতি	মোট	জিওবি	প্রকল্প সাহায্য	জিওবি	প্রকল্প সাহায্য	মোট (বরাদ্দে %)	জিওবি (বরাদ্দে র %)	প্রকল্প সাহায্য (আরপিএ ব্যয় বরাদ্দের %)	(মম্ভব্য যদি থাকে)
2	૨	৩	8	¢	હ	٩	þ	৯	20	22	১২	১৩	28	26	১৬	ንኦ

প্রকল্প পরিচালক ক্লাইমেট স্মার্ট এগ্রিকালচার এন্ড ওয়াটার ম্যানেজমেন্ট প্রজেক্ট (মৎস্য অধিদপ্তর অংশ) মৎস্য অধিদপ্তর, মৎস্য ভবন, রমনা, ঢাকা

167

### সালের এডিপি/আরএডিপিতে অর্ন্তভূক্ত প্রকল্পসমূহের ক্রয় পরিকল্পনার অগ্রগতির তথ্য

### প্রতিবেদন কাল ঃ

ক্রঃ নং	প্রকল্পের নাম		৸৽	াপত্র আহবা	নর লক্ষ্যমা	ত্র	ন	রপত্র আহ	বানের সংখ্য	t			কা	র্যাদেশ প্রদ	ন		দরপত্র আহবান না
	বাস্তবায়নকাল অনুমোদিত কি না উনুয়ন সহযোগীর নাম প্রকল্প পরিচালকের নাম টেলিফোন নং-	পন্য	কাৰ্য	সেবা	মোট	প্রক্কলিত ব্যয় (লক্ষ টাকায়)	পন্য	কার্য	সেবা	মোট	পন্য	কাৰ্য	সেবা	মোট	প্ৰক্কলিত ব্যয় (লক্ষ টাকায়)	প্রকৃত ব্যয় (লক্ষ টাকায়)	হয়ে থাকলে তার ব্যাখ্যা
2	২	8	¢	ა	٩	Ъ	ጽ	20	22	પ્ર	১৩	>8	ንራ	しょ	29	ንዮ	১৯

168

Annex-3.7

### Progress Report of On-going Development Projects/ Operational Plan (Format 05/2008)

Reporting Period:

(All financial figures in Lakh Tk)

Part-A: Monthly Report for the M/O

Name of the Ministry/Division/Organization : Ministry of Fisheries and live stock

- Name of the Project/Operational Plan :PMU/PIU
   Climate Smart Agriculture and Water Management project (DoF-Part)
- 2. Objectives of the Project/Operational Plan (in Brief) :
- 3. Location of the Project/Operational Plan:
- 4. Project Approval Status & Cost:

(Tk in Lakh)

ТРР	Date of approval	Implementation period	Total Cost	GOB	Project Aid (RPA)

5.

### **Progress of Fund Release:**

### (Tk in Lakh)

		Date of		Amount	Date of issue of
	Proposal Sending	Issue of	Issue of order	Released/	Cheque from
Quarter-wise	to	order by	from	Authorizat	CAO (in case of
	Ministry/Division	Ministry	Finance	ion	Autonomous
			Division		body)
(1)	(2)	(3)	(4)	(5)	(6)
PA authorization					
Total =					

### Climate Smart Agriculture and Water Management project (DoF-Part)

### PMU/PIU

# Target and Achievement of the main Components of the Project: Period:

(Tk in lakh)

Code / Sub- Code	Work achievement as per TPP (with Qty.)	Estimated cost				Achievement upto June, 20		Target of the current year		Progress upto the month of June 20		spent nished lance ast DPP rgets
		GO B	R P A	T O T A L	Financ al	Physic al (%) of the comp onent	Financ ial	Physic al (%) of the compo nent	Financ ial	Physic al (%) of the compo nent	Fina ncia l (3-8)	Physi cal (%)
1	2		3		4	5	6	7	8	9	10	11
	al of Operational Expenses											
	Total of Local op/Seminar/Con ference											
	Vehicle Hire Consultancy											
	Individual Consultants											
	ub Total of onsultancy		-									
	Miscellaneous & Other operational Costs											
Sub To	tal of Supply & Services											
	Repair, Maintenance & Renovation:											

Furniture &						
Fixtures						
Computers & Office						
Equipment						
Office Building						
Sub-Total of R/M						
Sub-Total (Revenue Component)						
Total Contingency						
(b) Capital Component						
Acquisition of Assets						
·						
Sub-Total (Capital Component)						
Grand Total						

Annex 3.8

### Government of the People's Republic of Bangladesh Climate Smart Agriculture and Water Management Project (DoF-Part)

Credit No Sources and Uses of Fund Statement For the Quarter Ended In Bangladeshi Taka (BDT) 000's

