GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Naoko Ishii
CEO and Chairperson

April 13, 2016

Dear LDCF/SCCF Council Member:

FAO as the Implementing Agency for the project entitled: ***Bangladesh: Community-based Climate Resilient Fisheries and Aquaculture Development in Bangladesh***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with FAO procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by LDCF/SCCF Council in April 2014 and the proposed project remains consistent with the Instrument and LDCF/SCCF policies and procedures. The attached explanation prepared by FAO satisfactorily details how Council's comments have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii

Attachment: GEFSEC Project Review Document
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee

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REQUEST FOR CEO ENDORSEMENT

PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND:LDCF

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title: Community-based Climate Resilient Fisheries and Aquaculture Development in Bangladesh			
Country(ies):	Bangladesh	GEF Project ID:[1]	5636
GEF Agency(ies):	FAO (select) (select)	GEF Agency Project ID:	626403
Other Executing Partner(s):	Department of Fisheries, Bangladesh	Submission Date: Resubmission Date:	14 Dec 2015 15 March 2016
GEF Focal Area (s):	Climate Change	Project Duration(Months)	48
Name of Parent Program (if applicable): ➢ For SFM/REDD+ ☐ ➢ For SGP ☐ ➢ For PPP ☐	N/A	Project Agency Fee ($):	515,386

A. FOCAL AREA STRATEGY FRAMEWORK[2]

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Cofinancing ($)
CCA-1 (select) Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level	Outcome 1.1: Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas. Outcome 1.2: Reduced vulnerability to climate change in development sectors. Outcome 1.3: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas.	Output 1.1.1: Adaptation measures and necessary budget allocations included in relevant frameworks Output 1.2.1: Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability. Output 1.3.1: Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability.	LDCF	1,050,000	4,905,000
CCA-2 (select) Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national,	Outcome 2.1: Increased knowledge and understanding of climate variability and change-induced risks at country level and in targeted vulnerable areas	Output 2.1.1: Risk and vulnerability assessments conducted and updated. Output 2.1.2: Systems in place to disseminate timely risk information.	LDCF	754,000	3,270,000

[1] Project ID number will be assigned by GEFSEC.
[2] Refer to the Focal Area Results Framework and LDCF/SCCF Framework when completing Table A.

regional and global level	Outcome 2.2: Strengthened adaptive capacity to reduce risks to climate-induced economic losses Outcome 2.3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	Output 2.2.1: Adaptive capacity of national and regional centres and networks strengthened to rapidly respond to extreme weather events. Output 2.2.2: Targeted population groups covered by adequate risk reduction measures. Output 2.3.1: Targeted population groups participating in adaptation and risk reduction awareness activities.			
CCA-3 (select) Promote transfer and adoption of adaptation technology	Outcome 3.1: Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas. Outcome 3.2: Enhanced enabling environment to support adaptation-related technology transfer.	Output 3.1.1: Relevant adaptation technology transferred to targeted groups Output 3.2.1: Skills increased for relevant individuals in transfer of adaptation technology.	LDCF	3,621,114	8,175,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
		Total project costs		5,425,114	16,350,000

B. PROJECT FRAMEWORK

Project Objective: Building climate change (CC) adaptive capacity of vulnerable fisheries and aquaculture communities in Bangladesh						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Grant Amount ($)**	**Confirmed Cofinancing ($)**
Component 1: Climate resilient fisheries sector through relevant national capacity development	TA	1: Improved relevant national policies & strategies to facilitate climate resilient fisheries sector & development at all levels Indicators: • Revised national fisheries policy (1) • Revised	1.1: Climate induced risks & vulnerability of fisheries and aquaculture sub-sectors at national level assessed with special focus on gender and climate sensitive areas. 1.2: Relevant national policies & strategies reviewed (gaps analysed) & revised by	LDCF	1,000,000	2,333,334

		national fisheries and aquaculture strategies (2) • Enhanced capacity and knowledge of at least 100 GoB personnel, 14 private entrepreneurs and 24 community leaders (40% female) in climate resilient inland capture fishery and aquaculture	incorporating fisheries & aquaculture adaptation to CC. 1.3: Capacity building strategy for DoF, other relevant GoB agencies, private sector & community-based organizations developed to facilitate climate resilient fisheries sector			
Component 2: Strengthening knowledge and awareness of fisheries/aquaculture dependent communities facing the adverse impacts of climate change.	TA	2: Local community organizations have institutionalized disaster risk management (DRM) in their local development plans & programmes, thus improving local CC related governance Indicators: • 70 communities' in 9 sub-districts adopt 15 local development plans and integrate Disaster Risk Management considerations (Fisheries and aquaculture communities within 4,790 km2 of coastal and inland aquatic ecosystems). • Early Warning Systems in place in at least 50 communities	2.1: Risks & vulnerability of fisheries, aquaculture & livelihoods to the adverse impacts of CC, including knowledge gaps, assessed with the participation of relevant stakeholders & DoF field officials at project sites. 2.2: Communities' awareness & capacity enhanced to understand, assess, plan & implement fisheries, aquaculture & livelihood adaptations to CC risks.	LDCF	480,000	4,857,143
Component 3: Enhancing local adaptive capacity to support climate resilient fisheries and aquaculture management and alternative	Inv	3: Communities with strengthened adaptive capacity maximize their incomes & access to nutrition through adoption of CC resilient fisheries, aquaculture &	3.1: Site specific climate resilient & gender sensitive fisheries, & aquaculture technologies (e.g. fisheries information platform, innovative aquaculture systems,	LDCF	3,448,680	7,619,048

livelihoods in the face of climate change		livelihood technologies/ approaches in targeted areas Indicators: • Improved income, food security and nutrition in 70 communities (an estimated 400,000 people (22% of total population of the project sites) with reduced vulnerability to CC; about 40% women: • Around 15% increase in fisheries and aquaculture productivity in targeted households • Around 15% increase in income generation by targeted beneficiaries • Around 70% of targeted households adopt climate resilient livelihoods	brood banks & satellite hatcheries, salt tolerant fish strains etc.) developed & adopted by the targeted communities. 3.2: Community-led & gender sensitive dissemination systems of adaptation technologies developed & adopted. 3.3: Innovative environmental monitoring & information tools for the communities to obtain & exchange information to improve resiliency & increase production in the fisheries and aquaculture. systems developed & implemented 3.4: Manuals on climate resilient & gender sensitive fisheries, aquaculture. & livelihood technologies/ approaches developed & adopted by the communities, DoF & other relevant government & NGO entities.			
Component 4: Dissemination of best practices and lessons learned, monitoring and evaluation	TA	4: Project implementation based on results based management and application of project findings and lessons learned in future operations facilitated. Indicators: • Strengthened project knowledge base on climate	4.1: Lessons learned & best practices from the use of different CC resilient fisheries, aquaculture and livelihood technologies/approaches documented & communicated to relevant stakeholders & a wider audience. 4.2: Project monitoring	LDCF	238,095	761,905

		resilient fisheries and aquaculture technologies, including livelihoods • Communicati on and dissemination materials produced and distributed to beneficiaries and other stakeholders. • Adaptive, results-based M&E	system operating providing systematic information on progress in meeting project outcome &output targets. 4.3: Mid-term & terminal evaluations conducted.			
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
			Subtotal		5,166,775	15,571,430
			Project management Cost (PMC)[3]	LDCF	258,339	778,570
			Total project costs		5,425,114	16,350,000

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME ($)

Please include letters confirming cofinancing for the projeSct with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount ($)
National Government	Department of Fisheries (DoF)	In-kind	6,100,000
National Government	Department of Environment (DoE)	In-kind	250,000
National Government	Ministry of Environment and Forests (MoEF) -- funding from IUCN	In-kind	1,300,000
CSO	WorldFish	In-kind	2,000,000
Other Multilateral Agency (ies)	IFAD	In-kind	2,500,000
GEF Agency	FAO	In-kind	4,200,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Co-financing			16,350,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in $)		
				Grant Amount (a)	Agency Fee (b)[2]	Total c=a+b
FAO	LDCF	Climate Change	Bangladesh	5,425,114	515,386	5,940,500
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0

[3] PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				5,425,114	515,386	5,940,500

[1] In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

[2] Indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount ($)	Cofinancing ($)	Project Total ($)
International Consultants	315,000	650,000	965,000
National/Local Consultants	1,578,694	2,700,000	4,278,694

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF[4]

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

Information in the PIF has not been significantly changed, but updated as below:

The ProDoc components and outcomes cross-cut with the NAPA 2009 (update). Specifically, the project addresses NAPA concept 13: "Adaptation to fisheries in areas prone to enhanced flooding in the northeast and central region through adaptive and diversified fish culture practices", and concept 14: "Promoting adaptation to coastal fisheries through culture of salt-tolerant fish species in the coastal areas of Bangladesh". This project also contributes to NAPA 2009s intervention no. 4 on Climate change and adaptation information dissemination to vulnerable community for emergency preparedness measures and awareness raising on enhanced climatic disasters and intervention no. 6 on Mainstreaming adaptation to climate change into policies and programmes in different sectors.

The indicators in the Project Results Framework have also been strengthened to ensure a good alignment with the NAPA.

A.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

Relevant targets and indicators for the key GEF priorities have been added in the Project Results Framework in Annex 1, as well as in Table B above with the Project Framework.

[4] For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

A.3 The GEF Agency's comparative advantage:

N/A (no changes since the PIF).

A.4. The baseline project and the problem that it seeks to address:

The problem addressed by the LDCF project has not changed, but information on the baseline projects has been updated and is summarized in the tables below:

Department of Fisheries (DoF) of the Government of Bangladesh (GoB)

Title:	**1. Aquaculture and Fisheries Management Project in Haor Areas**	
Objectives	• Increase production and protect natural biodiversity in the selected water bodies/ fisheries through establishment of beel nurseries, fish sanctuaries, fingerling stocking, and improving natural habitat	**Remarks** relates to Comp. 3 of this LDCF project
	• Poverty reduction of fishers and fish farmers through technology dissemination and employment generation	relates to Comp. 3 of this LDCF project
	• Development of knowledge and skills of DoF, selected NGO employees and CBO members involved in the project;	relates to Comp. 2 of this LDCF project
	• Capacity building of DoF technical personnel for managing ICF resources along with CBO members and other stakeholders	relates to Comp. 1 of this LDCF project
	• Development of sustainable community-based improved management framework for the selected water bodies/fisheries	relates to Comp. 1 of this LDCF project
Project area	48 Upazilas of Netrokona, Kishoreganj, Sunamganj, Moulvi Bazar, Hobiganj, Sylhet and Brahman Baria districts.	
Budget	US$ 4.77 million	
Duration	October 2010 – June 2016 (1st revised)	

Title:	**2. Establishment of Beel Nursery and Fingerling Stocking in Inland Open Waters**	
Objectives	• Increase fish production from capture fisheries through beel nurseries	**Remarks** relates to Comp. 3 of this LDCF project
	• Develop fish stock in the open water bodies through stocking fish fingerlings	relates to Comp. 3 of this LDCF project
	• Improve socio-economic condition of the open water dependent poor fishers	relates to Comp. 2 and 3 of this LDCF project
	• Restore aquatic biodiversity through stocking endangered fish species	relates to Comp. 3 of this LDCF project
	• Create awareness among the open water dependent people for sustainable management	relates to Comp. 2 and 3 of this LDCF project
Project area	All over the country (60 districts);	
Budget	US$ 15.28 million	
Duration	February 2014–June 2016	

