(উন্নয়ন সহযোগী কর্তৃক নিম্নোক্ত পত্রটি ইংরেজীতে লেখা হয়েছে)

Government of the People's Republic of Bangladesh
Ministry of Finance
Economic Relations Division
UN-6 Section
www.erd.gov.bd

No. 09.00.0000.109.14.003.21.128 Date: 20 October 2024

Subject: **The signed Project Document (ProDoc) of the project titled "Community-based Management of Tanguar Haor Wetland Ecosystem"**

The undersigned is directed to inform that the Project Document (ProDoc) of the project titled "Community-based Management of Tanguar Haor Wetland Ecosystem" was signed between Economic Relations Division (ERD), Ministry of Environment, Forest and Climate Change (MoEFCC) and United Nations Development Programme (UNDP).

02. The Project Document (ProDoc) has been approved subject to the following condition:

"The differences between the approved TAPP and ProDoc should be discussed in the inception workshop followed by PSC decisions. The ProDoc needs to be revised aligning with the PSC decisions".

Attached: **Signed ProDoc**

20.10.24.

Dr. Sirat Mahmuda
Deputy Secretary
Phone: 9180909
E-mail: un9@erd.gov.bd

Distributions (not in order of seniority):
1. Secretary, Ministry of Environment, Forest and Climate Change, Bangladesh Secretariat
2. Additional Secretary and wing Chief (FABA & ICT), Economic Relations Division.
3. Director General, Department of Environment, Paribesh Bhaban, E/16 Agargaon, Sher-e-Bangla Nagar, Dhaka-1207
4. Resident Representative, UNDP Bangladesh, IDB Bhaban, 18th Floor, UN Offices, E/8-A, Begum Rokeya Sarani, Dhaka-1207
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CC (not in order of seniority):
1. Member, Agriculture, Water Resources and Rural Institutions Division, Planning Commission, Ministry of Planning
2. Deputy Secretary, Planning-1 Section, Ministry of Environment, Forest and Climate Change, Bangladesh Secretariat

3. Director (Planning), Department of Environment, Paribesh Bhaban, E/16 Agargaon, Sher-e-Bangla Nagar, Dhaka-1207
4. PS to Secretary, Economic Relations Division
5. Deputy director (Dhaka Lab), Department of Environment, Paribesh Bhaban, E/16 Agargaon, Sher-e-Bangla Nagar, Dhaka-1207
6. Personal Officer, Wing-4: (UN), Economic Relations Division
7. Personal Officer, UN Branch-1, Economic Relations Division

20.10.24.

Dr. Sirat Mahmuda
Deputy Secretary

United Nations Development Program

Project title: Community-Based Management of Tanguar Haor Wetland Ecosystem **GEF-approved title: Community-based Management of Tanguar Haor Wetland in Bangladesh**		
Country(ies): Bangladesh	**Implementing Partner (GEF Executing Entity):** Ministry of Environment, Forest and Climate Change	**Execution Modality**: NIM
Contributing Outcome (UNDAF/CPD, RPD, GPD): UNSDCF Outcome 3: By 2026, ecosystems are healthier, and all people, in particular the most vulnerable and marginalized in both rural and urban settings, benefit from and contribute to, in a gender-responsive manner, a cleaner environment, an enriched natural resource base, low carbon development, prosperous and are more prosperous and resilient to climate change, shocks and disasters CDP Outcome 2: By 2026, ecosystems are healthier, and all people, in particular the most vulnerable and marginalized in both rural and urban settings, benefit from and contribute to, in a gender responsive manner, a cleaner environment, an enriched natural resource base, low-carbon development, and are more resilient to climate change, shocks and disasters.		
UNDP Social and Environmental Screening Category: Substantial		**UNDP Gender Marker:** GEN2
Quantum Award ID: 00120091		**Quantum Project ID:** 00116394
UNDP-GEF PIMS ID number: 6563		**GEF Project ID number:** 10702
LPAC meeting date: July 18, 2023		
Last possible date to submit to GEF: February 11, 2022		
Latest possible CEO endorsement date: June 11, 2022		
Project duration in months: 60		
Planned start date: July 1, 2024		**Planned end date:** June 30, 2029
Expected date of Mid-Term Review: September 31, 2026		**Expected date of Terminal evaluation:** February 30, 2029
Expected Operational Closure Date: June 30, 2029		**Expected Financial Closure Date: December 31, 2029**
Brief project description: The project objective is to promote sustainable use of wetland resources by local communities to conserve globally significant biodiversity, improve ecosystem services and secure local livelihoods in Tanguar Haor. It is aimed at addressing the increased degradation of wetland habitat from unsustainable development and local community practices that is leading to biodiversity and ecosystem losses and as a consequence depletion of the productivity of the wetland. This is attributed to habitat degradation and fragmentation caused by expanding human settlement and agriculture, changes in hydrological regime caused by changes in land use patterns, pollution from discharge of effluents, dumping of waste, agro-chemicals and erosion of soil, over-exploitation and other unsustainable uses of natural resources, unplanned tourism, invasive alien species, particularly the introduction of exotic species of fishes and climate change impacts. The project is thus aimed at addressing these multiple threats by harmonizing socio-economic development, sustainable management of land and water resources and biodiversity conservation through an integrated ecosystem-based management approach in the wetland. To achieve this, actions will be taken to strengthen capacity and coordinated planning at the national and sub-national levels on socio-economic development as well as demonstrate sustainable fisheries, agriculture and natural resources management, biodiversity conservation and restoration, and alternative livelihood initiatives, including from a gender perspective on the other. This project intends to remove barriers towards establishing an integrated collaborative and participatory management approach effectively operational at all levels of conservation action including planning,		

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implementation, monitoring and assessment to drive adaptive management processes to restore and improve the condition of the wetland. This will be achieved through the three inter-related and mutually complementary components that are focussed at addressing existing barriers. The three components of the project are: Component 1: Design and implementation of an integrated ecosystem management framework for Tanguar Hoar; Component 2: Strengthened community management of wetland resources; and Component 3: Knowledge management, M&E, communication and gender mainstreaming

FINANCING PLAN	
GEF Trust Fund grant	USD 4,050,913
(1) Total Budget administered by UNDP	**USD 4,050,913**
(2) Total confirmed co-financing to this project not administered by UNDP)	**USD** 17,200,000
(3) Grand-Total Project Financing (1)+(2)	**USD** 21,250,913

SIGNATURES:

Signature: Md. Shahriar Kader Siddiky Secretary Economic Relations Division Ministry of Finance Dhaka	**Agreed by Government Development Coordination Authority**	**Date/Month/Year:** 17.10.2024
Signature: Dr. Farhina Ahmed Secretary Ministry of Environment, Forest and Climate Change Bangladesh Secretariat, Dhaka	**Agreed by Implementing Partner**	**Date/Month/Year:** 17 October 2024
Signature: Stefan Lillar Resident Representative UNDP Bangladesh	**Agreed by UNDP**	**Date/Month/Year:** 17/10/2024

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Acronyms and abbreviations

BFD	Bangladesh Forest Department
BPC	Bangladesh Parjaton Corporation
BPPS NCE	Bureau for Policy and Programme Support, Nature, Climate and Energy
CBA-ECA	Biodiversity Conservation and Social Protection Project
CBD	Convention on Biological Diversity
CSO	Civil Society Organizations
DAE	Department of Agricultural Extension
DOE	Department of Environment
DOF	Department of Fisheries
DLS	Department of Livestock Service
DSS	Department of Social Services
DWA	Department of Women Affairs
ECA	Ecologically Critical Area
ECA-MMCU	ECA Management, Monitoring and Compliance Unit
EMF	Ecology Management Fund
ESMF	Environment and Social Management Framework
ESMP	Environment and Social Management Plan
ESIA	Environment and Social Impact Assessment
FPIC	Free, Prior and Informed Consent
FSP	Full Sized Project
ICTP	International Conventions, Treaties and Protocols
IPCC	Intergovernmental Panel on Climate Change
IP	Indigenous People
IPF	Indigenous Peoples Framework
IPP	Indigenous Peoples Plan
IUCN	International Union for the Conservation of Nature
KAP	Knowledge, Attitudes and Perceptions
KM	Knowledge Management
LDN	Land Degradation Neutrality
LGD	Local Government Division
MEA	Multilateral Environmental Agreements
MOEFCC	Ministry of Environment, Forest and Climate Change
MoLGRDC	Ministry of Local Government, Rural Development & Co-operatives
MoCW	Ministry of Social Welfare
MoWR	Ministry of Water Resources
MoWCA	Ministry of Women and Children Affairs
MSP	Medium Sized Project
NBSAP	National Biodiversity Strategy and Action Plan
NGO	Non-Government Organization
NRM	Natural Resource Management
PA	Protected Area
PIF	Project Identification Form
PIR	GEF Project Implementation Report
POPP	Programme and Operations Policies and Procedures
PPG	Project Preparation Grant
RC	Rio Conventions
SAP	ECA Scientific Advisory Panel
SDG	Sustainable Development Goals
SES	Social and Environment Standards
SIP	Stakeholder Involvement Plan
STAP	GEF Scientific Technical Advisory Panel
SUFAL	Sustainable Forests and Livelihoods
TH	Tanguar Hoar
UCG	Union Coordination Committees
VCG	Village Conservation Groups

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II. DEVELOPMENT CHALLENGE

1 Biogeographically, Bangladesh is located at the cross roads of the Indo-Himalayan and Indo-Chinese sub-regions under the Oriental region. Thus, the country acts as an important merging and sharing habitat, land bridge and biological corridor for the fauna and flora between these sub-regions. This strategic location makes Bangladesh as one of the most ecologically significant and biologically diverse landscapes in terms of migratory birds, stepping stones, staging grounds and flyways for wildlife movements of the region.[1] Bangladesh is a land of water bodies, with wetlands comprising over 50% of the territory, drained by the 700 tributaries of the Ganges, Brahmaputra and Megna rivers. Wetlands in Bangladesh encompass a wide variety of changing ecosystems including mangrove forests, natural lakes, freshwater marshes, reservoirs, oxbow lakes, haors (deep depressions in the north-east that coalesce to a vast inland sea in the monsoon), beels (permanent freshwater depressions), fish ponds and tanks, estuarine waters, and extensive seasonally inundated floodplains.[2] They include some 6,300 *beels* (permanent and seasonal shallow lakes), 47 major *haors* (deeply flooded depressios) in the north-east, *baors* (oxbow lakes) and vast areas of seasonally flooded plains.[3] These inland water bodies are rich is species, such as freshwater fish (260 species)[4] and hundreds of thousands of migratory birds[5]. Coastal wetlands are also extensive and include part of the largest single tract of natural mangrove in the world: the Sundarbans, a World Heritage site of which 60% (601,700 ha) is in Bangladesh and the rest in India.

2 Despite their great biological and socio-economic value, the wetlands of Bangladesh are in decline due to a number of reasons, especially, the past consideration of wetlands as "wastelands" that resulted in their and conversion to agriculture. The remaining wetlands are threatened by a number of factors, namely: (i) construction of flood embankments and water control structures; (ii) rice cultivation in wetlands; (iii) leasing out fishing rights in public water bodies under short-term leases that encourage maximum exploitation removing incentives to protect the resource' (iv) industrial development and resultant pollution discharges into wetland habitats; (v) removal of riparian vegetation and poor land management causing siltation and reduction in wetland area; and (vii) destructive fishing and aquatic resource harvest methods. As a consequence, more than 40% of Bangladesh freshwater fish are now threatened[6]and inland fish capture has declined substantially in recent years.

3 In the north-east of the country, lies the Tanguar Hoar, one of the largest freshwater wetlands in the country. It is an unique ecosystem representing key elements of a complex hydrological, biological and ecological system, supporting a significant assemblage of rare and vulnerable species of plants and animals, including endemic species[7]. The whole area supports large numbers of migratory waterbirds arriving from northern Palearctic regions upon the onset of the winter season. The Tanguar Haor wetland covering 9,727 hectares is well known for its many species of fish and as a staging and over-wintering area for at least half a million migratory birds, supports the lives of the lives of about 60,000 inhabitants in 88 villages around its periphery. The Government of Bangladesh declared the wetland an Ecologically Critical Area (ECA) in 1999, considering its critical condition as a result of the overexploitation of its natural resources. Given, the unique biological value of the Tanguar Haor, it was declared a Wetland of International Importance under the Ramsar Convention (Ramsar site) in 2000 on account of its rich biodiversity, supporting many nationally and globally threatened species. Tanguar Haor fulfills at least three of the criteria necessary for its declaration of a wetland of international importance under the Ramsar Convention, namely: (i) a wetland considered internationally important if it supports vulnerable, endangered or critically endangered species or threatened ecological communities; (ii) a wetland that is internationally important if it regularly supports 20,000 or more waterbirds; and (iii) a wetland is considered internationally important if it regularly supports 1% of the individuals in a population of one

[1] Fifth national Report to the Convention on Biological Diversity (2015)
[2] Thompson, Paul, M. Conserving and Restoring the Benefits from Bangladesh Wetlands
[3] Ibid
[4] Rahman, A.K.A (2005). Freshwater Fish of Bangladesh, Dhaka University
[5] Birdlife International (2004). Important Bird Area in Asia. Birdlife International, Cambridge, UK
[6] IUCN, Bangladesh (2000). Red Book of Threatened Fish Species of Bangladesh. IUCN-The World Conservation Union
[7] IUCN (2015). Tanguar Haor Management Plan Framework and Guidelines

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species or subspecies of waterbird. In 2001, a minimum of 2,500 Baer's Pochard (*Aythya baeri*) was counted, which represents 50% (estimated global population of 5,000) and 90,900 (2002) Ferruginos Poachard (*Aythya nyroca*) which represent 90% of the global population estimate (100,000) of this species. The principal wetland habitats in Tanguar Haor include open water vegetation (with submerged and floating aquatic plants), seasonally inundated mixed herbaceous vegetation, freshwater evergreen swamp forests, reed beds and rice fields. At least two plant species, *Duchesnea indica* and *Hydrocotyle sibthorpioides,* are considered very rare and about 25 species are considered rare[8]. There are about 54 small, medium and large *beels* within Tanguar Haor that are connected to rivers or inter-connected among each other, which contribute to its unique character and the range of ecosystems and habitats represented. Some of the *beels* are perennial while others are seasonal.

4 The Tanguar Haor represent the last vestiges of fresh water swamp forests in Bangladesh. These forests develop in waterlogged conditions due to flat low-lying land becoming inundated due to rainfall runoff and inflows from surrounding river systems. In swamp forests, the water table is typically very close to the surface and the continuous inundation gives rise to a habitat that is floristically distinct from the surrounding dryland forests, with adaptations including buttresses, stilt roots and different types of pneumatophores. This swamp forest is high in faunal diversity and extensively used by migratory birds for roosting and nesting. The swamp forest is a key element of the wetland in that it provides food and shelter for fish populations and hence it contributes economically to the livelihoods of local people who depend on these resources.

5 In terms of faunal diversity, it is estimated that there are 141 fish, 11 amphibian, 34 reptile, 206 bird and 31 mammal species.[9] On average, around 70-80 species of birds are resident in the Tanguar Haor, while around 60 species of migratory water birds visit the wetland. It also provides habitat for globally threatened wildlife species, including a single amphibian, three turtle, two lizard, four snake, ten bird and six mammal species.[10] Among the bird species, the Critical Endangered Baer's Pochard (*Aythya baeri)* and Endangered Pallas Fish Eagle (*Haliaeetus leucoryphus*) occur[11]. Some of the major *beels* are considered fish micro-sanctuaries and have been declared as important bird areas. In terms of fisheries resources, the Tanguar Haor is very rich and important for fish production and fish habitat, contributing to the national economy and providing livelihood support to local communities. In addition to its high fish diversity, the Haor supports rare and globally threatened species, including 10 IUCN Red Data Book and 22 CITES-listed species. These include *Bagarius bagarius, Clupisoma garua, Crossocheilus latius, Ctenops nobilis, Eutropiichthys vacha, Laboe boga, Mystus seenghala, Notopterus chitala, Pangasius pangasius, Rasbora elanga, Rita rita, Rohtee cotio, Silonia silondia* and *Tor tor*[12].

6 People living around Tanguar Haor are generally poor, of which around 95% are dependent on the wetland for their livelihoods, mostly through fishing, fish trading, boating and agriculture.[13] The provision of ecosystem services makes the wetland a major livelihood source for the people. Most economic activity includes commercial fishing, fuel wood sale, hunting of waterfowl, harvesting and sale of grass and reed and farming. Additionally, the wetland provides water storage, drinking and irrigation water, flood control, groundwater recharge, recreation and transport services. An estimate of the total annual benefits from Tanguar Haor based on different ecosystem values is USD 20.46 million, of which provisioning services account for an estimated 78% of the total[14]. Annual harvested wetland products are estimated at USD 1.6–4 million, with fish contributing around 64% of the net value.

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[8] IUCN (2012). Biodiversity of Tanguar Haor: A Ramsar Site for Bangladesh. Volume 2: Flora

[9] Gieson, W. and Rashid, S.M.A. (1997) Management Plan for Tanguar Haor. Ministry of Environment and Forests, Bangladesh

[10] IUCN (2015). Tanguar Haor Management Plan Framework and Guidelines

[11] IUCN (2012). Biodiversity of Tanguar Haor: A Ramsar Site for Bangladesh. Volume 1: Wildlife

[12] IUCN (2015). Tanguar Haor Management Plan Framework and Guidelines

[13] IUCN (2015). Tanguar Haor Management Plan Framework and Guidelines

[14] Haque, A.K.E etal (2012). Ecosystem values and Ecosystem Services of Tanguar Haor. Community based sustainable management of Tanguar Lake project, IUCN

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7 Despite the high level of biodiversity and variety of ecosystems and the economic value of the Tanguar Hoar to the local population, ecological degradation is taking place. Increased silt deposits by rivers that flow from the hills threaten crops and water quality. Swamp forests, and reed beds are in decline and fish production has been severely reduced resulting in the need for restocking with exotic species to compensate for the loss of productivity. Given the cutting, clearing and other anthropogenic activities, the swamp forests have been severely reduced, leading to impacts on resource use and livelihoods of the local people, in particular through the reduction of fish production and limited natural regeneration of this forest. Furthermore - amphibian, reptilian and certain bird species have become rare on account of trapping and hunting. The growing human population and increasing vulnerabilities of rural communities to climate change impacts leads to increased pressures on natural resources, causing widespread degradation of ecosystems through changes in land use and hydrological regimes, over-exploitation and pollution of aquatic and terrestrial habitats, and invasion by alien species, all of which contribute towards the loss of native species diversity.

Key Threats to wetland biodiversity and ecosystem servcies

8 The main direct threats to biodiversity in Tanguar Haor are as follows:

- Habitat degradation and fragmentation caused by expanding human settlement and agriculture, and other changes in patterns of land use that result in conversion of natural wetlands to other land uses.
- Changes in hydrological regime, also caused by changes in land use patterns and associated construction of flood management infrastructure.
- Pollution of terrestrial and aquatic ecosystems from discharge of effluents, dumping of waste, agro-chemicals, erosion of soil due to agricultural and construction activities
- Over-exploitation and other unsustainable uses of natural resources.
- Unplanned tourism, particularly badly conceived and implemented nature-based tourism
- Invasive alien species, particularly the introduction of exotic species of fishes since the 1950s, resulting in rivers and wetlands becoming colonized by highly invasive species that predate on, or outcompete indigenous species.
- Climate change impacts, including rising temperature, changing rainfall pattern, and increasing frequency of extreme weather events (e.g. flooding, cyclones, flash floods, etc.).

9 The most important threats to Tanguar Haor are discussed further in the section below:

Wetland habitat loss and degradation

10 Tanguar Haor is facing overwhelming threats due to natural resource degradation, soil erosion, swamp forest and aquatic habitat degradation, water imbalance and human interference. Small freshwater swamp forests that were common in the past have now been severely depleted due to clearing, cutting and burning. Reed beds have been severely reduced because of collecting for fuel and thatch, and the conversion of marginal lands for agriculture.[15] It is reported that around 40% of the total landscape of the study area in Tanguar Haor has been impacted within the period 1980-2010, with highland or forested vegetation decreased by 50%, deep water surface area decreased by 49% and shallow water surface area increased by 33%.[16] As a consequence of the increase in shallow water, this has favored increase in agricultural activities and semi-permanent and permanent settlements. Certain species of aquatic plants have now disappeared or become very rare, probably due to a combination of over-utilization and

[15] Haque,Inzamul and Basak, Rony (2016). Land Cover change detection using GIS and remote sensing techniques: A spatio-tepmoral study on Tanguar Haor. The Egyptian Journal of Remote Sensing and Space Sciences. Elsevier

[16] Ibid

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changes in water quality. The current leasing system of lands within the wetland is considered as one of the major threats to its sustainable management, as it has encouraged maximum exploitation and marginalization of the local community. Additionally, the area of the wetland is decreasing due to expanding human settlement, agriculture, siltation and encroachment for construction purposes. The rivers that support the wetland have also suffered loss of riparian wetlands due to the expansion of agriculture, increased extraction of water for irrigation and development processes. These habitats are critical for supporting the rivers' ecological health and providing resilience against flood, drought and climate change.

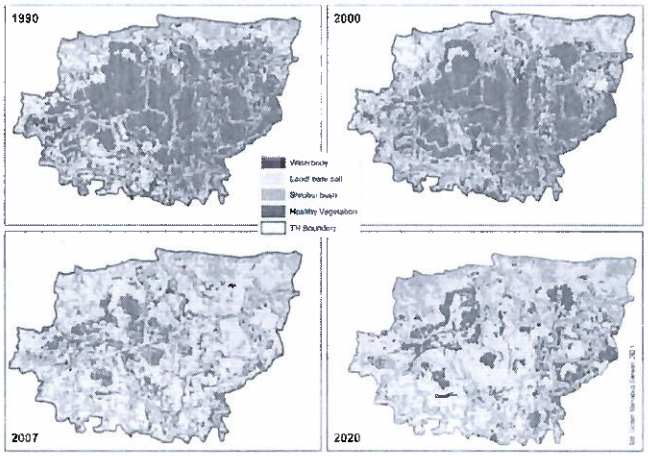


Figure 1: Land Cover in Tanguar Hoar (1990-2020)

Table 1: Land Cover Change in Tanguar Hoar and surroundings (1990-2020)

Land Cover Category	January 1990	January 2000	December 2006	January 2014	January 2020	% Change from 1990-2020
Water	6,895.12	6,295.09	2,301.15	966.83	2,827.79	-58.99
Land/Bare Soil	3,869.91	4,135.11	8,934.39	9,600.69	8,819.61	+129,90
Shrubs	3,485.56	4,062.68	4,231.89	5,395.27	4,162.34	+1.,42
Healthy Vegetation	1,917.48	1,677.48	699.32	205.34	358.23	-81.32
Total (hectares)	**16,168.07**	**16,170.37**	**16,166.75**	**16,168.13**	**16,167.97**	

Over-exploitation and other unsustainable uses of natural resources, particularly in relation to fisheries

11 Over-exploitation of fishes and wetland resources, killing and trapping of birds are a serious threat to biodiversity in Tanguar Haor. In addition, reed beds have been significantly reduced by over-harvesting of reed for fuel and their conversion to agricultural use. The causes of decline of fish species populations is attributed to brood fish catch, increase in fishing pressure, use of insecticides in crop fields, fishing using destructive means and water quality degradation due to siltation and other factors. The reduction of wildlife is attributed to increased hunting and trapping, destruction of bird nesting sites and use of insecticides that kill the insect prey of birds. Dewatering of key areas and repeated fish harvesting are unsustainable fishing practices in the wetlands. Wetland plants are overharvested for fuel, cattle feed and other uses. The hunting, trapping and killing of water birds has resulted in a rapid decrease in the number of water birds visiting the Tanguar Haor wetland. It is reported that there has been a decrease of 10 to 75% in the population of 30 bird species visiting the Tanguar Haor between 2000 and 2012 as a

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result of hunting, deforestation and other anthropogenic factors.[17] A recent study showed that over 100 riverine fish species are currently under threat and 25 fish species have not been observed in the past 20 years, indicating the possibility of their extinction from water bodies in the country.[18]

Invasive alien species

12 The introduction of exotic species of fish to compensate for decreasing fish yields, has resulted in colonization by highly invasive species that predate on, or outcompete indigenous species. Several of the introduced species are highly carnivorous and predatory and consume the smaller indigenous varieties. The ecological, economic and biological consequences of the introduction of exotic fish species have not been adequately assessed, although some of the known negative impacts of exotic species are the stunting and decrease in the population of the smaller indigenous species. Some exotic species destroy embankments and stir up bottom mud reducing the dissolved oxygen (DO) levels and destroying the habitat of small indigenous species. The carp species compete with the indigenous species for food and space, while other species are voracious predators on small and medium fishes. All of these exotic species are a big threat to the indigenous species.[19] Aquatic weeds such as Water Hyacinth are the most hazardous and cost-intensive problem in most of the wetlands. The main problem with this aquatic weed has been the reduction of water depth in the wetland due to accumulation of dead vegetation, reducing the fish production rate and the diversity of aquatic flora and fauna, in addition to local environmental impacts.

Climate change impacts

13 Bangladesh is one of the most vulnerable countries to climate change with rising temperature, changing rainfall pattern, sea level rise and increasing frequency of extreme weather events (e.g. tidal surges, flooding, cyclones). Many species of wildlife, fishes and invertebrates depend upon certain temperature ranges for flowering, pollination, seed formation, seed germination and plant growth. The Hoars are generally viewed as vulnerable to climate change impacts because of their unique geographical location, dominance of floodplains, high population density, elevated level of poverty and overwhelming dependency on nature and its natural resources. In terms of Bangladesh, the mean temperatures across the country are projected to increase between 1.4°C and 2.4°C by 2050 and 2100, respectively. Average temperatures are expected to increase between 1°C and 2°C by 2100, and the frequency of tropical cyclones in the Bay of Bengal may increase and, according to the Intergovernmental Panel on Climate Change's (IPCC) Third Assessment Report, there is "evidence that the peak intensity may increase by 5% to 10% and precipitation rates may increase by 20% to 30%" (IPCC 2001). Cyclone-induced storm surges are likely to be exacerbated by a potential rise in sea level of over 27 cm by 2050, while runoff, a measure of water availability, is projected to increase, the time between rainy days is expected to increase and the peak 5-day rainfall intensity (a surrogate for an extreme storm event) is projected to increase.[20]

14 In terms of the Tanguar Haor, there are no specific future projections, but studies have demonstrated an annual average decrease in rainfall by 25mm between 1980-2008 and average annual maximum and minimum increases in temperature by 1.45°C and 1.4°C respectively[21]. The major negative impacts of climate change in Tanguar Haor are expected to decrease in crop production, impacts on fish productivity, loss of cultivated land, droughts, floods and impacts on biodiversity and swamp forests. Climate risks are anticipated from increase in floods and droughts, river erosion, changes in temperature and rainfall, etc.

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[17] Uddin, M.R. et.al. (2015). Land use change and its impact on ecosystem services, livelihoods in Tanguar Haor. *Scientia Agriculturae* 12(2)

[18] *Fish Museum and Biodiversity Center of Bangladesh Agricultural University (DOE 2015)*

[19] *Fifth national Report to the Convention on Biological Diversity (2015)*

[20] https://climateknowledgeportal.worldbank.org/country/bangladesh/climate-data-projections

[21] Rahaman, M.Z., Sajib, K.I and Alam, I (2015). A Study on Climate Change Impact on Livelihoods of the people of Tanguar Haor. Water World Congress XV. Scotland

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15 The changing pattern of temperature in the Tanguar Haor (1.45°C) is significantly higher compared to the IPCC assessment over the world in last 100 years (1910- 1940: 0.35°C, 1970-2007: 0.55°C) (IPCC, 2007:252)[22]. This creates considerable negative impacts on crop production as well as livelihoods of the local people. Therefore, location-wise and scientifically based sustainable adaption practices are essential to cope up with the changing climatic conditions. Otherwise, it would be very difficult to make communities more resilient towards adverse impacts of climate change and ensuring food security.

16 The perception among the local inhabitants around the Tanguar Haor is that climate change causes a decrease in crop production (25%), reduced fisheries (21%), loss of forest ecosystem (16%), loss of biodiversity (16%), loss of cultivable land (13%) and loss of personal belongings (9%), water borne diseases thus requiring adaptation strategies to cope up with these climatic events such as diversification of livelihoods, changes in crop calendar, rainwater harvesting, repair/reconstruction of houses, availability of timely information on weather forecast and purifying drinking water[23]. These perceptions are particularly relevant to the project in terms of ensuring improved crop production through restoration of degraded agricultural lands, promoting sustainable fisheries and wetland resource use, conservation and restoration of freshwater evergreen swamps, *beels* and associated ecosystems, enhancement of biodiversity and ecological services and improved awareness and information.

Barriers that need to be addressed to restore and maintain favorable ecological conditions in the Tanguar Hoar:

Barrier 1: Limited institutional coordination, funding and recognition of the benefits of community participation in the long-term sustainable management of the Tanguar Haor

17 Although institutional governance arrangements are mandated in the 2016 ECA Management Rules as the delivery mechanism for management of these areas, there is limited capacity to facilitate and coordinate among communities and multiple sectors of government and little or no private sector participation in the implementation and enforcement of management prescriptions, as well as to reach out to local communities (especially farmers and fisher folk) and other users of wetland resources (including the private industry). The limited coordination and mutual trust between the relevant public agencies and between community organizations and the government (at all levels) has limited the participation of the community (through the community leaders) in management and decision making and in the delegation of authority for promotion of effective co-management of wetland resources. Inadequate institutional support and limited avenues and access to external sources of funding for local community engagement due to limited capacity for local resource mobilization further constraints effective community co-management. There is also inadequate understanding and conviction on the benefits of co-management among the community and limited opportunities to train and nurture knowledge and practices on the benefits of co-management. Because of the lack of an organized platform for collective action, there is little or no enthusiasm for preservation and sustainable use of natural resources leading to their rapid deterioration. All of this has contributed to the absence of a long-term vision between the government and other key stakeholders, and amongst the community on resource management and institutional sustainability.

Barrier 2: Conflicts in resource management and limited recognition of ecosystem service values

18 While a significant percentage of the 60,000 inhabitants living in the 88 villages in and around the Tanguar Haor are dependent on its natural resources, many of whom belong to the poorest groups whose primary source of income is derived from fisheries or daily labor and farming and, this is compounded by an inherent competition and conflict in the mode of resource use. There are a number of underlying factors

[22] Ibid
[23] Ibid

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that exacerbate resource conflicts. The lack of clear policy guidance and operational support for local communities has resulted in their inability to play a major role in resource management and protection as well as in developing a collaborative shared vision for its management and use amongst the key stakeholders. Limited enforcement of regulations regarding resource use coupled with patronization by socio-political elites and vested interests has made it difficult for ensuring equitable access and benefits to members of the community. There is little social and cultural resistance against these harmful resource exploitation practices on account of the strong external influence and political dominance of the elite in this illicit resource exploitation and use practices. As a consequence, marginalized local communities that usually live in abject poverty tend to resort to desperate means of resource exploitation in pursuit of short-term gains in the absence of a collective long-term strategy for promotion of resource conservation and sustainable use that would benefit them. The lack of agreement amongst communities and local government about the priorities and goals of Tanguar Haor management, coupled with a poor understanding of wetland ecosystem service values and management requirements has resulted in conflicts between resource use, conservation and economic development.

Barrier 3: Limited opportunities for local institutions and communities to improve livelihoods

19 Local communities and their institutions in and around Tanguar Haor are constrained in their efforts to improve capacity and economic opportunities for a variety of reasons, including limited access to public services and land tenure insecurity (as lands around the wetland are under various tenure regimes, including government owned, leased out to private parties for 1 to 3 years, usually for fishing purposes, and privately owned agricultural lands and homesteads) leading to diverse conflicting priorities amongst the key stakeholders. There is also a very limited number of functional community organizations to nurture collective actions on account of capacity constraints and the low educational level of the communities. This makes it difficult to build and strengthen skills for collective action and corresponding sustainable development. As a consequence, there are limited options for livelihood improvement, further constrained by inadequate marketing information and access and links to supply chains. In an effort to eke out a living, communities have caused rapid degradation and destruction of their natural resources, especially common forests, medicinal and aromatic plants, watersheds and wetland resources, thereby reducing opportunities for more sustainable natural resource-based forms of economic development.

Barrier 4: Limited awareness, knowledge sharing, information collection and monitoring related to wetland resource management

20 While the Department of Environment's (DoE's) role is to share knowledge and best management practice guidance, it has limited manpower and resources to advise, coordinate and monitor compliance. It has left the implementation of management plans to those owning or having tenure over the respective wetland areas. Underlying these difficulties is the lack of coordinating responsibilities and partnerships, including with the private sector, to find appropriate and sustainable solutions for effective management of the wetland and its productive resources. There is limited understanding regarding the condition of these wetland resources, their carrying capacity limits, and best practices in habitat protection and management, along with the application of equitable, transparent and accountability procedures and practices related to the management of the Tanguar Haor. Although there has been some documentation of experiences from the past, there is a lack of regular review processes that involve community organizations, non-governmental and environmental organizations and research agencies, thus limiting the opportunities for replication and scaling up of best practices.

21 While ECA rules articulate the need for ecosystem-based planning and management, there is usually a lack of critical baseline data on the extent, location, condition and threats on wetland resources and species. Consequently, there is an urgent need for a concerted and committed effort, with adequate manpower, skills and funding to monitor the condition of the resource, distribute data, and build the

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institutional, technical, human and infrastructural capacity needed to support on-going biodiversity monitoring and decision-making. Consequently, the country's knowledge base on biodiversity and natural resources, and capacity for stewardship is limited. Drivers of, and vulnerabilities to climate change in Tanguar Haor is also little understood. Among the local community, there is little understanding of the value of biodiversity and natural systems in providing critical ecosystem services (including mitigation of climate change impacts) to those dependent on these resources and the impacts that wetland degradation could have on provisioning of such services. Industry remains largely unaware of the value of maintaining optimal environmental conditions and of the impacts that environmental degradation can bring to the local, regional and national economy.

22 **Project conceptual model:** The complex interacting web of factors that threaten globally significant wetland biodiversity in Bangladesh is illustrated in a situation analysis in Figure 1. This indicates the key areas (indirect and direct factors) and the points where project intervention can contribute towards a reduction in the level of threats, and therefore contribute towards the conservation of biological ecosystems and globally threatened species – and the integrity of the ecosystems they inhabit. The main project intervention strategies are shown as yellow hexagons in Figure 1.