Particulars		Quarter		Cumulative				
	GOB	RPA	Total	GOB	RPA	Total		
Fund Receipts:								
Project Bank Account								
Special Account (CONTASA)								
Direct Payment								
Total Financing								
Less: Expenditure by Category:						-		
Works								
Goods								
Services								
Training								
Operating Costs								
CGP								
SPGR								
PPF								
CDVAT								
Total Expenditure								
Receipts less Expenditure								
Add: Foreign Exchange Difference								
Net change in Cash								
GOB in Kinds								
Opening Cash Balance:								

Particulars		Quarter			Cumulative	•
-	GOB	RPA	Total	GOB	RPA	Total
Project Bank Account (IAs)						
Special Account (CONTASA) at Bank						
NATP Operating A/C						
Add:Net change in Cash						
Net Cash Available						
Less GOB Fund Refund						
NATP Operating A/C ( )						
Project Bank Account (IAs)						
*Special Account (CONTASA) at Bank						
Closing Cash Balance:				>		

\* Special Account CONTASA closing balance on

1 USD = BDT

# অর্থ বৎসরের অন্যান্য আরপিএ (সরকারের মাধ্যম ব্যতীত) এবং /অথবা ডিপিএ এর মাধ্যমে সঞ্চালিত লেনদেনের বিবরণী ঃ

মন্ত্রণালয়/বিভাগঃ মৎস্য ও প্রাণিসম্পদ মন্ত্রণালয়

মাসের নামঃ

প্রকল্পের নামঃ ক্লাইমেট স্মার্ট এগ্রিকালচার এন্ড ওয়াটার ম্যানেজমেন্ট প্রজেক্ট (মৎস্য অধিদপ্তর অংশ) মৎস্য অধিদপ্তর, মৎস্য ভবন, রমনা, ঢাকা

(লক্ষ টাকায়)

ভ	প্রকল্পের নাম	প্রকল্প	প্রকল্প	দাতা সংস্থা	/দেশের নাম	বৈদেশিক	ঋণ/	হিসাব	2026-	১৬ অর্থ ব	ৎসরে প্রক	ল্পের	২০২২-১	৩ অর্থ ব	ৎসরে/২২	মাসের	২০২২-২	২৩ অৰ্থ বৰ্ণ	সরে /২২	মাস	মন্তব্য
নং	কোডসহ এবং	পরিচালকের	শুর <sup>ে</sup> ও			বৈদেশিক	সাহায্য	পদ্ধতির	আরএমি	<u></u> উপি বরাদ্দ	(টাকা)		প্রকল্পের	ব্যয় (টাক	t)		পৰ্যন্ত প্ৰব	ব্ল্পের ব্যয়	(টাকা)		
	বাস্তবায়নকারী	নাম পদবী,	শেষের					নাম													
	সংস্থার নাম	ঠিকানা ও	তারিখ				-														
	(কোডসহ	ফোন নম্বর।		বৈদেশি	আন্তর্জাতিক	ঋণ	সাহায্য	ডসা/	ডি	পিএ	অন্যান্য গ	আরপিএ	ডিপি	ন	অন্যান্য জ	মারপিএ	ডিগি	শত	অন্যান্য	আরপিএ	
				ক	সংস্থা			কোনটা													
				সরকার				স										L			
									রাজ	মূলধন	রাজস্ব	মূলধন	রাজস্ব	মূলধন	রাজস্ব	মূলধন	রাজস্ব	মূলধন	রাজস্ব	মূলধন	
									স্ব												
	3	৩	8	¢	Ŀ	9	br	8	30	22	১২	১৩	28	১৫	১৬	১৭	ንጉ	১৯	૨૦	২১	૨૨
2	× .	Ŭ	0	u	S		U	0		22	24	20	20	ມແ	20	27	20	20	20	<،	~~
				-	বিশ্বব্যাংক,			কোনটা	-	-										1	
								সা													

ক্রমিক নং	হিসাব পদ্ধতির নাম (ডসাঁ <b>/কোনটাসা/</b> সেফ/ইমপ্রেষ্ট)	উলি খিত মাসিক	ব্যয়ের	উলি- খিত পর্যন্ত	র্যয়ের
		১৩ অংকের খরচের কোড	টাকার পরিমাণ	বিপরীতে ১৩ অংকের জমার কোড	টাকার পরিমাণ
	আরপিএ				
	সর্বমোট				

### Annex 3.10 Climate Smart Agriculture and Water Management Project IDA Credit No. Project Implementation Unit (PMU) Project Financial Statement As on 30<sup>th</sup> June, 2022