DoF-WorldFish

Title:	**3. Feed the Future (FTF) Aquaculture project**	
Objectives	• Improved quality &/or genetically improved lines of tilapias, carps, prawns and shrimp seeds to aquaculture farmers for increasing fish yield up to 12-27% for ponds & ghers, promote culture of salt-tolerant commercial aquaculture species benefiting around 721,672 HHs in the southern area	**Remarks** relates to Comp. 1 and 2 of this LDCF project
	• Support public & private fish hatcheries to source quality brood stocks,	relates to Comp. 3 of

	establish management systems to maintain and develop quality lines, and to accelerate distribution of improved strains of fish and shrimps to farmers across the southern region	this LDCF project
	• Deliver improved nutrition and incomes through aquaculture and horticulture to poor and vulnerable HHs through demonstrating improved aquaculture technologies, training and communication programmes. Nutrition education and promotion of Vitamin-A rich orange fleshed sweet potato cultivation and production of indigenous nutrient-dense fish species	relates to Comp. 3 of this LDCF project
	• Facilitate collaboration with project partners to stimulate investment, employment and incomes	relates to Comp.4 of this LDCF project
Project area	South-western coastal districts: 100,000 shrimp and prawn farmers and 20,000 entrepreneurs in high value commercial fish culture	
Budget	US$ 5.0 million	
Duration	2011-2016	

DoF-Department of Agriculture Extension (DAE)-WorldFish

Title:	**4. Aquatic Agricultural Systems (AAS)**	
Objectives	• Enhance sustainable AAS productivity and thereby benefitting AAS dependent communities	**Remarks** relates to Comp. 3 of this LDCF project
	• Create improved and enable markets for small-holders AAS producers;	relates to Comp. 3 of this LDCF project
	• Strengthen resilience and adaptive capacity of vulnerable poor and marginalized communities;	relates to Comp. 3 of this LDCF project
	• Reduce gender disparities in access to and control over resources and decision making;	relates to Comp.3 of this LDCF project
	• Improve policy and institutional structure and processes to support pro-poor, gender equitable sustainable development	relates to Comp. 1 and 2 of this LDCF project
	• Create relationships, partnerships, and networks for knowledge sharing and sustained development outcomes	relates to Comp.4 of this LDCF project
Project area	US$ 9.77 million	
Budget	Greater Sylhet, greater Mymensingh, greater Khulna, greater Barisal, greater Noakhali and greater Comilla: Aquatic agricultural system-dependent people rather than fishers and aquaculture farmers	
Duration	2012-2016.	

WorldFish-USAID (United States Agency for International Development)

Title:	**5. Enhanced Coastal Fisheries (EcoFish) Project**	
Objectives	• Improved resilience (IR) and governance of estuarine ecosystem and livelihoods of communities reliant on the Hilsa fishery" of the Ganges/Meghna Rivers in Bangladesh.	**Remarks** relates to Comp. 1 and 2 of this LDCF project
	• Improved science-based fisheries management decision making	relates to Comp. 1 and 2 of this LDCF project
	• Strengthened fisheries adaptive co-management	relates to Comp. 2 of this LDCF project
	• Enhanced socio-ecological and economic resilience of target communities;	relates to Comp. 3 of this LDCF project
Project area	Hilsa fishery of the Ganges/Meghna Rivers in Bangladesh (Munshiganj, Chandpur, Shariatpur, Bhola, Barishal, Chittagong, and Cox's Bazar).	
Budget	US$ 15.0 million	
Duration	01 July 2014 - 30 June 2019.	

IFAD (International Fund for Agricultural Development), Bangladesh

Title:	**6. Haor Infrastructure and Livelihood Improvement Project (HILIP) & Climate Adaptation and Livelihood Protection (CALIP) Project**	
Objectives	Communication Infrastructure (Focus on submersible Union and Upazila roads, culverts, bridges and boat landings)	**Remarks** relates to no Comp. of this LDCF project
	Community infrastructure that includes village protection works(Focus on village roads, markets and protection against wave action); US$ 8.6 million	relates to Comp. 1 and 2 of this LDCF project
	Community resource management (Focus on strengthening existing Beel User Groups - BUGs, creation of 200 new BUGs, improved management and excavation of beels to increase productivity	relates to Comp. 3 of this LDCF project
	Livelihoods protection (Focus on protecting existing livelihoods such as rice and other crops, horticulture and livestock using a value chain approach);	relates to Comp. 3 of this LDCF project
	Capacity and knowledge for building resilience (Addition of this Component through CALIP significantly strengthens HILIP;	relates to Comp. 2 of this LDCF project
	Project management	relates to Comp. 4 of this LDCF project
Project area	4 Upazilas in Netrakona (Khaliajuri, Kolmakanda, Modon, Mohanganj), 4 Upazilas in Kishoreganj (Itna, Mithamoin, Astagram, Nikli), 6 Upazilas in Brahmanbaria (Nasirnagar, Nabiganj, Sarail, Ashuganj, Brahmanbaria Sadar, Bancharampur), 3 Upazilas in Habiganj (Azmiriganj, Lakhai, Baniachong) and 11 Upazilas in Sunamganj (Sunamganj Sadar, Dakshin Sunamganj, Bishwambarpur, Tahirpur, Jamalganj, Dherai, Sulla, Dowarabazar, Dharmapasha, Chhatak, Jagannathpur); Poor communities of NE haor area	
Budget	After inclusion of CALIP in HILIP, the total project cost stands at US$ 133.0 million	
Duration	2014–2020	

FAO (Food and Agriculture Organization of the United Nations)

Title:	**7. Enhancing aquaculture production for food security and rural development through better seed and feed production and management with special focus on public-private partnership**	
Objectives	• Improved brood banking pilot project for major and Chinese carps in 7 selected Govt. fish hatcheries	**Remarks** relates to Comp.3 of this LDCF project
	• Pilot-scale selective breeding programme involving cooperative arrangement among 7 Govt. fish hatcheries and 6 private hatcheries	relates to Comp. 3 of this LDCF project
	• Comprehensive long-term implementation plan of selective breeding programme of major carps, Chinese carps, Nile tilapia and Thai pangas	relates to Comp. 3 of this LDCF project
	• Capacity of private hatchery for breeding, hatchery management and operation is upgraded through upgradation of hatchery facility, better hatchery management practices, process of certification for hatchery operations and 90 Hatchery Technicians (Govt. & Private) trained	relates to Comp. 2 and 3 of this LDCF project
	• Set of implementing guidelines for Fish Hatchery Act developed and a provision made	relates to Comp. 1 of this LDCF project
	• Set of Technical implementing guidelines for Fish & Animal Feed Act and a provision made	relates to Comp. 1 of this LDCF project
	• Formation of National Network of Fish Seed Producers; Formation of National Association of small- and medium-scale feed producers; Capacity of small- and medium-scale feed producers improved	Relates to no Comp. of this LDCF project
	• A pilot-scale feed quality analytical lab. Established & feasibility of	

	country-wide feed quality analytical service; Inventory of all feed additives being used, their efficacy studied and disseminated	
	• Proposal for credit facility for small-scale farmers, hatchery operators and small- and medium-scale feed producers	
Project area	60 districts of Bangladesh	
Budget	US$ 0.45 million	
Duration	November 2014 – October 2016	

A. 5. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

No major changes were made, but information on funding from the baseline has been updated – please see above.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

Environmental and social screening during the PPG phase categorized the Project as Low Risk and showed that the project will have minimal or no adverse environmental or social impacts. One new risk was identified compared to the PIF:

High tides threaten fish ponds, shrimp/prawn farms (ghers), crab fattening units, fish sanctuaries, supplementary stocked beel nurseries both from inside and outside embankments. Besides, floods and storm surge sometimes cause total loss to culture based fisheries (especially brackish water shrimps, freshwater prawns, fin-fishes and crabs) and other properties of livelihood (livestock, houses, crops, etc.) through inundation. This risk has been added to the Project Risk Matrix and appropriate mitigation measures have been identified to reduce the risk to project activities (Table 9).

A.7. Coordination with other relevant GEF financed initiatives

This Project will coordinate with and build on the activities of other ongoing, planned and recently phased out projects. Some GEF and non-GEF national projects that focus on adaptation to climate change have been or are currently being implemented in Bangladesh. These initiatives would provide opportunities for synergies and knowledge exchange with this LDCF-financed project. The project management team will coordinate efforts and establish linkages with similar on-going and recently finished projects. This Project will focus on collating, synthesizing and disseminating the lessons learned from these projects. This approach will: i. maximize synergies; and ii. avoid duplication of activities.

In addition to the baseline activities that are described in the Section **A.4**, close in-country coordination will be sought specifically with the following GEF financed initiatives:

Bay of Bengal Large Marine Ecosystem (BOBLME) (2009-2015) is a GEF-funded International Waters (IW) project, with GEF funding of USD 12 million. It concerns a large marine ecosystem stretching across eight countries: Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand. It is executed by FAO in close coordination with the participating countries. The Strategic Action Programme (SAP) was adopted in 2015 and a BOBLME follow-up project to support the implementation of the SAP is under preparation. The aquaculture demonstration activities in the southwest coastal area of the LDCF project will directly contribute to the implementation of Component 4 of the BOBLME SAP on social and economic considerations and its focus on reducing vulnerability to natural hazards, climate variability and climate change, and increasing climate resilience of coastal communities as well as coastal ecosystems.

Community-based Adaptation to Climate Change through Coastal Afforestation is a LDCF-funded project (2009) implemented by UNDP and executed by the Forest Department of the Ministry of Environment and Forestry (MoEF), with LDCF funding of USD 3.3 million. It is implemented in five coastal districts (Barguna, Patuakhali, Bhola, Noakhali, and Chittagong) most susceptible to the effects of climate change. The project aims to enhance resilience of coastal communities as well as introduce new options for income generation, by adopting the successful community-

based adaptation intervention known as the "Forest, Fish and Fruit" (FFF) model. By planting protective and productive vegetation, with an elevated mound and ditch structure interspersed with fish nursery ponds, the FFF model not only provides additional sources of income, but has also established a 'green shield' surrounding some of Bangladesh's most vulnerable communities. An estimated 14,350 households have been able to use this model to manage and protect their capital in a changing climate.

Ecosystem-based Approaches to Adaptation (EbA) in the Drought-prone Barind Tract and Haor "Wetland" Area is a LDCF-funded project, to be implemented by UNEP with LDCF funding of USD 5.2 million and executed by the Minsitry of Environment and Forestry (MoEF). The project focuses on EbA in the drought-prone Barind tract and *haor* area. EbA will restore ecosystems in the haor area thereby complementing improvement of habitats for important fisheries species by promoting fisheries productivity and additional improved livelihood options for the neighboring community. The project (5456) aims to build hard structures (culverts, sluices) and earth works (dykes and polders), and other climate change ecosystem-based adaptation (EbA) measures to conserve water in the Barind Tract and reduce erosion in the Haor Area, and promote additional livelihood options addressing general community vulnerability. In contrast, this LDCF Project (5636) focuses on climate change adaptation, disaster risk reduction and improved resilience of fisheries dependent communities (fishers and fish farmers and their community leaders, women's groups, etc.) with specific and gender sensitive adaptation technologies based on the ecosystem approach to fisheries management (EAF) and ecosystem approach to aquaculture (EAA). EbA focuses more on habitat restoration than on the fishery resources *per see*, as in the case of EAF and EAA, and the two projects are thus fully complementary and close collaboration and coordination will be forged in the implementation phase to fully realize synergies and opportunities for scaling up of best practices in both EbA and EAF/EAA.