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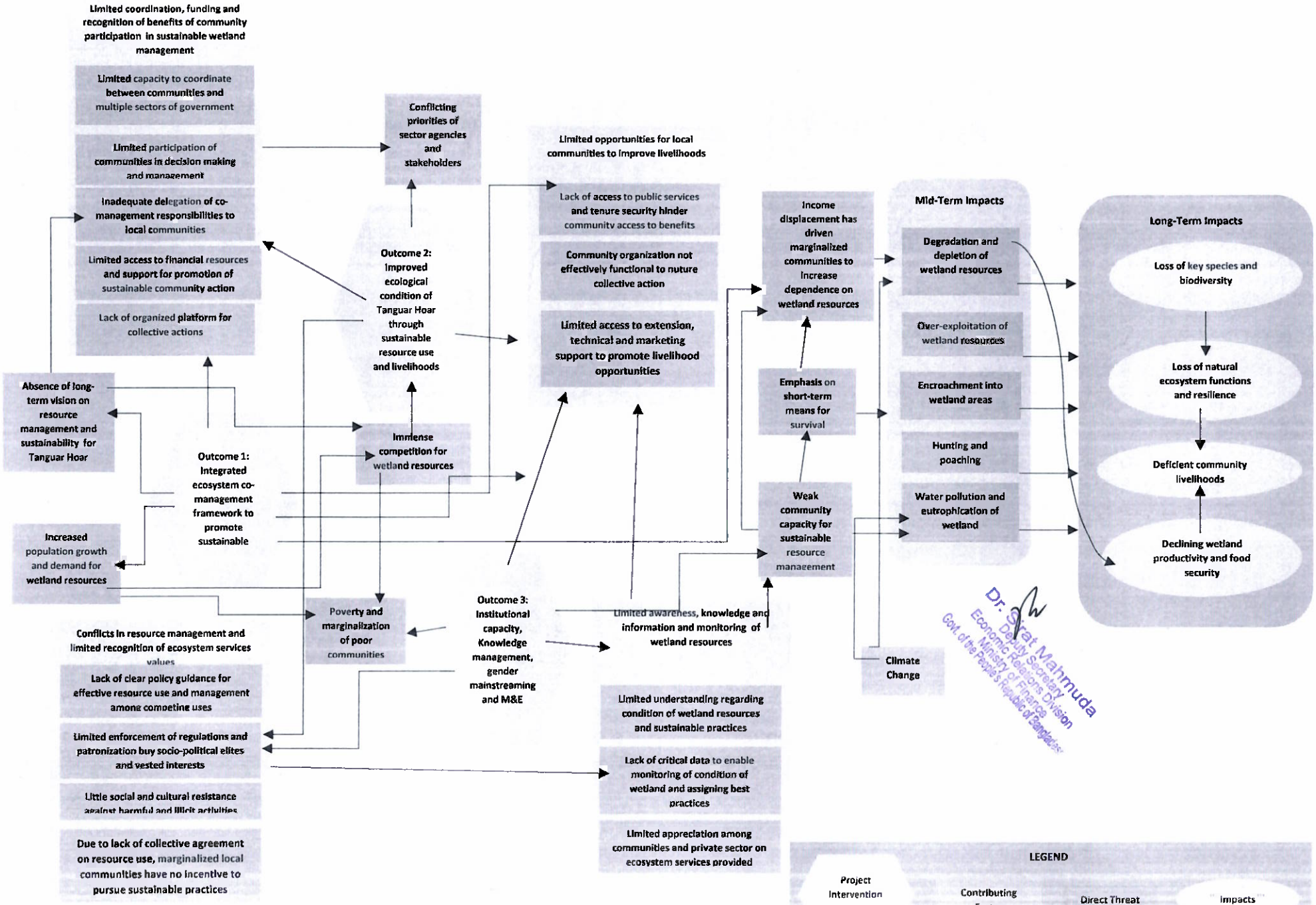


Figure 1: Situation Analysis

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2) Baseline scenario or any associated baseline projects

23 The Government of Bangladesh has formulated a considerable number of policies and regulations relevant to Protected Areas, Ecological Critical Areas and wetlands. Bangladesh is a signatory to a number of Multilateral Environmental Agreements (MEAs) including the Rio Conventions (RCs), i.e. United Nations Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity (CBD) and United Nations Convention to Combat Desertification (UNCCD) and has so far signed, ratified and or accessed 35 international Conventions, Treaties and Protocols (ICTPs). Among them, the following ICTP's are relevant to wetlands: (i) Convention on Wetland of International Importance Especially as Waterfowl Habitat (Ramsar Convention) which was ratified on 20 April 1992 and declaration of the Sundarbans and Tanguar Haor as Ramsar sites; (ii) Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) ratified on 18 February 1982. The Bangladesh Wildlife (Preservation) (Amendment) Act 1974 provides a list of species protected against any form of trading; (iii) Convention Concerning the Protection of the World Cultural and Natural Heritage ratified on 3 November 1983. In 1999, Government of Bangladesh declared the Tanguar Haor Basin as an "Ecologically Critical Area" to highlight its ecological importance and to monitor its environmental quality. In 2000, the haor basin was declared as the country's second RAMSAR site – wetland of international importance. With the declaration of Tanguar Haor as a RAMSAR site, government has its commitment to preserve the ecosystem and floral and faunal diversity including its migratory birds from illegal hunters.

24 Relevant wetland conservation and management policy in Bangladesh includes: the National Jalmahal [Water Body] Management Policy 2009; National Land Use Policy 2001; the National Agricultural Policy 1999; the National Water Policy 1999; the National Fisheries Policy 1998; the National Agricultural Extension Policy 1997; National Forest Policy 1994; the Environment Policy and Implementation Plan 1992; the Environment Conservation Rules 1997, the Protection and Conservation of Fish Rules 1985.

25 Considerable experience and information have accumulated over the last few years from a number of wetland projects supporting the establishment and management of Tanguar Haor to address pressures on natural resources. In 2002, a historic milestone was achieved in the management and conservation of Tanguar Haor and its rich biodiversity after the traditional leasing of Tanguar Haor was stopped and its management was brought under the Ministry of Environment, Forest and Climate Change (MoEFCC). As a result, the nodal MoEFCC took an initiative to establish a community-based management system in Tanguar Haor during a three-phased project (December 2006–August 2016). However, this effort needs substantial strengthening and commitment to strengthen the role of the community in planning and management of the wetland.

26 In particular the GEF 7 project would build on the existing baselines to further enhance the integrated management of the Tanguar Haor, as an approach to demonstrate a new and innovative approach to wetland conservation that can be replicated elsewhere. In particular, the GEF 7 project will further build on the baseline activities to demonstrate a financially viable ecosystem-based management framework for the Tanguar Haor (based on ECA rules and experiences available in the country), but more importantly empower local resource users to plan and manage the wetland resources through co-management arrangements. This mandates local communities (in particular fisher folk and wetland resource collectors) to take responsibility for decision-making in managing their respective parts of the wetland. It will also look at the different wetland elements within the wetland as an integrated, interdependent and complex ecosystems (rather than as individual parts) in designing and planning conservation, sustainable management and restoration practices. Also, to promote an alternative conservation-oriented natural resource-based economy within and around the wetland and test sustainable financing mechanisms, with emphasis on private sector partnerships with local communities. Refer Table 1 for further details relating to baseline activities and additional needs.

27 **GEF Quantum 92054/PIMS 4620 Expanding the Protected Area System to incorporate important aquatic ecosystems: a medium-size project (signed in June 2015 and closed in June 2020)** focused on safeguarding the Ganges and Irrawaddy dolphins from unsustainable fisheries in the Sundarbans by expanding and strengthening the protected area (PA) system, with support from local

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communities. Implementation commenced only in April 2017 and the project closed in May 2020. Lessons from this project would be useful for strengthening community co-management processes.

28 **GEF Atlas 89619/PIMS 4884 National Capacity Development for Implementing Rio Conventions through Environmental Governance:** a medium-size project (signed in May 2015 and closed in December 2019) to strengthen information management and other support systems that contribute to policy development and improve implementation of the three Rio Conventions. Potential synergies are identification of this project's tangible contribution to Bangladesh in meetings its international obligations and sharing of monitoring and other information on ECA status.

29 **GEF Atlas 87558/PIMS 4878 Integrating Community-based Adaptation into Afforestation and Reforestation Programs in Bangladesh:** a full-size project (signed in May 2015 and will close in March 2021) to reduce climate vulnerability of local coastal communities by stewardship of coastal greenbelts, climate resilient livelihoods, nature-based solution and disaster preparedness planning. Potential synergies are possible with regard to livelihood diversification and climate resilience.

30 **GIZ Managing the Sundarbans mangrove forests** to conserve biodiversity and adapt to climate change (2015-2019; closed): executed by the Forest Department and focused on management of PAs in collaboration with civil society and communities. Potential synergies on knowledge management and interactive platform for information sharing and application of a harmonized approach to monitoring and evaluation will benefit the proposed GEF project.

31 **Forest Department is currently implementing US$ 175 million World Bank-funded Sustainable Forests and Livelihoods (SUFAL) Project** (2019-2023) for the country. The SUFAL project aims to improve forest management and increase benefits for forest dependent communities in targeted sites by financing nearly 79,000 hectares of forests on public and private lands, including about 22,000 hectares of coastal green belt across 147 Upazilas (sub-districts). The project will directly benefit about 40,000 forest dependent households – with special emphasis on women and adolescent girls – by increasing their participation in forest management and access to diversified income generation options. In addition, about 180,000 people will benefit through involvement in collaborative forest management activities. The proposed project can draw on learning from forest restoration and gender related successes.

32 **Implementing Ecosystem-based Management in Ecologically Critical Areas in Bangladesh (GEF6; approved by GEF in May 2020)** The project objective is to apply an ecosystem-based framework for managing two ECAs (Morjad Baor and Halda river) in Bangladesh to enhance the conservation of globally significant biodiversity and support local livelihoods. It is aimed at addressing the increased degradation of wetland habitats from unsustainable development and local community practices that is leading to biodiversity loss. While, the proposed GEF 7 project will work closely with the GEF 6 project to ensure complementarity, lessons sharing and exchange of information, a particular difference is that the GEF 7 project will introduce a new approach to empower individual villages and/or groups of resource users to manage their respective parts of the wetland (in particular fisher folk and wetland resource collectors). This would necessitate development of appropriate community decision-making structures for management of the wetland, including in particular to take collective agreements and actions for setting up seasonal sanctuaries or no-take zones to protect fish breeding and spawning, defining sustainable harvest limits and species to be harvested, regulation of fishing gear and harvest times, and other measures that the community deem necessary to maintain the favorable ecological conditions in the Tanguar Haor.

33 The three-phased *'Community Based Sustainable Management of Tanguar Haor'* project implemented by MoEFCC and completed in 2016, had extensively focused on co-management governance of Tanguar Haor bringing 76 villages with 7,081 members under the umbrella of a community organization. The most significant progress has been the establishment of poor fisher's fishing access to fish resources through a sustainable fish harvesting (commercial and non-commercial) system. In particular, the introduction of fishing modality following the fish harvesting guidelines has led to a positive impact among the community organization, particularly the poor fishermen.

34 In particular, the termination of allocation of fishing rights to the highest leaseholder and suspension of all fishing except for small-scale fishing in the immediate vicinity of some of the haor villages in

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recognition of the traditional rights for use of the wetland resources has created opportunities for the wise and sustainable use of its resource. However, this approach has not been fully institutionalized, which is necessary for scaling up to the entire Tanguar Haor.

35 There is a need for designing and implementing a "whole of wetland" approach based on the ECA management rules of 2016 through the project that integrates conservation, resource use, livelihood support and monitoring into a planning framework that is aimed at achieving favorable ecological conditions in the wetland. This would facilitate the change from a 'business as usual' scenario that continues to promote unsustainable resource dependency; inconsistent governance structures for planning, management and resourcing (especially staff) across the network; and a lack of scientific protocols to clearly articulate the biodiversity features and values of wetlands with a new approach. This would define 'favorable ecological conditions' to be achieved and prescribe measures necessary to achieve this status and establish a monitoring system to track wetlands status with regard to progress to achieving the desired 'favorable ecological condition'. To achieve this new paradigm requires a strategy to secure and institutionalize sustainable financial resourcing of DoE to fulfill its mandate with respect to Tanguar Haor.

Table 2: Summary of Baseline Activities and Additional Complementarity

Baseline Project/Activities	Key Objectives of baseline project/activities related to the GEF project	Additional Complementarity with proposed GEF project
GEF-UNDP Integrating Climate Change Adaptation into Sustainable Development Pathways (2021-2025)	To support Bangladesh in addressing urgent, medium and long-term climate change risks in selected agro-ecological zones through (i) Enhanced capacity with improved coordination mechanisms,	The GEF 7 will build on the learning of the baseline project, in particular on the address of risks at different locations and information sharing and adaptation measures. Since the 2 projects are located in Department of Environment , coordination would be potentially possible. More specifically, the useful learning will some from: • The sharing and information exchange system between national and local government entities and the private sector organizations, on climate change adaptation projects and programs • Sharing of user guide and tools for climate monitoring and impact analysis for local resource users to manage the wetland resources through co-management arrangements, where local communities (in particular fisher folk and wetland resource collectors) take responsibility for managing their respective parts of the wetland; • Use of the risk-specific list of best practices innovations for mainstreaming adaptation in Bangladesh, in particular in relation to specific issues related to wetlands • Access to community process of best practices for co-management • Sharing of information of women specific climate resilient alternative livelihoods
GEF-FAO Building climate resilient livelihoods in vulnerable landscapes in	The project objective is to improve the resilience of people, communities, and ecosystems to climate change, and improve livelihoods through increased value addition in the agricultural food	While, the baseline project focused on climate adaptation in afforestation and reforestation activities, it provides good lessons and learning on the planning and community engagement process for climate

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Bangladesh (2021-2026)	systems of Bangladesh. The key elements of the project are: to strengthen capacities for integration of adaptation measures in agriculture sector planning, budgeting and policy processes and to demonstrate resilience to agriculture-0based livelihoods	adaption that can be integrated into the GEF 7 project, particularly in terms of planning for the wetland areas. The GEF 7 project, unlike the baseline project, will look at management and adaptation in a very integrated approach. In particular, it would consider freshwater evergreen swamp forests, reed areas, *beels* and connecting riverine ecosystems as a complex ecosystem, in determining management approaches at forest and *beel* restoration and community adaptation in a very integrated and inter-connected fashion, rather than as isolated elements of the wetland.
Managing the Sundarbans mangrove forests (2015-2019)	The GIZ funded project supported the management of the Sundarbans in a sustainable manner through co-management by involving local resource users, efficient and standardized patrolling, and a proper ecological monitoring. The main target groups were poor communities and direct resource users including landless people. The strengthening of co-management structures in the Sundarbans with special emphasis on the role of women was intended to enhance the conservation and sustainable use of the forest resources. Well-organized user groups were enabled to claim their rights and understand the benefits of conservation. They were encouraged to collaborate with the forest department and service providers and funding agencies. Women played a key-role in this process.	The GEF 7 will draw on a number of lessons from the GIZ project, in particular in terms of the following: (i) strengths and weaknesses of the co-management approach; (ii) impacts of the patrolling; (iii) success of the ecological monitoring; and (iv) role of women in conservation of the Sundarbans. Building on the GIZ project, the GEF 7 takes the emphasis on co-management further, in actually trying to promote a wetland area-based co-management approach that integrates the various aspects of wetland management, from conservation of existing wetland resources, habitat restoration, sustainable wetland resource use, protection, enhancing sustainable livelihoods, climate adaptation and participatory monitoring.
Sustainable Forests and Livelihoods (SUFAL) Project (2019-2023)	The World Bank projects aims to support climate change related research on forest management and conservation to improve forest management and increase benefits for forest dependent communities and access to diversified incomes as well as support collaborative forest management activities.	While, the SUFAL project is focused on forest management, its practices in engaging and diversifying community incomes through collaborative management can be useful for the GEF 7 project in that it can provide insights on options for livelihood diversification, incentives and tools that can support such diversification, identifying market linkages and skills need to support such innervations.
Implementing Ecosystem-based Management in Ecologically Critical Areas in Bangladesh (2020-2025)	The project objective is to apply an ecosystem-based framework for managing two ECAs (Morjad Baor and Halda river) in Bangladesh to enhance the conservation of globally significant biodiversity and support local livelihoods to address degradation of wetland habitats from unsustainable development and local community practices.	While, the proposed GEF 7 project will work closely with the GEF 6 project in that it will build on application of an ecosystem-based framework for the wetland based on lessons learned from the baseline project. The GEF 7 project will go further in that it will introduce a new approach to empower individual villages and/or groups of resource uses to manage their respective parts of the wetlands as part of defining a locally managed wetland co-management and decision-making approach, that will be new to Bangladesh. This would necessitate

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		development of appropriate community decision-making structures for management of the wetland, including in particular to take collective agreements and actions for setting up seasonal sanctuaries or no-take zones to protect fish breeding and spawning, defining sustainable harvest limits and species to be harvested, regulation of fishing gear and harvest times, and other measures that the community deem necessary to maintain the favorable ecological conditions in the Tanguar Haor.

Alignment with national and global priorities

36 The project is consistent with the following national strategies, plans and reports:

- National Biodiversity Strategy and Action Plan (NBSAP) 2004 and updated in 2016 (for the period of 2016–2021)
- Bangladesh Biodiversity Act, 2017
- Ecologically Critical Area Management Rules(ECA Rules), 2016
- Protected Area Management Rules, 2017
- National Environment Policy, 2018
- National Agriculture Policy, 2018
- National Fisheries Policy, 1998
- Draft National Forest Policy, 2016
- Bangladesh National Conservation Strategy, 2016
- Country Investment Plan for Environment, Forestry and Climate Change (EPCC CIP: 2016-2021)
- Bangladesh Environment Conservation Act, 1995
- National Capacity Self-Assessment (NCSA) 2007 under UNCBD, UNFCCC, UNCCD
- Sixth National Report to CBD (2019)
- National Adaptation Plan (under preparation)
- Nationally Determined Contribution (2015), now updating with UNDP's Climate Promise Program
- Land Degradation Neutrality
- Convention on Biological Diversity

37 **Bangladesh Environment Conservation Act:** The proposed project is aligned directly with the provisions of The Bangladesh Environment Conservation Act, 1995 and its 2010 Amendment Act that concerns the declaration and planning of ECAs under the remit of the Department of Environment, along with the Department's mandate to control pollution. More specifically, it supports the application of the Ecological Critical Area Management Rules, recently introduced in 2016, which provide a governance structure for managing ECAs and address the need for alternatives for people dependent on ECAs for their livelihood. Governance roles for a National Committee, District and Upazila committees, Union Coordination Committee and Village Conservation Group are defined. Other provisions include management by public-private partnerships and constitution of Ecological Management Funds for individual ECAs. These new rules have been informed by over a decade of experience in establishing and managing ECAs and now is a timely opportunity to apply them in an holistic, integrated manner, while also piloting a public-private partnership or similar approach to extend that experience to the private sector over pollution issues from industry and from agriculture.

38 **National Biodiversity Strategy and Action Plan (2016-2021)**: The project will contribute significantly to achieving at least half of the 20 national targets identifed in the Action Plan, as listed below.

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(1) Relevant stakeholders will be aware of the value of wetland biodiversity and play an active role in ensuring sustainable use.

(6) Stock assessment of fish, invertebrate stocks and aquatic plants will be undertaken keeping in mind the safe ecological limit and awareness raising of the stakeholders will be enhanced so that aquatic biodiversity will be managed and harvested sustainably, legally taking into account of ecosystem based approach towards avoidance of overfishing and conservation of threatened species and vulnerable ecosystems.

(8) Study on impact of pollution and excess nutrient on functioning of major ecosystems will be conducted and enforcement drive for controlling pollution will be strengthened.

(12) The extinction of known threatened species will be prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

(14) Develop and implement restoration plan for degraded forests and reeds and river banks taking into account the needs of vulnerable people and local communities.

(15) Initiate implementation of restoration plan for degraded ecosystems, especially forest lands and wetlands for addressing climate change mitigation, adaptation and combating desertification.

(18) Traditional knowledge, innovations and practices of local communities or ethnic groups will be recognized and documented.

(19) Agencies responsible for Biodiversity and Natural Resources Management will be adopting modern information technology like GIS and RS and information on biodiversity will be shared through Clearing House Mechanism (CHM).

(20) Financial resources will be mobilized towards accelerated implementation of targets and activities of updated NBSAP.

39 **Ecologically Critical Area (ECA) Rules:** The Bangladesh Environment Conservation Act (BECA), 1995 has provision for Ecologically Critical Area (ECA) declarations by the Director General of the Department of Environment in certain cases where ecosystem is considered to be threatened and reached a critical state. If the government is satisfied that due to degradation of environment, the ecosystem of any area has reached or is threatened to reach a critical state, the government may by notification in the official gazette declare such areas as Ecologically Critical Areas. The government shall specify, through the notification provided in sub-clause (1) or by separate notification, which of the operations or processes cannot be initiated or continued in the Ecologically Critical Area (Bangladesh Environment Conservation Act/BECA), 1995. In April 1999, the Director General of the Department of Environment (DOE) officially declared nearly 40,000 ha, within seven separate wetland areas, as ECAs. In order to identify priority sites, a series of biodiversity 'importance criteria' have been taken into account in addition to the above 'urgency criterion'. Tanguar haor, an important wetland area located in northeastern Bangladesh was declared as an ECA.

40 **Sixth National Report to CBD (2019):** The following were the national targets:

- National Target 5: By 2021, studies on the rate of habitat loss will be furnished towards promoting implementation of land use policy and enforcement of relevant legislation on conservation of natural habitats
- National Target 8: By 2021, study on impact of pollution and excess nutrient on functioning of major ecosystems will be conducted and enforcement drive for controlling pollution will be strengthened.
- National Target 11: By 2021, Bangladesh's 3% area under terrestrial ecosystem (forests), 3% area under inland wetlands and coastal ecosystems and 5% of total marine area will come under PAs or ECAs with development and implementation of management plan for these areas.

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- National Target 12: By 2021, the extinction of known threatened species will be prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
- National Target 14: By 2021, develop and implement restoration plan for degraded wetlands and rivers taking into account the needs of vulnerable people and local communities.
- National Target 15: By 2021, initiate implementation of restoration plan for degraded ecosystems, especially, forestlands and wetlands for addressing climate change mitigation, adaptation and combating desertification.

41 **Land Degradation Neutrality (2018):** The project will achieve the following targets to contribute to Bangladesh's voluntary national LDN targets to UNCCD.

- Target 1: To improve forest cover in 400 hectares of freshwater evergreen swamp forests
- Target 2: To increase soil fertility and Carbon stock in 500 hectares of cropland

42 **Seventh Five-Year Plan**: The core theme of the 7th Five Year Plan for Bangladesh is "Accelerating Growth, Empowering Citizens". This is enshrined within the context of climate resilient, sustainable growth, with special focus on governance isues to enhance productivity and on developing a knowledge-based economy. Much of this theme resonates well with the conceptual design of this project and its more innovative elements, including its focus on: consolidating and institutionalising the governance of the ECA; piloting engagement with the private sector to address industrial and agricultural pollution of wetlands; and underpinning the system with a web-based GIS that will include a reporting facility to document Tanguar Haor ECA condition (health) and the effectiveness of managing the system.

43 Within the environment sector, these themes translate into a number of goals and targets to which this proposed project will contribute, notably:

- Increase productive forest coverage to 20 percent.
- Promote zero discharge of industrial effluents.
- Rural wetlands are restored and protected in line with the Wetland[24] Conservation Act.
- At least 15% of the wetland in peak dry season is protected as aquatic sanctuary.
- Land zoning for sustainable land/water use completed.

44 More specifically, the 7th five-year plan in relation to wetland management calls for the following:

- A program of actions for ECAs, including the creation of a knowledge centre for ECAs and Wetland Management.
- A new approach to industrial pollution/waste management involving communities, local institutions, news media, law enforcement agencies and other relevant stakeholders to engage with the polluters;
- Management of agrochemicals to avoid/reduce pollution of water bodies; and
- Sustain and replicate ECA and wetland management project(s) in other areas with the ultimate objective of restoration and damage prevention.
- Develop Tanguar Haor ECA specific protection/restoration management plan in consultation with local community and implement the plan in a time bound manner.
- Sustain and replicate ecosystem-based management of Ramsar Site and ECA.
- Sustain and replicate community-based adaptation of ECAs through biodiversity conservation and social protections.
- Create a knowledge Centre for ECA and Wetland management.

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[24] This is a misprint in the Plan and should read "Environment".

45 **National Targets for Aichi:** Government of Bangladesh set National Targets in line with Aichi Biodiversity Target expected to be achieved by 2021. The key relevant national targets related to the project are the following:

- National Target 11: The NBSAP 2016 -2021 target is to bring country's 3% area under terrestrial ecosystem (forests), 3% area under inland wetlands and coastal ecosystems and 5% of total marine area will come under PAs or ECAs with development and implementation of management plan for these areas.
- National Target 12: By 2021, the extinction of known threatened species will be prevented and their conservation status, particularly of those most in decline, sustained
- National Target 14: By 2021, develop and implement restoration plan for degraded wetland and rivers taking into account the needs of vulnerable people and local communities.
- National Target 15: By 2021, initiate implementation of restoration plan for degraded ecosystems, especially, forestlands and wetlands for addressing climate change mitigation, adaptation and combating desertification.
- National Target 18: By 2021, traditional knowledge, innovations and practices of local communities or ethnic groups will be recognized and documented.

46 The project will contribute to the **2030 Agenda for Sustainable Development** and achievement of the its goals, notably:

- SDG 5 Gender Equality [Target 5.5: Ensure full participation in leadership and decision-making]
- SDG 13: Climate Action [Target 13.1: Strengthen resilience and adaptive capacity to climate-related disasters]
- SDG 14: Life Below Water [Target 14.2: Protect and restore ecosystems; Target 14.4: Sustainable fishing]
- SDG 15: Life on Land
  - Target 15.1: Conserve and restore terrestrial and freshwater ecosystems
  - Target 15.2: End deforestation and restore degraded forests
  - Target 15.5: Protect biodiversity and natural habitats
  - Target 15.8: Prevent invasive alien species on land and in water ecosystems
  - Target 15.9: Integrate ecosystem and biodiversity in governmental planning

47 The proposed project will also complement the Post-2020 Biodiversity Framework that is expected to apply a "theory of change" approach to help plan, implement and evaluate the impacts of the actions taken and allows diverse stakeholders to articulate challenges, work together towards common goals, and ensure that collective actions are aligned towards achieving the greatest possible impact

III. STRATEGY

48 The above baseline established for Tanguar Haor and other wetlands is impressive with respect to the governance structure, rooted in ecosystem-based management at the community level and managed by a Union Coordination Committee at the lowest level of government that is now approved under the 2016 ECA Management Rules. With the ECA Management Rules in place, there is a timely opportunity to: develop and institutionalize a sustainable financing strategy that will address the current acute shortage of staff resources and technical capacity across the wetland; establish a sound scientific framework for managing and monitoring the condition of wetland resources; and reach out to the private sector to promote social and environmental responsibility as good practice to conserve ecosystems and species. The GEF increment will be fundamental to financing interventions necessary to effect the above changes to the current baseline and promote a long-term approach to sustain favorable ecological conditions in Tanguar Haor.

49 The **Project Objective** is: ***to promote sustainable use of wetland resources by local communities to***

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conserve globally significant biodiversity, improve ecosystem services and secure local livelihoods in Tanguar Haor. The intent is to promote an integrated community-based ecosystem management approach for the Tanguar Haor, through appropriate policy, governance, institutional and financial arrangements. It will empower local resource users to manage the wetland resources, where local communities (in particular, fisher folk and wetland resource collectors) take collective responsibility for managing the wetland. This would entail innovative community management decision-making structures for management of the wetland, including in particular collective agreements for setting up seasonal sanctuaries or no-take zones to protect fish breeding and spawning, defining sustainable harvest limits and species to be harvested, regulation of fishing gear and harvest times, and other measures that the community deem necessary to maintain the favorable ecological conditions in the Tanguar Haor. Importantly, the ecological conditions determined as being necessary to maintain (or first restore and then maintain) the salient biodiversity features of the wetland will be defined in the framework and provide a basis for monitoring compliance towards achieving such conditions. It is further meant to strengthen collaborative community-based ecosytem management using ecological criteria as a basis for monitoring the status of wetland and its resource condition and, ensuring compliance towards favourable condition is progressively achieved. This approach should enable DoE to overcome previous difficulties associated with the multiple ownership of land that tends to prevail in the Haor.

50 Operationalization of an integrated community-based ecosystem management approach is intended to safeguard Tanguar Haor's biodiversity, ecosystem services and productive systems (i.e. agriculture and fisheries) from over-exploitation, pollution, invasive alien species, climate impacts and other development threats. The project recognizes that Tanguar Hoar, which has significant biodiversity and provides key ecosystem services, underpin the lives and livelihoods of local communities that depend directly or indirectly on the Haor's resources and that implementation of such an integrated strategy is integral to achieving a balanced approach to development and community resource use of the wetland resources. To achieve this objective, the GEF alternative aims to (i) take into account the interconnectivity of wetland components (freshwater evergreen swamp forests, reed areas, seed banks, *beels* and riverine ecosystems) as an integrated, inter-linked and complex ecosystem that needs to be managed for their various interactions; (ii) ensure that relevant agencies and actors have adequate capacities to promote integrated ecosystem-based management approaches and tackle the threat to wetland biodiversity and resource management; and (iii) advocate science based approaches and use of traditional and good practice knowledge systems to restore degraded wetlands and prevent degradation of existing wetlands while promoting sustainable agricultural, fisheries and livelihood practices. The project builds on past experiences to incorporate an ecosystem-based management approaches to planning and management of Haor that takes into consideration the diverse needs and dependencies, thus seeking the following options: (i) promoting multi-sectoral and multi-sector coordination; (ii) strengthen institutional structures at national, district, Upazila and union levels' including Village Conservation Groups (VCGs); (iii) diversifying financing beyond the government to include the private sector (industry, housing, etc.); strengthen sustainable community resource use and livelihood improvements to enhance local incomes; (iv) capacity and skills development at all levels; and (v) monitoring and enforcement. All of these actions are essential to ensuring an integrated and multi-sector and multi-stakeholder approach to improved management of ECAs, which the project design tries to address. The project will be implemented over the project period based on the following principles:

- Promoting a holistic, multi-sectoral and integrated ecosystem-based management approach to resource governance to enhance ecosystem services and maintain ecological integrity of the wetland ecosystems;
- Defining a set of national agreed standards for monitoring the achievement of favorable ecological conditions in ECAs that is enforceable by appropriate legislative means and can be monitored by simple indicators;
- Supporting a participatory, consultative bottom-up planning and management approach for maintenance and restoration of favorable ecological conditions in the Hoar that focuses on national, district, upazila, union and local community priorities and decisions that integrate conservation, sustainable resource use, climate risk management and livelihood outcomes;
- Ensuring consultations with local communities and resource dependents before negotiating

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investments and restoration activities and ensuring that any displacement of incomes or access to resources are adequately compensated through alternative livelihood improvement plans;

- Enhancing capacities of communities, private landowners and private sector to restore and/or maintain the good condition of the Haor;
- Strengthening the capacity of planning and research agencies to support the proposed local initiatives with technical expertise, improved interagency coordination, information system, enforcement capacity, supporting networks for participatory planning, and stronger mechanisms for implementation of plans;
- Ensuring that in its development and implementation, gender is mainstreamed so that the project contributes to equality and equity, through the creation of equitable opportunities and benefits for both women and men;
- Developing, promoting and ensuring an adaptive management approach for the proposed project that progressively identifies threats to biodiversity and wetland habitats and associated ecological, demographical, climatic, market, technological and economic challenges and provides support for iterative strategies to address them, monitoring and assessing the effectiveness of conservation measures and proposing new approaches as necessary; and

51 The Project strategy entails a sequencing of project activities that ensures that foundational activities are completed first, to the extent feasible, or in parallel, such as (i) strengthening governance and coordinating mechanisms at wetland level to facilitate planning ecosystem-based management and compliance monitoring in promoting the application of favorable ecological framework for the wetland; (ii) capacity improvements to strengthen the application of ecosystem-based management framework in Tanguar Hoar; and (iii) a sustainable financial mechanism to support new and innovative financial mechanisms to maintain the favorable ecological conditions in the Haor. On-the ground interventions in Tanguar Haor in Component 2 is intended to achieve favorable ecological conditions that will build on the extreme wealth of work already done in the Haor and the foundational activities established under Component 1. In order to ensure a clear, practical and cohesive implementation strategy at the Haor, the proposed project will engender a two-pronged, mutually enforcing approach of (i) strengthening existing management structures for implementation and enforcement of the ecological framework in the Tanguar Haor, and (ii) demonstrating a participatory community-based management approach to tackling the pressures and threats to wetland conditions and its attendant biodiversity and habitats while

52 In order to ensure that investment activities (Component 2) in the Tanguar Haor demonstrate tangible impacts and outcomes, the project will attempt to locate a suitable mix of project investments in the selected priority locations within the Haor, where tangible impacts on wetland biodiversity conservation and threat reduction can be demonstrated. The strategy of using priority locations as the basis for confining project on-the-ground investments is based on the premise that conservation of biodiversity within the priority locations and maintenance of critical species and ecosystem linkages will ensure that the results and best practices can be translated to other parts of the wetland as well. This will particularly necessitate that ecosystem restoration, sustainable agriculture and fisheries and sustainable livelihood and community and private sector related bio-friendly business solutions are developed and implemented in an integrated fashion within the priority locations.

53 The **Validation Workshop** was preceded by a national consultation workshop(s) with key stakeholders hosted by MoEFCC in Dhaka and the Field Districts. The mission schedule, summary of key findings and list of people consulted can be found in Annex 19.

54 The project objective will be achieved via three inter-related and complementary strategies (Project Components comprising Outcomes and Outputs) that focus on removing/reducing the four key barriers to accomplish the long-term solution (**Figure 1)** by means of intervention pathways shown in the theory of change diagram (**Figure 2)**. Indicators and assumptions for the accomplishment of expected Outcomes under the respective Components are given in the Project Results Framework.

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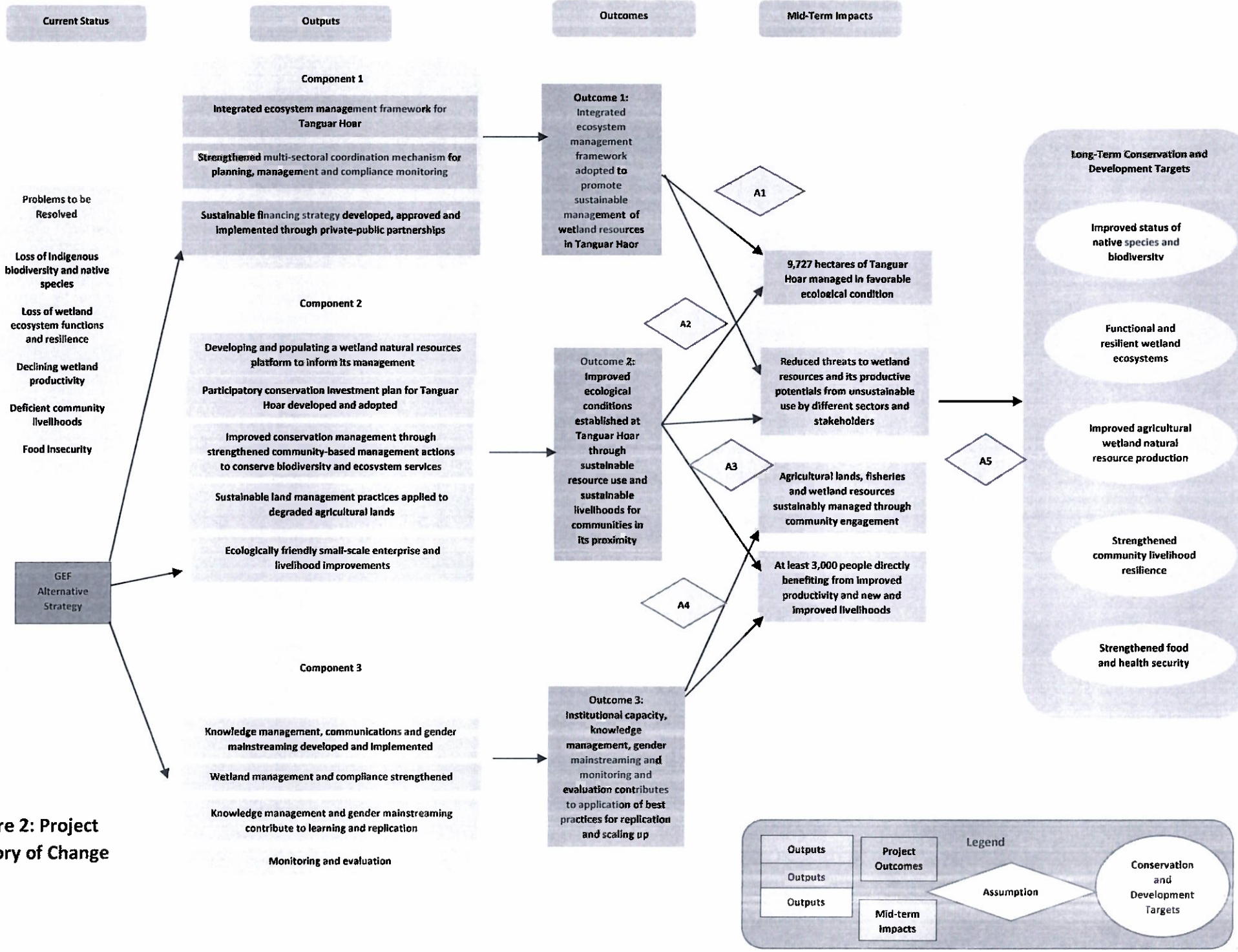


Figure 2: Project Theory of Change

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Table 3: Key assumptions underpinning the Theory of Change

Assumption		Notes and References
A1	There is political support for the strengthening the legal, governance and institutional framework for mainstreaming of sustainable wetland management activities into planning and management processes at district, upazila, union and community levels.	The Bangladesh government is placing a strong emphasis on preventing, controlling, and managing unsustainable activities in Environmental Critical Areas (ECAs) through effective implementation of the 2016 ECA Management Rules. The government's commitment towards ensuring sustainable management of ECAs, including the Tanguar Hoar is expressed in the NBSAP as part of the strategic priorities and supported by specific actions. Since the adoption of the NBSAP, a number of government and donor funded activities have been implemented in the ECAs, and in the Tanguar Hoar, in particular a governance structure has been established and a number of Village Conservation Groups are functional.
A2	The enhanced capacities of governmental and stakeholder institutions and supporting collaboration, coordination and technologies are sufficient to create a viable and effective change for achieving favourable wetland conditions	In line with the above, there is an increasing realization among the project partners that to achieve an effective and cost-effective wetland management implementation there is a need for cross-sector coordination and collaboration, including with local community groups. To support this, a critical aspect of the project is to ensure such coordinating bodies, particularly at the national, district and sub-district levels are established and maintained. Through the work (and through building of capacity) of the ECA coordinating bodies, wetland management efforts towards more holistic responses to sustainability of the wetland will be ensured.
A3	The increased capacities of local stakeholders, including fishers, farmers, graziers and other wetland dependents ensure sustainable and appropriate use and management of wetland resources that results in reduction of threat to local endemic species and ecosystems	The Government of Bangladesh is willing and pro-actively promoting co-management arrangements with local wetland communities and to develop partnerships with the private sector. To enable this to happen, there is government realization that adequate resources are invested in quality training for fishers, farmers, graziers and resource users and government staff in the surrounding districts and communities. To enable them to benefit from best practices of wetland management from regional and national experiences. This will enable suitable techniques being tested and implemented in the project targeted wetland. The lessons learned including the feedback on community planning and usage will be channeled back into the collective knowledge base and will be used in other areas in Bangladesh.
A4	Increased awareness and knowledge management expand political understanding and actions supporting wetland conservation and management within the country	The importance of actively addressing wetland resource management is recognized by the government of Bangladesh, based on the legislation, regulations and financial support that is being provided to ECAs. The project promotes increased awareness, a monitoring and enforcement system and information and knowledge promotion. If this is achieved, it will provide Bangladesh with a tested approach to direct and support wetland conservation efforts throughout the nation. It is also recognized that creating awareness and support for wetland conservation is underpinned by a well maintained information and monitoring systems that is readily accessible to all stakeholders, and meets the technical and information needs for sustainable management of the Tanguar Hoar resources.
A5	There is stability in the economic and political global environment	The achievement of long-term impacts will likely be achieved if the assumptions from 1 through 4 are effective. However, this achievement is ensured based on the following assumption, namely that national and international macroeconomic conditions and other natural or man-induced factors remain stable and manageable, so that this does not shift government priorities and that there is no financial implications that might endanger adequate resourcing for management of the wetland in favorable environmental condition.