Taka in lac

Resources	Notes *	Inception to 30 June 20	for the year 2021-22	Inception to 30 th June 2022
Government of Bangladesh*				
Lender/Donor				
Others Resources				
others Resources				
Opening Cash Balance				
TOTAL RESOURCES				
EXPENDITURE** & CASH				
Pay & Allowances				
Supply & services				
Repair & Maintenance				
Asset Acquisition				
CDVAT & Other Taxes				
Total Expenditure				
Closing Cash Balances				
Account Current (CD VAT)				
DOSA Account (Bangladesh Bank)				
PIU's & PCU				
Project (NATP) Operating Account				
Total Expenditure and Cash (BDT)				
*Resources exlcludes GOB in kind (n				
**Expenditure exlcludes GOB in kind	l (manpo	wer office space et	c) of PCU and all P	PIUs
		-	(0.00)	
				Project Director

Annex 3.11

### **Project Implementation Progress Report**

### Reporting Period:

Name of the Ministry/Division/Organization:

1.	Name of Project (		0	: Climate Smart Agriculture and Water Management								
2.			the Project									
3.	Impleme		5	•								
3.	Location											
4.			ding (with amount)	:	Total	Lakh Taka; GOB	L	akh Taka, IDA Lakh Taka				
	Estimate		•	:				akh Taka)				
Total	Taka			Project	Aid (RPA	<b>(</b> )	Physical (% of Total					
								Project)				
-	a) Origi	inal			:							
	b) Cum	ulativ	e Progress upto last	June :								
	c) Curre	ent ye	ear allocation and	:								
	Phys	ical T	arget		:							
	d) Prog	ress o	f current month		:							
	e) Prog	ress u	p to the current mor	nth :								
	of the year :											
	f) Fund released up to the current month :											
5.	Quarterly	/ Fina	ncial and Physical		:							
	-		•					(In lakh Taka)				

	(III lakii Taka)								
	1 <sup>st</sup> Qu	arter	2 <sup>nd</sup> Qu	arter	3 <sup>rd</sup> Qu	arter	4 <sup>th</sup> Quarter		
	Financial	Physical	Financial	Physical	Financial	Physical	Financial	Physical	
a) Target									
b) Achievement									

c) Target and Achievement of the main Components of the Project:

(In lakh Taka)

Code No	Work components as per PP	Estimated Cost	Achieveme 20	ent upto 30 June	Target of th	ne current year	Progress up to the month of June of the current year			
	(With quantity)		Financial	Physical* (% of the component)	Financial	Physical (% of the component)	Financial	Physical (% of the component)		
	Pay of Contractual core Staff									
	Asset Acquisition									
Total										

:

\*Physical progress has been shown in individual PIU reports and attached herewith

- d) Reasons for the delay of Project Implementation
- e) Existing problems of implementation of the Project

### গণপ্রজাতন্ত্রী বাংলাদেশ সরকার প্রকল্প পরিচালকের কার্যালয় ক্লাইমেট স্মার্ট এগ্রিকালচার এন্ড ওয়াটার ম্যানেজমেন্ট প্রজেক্ট (মৎস্য অধিদপ্তর অংশ) মৎস্য অধিদপ্তর, মৎস্য ভবন, রমনা, ঢাকা

মাসের নাম:-

প্রকল্পের অনিষ্পনু অডিট আপত্তি সংক্রান্ত মাসিক তথ্য /২০২২ মাস পর্যন্ত।

<u> </u> দিশি	দপ্তর/সংস্থার নাম	পূৰ্ববতী	চলতি	মোট	মোট	মোট	পূৰ্ববতী	চলতি	মোট	মোট	অনিষ্পন্ন	মোট	মোট	দ্বিপক্ষ	ায়/ত্রিপর্ষ্ণ	নীয়	*
নং		আপত্তির	মাসে	আপত্তির	আপত্তিতে	প্রেরিত	নিষ্পত্তির	মাসে	নিষ্পত্তির	নিষ্পত্তিতে	আপত্তির	অনিষ্পন্ন	মনিষ্পন্ন	সভা			মন্তব্য
		সংখ্যা ও	উত্থাপিত	সংখ্যা	জড়িত	বি এস	জের	নিষ্পত্তির	সংখ্যা	জড়িত	শ্রেণী						
		জড়িত টাকা	আপত্তির		টাকা	জবাব		সংখ্যা		টাকা	বিন্যাস		মাপত্তির				
		(ল	সংখ্যা ও		(ল			છ		(ল		সংখ্যা	জড়িত স				
		টাকায়)	জড়িত		টাকায়)			জড়িত		টাকায়)			টাকা				
			টাকা					টাকা					(ল				
			(ল					(ল					নকায়)				
			টাকায়)					টাকায়)					,				
			8			٩			10				28		36		<b>N</b> 1.
2	૨	٩	8	¢	ى	٩	ዮ	2	20	22	১২	১৩	28		20		১৬
				(৩+৪)	(৩+8)				(৮+৯)								
21															-		

প্রকল্প পরিচালক

177