The Project will also be aligned with i. the GEF-funded Assisting Least Developed Countries (LDCs) with country-driven processes to advance National Adaptation Plans (NAPs) is a UNEP/UNDP support programme for strengthening technical capacity of local and national institutions to plan, implement and upscale ecosystem based approach (EbA) of conservation-management and ii. the GEF-funded project Enhancing Capacity, Knowledge and Technology Support to Build Climate Resilience of Vulnerable Developing Countries by sharing lessons learned on implementing and maintaining EbA through the web-based platform that has been developed by the project.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

The following stakeholders have been identified as key actors in the Project and consulted during the PPG phase:

Stakeholders	Roles and responsibilities during the project implementation
Ministry of Fisheries and Livestock (MoFL)	The main functions of the MoFL, GoB are to preserve fisheries resources, fulfil the requirement of animal protein through proper management and planned development, increase socio-economic conditions of fishermen, create employment opportunities for rural unemployed and landless people, and expand foreign exchange earnings by exporting fish and fishery products. In addition to planning and management, MoFL also regulates and oversees research on the conservation and development of innovative new, adaptive fisheries technologies. The MoFL will coordinate with other relevant ministries (e.g. MoEF, PC, ERD, IMED, MoRDM, etc.) during implementation of this project..
Economic Relations Division (ERD)	The ERD is one of the four divisions of the Ministry of Finance (MoF), GoB and leads as the focal point of the GoB for interfacing with the development partners as well as for coordination of all external assistance inflows into the country. The ERD of the Bangladesh Planning Commission (PC) is the principal planning authority for the country, sets the goals, objectives and strategies for the country's short and medium-term plans using a long-term perspective as a framework. Its activities include policy planning,

	sectoral planning, programme planning, project planning and evaluation. This Commission will provide critical observations on capacities developed, in particular through the use of these skills in the learn-by-doing mainstreaming of Rio Conventions in planning development frameworks.
Planning Commission (PC)	The PC under the Ministry of Planning (MoP), GoB is the principal planning authority of the country. It sets the goals, objectives and strategies for the country's short- and medium-term (5-years) plans using a long-term (15-20 years) perspective as a framework, formulates policy measures for the achievement of planned goals and targets and also works on improving governance. It prepares Annual Development Programme (ADP) within the framework of Three Year Rolling Investment Programme (TYRIP) in consistence with the Five Year Plan. Its activities include policy planning, sectoral planning, programme planning, project planning, and evaluation. The PC appraises project proposals for the ECNEC and the MoP and does evaluation of plans and impact on the economic development of the country.
Implementation Monitoring and Evaluation Division (IMED)	The IMED is one of the three divisions of the MoP, GoB central and apex organization of the GoB for monitoring and evaluation of the public sector development Projects included in the ADP. The IMED provides support to all Ministries/Divisions on project implementation through a structured way of collecting, compiling and analysing project information in its central MIS and gives feed back to the Ministries/Division on problems and bottlenecks of projects during implementation. It also reports the progress of implementation of public sector development projects to the NEC and its ECNEC headed by the Chief Executive of the Country.
Ministry of Environment and Forest (MoEF) **including CCU, BCCTF and BCCRF**	The MoEF, GoB is the nodal agency in the administrative structure of the government for the planning, promotion, co-ordination and overseeing the implementation of environmental and forestry programmes. In addition, the MoEF works with other line ministries and agencies to ensure that environmental concerns, including climate change issues are given due priority in their development programmes/projects. The MoEF will ensure that environmental concerns, including climate change issues are given due priority in this projects. The MoEF can also provide environmental and climate change related advice and guidance during the implementation of the project. Drawing on various climate change-related projects being implemented by the BCCTF and BCCRF, the MoEF will provide baseline co-financing for this project. The CCU is a DoE project-based unit established in 2010 with a mandate to manage the Bangladesh Climate Change Trust (BCCT). The CCU operates under the MoEF. Bangladesh Climate Change Trust (BCCT) is a statutory body formed under *Climate Change Trust Act, 2010* to administer Climate Change Trust Fund (CCTF). The CCTF is a self-financing mechanism of the Government of Bangladesh to address the adverse impacts of climate change. It is an annual block allocation from the revenue budget of the Government. The Bangladesh Climate Change Resilience Fund (BCCRF) is a coordinated multi-donor trust fund by the Government of Bangladesh, development partners and the World Bank to address the impacts of climate change. The BCCRF financing activities are designed to achieve the BCCSAP's goals and support one or more of the BCCSAP's six pillars (Food security, social protection and health; comprehensive disaster management; Infrastructure; Research and knowledge management; Mitigation and low carbon development; and Capacity building and institutional strengthening). The CCU will be linked to this project implementation for coordination, technical and administrative support and policy advocacy and related funding of BCCTF and BCCRF will provide baseline co-financing.
Department of Fisheries (DoF)	The DoF, GoB is under the administrative control of the MoFL. It is headed by a Director General and there are administrative set-ups at division, district and Upazila (sub-district) levels headed by Deputy Director, District Fisheries Officer and Senior/Upazila Fisheries Officer and Fisheries Extension Officers respectively. DoF has fish and prawn hatcheries and nurseries and training centres all over the country. The DoFs mandates are: disseminate improved aquaculture technologies through training and

	demonstration and to extend extension advisory services to the focal stakeholders; enhance fisheries resources through enacting conservation and management measures; assist the administrative ministry to formulate policies, acts etc.; facilitate alternative income generating activities for rural poor and unemployed people towards poverty alleviation; formulate and implement development projects/programs towards sustainable utilization of fisheries resources to ensure food security; and disseminate improved aquaculture technologies through e-Extension service. The DoF will be the main technical agency of the project with responsibility for coordination with BFRI, DoE, DAE, FD, FAO, WF and IUCN. It will house the project technical team and be responsible documentation and reporting.
Bangladesh Fisheries Research Institute (BFRI)	The BFRI is the nodal fisheries research institute and an autonomous organization under the MoFL, GoB. Under this institute there are 5 stations located at Mymensingh, Chandpur, Cox's Bazar, Bagherhat and Paikgacha (Khulna); and 5 substations at Santahar, Jessore, Rangamati, Khepupara and Sayedpur. These stations conduct basic and applied research on freshwater aquaculture, inland fisheries management, lake management, fish diseases, marine fisheries, brackish water aquaculture, fish breeding genetics, etc. Some of the technologies innovated by this institute are being disseminated to the fields by DoF. The BFRI will support the project by prescribing best on-farm climate resilient aquaculture technologies for the coastal aquaculture affected by the adverse impacts of climate change. The BFRI could also collaborate in training on climate resilient fisheries and aquaculture practices.
Department of Environment (DoE)	The DoE is the technical arm of the MoEF, GoB and the lead institution for sectoral environmental management plan and deals specifically with the environmental issues. The DoE has wide ranging responsibilities from enforcement of environmental laws and codes in addition to EIA in respect of public and private sector projects. During implementation of this project the DoE's involvement would be ensured as being a member of the Project Steering Committee (PSC) and the DoE will provide climate change data and impact predictions to the project. Various climate change-related projects being implemented by the DoE can provide baseline co-financing for this project.
Bangladesh Forest Department (BFD)	The BFD, another arm of the MoEF, GoB works towards ensuring natural sustainability and biodiversity conservation through social forestry, forest management, afforestation, reforestation, protected area management, etc. The BFD facilitates collaborative management of the Sundarbans fisheries and aquatic resources jointly with the DoF. Best lessons learned from the BFD's on-going IPAC, SEALS, CABCC-CF projects working in the Sundarbans Impact Zones (SIZ) and adjacent coastal areas will be linked during this project implementation and could provide baseline co-financing. Project communities will be linked with Co-management Committees (CMCs) formed under IPAC to facilitate raise their voices at upazila-level decision making spaces. The project will thus be aided in supporting poor and women headed households to take up climate resilient aquaculture systems.
Department of Agricultural Extension (DAE)	The DAE of the Ministry of Agriculture (MoA), GoB is one of the largest public sector agricultural extension providers in Bangladesh. DAE is responsible for carrying out agricultural extension services at the grassroots level throughout the country. DAEs concepts of Farmers Field School (FFS) and Farmers Climate School (FCS) will be linked to this project for e-disseminating early warning systems, capacity and awareness improvement of the fishers' and fish/shrimp/prawn/crab farmers, especially emphasizing poor and women headed households to take up climate resilient fisheries and aquaculture systems.
Bangladesh Meteorological Department (BMD)	The BMD, under the Ministry of Defence (MoD), GoB is the authorized government organization for all meteorological activities in the country. It maintains a network of surface and upper air observatories, radar and satellite stations, agro-meteorological observatories, geomagnetic and seismological observatories and meteorological telecommunication system. The BMD will be linked to this project and provide climate data and impact predictions.
Ministry of Disaster Management and	The MoDMR, GoB is the focal ministry for disaster risk reduction and emergency management and takes the lead in coordinating disaster management efforts. MoDMR has

Relief (MoDMR)	been successful in shifting the paradigm from relief culture to risk reduction management through the development of a comprehensive disaster management programme, a cyclone preparedness programme in coastal areas, and a huge safety net support programme. These initiatives have yielded a number of encouraging results in terms of environmental protection and disaster management that the project will build on.
Disaster Management Department (DMD)	The DMD is the technical arm of MoDMR, GoB which coordinates all activities related to disaster management from national to the grassroots level. The DMD through its Comprehensive Disaster Management Program-II (CDMP-II) provide training of the communities and staff on DRR and climate change adaptation, facilitate setting up of early warning systems for the coastal aquaculture communities. The DMB will be linked to this project and provide training of the communities and staff on disaster risks reduction (DRR) and climate change adaptations, and facilitate setting up of early warning systems for the fishers and aquaculture communities.
Food and Agriculture Organization (FAO) of the UN, Bangladesh	The FAO Country Programming Framework, CPF (2014-2018) for Bangladesh is a strategic planning and management document which provides FAO with a sound basis of developing its mid-term country programme, in line with the policies and development priorities of the Government of Bangladesh. It is also a tool to help mobilize resources in a programmatic manner, rather than on a project-by-project basis. The core goal of CPF is to identify country level priority areas of work, required technical assistance and investment opportunities; to help coordinate and contribute to the multilateral goals relating to the sustainable agriculture; rural development, food security and nutrition. The CPF in Bangladesh lays out the basis for more integrated and 'bottom-up' approach to the FAO programming in Bangladesh. Bangladesh has, as well, contributed significantly to FAO initiatives, commissions, committees and the working panels. FAO Bangladesh team is ready to incorporate all the responses to these growing concerns in its cooperative development initiatives, as it has been doing for more than 40 years now.
WorldFish	WorldFish is supporting the GoB and implementing projects in the southwest coastal area of Bangladesh and is particularly experienced and have comparative advantage in identifying and developing best practices and innovations related to fisheries, brackish water shrimp culture, freshwater prawn culture, crab fattening and white fish couture in that area in the face of climate changes. WFs experience will be leveraged to this project in implementing best lessons learned, capacity and awareness improvement trainings of the fishers' and fish/shrimp/prawn/crab farmers and other technical areas (quality fish seeds) through Feed the Future (FTF) Aquaculture and Aquatic Agriculture System (AAS) projects including in improving the relevant national policies and strategies. Besides, its investment in various adaptive fisheries and aquaculture projects will provide baseline co-financing..
International Union for the Conservation of Nature (IUCN)	The IUCN is the largest professional global conservation network and is an important institution that has provided important technical services to support the GoB in the past, and may be called upon to do so in future. With respect to this project, their comparative advantage in identifying and developing best practices and innovations related to wetland (*haor* basin) management will be very valuable.
International Fund for Agricultural Development (IFAD)	IFAD has implemented *Haor infrastructure and livelihood improvement project* (HILIP) and now up scaled that project into Climate Adaptation and Livelihood Protection (CALIP) project in NE haor area, Bangladesh for scaling up best practice and testing new adaptation interventions of the HILIP. The projects provided support for building upazila and union roads including submersible roads, bridges and culverts, community (village) roads, village markets and protection works against wave action and erosion in flooded haor wetlands. It also provided support to beel user groups (BUG) and water bodies under community management in the NE haor region. The project strengthened the institutional arrangements for beel management and invest resources in developing water bodies to improve their productivity and biodiversity through beels re-excavation, livelihood protection by protecting existing sources of livelihood such as crop cultivation particularly rice, horticulture, livestock and fisheries.