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Project Area

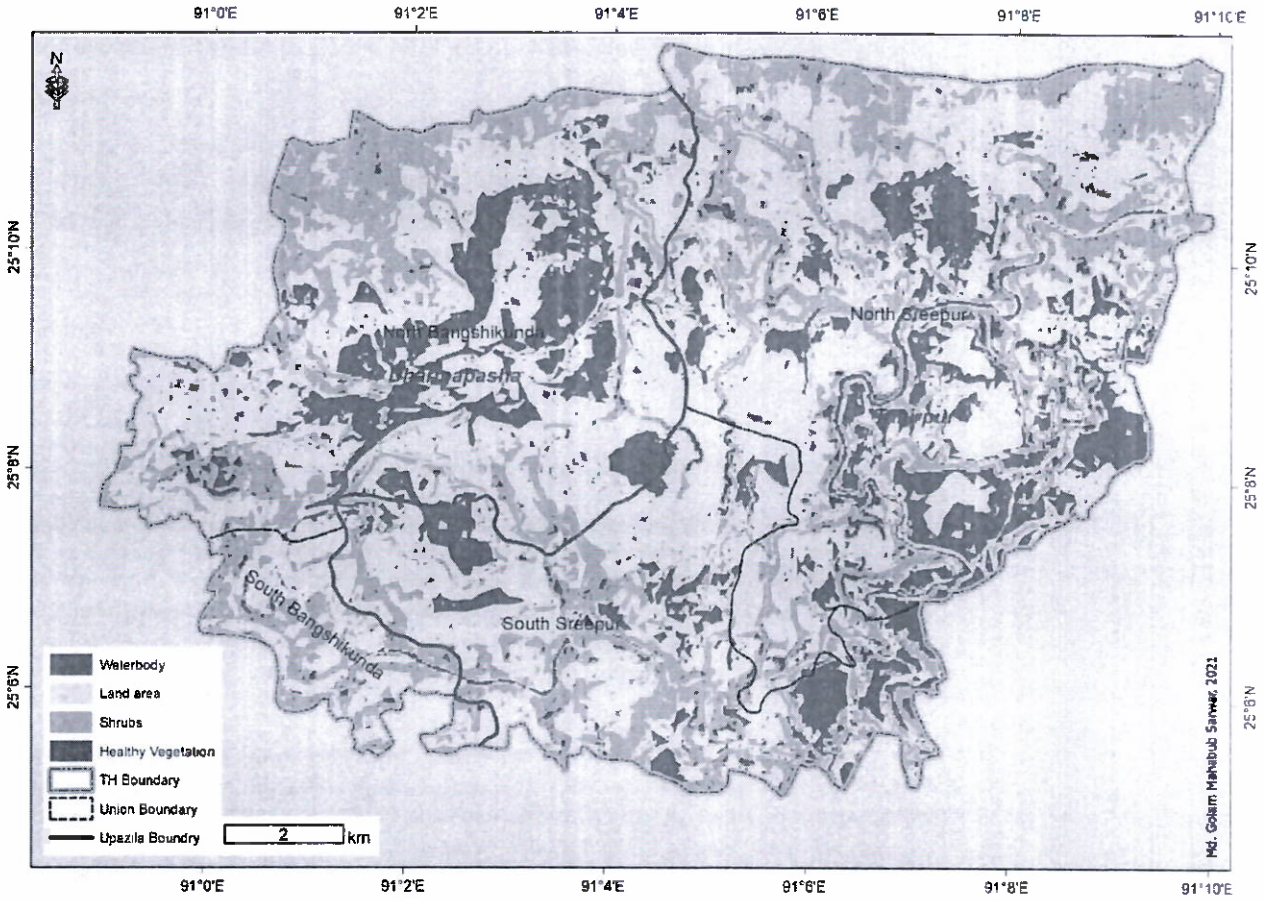


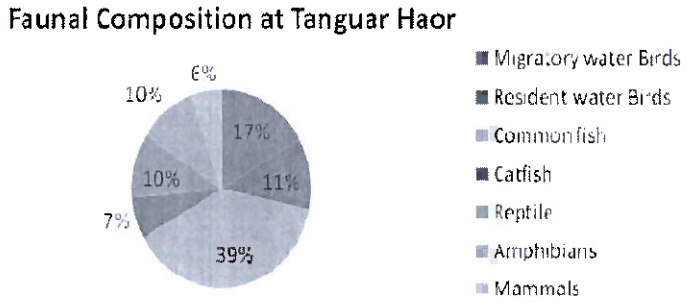
Figure 2: Map of Tanguar Hoar

Table 4: Key Characteristics of Tanguar Hoar

Key Parameters	Description
Geographic Location	**Geographic Coordinates:** 25 ° 12 ' 2.572 " N to 25 ° 5 ' 47.989 " N Latitude 90 ° 58 ' 49.426" E to 91 ° 10 ' 0.018" E Longitude Tanguar Haor is situated in the northern part of Bangladesh. It covers an area of approximately 9,727 ha, situated next to the Indian border. In the north, it shares a 17-kilometer border with Nongstoin (Meghalaya), India. The geography of the haor's landscape is uneven. Tanguar Haor is part of the flood plain complex of the Surma-Kushiyara river system. These two rivers are key tributaries of the Meghna River and are linked to the Dhanu, Baulai, and Jadukata rivers via the Tanguar Haor floodplain. The river area of Tanguar Haor is 359 ha. Water bodies cover around half of Tanguar Haor's territory, with cropland accounting for remaining's 31%. The haor's swamp forest area is another distinctive ecological feature of the haor ecology, which plays an important role in fish production and serves as the country's "mother fishery." It was designated as Bangladesh's second Ramsar site in 2000 due to its ecological significance.
Biological Importance	Tanguar haor is abundant in both terrestrial and aquatic resources. It has 46–50 beels of different sizes. There are 2802.36 ha of permanent water bodies. This haor is home to a large number of

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faunal species. The haor has abundant in fisheries species too. There are approximately 141 freshwater aquatic species available in the area. Besides, it has full of phytoplankton range and other aquatic resources. The haor is home to approximately 208 bird species, 135 fish species, 92 water bird species, and 98 migratory bird species. There are 22 'CITES listed' species and 10 'IUCN Red Book listed' species in the haor.



The-faunal-composition-found-at-Tanguar-haor (ResearchGate)

Tanguar Haor is an important conservation site because it is the country's only natural freshwater wetland with various type species, especially the fisheries resources. Tanguar Haor's fishing resources are abundant and vital in terms of fish productivity, breeding support, fish habitat, economic development, and livelihood support. In terms of fish species diversity, the haor is essential. A variety of fish species can be found. Around half of Bangladesh's 260 freshwater fish species are found in 35 families. Rui, Catla, Men, Mrigal,Tengra, Chapila, Kalibaush, Chingri, Gonia are the dominant fish species in Tanguar Haor.

Forest coverage: Tanguar Haor differs significantly from other wetland types due to its diverse physical and biological characteristics. This ecosystem provides the most productive habitat for biological species, including swamp forests, reed beds, floodplains, and perennial open water bodies. Its reed beds and swamp forest ecosystems cover 1,058 hectares of vegetation. From April to October, about 3447.65 hectares of fallow land are flooded. With the help of grass, bushes, and other plants, this fertile fallow area is transformed into greenery. This wetland ecosystem's biodiversity provides critical habitat for a variety of hydrophytes, aquatic creatures, birds, and mammals. It is one of Bangladesh's richest locations in terms of sheer biological species diversity.

At least 150 wetland plant species, 141 freshwater fish species, 11 amphibians, 34 reptiles (including 6 turtles, 7 lizards, and 21 snake species), 208 bird species, and 19 mammal species call it home. It is home to some of Bangladesh's last remaining swamp forests and is one of the few remaining haor ecosystems with a more-or-less natural hydrological regime. Several plant species are used as traditional medicine by the natives. People utilize these herbs to treat diarrhea, fever, jaundice, headaches, and a variety of other diseases.

The haor serves as a source of animal fodder for the locals. For grazing livestock, they have traditionally used the fallow lands and open spaces surrounding rice fields and beels. For firewood, protecting kandas, thatching materials, and animal feed, the local community used to collect grass and reed from the Chanmohol of the haor, along the perimeter of the beels. Tanguar Haor is a great environment for waterfowls.

Water coverage: The Tanguar Haor is part of a floodplains complex in northeastern Bangladesh. Water bodies make up around half of Tanguar Haor's land. It is submerged in water during the monsoon season. During the dry season, water recedes from the rivers. This wetland serves as a source of fisheries, irrigation, biodiversity, breeding grounds, flood control, and navigation, among other things. During the winter, these bodies of water attract a large number of birds and act as vital breeding grounds for a variety of fish species.

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Sociological Importance and Threats	Tanguar haor is extremely important in terms of both ecology and socioeconomics. The wetlands are rich in biodiversity and have significant ecological, economic, and social importance in terms of maintaining the livelihood security of millions of disadvantaged people. Many poor people are directly dependent on the wetlands. They earn money, and it directly contributes to our economic system. About 56,000 people from 10,205 households in 88 communities on its outskirts are directly or indirectly (93%) dependent on this natural resource base for their daily livelihood possibilities. Tanguar Haor consists of 46 villages and approximately 120 beels. It is not only ecologically significant, but also socioeconomically significant because it provides a source of income for over 70,000 people. The majority of people who live in Tanguar Haor are impoverished. They lead very poor lifestyles. They dependent on these natural resources for their daily livelihood possibilities Fishing is the main source of income in this area. Aside from that, farming, livestock rearing, and business are the most common occupations. According to a survey, 30.1% of people rely on fishing, 12.9% on farming, 8.6% on livestock, and 8.6% on business. The majority of them work in fishing during the monsoon season and they engage in agriculture during the dry season. People depends on natural resources for collecting firewood. Cattle and buffalo dung, crop wastes, homestead trees, swamp forest wood (mostly koroch and hijal) and dhol kalmi, as well as all grasses, including common reed (example, nal khagra), are the main sources of fuel for the local community. They collect these fuel materials from TH area. Tanguar Haor's water supply is used for a variety of reasons by the communities. As a result, water has become an integrated part of the villagers' daily lives (for example, cooking, washing, and bathing) as well as for agricultural purposes. It also provides transportation facilities for the locals as well as for the visitors. The water from the beels is also used to irrigate rabi (winter) rice as well as other crops, including mustard, caraway and other crops. Safe drinking water and latrines are common and critical issues in this area. Most people in this area use hanging latrines, which is very unhygienic. Many of them drink haor or river water without purifying the water. Burning oil, pesticides, hanging latrines, and coal washing were the main drivers of environmental degradation in the haor area, resulting in socio-economic changes, health issues, and environmental disruption. Flashfloods are a common occurrence in this area, and as a result, agricultural losses, livestock infections, property damage, and health issues affect many people during, after, and before the flood, affecting the socio-economic system badly. **Threats** • Indiscriminate catching of fisheries resources. • A large number of migrating birds flock to this wetland over the winter. Water birds are hunted by the locals and sold in the market. • Use of swamp forest for fuel wood; • Aggressive tourism developed recently. • Plastic pollution. • Flash flood affects agricultural and fisheries resources • The majority of local residents believe that natural resources such as fisheries, swamp forests, and biodiversity have declined.
Institutions	Most important Government agency's presence in Tanguar Haor is Upazila administration, under the administrative jurisdiction of Sunamganj District. Being an ECA, MoEFCC is the main authority of Tanguar Haor. Department of Environment (DoE) is designated by MoEFCC to take care of the ECA. However, because of an enormous fish stock, Department of Fisheries is an important department in the area. Agriculture, water, local government, and tourism are other important sectors. **Department of Environment (DoE):** Under the MoEFCC, DoE declares and maintains ECAs, enforces legal instruments of environment, monitors overall environmental matters and provides various types of environmental training sessions and awareness programs. **Department of Fisheries (DoF):** DoF It deals with fisheries resources of the Tanguar Haor area. It deals with the entire management and monitoring system of hoar fisheries, and takes care of the haor dependent community.

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LGED: LGED is involved in rural development. It is primarily concerned with the marketing management and transportation improvements of the haor area. It deals with the stakeholders too.

Department of Social Services (DSS): It deals with the Haor area's social protection. DSS provides Social Safety Nets services. Much development-related work is done by this sector.

Ministry of Water Resources (MoWR): It deals with the Haor area's water resources. It monitors the early warning system. It also deals with flood control, riverbank erosion control, drainage systems, delta development, irrigation, and land reclamation of the Haor area. It manages several types of environmental activities too.

Haor Development Board: It deals with the Haor area's sustainability. It also monitors the Haor area's livelihood system and flood management system.

NGOs: Many development agencies are working in the haor area, such as IUCN, CNRS, BRAC, etc. NGOs are involved in biodiversity, environment, as well as community development.

IV. RESULTS AND PARTNERSHIPS

55 The **Long-Term Impacts** of the Project Objective, sometimes referred to as *global environmental benefits* but generally realized post-project as in this case, will be:

- The Tanguar Haor is maintained in favorable ecological condition, including associated endemic and/or threatened species;
- The improved well-being and resilience of local communities living in and around Tanguar Haor; and
- A national strategy and plan for scaling up project successes to other environmental critical areas in the country.

56 **Global environmental benefits,** post-project will be improved management and compliance monitoring of 9,727 ha of inland freshwater wetland. The project's global environmental benefit will be generated as a result of the project's intervention to introduce an ecosystem-based framework to the planning and management of the Tanguar Haor. The increment to be achieved from the additional GEF funds is summarized below in Table 5.

57 While wetland projects, including in the Tanguar Haor have been subject to project interventions for many years and, while their conservation status has improved to some extent, they continue to be project dependent (i.e. sustainable solutions have yet to be realized). The fundamental issue is enforcement of measures to protect the condition of the wetland. To enable this, it is necessary to understand the following: (i) the current environmental and ecological status of the wetland and how the status of the wetland is changing over time, in particular in the past ten years or so, under the changing management scenarios in the wetland, in particular following the range of actions that have been initiated to manage the wetland; (ii) the status of the biological diversity and ecological parameters, including the species and/or habitats for which it is nationally/globally important for biodiversity conservation and provision of ecosystem services; and (iii) the additional measures necessary to restore and/or maintain the ECA to good ecological condition. Based on this knowledge, the key partners (DOE, district, upazila, union council and communities) will be able to strengthen the management measures necessary for the uses to restore and/or maintain the good condition of the wetland. This would also require a monitoring framework that monitors the status of the wetland to ensure that its good condition is being maintained or attained within a specific timeframe. Such monitoring provides the ability to track implementation of the management agreement and, if necessary, penalize the responsible party for non-compliance.

58 Underpinning the monitoring, therefore, is a hydrological framework that can validate that agreed standards for the Tanguar Hoar, based on physical (e.g. water clarity), chemical (e.g. levels of oxygen and pollutants such as nitrogen and phosphorus) and biological (e.g. algal mats, aquatic plants and animals)

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indicators that can be maintained. This hydrological framework would need to be validated and improved, applied to the Tanguar Haor by way of specific project interventions. Thus, the project intends introducing a sound scientific approach to Haor management in a consistent manner and used as a basis for enforcing compliance with the management measures prescribed by DoE in consultation and agreement with the wetland users. Stakeholders, particularly local communities, need to be introduced to this science as part of the management planning process and their practical experience in managing their wetlands for agricultural, fishery and other purposes should be taken into account and contribute to the design of management interventions. A further dimension to this particular project is its engagement with the private sector, something not previously fully addressed but a necessary element of a holistic approach, given that the private sector is a significant polluter of the wetland.

Table 5: Summary of incremental cost rationale and global environmental benefits

Baseline practices	Alternative to be put in place	Project impact
• The unsustainable use of wetland resources will likely continue without continuing GEF project investments; nor will there be any robust, transparent mechanism for monitoring status quo to effectively reach desired ecologically favorable conditions • ECA responsibility is vested in DoE but land tenure often lies with third parties (e.g. Forest Department). • ECA Management Rules finally approved in 2016, underpinning the institutionalization of the governance system that has yet to be mainstreamed across activities in Tanguar Haor • Limited financial resources and capacity continue to hinder sustaining activities within the Haor. • Limited capacity to coordinate among communities and multiple sectors of government as well as to reach out to local communities (especially farmers and fisherfolk) and other users of wetland resources • Inadequate institutional support for co-management with local communities	• Financially viable ecosystem-based management framework designed, mainstreamed across Tanguar Haor ECA and institutionalized (based on ECA rules and experiences available in the country) • The ecosystem-based management framework will require empowering local resource users to manage the wetland resources through co-management arrangements, where local communities (in particular fisher folk and wetland resource collectors) take responsibility for managing their respective parts of the wetland. • Considering freshwater evergreen swamp forests, reed areas, *beels* and connecting riverine ecosystems as a complex ecosystem. • Promoting an alternative conservation-oriented natural resource-based economy within and around the wetland and testing sustainable financing mechanisms, with emphasis on private sector partnerships with local communities • Private sector engaged to address pollution of water from agricultural run-off from pesticides, oil spills and chemical fertilizers. • Institutional and technical capacity of DoE strengthened to put in place measures to address threats to Tanguar Haor and responsibilities of different stakeholders to restore and	• Ecosystem-based management framework developed and applied to Tanguar Haor resulting in up to 9,727 ha of wetlands being managed in compliance with criteria that will result in 'favorable ecological condition' being achieved. Scaling up of management effectiveness to 2-3 other ECAs (covering around 3,000 ha) in the country based on learning from Tanguar Haor. • 400 hectares of freshwater evergreen swamp forest restored (additionally improved co-management regimes will ensure preservation of the biological value of the entire wetland area of 9,727 ha and its constituent parts that includes 735 ha of existing evergreen swamp forests, 475 ha of reed vegetation, 3,943 ha of aquatic vegetation habitat and riparian areas and 260 ha of seed banks, all of which are the direct BD benefits generated through the project and contribute to maintenance of the biological and ecosystem value of the wetland). • Stable or increased populations of key species • Local livelihoods benefit substantially from a range of ecosystem goods and services (to be quantified during project preparation stage) at Tanguar Haor. At least 25% of the targeted beneficiaries would be from vulnerable populations.

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• Limited community access to public services and land tenure insecurity) leading to diverse conflict and priorities amongst the key stakeholders. • Continued degradation of the wetland ecosystem in the baseline situation.	maintain the ecological integrity of the wetland • Transparent monitoring system established for Tanguar Haor to track progress towards achieving favorable condition in the wetland • Improved capacity and extension promoting best practices in agricultural lands; • Improvement of soil and water quality of the small-holder farmers; • Agro-forestry and sustainable agricultural and home garden models and stewardship contracts will be promoted to secure broad community support for conservation solutions.	• GHG benefit of 578,391 tCO_2/20 years • Information management system established for Tanguar Haor for monitoring 'favorable ecological condition' • Improved water quality in Tanguar Haor (by 20-30%) resulting from engagement with private sector specifically to address pollution of water by agricultural run-off, oil spills from diesel boats and household wastes resulting in improved water quality for small farmers and wetland residents • 500 ha of production areas (agriculture lands, home gardens and agroforestry) under improved sustainable management regimes. Additionally, 349 ha of rivers/streams and associated riverine banks that crisscross the wetland, another 475 ha of reed banks, and extensive drawdown of fallow lands of which 587 ha represents pasture/grazing areas that is exposed and grazed in the dry season will be maintained against degradation through bank and gully erosion, wave action, overgrazing and land and vegetation clearing. This makes a total of 1,911 ha. • DoE enabled to resource Tanguar Haor in terms of adequate staffing with relevant competencies as a result of developing and implementing a Sustainable Financing Strategy.

59 The GEF funding requested by the Government of Bangladesh will be used to achieve the Project Objective through three inter-related **Component/Outcomes**, as described in **Section III**. Each Outcome is elaborated below, together with its respective outputs. The respective Objective and Outcome level indicators, with baselines and targets, are defined in the Results Framework (**Section VI**).

Component 1: Integrated ecosystem management framework for Tanguar Haor

Baseline conditions (without GEF project):

60 Although 2016 ECA Management Rules provides guidance and a mandate for establishing institutional governance arrangements for management of the ECAs, including Tanguar Hoar and there are functional

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community-based structures in place, there remains considerable uncertainty about what co-management entails, how it functions, what is the scope of its purview and what precisely would be the respective prerogatives of government and communities under a co-management scheme. Further the co-management model must deal with many challenges, such as providing legal access to wetlands while maintaining nature conservation. The establishment of the first requires the willingness and commitment of the different government partners, at the national, district and local levels for implementation and enforcement of management prescriptions, as well as to reach out to local communities (especially farmers and fisher folk) and other users of wetland resources (including the private sector). The limited coordination and mutual trust between the relevant public agencies and between community organizations and the government (at all levels) has limited the full, and effective participation of the community (through the community leaders) in management and decision making and in the delegation of authority for promotion of effective co-management of wetland resources. Inadequate institutional support and limited avenues and access to external sources of funding for local community engagement due to limited capacity for local resource mobilization further constraints effective community co-management. Another essential thing, particularly in wetlands conservation, is up and downstream management. In other words, controlling issues evolve from outside but affect internal resources. Both up and downstream issues need to be addressed under the co-management governance, despite its origin from outside the territory.

61 Without the GEF project, the multi-sectoral and multi-stakeholder ecosystem-based model will not be implemented to its fullest potential that constraining the management of the wetland resources. It would consequently lead to the decision-making on development plans that will continue to be planned and implemented without full recognition on its impacts on the wetland, or in other words not be effectively integrated to enhance the favorable ecological condition of the wetland.

Alternative (with GEF project):

62 Under the GEF alternative, Component 1 will help strengthen the enabling technical and institutional capacity for enhancing the development of an inclusive and integrated ecosystem co-management framework that represents a multi-sector and multi-stakeholder integrated management approach to achieve integrated ecosystem management[25]. This approach intends to work across sectors and interests to manage species and habitats, economic activities, conflicting uses, and the sustainability of resources within the Tanguar Haor (that would be of replication value in other wetlands across the country) and allows for consideration of resource tradeoffs that help protect and sustain diverse and productive ecosystems and the services they provide. An integrated ecosystem co-management framework for Tanguar Haor will be developed and established along with a system to ensure monitoring and compliance through a wetland-specific information system. Community-based approaches will be designed, using incentive and disincentive measures as necessary to ensure that wetland resoures are not overexploited.

63 The ecological conditions needed to restore and maintain the salient biodiversity features of the Tanguar Haor will be specified in the framework and provide a basis for monitoring compliance. The project will support this shift towards community-based ecosystem management, using ecological criteria as a basis for monitoring the status of wetland and progressively ensuring compliance. This approach should enable DoE to overcome previous difficulties associated with the multiple ownership of land in the Haor and monitor compliance by the landholders in meeting the agreed prescribed conditions for safeguarding the Haor. This component lays the foundation for piloting public–community–private partnerships within the Tanguar Haor (Component 2) and for applying a strategy for scaling up in other wetlands in the country (Component 3).

[25] IEM is an ecological approach to natural resource management that aims to ensure productive and healthy ecosystems by integrating social, economic, physical, and biological needs and values

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Outcome 1: Integrated ecosystem management framework adopted to promote sustainable management of wetland resources in Tanguar Haor.

64 Outcome 1 is focused on developing a co-management framework for maintenance and/or restoration of Tanguar Haor to a good environmental condition that is based on sound science directed at maintaining, or first restoring, their salient biodiversity features (genes, species and ecosystems) using a set of indicators and respective targets to monitor and, as necessary, enforce compliance.

Output 1.1: An integrated ecosystem management framework[26] for planning and management of Tanguar Haor designed and adopted

65 An integrated ecosystem co-management framework for planning and management of the Tanguar Haor designed and adopted with clear rules to guide the management of the wetland and a set of indicators for monitoring the effectiveness of the management measures (e.g. water quality, species diversity and population size and other environmental parameters). The ecosystem-based co-management framework could be used as successful tool not only to conserve existing wetland assets, but also as a means to attempt to reverse or rebuild the ecological condition of the wetland. This approach has clear benefits over a more traditional PA based approach that is species or habitat focused to address a site holistically, addressing a broad range of environmental concerns. The framework will be developed within the provisions of the 2016 ECA Management Rules to: (i) maintain or improve the prevailing natural conditions and biodiversity of the wetland; (ii) to manage and reduce contamination and degradation of the wetland ecology and environment; (iii) to remove threats to wildlife, including birds and fishes, in particular; (iv) to improve the livelihoods and benefits to local communities; and (v) to maintain the pristine value of the wetland, so as to be enhance the recreation and cultural value of the wetland to local residents and the national and international community, at large. The important aspect is to establish achievable and practical targets for the wetland that are time-bound, written into monitorable agreements that ensures delivery of necessary actions, and enforced, either through mutually agreed cooperative agreements with local communities, private sector entities that use or depend on the wetland, and local and district level government entities or other legal means. The following are key indicative activities:

1.1.1 The project will provide **national technical expertise to establish a baseline of key parameters** for Tanguar Hoar, including, but not limited to ecological (habitat quality, fish populations, faunal populations, including if possible invertebrate aspects, plant and algae communities, avian fauna, hydrographs, etc.), habitat elements (nutrient balance, flow regimes, nutrients, oxygen, indicators of pollution and agro-chemicals) and socio-economic parameters (livelihoods, productivity parameters, etc.). This baseline exercise will use available information that is complemented by rapid assessment to assess current conditions and evaluate recent trends;

1.1.2 Based on the above baseline assessment, **a wide suite of environmental criteria would be established that would help evaluate the ecological health of the wetland and establish realistic targets** to be achieved on a time-bound scale. The targets would be based on highlighting the factors that have the greatest impact on the ecosystem as priorities for ameliorative actions, recognizing that some priorities would be more difficult to achieve than others. To achieve this framework would require reaching a common agreed vision for the wetland, that is realistic, time-bound and defined within the existing capacity, financial, social and institutional constraints that operate at the wetland. Setting environmental criteria and targets would require assembling expert judgement, including qualified researchers,

[26] An integrated ecosystem management framework is intended to enhance favorable conditions in Ecologically Critical Areas (particularly wetlands) by management of anthropogenic challenges in order to enhance river-floodplain connectivity, conserve the aquatic-terrestrial transitional zone, reverse changes in land use, reduce land degradation and salinity, ensure sustainable harvest of fish and wetland resources, promote sustainable agriculture and improved livelihoods, reduce use of wetland resources as sources of energy, reduction of IAS and management of climate impacts

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environmentalists, Scientific Advisory Panel that will advise and guide the MOEFCC with respect to the planning, monitoring and enforcement of the integrated ecosystem-based co-management framework for the Tanguar Hoar. As an example, targets might include quantitative populations of endemic fish or macrophytes, percentage cover of waterweeds, riparian cover or reed banks, target levels of water quality indicators, pesticide levels, etc. The targets should be subjected to cost-benefit analysis and assessment of wider impacts;

1.1.3 Based on the integrated management framework, **different institutions, stakeholder groups and private sector that is suited to deliver the different objectives** and/or targets would be identified and assigned to the achieve the framework, including individually and/or collectively as resource users or resource impact groups;

1.1.4 In addition, an assessment will made to determine, if **any policy, legislative or institutional changes are required to achieve the assigned targets;**

1.1.5 Once the time bound framework is agreed upon through a participatory and consultative process, **an agreed monitoring program/framework** would be designed to access progress towards achievement of agreed targets, along with institutional and reporting requirements and mechanisms to address feedback and adaptive management mechanism. The monitoring framework will cover: (i) evaluating and tracking wetland health to assess whether or not that status is changing for better or worse under existing management regimes; (ii) understanding if prior healthy status of ECAs before it became ecologically degraded, including the species and habitats for which it is nationally/globally important for biodiversity conservation and provision of ecosystem services; evaluating success of wetland restoration efforts; (iii) defining measures necessary to restore and/or maintain the ECA in good ecological condition, including strengthening water quality standards for aquatic life support, drinking water supply, fish consumption and recreational activities and (iv) monitoring the effectiveness of mitigation/management measures in maintaining and restoring the health of the wetlands; (v) ensuring that the framework agreement (and any specific policies and strategies) is subjected to SESA process to ensure its compliance with UNDP SES policies and practices; (vi) that such framework is established following application of FPIC procedures to ensure that there is consensus of all stakeholders, including IPs and such framework will not unduly impact on the rights, cultural norms and practices of the IPs; and (vi) certifying standards for discharge to wetlands or water bodies to enable enforcement. It will be accompanied by guidelines on how it should be applied in a consistent manner to the Tanguar Hoar; incorporated within its management/operational plans; and routinely monitored and reported, using the provisions of the 2016 ECA Management Rules to institutionalize and later replicate the entire process within national and local government administrations. A renowned University could be tasked to develop the monitoring framework and carry out the monitoring. Clear procedures for transparent sharing and access to monitoring information generated through the application of the national ecological standards for ECAs would be developed (refer Output 3.2)

1.1.6 The development and implementation of the collaborative framework will require the **strengthening existing and proposed multi-sector coordination mechanisms** for the Tanguar Haor at various levels (district, upazila, union council and community levels) to address critical resource use and conflict management issues, strengthen ownership at the district and next levels of local governance and develop opportunities for co-management.

1.1.7 From time to time (perhaps at mid-term and end of project and subsequently during the post-project period at least every five-years), to **review progress against the measured criteria and targets** and with the aim of bringing the condition of the wetland to a 'good' status within the agreed timeframe.

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Output 1.2: Strengthened multi-sector coordination mechanisms for community-based planning, management and compliance monitoring applied at national, district, upazila, union and community levels on the basis of Ecologically Critical Areas (ECA) management rules

66 This Output will enable the enhancement of existing modalities for working with various sectors and institutions that have influence on the wetland, working modalities for ECA Committees at the different administrative levels and their individual roles and responsibilities, arrangements for community organization and collaboration, measures for engagement of the private sector and monitoring, accounting and accountability rules. It will be based on further strengthening the operationalization of the 2016 ECA Management Rules, with powers delegated to district authorities to oversee ECA planning, ecosystem-based management and compliance monitoring, as well as to facilitate partnerships with the private sector (e.g. industry, tourism) and communities (e.g. farmers, fishers, etc.). The ECA rules provided for the formation of a National Committee, District level Committee (to provide necessary guidance to the Upazila Committees for development of plans and implementation measures to promote sustainable management of ECAs, coordination, monitoring and overseeing progress in implementation of relevant development plans to protect and conserve the ecological state of ECAs, including promoting livelihoods for local communities and taking legal actions against unlawful activities, the Upazila Committees (that include representatives from the village conservation groups or VCGs) to providing necessary guidance to Union Coordination Committees and VCGs for implementing the agreed development plans relevant to ECA management and to resolve conflicts among different stakeholders involved in ECA management and ECA dependent communities. Upazila Committees are also responsible for assisting VCGs to form cooperative societies and to register them as legal entities as well as made responsible for maintaining proper accounts of the Ecology Management Fund (EMF). The Union Coordination Committees (UCCs) will coordinate and support the VCG activities and provide direction and guidance to enhance the functioning of the VCGs and address specific problems and resolve conflicts at that level. The VCGs formed from members of dependent communities, register as a cooperative society under the Cooperative Societies Act (2001) and be responsible for implementation of development plans in the ECA in accordance with ECA plans, programs and projects. The following is an indicative list of proposed activities under this Output:

1.2.1 Provide national technical support to help **review existing coordination modalities at national, district, upazila, union and community levels to assess effectiveness, track record, mandate and functionality** of these institutional structures to identify gaps and measures needed to revitalize and strengthening the existing ECA coordination arrangements at the different levels. In particular this evaluation will assess the effectiveness of existing modalities for (i) working with various sectors and institutions that impact and influence ECAs; (ii) working practices for ECA committees at each of their respective levels of local administration, with roles, responsibilities and reporting requirements (templates) clearly defined; (iii) working practices for VCGs; (iv) working with the private sector in facilitating the maintenance and restoration of the ecological health of the wetland; and (v) effectiveness of existing monitoring, financial accounting and accountability systems for each ECA committee level and VCGs.

1.2.2 Based on the above review (1.2.1), in collaboration with DOE and decentralized entities, **identify what mechanisms (coordination, capacity, institutional, policy and practices) are needed to be developed or strengthened to enhance and strengthen the effective operationalization of the 2016 ECA Management Rules** at the Tanguar Hoar, in particular to implementation of the integrated ecosystem-based framework and enhancement of co-management regimes of the Village Conservation Groups (VCGs)

1.2.3 Based on analysis conducted through Activities 1.2.1 and 1.2.2, **facilitate the development/strengthening of existing rules/guidelines** (and in accordance with the findings of the SESA carried out under Activity 1.1.5) for improving institutional functioning, strengthening training and skills development for effective coordination and management, identify and

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establish modalities for public-private-community partnerships for resource management in the Tanguar Hoar etc.

1.2.4 Support the institutionalize the National Scientific Body (NSB) that was approved through a gazette notification, comprising 8 members that started working to provide scientific inputs for achieving objectives of Community Based Sustainable Management of Tanguar Haor. The plan was to institutionalize the NSB. However, the activities of HAP were not visible. The project will facilitate the strengthening of the NSB, enhance its capacity and operations and develop clear protocols to generate inputs and collaborate with the development, oversight and monitoring of the integrated management framework for the Tanguar Hoar described in Output 1.1.

1.2.5 In terms of the Tanguar Hoar support capacity building, oversight and extension to strengthen the existing 40 VCGs that operate in the Tanguar Hoar and mobilization and establishment of the additional 34 new VCGs so as to fully cover all villages that are located within and around the wetland. The end result would be the effective functioning of 74 VCGs that will cover co-management arrangements for the extent of the entire wetland and establishment of functional SMART patrol teams.