Centre for Environmental and Geographic Information Services (CEGIS)	CEGIS is a pioneer in integrated environmental and social analysis and monitoring studies using the latest concepts and GIS and space technologies. Its services include initial environmental examination (IEE), environmental impact assessment (EIA), social impact assessment (SIA), Resettlement Action Plans (RAP), analytical framework for integrated water resources management (IWRM), spatial analysis using GIS and Remote Sensing for flood monitoring, drought assessment and monitoring, monitoring of river plan form changes, river erosion and accretion prediction, flood damage assessment, land use planning and zoning, urban planning, database and IT services, development of meta-database and web-based spatial database, MIS and Decision Support Systems for planning, designing, implementation and monitoring of projects, etc.
NON-Government Organizations (NGOs)	There are a number of NGOs such as, Bangladesh Shrimp and Fish Foundation (BSFF), Centre for Natural Resources Studies (CNRS), Bangladesh Centre for Advanced Studies (BCAS), Centre for Advanced Research in Natural Resources & Management (CARINAM), Nature Conservation Management (NACOM), that are undertaking important and related resource studies related to conservation and management on fisheries, environment and biodiversity addressing related policy issues in Bangladesh. During project implementation national and local NGOs, particularly working in the envisioned demonstration places will be mobilized, and involved in relevant participatory project activities, such as RRA/PRA, gender equity awareness, livelihood vulnerability and risk assessment in fisheries and aquaculture in the face of climate changes, and development of extension materials (leaflets, booklets, posters, etc.).
Bangladesh Shrimp and Fish Foundation (BSFF)	Bangladesh Shrimp and Fish Foundation (BSFF) is a non-profit private research and advocacy organization created through a USAID project. It has been registered in 2003 under Trust Act 1882 and also registered in 2008 under Social Welfare Services from Dhaka, Bangladesh. It has started functioning since June, 2003. It is one of the active organizations in fisheries sector of Bangladesh. The foundation is dedicated to provide services and support to the country's shrimp and fish based industry to keep the sector sustainable. It works as an inter-face among the public, private sectors, academic institutions and development agencies. BSFF achieves its goal through dialogues, conferences, research, demonstrations and advocacies. It works closely with industry associations and GoB and facilitates exchange of opinions between and among various stakeholder groups, e.g., hatchery, nursery, grow out farm, feed mill, ice plant, field depot or service centre and processing plant operators, government, non-government and donor organizations to reach sound consensus. Help establish good harmony and coordination throughout the entire chain of the industry. Develop a database and a central information repository. Conduct technical, social, environmental and market research and studies. Training and Information dissemination on relevant aspects and provide technical assistance.
Village/rural level Community Institutions (CIs): Community-based Organizations (CBOs), local community organizations, local leaders, women organizations, etc.	There are Self Help Groups (SHGs), Women's Groups, Fishermen's Associations, Youth Groups, Co-Management Committees (CMCs), Village Forum (VFs), Community-based organizations (CBOs), community organizations, local leaders, women organizations, etc. in both the northeast and southwest. Those organizations, leaders, and women groups will be mobilized and involved in participatory implementation of the project activities. Emphasis will be given to community-based participatory adaptation supporting poor and women headed households, awareness and capacity improvement trainings for their livelihood improvement vis-a-vis sustainable exploitation and management of the renewable finite natural resources of fisheries.

In addition, the Project recognizes that women are vital stakeholders in managing and using aquatic resources, through their involvement in harvesting, aquaculture operation, processing and marketing, and provisioning aquaculture and inland fishery resources in the households. The proposed project is consistent with the GEF Policy on Gender Mainstreaming (PL/SD/02. May 1, 2012) and is fully aligned with the gender policy of FAO.

A new section on Gender Considerations (2.3) has been inserted into the Project Document that explains more in detail how the project is aligned with FAO's gender policy. Examples are also provided, under each project component, on gender differentiated technologies and/or adaptive actions that will be supported and which risks and barriers specific to women they address.

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

The impacts of climate change on aquaculture and inland capture fisheries incur immense costs to Bangladesh, resulting from lost income and products, damage to infrastructure and services such as roads and water storage and increased costs of water treatment, flood prevention, and reduced resilience to shocks and climate change. This Project will contribute to socio-economic benefits in affected areas through demonstration activities at eight vulnerable sites, which will include:

- Sustained livelihoods for people dependent on fisheries and aquaculture: The project will pay special attention to assessing the impacts of CC on vulnerable groups, such as female headed households, and identifying gender sensitive interventions.
- The project will ensure that it works with a representative number of female-headed households at demonstration sites; that recommended CCA technologies and approaches are benefiting men and women equally;
- Improved food security in demonstration areas, with a particular focus on enhancing ecosystem resilience to climate change for sustained provision of ecosystem services necessary fisheries and aquaculture production.

The Project benefits are summarized below by component where it is clearly demonstrated that adaptation benefits under Components 2 and 3 are underpinned by gender disaggregated socio-economic benefits to local communities:

Project Component	Project Adaptation Benefits and Targets
Overall impact (after replication through training and dissemination)	• Fisheries and aquaculture communities within 4,790 km^2 of coastal and inland aquatic ecosystems (command area) under initial climate resilient plans and management practices. • An estimated 400,000 people (22% of total population of the project sites) with reduced vulnerability to CC, about 40% women. • 15% increase in per capita income in targeted beneficiary locations.
Component 1: Improved relevant national policies and strategies to facilitate climate resilient fisheries sector and development at all levels	• Revised national fisheries policy and aquaculture strategies leading to improved and climate resilient governance of the sector. • Enhanced capacity and knowledge of GoB and partners personnel, community leaders(at least 40% female), and private entrepreneurs on climate resilient inland capture fisheries and aquaculture.
Component 2: Strengthening knowledge and awareness of fisheries/aquaculture dependent communities facing the adverse impacts of climate change	• 70 communities adopt 15 local development plans and integrate DRM and EWS considerations in their fisheries and aquaculture management systems. • Collaborative Early Warning System (EWS) in place and appropriately connected to local environmental monitoring in at least 50 communities.
Component 3: Enhancing local adaptive capacity to support climate resilient fisheries and aquaculture management and	• Improved income, food security and nutrition in 70 communities. • At least 15% increase in fisheries and aquaculture productivity in targeted HHs. • At least 15% increase in income generation in targeted beneficiaries. • Around 70% of targeted households adopt climate resilient livelihoods under

alternative livelihoods in the face of climate change	existing and projected climate change.
Component 4: Dissemination of best practices and lessons learned, monitoring and evaluation	• Strengthened project knowledge base on climate resilient fisheries and aquaculture technologies and livelihoods. • Communication and dissemination materials produced and disseminated to beneficiaries and other stakeholders. • Adaptive results-based M&E.

B.3. Explain how cost-effectiveness is reflected in the project design:

By funding the additional cost to the business-as-usual scenario in targeted sectors in the absence of climate change, cost-effectiveness is built in to the design of LDCF projects. The activities of the partners in the baseline cover most of the development issues related to inland capture fisheries and aquaculture in Bangladesh, as was discussed in Part I, Section C. This means that the FAO/GEF Project builds on a large baseline and with a baseline and co-financing of US$ 16.35 million, the FAO/LDCF costs are only around 25% of the entire Project cost. In order to identify the most cost-effective project design, several alternative designs and approaches were considered for creating a climate resilient fishery and aquaculture sector in Bangladesh.

The project is designed to engage the government staff, including those providing extension services at District/Sub-district levels, to reach the vulnerable communities in the pilot areas, which cost is partially borne by the government as in-kind contribution to the project.

C. DESCRIBE THE BUDGETED M &E PLAN:

The main M&E reports, responsible parties, timeframe and costs are summarized below:

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Inception Workshop (IW)	Project Management and technical Support Unit (PMTSU), supported by the FAO Lead Technical Officer (LTO), FAO Budget Holder (BH), and FAO GEF Coordination Unit (TCI-GEF)	Within three months of project start up	USD 10 000
Project Inception Report	PMTSU, cleared by LTO, BH, and TCI-GEF	No later than one month post IW.	-
Field based impact monitoring	PMTSU, Department of Fisheries (DoF) and other relevant agencies to participate.	Periodically, to be determined at inception workshop.	USD 40 000
Supervision visits and rating of progress in PPRs and PIRs	PMTSU, BH, LTO, other participating units and TCI-GEF	Annual or as required	The visits of the LTO and the TCI-GEF will be paid by GEF agency fee. The visits of the PC will be paid from the project travel budget
Project Progress Reports	PMTSU, with inputs from Project Director (PD), Project Steering Committee (PSC) and other partners	Semi-annual	USD 0 (as completed by PMTSU)

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Project Implementation Review report	BH and LTO supported by PMTSU and cleared and submitted by the TCI-GEF to the GEF Secretariat	Annual	Paid by GEF agency fee
Co-financing Reports	PMTSU, PD	Annual	0 (as completed by International Team Leader and PMTSU)
Technical reports	PMTSU, LTO & other Participating Technical Units of FAO	As appropriate	-
Mid-term Evaluation	External Consultant, FAO Office for Evaluation in consultation with the project team including the TCI-GEF and other partners	At mid-point of project implementation	USD 45 000 for independent consultants and associated costs.
Final evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team including the TCI-GEF and other partners	At the end of project implementation	USD 45 000 for external, independent consultants and associated costs.
Terminal Report	PMTSU, BH, LTO, FAO's TCSR Report Unit	At least two months before the end date of the Execution Agreement	USD 15 000 (including translation)
Total Budget			**USD 155 000**

Provision for Evaluation:

The project will be subject to Annual Review once every twelve months by representatives of the Bangladesh Government and FAO the executing agency and the first such meeting to be held within the first twelve months of the start of full implementation. The Project's PMTSU and the PIU shall prepare an Annual Project Report (APR) and submit to each TPR meeting. Half-yearly progress reports will be produced to ensure that design and inception activities are closely monitored. Separate reviews of each site component to be conducted. Monitoring and Evaluation Indicators will be built into the project in consultation with FAO/GEF. An independent Mid-Term Evaluation (MTE) will be undertaken towards the middle of Project Year-2 to review progress and effectiveness of implementation in terms of achieving Project objective, outcomes and outputs. Findings and recommendations of this evaluation and review will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. FAO (the Office of Evaluation) will arrange for the MTE in consultation with project management. The evaluation will, *inter alia:*

i. review the effectiveness, efficiency and timeliness of project implementation;
ii. analyze effectiveness of partnership arrangements;
iii. identify issues requiring decisions and remedial actions;
iv. propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
v. highlight technical achievements and lessons learned derived from project design, implementation and management.

A Project Terminal Report will be prepared for consideration at the terminal tripartite meeting. Draft report will be distributed sufficiently in advance to allow in-house review and technical clearance by the FAO and GEF prior to the terminal tripartite review. An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE would aim to identify the project impacts and the sustainability of project results and the degree of achievement of long-term results. This evaluation would also have the purpose of indicating future actions needed to expand on the existing project in subsequent phases, mainstream and up-scale its

products and practices, and disseminate information to management authorities responsible for related issues to ensure replication and continuity of the processes initiated by the project.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):): (Please attach the Operational Focal Point endorsement letter(s) with this form. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Md. Shafiqur Rahman Patwary	Secretary and GEF Operational Focal Point	Ministry of Environment and Forests	07/14/2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
Gustavo Merino Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153 Rome, Italy TCI-Director@fao.org		15 March 2016	Doris Soto, Senior Fisheries Resources Officer, FAO headquarters in Rome, Italy Weimin Miao, Aquaculture Officer, FAO Regional Office for Asia and the Pacific, Bangkok, Thailand	(+39) (06) 5705-6149 (+66) (02) 697-4119	Doris.Soto@fao.org Weimin.Miao@fao.org
Jeffrey Griffin Senior Coordinator, GEF Coordination Unit, Investment Centre Division, Technical Cooperation Department, FAO Viale delle Terme di Caracalla, 00153 Roma, Italy GEF-Coordination-Unit@fao.org			Mike Robson, FAO Representative in Bangladesh P.O. Box 5039 (New Market), 1205 Dhaka, Bangladesh	(+880) 2 912 6673	FAO-BD@fao.org

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project Objective and Indicators (Impact):

Objectives	Outcome/ impact indicators	Baseline[5]	Mid-project Target	End of Project Target	Means of Verification and Responsible Entity
Project Objective: Building climate change (CC) adaptive capacity of vulnerable fisheries and aquaculture communities in Bangladesh	• Area of Coastal and inland aquatic ecosystems under climate resilient plans and management practices.	• Coastal and inland aquatic ecosystems are not under exact climate resilient plans and management practices; sporadic attempts are focused on ecosystem approach to fisheries and aquaculture management.	• Targeted fisheries and aquaculture communities within 2,395 km^2 of coastal and inland aquatic ecosystems under climate resilient plans and management practices	• Fisheries and aquaculture communities within 4,790 km^2 of coastal and inland aquatic ecosystems (command area) under initial climate resilient plans and management practices	GEF CC-A Tracking Tool, PIR, Mid-term and Final Evaluations (DoF, FAO) District and sub-district (upazila) level fisheries and aquaculture management plans District and sub-district statistical reports
	• Number of people (disaggregated by gender) with reduced vulnerability to climate change	• Almost all fishers and fish farmers' communities are vulnerable to climate change implications.	• An estimated 160,000 people with reduced vulnerability to CC, about 40 %women	• An estimated 400,000 people (22% of total population of the project sites) with reduced vulnerability to CC, about 40% women	

[5] To be established during first phase of project when LUS training and mapping and final identification and definition of pilots have taken place

Outcomes and Outputs per Component:

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Project Objective/Impact									
Component 1: **Climate resilient fisheries sector through relevant national capacity development**									
Outcome 1: **Improved relevant national policies and strategies to facilitate climate resilient fisheries sector and development at all levels.**	• National policy and strategies for fisheries and aquaculture sector strengthened. • Capacities to address CC in the fisheries and aquaculture sector strengthened.	Fisheries and Aquaculture Policies and Strategies are old, need review and updating incorporating gender, CC considerations and possible adaptation actions; base year late 2015. National capacities on CC adaptation approaches are minimal.	National fishery policy revised to include CC. Inland fisheries and aquaculture strategies revised to include CC.	- Enhanced capacity and knowledge of at least 170 people including GoB and partners personnel, community leader/ people (40% female), and private entrepreneurs on climate resilient inland capture fisheries and aquaculture.			-Revised national fisheries policy (1) and fisheries and aquaculture strategies (2). -Enhanced capacity and knowledge of GoB and partners personnel, community leader/ people (40% female), and private entrepreneurs on climate resilient inland capture fisheries and aquaculture.	Policy documents, minutes from meetings - amendments to policy and strategy areas; DoF and MoFL. Training manuals. Targeted capacity assessment surveys of fisheries and aquaculture stakeholders.	Policy reform processes in support of climate resilient fisheries and aquaculture continue to receive government support at the highest level. Political willingness to support and encourage women participation
Output 1.1: Climate induced risks and vulnerability of fisheries and aquaculture.	• National assessment of climate vulnerability and CC risks to fisheries and aquaculture.	Climate induced risks and vulnerability of fisheries & aquaculture subsector	Confirmation of Fisheries CC sensitive areas. Assessment of climate induced risks and vulnerability of	0	0	0	Confirmation of fisheries CC sensitive areas 1 Report on Assessment of climate induced risks and	Assessment report; DoF & MoFL	DoF and other relevant GoB agencies can be trained to have the capacity to assess risk

[6] Value in the case of quantitative indicators and description of situation in the case of qualitative indicators. Please insert the year of the baseline

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
sub-sectors at national level assessed with special focus on gender and climate sensitive areas.	sub-sectors. • Number of fishery sector climate sensitive areas identified	have not been comprehensively assessed. No CC fisheries-sensitive areas are formally identified	fisheries & aquaculture subsector with due consideration to gender and with focus on climate sensitive areas targeted by the project.				vulnerability of fisheries and aquaculture with due consideration to gender and with focus on climate sensitive areas targeted by the project.		and vulnerability of fisheries & aquaculture subsector with consideration of gender and focus on climate sensitive areas
Output 1.2: Relevant national policies and strategies reviewed (gaps analysed) and revised by incorporating fisheries and aquaculture adaptation to CC.	• Number of revised policies and strategies incorporating fisheries and aquaculture. adaptation to CC.	Fisheries and Aquaculture Policies and Strategies are old, need reviewing and updating incorporating CC considerations (gender sensitive) and possible adaptation actions; base year late 2015.	Updated review (report) of relevant fisheries policy and strategies. 01 revised fisheries policy and 02 revised strategies (inland capture and aquaculture) incorporating gender differentiated CC adaptation considerations and forecast budget allocations to adaption actions in revised strategies.	0	0	0	Revised and updated review report of fishery sector policy (1) Revised and updated inland capture fishery and aquaculture strategies (2)	Fisheries Policy and Strategy Review Report, revised policy and strategy documents; DoF and MoFL Including specific indications regarding DRM and EWS for fisheries and aquaculture.	Policy reform processes in support of climate resilient fisheries and aquaculture continue to receive government support of DoF, BFRI and other GoB agencies.

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Output 1.3: Capacity building including a capacity building-strategy for DoF, other relevant GoB agencies, private sector and community-based organizations developed to facilitate climate resilient fisheries sector.	• Capacity needs assessment of DoF, BFRI and other related GoB agencies and capacity building strategy for DoF, other relevant GoB agencies and the private sector with subject areas. • Training manual on *Climate forecast application, DRM, CC mitigation & adaptation and EWS in fisheries & aquaculture* for local communities. • Number of stakeholder groups trained (e.g. DoF & BFRI, other partner organisations, private sector,	Low capacity of DoF, BFRI and other related GoB agencies to facilitate climate resilient fisheries sector development. No such Training module exists. Country lacks skilled personnel on Crab hatchery techniques and management. GoB personnel, private entrepreneurs and community lacks skill on climate	1 Detailed Report on capacity needs assessment of DoF, BFRI & other related GoB agencies, private sector and community. Design of a capacity building strategy to strengthen them. 01 DoF & 1 BFRI personnel to be trained on mud crab hatchery techniques in Indonesia for 3-4 months. 25 DoF, BFRI and other GoB personnel to be trained on climate resilient adaptation and management approaches for the fisheries and aquaculture sector in-	30 GoB (DoF and other partner organization's personnel to be trained[7]) on climate resilient adaptation and management approaches for the fisheries and aquaculture sector in neighbouring countries/ overseas. 25 DoF, BFRI and other GoB personnel to be trained on climate resilient adaptation and management approaches for the fisheries and aquaculture sector in-country. 24 advanced community leader/people (40% female) and partner	25 DoF, BFRI & other GoB personnel to be trained on climate resilient adaptation and management approaches for the fisheries and aquaculture sector in-country. 14 Private entrepreneurs to be trained[3] on climate resilient adaptation and management approaches for the fisheries and aquaculture sector in-country.	25 DoF, BFRI & other GoB personnel to be trained (as per preliminary training need assessment in PPG phase) on climate resilient adaptation and management approaches for the fisheries and aquaculture sector in-country.	1 Capacity need assessment (training needs assessment) report for DoF, BFRI and other related GoB agencies, private sector and community. 1 training manual on *Climate forecast application, DDR management and adaptation, mitigation options, and EWS in fisheries and aquaculture.* 1 DoF and 1 BFRI personnel trained on *Crab hatchery techniques* in Indonesia for 3-4 months. 30 GoB (DoF & other partner organization's) personnel trained on climate resilience	Report of capacity need assessment of DoF, BFRI & other related GoB agencies. 1 Training manual on *Climate forecast application, DDR management and adaptation, mitigation options, and EWS in fisheries and aquaculture.* Reports of all training events (in-country and overseas) and attendance sheets.	Relevant training and capacity building of government staff and other stakeholders delivered in a timely manner leading to enhanced skills/capacity to handle and plan CC implications in fisheries sector. Capacity of the Fisheries Department to establish and maintain a mud crab hatchery to conserve mud crabs' biodiversity.

[7] All training will be based on the initial needs assessment done during the PPG phase (e.g. capacity building on an identified climate smart farming technique such as Mud-Crab) and as informed by the in-depth needs assessment during the year 1.

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
	and communities) on CC resilient fisheries and aquaculture.	change implications to fisheries sector and appropriate resilient adaptation options.	country.	GoB personnel to be trained overseas in 2 batches on EAF and EAA as climate resilient management approaches and each batch lead by 01 GoB official. 1 Training manual.			approaches for the fisheries and aquaculture sector in neighbouring countries. 100 DoF, BFRI and other GoB personnel trained in-country. 24 advanced community leader/people (40% female) and partner GoB personnel trained in regional trainings (Asia) in 2 batches on EAF and EAA and each batch lead by 01 GoB official. 14 Private entrepreneurs trained in-country.		
Component 2: **Strengthening knowledge and awareness of fisheries/aquaculture dependent communities facing the adverse impacts of climate change**									
Outcome 2: **Local community organizations have institutionalized disaster risk management**	•Number of local communities adopting development plans/ programmes including DRM	Poor governance of CC in fisheries and aquaculture. Local		15 local development plans integrated DRM considerations by 70 communities.	At least 30 communities adopt DRM and EWS.	Collaborative Early Warning System (EWS) in place and appropriately connected to the local environmental monitoring in at	70 communities adopt 15 local development plans and integrate DRM considerations. EWS in place in at least 50	Climate resilient local development plans. EWS reports. Revised local development	Local governments and local communities, including women, willing to participate.