Output 1.3: Sustainable financing strategy for Tanguar Haor developed, approved and implemented through private-public partnerships

Inadequate and sustainable financing has been a key barrier to delivering an effectively managed of ECAs, including the Tanguar Hoar, in particular because restoration and maintenance costs of wetlands can be very high, particularly if the ECAs is degraded or in a degrading state. While, the Government of Bangladesh has set aside resources through its five-year development planning process, these funds are generally only adequate to meet the core expenditure of government oversight and compliance monitoring. Although, the five-year plans calls for a new approach to industrial pollution and waste management, with zero discharge of industrial effluents, restoration of urban wetlands and protection of at least 15% of a wetland in peak dry season are likely to exceed running costs many times over in the case of most ECAs, that will need to be covered from a range of other sources, such as technical assistance projects (grants), low interest loans from multi-lateral banks, investments from the private sector, and payments for ecosystem services (PES). In the case of the Tanguar Hoar, restoration costs associated with rehabilitation of swamp forests, riparian vegetation and river and canal bank restoration and dealing with point sources of pollution such as from industries and sewage works are likely to be exorbitant, however, these costs are compensated by huge economic (and social) benefits. Thus, the project will need to assess some of these costs and benefits in order to raise awareness of the net benefits of restoration initiatives in order to help secure the necessary financial investments. Recent national legislation provides for a variety of funding mechanisms that may also be relevant to this ECA. These include the Ecology Management Fund that has yet to be established under the 2016 ECA Management Rules; Biodiversity Conservation Fund under the 2017 Biodiversity Conservation Act; Bangladesh Climate Change Trust Fund under the 2010 Climate Change Trust Fund Act; and the Disaster Management Fund under the 2012 Disaster Management Act. As obvious, under this project, a key deliverable would be the establishment of the Ecology Management Fund for Tanguar Hoar. Potential activities under this Output would likely include:

1.3.1 Based on the suite of environmental criteria and targets established for achievement of favorable ecological conditions in the Tanguar Hoar (Output 1.1), **determine what actions need to be prioritized and funded in the short term** and what additional actions will be the next focus (in terms of the medium and long-term actions) to ensure that financial consideration is taken at the appropriate levels for all sectors which would be part of this process. Part of prioritization could include: (i) effectiveness of proposed actions (long and short term); (ii) cost of proposed actions; and (iii) anticipated cost if actions is not undertaken;

1.3.2. **The economic analysis will enable DOE and MOEFCC to determine the range of costs to implement priority actions.** This should also include sub-sections for additional costs to address

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medium and longer-range items and also what funding levels should be on hand for emerging/emergency issues. The prioritization of actions as envisaged in Output 1.1 should also provide guidance for the development of financing plans and strategies in ECA management plans;

1.3.3. Based on outcome of Output 1.3.2, undertake **an assessment to identify potential best financial options** from an available or potential suite of mechanisms that are possible within the country, which can be applied to engage funding to support these actions. Some examples of potential funding mechanisms that could be considered in the feasibility assessment are already identified for ECAs, including Ecology Management Fund, which is mandated under the ECA rules. The establishment of the ECM will entail an initial comprehensive study to identify the structures and functions of different funds established under sectoral laws and policies and to design a structure and function of such Fund;

1.3.4. **Reach agreement on a long-term financial strategy** (including a potential suite of finding mechanisms) for meeting rehabilitation costs as well as cost-recovery (through fines, PES and polluter pay principle, etc.) and ensure the strategy is endorsed by the government. Make an assessment of the financial viability of the priority funding solutions, include potential private-public partnerships to identify responsibilities and profit-sharing mechanisms between partners that can be tested at Tanguar Hoar;

Component 2: Strengthened community management of wetland resources

Baseline conditions (without GEF project):

68 The 60,000 inhabitants living in the 88 villages in and around the Tanguar Haor are dependent on its natural resources, many of whom belong to the poorest groups whose primary source of income is derived from fisheries or daily labor and farming. However, there is inherent competition and conflict in the mode of resource use that is likely to continue and detrimental to both the health of the wetland and the benefits that are accessed by the local communities. Without the GEF project, there is likely to be limited progress in policy guidance and operational support for local communities in developing a collaborative shared vision for its management and use amongst the key stakeholders. Community enforcement of regulations regarding resource use will likely continue to be patronized by socio-political elites and vested interests and ensuring equitable access and benefits to members of the community will be undermined. As a consequence, marginalized local communities that usually live in abject poverty will likely resort to resource exploitation in pursuit of short-term gains in the absence of a collective long-term strategy for promotion of resource conservation and sustainable use that would benefit them.

69 Without the GEF project, it is also likely that local community capacity and economic opportunities will be limited leading to diverse conflicting priorities amongst the key stakeholders. Similarly, only a few or part of the Village Conservation Groups will remain functional, while other remain non-functional or absent, thus resulting in less than desirable collective approach to conservation and sustainable management of the wetland resources and increasing conflict between functional and non-functional village groups in the absence of collective agreements. As a consequence, there will continue to be limited options for livelihood improvement, further constrained by inadequate marketing information and access and links to supply chains. In an effort to eke out a living, communities will continue to use resources unsustainably leading to rapid degradation and destruction of their natural resources, thereby reducing opportunities for more sustainable natural resource-based forms of economic development.

Alternative (with GEF project):

70 This Component will support the implementation of a community-based decision-making process to effectively plan, manage, finance and monitor compliance in Tanguar Haor. The 9,727 hectares of

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Tanguar Haor (including its surrounding lands) that have been declared as ECAs under the Bangladesh Environmental Conservation Act of 1995, will likely continue to be managed with enhanced recognition of their value as repositories of biodiversity and the contribution that they make to local livelihoods as well as the ecosystem services that they provide. The proposed GEF project will strengthen the co-management institutions in Tanguar Haor for its sustainable management, conservation, and restoration. It will also ensure the proper functioning of previous community-based management efforts and will enable local resource dependent people to engage and contribute to the management of Tanguar Haor more actively. Taking lessons from previous co-management initiatives, the proposed project will support the implementation of a more inclusive, transparent and accountable community-based decision-making process to effectively plan, manage, finance and monitor compliance in Tanguar Haor. It will establish an effective participatory consultation platform in Tanguar Haor to develop an achievable conservation management plan for the area with defined targets and locations of forest and habitat restoration efforts, weed eradication, restoration of degraded agricultural and other productive lands, sustainable resource use, monitoring plans and co-management arrangement, etc. Based on community consultation, there will be provisions for alternative income generation and livelihood improvement through sustainable fisheries, agriculture, tourism, micro-enterprises, etc.

Outcome 2: Ecological conditions of Tanguar Haor improved through sustainable resource use and livelihoods for communities in its proximity

71 Under this Outcome, a number of ecosystem-based interventions will be employed to improve conservation outcomes, improve water quality and enhance livelihood diversification and/or provide alternative sustainable practices for local communities that are dependent on the wetland resources.

Output 2.1. A wetland natural resource platform developed and populated for Tanguar Hoar to inform its management.

72 This will entail undertaking an assessment to determining the condition of the natural resources within the Tanguar Haor and its surroundings, including the status of biodiversity, water quality, fisheries productivity and fish species distribution and diversity, and other wetland resource condition, status of wetland evergreen swamp forests, fisheries, extent of land and agricultural areas under degradation, erosion and soil fertility and indicators to assess the extent to which these resources are depleted or degraded and to elaborate on specific threats leading to this situation. The intent is to obtain adequate information on key parameters to inform management decision making. This will be achieved through: (i) development of simplified, standardized and dedicated information management system and operationalization; (ii) strengthening information support system for consortium of government, district, private and other stakeholders for sharing good practices; (iii) setting up of standardized information collection standards; and (vi) cross-agency and cross-sector efforts to collect and digitally catalog existing information to support replication. This will entail transferring all information into a digital format as well as regular updating. This database will support the collection and documentation of detailed information on species, habitats, threats, water quality and conservation actions, ultimately improving the overall national and sub-national capacity and the ability to effectively target threats and risks. Relevant information and knowledge will also be made available to existing key information systems of the Department of Environment to enhance opportunities for collaboration and cooperation in conservation efforts.

73 The following are key indicative activities:

2.1.1 Develop a **simplified, standardized and dedicated information management system** (including website and social media platforms) for agreed parameters related to the wetland, based on outcomes from Outputs 1.1 and 2.2, including standards for information collection and sharing;

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2.1.2 **Wetland Information Management System/platform** operationalized, including data collection, input, on-line website and dissemination;

2.1.3 Setting up **information collection standards** that are: gender and socially inclusive; environmentally and socially inclusive, facilitate standardized inputting and recording of information; and provide for digital access and sharing, including compatibility with existing databases as feasible; and

2.1.4 A **cross-agency and cross-sector effort to collect and digitally catalog existing information** on forest planning, biodiversity and natural resources management best practices, resulting in a highly accessible, usable, and catalogued bibliography of available resources in support of replication and upscaling.

Output 2.2: Participatory conservation investment plan for Tanguar Haor developed and approved

74 Based on the results of Output 2,1, Output 2.2 will focus on establishing a participatory consultation process to a project-specific conservation investment plan for Tanguar Haor building on work done so far (including the existing management plan), and following extensive consultation. This plan will define targets and locations of forest and habitat restoration efforts, weed eradication, restoration of degraded agricultural and other productive lands, sustainable resource use and livelihood improvement (fisheries, agriculture, tourism, alternative income generation, micro-enterprises, alternative clean sources of energy for domestic use, etc.), monitoring plans and co-management arrangement. Interventions for management of the wetland would be defined in particular to improve biodiversity outcomes, the productivity of wetland resources, improving crop, soil and land productivity and contribute to Bangladesh's biodiversity and LDN targets by embedding the LDN tools into the planning framework. Individual villages and/or groups of resource users will be empowered through technical support, capacity development and institutional agreements to manage the wetland resources through co-management arrangements, where local communities (in particular fisher folk and wetland resource collectors) take responsibility for managing their respective parts of the wetland. This would entail innovative community management decision-making structures for management of the wetland, including in particular collective agreements for setting up seasonal sanctuaries or no-take zones to protect fish breeding and spawning, defining sustainable harvest limits and species to be harvested, regulation of fishing gear and harvest times, and other measures that the community deem necessary to maintain the favorable ecological conditions in the Tanguar Haor. The intent is to promote an alternative conservation-oriented natural resource-based economy within and around the wetland that is based on a truly locally co-managed wetland approach and testing sustainable financing mechanisms, with emphasis on private sector partnerships with local communities.

75 This would be supported with a small grant mechanism for improving fisheries operations (harvest rates, fish catches, net sizes, capture methods and pollution control measures, etc.); sustainable agricultural activities (applicable farming practices, floating vegetable gardens, pest and pesticide management, pollution effluent discharge controls, choice of crops, marketing etc.); ecotourism practices; agroforestry and home garden practices; livestock and poultry rearing, vermiculture, natural resource-based small-scale enterprises, nursery raising, aquaponics/hydroponics, fish processing and preservation, composting plants, etc. Non-Government Organizations (NGOs), Civil Society Organizations (CSOs), private sector and citizen forums will be engaged to build capacity among communities in co-management to conserve biodiversity, participatory monitoring and sustainable resource use practices. It would also assess the impact of Covid19 on vulnerable communities and design appropriate interventions to facilitate their economic recovery and enhance their longer-term resilience to the disease.

76 The provision of alternative sources of energy is particularly relevant to the conservation of the ecology of the Tanguar Haor as it is directly linked to the overuse of wetland resources (e.g. fuelwood from freshwater swamp forests, reeds, grasses and drywood). The project will assess the feasibility of alternatives in terms of energy for cooking (LPG) and lighting (e.g. solar mini/nano grid, solar home

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systems, etc). Options of funding of alternative energy sources will be sought through existing government or private sector programs (INDOL) recognizing that such sources of alternative energy are critical to improve the Tanguar Haor ecosystem. The following are key indicative activities:

2.2.1. Contract an independent consultant (firm or NGO) to design and facilitate the investment planning process and support four years of implementation. The investment plan will build and be guided by the findings of the integrated ecological framework developed under Output 1.1 and a rapid mapping and pollution assessment study and undertake a planning process that would entail the following participatory and oversight arrangements:

- Undertaking a stakeholder consultation process to key stakeholder groups, vested interests and perceptions and develop an agreed participatory process to ensure constant dialogue and feedback during the investment planning process;
- Concomitantly reach agreement on a technical advisory committee, establish a stakeholder comprising representatives from all bodies with vested interests in the site (i.e. communities, government administrations and agencies, research institutes, colleges/universities, private sector, NGOs, other projects operating in the area to provide continuing oversight and guidance during the investment planning process. This committee could include key representatives for sector agencies (environment, water resources, fisheries, waste management, tourism, agriculture and representatives from district and upazila levels)

2.2.2 Undertake a rapid ecological mapping of the Tanguar Hoar building on the baseline parameters developed under Activity 1.1.1 to identify specific locations/zoning for conservation, restoration, sustainable grazing, sustainable agriculture and livestock grazing, ecotourism, etc.

2.2.3 The above activity will be complemented (through national consultancy) to undertake a full pollution assessment of the Tanguar Hoar ecosystem to identify pollution types, key sources, and gaps in enforcement or legislation. This will be aligned with the 3-year monitoring program, described under Activity 1.1.5 as a single exercise, but the investment planning should proceed using available data and not be delayed. It can subsequently be updated and revised as necessary in Year 3 or 4, in line with the findings from three years of data.

2.2.4 Apply the ecological monitoring framework developed for ECAs under **Output 1.1** to Tanguar Hoar with technical assistance on restoration interventions provided by the ECA Management, Monitoring and Compliance Unit that will be tracked for compliance with measures agreed in Outputs 1.1 and 3.2 for achieving/maintaining 'favorable ecological condition', and the well-being of communities dependent on ECAs for their natural resources. (refer Output 3.2).

2.2.5 The range of investment activities defined under this Output will be implemented within the confines of Outputs 2.3, 2,4 and 2.5 ensuring that Stakeholder Engagement will emphasize the need to include women and vulnerable/marginalized groups and be carried out in accordance with UNDP SES standards using the SESP as a means to assess any potential environmental od social risks that might be encountered and adequately addressed.

77 Output 2.2 (along with 2.3, 2.4 and 2.5) will support the application of the ecosystem-based framework developed under Output 1.1 to the Tanguar Hoar and, through new monitoring procedures, demonstrated that restored and sustainably managed wetland ecosystems improve water, energy and food security. It will pick up on gender and social inclusion issues identified in the gender analysis and in line with the Gender Action Plan.

Output 2.3: Conservation management improved through strengthened community-based management actions to conserve critical biodiversity and ecosystem services

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78 This output will focus on specific community-based conservation actions that are complementary to the sustainable economic activities envisaged under Output 2.2. In this Output, efforts will focus on active community engagement in supporting reciprocal conservation commitments to conserve critical species, habitats and ecosystems that are necessary to maintain the ecological health of the wetland. This would include specific measures, to be agreed with communities for eco-zoning, establishing "no-take" areas to conserve important spawning and breeding areas for key fish species, restoration of canals and beels to enhance water flows and restoration of degraded habitats through 'social fencing" and direct rehabilitation, weed eradication, restoration of freshwater evergreen swamp forest, waste management and recycling, irrigation and water management for agriculture to prevent overuse and siltation, etc. The other related biodiversity benefits from this effort would be the preservation of the biological value of the entire Ramsar wetland area of 9,727 ha and its constituent parts (that includes 735 ha of existing evergreen swamp forests, 475 ha of reed vegetation, 3,943 ha of aquatic vegetation habitat and riparian areas and 260 ha of seed banks), all of which are the direct BD benefits generated through the project and contribute to maintenance of the biological and ecosystem value of the wetland.

79 Under Output 2.3, the project will focus on activities that directly depend on the wetland resources or impact of the wetland resources, while Output 2.4 will focus specifically on complementary sustainable land management activities, in and around the wetland. Under Output 2.3, the project will specifically focus on working with local communities to expand and/or enhance co-management initiatives, in particular to cover all the 74 villages that are within the wetland with the intent of improving livelihoods through more sustainable and/or alternative practices, and where opportunities exist to also engage the private sector to help address their corporate social and environmental responsibilities, particularly with respect to household and agricultural pollution of water bodies.

80 Livelihood support from the project will focus on improving the sustainability of existing livelihood practices, particularly in relation to agriculture (e.g. reducing use of agro-chemicals and minimizing soil erosion, especially in the proximity of water bodies) and fisheries (e.g. ensuring compliance with regulations on net size and closed seasons) strengthening, and promoting appropriate alternatives, enhancing sustainable fisheries operation and harvest of wetland resources.

81 The following are key indicative activities that will be confirmed during the management planning process (described in Output 2.2) when stakeholders will be thoroughly consulted, as ownership of such activities is crucial to their successful delivery.

82 Potential pilot options in Tanguar Hoar might include the following:

- Promotion of the fishery is a very significant part of the livelihoods of the traditional fishing communities in Tanguar Hoar. Based on the assessments carried out in Output 2.2 and following extensive consultation, in particular with fisherfolk, the project will aim to improve the sustainable harvest of fisheries resources through a variety of means that might include reforming the tenure/leasing system, ensuring compliance with fishing regulations (e.g. net mesh sizes, closed seasons etc.), restoring native fish species, improving value addition through improved storage, processing, marketing and enhanced supply chain development. In this regard, the project will work towards strengthening and supporting the implementation of the management plan framework and guideline (established in 2015) that defines modalities for fish harvesting in the Tanguar Hoar in relation to commercial fish harvesting and non-commercial fish harvesting. This 2015 framework establishes parameters for selection of fishers, gear and permits, terms and conditions for fishing, benefit sharing arrangements, monitoring and information sharing, etc. that is discussed in **Annexes 15 and 16**.

- Implementation of conservation priorities for the wetland, including in particular: (i) rehabilitation of forests through reduction of unsustainable harvest of fuelwood, enhanced protection and other restoration practices; (ii) rehabilitation of degrading bird/fish habitat through multi-species and reed plant restoration that can serve as useful habitats for birds, fishes and amphibians; (iii) protection and rehabilitation of degrading beels, canals and rivers sections through tested silvicultural practices;

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(iv) strengthened support for fish sanctuaries for protection of spawning grounds and grazing areas and migration; (v) managed grazing in drawdown areas of the wetland; and (vi) community-based biodiversity monitoring to assess effectiveness of management interventions. These activities will be undertaken by local communities working in partnership with the ECA management authority, including in addition in patrolling, monitoring and restoration tasks. small-scale ecotourism opportunities to realize. These practices will be assessed and managed for environmental and social safeguard risks detailed in the SESP, including environmental and social **management plans** developed using participatory planning processes and informed by site-specific studies.

- There is significant scope for engaging VCGs in conservation activities to safeguard key species, once the appropriate interventions are agreed and underway that can be enhanced by small-scale ecotourism opportunities to realize economic benefits to local communities
- Pollution of the wetland is a common problem related to community sanitation, agricultural runoff and livestock, particularly those households that reside adjacent to water bodies, where appropriate are needed to reduce the load into the waterbody. There is also pollution from oil spills and coal residue from boats that carry the coal.
- Management of waterweeds that might require physical removal through engagement of the community. However, sustainability is questionable in the long-term, but again dependent on the reduction of the pollution load in the wetland.

83 A three-tiered evaluation process will be employed to facilitate the identification of the locations within the Tanguar Hoar for investment and demonstration, based on the guidance provided through the management plan. The first tier entails the use of biological criteria to identify the best sites, namely those sites that are representative of a suite of vulnerable species and habitats. Once these important sites are identified, these will be subjected to a second-tier evaluation in terms of threats where historical and future trends of use and resource conflicts and drivers of degradation and predicted response of biodiversity to these trends are assessed. The third tier involves the assessment of the demonstration potential of the proposed sites in terms of resource use conflict reduction, enabling policy environment and potential trade-offs and community responsiveness.

84 **Activities** to be undertaken to achieve this output include:

2.3.1 Based on the mapping undertaken in Output 2.2, reaching agreement of priority target locations for conservation interventions (such as rehabilitation of swamp forests, beels, canals, river systems and reed banks, establishment of bird sanctuaries and other important conservation sites within the wetland); community activities in terms of establishing fisheries sanctuaries and fish harvest zonation, bank and reed stabilization, weed removal, irrigation management, monitoring stations, and community activities in particular for other aquatic species conservation and management) based on the three-tiered evaluation process defined earlier;

2.3.2 Consultations with local communities (VCGs) on needs and expectation;

2.3.3 Based on the mapping and consultation, defining the ecological and physical boundaries of the Tanguar Hoar and reaching agreement on a pattern of zoning for the wetland with rules and procedures (including strengthening of existing rules) that govern the wetland and its resource uses

2.3.4 Participatory planning to define sustainable investment options for participating VCGs in terms of fisheries, conservation, resource use and harvest, including preparation of VCG plans that define investments, participatory monitoring, patrolling and enforcement measures and any measures necessary to compensate for lost incomes, if needed, including the development and implementation of livelihood action plans;

2.3.5 Establishment of participatory norms for chemical usage, agricultural run-off through promotion of less intensive chemical usage and organic farming (discussed under Output 2.4) and management of household wastes, oil spills, etc.

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2.3.6 Strengthening and capacity building of VCGs to implement VCG plans and to manage and report on funds and improve participatory management of such funds and performance-based grant financing for implementation of VCG plan activities to enhance and improve ecological conditions in the water bodies;

2.3.7 Support for ecotourism in the Tanguar Hoar through technical support, training and financing for small eco-cottages, guiding services, tourism control and management, tourism promotion and marketing, etc., that is carried out in accordance with environmental and social **management plans** developed using participatory planning processes and informed by site-specific studies; and

2.3.8 Participatory monitoring of wetland benefits, threat reduction, surveillance and enforcement and documentation of lessons learned.

85 Grant financing for VCG investment (for Outputs 2.3, 2.4 and 2.5) activities will follow UNDP's LVG procedures and be performance-based and designed on basis of ensuring transparency and extensive consultations with local and district entities and other relevant stakeholders. It will be coordinated and promoted through effective technical support, regular review of implementation arrangements and the use of monitoring and evaluation information to adjust and refine the system in consultation with the stakeholders. Grants would be typical cash for work payments that would be based on the following principles: (i) competitive assessment to selected community institutions/beneficiaries; (ii) selection of beneficiaries in accordance with transparent criteria (to be defined early in the project); (iii) upfront payment (percentage of payment to be defined in consultation with stakeholders); and (iv) balance payment on successful completion and verification of work. Grant financing will be mainly for promoting sustainable fisheries and aquaculture, sustainable agriculture and alternative livelihoods and income generation activities covering over 3,000 beneficiaries. Efforts will be made to identify additional funding support for this activity from existing provincial and district development programs. The small grant program will be assessed and managed for environmental and social safeguard risks detailed in the SESP, including environmental and social **management plans** developed using participatory planning processes and informed by site-specific studies.

Output 2.4: Sustainable land management practices applied to surrounding degraded agricultural lands through various technological packages and incentives

86 Under this Output, sustainable land management practices will be applied to 500 hectares of degraded agricultural lands (wetland paddy, home gardens, etc.) through various technological packages and incentives for nutrient management, organic inputs, limited tillage, soil enrichment, agricultural and tree crop diversification and agro-forestry, linkage to markets, etc. These efforts will be primarily aimed at increasing productivity of the smallholder farmers and small-scale agriculture practices, saving costs in chemical fertilizers, improving productivity and thus increasing profit margins. These interventions are expected to directly benefit biodiversity, while improved profits are likely to increase farmers' and motivation to contribute to biodiversity conservation. However, the cumulative LDN benefits extend beyond the direct restoration of 500 ha of degraded agricultural land (and the protection benefits from the restoration of 400 ha of evergreen swamp forests). The integrated co-management approach will also facilitate stabilization of stream/river banks (349 ha), reed banks (475 ha) and sustainable use of the drawdown pasture/grazing areas (587 ha) of the wetland that are all necessary to maintain the biological, ecological and economic value of the wetland. This makes a net additional benefit of 1,411 ha in addition to the 500 ha degraded agricultural land restored and 400 ha of degraded evergreen swamp forest restored, making a net benefit of 1,911 ha (excluding the biodiversity benefits of 400 ha. Additionally, improvements in water quality and soil fertility will have direct benefits to community health and livelihoods.

87 In the Tanguar Hoar, agriculture is practiced on homestead land, *Kanda* slope, and pond dykes. These small pieces of cultivable land that is available are brought under homestead-based agriculture. In the

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winter season, the water level reduces and exposed area is brought under rice and mustard seed cultivation. The agriculture beneficiaries will use the pheromone trap, integrated pest management method for pest and disease control instead of using poison. The agricultural production in the community level helps the poor community meeting household consumption that adds the nutrition value, economic output from cash sale etc. The overall intent of this Output is to explore opportunities for introducing environmental safeguards to agricultural, aquaculture and horticultural practices, particularly with regard to the soil erosion and the use of fertilizers, pesticides and herbicides and unsustainable harvest practices within and in the vicinity of water bodies as well as to introduce water-sensitive agriculture incorporating crop choice, reducing agro-chemical use and enhancing climate resilience.

88 The following are key indicative activities:

2.4.1 Undertake an assessment to determine the type and range of agricultural, horticultural and aquacultural activities being practiced in and around the Tanguar Hoar, as well as the environmental social, economic and land management implications of such practices;

2.4.2 Based on the above assessment, undertake participatory planning exercises to define sustainable investment options for participating VCGs in terms of agriculture, MMSEs and income generation activities (the latter two further discussed under Output 2.5), including preparation of VCG plans that define investments, participatory monitoring, and enforcement measures and any measures necessary to compensate for lost incomes, if needed;

2.4.3 Provide technical support, training and extension services for promotion of enhanced and sustainable agricultural and horticultural practices, such as diversification of homestead cultivation, three-layered vegetable cultivation (vertically arranged layers), dkye/slope cropping best practices, floating vegetable cultivation, vermicompost production, horticultural improvements, agro-forestry, wet season rice cultivation, IPM, disease control, etc.

2.4.4 Provide technical support, training and extension services for promotion of improved livestock interventions and aquaculture (that would likely benefit women), mostly in homestead areas, the latter in terms of mixed species fish culture and cage fish culture.

2.4.5 Ensuring that any investment activity is carried out after carrying out an assessment of environmental and social safeguard risks detailed in the SESP, including environmental and social **management plans** developed using participatory planning processes and informed by site-specific studies.

Output 2.5: Ecologically-friendly community small enterprise and rural livelihood supported

89 In particular, this Output will focus on support for community-private partnerships for development of micro and small environmentally-friendly enterprises based on locally available resources through assessment of business opportunities, strengthening of community organizations, skills improvement and training, improving market access and linkages, etc. Women in the Tanguar Hoar villages are mainly engaged in agricultural production, home garden and small-scale aquaculture activities. They also collect a variety of wetland products, such as firewood, medicinal plants, and fish fry that they are likely to devote directly to family use, although they also sell might sell these products to earn money to meet basic household needs. To complement these activities, the project will seek to assess challenges and opportunities of women entrepreneurship and propose strategies, mechanisms, and measures to strengthen start-up initiatives. Other livelihood development for women is the establishment of production groups, cooperatives, or interest groups managed by women, then provide support to them in accessing affordable inputs, credit, technical trainings, extension services, market information, and connecting these groups with traders, cooperatives, and enterprises in the private sector to help them improve market access. In addition, trade fairs at local level to introduce and exchange agricultural

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products, vocational trainings for women linked with particular focus on non-farm careers, trainings for women groups on advanced production techniques, agriculture and fisheries-based value chains, start-up and business development, business plan, marketing, financial management, fundamental accounting; and forums to disseminate successful models of business, production and entrepreneurship owned or managed by women should be organized in order to expand income generating activities for women and increase women's confidence and motivation in participating in livelihood development activities as well.

90 A number of small to medium sized grants will be available to support this activity. In relation to the COVID-19 situation, given the relative remoteness of the project site and its rural nature, the number of COVID cases have been relatively lower than other parts of the country. Neverthless, as part of the effort to address impacts of Covid-19 and other future risks, an analysis will be undertaken to understand the extent and risk posed by the disease as well as emerging infectious diseases in the future, to map most vulnerable groups, to assess the social and economic impacts on these vulnerable populations and to identify specific investments and means to engage with, respond to, build resilience and ensure income recovery for these populations as well as improving awareness of risks of zoonotic diseases. Additionally, options for promoting income generation activities would be investigated with financial options that might be available through a number of government and co-financing for biodiversity conservation and local livelihood improvement available for supporting the poor and economically disadvantaged, who are likely to be most affected by future zoonotic disease outbreaks. Campaigns on public awareness and education on behavior change can be instituted, along with better dissemination of risks posed by the Covid-19 and information on ecological and local economic consequences of the disease. Efforts would be made to directly target the most vulnerable populations, and in particular ensuring that at least 50% of the beneficiaries would be women and 25% of beneficiaries for economic activities would represent populations that are most affected by the disease. Additional measures will be out in place in particular, for project staff and other essential personnel, could include more active use of remote communication, and where interaction with local community is needed extra precautionary measures will be taken following health advice and guidance to prevent transmission of the disease.

91 This Output will be achieved through the following actions:

2.5.1 To do a **gender analysis related to livelihoods**, including gender role, access to and control of resources, gender division of labor, poverty, power relations and legal rights, barriers and obstacles of women's participation in livelihood activities, existing national and local policies to support livelihood development for women, including ethnic minority women;

2.5.2 **Assess technical, economic, social, and environmental feasibility** (in accordance with UNDP's SES standards) **of livelihoods appropriate for women** in order to determine livelihood interventions for women (e.g. organic agriculture, animal husbandry, community tourism, small business, traditional handicraft, start-up, establishment of production groups, cooperatives, or establishment of interest groups managed by women and provision of technical, financial and market supports to them);

2.5.3 **Establish mechanisms for livelihood support for women,** including developing specific demonstration models or/and grant mechanisms (women fund or revolving fund);

2.5.4 Assess options for **branding of local products** (some examples might include products like fresh fish, dry fish, local rice, etc.) with market linkages

2.5.5 To provide **technical support and capacity building**, e.g. training on cultivation/planting techniques, seeds, seedlings, feeding and caring, harvest and postharvest measures and disease control; and

2.5.6 To **replicate successful livelihood models** managed by women in order to increase women's confidence and motivation in participating in livelihood development activities.

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92 The potential indicative list of possible activities might include: puffed rice production and marketing, Bondhu (furnace) Chula production and marketing, Shitol pati making and marketing, nursery raising, sanitary material production, tailoring, small grocery businesses, small biogas plant management, eco-cottages and guiding, and other that would be further assessed during the project implementation period.

Component 3: Knowledge Management, M&E, Communications and Gender Mainstreaming

Baseline conditions (without GEF project):

93 In terms of the existing situation, the capacity within the key agencies to work towards an integrated ecosystem-based approach to planning and management of ECAs will continue to be limited without the GEF project. There will also likely be limited movement establishing and strengthening partnerships with communities, other sectors of government (e.g. agriculture, fisheries, rural development, tourism, energy, water) and the private sector (commercial enterprises) to work towards sharing knowledge and best practices, advise, coordinate, promote collaboration and monitor compliance. Without the project, it seems likely that some inequities will exist in terms of gaps in information sharing, knowledge, and attitudes amongst women, men and other disadvantaged groups. Considerations on gender and sustainable wetland resource use that require examining the influence of gender roles and gender relations on the access and control to use, management and conservation of biodiversity by men and women are needed. Without this project, gender inequality in relation to access to resources, differences in impacts that men experience in relation to agriculture and impacts of climate and disaster risks; differences in relation to knowledge at the institutional and ground level regarding biodiversity and ecosystem functions would persist. While there are some on-going efforts at sharing knowledge using public media and other social networks, this is likely to continue to advance at its own slow pace. Knowledge and understanding of the relationship between biodiversity conservation, ecosystems, sustainable wetland resource use and human welfare will remain incomplete. Appreciation of the contribution of conservation to development will continue to be less recognized. Priorities for information collection will likely not fully consider gender, or the concerns of the indigenous and disadvantaged communities, NGO and vulnerable groups of people. The overall low appreciation of conservation values in general and limited understanding of the concept of wetland planning will persist. Significant gaps in understanding of terrestrial and freshwater habitats, both at the institutional level and at the community level will continue to exist, and the impacts of poor land management and exploitative practices will remain not well understood. Despite its growing use of media, without the GEF increment, communications will modernize only slowly. While much information is generated through "projects", this information is likely to continue to be compartmentalized and not widely shared outside of the close circle of project implementers.

Alternative (with GEF project):

94 With the project, the expectation is that there will be improved awareness of the importance of ecosystem-based management of the Tanguar Hoar, improved knowledge and information collection and sharing of best practices on conservation of wetland habitats and its associated biodiversity and ecosystems through communication, documentation and dissemination; ensuring gender considerations are mainstreamed into wetland resources use planning and management and monitoring and evaluating project investments to ensure that these are meeting project outcomes and contribute to Bangladesh's conservation and ongoing development agendas. To achieve such an objective, the project will work towards improving understanding and participation of key target groups, community groups, decentralized institutions and others, including in particular women and the most vulnerable segments of the population. The development of a knowledge management and communication plan early in project implementation will help promote meaningful stakeholder awareness, understanding and participation in biodiversity conservation, sustainable wetland resource use and alternative livelihood as well as to document, disseminate and scale up successful lessons and best practices in resource

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conservation from the Tanguar Hoar to the targeted additional ECAs. This will be accomplished through awareness campaigns, and creation and maintenance of an online public access database and documentation repository.

Outcome 3: Institutional capacity, knowledge management, gender mainstreaming and monitoring and evaluation contributes to application of best practices for replication and scaling up

95 Outcome 3 will focus on improving knowledge and information collection and management systems to enhance awareness and sharing of best practices on conservation and community-based resource use through communication, documentation and dissemination; ensure gender considerations are mainstreamed into resource planning and utilization practices and promotion of gender equitable access; and monitoring and evaluating project investments to ensure that these are meeting project outcomes and contributing to Bangladesh's conservation and ongoing development agendas.

Output 3.1: Knowledge Management, Communications and Gender Mainstreaming strategies developed and implemented

96 This will entail the development and implementation of a project-specific communication strategy, and gender mainstreaming action plan. A Knowledge, Attitudes and Practices (KAP) survey will be undertaken early in the project period to provide a baseline as to the extent of awareness among stakeholders on environmental aspects related to the Tanguar Haor and a repeat survey at the end of the project to assess changes in awareness and learning. Knowledge and information exchange will be supported through a wetland knowledge management platform that should provide the basis for learning and replication in other wetlands in the country. The indicative activities under this output are:

3.1.1 Contract a communication expert to undertake a KAP surveys to access the level of awareness about wetland management to facilitate development of communication action plan;

3.1.2. Develop communication and gender awareness materials to ensure that the project is well understood, means of participation are defined and there is sensitization to the role of women, including minority groups in promotion of an affective wetland agenda;

3.1.3 Recruit a gender specialist to support implementation of gender mainstreaming action plan, including providing training on gender sensitization, establishing means to monitor gender progress; and

3.1.4. Knowledge exchange through the wetland knowledge platform.

Output 3.2: Wetland Management and compliance strengthened to support medium and long-term ecological monitoring in particular for Tanguar Haor

97 This Output will focus on providing equipment, technical support and limited financing to establish monitoring protocols and initiate monitoring of the Tanguar Haor. This Output will build on, and complement the work done under Output 1.1. While, in the past there were no standards for ECAs and their ecosystems/water quality, etc, there is an urgent need to ensure that these standards are established and written into regulation so that these can be enforced. To do so the, **ECA Management, Monitoring and Compliance Unit (ECA MMCU) that is being established under the GEF 6 project** is expected to focus on benchmarking of the status of ECAs and identifying what measures need to be taken to restore them to 'favourable' conditions (or better) and setting targets within specific timeframes for specific ECAs. This Unit will also maintain the web-based GIS Information System on ECAs, which will include all the monitoring data. Output 3.2 will specifically focus on piloting the application of the monitoring and compliance at Tanguar Hoar within the overall MMCU framework being established under the GEF 6 project.

98 An indicative list of activities for Output 3.2 is provided below:

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3.2.1 A team of wetland specialists, compliance/enforcement officer, information systems/GIS technician, communications specialist, training specialist established with government financing is expected to be established under the GEF 6 project in the second half of that project. To complement this effort, the Technical Coordinator and a wetland ecologist recruited under the Tanguar Haor project will work closely together to set up standards and monitoring protocols that are specific to Tanguar Haor until the MMCU is fully functional.

3.2.2 Currently there are no standards for ECAs (including the Tanguar Haor) and their ecosystems/water quality, etc. Once standards and protocols for ECAs are identified and written into regulation as part of the GEF 6 project, DoE and others can enforce. Output 3.2 is intended to complement and support this process by benchmarking of the status of Tanguar Haor and identifying what measures need to be taken to restore the wetland to 'favourable' conditions (or better) and setting targets within specific timeframes for the wetland. This will provide the basis of Tanguar Haor ECA management plans. While the MMCU Unit will maintain the web-based GIS Information System on ECAs, which will include all the monitoring data, the GEF 7 project will provide specific data from the Tanguar Haor to populate this system that will be in the public domain so that there is accountability within DoA and the ECA committees regarding status of the ECAs.

3.2.3 Meanwhile, a parallel initiative under the GEF 6 project will be set up for overseeing and advising on national standards for ECAs in terms of the water and habitat/ecosystems quality. The standards will become law (regulations) framed under the ECA Management Rules. This same Unit bring together a multi-sector **ECA Scientific Advisory Panel** (ECA SAP) comprising of 6-10 persons max. of outstanding scientists covering water quality, hydrology, aquatic plants and animals (including fisheries) to advise and guide the MMCU/DOE regarding standards. The ECA SAP will also provide guidance to the Tanguar Haor.

3.2.4 In the case of the Tanguar Haor, monitoring of conditions at Tanguar Haor will be the responsibility of the Upazila ECA Committees,

99. Once the ECA MMCU established under GEF 6 project is functional, it would monitor compliance, report non-compliance etc. to the National ECA Committee. DoE can then follow up on non-compliance, which would go before the Environmental Court in the first instance.

100. By DoE focusing on compliance and ensure that responsibilities for monitoring are shared through the respective Upazila ECA Committees, a paradigm shift can be generated to turn current trends in degradation and restoration of the ECAs, and in the case of this project, specific to the Tanguar Haor.