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
(DRM) in their local development plans and programmes, thus improving local CC related governance.	considerations. • Collaborative Early Warning System (EWS) in place.	development plans do not adequately integrate DRM for fisheries and aquaculture.				least 50 communities of the SW coastal and NE haor area.	communities.	plans	
Output 2.1. Risks and vulnerability of fisheries, aquaculture. & livelihoods to the adverse impacts of CC, including knowledge gaps, assessed with the participation of relevant stakeholders & DoF field officials at project sites.	• Risk and vulnerability assessments conducted and updated at project sites.	Climate induced risks and vulnerability of fisheries & aquaculture subsector assessment not available.	Risk and vulnerability assessment completed among communities (CBOs/occupational groups) in 5 upazilas.	Risk and vulnerability assessment completed among communities (CBOs/occupational groups) in remaining 4 upazilas (i.e. risks and vulnerability assessment completed among 70 communities in 9 upazilas). 40 communities' (CBOs) adopt 7 local development plans and integrate DRM and EWS considerations.	30 communities' (CBOs) adopt 7 local development plans and integrate DRM and EWS considerations.		Risk and vulnerability assessment completed among 70 communities in 9 upazilas. 70 communities adopt 15 local development plans and integrate DRM and EWS considerations.	Risk and vulnerability assessment reports from 9 upazilas.	Sub-district technical officers trained and able to conduct risk and vulnerability assessment
Output 2.2: Communities',	Number of fishers and fish farmer's	Low awareness and capacity	Local authorities, DoF, and	40 communities' (CBOs) have	At least 30 communities' (CBOs) adopt	Collaborative Early Warning System (EWS) in	Collaborative Early Warning System (EWS)	Records and attendance of training sessions	Local communities, especially

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
awareness and capacity enhanced to understand, assess, plan and implement fisheries, aquaculture and livelihood adaptations to climate change risks	communities with DRM and EWS mechanisms in place in SW and NE climate sensitive areas. Number of communities aware of climatic variability and climate change risks and main adaptation approaches and options.	of local communities to adapt to fisheries and aquaculture practices to climate change due to limited access to knowledge and information. There are no local DRM systems in place for fisheries and aquaculture communities.	leaders of 70 communities trained in country on the implementation of DRM and EWS[8] mechanisms and plans focused on fisheries and aquaculture in SW and NE climate sensitive areas. 1,000 (HHs) households (40% female) trained on climate variability and CC risks and on general climate resilient adaptation and management approaches.	initiated implementation of local DRM and EWS plans and integrate DRM considerations in the fisheries and aquaculture management systems. 2,000 HHs (40% female) to be trained on climate variability and CC risks general climate resilient adaptation and management approaches.	local DRM and EWS plans and integrate DRM considerations in the fisheries and aquaculture management systems. 2,880 HHs (40% female) to be trained on climate variability and CC risks general climate resilient adaptation and management approaches.	place and appropriately connected to the local environmental monitoring [Community radio, Mobile SMS gateway & Training manuals/ mass awareness materials, etc.] in at least 50 communities of the SW coastal and NE haor areas.	and DRM in place [Community radio, Mobile SMS gateway & Training manuals/mass awareness materials, etc.] in at least 50 communities of the SW coastal and NE haor areas. At least 5,880 HHs trained on climate variability and CC risks general climate resilient adaptation and management approaches for the fisheries and aquaculture sector in country.	& their understanding; DoF and MoFL. EWS reports, broadcasting in mass media, hotlines, etc. Assessment of functioning DRM and EWS in the communities by DoF and MoFL.	women and the very poor, willing to participate in trainings and in EWS. Continued interest and support of communities to have a EWS in place.
Component 3: **Enhancing local adaptive capacity to support climate resilient fisheries and aquaculture management and alternative livelihoods in the face of climate change**									

[8] EWS to be linked and also fed by the local environmental monitoring systems (see output 3.3).

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Outcome 3: **Communities with strengthened adaptive capacity, maximize their incomes and access to nutrition through adoption of CC resilient fisheries, aquaculture and livelihood technologies/ approaches in targeted areas.**	• Number of targeted groups adopting CC adaptation technologies. • Number of communities (that have adopted new technologies and approaches) with improved income, food security and nutrition.	Adoption of climate resilient practices in the fisheries and aquaculture communities is very low due to lack of knowledge, awareness and availability of potential technologies and approaches.	Site selection, community mobilization and initiate climate resilient smart technologies demonstration with communities. Initial Farmers Field School establishment.	30 communities (CBOs/occupational groups/) adopt climate smart technologies. 10 Farmers Field School established.	40 (CBOs/occupational groups/) communities adopt climate smart technologies. All 25 Farmer Field Schools established.	Improved income and nutrition in 70 fishers and fish farmers' communities.	Improved income, food security and nutrition in 70 communities: • Around 15% increase in fisheries and aquaculture productivity in targeted HHs. • Around 15% increase in income generation in targeted beneficiaries under existing and projected climate changes. • Around 70% of targeted households adopting climate resilient livelihoods under existing and projected climate changes.	GEF CC-A Tracking Tool, PIR Midterm and Final Evaluations. Sub-district statistics and technical reports.	Local communities have incentives to adopt adaptation technologies through improvement in incomes and/or improved food security and nutrition.

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Output 3.1: Site specific climate resilient and gender differentiated fisheries, and aquaculture technologies (e.g. fisheries information platform, innovative aquaculture systems, brood banks and satellite hatcheries, salt tolerant fish strains etc.) developed and adopted by the targeted communities.	• Number of communities adopting X number of adaptation technologies/approaches, disaggregated by gender. • Feasibility report of mud crab (*Scylla serrata*) hatchery establishment • Golda hatcheries' efficiency improvement report. • Establishment of PL/fingerling markets in Bagerhat-Dacope area.	The availability and adoption of climate resilient practices and technologies in the fisheries and aquaculture sector is inadequate. Feasibility report regarding mud crab hatchery establishment is non-existent. Golda farming is suffering from needed seed supply due to inefficient golda hatcheries. PL/fingerling market is non-existent in Bagerhat-Dacope area.	Innovative technologies and approaches are clearly identified/ communicated and accepted by each target community/ groups.	At least 30 communities (CBOs etc.) initiate adoption of at least 10 climate smart technologies. Feasibility survey and report of mud crab (*Scylla serrata*) hatchery establishment. Golda hatcheries' efficiency improvement report.	At least 40 (CBOs/ communities) adopt at least 10 climate smart technologies. Establishment of 01 PL/ fingerling market in Bagerhat-Dacope area.	At least 40% of the communities adopt 15 climate smart initiatives.	At least 70% of the targeted at least 50 communities (40% women) adopt 15 climate smart initiatives. 15 adaptation technologies adopted including gender differentiated technologies (homestead pond fish culture, mud crab fattening, etc.). Feasibility survey and report of mud crab (*Scylla serrata*) hatchery establishment. Golda hatcheries' efficiency improvement report. PL/fingerling market established in Bagerhat-Dacope area.	GEF CC-A Tracking Tool, PIR Mid-term and Final Evaluations. Sub-district statistics and technical reports. Mud crab hatchery establishment feasibility report and golda hatchery efficiency improvement report.	Local communities have incentives to adopt new/ improved technologies and diversify their livelihoods.

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Output 3.2: Community-led and gender differentiated dissemination systems of adaptation technologies developed and adopted.	• Community led gender differentiated dissemination systems developed and adopted, including information communication technology (ICT) systems, • Farmers Field Schools (FFSs) on fisheries and aquaculture. and pilot farms established. • Types of user-friendly dissemination materials produced and distributed.	Some disseminati on systems that could be adapted to the objectives of this project in place but inadequatel y addresses gender.		Gender differentiated ICT-based dissemination systems in place in 9 upazilas and used by 60% communities. Initiate Farmers Field School establishment. 3 types of user-friendly dissemination materials produced and distributed.	12 Farmers Field School established. 5 types of user-friendly dissemination materials produced and distributed.	13 Farmers Field School established. 2 types of user-friendly dissemination materials produced and distributed.	Gender differentiated ICT-based dissemination systems in place in 9 upazilas and used by 60% of communities. 25 FFS established of which at least 75% is functional for diversification of livelihoods in 9 upazilas. Around 10 types of user-friendly dissemination materials produced and distributed among community and stakeholders.	Broadcast recordings, films, videos. FFS reports and meeting minutes, posters, fact sheets.	Communities are willing to become involved in disseminatio n of adaptation technologies for fisheries and aquaculture. Women are motivated and interested in participating in targeted activities.
Output 3.3: Innovative local environmental monitoring systems and information tools for the communities to obtain and exchange information to	• # communities trained on the implementatio n of local environmental monitoring systems • Small equipment/ tools distributed to	Communitie s are totally dependent on the DoF officials and Govt. extension agents for monitoring of environment al	Training of 20 DoF/communit y trainers on implementing local environmental monitoring systems (linked to the community EWS and DRM)	50 CBOs (1,250 persons of which 40% are women) taught/trained in using small equipment for monitoring environmental parameters (shrimp/fish habitats) .	Implementation of functioning local environmental monitoring systems (well connected to EWS and DRM) in at least 50 (70%) communities.	9 location-specific fishery habitat maps prepared.	At least 100 communities (2,500 persons, 40% female) trained on implementing local environmental monitoring systems. Environmental	Physical verification of supplied environmental monitoring equipments to 100, household feed machine to 16 and insulated fish box to 16 communities and their climate	Communities understandin g and skills sufficient to use environment al monitoring equipment, and interpreting results into best actions.

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
improve resiliency and increase production in the fisheries and aquaculture. systems developed and implemented.	X number of CBOs for environmental (fish/shrimp habitats) monitoring. • Number of communities adopting the community-led monitoring systems connected to EWY and DRM. • Number of location-specific fishery habitat maps produced as a key information tool to improve management and increase resiliency of the fishery.	parameters and are not able to react to CC environmentally related emergencies. Location-specific fishery habitat maps do not exist.	50 CBOs (about 1,000 people of which 40% women) taught/trained on implementing local environmental monitoring systems.				monitoring systems (well connected to the EWS and DRM) in place in 70 (70%) of the communities. 100 CBOs have access to small equipment for monitoring environmental condition of shrimp/fish habitat; 9 location-specific fishery habitat maps produced.	specific understanding; DoF and MoFL. Assessments of the functioning environmental monitoring systems by DoF and MoFL Available fishery habitat maps.	CBOs have sufficient capacity to use new and introduced technologies.
Output 3.4: Manuals on climate resilient & gender differentiated fisheries, aquaculture and livelihood technologies/ approaches	• Number of manuals developed on different topics. • Number of users of the manuals, including number of communities	Existing Manuals are scattered, needs updating and consolidation with inclusion of best fisheries and aquaculture	0	1 Training Manual produced on: *Fisheries Habitat Conservation-Management.*	1Training Manual produced on *Community management and women empowerment in fisheries and aquaculture activities.*	1Training Manual produced on: *Fisheries and Aquaculture Resources and Climate Resilient Best Practices.*	03 training Manuals produced/in place and distributed to beneficiaries and all stakeholders.	Printed Training Manuals of 03 types; DoF and MoFL. User survey (of the manuals) of selected communities, DoF and other relevant GoB	Communities' understanding, awareness and capacity sufficiently developed for using the manuals. DoF, other GoB entities

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
developed & adopted by the communities, DoF and other relevant government & NGO entities.	and government & NGO entities.	technologies, lessons learned, conservation - management and climate forecast applications, disaster risk management and adaptation, mitigation options.						entities and NGOs.	and NGOs willing to adopt and use the manuals.
Component 4: **Dissemination of best practices and lessons learned, monitoring and evaluation**									
Outcome 4: **Project implementation based on results based management and application of project findings and lessons learned in future operations facilitated.**	• Knowledge base of adaptation technologies to support adaptive results-based management and monitoring of upscaling resulting from the project.	Inadequate knowledge base on fisheries and aquaculture adaptation & M&E system.	M&E system in place.	Adaptive results-based M&E.	Adaptive results-based M&E.	Adaptive results-based M&E.	Strengthened project knowledge base on climate resilient fisheries and aquaculture technologies, and livelihoods. Communication and dissemination materials produced and distributed to beneficiaries and other stakeholders. Adaptive results-based M&E.	GEF CC-A Tracking Tool, PIR, Midterm and Final Evaluations (PMU, DoF, FAO).	DoF and other stakeholders support M&E processes, and are committed to continuous learning and exchange of knowledge on adaptation technologies.
Output 4.1: Lessons learned &	• Project website. • number of	• Limited cc adaptation documents,	Project website fully up to date with project	Project website fully up to date with all project	Project website fully up to date with all project	PMU Awareness/	Half-yearly Newsletters regularly	Project Website and statistics of no. of visits.	PMU functioning and adequate