Output 3.3: Knowledge Management and gender mainstreaming contribute to learning and advancing replication and scaling up of wetland management approaches elsewhere in the country

101. The project will make special effort during its life (in addition to the preparation of a replication and scaling up strategy) to promote scaling up of learning from the Tanguar Haor to other ECAs in the country (covering around 380,000 hectares in 13 ECAs). The project will focus special efforts at expanding training opportunities to staff of other ECAs in the country, as well as support study visits and provide technical support to these ECAs as part of the effort to encourage uptake in particular, of the innovative community co-management and integrated and holistic approach to wetland management that will be piloted in Tanguar Hoar. In particular, as part of the effort at scaling up (as discussed in Section 7 under "Scaling up"), the project will target promotion of application of policies, techniques, tools and community approaches, etc. developed at Tanguar Haor to improve management effectiveness in 2-3 other freshwater ECAs in the country covering around 3,000 ha through technical support, training, study visits and extension support. The targeted ECAs will be selected and extent verified at PPG stage. The PMU will work with the MOE and provincial governments to identify sources of government and private sector funding to promote replication in these sites. An indicative list of proposed activities is the following:

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3.3.1 **Documentation and dissemination** of case studies, best practices and lessons learned from the project for use by other ECAs;

3.3.2 Support for development of **policy guidance notes** that addresses current constraints and gaps in existing policies and legislation;

3.3.3 **Technical reports, publications and other knowledge management products** (including in local languages and accessible to IPs) documented and disseminated via mass media;

3.3.4 **National and District workshops** to facilitate dissemination of field lessons and help inform legal and policy reform relevant to wetland conservation practice. The initial documentation of these lessons will be included as part of the participatory monitoring process, that would be complemented by additional national technical support to distil and document lessons and experiences. The project will support workshops at the Tanguar Hoar level (Year 3 and 5) to share lessons and experiences and a national workshop at the end of Year 5) to facilitate the sharing of lessons more widely, but importantly to be able to further develop and refine successful approaches for replication nationally;

3.3.5 Efforts would be made to **institutionalize some of the best practices** through promotion of policies and guidelines in order to secure support for replication and up-scaling.

3.3.6 **Inclusion of public engagement pages** on national and district websites and social media platforms that link to information about the project and its products, including development of a specific public information sharing platform. This in particular could serve to share information with other ECAs, PA managers, district, upazila, union ECA committees, NGO and government entities etc.

3.3.7 Preparation of a **replication and scaling up strategy** based on project experiences and best practices for promotion of integrated wetland management, including institutional, financial and resource requirements, partners and coordination arrangements. The scaling up strategy will also provide information that will enable implementation of such approaches in other ECAs in the country.

3.3.8 **End of project national seminar on** outcomes and replication for integrated wetland management practices in Bangladesh.

Output 3.4: Monitoring and evaluation plans implemented for adaptive management

131. The project-based M&E system will be implemented, including safeguards and gender mainstreaming, to support project impact and evaluation. Full adherence to safeguards and recognition of community rights including Free, Prior and Informed Consent (FPIC) of Indigenous Peoples (IP) groups will be a key part of this process. The M&E system and regular assessment of M&E data will allow the project: (i) to identify the most effective project strategies; (ii) to check project assumptions (hypotheses) and risks; (iii) to prepare management response to changing political, economic, and ecological environment; (iv) to learn from successful and unsuccessful project experience; (v) to incorporate learning in the project planning and adaptive management; and (vi) share experience among GEF and other projects in the region and the world. Lessons learned through the project cycle will be reflected in the Annual Project Reports to ensure that the project uses the most effective strategies to deliver project Outputs and achieve project Outcomes in the changing environment. The indicative activities for this output are the following:

102. This Output will be achieved through the following indicative actions:

3.4.1 **Implementation of a gender analysis and mainstreaming action plan** so that: (i) a gender and socially inclusive perspective is applied to every set of activities; (ii) research on gender and social roles in wetland management informs resulting plans and ensures equitable distribution of benefits; and (iii) information is collected and shared across gender and social

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divides. **Training of staff** on application of gender mainstreaming in project communication and project activities;

3.4.2 **Monitoring of IPP** that will be developed in the early part of the project so as to: (i) ensure that there is free, prior and informed consent (FPIC); (ii) IPs fully participate and are represented at all levels in the decision-making process, in particular on those that may affect their development and environment rights; (iii) that their rights to self-determination are recognized; (iv) ensure that their culture, social and religious beliefs are not compromised; (v) integration of IP perspectives and concepts in the development process, etc.

3.4.3 **Preparation, Monitoring the implementation of the ESMP and undertaking ESIA**

3.4.4 Development and implementation of monitoring framework, based on the Results Framework Agreement to validate baselines and monitor progress in achieving project outcomes and impacts

3.4.5 Conduct **gender, indigenous people and wetland biodiversity focused training and development of training materials**

3.4.6 **Review and regular update of M&E plan**, including results framework baselines, tracking tools, Theory of Change to subsequently adopt these findings to implement all aspects of the project; and

3.4.7 Conduct **mid-term and terminal evaluation** in line with UNDP/GEF requirements and incorporate and adapt recommendations of MTR to revise project plans and monitor their implementation.

Partnerships:

104. The proposed project will coordinate with selected government programs and donor projects associated with them to generate positive results through combined action (where appropriate) and to share lessons learned and best practices. They key national Environment, Forestry and Natural Resources programs that are complementary to the Tanguar Haor project is provided in the table below.

105. In the context of the above and related core programs, the project will collaborate with agencies on knowledge and lessons learned from important, recently completed projects (which are described in the various sections of the project design), as well as ongoing and pipeline projects (usually assisted by donor/development partners). Collaboration with ongoing and pipeline projects would primarily aim to synergize planning and implementation with concerned projects in common sites. For projects without common sites, the main purpose is to build on each other's field methodologies and share information needed for policy dialogue. The following are the key ongoing and pipeline projects.

106. There are a number of key lessons and challenges that have been recognized from past projects in Tanguar Hoar and other wetlands in Bangladesh that provided good insights for project design. These include the following lessons: ensuring priority is given to innovative livelihood opportunities to reduce unsustainable resource uses; ensuring improving training and mechanisms for strengthening village governance capacity; enhancing capacity through training to support conservation activities and encouraging support for ecotourism facilities and programs. Some of the key challenges were: recognizing that local influential people often tried to influence the activities of the project in their favor; recognizing that a number of VCG members are illiterate, so different means of communication are necessary and promotion of livelihood activities that are likely to be sustainable over the long-term. The role of Union ECA Coordination Committee and Upazila Coordination Committee are critical for ensuring effective community participation, as well as ensuring more involvement of female member of the VCG etc.

Table 6. Partnership Arrangements

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Name of on-going and planned program/project, years of implementation and sites	Program/project objectives and targets	How proposed UNDP/GEF project will collaborate with the program/project?
DoE: Biodiversity Management Project (Proposed) (approx. US$ 10 million proposed)	Sustainable management of natural resources of Tanguar Haor. Government will undertake a project for sustainable natural resources management of Tanguar Haor.	MoEFCC is the key authority of both projects. Two projects will be able to share identified activities through knowledge exchange visits, organizing joint meeting and sharing knowledge and information through conference and workshop. The MOEFCC will complement the GEF projects in being able to finance activities that are not eligible for GEF financing
World Bank: Sustainable Forests and Livelihoods (SUFAL) Project, 2018-2023 (US$ 175.00 million)	To improve collaborative forest management and increase benefits for forest dependent communities in targeted sites.	100% of project focus on forest policies and 60% specific on biodiversity. Common field of interest of both projects is conservation of biodiversity. Both projects will exchange data, information and strategy on status, trend and threats on biodiversity.
MoEFCC: Ecosystem-based Management in Ecologically Critical Areas in Bangladesh (GEF6; approved by GEF in May 2020) (approx. US$ 13.5 million)	Apply an ecosystem-based framework for managing Ecologically Critical Areas (ECAs) in Bangladesh to enhance the conservation of globally significant biodiversity and support local livelihoods.	Both project will develop ecosystem management framework for ECA. Regular meeting and information sharing will be maintained between the project to share experience and best practices include site visits, co-organise workshop/seminar to share information, share documentation and join training to share and promote similar approach and best practices.
MoEFCC: Integrating community-based adaptation into afforestation and reforestation (ICBA-AR) Programs, 2015-2021 (approx. US$ 5.72 million)	Reduce climate vulnerability of local communities through participatory planning, community-based management, integration of climate resilient livelihoods and diversification of species in afforestation and reforestation programs.	MoEFCC is the key authority of both projects. Two projects will be able to share identified activities, especially on afforestation.
FAO: Building climate resilient livelihoods in vulnerable landscapes in Bangladesh (BCRL),2019 (approx. US$ 8.9 million)	Strengthening landscape resilience in Bangladesh for improved livelihoods and reduced vulnerability to climate change through institutional capacity building, supported by diffusion and scaling-up of adaptation technologies and innovations.	Sharing of information and lesson learned on climate resilient livelihood technology, PPP, biophysical and socio-economic resource mapping, and stakeholder engagement
EU: Support for enhancing communities' resilience to climate change and related disasters- Local Government Initiative on Climate Change (LoGIC) 2016-2023, Budget: US$ 15.0 million (approx.)	Improved and inclusive local level planning and a strengthened financing mechanism for community-based climate change adaptation solutions through local governments. Expected results: • Strengthened capacity of vulnerable people and local stakeholders for accountable planning and financing on	One of the project sites is Sunamganj, covering TH sites. Both projects will benefit from sharing of data and information on community participation, capacity building of local people, and natural resources management.

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Name of on-going and planned program/project, years of implementation and sites	Program/project objectives and targets	How proposed UNDP/GEF project will collaborate with the program/project?
	Climate Change Action/ Disaster Risk Reduction actions for building resilience. • Enhanced access of Local Government Institutions and vulnerable households to climate funds have for climate resilient infrastructures and adaptive livelihoods. Established evidence-based advocacy for a mechanism for 'financing local resilience	
JICA: Flood management and livelihood development program in Haor area (2nd phase), 2014-2022 Budget: US$ 134.0 million (approx.)	To reduce the damages from flood, improve access to basic infrastructure and increase agriculture and fishery productivity by • rehabilitating and constructing the flood management facilities, • rehabilitating and constructing the rural infrastructures and implementing agriculture and fishery promotion activities in the Haor areas in the upper Meghna river basin, thereby contributing to the improvement of living standard and activation of economic activities in the target area.	Both projects will benefit from sharing of information and lessons learned. Agriculture and fisheries promotion are two key areas of both projects. The projects will share data on the promotion of these two sectors by site visits, co-organizing workshop/seminar to share information, share documentation and join training and other programs.
DoE: Biodiversity Management Project (Proposed) Budget: BDT 15,00,00,000.00 (approx. US$1.8 million)	Sustainable management of natural resources of Tanguar Haor. Government will undertake a project for sustainable natural resources management of Tanguar Haor.	MoEFCC is the key authority of both projects. Two projects will be able to share identified activities through knowledge exchange visits, organizing join meeting and sharing knowledge and information through conference and workshop
USAID Ecosystems Protibesh project Budget $20.5 million 5 years	Improve ecosystem conservation by strengthening environmental governance and management to reduce threats to biodiversity and support market based incentives, including in critical forest and wetland systems	MoEFCC is one of the key agencies participating in this project as well as the TH project, so efforts will be made to share identified activities through knowledge exchange visits, organizing join meeting and sharing knowledge and information through conference and workshop

Table 7: Co-financing Considerations

Co-financing source	Co-financing type	Co-financing amount	Included in project results?	If yes, list the relevant outputs
Recipient Country Government- Ministry of	Public Investment	10,000,000	No	NA
	In-Kind	7,200,000	No	NA

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Environment, Forestry and Climate Change (MoEFCC)				
Total (USD)		**17,200,000**		

MOEFCC Grant Financing: The MOEFCC is providing budget resources (USD 10,000,000) through the national program, namely through the Ecosystem based sustainable management for Tanguar Haor (ESMT) program and the Bangladesh Environmental Sustainability and Transformation (BEST) program to support activities in TH that complement the GEF project through the 5-year implementation period. These resources are investments that are unlikely to be funded through the GEF grant. In terms of the ESMT program, the co-financing will focus on funding in terms of dredging of critical riverine channels, connecting small beels that have got sedimented and restoration of degraded river banks so as to enhance the ecological connectivity of the TH. Additionally, this program will support complementary restoration of degraded swamp forests, habitat improvement activities to boost nesting sites for migratory birds, delineation of area, support community ecotourism infrastructure improvements and development, etc. The BEST program will fund establishing a mobile monitoring system for TH and measures for pollution abatement and water regulation, district and Upazila office construction and lab facilities at Sylhet region.

MOEFCC In-Kind Financing: The MoEFCC will also provide the equivalent of USD 7,200,000 in-kind financing through staff time (any national and district levels and participation of DoE's ECA committees at district, Upazila and Union levels, use of office space at national and other levels, use of equipment and facilities available with the institution.

Monitoring of Co-financing: Co-financing expenditures will be monitored by the PMU with oversight from UNDP CO. The PMU will work with MoEFCC in their annual budget planning exercises to ensure that commitments to TH are complementary and coordinated with the GEF project. The PMU will monitor annual MOEFCC national budget allocations and expenditures to assess the extent to which commitments are realized and monitor progress reports (coupled with field visits to verify that activities have been carried out in accordance to agreed plans). As this GEF project will be coordinated at local, regional level where different institutes including fisheries department activities will be discussed and shared. These coordination meeting records will also be collected and tracked for co-financing activities. Similarly, in terms of the in-kind contribution, the co-financing relates largely to availability of staff time, office space and utilities. The PMU will monitor the delivery of the in-kind commitments through achievement of agreed plans and programs of MoEFCC. The PMU will report in the Annual GEF PIR and MTR and TE reports the co-financing expenditures, including if there are any specific delays or risks associated with the co-financing.

In terms of the risks, associated with the co-financing (even though the co-financing may not be directly related to the achievement of project results), the PMU will be responsible for monitoring and reporting on any risks associated with the co-financing, including environmental and social risks and risks to IPs). As part of the development of the ESIA and related management plans, the assessment will also evaluate the risks associated with the co-financing. The monitoring and reporting of the management of risks will also cover the risks associated with the co-financing.

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Risks:

Table 8: **Risk Matrix**

Risks	Rating	Risk Assessment and Management Measures
Risk 1: Government's limited finances and capacity to effectively support activities at Tanguar Haor may constrain its ability to ensure long-term sustainability of project interventions.	Moderate	Consolidating and expanding the government's capacity to address environmental outcomes in the Tanguar Haor will be supported by the development and implementation of a sustainable Financing Strategy that will identify potential opportunities through public and private sectors. This will be targeted at the national five-year planning process, effective enforcement of the polluter-pays principle, using policies (existing and new) and mechanisms to incentivize pollution reduction and mitigation measures. The strategy will be informed by assessing costs of its delivery versus financial benefits of having rivers and wetlands with relatively clean (unpolluted) water that can be used for local consumption, irrigation and public water supplies.
Risk 2: Government (including sub-national administration) may be unable to provide adequate human resources capacity to support implementation of the project and beyond.	Moderate	The Tanguar Haor is the most important freshwater wetland in the country and the Government considers it a high priority given signatory of relevant MEAs (e.g. Ramsar Convention). The project will ensure design of appropriate skills development and training to match the capacities of government during the initial years of implementation, following which implementation of the financing strategy should provide for institutionalization of more human resources before project ends. A key initiative to build and sustain technical capacity will be to institutionalize the project's modular training program in wetland management, monitoring and enforcement at all levels of governance. The project's exit strategy will systematically document the costs of continuing to expand human and technical capacities post-project, implementation responsibilities, and sources of financial support as per the Financing Strategy.
Risk 3: As the Tanguar Hoar is located close to the international boundary with India, there is potential that activities across the border can affect the spatial and temporal distribution of water availability in the wetland	Moderate	As there are 54 transboundary rivers in Bangladesh, this is an issue that is not unique to the Tanguar Haor alone and needs to be addressed at a high political level that is beyond the scope of the GEF project. While, the project will not deal directly with these complex and politically sensitive transboundary issues, the application of an ecological and co-management approach to management of the Tanguar Haor, will to a small extent facilitate achieving some ecological balance within the Haor, itself
Risk 4: Co-financing contributions from partners will be not realized as committed.	Moderate	Co-financing contributions are primarily represented by parallel, baseline funding for initiatives and investments that have been approved or are ongoing. The project will regularly monitor co-financing contributions and report results to the MoEFCC and the PSC.
Risk 5: Impacts of exchange rate fluctuations and/or a possible global economic recession on project delivery.	Moderate	Disbursements will be made based on annual work plans, which will be adjusted to possible currency fluctuations. In fact, exchange rate gains will benefit the project output deliveries as most of the expenses are made in local currency.
Social and Environmental Risks		
Risk 1: The project proponent and right-holders may not have the capacity to effectively engage and ensure participation of all stakeholders, including the women, smallholders, farmers, IPs and marginalized groups during implementation phase could result in violation of human rights. They might also not effectively apply FPIC procedures	Moderate	Following extensive consultations with stakeholders including Small Ethnic Communities, local community and small holders, vulnerable groups through focus group discussions, to the extent feasible under the current Covid19 restrictions, the following management plans/frameworks were prepared at PPG stage to understand and try to address the potential environmental and social impacts of the project. These included the following: • A Stakeholder Engagement Plan (Annex 7) that defines the clear role and responsibilities of each stakeholder, including local TH communities to effectively engage and ensure participation of all stakeholders, including the including to women, smallholders, farmers, IPs and marginalized groups in the implementation of the project.

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Risks	Rating	Risk Assessment and Management Measures
		• A grievance redress mechanism for the project, to provide an avenue to articulate any project specific grievances and have a transparent system address such grievances • An ESMF that covers this risk and all others in this SESP. The ESMF lays out procedures and actions to identify and assess potential impacts of project activities, including in particular activities that have still not been fully designed (and likely to be better defined in early implementation of the project). • IPFs: An IPF with guidelines for FPIC to ensure FPIC to be secured multiple times during the project timeline, ensure that IPs are actively engaged in project activities, their cultural, social and traditional practices are recognized, maintained and enhanced, that they share equitable benefits from the project (livelihoods, resource use and other benefits derived from the project), • For those activities that present a significant risk, additional consultations will be made as part in undertaking a scoped ESIA(s) assessment and developing scoped ESMP(s) to address specific risks posed by the project. • Interventions for managing the wetland, or restoration activities will be selected giving high priority to avoiding restrictions on access to resources and direct or indirect economic displacement. Where such restrictions are unavoidable and there is no other feasible way to achieve the biodiversity protection objective, mitigation methods must be employed to minimize such economic displacement • **A Livelihood Action Plan(s)** will be developed (in accordance with applicable national laws), if required for SES compliance (e.g. in case there is any inadvertent or intentional restriction on access to resources by communities on account of project activities. A process framework will be developed early in Year 1 to provide the mechanism to ensure that decisions on resource access, restrictions and mitigation measures (including LAPs) are defined through a transparent consultative process • As a complement to the above measures, the project will apply participatory processes and approaches to all activities relevant to local communities where principles of FPIC will be further emphasized and demonstrated through providing timely information related to opportunities and risk of the proposed interventions for the beneficiaries to enable them to make decisions. In case community concern or inability to secure FPIC emerge the following mechanisms would be applied as adaptive management: (i) Additional stakeholder consultations/workshops to further refine project activities and approaches to address any concerns. • UNDP CO is committed to ensuring monitoring investment proposals to ensure that these comply with FPIC processes during the implementation phase of the project as part of their responsibilities for project oversight
Risk 2: Application management practices might potentially restrict access and/or result in economic displacement to resources or basic services, in particular, for marginalized individuals or tribal groups.	Substantial	An initial assessment was undertaken at PPG stage to better understand the potential impacts of restrictions of access to resources for conservation activities in the Tanguar Hoar. While, it is unlikely that there will be physical displacement, this will be accessed during project implementation using the process framework and measures instituted if case there is possible intentional or unintentional physical or economic displacement (e.g. wetland resource) restriction. • At PPG stage, a mechanism was defined to: (i) ensure that project activities are detailed in collaboration with Upazila and Union governments and local communities (including IPs); (ii) management of sustainable use of resources (for fisheries, wetland resource collection and farming) are planned and managed under community governance mechanisms that take into consideration current uses of these resources.

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Risks	Rating	Risk Assessment and Management Measures
		• An ESMF developed at PPG stage will outline the required actions to further assess this impact and develop appropriate management interventions to mitigate this risk. The ESMF recognizes this as a potential risk, and suggests that specific actions, including scoped ESIA(s) be defined following screening and assessments undertaken to mitigate and manage any such potential risk. This will entail the preparation of scoped management plans/ESMP(s) developed with local communities and stakeholders. Should there be an inadvertent possibility of a manifestation of the risks, the management measures as outlined in Risk 4 will be instituted, including the GRM process, livelihood action plan(s) and other related prescriptions that might emerge from the targeted assessment. • The preparation of an Ecosystem based management framework for the Tanguar Hoar will follow the Strategic Environmental and Social Assessment (SESA) approach. The project document specifically states that SESA will be applied during the development to all new policies and legislation/regulations/ordinances prior to approval by Government and this has been built into detailed project design.
Risk 3: Motivation of local communities who are largely dependent on fuel wood and other ecosystem products and services for their livelihoods to shift to other sources of sustainable energy could be difficult resulting in continued destruction of swamp forests	Moderate	Project design and implementation phase conducted a comprehensive participatory consultation process that engaged with communities from the wetland to secure local support and ensure that their immediate and long-term livelihood needs are addressed in the management plans through ecosystem-based approaches. The identified the source of fuel for cooking, cow dung(goshi), fuel wood, Hijol/Koroch branches, dry wood, grass, reeds or nolkhagra was common. While., some of these measures are likely to continue without any negative impacts, cutting of trees for fuelwood would be replaced by the following measures: • Introduction of alternative fuel-efficient measures such as improved cooking stoves and use of bio-gas plants • Finding alternate sources of fuel such as briquettes, existing IAS etc.
Risk 4: Women and other disadvantaged groups may not be fully involved in planning, implementation and monitoring of project interventions or obtain benefits from such initiatives, rather than influential leaders and/or groups may have more control on local level decision making.	Moderate	A Gender Specialist was assigned during the PPG stage to undertake a Gender Analysis of the proposed project interventions and develop a Gender Mainstreaming Action Plan to identify measures to ensure that the project contributes to gender equality and creates equitable opportunities for women and men at all levels of engagement and benefit sharing. The gender analysis and plan focus on specific measures to ensure gender discrimination is avoided and provides an effective means to improve women's participation in decision-making, have access to wetland resources and receive benefits from the project in an equitable manner. sharing. The gender action plan identifies the following actions to enhance the role of women and ensure their more active participation in project activities: • Review and updating of the previous co-management system, develop and piloting of an inclusive and gender responsive system for the implementation of new framework. • Specific awareness and training sensitize district, Upazila and Union ECA Committee members and project staff s on gender related issues and opportunities to improving women roles in decision making and access to benefits; • Ensuring adequate representation and active participation of women in relevant decision-making bodies (District, Upazila, Union and Village Co-management committees) • Involving women in sustainable fisheries, agriculture and livelihood activities • Provide technical trainings for women on climate smart agriculture practices, organic farming, sustainable tourism, handicraft production, start up and business development and support women union to promote women's participation in all livelihood activities. In addition, the project will support training in value chains and entrepreneurship, and establishment of women's groups in wetland-dependent communities.

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Risks	Rating	Risk Assessment and Management Measures
		• Gender consultant support will be obtained to help oversee and monitor the implementation of the gender action plan, train key staff and Union and Upazila staff and ensure collection of gender disaggregated data to validation participation of women and their role in decision-making and sharing of benefits • Strengthening women groups and their institutions • Engage VCG members, men, women, young boys and girls for promoting small grant for livelihoods improvement, ecotourism, conservation of ecosystem and biodiversity. • Training Government officers on NRM, Gender Responsive budgeting, gender responsive services, etc.
Risk 5: Development interventions in terms of habitat and stream restoration, community livelihoods and community-based enterprises (e.g. eco-tourism and natural resources based value addition, etc.) can have adverse impacts on species and habitats	Moderate	Following mapping and consultation, the sites selected for project investment will conform to the project's objective of conservation of wetland biodiversity and maintaining its ecosystem services. The project intends to have interventions that will benefit improved conservation, support environmentally friendly agricultural, fisheries, grazing and wetland use practices to reduce impacts on species and ecosystems, improved monitoring of species and ecosystem health, participation of a four tiered coordination committees in environmentally-friendly practices (including reduced wetland degradation and improved management of wetland resource use) and more importantly enhanced environmental stewardship of wetland resources by local communities through co-management arrangements. The SESP will be applied to screen all investments to ensure that they comply with sound social and environmental principles and are sustainable. Such a checklist would also include the identification of wetland locations in relation to conservation, sustainable wetland resource use, agricultural and fisheries management, etc. The following are potential actions to reduce impacts on biodiversity will include the following: • Survey and inventory of species and diversity within the target sites as means to identify appropriate actions to enhance conservation; • Develop ecological baselines to access and monitor outcomes of conservation actions: • The village co- management plans will be adaptive in nature enabling revisions based on outcomes of monitoring; etc. • Monitoring indicators are selected to reflect the health of species and ecosystems. • In terms of community-based enterprises, specific criteria and procedures will be used to assess potential impacts from any livelihood investment activities and define management responses before these activities are financed • Technically qualified biodiversity specialists will support the PMU to coordinate and monitor this risk.
Risk 6: Interventions proposed under this project could fail or be severely reduced due to natural calamities, disasters or extreme weather conditions. Moreover, climate change impacts may limit the success of interventions.	Moderate	An assessment was made at PPG stage that included the consideration of climate vulnerability on habitats or communities that could be affected. Climate vulnerability has been included throughout project design, given the intersection with threats from wetland degradation. A separate pre-screening climate change assessment was undertaken for the PIF, which has informed the design of the full project. To address climate risk the following measures are to be implemented: • The establishment of an integrated participatory ecosystem-based management framework for the Tanguar Hoar will be based on consideration of many factors, including climate and would also include protocols for tracking the effects of climate change of the wetland, its biodiversity and ecosystem functions • In establishing co-management plans for the Tanguar Hoar, climate adaptation and strengthening of community resilience will be important considerations

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Risks	Rating	Risk Assessment and Management Measures
		• .A major part of this effort will be to enhance capacity the related stakeholders (VCGs, Beel based community leaders and respective government departments) to monitor climate change trends/impacts and establish counter measures. • Climate change mitigation and adaptation measures have been embedded in the project design through improved natural wetland resources management, sustainable fisheries and agricultural management, rehabilitation of natural ecosystems and improved and diversified environment friendly livelihoods, • The Environment Court Act (2000), describing environment related legal proceedings recognizes that adaptation to climate change requires efforts to enhance adaptability to climate change, including climate diversity and extreme climate so as to reduce potential of damage attributed to climate change, utilize opportunities arising from climate change and overcome consequences arising from climate change. This will be a major consideration for the project.
Risk 7: Indigenous peoples (Garo and Hajong tribes) may be directly or indirectly affected by the project if they are not adequately involved in project design and therefore not engaged in, supportive of, or benefitting from project activities. Due to existing inequalities, rights holders may not have the capacity to claim their rights. Given, the Covid situation at the time of PPG, consultations with IPs was limited. Some activities of the project (including on-the-ground activities and establishing the integrated framework for the TH and related strategy work). FPIC has been undertaken with indigenous peoples during the PPG phase. Some activities of the project will require continuous FPIC during project implementation.	Substantial	During the PPG phase, comprehensive engagement with key stakeholders, particularly the communities of indigenous people was undertaken to assess existing inequalities and will define measures to ensure they are addressed within the full project design documentation. • Following consultations at PPG stage, a stakeholder engagement plan has been prepared (Annex 9). As some project investment sites and activities have not been finalized in fine-level detail at the time of project design, formal FPIC will be obtained before any relevant implementation starts. • The consultations undertaken during the PPG phase will continue during project implementation and Indigenous communities will be further informed of their rights and their ability to withhold consent on certain activities of the project during implementation. • In addition, a grievance redress mechanism has been designed and incorporated within the project's ESMF and IPPF. The ESMP and IPP when completed in early project implementation will serve as the primary risk management measure. Monitoring and evaluation process have been designed to record any complaints or grievances that arise within the project and wider community, with attention being brought to the Project Board. The GRM has been designed to be culturally sensitive and accessible to all stakeholders.
Risk 8: Existing resource conflicts may be exacerbated and result in inequitable or discriminatory for poor or marginalized people if activities are planned without adequate consultation and consideration of the needs and aspirations of marginalized groups	Moderate	Following consultation and assessment at PPG stage, the following management are proposed to mitigate this risk: • The project will conscientiously promote inclusive measures to ensure equitable participation in project activities and benefits and opportunities between all stakeholders • Ensure adequate social and monitoring expertise within the project provide guidance on measures to diffuse tensions and enhance relationships. • The ESMF risks and identify measures to manage it, including ensuring that design processes with detailed mechanisms for collaboration with Upazila and Union governments and local communities, so that actions for management and sustainable use of resources can avoid discrimination and inequalities and hence reduce conflict.

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Risks	Rating	Risk Assessment and Management Measures
		• Ensuring that any decision regarding resource use is made through a consultative community participatory process • Preparation of a livelihood plan, if community restrictions on livelihoods are affected • A project's grievance redress mechanism or GRM system was developed at PPG that will be applied to address any specific community concerns and help resolve conflicts. • A Comprehensive Stakeholder has been developed. • The ESIAs and ESMPs will serve as the main management measure to address this risk.
Risk 9: COVID-19 and other potential zoonotic disease outbreaks could pose serious difficulties for effective project implementation and socio-economic hardships	Moderate	• During the preparation of the ESMF, an assessment of the social and economic impacts of ongoing Covid19 was assessed. The following mitigation measures are identified in the project during implementation. (Refer UNDP project document for specific Covid-19 analysis) • During the early part of project implementation particularly for the site level interventions, an assessment will be undertaken to assess any potential future risks. This assessment will focus on potential social and economic risks, in particular on vulnerable and poor populations and identify potential options for provision of income generation opportunities. • In case of potential delays in project start up due to COVID situation - the project team will take this into consideration when developing annual plans and implementation schedules, using best possible means to try to reduce and minimize delays. While this is a reality, the project will ensure that effective methods for bio-secure implementation are planned and implemented including the use of remote communication, where feasible, coupled with the use of PPE and following the safe COVID-19 guidelines and protocols of the Bangladesh. • The project will develop, through its communication and Knowledge Management (KM) strategy in the target sites to maintain a system of on-going communication to foster improved coordination and efficiency of disseminating awareness of COVID-19 protocols for management and control of the disease.
Risk 10: Beneficiary selection challenges could create discrimination	Moderate	The project is based on similar existing programs currently being undertaken in Bangladesh. • A clear beneficiary selection process that will be communicated to target communities during the project inception that would include the following criteria (to be further validation at project start-up), namely HHs: (i) poor/marginal and highly vulnerable to floods, droughts and climate change; (ii) with one or very minimum livelihood strategies and limited scope for diversification of incomes; (iii) Little or no ownership of productive asset; (iv) Low level of income or poverty stricken; (v) Women, widows and IP headed households; (vi) with persons having disabilities or handicapped and (viii) fuel wood or forest dependent • Furthermore, in the event that any community members feel they are being discriminated against, they can file a complaint through the project's grievance redress mechanism
Risk 11: Potential risks associated with the use of chemicals in agriculture	Moderate	Based on an assessment at PPG stage, there is some level of chemical fertiliser use (the extent of which and impacts will be assessed during the ESIA process). To help farmers and smallholders meet these acceptable internationally recognized pesticide application standards, the project will support the following actions • Using ESIAs/ESMPs to access risks and mitigation measures • Support capacity building of local institutions and farmer organizations on meeting chemical application procedures and standards) to enable them to support alternative pest management and chemical practices;

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Risks	Rating	Risk Assessment and Management Measures
		• Provide training and extension to small holders and on the safe use (use of protective gear and other precautions), storage and disposal of chemicals • Support co-management committees to promote restrictions on chemical applications, particularly in important biological sites • Support smallholder farmers to develop approaches to promote organic fertilizer The Project will support farmers to adopt improved farming techniques (e.g., organic agriculture, soil and water conservation) that would reduce the use of chemical fertilizers and harmful pesticides, thus reducing the contamination of soil and water bodies
Risk 12: While, the project will not result in waste creation, management and control of existing urban management and control of urban waste, agro-chemical pollutants and untreated industrial waste may involve occupational health and safety risks,	Moderate	A rapid assessment was undertaken during the PPG phase to assess the extent of pollution, source of pollution and means to contain this. Based on this, the following management measures will be instituted • By reaching agreement on a common agreed ecosystem management framework for the Tanguar Hoar with clear rules and guidelines and indicators to monitor the health of the wetland, including standards for discharge into the wetland • Based on the above, applying a 'polluter pays' principle to enforce and agreed standards necessary to maintain the health of the wetland, in particular for cold transport boat owners • Enhancing co-management of the wetland by the 74 village conservation committees who will take added responsibility for -managing and maintain the condition of the wetland • Strengthening wetland management, monitoring and compliance systems to support long-term monitoring of the wetland to assess trends and institute mechanisms to maintain the quality of the wetland
Risk 13: Unknown potential impacts of small grant projects	Moderate	The ESMF will identify potential menu of livelihood and resource management activities, and their potential impacts and management interventions. The ESMP will then include specific safeguard procedures and/or exclusionary criteria to ensure that the risks from these activities will be avoided or managed during implementation, when those grants projects are defined

107. The overall risk is classified as **'Substantial'**. To meet the SES requirements, at the PPG stage, the following have been prepared: (i) ESMF with FPIC procedures; (ii) Stakeholder analysis and comprehensive Stakeholder Engagement Plan; (iii) Gender Analysis and Gender Action Plan; (iv) project-level Grievance Redress Mechanism; (v) specific management measures to address risks and opportunities provided by Covid19 and potential future crises; (vi) an IPPF and (vi) address of climate change risks and its management.
108. The Social and Environmental Screening Procedure (SESP) was finalized during project preparation, as required by UNDP's Social and Environmental Standards (SES). The thirteen risks identified at PPG stage which were all rated moderate, except for two that were rated as Substantial, were reviewed and in consultations with communities. The SESP has identified the project as being potentially overall with Substantial risk.

Targeted Assessment

109. **Site- and activity-specific SESP screening.** At the current stage of project development, precise locations and on-the-ground activities are not finalized. The SESP has been conducted based on the broad scope of activities envisaged, and impacts listed are therefore generic rather than site-specific. The exact locations for on-the-ground activities (and hence the project's direct beneficiaries and project-affected communities), have not been specified at the present stage of project development. Further screening is required to identify risks' site-specific significance, and to effectively target any required further impact assessment or management. Locations, and proposed project activities specific to those locations, will

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be defined during the first year of the project. Once the initial project activities are fully specified and exact locations selected, further screening using the SESP will be required to ground-truth and update the SESP, and to determine whether additional social and environmental impacts may be present that will require further assessment and management.

110. **Climate Change and Disaster Risk.** The project has been assessed for climate change and disaster risk, as detailed in **Annex 23**

111. **Covid-19 and Health Hazard Assessments.** The project will evaluate the vulnerability of project stakeholders to such crises, and appropriate measures will be integrated into project management. Adaptive management measures will be implemented to reduce the risk of virus exposure during a prolonged or recurrent COVID-19 pandemic, or similar crisis. Virtual meetings will be held where feasible. Activities involving gatherings of people will require activity-specific Health hazard assessments, and mitigation measures will be implemented accordingly, e.g., ensuring physical distancing, providing personal protective equipment, avoiding non-essential travel, delivering training on risks and recognition of symptoms, etc. Refer **Annex 22** "Summary Analysis and Project Implications/Opportunities of COVID-19".

112. **Gender Action Plan:** The SESP identified risks that project activities and approaches might not fully incorporate or reflect views of women and girls and ensure equitable opportunities for their involvement and benefit. Prevailing gender biases could unintentionally discriminate against women, limiting or adversely impacting their opportunities to access and/or influence project activities. A Gender Analysis has been completed and a Gender Action Plan has been developed and is in place and included as **Annex 9** to the Project Document.

113. **Stakeholder Consultation.** The project is built around consultation with stakeholders, and no on-the-ground activities will take place without community agreement through their respective VCGs. All activities will be developed in conjunction with local communities, through extensive stakeholder consultation, in accordance with VCGs decision-making structures, and with a proactive emphasis on the inclusion of women, the poor, and marginalized groups. Initial consultations have taken place on the project concept during PPG, and a plan for ongoing stakeholder engagement has been developed. As locations for demonstration activities are finalized, the plan will be updated and will specifically consider how to equitably and meaningfully engage marginalized and vulnerable populations including specific measures to include women within the project areas. The plans will ensure that community rights, land tenure and traditional use rights in the wetland are considered and mainstreamed at all throughout. This is included as **Annex 7**

114. **Project-Level Grievance Redress Mechanism.** The Project will establish and implement a transparent, fair and free-to-access project-level Grievance Redress Mechanism (GRM), approved by stakeholders, which will be put in place at the start of implementation. Interested stakeholders may raise a grievance at any time to the Project Management Unit, the Executing Agency, or the GEF Implementing Agency (UNDP).