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
best practices from the use of different CC resilient fisheries, aquaculture and livelihood technologies/ approaches documented & communicated to relevant stakeholders & a wider audience.	project newsletters with lessons learnt (in English and Bangla). • Awareness/ outreach events organized for local communities using audio visual materials. Types/ kinds • Numbers of Communication and dissemination materials. (flyers/ booklets/ leaflets/ posters/ fact sheets; videos, news on web; promotional materials, desk calendar, note book, year planner, caps, National Day special newspaper issues, etc.) produced and distributed.	extension materials. • No website currently exists.	results and linked to DoF and FAOBD portal. Half-yearly Newsletters produced and distributed. Communication and dissemination materials produced and distributed.	results. Half-yearly Newsletters produced and distributed. Communication and dissemination materials produced and distributed. Support to developing special National day's Newspaper Issues (Fish week, World Food day, etc.).	results. Half-yearly Newsletters produced and distributed. Communication and dissemination materials produced and distributed. Support to developing special National day's Newspaper Issues (Fish week, World Food day, etc.).	outreach events convened & materials in place. Statistics of website visitors. Half-yearly Newsletters produced and distributed. Communication and dissemination materials produced and distributed. Support to developing special National day's Newspaper Issues (Fish week, World Food day, etc.).	published & circulated nationally; total 8 Newsletters produced. Project website functioning, with links to DoF, FAOBD and related webs. Communication and dissemination materials (flyers/ booklets/ leaflets/ posters/ fact sheets; videos, news on web; promotional materials (desk calendar, note book, year planner, caps, etc.) produced and distributed. Total no. of issues of special National day's Newspaper Issues (Fish week, World Food day, etc.).	Project Newsletters. Communication and dissemination materials (flyers/ booklets/ leaflets/ posters/ fact sheets; videos, news on web; promotional materials (desk calendar, note book, year planner, caps, etc.) . Verified lists of events supported Participants' lists from outreach events.	financial resources allocated to project website, outreach events, newsletters, special newspaper issues, etc.
Output 4.2:	•Baseline and	0	System in	PIR, Annual	PIR, Annual	PIR, Annual	3 PIRs and	CC-A Tracking	PMU

Results Chain	Indicators	Baseline[6]	Milestones				End of Project Target	Means of Verification & Responsible Entities	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Project monitoring system operating providing systematic information on progress in meeting project outcome &output targets.	targets for project indicators . •Annual project implementation review (PIR) reports submitted to GEF Secretariat. •Six monthly project progress reports.	0	place for annual M&E of indicators.	monitoring report.	monitoring report.	monitoring report.	monitoring reports (as per GEF-FAO guideline).	Tool, PIR, Midterm &Final Evaluations (PMU, DoF, FAO).	functioning and adequate funding allocated to M&E.
Output 4.3: Mid-term & terminal evaluations conducted.	• Mid-term & final evaluation reports.	No evaluations exist at present.		Mid-project evaluation recommendations implemented.	Evaluation recommendations included in lessons learned.	Terminal evaluation with recommendations.	Project's mid- and terminal evaluation Reports with recommendations and way forward.	Evaluation reports (FAO evaluation office).	PMU functioning & adequate funding for M&E.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

GEF Secretariat's comments at PIF submission (November 26, 2013)	**FAO's responses**
Question 7: By CEO endorsement: Please provide further information on where (which districts) the project activities will be undertaken.	Through the consultation done during the PPG phase, the two project areas were identified: the south-east coastal area and the north-east *haor* wetland area. Both areas were also identified as priority climate-vulnerable areas in the updated Bangladesh's NAPA (2009). Details of the areas are provided in the ProDoc Section 1.1.3: Project Areas and specific site selection criteria are provided in the ProDoc Section 1.1.4: Project Sites.
Question 11: By CEO endorsement: Please also discuss risks to sustainability of project outcomes. How will it be ensured that community-based organizations continue to monitor the on-the-ground measures -- and are able to monitor them adequately?	The composition of the Project Steering Committee (PSC) is designed to include representatives of fishers/fish farmers' society, private sector and civil society, to ensure their ownership and participation (details are provided in the ProDoc Section 4.2: Implementation Arrangements). The long-term sustainability of the adaptation interventions will be promoted by strengthening the capacity of targeted communities, CBOs/OGs will be mobilized into Farmer Field Schools (FFSs) at the project sites. This arrangement promotes the communities' capacity in monitoring the on-the-ground measures (details are in the ProDoc Section 5: Sustainability of Results).
Question 13: By CEO endorsement: Please provide more information on how the continuation of project benefits will be ensured.	Social, environmental, and financial/economic sustainability was fully considered during the project preparation and are detailed under the ProDoc Section 5: Sustainability of Results.
Additional GEF Secretariat's comments at CEO Endorsement Request (February 1, 2016)	**FAO's responses (March 15, 2016)**
9. Is there a clear description of: a) the socio-economic benefits, including gender dimensions, to be delivered by the project, and b) how will the delivery of such benefits support the achievement of incremental/ additional benefits? FI, 2/1/2016: Agency is requested to provide some additional information for item 9. Further information is requested. Section 2.3 of the ProDoc provides details of how women will be engaged, their particular vulnerabilities studied, and the project's efforts to address their adaptation needs. Further, a gender specialist will be brought on board to develop a gender strategy and action plan for the project. Agency is requested to kindly provide	1) An international gender/socio-economic expert and national gender/socio-economic analyst to be recruited under the project and a Gender Focal Point of the Department of Fisheries are tasked to conduct gender assessment of the target communities to obtain baseline information of who has access to which technologies, who participate in decision-making processes and for a, access to productive resources etc. The project can specifically measure women's access to technologies and decision-making/participation in community meetings related to micro-plan/annual fish farming, facilitated by the project. The following indicators can be considered: - No. of gender-sensitive technologies/practices introduced; - No. of women and men benefitting from fisheries and aquaculture technologies; and - No. of women and men benefitting from trainings. - Mobility of women and men within the communities

further information on the following: 1) How will the project measure its contribution to the objectives (of the FAO gender policy) listed in the bullets on p. 78 of the ProDoc? In other words, how will we be able to know that due to the project, women have greater access to and control over income and productive resources, or that they have greater decision-making ability due to project activities? 2) Related to the above, Section 2.3 states for Component 3 (p. 79, second bullet) that "women will also be empowered to participate actively in community planning processes". Could the Agency please point to the indicators that will be used to measure this change in empowerment? 3) It is also important to assess how women themselves feel that their situation is improving. Would it be possible, based on the understanding that will be built of vulnerability and resilience among community women, to put in place a self-monitoring system among them (perhaps working through women's groups), so they can systematically report on what is improving and what is not?	(indicative indicators: No. or % women participating in fisheries/aquaculture activities in different communities.) 2) In a similar arrangement of international and national gender experts tasked with obtaining the baseline information and monitoring the results, the following indicators can be considered: - No. of women and men participating in community decision-making meeting and through community level group; and - No. of women and men in leadership positions in community decision-making. 3) Thank you for a suggestion to include a self-monitoring system to assess how women feel about improvement in their situation with the project intervention. As in the Project Output 2.1, 2.2, 3.1, 3.3, the project will draw participants from the local CBOs/OGs into Farmer Field Schools (FFS). With inputs from stakeholders and a gender specialist to be recruited for the project, part of the FFS curriculum can include regular meetings/discussions, and questionnaires handed out several times during the project duration(and beyond as appropriate) to monitor the situation and for women to report back in the changes. A checklist/ questionnaires on perception of changes could be designed as a monitoring tool in consultation with the women participants themselves. Exemplary questions can include: e.g., what have you learnt about fish rearing techniques since the project started? ; do you feel you are more involved in the community decision making? – these questions can be fully consulted with the eventual women participants during the project implementation.
GEF Secretariat's comments at CEO Endorsement Request (December 22, 2015)	**FAO's responses (January 12, 2016)**
Question 9: Is there a clear description of: a) the **socio-economic benefits**, including gender dimensions, to be delivered by the project, and b) how will the delivery of such benefits support the achievement of incremental/ additional benefits? FI, 12/22/2105: Further information is requested on Gender aspects. The project is aimed at increasing and sustaining incomes and food security from fisheries and aquaculture. It will be developed and implemented using a participatory approach, and will promote adaptation technologies that	The project aims at achieving climate change adaptation and diversifying local community's livelihoods and economic sectors including fisheries and aquaculture. The Project recognizes that women are vital stakeholders in managing and using aquatic resources, through their involvement in aquaculture operation, harvesting, processing and marketing, and provisioning aquaculture and inland fishery resources in the households. The proposed project is consistent with the GEF Policy on Gender Mainstreaming (PL/SD/02. May 1, 2012) and is

give local fishers financial and economic incentives to adopt them. It has been oft-mentioned in the ProDoc that gender sensitive approaches and gender-differentiated activities that will be undertaken. Please include a dedicated section on Gender in the ProDoc, which also provides (i) examples of gender-differentiated technologies and adaptive actions that may be supported by the project, and (ii) information on how specific risks or barriers women face more often (in the context of the project activities and outcomes) will be reduced.	fully aligned with the gender policy of FAO. A new section on Gender Considerations (2.3) has been inserted into the Project Document that explains more in detail how the project is aligned with FAO's gender policy. Examples are also provided, under each project component, on gender differentiated technologies and/or adaptive actions that will be supported and which risks and barriers specific to women they address. As already included in the ToRs, the project team will also include a gender specialist (budgeted for 5 months) who will develop a gender strategy and action plan for the project and will be responsible for overall coordination. Also, the FAO Regional Office for Asia and the Pacific (FAORAP) and WorldFish are planning to conduct a case study (separately from the proposed LDCF project) to analyze women's social and economic empowerment in aquaculture production systems in selected locations in Asia in early 2016 – Bangladesh is one of the proposed locations. The case study will look at how aquaculture contributes to women's social and economic empowerment by analyzing enabling factors and constraints to women's productive role particularly in terms of access to key resources, technologies and services and capacity to benefit from these (including in terms of their labour saving potential). The study will be based on a combination of in-depth literature reviews and empirical qualitative data collection and analysis in two sites per country. In order to gain synergy, the best efforts will be made to include one of the proposed LDCF project sites in one of the case studies.
Question 11: Does the project take into account potential major risks, including the consequences of climate change, and describes sufficient risk mitigation measures? (e.g., measures to enhance climate resilience) FI, 12/22/2015: Please also discuss how the project will cope with the potential risk of flooding or a coastal storm that results in sudden and severe damage or disruption to project activities or investments at the project sites.	High tides threaten fish ponds, shrimp/prawn farms (ghers), crab fattening units, fish sanctuaries, supplementally stocked beel nurseries both from inside and outside embankments. On the other hand, floods and storm surge sometimes cause total loss to culture based fisheries (especially brackish water shrimps, freshwater prawns, fin-fishes and crabs) and other properties of livelihood (livestock, houses, crops, etc.) through inundation. This risk has been added to the Project Risk Matrix (Table 9) in the Section 3.2 Risk Management in the Project Document, with the following mitigation measures identified: • As per project scope the beneficiaries will be linked to various existing local initiatives on access early warning system and information, disaster management, mitigation and adaptation and capacity

	building on crop seed preservation, drinking water facilities, feed, livestock, fish, prawn etc. during sudden and severe damage or disruption due to extreme events. • As per envisioned activities of the project the CBOs /CIGs will participate in self-help earth work for raising height of the dykes and plantation along the dykes of fish ponds, shrimp/prawn farms (ghers), crab fattening unit ponds, fish sanctuaries, supplementally stocked beel nurseries in the pilot sites of the project areas. This would minimize potential risks of flooding or storms of medium strength that results in sudden and severe damage or disruption to project activities or investments at the project sites. • Collaboration will be sought with other agencies (baseline co-funding) for excavation/re-excavation works to protect fish habitats, fish/shrimp/crab farms from flooding, maintaining needed water depth, sufficient pond depths, linking river and khals for enhancing water exchange facilities and for reestablishment/ reopening of fish migration and dispersal routes so far lost/degraded. Provision of Emergency and disaster management support (under Expendable Procurement) has been included in the budget to cope with any sudden damage/ disruption to project activities or investments at the project sites.
Question 12: Is the project consistent and properly coordinated with other related initiatives in the country or in the region? FI, 12/22/2015: Further information is requested. Please provide information on: A) Relevant non-GEF financed initiatives (besides the CDMP II and CBA-ECA projects) on sustainable fisheries, coastal adaptation, etc. that the project should coordinate with; and B) How the project will coordinate and synergize with activities of LDCF Project ID 5456, which is also supporting adaptation to climate change in the haor wetland, including in the Juri Upzila.	Functional/working relationship and data/information sharing would be established with relevant GOs, development partners, other projects and NGOs for increased linkages that are inadequate now for implementing climate resilient policy and strategies at national level, build capacity of the GoB, private sector and community people in climate resilient adaptations. The LDCF project will coordinate synergies and knowledge exchange with the following non-GEF financed initiatives. These would expedite existing, recently phased-out and upcoming GoB's and development partner's priority initiatives: (see also new text in the Project Document under section 4.1.2) • DoF's (GoB) *Aquaculture and Fisheries Management* Project *in the Haor Area, Establishment of beel nursery and fingerling stocking project in inland open waters* project; • The LDCF-financed project is well aligned with the habitat restoration component of IFAD's *Sunamganj Community Based Resource Management Project*, the *Haor Infrastructure and Livelihood Improvement*