Stakeholder engagement and south-south cooperation:

115. A wide range of consultations with stakeholders were conducted during the PPG stage, keeping in mind the severe constraints imposed due to prevailing Covid-19 situation that to some extent limited the extent of consultations, particularly at the ground level. Initial stakeholder analysis during the PIF stage was followed up with consultation during the PPG stage in the design of the project. During the PPG stage, following consultations at the national level and in the area around the Tanguar Hoar, the stakeholder analysis was updated and elaborated following consultations undertaken by the PPG national consultants with the district, upazila and union entities addressing both institutional stakeholders in the context of their statutory involvement in the project, and more broadly for non-governmental stakeholders (IPs,

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communities and CSOs) including wetland resource-dependent communities. See Table 9 below for the list of consultations undertaken. Also refer to ESMF and EMPF for additional consultations conducted in terms of preparation of safeguard documents.

Table 9: Consultation Meetings

KEY CONSULTATIONS	DATE	STAKEHOLDERS
Consultation meeting with UCN: Mr. Raquibul Amin, Dr. Khalid Hossain, Mr. Sarowar Alam Dipu. UNDP: Mr. Arif M Faisal UNDP (Consultants): Dr. Sharif A. Mukul, Ms. IrfathAra Iva, Mr. Mohammad Mizanur Rahman Bhuiyan, Mr. Md. Shafiqul Islam, Dr. Md. Golam Mahabub Sarwar.	18 July 2021	General discussions related to past experiences with Tanguar Hoar in terms of (i) Community and/or Stakeholder engagement; (ii) status of programs at biodiversity conservation and Environmental improvement; (ii) gender dimension and mainstreaming experiences; and (iv) opportunities in terms of livelihood improvement.
Consultation meeting with key government sector entities, including the following: Rezaul Karim Chowdhury, Divisional Forest Officer (Sylhet), Forest Department; Dr. Haseeb Md. Irfanullah, Environment and Climate Change Specialist; Syed Mahmud Riadh, Concern Worldwide; Wahiduzzaman Sarker, Concern Worldwide; DhruboKanti Kundu, HILIP; Yahiya Sazzad, CNRS; Dr. Sharif A. Mukul, National Wetland and Biodiversity Conservation Expert, CbMTHWB; IrfathAra Iva, National Gender Expert, CbMTHWB; Mohammad Mizanur Rahman Bhuiyan, National Safeguard Specialist, CbMTHWB; Md. Shafiqul Islam, National Community Engagement and Livelihood Specialist, CbMTHWB; Dr. Md. Golam Mahabub Sarwar, National Community-based Ecosystem Management Specialist, CbMTHWB.	26 July 2021	The meeting was useful to share information among different stakeholders on experiences in sustainable management, wetland biodiversity conservation, including riparian areas, swamp forests, reed banks and forest restoration procedures and management aspects.

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KEY CONSULTATIONS	DATE	STAKEHOLDERS
Meeting with staff from various departments of the Ministry of Environment, forest and Climate Change	29 October 2021	The following topics covered in the meeting: • Theory of change and activity matrix • Development of GIS maps of TH with the latest land use/cover of the area • Investigation of land-use dynamics of TH area using current and historic satellite images. Identify major changes in land use/cover during wet and dry seasons. • Identification of location (geo-referenced) of specific activity (e.g. canal/river excavation, restoration/conservation of Hijal/Karach forest) in TH map. • Review and update of baseline information (social, economic, and livelihood aspects) of TH for relevant project documents. • Identification of point and non-point sources of pollution in TH area. • Identification of different drivers of land degradation in TH area. • Adjust/review of proposed project activity based on the TH bridging project developed by DoE. • During the field visits, also collect data on ecotourism (no. of tourist boat per ghat, tourists during peak/full moon and off-peak period, etc.), local wage rate, etc.
Field Consultations at Tanguar Hoar with Central Co-Management Committee members and Guards of the *Tanguar Haor* and ethnic minority communities	18 October 2021	To identify the key threats of the *Tanguar Haor* ecosystem and its potential solutions, livelihood opportunities, etc.; community perceptions and interests in participation, current constraints for community participation and means for improving communication, consultation and participation.
Field Consultations at Tanguar Hoar with Dharmapasha and Tahirpur Upazila level stakeholder consultation. Participants included: Upazila Nirbahi Officer, Assistant Commissioner of land, Secondary Education Officer, Upazila Livestock Officer, Senior Upazila Fisheries Officer, Medical Officer, Principal, Govt. College, Upazila Cooperative Officer, Upazila Education Officer, SAE/SO, BADC, NGO official, UP Chairman, Water Development Board, Members of VCC, CCC, Poribesh o HaorUnnayan Songstha	19 October 2021	Discussion on the role of different agencies in supporting activities at TH, their capacity and mode of participation, providing extension and technical support to the Village Conservation Committees in planning, implementation and monitoring of activities at TH
District level stakeholder consultation, Sunamgonj at Tanguar Hoar with Deputy Commissioner, Sunamgonj, Upazila Chairman, Tahirpur Upazila, Deputy Director-Agriculture, District Livestock Officer, UNO, Tahirpur, AC Land Tahirpur, Divisional Fisheries Officer, Assistant Director, DoE, Sylhet, Sub Divisional Engineer, BWDB, Pres dent, Poribesh o Haor Unnayan Songho, Focal Person, CNRS, President, Central Cooperative, District Coordinator, BRAC, Secretary, CCC, TH, Assistant Conservative Forest, UP Chairman, South Sreepur,	19 October 2021	Discussion on the role of different agencies in supporting activities at TH, their capacity and mode of participation, providing extension and technical support to the Village Conservation Committees in planning, implementation and monitoring of activities at TH

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KEY CONSULTATIONS	DATE	STAKEHOLDERS
Executive Engineer, RDC, Sunamgonj, Assistant Deputy Commissioner (Revenue)		
A consultation was held with Sylhet Division office of DOE. Participants included: Mohamad Amran Hossain, Director, DoE, Sylhet; Md. Alamgir, AD, DoE, Sylhet; Md. Maydul Islam, Inspector, DoE, Sylhet; Dr. Mohammad Muzammel Hoque, National Coordinator, SGP-GEF; Dr. Md. Golam Mahbub Sarwar, Community Development Specialist; Dr. Sharif A. Mukul, Biodiversity and Wetland Specialist; Mohammad Mizanur Rahman Bhuiyan, Safeguard Specialist; Md. Shafiqul islam, Community Engagement and Livelihood Specialist	20 October 2021	Discussion on the role of Sylhet Divisional Office of DoE in supporting activities at TH, their capacity and mode of participation, providing extension and technical support to the Village Conservation Committees in planning, implementation and monitoring of activities at TH.
A consultation was held with Officials of DOE Head Quarter. Participants included: Mohammad Solaiman Haidar, Director, DoE; Md. Mahmud Hossain, DD, DoE; A K M Rafiqul Islam, DD, DoE; Md. Hasan Hasibur Rahman, DD, DoE; Md. Samsuzzaman Sarkar, DD, DoE; Md. Iliyas Mahmud, DD, DoE; Subarna Mosaraf, AD, DoE; Mst. Papia Sultana, AD, DoE; Md. Atikuzzaman, AD, DoE; Ashfaq Seyam, AD, DoE; Md. Sha Alam, Inspector, DoE, A K M Azadur Rahman, Program Specialist, UNDP; Dr. Md. Golam Mahabub Sarwar, Consultant; Dr. Sharif A Mukul, Consultant; Irfath Ara, Consulktant; Md. Shafiqul Islam, Consultant; and Afroza Hoque, UNDP.	06 January 2022	Discussion on the draft Prodoc and role of DoE in supporting activities at TH, their capacity and mode of participation, providing extension and technical support to the Village Conservation Committees in planning, implementation and monitoring of activities at TH.

116. The purpose of the Stakeholder Involvement Plan (SIP) for the project is to ensure long-term sustainability of the project achievements, based on transparency and the effective participation of the key stakeholders. The objectives include the following: (a) to identify the main stakeholders of the project and their basic roles and responsibilities in relation to the project; and (b) to take advantage of the experience and skills of the main stakeholders, safeguard their active participation in different activities, reduce obstacles in project implementation, and sustain gains after project completion. The approach is based on the principles of fairness and transparency in selection of stakeholders, ensuring consultation, engagement and empowerment of relevant stakeholders. This is to ensure: (i) better coordination between them from planning to monitoring and assessment of project interventions; (ii) access of information and results to relevant persons; (iii) accountability of stakeholders; (iv) implementation of grievance and redress mechanism; and (v) sustainability of project interventions after its completion.

117. Stakeholder involvement will enhance the planning and management of conservation of the Tanguar Hoar. Their engagement will secure the conservation of globally and nationally important biodiversity within this important wetland, and mainstream biodiversity and sustainable wetland management and resource use. District, Upazila and Union ECA committees will be instrumental in establishing collaborative links with other district and local level entities, CSOs, private sector, IPs and local communities, while facilitating coordination across sector and administrative levels. The Project may solicit the services of NGOs/Civil Society Organizations (CSOs) to implement project activities.

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Identification of Potential Stakeholders

118. The SIP involves the identification of stakeholders at the provincial, district and commune levels that would be engaged as project partners. These include government entities, CSOs and local and IP communities.

119. Role and responsibilities of key stakeholders and their Involvement Mechanisms and Strategies

120. Mechanisms and strategies for stakeholder involvement will ensure that relevant shareholders: (i) receive and share information, (ii) provide inputs in the planning, design, implementation, monitoring and evaluation of project initiatives, and (iii) play a role in sustaining the initiatives during and after the closure of the project. Roles and responsibilities of main stakeholders of the project are summarized in Table 10 below. Early in project implementation, DOE (with support from District entities) will develop a more detailed Stakeholder Engagement plan that would ensure: (a) stakeholders' involvement in project planning, implementation and monitoring; (b) stakeholders engagement in social and environmental screening and risk monitoring; (c) free, fair and transparent methods of information sharing; (d) implementation of gender mainstreaming strategy and action plan; (e) measures to empower stakeholders and potential project beneficiaries; and (f) disclosure and accessibility of information.

Table 10: Stakeholder Involvement Plan

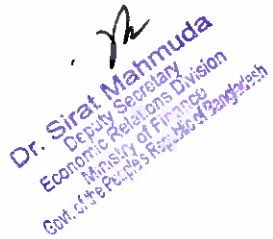
Stakeholders	Mandate of the stakeholder institutions	Roles and Potential Involvement in Project
National level		
Department of Environment (DoE), Ministry of Environment, Forest and Climate Change (MoEFCC)	• DoE's mission is to secure a clean and healthy environment for present and future generations. • The Tanguar Haor Wetland ECA and *Ramsar* Site fall within DoE's mandate and it is responsible for determining which activities may prevail or not in such areas.	• DoE is the Responsible National Executing Agency under the MoEFCC, for implementing this project.
Bangladesh Forest Department (BFD)	• BFD is responsible for protection, management and development of the nation's forest estate under its remit, some of which lies within wetland, as well as the protection of wildlife throughout the country. • BFD is responsible for management of Protected Areas (PA).	• FD will be an Implementing Partner particularly afforestation, reforestation, swamp forest restoration, agroforestry and nursery components of the project.
Department of Agricultural Extension (DAE), Ministry of Agriculture	• Promote innovative and sustainable agriculture practices in the country.	• DAE will be an implementing partner and will support in promotion of sustainable and environment friendly agriculture practices in wetland; and provision of guidance/manuals etc. on best agriculture environment practices, policies etc. if not already in existence. • Provide technical assistance.

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Stakeholders	Mandate of the stakeholder institutions	Roles and Potential Involvement in Project
Department of Fisheries (DoF) and Department of Livestock Service (DLS) under Ministry of Fisheries & Livestock	• Promote innovative and sustainable fisheries and livestock practices in the country.	• DoF and DLS will be the implementing partners for promoting sustainable fisheries and livestock-based livelihood support (e.g. aquaculture, poultry, goat, sheep, pig , beef rearing etc.) and manure management; • Provide technical assistance in conducting training programs
Bangladesh Parjaton Corporation (BPC- National Tourism Board), Ministry of Civil Aviation & Tourism	• Promote tourism in the country	• BPC will support in promotion of ecotourism in *Tangura Haor* wetlands and guide in formulation of best practice guidelines. • They will also support guide tour operator for responsible tourism in the *Tanguar Haor* areas.
Finance Division, Ministry of Finance	• Ensure smooth financing	• Need to coordinate with the agency to engage about sustainable financing of wetland system in the plan.
Ministry of Law, Justice & Parliamentary Affairs	• Prepare, review, amend the laws, regulations, rules etc.	• Need to coordinate with relevant agency (in the Ministry) with whom to work after project has reviewed ECA law, regulations, rules etc. and wishes to recommend changes that will strengthen governance and sustainable financing of ECA system.
Ministry of Land	• Management of land	• Involvement of Land Reform Board, Land Record & Survey Department, etc. may be required as deals with land tenure issues, especially in recognition of the fact that DoE is not a landowner and so has to work with those who own the land.
Local Government Division (LGD), Ministry of Local Government, Rural Development & Co-operatives (MoLGRDC)	• Promote local government in the development initiatives	• Ultimately, the 'sustainable solution' may be to delegate management responsibility to the District Officer as he/she engages with all sectors of local government and ownership at district level is potentially strong – thus DoE needs districts on board, which presumably come under this Ministry. • Provide technical assistance in the development of Cooperative model among the beneficiary groups
Ministry of Social Welfare (MoSW)	• Promote social safeguard	• Department of Social Welfare will be engaged to provide social protection support to ultra-poor, women and adolescent girls and other vulnerable groups.
Department of Women Affairs (DWA), Ministry of Women and Children Affairs (MOWCA)	• Promote gender mainstreaming, social safety net for women, children etc.	• This ministry will guide in providing required policy support in improving women participation in conservation action, socio-economic development through livelihood initiatives and ensuring social safety net for women.

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Stakeholders	Mandate of the stakeholder institutions	Roles and Potential Involvement in Project
Ministry of Water Resources (MoWR)	• Governing and managing of the water resources • The Ministry is responsible for regulating and developing rivers and their valleys, governing matters relating to irrigation and flood forecasting and control.	• Institute of Water Modelling, Bangladesh *Haor* and Wetland Development Board, Bangladesh Water Development Board, Centre for Environmental & Geographic Information Services (CEGIS) will be engaged for Integrated Water Resource Management (IWRM), canal re-excavation, river dredging etc. of the *Tanguar Haor*.
International agencies and NGOs	• Promote knowledge sharing, exchange of expertise etc.	• IUCN Bangladesh, Government of the Netherlands, Swiss Agency for Development & Cooperation (SDS) and USAID has all supported ECA projects in the past. • Some local NGOs like BCAS, CNRS, NACOM, ERA, etc. has provided support through capacity building, research and monitoring, educational outreach, and the development of management plans for wetland resource management.
Local level		
Local Government Authorities District administration Upazila administration Union Councils/Parishad	• Maintain coordination among the development agencies • Promote monitoring system • Administrative support as needed	• District authorities (Deputy Commissioner) in which the *Tanguar Haor* is located will play a vital multi-sector coordinating role within their respective districts; and operate at the interface between national government and those safeguarding and sustainably managing the resources and ecosystem services provided by the wetland (i.e. local communities and private sector interests). • Coordination mechanisms will also be operational at Upazila and Union Parishad levels. • The Upazila Management Committee of the *Tanguar Haor* will be responsible as local focal authority of the management committee in the Upazila level headed by the Upazila Nirbahi Officer. • The Union Parishad Chairman will be valued members of the Upazila Management Committee for their contribution. The local community people are very close to the Union Parishad.



Stakeholders	Mandate of the stakeholder institutions	Roles and Potential Involvement in Project
Local Communities Women's associations Youth groups	• Direct involvement of the community people in the project initiatives as a part of the management of the *Tanguar Haor*	• Communities will be closely involved in project implementation through the establishment of ecosystem-based village committee. • Final selection of investment sites for project implementation at *Tanguar Haor* will take into consideration any opportunities and interests of local communities. • Community level women's associations have been promoted in *Tanguar Haor* by establishing the women groups in the livelihood initiatives to empower them economically and socially. Such associations will be involved to create opportunities for women and to ensure gender specific roles are built into ecosystem-based approaches to wetland management. • The youth groups may be involved in the process through youth nature conservation club, livelihood activities, community guards.
Indigenous peoples	• Direct involvement of the community people in the project initiatives as a part of the management of the *Tanguar Haor*	• IPs will be closely involved in project implementation through the establishment of ecosystem-based village committees • Participation in FPIC process to ensure buy-in and address of their concerns and rights • The *Garo* and *Hajong* tribe live in 11 villages in the northern part of the *Tanguar Haor* and are dependent on the wetland their income, employment and livelihood and will be directly associated through their local community institutions for the project.
NGOs, CBOs, CSOs (different layer s of committees, associations)	• Facilitate the implementation process • Direct involvement in project initiatives implementation	• Local NGOs (CNRS, NACOM, ERA, IUCN, etc.) will be involved, as appropriate, to facilitate community mobilization, group formation, awareness raising, livelihood support, training of local communities and providing them with ready access to information on wetland conservation, sustainable agriculture and fisheries management, watershed management, waste management and pollution control, along with strategies to cope with climate change and declining freshwater flows.

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Stakeholders	Mandate of the stakeholder institutions	Roles and Potential Involvement in Project
Private sectors	• Mitigating industrial pollutants, agro-chemicals etc. • Facilitating the ecotourism, livelihood initiatives, conservation process, market linkage	• Private sector will be engaged on account of mitigating industrial pollutants, as well as others such as agro-chemicals from farmed land. • They will also be engaged in promoting ecotourism, conservation of ecosystem and biodiversity, livelihood and alternative income generating activities, develop marketing network, etc. in the *Tanguar Haor*. • This will provide an innovative opportunity to engage with the private sector and exercise DoE's enforcement powers using appropriate market-based instruments to precipitate conservation and restorative measures to reverse such trends.

121. Potential cooperation with other countries may include visiting experts; and/or training and exchange visits for government officials and community representative staff on key management and other challenges where greater experience and clearer vision exist. Reference has been made to potential opportunities for partnership support and exchanges with the South Asia branch of Wetlands International and also in India there is considerable experience in the management of Water Hyacinth, including product of handicrafts from the raw material. There is also much to learn from market-based instruments for controlling water pollution, as applied in China[27]; and certainly, the project should facilitate discussions between DoE and other donor agencies with regard to scaling up post-project.

Gender equality and Women's Empowerment:

122. Considerable knowledge and experience have been gained from previous projects about the different roles of men and woman living in rural wetlands with respect to energy, water and food production to secure their livelihoods through more sustainable management of agriculture, fisheries, forestry and water resources management. The project recognizes that while, women and men possess different knowledge(s) and transmit it in various ways due to their respective roles and responsibilities in the private and public spheres, women both historically and currently are primarily responsible for food preparation and distribution and for ensuring the short and long-term health of the family and community. However, it has frequently been considered a sector dominated by men, making it difficult for women's participation to have full access to wetland resources and benefits arising from these resources. Men have better access to and control of wetland products and agricultural machinery including access to and control of training and, extension services.

123. In general, women and elderly women, do not have a solid understanding of ways and means of managing wetland resources more sustainably, they do, however, have a sense that business patterns are changing, affecting their wetland resource collection/harvesting yields and resulting in more difficult living conditions for their families. Almost all of women in Bangladesh as well as in each community may not have a conceptual understanding of how to deal with fair or equity benefit sharing, particularly with respects to their livelihoods and development and an understanding of sustainable harvesting techniques and its use. This is further aggravated by the lack of proper capacity development programs. Consequently, this has resulted in inappropriate use of wetland resources and the gradual depletion of

[27] Asian Development Bank. Market-based instruments for water pollution control in the People's Republic of China. Mandaluyong City, Philippines: Asian Development Bank, 2011.

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wetland biodiversity. This is acknowledged and further documented in the current National Biodiversity Strategy and Action Plan (2016-2021).

124. The project addresses gender inequalities in the agriculture, fisheries, forestry and water resources sectors and helped identify opportunities to support gender mainstreaming through the direct involvement of women. During the PPG phase, a gender specialist was recruited and undertook a full gender analysis (refer Annex 9) to identify the different roles of men and women in Tanguar Haor. At the site level, the project carefully examined local conditions pertaining to local livelihoods, resource access and use and management systems, and factors affecting the livelihoods of women and men who are dependent on the Tanguar Haor. The assessment focused on ensuring an inclusive approach through which women and men are able to participate actively and benefit equitably and have equitable access to the project resources and receive fair social and economic benefits. The gender analysis focused on the following key aspects to ensure that women are equally involved in decision making and sharing of wetland benefits, such as (i) having access to information relating to current status of wetland resources, threats and process for participation in decision-making; (ii) ensuring access to alternative livelihood and learning skills; (iii) active participation and benefit sharing from conservation actions and (iv) access to training and skills in leadership development.

125. Consultation sessions were held at the site level during the field visits to obtain views and inputs of a wide range of local stakeholders, including women, and to develop project activities and to inform means of ensuring the engagement of women. The gender analysis and mainstreaming action plan includes specific measures to ensure that women actively participate in decision making, as well as measures are in place to mitigate any negative impacts on rural women and girls (e.g. in terms of benefit sharing, labor division, access to resources, access to technology and skills development.). Additionally, project design includes specific budget allocations for investments related to agriculture and livelihoods, training, and awareness raising to ensure that women adequately benefit from project investments as well as capacity building and training activities and alternative livelihood options. In addition, the project appropriately incorporates measures to enhance capacity of women and vulnerable members to take an active part in the planning and decision-making process. This attention on gender mainstreaming is recognized in project Component 3. Gender-disaggregated targets and indicators are included within the project results framework. The project is aiming for at least 50% of direct beneficiaries to be female[28]. The project will also seek to create women sub-committees, as part of the village institutions so as to focus more direct interventions on women specific needs.

126. In terms of indigenous women, special efforts were made during the gender assessment study to identify current constraints and difficulties that they encounter, their access to services and opportunities and design specific interventions to ensure that they participate effectively in decision-making, have access to project benefits and opportunities for training, skills development and livelihood.

Innovativeness, Sustainability and Potential for Scaling Up:

127. ***Innovation:*** The strengthening of the existing hierarchical governance structure for ECA as postulated in the ECA management rules in Tanguar Haor will contribute towards demonstrating its application towards enhancing the ecological condition of the wetland. Innovation will be promoted through: (i) empowering local resource users to manage the wetland resources through co-management arrangements, where local communities (in particular fisher folk and wetland resource collectors) take

[28] Since the Tanguar Haor is situated in greater Sylhet district where people are more conservative and religious than other parts of the country, and women's participation in control and management of tangible and intangible natural resources is generally unfavorable. Hence, as a start the project would be to aim at 30% participation of women,

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responsibility for managing their respective parts of the wetland. This would entail innovative community management decisions in relation to setting up seasonal sanctuaries or no-take zones to protect fish breeding and spawning, define harvest limits and species to be harvested, regulate fishing gear and harvest times, etc.; (ii) viewing remaining freshwater evergreen swamp forests, reed areas, *beels* and connecting riverine ecosystems as an integrated, inter-linked and complex ecosystem that needs to be managed for their various interactions; (iii) promote a community-based approach towards the protection and management of the wetland ecosystems through establishing links with maintenance of wetland conditions ; (iv) bringing actors from the districts, upazilas and unions together to support local communities to achieve and implement mutually agreeable plans for conserving favorable ecological conditions within the wetland; (v) promoting an alternative conservation-oriented natural resource-based economy within and around the wetland and testing sustainable financing mechanisms, with emphasis on private sector partnerships with local communities; and (vi) establishment of a participatory monitoring framework for the wetland that will cover both its management and ecological status (health). The intent of this approach is to promote a community-decision making and management process that protects unsustainable harvesting of fish and wetland resources to enhance the production of recruits and restock fishing grounds; provide a refuge from fishing for depleting and vulnerable species; maintain biodiversity and ecological functions of natural biological communities; and facilitate ecosystem recovery with active community engagement and protection. The promotion of locally co-managed wetland areas will be innovative in that it will enhance the ability of the community to undertake on-the-ground adaptive management actions to conserve wetland resources under their responsibility by preparing a plan for its management, checking and monitoring the outcomes of its plan implementation and modifying management in light of outcomes or monitoring results. This approach will likely ensure that there is increased equity and self-determination, likelihood of sustainability, appropriateness of conservation and management initiatives, sense of local ownership and likelihood of success. The project will provide technical support, best practices, extension support and facilitate partnerships between community institutions and government and private sector partners. In addition, the promotion of a digital platform to provide information in a simplified, standardized and dedicated information management system on species, habitats, threats, water quality and conservation actions will help bench mark the status of Tanguar Haor and identify actions necessary to restore the wetland to 'favourable' conditions (or better) and enable enhanced collaboration and cooperation in conservation efforts.

128. This will entail undertaking an assessment to determining the condition of the natural resources within the Tanguar Haor and its surroundings, including the status of biodiversity, water quality, fisheries productivity and fish species distribution and diversity, and other wetland resource condition, status of wetland evergreen swamp forests, fisheries, extent of land and agricultural areas under degradation, erosion and soil fertility and indicators to assess the extent to which these resources are depleted or degraded and to elaborate on specific threats leading to this situation. The intent is to obtain adequate information on key parameters to inform management decision making. This will be achieved through: (i) development of simplified, standardized and dedicated information management system and operationalization; (ii) strengthening information support system for consortium of government, district, private and other stakeholders for sharing good practices; (iii) setting up of standardized information collection standards; and (vi) cross-agency and cross-sector efforts to collect and digitally catalog existing for collaboration and cooperation in conservation efforts.

129. ***Financial sustainability*** will be approached through the following measures: (i) development of a financing strategy, key elements of which will include: securing adequate funds within the 5-Year Plan framework to strengthen DoE's environmental governance and, in particular, its enforcement role as advocated in the Environment, Forestry and Biodiversity Conservation Background Paper for the 7th Five-Year Plan (Section 5.1) and relevant section of the upcoming 8th Five-Year Plan; and establishing a platform with the private sector to address industrial and agricultural pollution of wetlands through market based instruments (e.g. incentives, pollution charges, etc.); (ii) development and promotion of micro and small business partnerships with local communities and facilitating market linkages for community products; (iii) improving favorable ecological conditions in the wetland through co-management approaches with the intent to improve and sustain community-based lifestyles dependent

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on fisheries, agriculture and related livelihoods based on community needs and thus promote local ownership; and (iv) helping industry develop more sustainable and less polluting practices.

130. ***Institutional sustainability*** will be achieved through systematic and transformational capacity development of existing public institutions (DoE and others) and institutions at different administrative levels (district, upazila and union entities), networks of civil society organizations, local fishers, farmers and community groups. By engaging these stakeholders in gender responsive conservation and ecosystem management, and investment planning, the project will help to establish alliances for conservation and sustainable use of biological resources that is expected to continue beyond the project period.

131. ***Social sustainability*** will be achieved through development/strengthening of stakeholder participation mechanisms for the Tanguar Haor, including community groups, small-scale industry, fishers and farmers. A Knowledge Management and Communication strategy will be developed at the start of the project to facilitate awareness and enhance stakeholder participation. Extensive consultations that were undertaken during the PPG stage (constrained by the Covid situation) will be further expanded during Year 1 of the project to ensure collective and appropriate decision making to design this strategy in form and substance that is appropriate to the local condition. In addition, the delineation of areas to be set asides for conservation, restoration and protection as well as restorative measures will be undertaken following extensive consultations with local communities to ensure that there is buy-in from all stakeholders. A detailed grievance redress mechanism has been included in the project document to ensure social sustainability

132. ***Environmental sustainability*** will be achieved through a coordinated ecosystem-based approach involving improved wetland management, sustainable fisheries and agriculture and other wetland resource use practices, water quality management, freshwater evergreen swamp forest restoration and riparian area management, improving incentives for conservation and community participation. It would also reduce threats to the wetland through targeted ecosystem-based partnerships, with the intent to manage and control the pollution of water bodies and improve inter-institutional collaboration.

Scaling Up

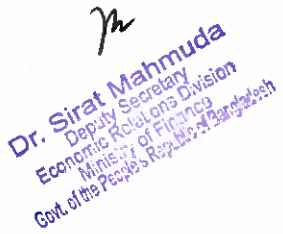
133. The governance, capacity building, monitoring and financial strengthening of the Tanguar Haor system achieved and demonstrated during the lifetime of this proposed project, including the adoption of standards, protocols and tools will benefit other wetlands in the country. All of the knowledge and experience gained, lessons learned, training modules, templates for management planning and monitoring, management plans and associated monitoring data, legal and regulatory provisions will be readily accessible on a web-based information system with GIS capabilities. A framework for scaling up the project will be developed during the project phase as outlined in Output 3.3.

134. The potential for scaling up is high in view of the enhanced national capacity to be established within DoE, supported by the new multi-sector Technical Advisory Panel. It is also noteworthy that a precedent has been established with the previous GEF-funded ECA project, *Coastal and Wetland Biodiversity Management Project 2003-2011* (CWBMP), which DoE scaled up with its Community-based Adaptation in the ECAs through Biodiversity Conservation and Social Protection Project (CBA-ECA) from 2010 to 2015. The Project's investment component will seek to develop synergies among rural development and private sector actors and programs with an objective of raising additional investments that will fund and expand models of wetland conservation and resource use and alternative livelihood activities within and outside of the targeted wetlands.

135. The most important aspect related to scaling up is the demonstration of the benefits of locally managed wetland co-management that promotes equity and self-determination, ensures the appropriateness of conservation and management initiatives based on community needs and aspirations, develops a sense of local ownership and enhances the community's ability to effectively manage wetland resources that they are dependent on.

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136. The GEF project that is promoting an innovative community ecosystem-based co-management approach to wetland management is premised on establishing and demonstrating a conservation-oriented natural resource-based economy within and around the wetland and testing sustainable financing mechanisms, with emphasis on private sector partnerships with local communities. This will be a new approach in Bangladesh that will have potential for replication. The project will make special efforts during the life of the project to promote scaling up of learning from the Tanguar Haor to other ECAs in the country (that cover a total of around 380,000 hectares in 13 ECAs in the country. To facilitate uptake to other ECAs in the country, the project will open training opportunities to the staff of other ECAs in the country, as well as support study visits and provide technical support to these ECAs as part of the effort to build interest and support for replication. The project will make special efforts during the life of the project to promote scaling up of learning from the Tanguar Haor to other ECAs in the country (that cover a total of around 380,000 hectares in 13 ECAs in the country. The Project Management Unit (PMU) will work with the MoEFCC and local governments to identify sources of government and private sector funding, micro-capital grants and self-help groups to initiate and promote replication in other ECAs. In particular, initial scaling-up efforts will be focused on 2-3 other ECAs (covering around 3,000 ha) in the country through technical support, training, study visits and extension support as part of the initial scaling up effort.



PROJECT RESULTS FRAMEWORK

The project will contribute to the following Sustainable Development Goal (s): SDG 5 Gender Equality: SDG 13: Climate Action; SDG 14: Life Below Water and SDG 15: Life on Lan
The project will contribute to the following country outcome included in the UNDAF/Country Program Document : UNSDCF Outcome 3/CDP Outcome 2: By 2026, ecosystems are healthier, and all people, in particular the most vulnerable and marginalized in both rural and urban settings, benefit from and contribute to, in a gender-responsive manner, a cleaner environment, an enriched natural resource base, low carbon development, prosperous and are more prosperous and resilient to climate change, shocks and disasters
This project will be linked to the UNDP Strategic Plan as follows: Aligned with UNDP Strategic Plan (2022-2025) Output Signature Solution #4 (Environment); contributing to UNDP SP **results 4.1: Natural resources** protected and managed to enhance sustainable productivity and livelihoods; and Result 4.2: **Public and private investment mechanisms** mobilized for biodiversity, water, oceans, and climate solutions

	Objective and Outcome Indicators	Baseline	Mid-term Target	End of Project Target
Project Objective: To promote sustainable use of wetland resources by local communities to conserve globally significant biodiversity, improve ecosystem services and secure local livelihoods in Tanguar Haor	***Indicator 1:*** *[GEF-7 CI 11; IRRF indicator 4.1.1]* Number of direct beneficiaries disaggregated by gender	*0*	*At least 500 beneficiaries (250 men and 250 women) with improved livelihood opportunities, including fisheries and agricultural practices, etc. At least 25% of the targeted beneficiaries would be from Covid19 affected/vulnerable populations*	*At least 3,000 beneficiaries (1,500 men and 1,500 women) with improved livelihood opportunities, sustainable agriculture, fisheries and animal husbandry* *Initial assessments (to be validated during project implementation) include beneficiary breakdown as follows: Agriculture -860; fisheries -300; animal husbandry -1,030 and small business development - 810*
	Indicator 2: *[GEF-7 CI 1; IRRF indicator 4.1.2]* ***Terrestrial protected area under improved management***	*Limited protection for TH with METT baseline of 19 points*	(i) 9,727 ha of Tanguar Hoar with at least 10-point increase from current baseline (ii) An additional 3,200 ha of 2-3 freshwater ECAs identified and agreement reached on timeline for replication	*At least 13,000 hectares under improved management that includes:* (i) 9,727 ha of Tanguar Hoar with at least 25-point increase from current baseline (ii) An additional 3,200 ha of 2-3 freshwater ECAs benefiting from scaling up of practices based on lessons from Tanguar Haor
	Indicator 3: *[GEF-7 CI 3; IRRF indicator 4.1.2]* ***Area of wetland under improved restoration***	*Continued degradation of freshwater evergreen swamp forests without*	*At least 100 hectares of degraded freshwater evergreen swamp forests established for*	*At least 400 hectares of degraded freshwater evergreen swamp forests under improved protection and restoration through MOUs with village committees*

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		any significant efforts at rehabilitation	*protection and rehabilitation*	
	Indicator 4: *[GEF-7 CI 4, IRRF indicator 4.1.2]* ***Area of landscape under sustainable practices (excluding protected areas) to benefit biodiversity***	*Agricultural lands and other wetland landscape types under degradation as reflected in Table 1*	*At least 500 hectares under sustainable practices to benefit biodiversity and including the following:* (i) 150 hectares of degraded agricultural lands under sustainable environment friendly practices (ii) 100 hectares of stream/riverbanks stabilized (iii) 150 hectares of reed banks stabilized (iv) 100 hectares of wetland drawdown areas under sustainable grazing practice	*At least 1,911 hectares under sustainable practices to benefit biodiversity and including the following:* (i) 500 hectares of degraded agricultural lands under sustainable environment friendly practices (ii) 349 hectares of stream/river banks stabilized (iii) 475 hectares of reed banks stabilized (iv) 587 hectares of wetland drawdown areas under sustainable grazing practice
	Indicator 5 *[GEF-7 CI 6]:* ***Greenhouse gas mitigated***	*No current efforts at C estimation*	*Methodology for C assessment and training undertaken to facilitate long-term monitoring*	*578,391 tCO_2 mitigated over a 20-year period*
Outcome 1: Integrated ecosystem management framework adopted to promote sustainable management of wetland resources in Tanguar Haor.	***Indicator 6:*** Ecosystem-based framework/system with measurable standards established to achieve favorable ecological conditions at Tanguar Hoar	*Currently there does not exist clear biodiversity features and values for establishing favorable ecological conditions in TH*	*Ecosystem-based framework/system established for the TH, including standards and targets for establishing favorable ecological condition in them.*	*Significant and measurable progress attained in at least 40% of established targets for ensuring favorable conditions at Tanguar Haor*
	Indicator 7: Level of institutional capacities for integrated ecosystem-based planning, management and monitoring of ECA at TH as measured by UNDP's capacity development scorecard	*Limited institutional capacities for planning, management and monitoring of ecosystem-based approaches to ECAs at national and local ECA*	*Average increase of institutional capacity as measured by a 10-point increase in UNDP Capacity Development Scorecard baseline values*	*Average increase of institutional capacity as measured by 25 points in UNDP Capacity Development Scorecard from baseline values*

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		institutional structures as measured by UNDP Capacity Development Scorecard baseline values of 19		
	Indicator 8: Gender-responsive measures in place for conservation, sustainable use, and equitable access to and benefit sharing of natural resources, biodiversity and ecosystems at Tanguar Haor	*Gender based practices not adequately addressed due to lack of awareness, capacity and commitment*	*Practices and institutional arrangements in place to enhance integration of gender actions*	*(a) At least 3 planning frameworks namely: (i) Improved guidelines for ecosystem-based framework specific to TH; (ii) Strengthen scope of work for TH committees at district, upazila and union levels; and (iii) Guidelines for TH management/ operational planning* *(b) institutions with trained staff and procedures – (i) at least 1 district ECA Committee; (ii) at least 2 Upazilla ECA Committee; (iii) at least 4 Union ECA Committee and (iv) At least 74 Village Conservation Groups*
Outcome 2: Improved ecological conditions established at Tanguar Haor through sustainable resource use and sustainable livelihoods for communities in its proximity	***Indicator 9:*** Number of Village Co-management plans in TH adequately resourced in terms of staff and financial resources approved by the government	*ECAs do not have sustainable ecosystem-based management and financing plans and only 40 VCGs functional*	*Co-Management and financing plans under development in at least 50% of villages*	*100% (or 74 villages) have approved and revised co-management and financing plans with clear planned activities and financial sources identified*
	Indicator 10: Improvement in water quality in ECA as measured for pH, DO, COD, BOD, N and P and other relevant parameters as determined by ECA framework	*Baselines for TH to be established in Year 1 for DO; BOD_5, COD; pH; N, P, etc.* *Note:* *Current baselines as described above are variable and inconsistent and would be established in Year 1 for locations where interventions are proposed as the basis for monitoring water quality changes*	*7-10% improvement in water quality indices from baselines at selected monitoring stations*	*10-15% improvement in water quality indices from baselines at selected monitoring stations*
	Indicator 11: *Status of population of flagship and keystone species (such as migratory waterfowl, indigenous fish species, etc.) in TH*	*Baseline to be established in Year 1*	*Stable or increased population of flagship and keystone species from baseline*	*Stable or increased population of flagship and keystone species from baseline*

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	from the baseline.			
	Indicator 12: Number of Village Conservation Groups established and functional	40 VCGs functional	50 VCGs functional with approved VCG plans/budgets and actions initiated on-the-ground	74 VCGs functional with VCG plans/budgets and around 50% of actions under effective implementation
Outcome 3. Institutional capacity, knowledge management, gender mainstreaming and monitoring and evaluation contributes to application of best practices for replication and scaling up	***Indicator 13:*** Extent of Information for Tanguar Hoar collated and integrated into ECA Management, Monitoring & Compliance Unit (MMCU) GIS database and monitored	*Limited information and technical capacity for monitoring and enforcement in safeguarding TH*	- *Baseline data and monitoring protocols for TH established to track compliance with prescriptions embedded in THs management plan.*	- *Upazila ECA Committees effectively monitoring and informing compliance on quarterly basis to National ECA Committee and effective follow up and reporting in relation to compliance* - .
	Indicator 14: Increase in level of knowledge of community and other stakeholders (disaggregated by gender) on threats and approaches to management of Tanguar Haor as measured by KAP survey.	*Limited awareness among communities of impacts of their unsustainable activities on the ecological condition of Tanguar Haor. Baseline survey established in Year 1 after KAP survey*	*At least 100 community members aware of impacts on the TH and at least 25% effectively applying these measures (at least 50% women beneficiaries)*	*At least 500 community members trained in relevant ecosystem-based best practice approaches and 50% effectively applying these measures (at least 50% women beneficiaries)*
	Indicator 15: Number of knowledge management products that reflects best practices and lessons learned	*Limited number (less than 5) of KM products on conservation and sustainable resource management codified*	*At least 5 additional KM products on conservation and sustainable resource management codified*	*At least 15 additional KM products on conservation and sustainable resource management codified and disseminated nationally and regionally*

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		and disseminated nationally and regionally	*and disseminated nationally and regionally*	

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MONITORING AND EVALUATION (M&E) PLAN

136. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP (including guidance on GEF project revisions) and UNDP Evaluation Policy **The UNDP Country Office is responsible for ensuring full compliance with all UNDP project M&E requirements including project monitoring, UNDP quality assurance requirements, quarterly risk management, and evaluation requirements.**

137. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[29]. The M&E plan and budget included below will guide the GEF-specific M&E activities to be undertaken by this project.

138. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed – including during the Project Inception Workshop - and will be detailed in the Inception Report.

139. **Minimum project monitoring and reporting requirements as required by the GEF:**

140. Inception Workshop and Report: A project inception workshop will be held within 2 months from the First disbursement date, with the aim to:
   a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
   b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
   c. Review the results framework and monitoring plan.
   d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
   e. Update and review responsibilities for monitoring project strategies, including the risk log; SESP report, Social and Environmental Management Framework (where relevant) and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
   f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
   g. Plan and schedule Project Board meetings and finalize the first-year annual work plan. Finalize the TOR of the Project Board.
   h. Formally launch the Project.

GEF Project Implementation Report (PIR):

141. The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. UNDP will undertake quality assurance of the PIR before submission to the GEF. The PIR submitted to the GEF will be shared with the Project Board. UNDP will conduct a quality review of the PIR, and this quality review and feedback will be used to inform the preparation of the subsequent annual PIR.

GEF Core Indicators:

142. The GEF Core indicators included as **Annex 11** will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to MTR and TE. Note that the project team is responsible for updating the indicator status. The updated monitoring data should be shared with MTR/TE consultants prior to required evaluation missions, so these can be used for subsequent groundtruthing. The methodologies to be used in data

[29] See https://www.thegef.org/gef/policies_guidelines

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collection have been defined by the GEF and are available on the GEF website. The required Protected Area Management Effectiveness Tracking Tool (METTs) have been prepared and the scores included in the GEF Core Indicators (Annex 11).

143. *Independent Mid-term Review (MTR):* The MTR will be initiated by August 2025 (no later than 36 months after CEO Endorsement). The terms of reference, the review process and the final MTR report will follow the standard UNDP templates and UNDP guidance for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC).

144. The evaluation will be 'independent, impartial and rigorous'. The evaluators that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project under review.

145. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the BPPS/NCE-VF Directorate.

146. The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by August 2025. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

Terminal Evaluation (TE):

147. An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center. TE should be completed 3 months before the estimated operational closure date, set from the signature of the ProDoc and according to the duration of the project. Provisions should be taken to complete the TE in due time to avoid delay in project closure. Therefore, TE must start no later than 6 months to the expected date of completion of the TE (or 9 months prior to the estimated operational closure date).

148. The evaluation will be 'independent, impartial and rigorous'. The evaluators that UNDP will hire to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

149. The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the BPPS/NCE-VF Directorate.

150. The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by November 2027. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

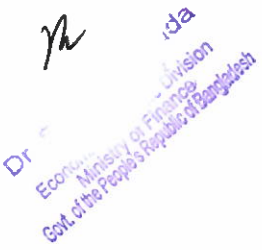
Final Report:

151. The project's terminal GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

152. Agreement on intellectual property rights and use of logo on the project's deliverables and disclosure of information: To accord proper acknowledgement to the GEF for providing grant funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications

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developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF. Information will be disclosed in accordance with relevant policies notably the UNDP Disclosure Policy[30] and the GEF policy on public involvement[31].



[30] See http://www.undp.org/content/undp/en/home/operations/transparency/information_disclosurepolicy/
[31] See https://www.thegef.org/gef/policies_guidelines

Monitoring Plan:

Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
Project objective To promote sustainable use of wetland resources by local communities to conserve globally significant biodiversity, improve ecosystem services and secure local livelihoods in Tanguar Haor	**Indicator 1** Number of **direct beneficiaries disaggregated by gender** (GEF Core Indicator 11)	MTR: At least 500 beneficiaries (250 men and 250 women) with improved livelihood opportunities, including fisheries and agricultural practices, etc. At least 25% of the targeted beneficiaries would be from Covid19 affected/vulnerable populations TE: At least 3,000 beneficiaries (1,500 men and 1,500 women) with improved livelihood opportunities, sustainable agriculture, fisheries and animal husbandry	Initial assessments (to be validated during project implementation) include beneficiary breakdown as follows: Agriculture - 860; fisheries -300; animal husbandry - 1,030 and small business development - 810	*Consultations with communities, KPA surveys*	Annually Reported in DO tab of the GEF PIR	*PMU, technical coordinator and consultants*	*Progress reports KAP survey reports*	*Assumptions:* *- Comprehensive training program designed and implemented* *- National capacity exists to conduct training effectively* *-Government agencies consider it their priority and staff and communities willing to participate in conservation actions* *Risks:* *-Lack of capacity in government, private sector and communities to meet obligations related to project.* *- Lack of involvement from resource users with continued unsustainable practices* *-The local administrations, CBOs, private sector and communities would work in close collaboration for preparation of wetland ecosystem management framework*
	Indicator 2: Terrestrial protected area under improved management	MTR: (i) 9,727 ha of Tanguar Hoar with at least 10-point increase from current baseline and (ii) an	Improved management effectiveness as measured through ecosystem management framework and	METT scorecards increase measured through ecosystem management framework and integration of sustainable	MTR and TE Reported in DO tab of the GEF PIR	PMU and MOEFCC	GEF METT Scorecard and PMU annual reports	*Assumptions* *- Government and sector agencies consider it priority to support integrated planning of the wetland*

[32] Data collection methods should outline specific tools used to collect data and additional information as necessary to support monitoring. The PIR cannot be used as a source of verification.

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	GEF Core Indicator 1	additional 3,200 ha of 2-3 freshwater ECAs identified and agreement reached on timeline for replication TE: (i) 9,727 ha of Tanguar Hoar with at least 25-point increase from current baseline and (ii) additional 3,200 ha of 2-3 freshwater ECAs benefiting from scaling up of practices based on lessons from Tanguar Haor	integration of sustainable practices and threat reduction	practices and threat reduction				*-Communities are organized to support collective actions* *Risks:* *-Demonstration of prevention and control measures for wetland is time consuming and costly and hence uptake uncertain* *-Lack of financial resources for ensuring sustainability* *-Communities might not see immediate benefits from collective actions and might not readily support sustainable actions* *-State sector agencies might not invest time and resources to support community activities*
	Indicator 3: Area of wetland under improved restoration GEF Core Indicator 3	MTR: At least 100 hectares of degraded freshwater evergreen swamp forests established for protection and rehabilitation TE: At least 400 hectares of degraded freshwater evergreen swamp forests under improved protection and restoration through MOUs with village committees	Degrading and degraded swamp forests restored to improve conservation outcomes	*Forest department and local consultants, district, upazila and union committees and VCGs*	Annually Reported in DO tab of the GEF PIR	*Forest Department and PMU*	*Restoration Plans and progress reports, biodiversity assessments of restoration sites before and after restoration, forest surveys*	*Assumptions:* *-Communities and government conservation entities are willing and recognize the value of conserving forests within the wetland* *-Communities are able to derive appropriate economic benefits from forest and land restoration* *Risks:* *-Vested interests might constrain ability to engage communities in equitable fashion*

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	Indicator 4: Area of landscape under sustainable practices (excluding protected areas) to benefit biodiversity GEF Core Indicator 4	MTR: At least 500 hectares under sustainable practices to benefit biodiversity TE: At least 1,911 hectares under sustainable practices to benefit biodiversity and including the following:	This includes the following breakdown ▪ 500 (150) ha of degraded agricultural lands under SLM ▪ 349 (100) ha of stream/ river banks stabilized ▪ 475 (150) ha of reed banks stabilized ▪ 587 (100) ha of wetland drawdown areas under sustainable grazing practice Note: figures is brackets are MTR values	*Forest, Agriculture and Livestock Department Consultations* *Review of biodiversity assessment reports before and after project* *Review of operational sites* *Consultation with communities*	*MTR and TE* Reported in DO tab of the GEF PIR	*PMU supported by consultants*	*Resource surveys, Restoration reports* *Annual work plans* *Progress reports* *Field visit reports*	*Assumptions:* *-Local resource users recognize that it is in their economic interests to achieve improved wetland ecological conditions* *-Adequate technical and extension support available to new practices* *Risks:* *-Loss of revenue during restoration process may likely constraint sustainable actions* *-Government policy changes may discourage investment in conservation aspects*
	Indicator 5: Greenhouse gas mitigated GEF core Indicator 6	MTR: Methodology for C assessment and training undertaken to facilitate long-term monitoring TE: 578,391 tCO_2 mitigated over a 20-year period	*Restoration activities result in forest and productivity loss avoided and land restored*	*Consultation with Forest, Agriculture and Livestock Department s* *Field visits and observations*	*MTR and TE* *Reported in DO tab of the GEF PIR*	*PMU and consultants*	*Progress reports in terms of forest restoration survey reports etc.* *-Status of natural system reports*	
Project Outcome 1: Integrated ecosystem management framework adopted to promote	**Indicator 6:** Tanguar Haor with defined ecosystem-based framework and standards to achieve	MTR: Ecosystem-based framework/system established for the TH, including standards for establishing favorable	This indicator will be measured by following parameters: ▪ Actions and resources directed at implementation of 'rules of	*Consultations with MOEFCC, district, upazila and union committees, NGOs and CSOs*	*MTR and TE* *Reported in DO tab of the GEF PIR*	PMU, MOEFCC and consultants	Progress reports Integrated framework document Survey and monitoring reports	*Assumptions* *-The national and local administration will develop institutional and technical measures that facilitate ecosystem management of TH in a timely manner.*

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
sustainable management of wetland resources in Tanguar Haor.	favorable ecological conditions	ecological condition in them. TE: *Significant and measurable progress attained in at least 40% of established targets for ensuring favorable conditions at Tanguar Haor*	business' for ecosystem-based management of TH' ▪ Protocols for assessing ecological standards tracked ▪ Harvest of wetland resources monitored and enforced ▪ Standards for effluent and waste discharge agreed, monitored and enforced				Independent review reports	*-The key sector agencies will take active part in developing the strategies and implementation using new knowledge and skills provided by the project* *-Local communities are convinced mainstreaming biodiversity management into key development sectors is in their long-term interests* *Risks:* *-Priorities of local communities might shift if development benefits take long to manifest* *- Plans are developed by not used, particularly by resource users* *- Planning bodies that build capacity are not effective in implementation*
	Indicator 7: Level of institutional capacities for integrated ecosystem-based planning, management and monitoring of TH ECA as measured by UNDP's capacity development scorecard	MTR: Average increase of institutional capacity as measured by a 10-point increase in UNDP Capacity Development Scorecard baseline values TE: Average increase of institutional capacity as measured by 25 points in UNDP Capacity Development Scorecard from baseline values	Current baseline is 19 as measured by UNDP Capacity Development Scorecard	Consultations with MOEFCC, District, upazila and union committees	MTR and TE Reported in DO tab of the GEF PIR	PMU and MOEFCC	UNDP capacity scorecard Training evaluation reports	

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	Indicator 8: Gender-responsive measures in place for conservation, sustainable use, and equitable access to and benefit sharing of natural resources, biodiversity and ecosystems	MTR: Policy and institutional arrangements in place to enhance integration of gender actions TE: (a) At least 3 planning frameworks in place (b) institutions with trained staff and procedures	This includes specifically the following: (a) At least 3 planning frameworks namely: (i) Improved guidelines for ecosystem-based framework specific to TH; (ii) Strengthen scope of work for TH committees at district, upazila and union levels; and (iii) Guidelines for TH management/ operational planning (b) institutions with trained staff and procedures – (i) at least 1 district ECA Committee; (ii) at least 2 Upazilla ECA Committee; (iii) at least 4 Union ECA Committee and (iv) At least 74 Village Conservation Groups	*Consultation with MOEFCC and Planning agencies, including legal department*	MTR and TE Reported in DO tab of the GEF PIR	MOEFCC and PMU	Government and Cabinet documents Policy documents Copies of guidelines Institution staff training reports	*Assumptions* *-There is political commitment to policy and regulatory change* *-Government agencies at national and local level willing to, and recognize the value of wetland conservation for economic well being* *Risks* *Priorities of government entities might shift to achieve short-term gain* *Communities might seek short-term gains at the risk of long gestation periods to achieve long-term benefits*
Project Outcome 2	**Indicator 9:** Number of Village Co-management plans adequately sourced in terms of staff and resources	MTR: Co-Management and financing plans under development in at least 50% of villages TE: 100% (or 74 villages) have approved and revised co-	Co-management or VCG plans that include agreed and approved investment, financing and monitoring means	Consultation with VCG groups	MTR and TE Reported in DO tab of the GEF PIR	PMU and Upazila and Union ECA committees	Co-management plans Approved annual plans PMU progress reports	*Assumptions:* *-Local communities understand need for ecological security and agree to participate in livelihood activities.* *Risks:* *-Lack of capacity in communities to meet*

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	and approved by government	management and financing plans with clear planned activities and financial sources identified					Financial expenditure reports	*obligations related to project.* *-Livelihood benefits may be limited for communities to give up current unsustainable practices*
	Indicator 10: Improvement in water quality in ECA in	MTR: 7-10% improvement in water quality indices from baselines at selected monitoring stations TE: 10-15% improvement in water quality indices from baselines at selected monitoring stations	Water quality parameters likely include pH, DO, COD, BOD, N and P and other relevant as determined by ECA framework	*Water samples and chemical assays*	*Annual* *Reported in DO tab of the GEF PIR*	*PMU and consultants*	*Water quality monitoring reports* *Annual work plans and expenditure statements*	*Assumptions:* *-Adequacy capacity and interests for monitoring exists* *- Baseline stations and standards established* *Risks:* *-Natural weather events may affect the reliability of the information*
	Indicator 11: Status of population of flagship and keystone species such as migratory waterfowl, indigenous fish species, etc.	MTR: Stable or increased population of flagship and keystone species from baseline TE: Stable or increased population of flagship and keystone species from baseline	Species selection and baseline values will be determined in Year 1 following initial ecological assessment of TH	*Field surveys and assessments*	*Annually* *Reported in DO tab of the GEF PIR*	PMU and consultants	Field survey reports	*Assumption:* *-Adequate technical capacity available for undertaking stringent monitoring of populations of key species* *-Monitoring results are readily available for decision-making* *Risk:* *-External factors beyond the control of the project (e.g. climate change) might effect populations negatively*
	Indicator 12: No. of Village Conservation Groups	MTR: 50 VCGs functional with approved plans/budgets and	Current baseline is 40 VCGs functional	*Consultation with VCGs, CSOs and NGOs*	*Annual*	*PMU and consultants, Union and*	*VCG survey reports*	*Assumptions:* *-Communities recognize the long-term benefits derived*

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	established and functional	actions initiated on the ground TE: 74 VCGs functional with plans/budgets and around 50% of actions under effective implementation			Reported in DO tab of the GEF PIR	*Upazila ECA committees*	*VCG meeting reports*	*from sustainable use of resources* *-There is support for community collective action* *Risks* *-The political elite can sabotage the program through its illegal grab of benefits from TH*
Project Outcome 3: Institutional capacity, knowledge management, gender mainstreaming and monitoring and evaluation contributes to application of best practices for replication and scaling up	**Indicator 13** Extent of Information for Tanguar Hoar collated and integrated into ECA Management, Monitoring & Compliance Unit (MMCU) GIS database and monitored	MTR: MM Baseline data and monitoring protocols for TH established to track compliance with prescriptions embedded in THs management plan TE: Upazila ECA Committees effectively monitoring and informing compliance on quarterly basis to National ECA Committee and effective follow up and reporting in relation to compliance	The MMCU to be established by DOE under another project is intended as an important component for ensuring maintenance of wellbeing of all ECAs in the country, including TH	Consultation with MMCU Consultation with local communities	MTR and TE Reported in DO tab of the GEF PIR	*PMU and MMCU*	Monitoring reports MMCU staffing reports	Assumptions *The government recognizes the importance of monitoring and adaptive management* *There is commitment and staff to ensure sustainable monitoring program for TH* *Risks* *-Staff recruitment is delayed* *-Government may not actively use the monitoring information for ensuring collective and adaptive actions*
	Indicator 14: Increase in level of knowledge (disaggregated by gender) on ecosystem-	MTR: At least 100 community members trained in relevant ecosystem-based best practice	This will be measured by number of community members trained and adopting new technologies and	KPA surveys	Year 1, MTR and TE	PMU	KPA survey reports Training reports	*Assumptions* *- Gender and Social Inclusion Mainstreaming Plan followed and benefits distributed equitably.*

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
	based approaches	approaches and 25% effectively applying these measures (at least 50% women beneficiaries) TE: At least 500 community members trained in relevant ecosystem-based best practice approaches and 50% effectively applying these measures (at least 50% women beneficiaries)	practices and also on dependent development of communication strategy and action plan and its effective implementation		Reported in DO tab of the GEF PIR			*-Stakeholders willing to actively participate in the review process.* *Risks:* *-Actions among the assorted agencies, private sector and CSOs remain uncoordinated* *-Community diversity will not be a hindrance to outreach activities* *- IPs potential left out*
	Indicator 15: Number of knowledge management products that reflects best practices and lessons learned	MTR: At least 5 additional KM products TE: At least 15 additional KM products	This will include KM products on a number of relevant conservation and sustainable resource management that would be documented, codified and disseminated nationally and regionally	*Consultations with all stakeholders and field visits*	*Last 2 years* Reported in DO tab of the GEF PIR	*PMU*	*Document reports* *Best practice reports*	*Assumptions* *-Project management will be able to identify, document and disseminate the best practices* *-Mid Term Review and End of Project Evaluation of the project will also contribute to identifying the best practices* *-Best practices on sustainable resource management readily available to resource users*
Mid-term GEF Tracking Tool		Completed in timely fashion	Standard GEF Tracking Tool available at www.thegef.org Baseline GEF Tracking Tool included in Annex 15	After 2nd PIR submitted to GEF	*Project Director and UNDP CO* Reported in DO tab of the GEF PIR	Completed GEF Tracking Tool	*Mid-term GEF Tracking Tool*	*Assumption:* *-National and local administration commitments to assessment*

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Results Monitoring	Indicators	Targets	Description of indicators and targets	Data source/Collection Methods[32]	Frequency	Responsible for data collection	Means of verification	Risks/Assumptions
Terminal GEF Tracking Tool		Completed in timely fashion	Standard GEF Tracking Tool available at www.thegef.org Baseline GEF Tracking Tool included in Annex 15.	After final PIR submitted to GEF	*Project Director and UNDP CO* Reported in DO tab of the GEF PIR	Completed GEF Tracking Tool	Terminal GEF Tracking Tool	*- Information available to enable appropriate level of evaluations* *- Adequate expertise available for update of tracking tool and reviews* *Risks* *-Willingness of government and communities to take corrective actions following evaluations might not be forthcoming*
Mid-term Review		Completed in timely fashion	To be outlined in MTR inception report	Submitted to GEF same year as 3rd PIR	*Project Director and UNDP CO*	Completed MTR	*Mid-term Review report*	
Terminal Review		Completed in timely fashion	To be outlined in MTR inception report	Submitted to GEF at end of project	*Project Director and UNDP CO*	Completed TE	*Terminal Review report*	
Environmental and Social risks and management plans, as relevant.		Completed in timely and diligent manner	Updated SESP, ESMP, IPF and management plans	Annually	*Project Director UNDP CO*	Updated SESP	Environmental and Social risks and management plans, as relevant.	*Assumption:* *National and local administration recognize and committed to manage social and environmental risks*

Monitoring and Evaluation Plan

Monitoring and Evaluation Budget for project execution:		
GEF M&E requirements to be undertaken by Project Management Unit (PMU)	**Indicative costs (US$)**	**Time frame**
Inception Workshop and Report	26,000	Inception Workshops at national and Upazila levels within 2 months of the First Disbursement
M&E required to report on progress made in reaching GEF core indicators and project results included in the project results framework	3,000	Annually and at mid-point and closure.
Preparation of the annual GEF Project Implementation Report (PIR)	NA	Annually typically between June-August
Monitoring of ESMP, IPP, SESP, RFA, GAP, SEP, etc.	93,000 (including travel)	On-going.

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Monitoring and Evaluation Budget for project execution:		
GEF M&E requirements to be undertaken by Project Management Unit (PMU)	**Indicative costs (US$)**	**Time frame**
Supervision missions	NA	Annually
Independent Mid-term Review (MTR):	30,000 (including travel)	August 2026
Independent Terminal Evaluation (TE):	30,000 (including travel)	December 31, 2028
Revisions of M&E plan, ESMP and IPP and related training	20,200	
TOTAL indicative COST - USD	**202,200**	Equivalent to TBWP component (M&E)

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GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Section 1: General roles and responsibilities in the projects' governance mechanism

158. Implementing Partner: The Implementing Partner for this project is the Ministry of Environment, Forestry and Climate Change (MOEFCC). The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

159. The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multiyear workplan.
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

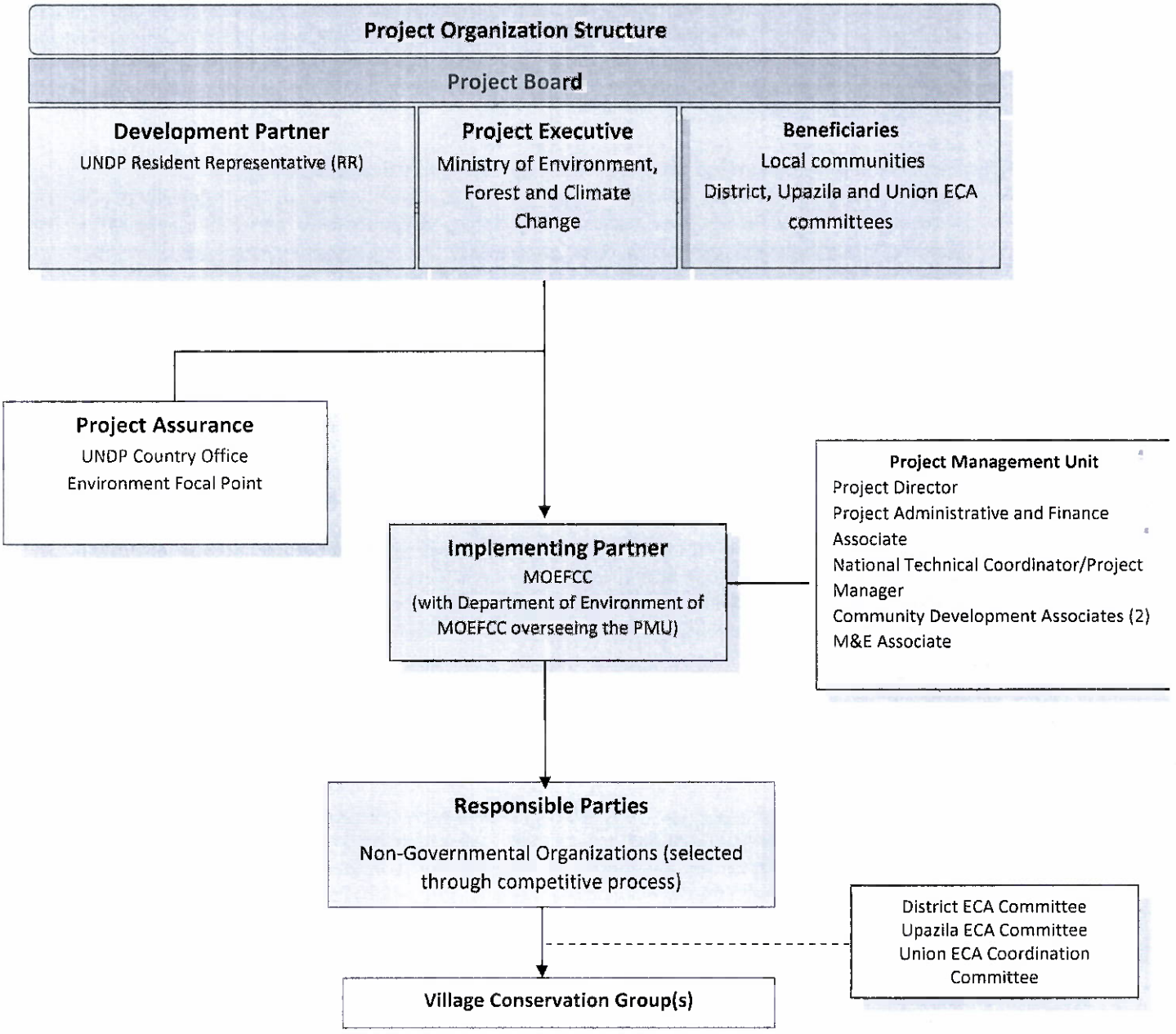
160. Responsible Parties: While, the MOEFCC would be the main implementing partner for most of the activities including the habitat restoration, monitoring and training activities, the implementation of the community activities at the ground level would be undertaken with the services of NGOs that have expertise and a good track record who would be selected through a competitive process during the initial months of the project. These NGOs will train, plan, oversee and guide the implementation of on-the-ground community activities in fisheries, agriculture, livestock management and income generation and livelihood development activities. The Upazila/Union ECA committees will directly liaise with the NGOs to ensure that activities are planned and managed in accordance with the ECA rules. Several consultants will support the implementing agency to prepare several ecosystem based management guidelines.

161. Project stakeholders and target groups: The key beneficiaries, namely the wetland resource dependents in the proposed 74 VCGs will be directly involved through their respective community institutions in all aspects of the project, namely in establishment of parameters to measure the favorable conditions of the wetland, in the planning and management of conservation, habitat restoration, sustainable wetland resource use, livelihood and small-scale enterprise development activities, as well as overseeing and supporting the monitoring of the condition of the wetland. The project will invest in technical and capacity development support to strengthen existing VCGs and promote the establishment of new VCGs, support training and capacity development of VCG members, provide extension support in relation to income generation, agriculture and other livelihood improvement activities.

162. UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

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Section 2: Project governance structure



163. The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

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164. To ensure the strict independence required by the GEF and in accordance with the UNDP Internal Control Framework, these execution services will be delivered independent from the GEF-specific oversight and quality assurance services.

Section 3: Segregation of duties and firewalls vis-à-vis UNDP representation on the project board:

162. As noted in the Minimum Fiduciary Standards for GEF Partner Agencies, in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.

In this case, UNDP is only performing an implementation oversight role in the project vis-à-vis our role in the project board and in the project assurance function and therefore a full separation of project implementation oversight and execution duties has been assured.

Section 4: Roles and Responsiblities of the Project Organization Strucutre:

163. **Project Board/Project Steering Committee:** All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

The two main (mandatory) roles of the project board are as follows:

1) **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the "Provide Oversight" section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.
2) **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the "Manage Change" section of the POPP).

Requirements to serve on the Project Board:

- ✓ Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
- ✓ Meet annually; at least once.
- ✓ Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- ✓ Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
- ✓ Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

Responsibilities of the Project Board:

- ✓ Consensus decision making:

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- The project board provides overall overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
- Review project performance based on monitoring, evaluation and reporting, including progress reports, risk logs and the combined delivery report;
- The project board is responsible for making management decisions by consensus.
- In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition.
- In case consensus cannot be reached within the Board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.

✓ Oversee project execution:
- Agree on project manager's tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.
- Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
- Address any high-level project issues as raised by the project manager and project assurance;
- Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
- Track and monitor co-financed activities and realisation of co-financing amounts of this project.
- Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
- Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.

✓ Risk Management:
- Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
- Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
- Address project-level grievances.

✓ Coordination:
- Ensure coordination between various donor and government-funded projects and programmes.
- Ensure coordination with various government agencies and their participation in project activities.

Composition of the Project Board: The composition of the Project Board must include individuals assigned to the following three roles:

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner), and it must be UNDP for projects that are direct implementation (DIM). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The

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Project Executive is represented by the Secretary of the Ministry of Environment, Forestry and Climate Change

2. **Beneficiary Representative(s):** Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representative (s) is/are: Local communities District, Upazila and Union ECA committees
3. **Development Partner(s):** Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner(s)is the UNDP Resident Representative.

164. Project Assurance: Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Director. Project assurance is totally independent of project execution.

165. A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is/are: *UNDP Country Office Environment Focal Point*

166. **Project Management – Execution of the Project:** The PMU will be under the direction of the National Project Director (NPD) - a senior staff of DOE/MOEFCC who will work on a full-time basis and funded through government's co-financing. The NPD will be responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The NPD typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers. The PMU will also include a project Adminstration and Finance Associate, two Community Development Associates (located at the field sites) and a National Technical Coordinator. The NPD will be supported by the National Technical Coordinator (as per TORs) who will provide 30% of time to support the NPD in project management related aspects and the balance 70% of time will be used to oversee and support te technical aspects of the project. The PMU will be located within the MOEFCC in Dhaka, Bangladesh. In addition, the PMU will also have an M&E Associate. A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative. The primary PMU representative attending board meetings is: *Project Director, MOEFCC.*

166(a) The project implementation arrangements:

To ensure the long-term sustainability of this project's activities, the project will be set firmly within the institutional setting of the Department of Environment. This involves the creation of three main groups to guide and implement the project – a Project Management Unit, a Project Steering Committee and Project Implementation Committee (PIC). Decision making will be streamlined as far as possible with the Project Management Unit, making operational decisions, within parameters defined and periodically adjusted by the Project Steering Committee. In addition, Project Implementation Committee (PIC) will act as technical advisory body for the project. Moreover, GEF focal person will play a consultative role to ensure that actions are well coordinated.

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166(b). Project Management Unit (PMU): The Project Management Unit (PMU) will coordinate the daily execution of the project's activities. The PMU will be housed in the DoE head office, Dhaka. PMU will be responsible for establishment for the strategic, technical and operational coordination of the project and will meet on a regular basis. The PMU will be led by Project Director and consist of national and international consultants who will be recruited prior to and during project implementation as deemed necessary and also a group of officers of DoE. The PMU will be responsible for the day-to-day management of the project. Key functions of the PMU are:

- Technically identify, plan, design and support all activities;
- Liaise with government agencies and regularly advocate on behalf of the project;
- Prepare the Annual Work Plan and Budget (AWP/B) and Monitoring Plan;
- Day-to-Day implementation of the project in line with the AWP;
- Ensure a results-based approach to project implementation, including maintaining a focus on project results and impacts as defined by the results framework indicators;
- Coordination of project interventions with other ongoing activities;
- Monitoring of project progress;
- Procurement of the project equipment or supplies as required;
- Elaboration of UNDP Project Progress Reports (PPR) and the annual Project Implementation Review (PIR);
- Facilitate and support the mid-term evaluation/review and final evaluation of the project;
- Ensure strong communication and visibility of project activities;
- Preparation of Project's Completion Report (PCR) in GoB's format;

166(c). Project Steering Committee (PSC): The PSC will be put in place to oversee project coordination, implementation, approve the Annual Work Plans, provide broad guidelines for administrative procedures, address matters or problems requiring inter-ministerial decisions and review the progress of these aspects of the Project. The committee will also provide guidance to formulate policies which are required for implementing project activities. The PSC will include members as per attachment "Composition of Project Steering Committee (PSC)" of the circular of Bangladesh Planning Commission, 2016 - titled "Procedures for Project Development, Processing, Approval and Revision of development projects for Government of Bangladesh". The Secretary of the MoEFCC will act as a chairperson of the PSC while Senior Assistant Chief/Assistant Chief will serve as member secretary. The Composition of project Steering Committee is as follows:

1.	Secretary, MoEFCC	Chair
2.	Director General, Department of Environment	Member
3.	Additional Secretary (Development), MoEFCC	Member
4.	Additional Secretary (Environment), MoEFCC	Member
5.	Joint Secretary (Development), MoEFCC	Member
6.	Representative from Respective Sector of Planning Commission	Member
7.	Chair, National ECA Committee	Member
8.	Representatives from Ministry of Fisheries & Livestock	Member
9.	Representatives from Ministry of Water Resources	Member
10.	Representatives from Ministry of Agriculture	Member
11.	Representatives from Ministry of Law, Justice and Parliamentary Affairs	Member
12.	Representatives from Ministry of Land	Member
13.	Representatives from Ministry of Local Government, Rural Development and Cooperatives	Member

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14.	Representatives from Ministry of Social Affairs	Member
15.	Representative from ERD	Member
16.	Representative from GED	Member
17.	Representative from NEC, ECNEC and Coordination wing of Planning Division	Member
18.	Representatives from IMED	Member
19.	Representatives from Finance Division	Member
20.	Representatives from Ministry of Water Resources	Member
21.	Representatives from Ministry of Agriculture	Member
22.	Representatives from Local Government Division	Member
23.	Representative from Department of Haor and Wetland Development	Member
24.	Representative, Forest Department	Member
25.	Director (Planning), DoE	Member
26.	Representatives from UNDP	Member
27.	Project Director	Member
28.	Concerned Senior Assistant Secretary/ Assistant Secretary	Member-Secretary

166(d). Terms of Reference (ToR) of the PSC:

- To review the recommendation of the project implementation committee for addressing problems that arise during project implementation and to take decision accordingly.
- To give guidelines to formulate policies which required for implementing project activities.
- Any other matter related to project implementation.
- The committee will meet at least once in every three months.
- Provide ad hoc direction and advice for exceptional situations when the project manager's tolerances are exceeded; and
- Assess and decide to proceed on project changes through appropriate revisions.
- Committee can co-opt other members, if necessary
- Any other issues for smooth functioning of the project implementation.