	Project (HILIP) and the supplementary *Climate Adaptation and Livelihood Protection (CALIP) project* by implementing EbA in the Haor area; • WorldFish's *Feed the Future Aquaculture Project, Aquatic Agricultural Systems* project, *Agriculture for Income and Nutrition* project and *Enhanced coastal fisheries (EcoFish)* project; • GiZ's *Wetland Biodiversity Rehabilitation Project* and Swiss Agency for Development and Cooperation's (SDC) *Community based management of Tanguar haor program;* • FAO's *Building trade capacity of small-scale shrimp and prawn farmers in Bangladesh: Investing in the bottom of the pyramid approach* (MTF/BGD/046/STF) (STDF/PG/321), *Integrated agriculture interventions for improved food and nutrition security in selected districts of southern Bangladesh* (GCP/BGD/049/USA), *Providing recovery assistance to waterlogged people of south-west Bangladesh* (OSRO/ BGD/ 402/ WFP), *Improving food safety in Bangladesh* (GCP/BGD/047/NET) and *Enhancing aquaculture production for food security and rural development through better seed and feed production and management with special focus on public-private partnership.* The Project will also synergize with the project on *Ecosystem-based Approaches to Adaptation (EbA) in the Drought-prone Barind Tract and Haor "Wetland" Area,* which is a UNEP-led LDCF-funded project (GEF Project ID: 5456).. The project focuses on EbA in the drought-prone dryland Barind Tract area and *Haor* wetland area, including the Juri Upazilla. EbA will restore ecosystems in the *Haor* area thereby complementing improvement of habitats for important fisheries species by promoting fisheries productivity and additional improved livelihood options for the neighboring community. The project (5456) aims to build hard structures (culverts, sluices) and earth works (dykes and polders), and introduce other climate change ecosystem-based adaptation (EbA) measures to conserve water in the Barind Tract and reduce erosion in the *Haor* Area, and promote additional livelihood options addressing general community vulnerability. In contrast, this LDCF Project (5636) focuses on climate change adaptation, disaster risk reduction and improved resilience of fisheries dependent communities (fishers and fish farmers and their community leaders, women's

	groups, etc.) with specific and gender sensitive adaptation technologies based on the ecosystem approach to fisheries management (EAF) and ecosystem approach to aquaculture (EAA). EbA focuses more on habitat restoration than on the fishery resources *per see*, as in the case of EAF and EAA, and the two projects are thus fully complementary and close collaboration and coordination will be forged in the implementation phase to fully realize synergies and opportunities for scaling up of best practices in both EbA and EAF/EAA. Efforts will also be exerted for collaboration with and to seek support of other baseline co-funding agencies for excavation/re-excavation works to protect fish habitats, fish/ prawn farms from flooding, maintain needed water depth, linking river and khals for enhancing water exchange facilities and for re-establishment/ re-opening of fish migration and dispersal routes so far lost/degraded.

Germany's comments (LDCF Council Comments, March 2014)	**FAO's responses**
Germany recommends outlining the expected outcomes of the project and the corresponding activities and outputs in more detail	This has been done in the detailed Project Results Framework (see Appendix-1), which also includes indicators and annual targets. Detailed activities are described in the FAO Project Document, Part 2: PROJECT FRAMEWORK AND EXPECTED RESULTS, as well as in Appendix 2, Work Plan.
The proposal covers two landscapes which are very different in terms of ecology and economy. We kindly ask that the authors make more explicit why they were included in a single project and a set of strategies instead of having two different projects/ strategies.	The two project areas have been identified as priority areas for the fisheries and aquaculture sector in Bangladesh's NAPA from 2009. Inland capture fisheries and aquaculture are also covered by the same policy framework under the aegis of the DoF. The adaptation technologies and approaches promoted by the project can be demonstrated in both areas and combined with similar alternative livelihood strategies, and up scaled also to other areas vulnerable to the impacts of climate change.
Component 1 aims at integrating climate change adaptation into relevant fishery policies and strategies. However, the PIF tells only very little about which strategies and policies are exactly targeted. Germany recommends describing in more detail the relevant policies and strategies and also including further information on these policy documents. The description should include the entities responsible for updating them, a short outline of the policy's revision processes and procedures (policy cycle) and the corresponding entry points for the project. This information will facilitate the search for appropriate entry points for integrating adaptation into these documents. As described in the PIF, the line ministries do not implement activities on the	The existing fishery and aquaculture policies and strategies have been thoroughly analysed and are discussed in 1.2 Sector Governance, 1.2.1 Legislation and policies, in the FAO ProDoc where major gaps and weaknesses have been identified as well as in Appendix 8 on relevant sectoral policies, strategies, action plans and multilateral agreements.. The project has been designed to take a bottom-up approach and will be implemented by sub-district authorities and adaptation mainstreamed into sub-district and community plans.

ground. Therefore, Germany recommends also including the district/communal level plans in the list of targeted documents.	
Component 1 bases the integration of climate change adaptation on new assessments. Although the provision of a sound information base is generally acknowledged as very positive, the description of what is being assessed is lacking clarity. Germany recommends clarifying whether the assessment is a pure risk assessment or whether it will be a broader vulnerability assessment, eventually including other risks than climate-induced risks. Furthermore, it should be clarified how these assessments relate to the assessments that should be carried out by staff members of the CCC and DoF.	The PPG phase of the project undertook a preliminary vulnerability assessment based on the understanding that vulnerability equals exposure plus sensitivity minus adaptive capacity. This assessment was to a large extent based on existing and available information, but will be further refined during the implementation of the project to see how and where to build adaptive capacity in the most efficient way. One national level assessment will be conducted led by DoF in consultation with the CCC. Assessments will also be carried out at sub-district level and will be led by field officers from DoF.
Germany recommends explaining in more detail how the results of the assessments will be made publicly available and be brought to the knowledge of relevant decision makers and planners in the fisheries and aquaculture sector.	Component 4 of the project will establish a website and publish newsletters to make information from the assessments publicly available. This will also be integrated with other DoF information and dissemination systems.
In *component 2*, the PIF proposes onsite community assessments. Germany recommends describing what kind of assessments should be conducted (knowledge needs assessment, vulnerability assessment, etc.).	Community vulnerability assessment will be conducted to identify how to build adaptive capacity, through capacity building and training on new technologies and alternative livelihood activities, improved access to new technologies, etc. The assessments will be based on the preliminary vulnerability assessment conducted during the PPG phase – for methodological description, see Appendix 7.
Looking at the poverty level, Germany would like to know more on how the ICT will be able to successfully reach a poor rural target population, especially women.	Community-based gender differentiated dissemination systems will be put in place by establishing pilot backyard farms where women folk can use and exchange knowledge on better seed and feed to increase production; and local formal/ informal CBOs, including extremely poor households dependent on fisheries/ aquaculture will be engaged in project planning, implementation and monitoring of adaptation alternatives. The ICT-based information services to be set up under the project will help the small-holder fish/ shrimp farmers from losses of fish/shrimp due to both rapid and slow onset of climate risks in both the hotspots. Supporting and engaging women folk (40% of fish/ shrimp ponds/ ghers are owned/ managed by poor women headed households) in assessing CC impacts will be a priority to satisfy their special needs, enhance their knowledge base and skills to face climate adversity.
Under part B. of the Project Framework, component B, there is mention of integrating disaster risk management (DRM) into development plans and programmes. In the description of Component 2, however, no reference is made to DRM. Germany recommends revisiting this part and also clearly explaining the link between DRM and longer term adaptation to climate change.	Output 2.1 has been designed to integrate DRM in community development plans, in 15 local development plans in total. The project will build on the works so far done by the CDMP II of the DoF. The Project will also facilitate participatory workshop and group exercises to improve the understanding of the community regarding hazard census, hazard calendar, livelihood calendar, risk analysis, ranking of hazards in the context of risks,

	prepared risk reduction action plan, prioritize the interventions, impact analysis of interventions and identification of ongoing risk reduction activities.
Component 3 mentions different types of monitoring systems i.e., a "follow up monitoring system for the innovation techniques" and an "innovative environmental monitoring system." In consideration of manageability and sustainability, as well as clarity reasons, Germany recommends describing the kind of information base to be used and whether it will be attached to existing systems and who will guarantee for the long-term operation of this information base.	The Project will support development of an aquaculture habitat monitoring system for the innovative technologies in collaboration with the target communities. For this purpose the project would train CBOs and supply small equipment for environmental monitoring of the aquaculture farms. It will also implement an innovative environmental monitoring system connecting to DRM, early warning and improved management of aquaculture and fisheries resources (for example introduction and adoption of simple monitoring tool for water quality, establishment of information platforms for the communities to obtain and exchange data and knowledge to improve resiliency). The *Innovative environmental monitoring system* will be adopted by the community at their demonstration sites with the help of the supplied small equipment. *Follow up monitoring* includes the appropriate actions taken by the community based on the environmental monitoring data (particularly water temperature, light penetration, pH, level of dissolved oxygen and salinity) from the demonstration sites. Usually upazila (sub-district) level Fishery Officer will guarantee and coordinate long-term operation of this information base.
Although gender aspects are already considered, Germany seeks more concrete strategies and a better risk assessment. There could be difficulties integrating women into local level decision-making processes as proposed or allowing work outside of the homestead area. In this sense, Germany would like to recommend the Sourcebook "Gender in Agriculture" (http://www.genderinag.org/content/e-learning-course).	Gender considerations have been thoroughly integrated into project design and although the aim is to reach as many women as men, it has been assessed that at a minimum 40% of target beneficiaries will be women. The project will also hire a full-time gender expert to ensure that women are reached by the project and their vulnerability to CC is reduced. The Sourcebook on Gender in Agriculture will be a useful tool in this regard.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[9]

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF: **USD 100,000**			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF/NPIF Amount ($)***		
	Budgeted Amount	***Amount Spent Todate***	***Amount Committed***
Activity 1: Climate resilient fisheries sector through relevant national capacity development.	7,223	7,223	0
Activity 2: Strengthening knowledge and awareness of fisheries and aquaculture communities.	7,267	7,020	247
Activity 3: Enhancing local adaptive capacity of fisheries and aquaculture to become climate resilient.	20,564	16,500	4,064
Activity 4: Disseminate best practices.	3,263	3,200	63
Activity 5: Information synthesis, project design and budgeting.	37,232	35,146	2,086
Activity 6: Stakeholders engagement and ownership through consultations and workshops.	24,451	18,551	5,900
Total	100,000	87,640	12,360

[9] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

N/A