166(e)(e). Project Implementation Committee (PIC): PIC is the central technical advisory body for the project and Project Steering Committee (PSC). PIC will be chaired by Director General of the DoE. PIC will meet on a quarterly basis to direct the activities, discuss the outputs, and to formulate recommendations to PSC on how the performance of the project might be improved. The PIC will include members as per attachment "Composition of Project Implementation Committee (PIC)" of the circular of Bangladesh Planning Commission, 2016 - titled "Procedures for Project Development, Processing, Approval and Revision of development projects for Government of Bangladesh". If necessary, other members can be included as per the recommendation of the PIC. The PIC will ensure: Technical quality of outputs; Close linkages between the project and other ongoing projects and programmes relevant to the project; Timely availability and effectiveness of co-financing support; Sustainability of key project outcomes, including up-scaling and replication; Effective coordination of government partners' work under this project. The Composition of Project Implementation Committee is as follows:

1.	Director General, Department of Environment (DoE)	Chairperson
2.	Additional Director General, DoE	Member
3.	Representative, Development Wing, MoEFCC	Member
4.	Representative, Agriculture, Water Resources and Rural Institutions Division, Bangladesh Planning Commission	Member

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5.	Representative, Programming Division of the Planning Commission	Member
6.	Representative, Department of Fisheries	Member
7.	Representative, Department of Bangladesh Haor and Wetlands Development	Member
8.	Representative, Department of Agricultural Extension	Member
9.	Representative, Bangladesh Water Development Board	Member
10.	Chair, District ECA Committee for Tanguar Haor	Member
11.	Representative, Bangladesh Water Development Board	Member
12.	Representative from NEC, ECNEC and Coordination wing of Planning Division	Member
13.	Representative from GED	Member
14.	Representative, IMED	Member
15.	Representative, ERD	Member
16.	Director (Planning), DoE	Member
17.	Representative, Forest Department	Member
18.	Representative, Department of Fisheries	Member
19.	Representative, UNDP	Member
20.	Project Director	Member Secretary

A local coordination committee will also be formed with representatives from the local government bodies, community representatives and the local relevant stakeholders to support in implementing project considering the local context and resolve local grievance.

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Terms of Reference (ToR) of the PIC:

- To give necessary assistance or suggestion for implementing project activities.
- Provide necessary decision for solution to any problem that arise during the project implementation.
- The committee will meet at least once in every three months.
- Provide necessary assistance or suggestions for implementing project activities.
- Committee can co-opt other members, if necessary.

166(f). UNDP's Role as GEF Implementing Agency: As requested by Bangladesh's GEF Operational Focal Point (OFP), UNDP will act as the GEF Agency for this project. UNDP will act as a trustee of GEF resources, applying a fiduciary standard to ensure efficient delivery of global environmental benefits. UNDP will disburse funds and provide technical, operational, and financial oversight throughout the project cycle, and will fulfil annual reporting obligations to GEF Secretariat on the project's status.

UNDP shall in its role as GEF Implementing Agency, provide project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. It shall also in partnership with DoE, and other key project partners engaged in promoting the project with a view to mobilizing resources and partnership. UNDP will perform the liaison function between DoE and the GEF Secretariat and report on the progress against milestones outlined in the CEO approval letter to the GEF Secretariat.

UNDP shall inform the GEF Secretariat whenever there is a potentially substantive co-financing change (i.e.one affecting the project objectives, the underlying concept, scale, scope, strategic priority, conformity with GEF criteria, likelihood of project success, or outcome of the project). It shall rate, on an annual basis, progress in meeting project objectives, project implementation progress, risk, and quality of project monitoring and evaluation, and report to the GEF Secretariat through the Project Implementation Review (PIR) report and ensure that the Evaluation and Oversight Unit of UNDP arranges for an independent terminal evaluation and submits its report to the GEF Evaluation Office.

166(g). DoE's Role as Project's National Executing Agency: The Department of Environment (DoE) under the Ministry of Environment, Forest, and Climate Change (MoEFCC) is the executing agency of the project. The roles of DoE will include:

- Designate a Project Director (PD) to lead the PMU.
- Designate a number of officials/pool of officials to be part of the PMU team and project implementation;
- Ensure liaison with all stakeholders to delineate a relevant area of responsibility for the project's activities for the components 1, 2 and 3;
- Ensure planning, promotion, coordination and overseeing the project implementation and coordination of overall project activities to achieve the intended objectives;
- Assistance in the execution of project activities with necessary engagement of stakeholders;
- Establish collaboration and coordination mechanism among entities involved in Tanguar Haor;
- Assistance in the organization of relevant workshops and meetings, facilitation of policy and regulatory approvals, and any other support to best implement the project;
- Support to the Mid-Term Review (MTR) and Terminal Evaluation (MTE) and audit of the project;
- Arrange PSC and PIC meetings and take lead in organizing inception, midterm, closing workshops.
- All the project personnel will be recruited/procured by PD except International consultants for midterm review and terminal evaluation and consultancy services for audit. The UNDP will take prior consent from the PD for recruiting these project personnel.

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166(h). Project Support Services: Based on a government request, UNDP's country office may provide direct operation and administrative support services to the project, including procurement and contracting services (if any), with costs to be recovered from the project management costs (PMC). UNDP will have oversight on i) managing funds; ii) programme quality assurance; iii) fiduciary risk management; iv) procurement; and v) the timely delivery of financial and programme reports to GEF.

167. **Grant Making -**The IP shall be fully accountable for the completion of all grant-making activities in accordance with its financial regulations, rules and policies, to the extent that they are consistent with UNDP's grant policies and Financial Regulations and Rules as defined in accordance to Annex 28 of UNDP Project Document. Funding to any individual grant recipient shall not exceed $150,000 per individual grant and $300,000 on a cumulative basis within the same program period. The IP shall supervise and monitor the grant recipient's activities and its achievement of specified results pursuant to the grant proposal selected by the Project Board or designated grant selection committee, including the schedules set forth therein, and have a systems to assess and monitor the grant recipient's activities and use of grant funds, including reporting and audit requirements. The Department of Environment (IP) has Grant Making rules that have been applied to programs in Environmentally Critical Areas (ECAs) that will also be applied (in consonance with UNDP grant policies) for the Tanguar Hoar. The IP Grant Making guidelines are presented in Annex 29.

FINANCIAL PLANNING AND MANAGEMENT

168. The total cost of the project is USD 21,250,913. This is financed through a GEF grant of USD 4,050,913 administered by UNDP, and additional support of USD 17,200,000. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources and the cash co-financing transferred to UNDP bank account only.

169. **Co-financing**: The actual realization of project co-financing amounts will be monitored by the UNDP Country Office and the PMU on an annual basis in the GEF PIF and will be reported to the GEF during the *mid-term review* and terminal evaluation process as follows:

Co-financing source	Co-financing type	Co-financing amount
Recipient Country Government-Ministry of Environment, Forestry and Climate Change (MoEFCC)	Public Investment	10,000,000
	In-kind	7,200,000
Total (USD)		17,200,000

170. **Budget Revision and Tolerance**: As per UNDP POPP, the project board may agree with the project manager on a tolerance level for each detailed plan under the overall multi-year workplan. The agreed tolerance should be written in the project document or approved project board meeting minutes. It should normally not exceed 10 percent of the agreed annual budget at the activity level, but within the overall approved multi-year workplan at the activity level. Within the agreed tolerances, the project manager can operate without intervention from the project board. Restrictions apply as follows:

171. Should the following deviations occur, the National Project Director /IP through UNDP Country Office will seek the approval of the BPPS/NCE-VF team to ensure accurate reporting to the GEF. It is **strongly encouraged** to maintain the expenditures within the approved budget at the budgetary account and at the component level:

a) Budget reallocations must prove that the suggested changes in the budget will not lead to material changes in the results to be achieved by the project. A strong justification is required and will be approved on an

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exceptional basis. Budget re-allocations among the components (including PMC) of the approved Total Budget and Work Plans (TBWP) that represent a value greater than 10% of the total GEF grant.

b) Introduction of new outputs/activities (i.e. budget items) that were not part of the agreed project document and TBWP that represent a value greater than 5% of the total GEF grant. The new budget items must be eligible as per the GEF and UNDP policies.

c) Project management cost (PMC): budget under PMC component is capped and cannot be increased.

172. Any over expenditure incurred beyond the available GEF grant amount must be absorbed by non-GEF resources (e.g. UNDP TRAC or cash co-financing).

173. **Project extensions:** The UNDP Resident Representative and the UNDP-GEF Executive Coordinator must approve all project extension requests. Note that all extensions incur costs and the GEF project budget cannot be increased. A single extension may be granted on an exceptional basis and subject to the conditions and maximum durations set out in the UNDP POPP; the project management costs during the extension period must remain within the originally approved amount, and any increase in PMC costs will be covered by non-GEF resources; the additional UNDP oversight costs during the extension period must be covered by non-GEF resources, in accordance with UNDP's guidance set out in UNDP POPP.

174. Audit: The project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Audit cycle and process must be discussed during the Inception workshop. If the Implementing Partner is an UN Agency, the project will be audited according to that Agencies applicable audit policies.

175. **Project Closure**: Project closure will be conducted as per UNDP requirements outlined in the UNDP POPP. All costs incurred to close the project must be included in the project closure budget and reported as final project commitments presented to the Project Board during the final project review. The only costs a project may incur following the final project review are those included in the project closure budget.

176. **Operational completion**: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed. This includes the final clearance of the Terminal Evaluation Report (that will be available in English) and the corresponding management response, and the end-of-project review Project Board meeting. **Operational closure must happen at the end date calculated by the approved duration after the Project Document signature or at the revised operational closure date as approved in the project extension. Any expected activity after the operational date requires project extension approval.** The Implementing Partner through a Project Board decision will notify the UNDP Country Office when operational closure has been completed. At this time, the project should have completed the transfer or disposal of any equipment that is still the property of UNDP.

177. **Transfer or disposal of assets**: In consultation with the Implementing Partner and other parties of the project, UNDP is responsible for deciding on the transfer or other disposal of assets. Transfer or disposal of assets is recommended to be reviewed and endorsed by the project board following UNDP rules and regulations. Assets may be transferred to the government for project activities managed by a national institution at any time during the life of a project (it is strongly encouraged to be done before the operational closure date). In all cases of transfer, a transfer document must be prepared and kept on file[33]. The transfer should be done before Project Management Unit complete their assignments.

178. **Financial completion (closure):** The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the Implementing Partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the Implementing Partner have certified a final Combined Delivery Report (which serves as final budget revision).

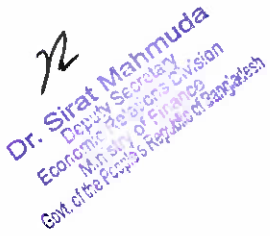
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[33] See https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PPM_Project%20Management_Closing.docx&action=default.

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179. The project will be financially completed **within 6 months of operational closure or after the date of cancellation**. If Operational Closure is delayed for any justified and approved reason, the Country Office should do all efforts to Financially Close the project within 9 months after TE is completed. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the BPPS/NCE-VF Unit for confirmation before the project will be financially closed in Atlas by the UNDP Country Office.

180. Refund to GEF: Should a refund of unspent funds to the GEF be necessary, this will be managed directly by the BPPS/NCE-VF Directorate in New York. No action is required by the UNDP Country Office on the actual refund from UNDP project to the GEF Trustee.



TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Quantum Award ID:	00120091	Quantum Output Project ID:	
Quantum Proposal or Award Title:	**Community-based management of Tanguar Haor Wetland in Bangladesh**		
Quantum Business Unit	UNDP-BGD		
Quantum Primary Output Project Title	**Community-based management of Tanguar Haor Wetland in Bangladesh**		
UNDP-GEF PIMS No.	6563		
Implementing Partner	Department of Environment, Ministry of Environment, Forestry and Climate Change		

Quantum Activity (GEF Component)	Quantumimplementing Agent (Responsible Party/[34], IP, or UNDP)	Quantum Fund ID	Donor Name	Quantum Budget Account Code	Quantum Budget Account Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amo Yea (US
COMPONENT 1 *Integrated nature-based management framework to promote sustainable wetland resource utilization, reduce degradation of the transitional aquatic-terrestrial interface and promotion of nature-friendly livelihoods in the*	**MOEFCC**	**62000**	**GEF**	71300	Local Consultants	8,000	36,000	41,(
				72100	Contractual services - Companies	76,000	70,000	38,(
				71800	Contractual services - Imp Partn	7,000	7,000	7,0
				75700	Training, workshops, conference	15,000	43,000	53,(
				71600	Travel	2,500	2,500	2,5
				72800	IT equipment	9,800		
					sub-total GEF	**118,300**	**158,500**	**141,**
					Total Outcome 1	**118,300**	**158,500**	**141,**
COMPONENT 2: *Improved ecological condition of Tanguar Haor through sustainable resource use and sustainable livelihoods for communities in its proximity*	**MOEFCC**	**62000**	**GEF**	71300	Local Consultants		38,000	10,(
				72100	Contractual services - Companies	199,040	339,240	318,
				71800	Contractual services - Imp Partn	34,200	34,200	34,2
				72600	Grants	162,500	270,000	295,
				75700	Training, workshops, conference	4,400	14,800	10,(
				71600	Travel	9,500	9,500	9,5
					sub-total GEF	**443,840**	**705,740**	**676,**
					Total Outcome 2	**443,840**	**705,740**	**676,**
COMPONENT 3: *Institutional capacity, knowledge management, gender mainstreaming and monitoring and*	**MOEFCC**	**62000**	**GEF**	71300	Local Consultants	10,000	6,000	6,0
				72100	Contractual services - Companies	6,000	14,000	10,(
				71800	Contractual services - Imp Partn	2,000	2,000	2,0
				75700	Training, workshops, conf	14,500	45,000	25,(
				71600	Travel	2,100	3,100	3,6
					Sub-total (Outcome 3 minus M&E)	**34,600**	**70,100**	**46,6**
Monitoring & Evaluation (M&E)	**UNDP**	**62000**	**GEF**	71200	International Consultants			15,(
				71300	Local Consultants			10,5
	MOEFCC			72100	Contractual services - Companies	1,440	8,440	3,4
				71800	Contractual services - Imp Partn	18,600	18,600	18,6

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				75700	Training, workshops, conference	26,000		
				72800	IT equipment	1,000		
				71600	Travel		2,000	3,0
					Sub-total (M&E)	**47,040**	**29,040**	**50,5**
					Total Outcome 3	**81,640**	**99,140**	**97,1**
PROJECT MANAGEMENT COST	MOEFCC	62000	GEF	71800	Contractual services - Imp Partn	27,000	27,000	27,0
				72200	Equipment and furniture	7,500		
				72500	Supplies	3,240	4,078	4,0
	UNDP			74100	Professional Services	1,160	1,160	1,1
	MOEFCC			73100	Rental & Maintenance and Premises		4,000	4,0
				71600	Travel	1,655	1,655	1,6
					sub-total	**40,555**	**37,893**	**37,8**
					Total Project Management	**40,555**	**37,893**	**37,8**
				PROJECT TOTAL		**650,135**	**1,001,27**	**953,**

Budget Notes

Budget Note No.	Project Output (Description)
	Component 1: Integrated ecosystem co-management framework for management of Tanguar Haor.
1	Local Consultants ($86,000) (i) National Consultant 40 days @ 300 $ per day to review and update a time bound and SMART ecosystem-based management and monitoring framework. (Output 1.1) (ii) LULC change mapping @ $12,000. (Output 1.1) (iii) National Consultant @ 250 $ for 40 days to develop PPP business model developed (Output 1.2) (iv) National Consultant @300 $ for 40 days to identify what mechanisms (coordination, capacity, institutional, policy and practices) are needed to be developed or strengthened to enhance and strengthen the effective operationalization of the 2016 ECA Management Rules (Output 1.2) (v) National Consultant @ 300 $ for 40 days to prioritize short term actions and funding, and also identifying medium and long-term plan of actions. (Output 1.2) (vi) National Consultant @ 250 $ for 40 days for determining the range of costs to implement priority actions (based on previous Economic analysis) (Output 1.3) (vii) National Consultant @ 250 $ for 40 days to identify potential financial options (Output 1.3) (viii) National Consultant to identifying funding mechanisms for meeting rehabilitation costs as well as cost-recovery (through fines, PES and polluter pay principle, etc.) at 250 $ for 40 days (Output 1.3)
2	**Contractual Services – Company ($ 262,000)** (i) Baseline survey and valuation of ecosystem services (Collection of all required baseline information) $60,000) Output 1.1 (ii) Baseline surveys (3000 Beneficiaries baseline information collection and database development) $10,000 (Output 1.1) (iii) Consultancy services for participatory formation of 34 VCGs and 2 Upazila Conservation Group (UGC), and Strengthening of 40 existing VCGs. (34 new VCG formed and facilitated for regular meetings as per VCG guidelines), training and capacity development . - $190,000 (Output 1.2)
3	**Contractual Services – Individual ($35,000)** (i) Partial costs National Technical Coordinator (Output 1.1, 1.2 and 1.3) -$17,000 (ii) Community development associates – part costs (9,000 x 2 = $18,000)
4	**Training, workshops and Conferences ($163,000)**

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	(i) Workshops with different institutions, stakeholder groups and private sector that is suited to deliver the different objectives and/or targets would be identified and assigned to the achieve the TH ecosystem based framework in Year 2 and 3 -$30,000 (Output 1.1) (ii) Training costs to cover module development for training, TOT for 222 VCC members and training of 1,480 community members, and 60 government officers in Years 2 to 5 -$55,000 (Output 1.1) (iii) Meetings to Facilitate developing/ improving existing rules/guidelines for ECA management through workshop/training in Year 1 through -$18,000 (Output 1.2) (iv) Conduct workshops to develop annual report of Haor Advocacy Platform, Policy advocacy notes, stakeholder consultation and dialogue, and GRM report, etc. publications and to strengthen of the National Scientific Body (NSB) on the Hoar - $60,000 (Output 1.2)
5	**Travel ($12,500)** Travel costs associated in connection with Outputs 11 through 1.3
6	**IT equipment ($9,800)** Costs for printers and scanners
Component 2: Strengthened community management of wetland resources	
7	**Local Consultants ($52,000)** (i) National Consultant @ 300 $ per day for 40 days to develop a conservation management (investment) plan, biodiversity restoration plan with better ecosystem services provisions through local ecosystem management actions ensuring inclusion of gender equality perspective in Year 2 -$12,000 (Output 2.2) (ii) National Consultant @ 300 $ per day for 40 days to develop a conservation management (investment) plan, biodiversity restoration plan with better ecosystem services provisions through local ecosystem management actions ensuring inclusion of gender equality perspective in Year 2 - $12,000 (Output 2.3) (iii) National Consultant @ 320 $ for 25 days to develop an ecosystem-based management framework, including conduct 4 FGDs with VCG members - $8,000) (Output 2.4) (iv) National Consultant 350 $ per day for 50 working days to develop a gender inclusive monitoring and mentoring support related to livelihoods and power dynamics - $14,000 (Output 2.5) (v) National Consultant @ 250 $ per day for 24 working days to assess technical, economic, social, and environmental feasibility (in accordance with UNDP's SES standards) of livelihoods appropriate for women. - $6,000 (Output 2.5)
8	**Contractual Services – Company ($ 1,329,000)** (i) Development of Information management system development - $12,000 (Output 2.1) (ii) Services for development of Functional wetland resource management platform formed - $24,000 (Output 2.1) (iii) Establishment of information collections for biodiversity register and standards and protocols - $6,000 (Output 2.1). (iv) Establishment of Sectoral coordination mechanism to collect and digitally catalog existing information on forest planning, biodiversity and natural resources management best practices (resulting in a highly accessible, usable, and catalogued bibliography of available resources in support of replication and upscaling).- $10,000 (Output 2.1) (v) Development of measures for Identification specific locations/zoning for conservation, restoration, sustainable grazing, sustainable agriculture and livestock grazing, ecotourism, etc. ($12,000) – Output 2.2 (vi) Pollution assessment of the Tanguar Hoar ecosystem to identify pollution types, key sources, and gaps in enforcement or legislation.- $12,000 (Output 2.2) (vii) Site selection (for rehabilitation of swamp forests, beels, canals, river systems and reed banks, establishment of fish and bird sanctuaries and other important conservation sites within the wetland) Including drone survey for plantation, restoration, etc. -$25,000 (Output 2.3) (viii) Establishment and restoration of 100 km long strip (kanda) Plantation along kanda - $50,000 (Output 2.3) (ix) Piloting of beel restoration $50,000 (Output 2.3)

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	(x)	Innovative management/establishment of 500 ha of critical bird and aquatic habitats - $250,000, (Output 2.3)
	(xi)	Development, management and protection of Reed bank 475 Ha @ approx. 171 $ - $81,300 (Output 2.3)
	(xii)	Development, management and protection of 400 ha of swamp forests - $480,000 (Output 2.3)
	(xiii)	Development and rehabilitation of grazing areas - $58,700 (Output 2.3)
	(xiv)	Preparation of VCG plans (investments, participatory monitoring, avian influenza, and enforcement measures) @ 250 $ for 74 VCGs - $18,500 (Output 2.3)
	(xv)	Reduced pollution from agro-chemicals and industries by 50%. Engage VCG members for pollution, control, management, monitoring and mitigating industrial pollutants, as well as agro-chemicals from farmland. - $12,000 (Output 2.3)
	(xvi)	Support for engaging VCG members, men, women, young boys and girls for promoting ecotourism, conservation of ecosystem and biodiversity - $15,000 (Output 2.3)
	(xvii)	Promotion of regulated tourism operations - $24,000 (Output 2.3)
	(xviii)	Support for development and Participatory monitoring of wetland benefits, threat reduction, surveillance and enforcement and documentation of lessons learned - $15,000 (Output 2.3)
	(xix)	Oversight and support for raising nurseries -$20,000 (Output 2.3)
	(xx)	Support for development of 74 VCG plans developed, livelihood mapping (to determine the type and range of agricultural, horticultural and aquacultural activities being practiced in and around the Tanguar Hoar) -$10,000 (Output 2.4)
	(xxi)	Conduct Assessment/study of IEE/ESIA and development management plan/ESMP and capacity building/awareness raising of Stakeholders engagement, IPs and institutional strengthening for Tanguar Haor Habitat restoration -$24,000 (Output 2.4)
	(xxii)	Hydrological survey of TH to better understand the dynamic hydrological relationships of the wetland - $31,500 (Output 2.4)
	(xxiii)	Support for Branding of local products (e.g. fresh fish, dry fish, local rice, etc.) with market linkage (online and offline) of Fresh fish-1; Dry fish-1; Local rice-1 @ 5000 $ each -$15,000 (Output 2.5)
	(xxiv)	Capacity building training of the project beneficiaries, 120 batches @ 400 $ for one day long on agriculture, fisheries, livestock, handicrafts, small business - $48,000 (Output 2.5)
	(xxv)	Support to Replicate successful livelihood models managed by women, @ 2500 $ for 10 demonstrations in new ECAs - $25,000 (Output 2.5)
9	**Contractual Services Individual - $171,000**	
	(i)	Partial costs National Technical Coordinator -$117,000
	(ii)	Partial Costs Community Development Associates (2) - $54,000
10	**Grants ($1,125,00**	
	(i)	Programs for promotion of Eco-tourism services by local communities - $75,000 (Output 2.3)
	(ii)	Support for promotion of sustainable agriculture and horticulture for 750 HH @ 300 $ for eco-friendly livelihood options.-$247,500 (Output 2.4)
	(iii)	Support for promotion of sustainable livestock interventions for 750 HH @ 400 $ for eco-friendly livelihood options.- $300,000 (Output 2.4)
	(iv)	Establishing livelihood and micro-enterprise programs, for women and vulnerable groups -$502,500 (Output 2.5)
		Use of grant shall follow UNDP Low-Value Grants Policy
11	**Training, workshops and Conferences ($51,600)**	
	(i)	Capacity building training for VCGs members (74 VCGs X 3 members, 222 members, 9 batches $ 800) $.$7,200 (Output 2.3)
	(ii)	74 VCGs quarterly meeting @ 50 $ per meeting - $44,400 (Output 2.3)
12	**Travel ($47.500)**	
	Travel associated with conduct of capacity building, consultation, technical support and extension for community-based management	
Component 3 Knowledge Management, M&E, Communication and Gender Mainstreaming		
13	**Local Consultants ($30,000)**	

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	(i) National Consultant @ 250 $ per day for 20 working days to conduct KAP surveys (to access the level of awareness about wetland management) - $5,000 (Output 3.1) (ii) National consultant for preparation of IP plan - $5,000 (Output 3.1) (iii) National Consultant @ 300 $ per day for 40 working days to develop an action plan on of Gender Strategy and Implementation of Gender mainstreaming action plan (including providing training on gender sensitization, establishing means to monitor gender progress) -$12,000 (Output 3.1) (iv) National Consultant @ 250 $ per day for 32 working days to develop a policy guidelines notes that addresses current constraints and gaps in existing policies and legislation - $8,000 (Output 3.3)
14	**Contractual Services – Companies ($94,000)** (i) Development of communication, gender awareness materials, and its promotion - $6,000 (Output 3.1) (ii) Development of wetland knowledge platform - $10,000 (Output 3.1) (iii) Documentation and dissemination of case studies, best practices and lessons learned from the project for use by other ECAs - $24,000 (Output 3.3) (iv) Preparation of Technical reports, publications and other knowledge management products (including in local languages and accessible to IPs) documented and disseminated via mass - $12,000 (Output 3.3) (v) Documentation for facilitation of the best practices through promotion of policies and guidelines in order to secure support for replication and up-scaling - $12,000 (Output 3.3) (vi) Creation and Inclusion of public engagement pages on national and district websites and social media platforms for connecting others with the Tanguar haor (TH) project information and its products. - $12,000 (Output 3.3) (vii) Preparation of a replication and scaling up strategy based on project experiences and best practices for promotion of integrated wetland management - $6,000 (Output 3.3) (viii) Preparation of Implementer's Manual and Lessons Learned guide - $12,000 (Output 3.3)
15	**Contractual Services – Individual ($10,000)** (i) National Technical Coordinator part time cost -$10,000
16	**Training, workshops and Conferences ($165,000)** (i) Gender analysis mainstreaming action plan and training -$24,000 (Output 3.1) (ii) Training on implementation of indigenous people, and wetland biodiversity including training materials development - $12,000 (Output 3.1) (iii) Conduct 5 workshops within 5 years @ 1200 $ for establishing monitoring information a team consisting of wetland specialists, compliance/enforcement officer, information systems/GIS technician, communications specialist, training specialist for the formation of ECA-MMCU and Establishment of an ECA Management, Monitoring and Compliance Unit (ECA MMCU) - $6,000 (Output 3.2) (iv) Conduct 8 meetings/workshops @ 1500 $ the ECA Scientific Advisory Panel (SAP) - $12,000 (Output 3.2) (v) Conduct of 15 quarterly meetings @ 1500 $ for strengthening of 1 District and 2 Upazila level ECA Management Committee - $22,500 (Output 3.2) (vi) Training of 4 batches of Government stakeholders @ 6000 $ each - $24,000 (Output 3.2) (vii) Conduct 2 knowledge sharing semi-annual exchange visit in best practicing co management area @ 2000 $ for each - $4,000 (Output 3.3) (viii) Conduct one district level and two sub district level workshops @ 1500 $ to facilitate dissemination of field lessons and help inform legal and policy reform relevant to wetland conservation practice - $4,500 (Output 3.3) (ix) National seminar on outcomes and replication for integrated wetland management practices in Bangladesh - $30,000 (Output 3.3) (x) Regional workshop at district level @ 2,000 $ and 2 Upazila level @ 2000 $ - $6,000 (Output 3.3) (xi) Closing workshop ($ 20,000) – (Output 3.3)
17	**Travel ($13,222)** Travel associated with KM management, communication
Output 3.4 Monitoring and Evaluation	
18	**International Consultants ($30,000)**

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	(i) MTR evaluation consultant - $15,000 (Output 3.4) (ii) TE evaluation consultant -$15,000 (Output 3.4)
19	**Local Consultants ($21,000)** (i) MTR evaluation consultant - $10,500 (Output 3.p) (ii) TE evaluation consultant -$10,500 (Output 3.4)
20	**Contractual Services – Companies ($20,200)** (i) Oversight of the ESMP and undertaking ESIA and regular revisions- $10,000 (Output 3.4) (ii) Review and regular update of M&E plan, including results framework baselines, tracking tools, Theory of Change to subsequently adopt these findings to implement all aspects of the project - $10,200 (Output 3.4)
21	**Contractual Services – Individual ($93,000)** (i) National Technical Coordinator part time cost -$3,000 (Output 3.4) (ii) M&E Associate - $90,000 ((Output 3.4)
22	**Training, workshops and Conferences ($26,000)** (i) Inception workshop(s) -$26,000 at national and upazila levels
23	**IT equipment ($1,000)** Purchase 1 Camera @ 1000 $
24	**Travel ($11,000)** Travel related to monitoring, M&E, MTR and TE
Project Management	
25	**Contractual Services – Individual ($135,000)** (i) Part cost (30%) of National Technical Coordinator -$63,000 (ii) Admin cum Finance Associate @ 1200 $ per month -$72,000
26	**Equipment and furniture ($7,500)** Includes office furniture, AC and field office furniture
27	**Supplies ($19,513)** Includes Office supplies to field and PMU sites
28	**Professional Services ($5,800)** Audit costs at $1,160/year for 5 years
29	Rental & Maintenance and Premises
30	**Travel ($8,278)** PMU related travel

LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of People's Republic of Bangladesh and UNDP, signed on 25 November 1986. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by [name of entity] ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

RISK MANAGEMENT

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1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP's property in the Implementing Partner's custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
   a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
   b) assume all risks and liabilities related to the Implementing Partner's security, and the full implementation of the security plan.

2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.

4. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

   (a) In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

   (b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.

5. a) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties referred to in paragraph 4 (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:

   i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;

   ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties referred to in paragraph 4 have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;

   iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties referred to in paragraph 4 have been informed or have otherwise become aware, and status thereof;

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iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and

v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in paragraph 4 with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.

b) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties referred to in paragraph 4, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.

6. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

7. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

8. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

9. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

10. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

11. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes in accordance with UNDP's regulations, rules, policies and procedures. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.

12. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

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13. UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

    Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

    Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

14. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.

15. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

16. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

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MANDATORY ANNEXES

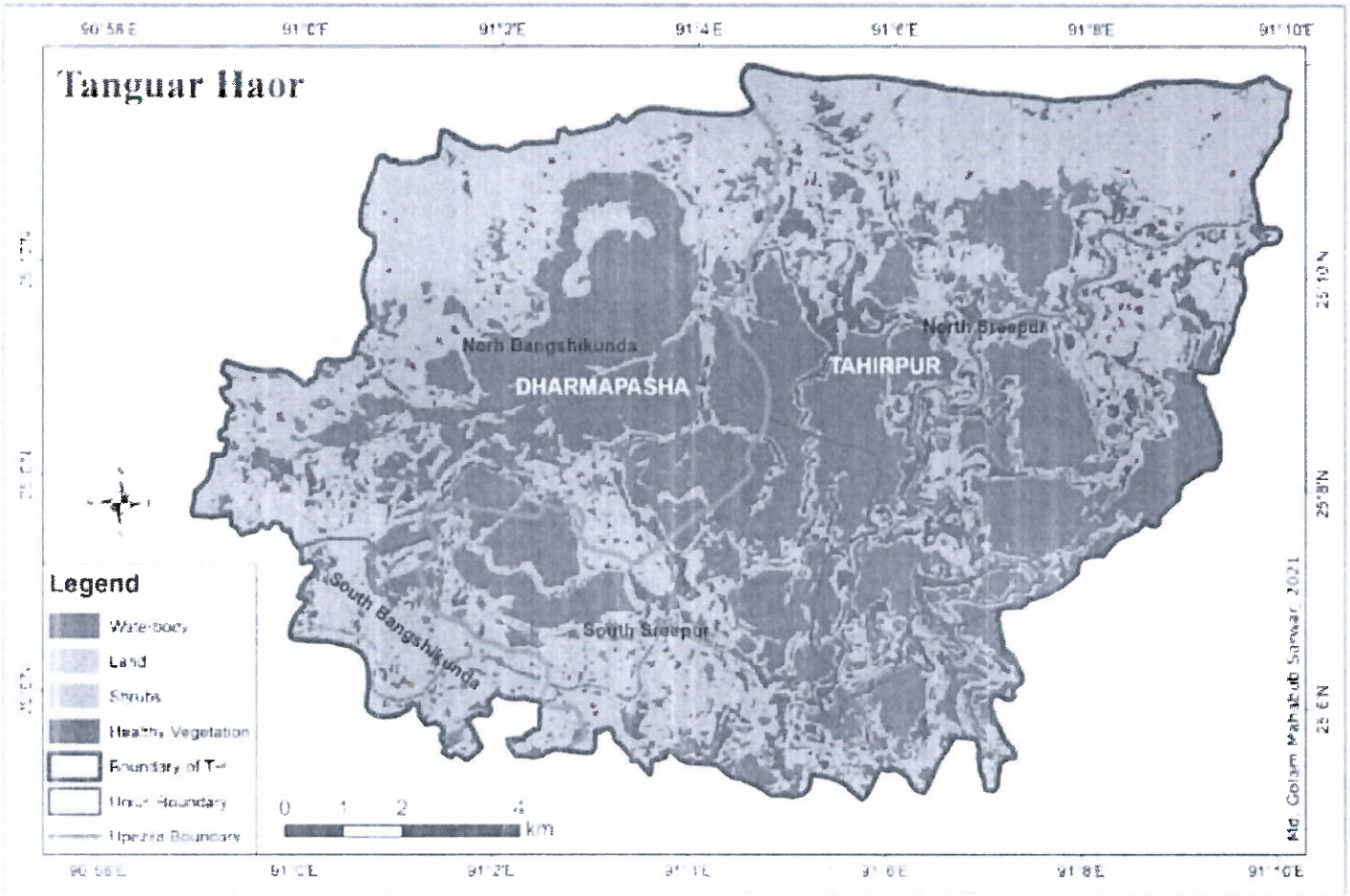
1. GEF Budget Template (available from BPPS NCE-VF)
2. Project Map and geospatial coordinates of the project area
3. Multiyear Workplan
4. Social and Environmental Screening Procedure (SESP)
5. UNDP Quantum Risk Register
6. Overview of technical consultancies/subcontracts
7. Stakeholder Engagement Plan
8. Environmental Social Management Framework (ESMF) or other SES frameworks/plans, if required, draft ESMF and IPF available
9. Gender Analysis and Gender Action Plan
10. Procurement Plan for 5 years
11. GEF and/or LDCF/SCCF Core indicators (see template below)
12. GEF Taxonomy (see template below) done
13. Partners Capacity Assessment Tool and HACT assessment (*Please refer to the HACT policies for guidance on applicability and financial thresholds -*
14. UNDP Project Quality Assurance Report (to be completed in UNDP online corporate planning system)
15. Legal, Policy and institutional approaches to ecosystem-based management of Environment Critical Areas
16. Ecosystem-based management framework for ECAs
17. Strategies for forest rehabilitation
18. Livelihood Opportunities at Tanguar Hoar
19. PPG consultation report
20. METT Tracking Tool
21. Capacity Development Scorecard
22. Covid-19 and Health Hazard Assessment
23. Climate Change and Disaster Risk Management
24. Co-financing letters
25. UNDP checklist
26. Institutional Structures for ECAs
27. FAO-EXACT Tool
28. UNDP's grant policies and Financial Regulations and Rules
29. Department of Environment (DOE) Grant policies for Environmentally Critical Areas (ECAs)

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ANNEX 1: GEF BUDGET TEMPLATE (AVAILABLE FROM BPPS NCE-VF)

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ANNEX 2: PROJECT MAP AND GEOSPATIAL COORDINATES OF THE PROJECT AREA



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ANNEX 3 MULTIYEAR WORKPLAN

Task	Responsible Party(ies)	YR 0	Year 1				Year 2				Year 3				Year 4				Year 5			
			Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Pre-Planning Phase (PPG Phase)																						
Constituting of Project Board	UNDP, GOB																					
Hiring of Contractual Staff	MOEFCC																					
Establishment of Project Special Accounts and Fund Flow Arrangements	UNDP and GOB																					
Planning and Implementation Phase																						
Component 1: Integrated ecosystem co-management framework for Tanguar Haor																						
Outcome 1: Integrated ecosystem co-management framework to promote sustainable wetland resource utilization, reduce degradation of the transitional aquatic-terrestrial interface and promotion of nature-friendly livelihoods in the management of Tanguar Haor.																						
Output 1.1: An integrated ecosystem co-management framework for planning and management of Tanguar Haor designed and adopted																						
Activity 1.1.1. National technical expertise to establish a baseline of key parameters for Tanguar Hoar	MOEFCC																					
Activity 1.1.2. A wide suite of environmental criteria established to help evaluate the ecological health of the wetland and establish realistic targets to be achieved on a time-bound scale	MOEFCC																					
Activity 1.1.3. Based on the integrated management framework, different institutions, stakeholder groups and private sector that is suited to deliver the different objectives and/or targets identified as assigned roles	MOEFCC																					
Activity 1.1.4. Assessment to determine, if any policy, legislative or institutional changes are required to achieve the assigned targets	MOEFCC																					
Activity 1.1.5. Agreed monitoring program/framework designed to access progress towards achievement of agreed targets	MOEFCC																					
Activity 1.1.6. Strengthening of existing and proposed **multi-sector coordination mechanisms for the Tanguar Haor at various levels (district, upazila, union council and community levels)**	MOEFCC																					
Activity 1.1.7. Review progress against the measured criteria and targets	MOEFCC																					
Output 1.2: Strengthened multi-sector coordination mechanisms for planning, ecosystem-based management and compliance monitoring applied at national, district, upazila, union and community levels on the basis of Ecologically Critical Areas (ECA) management rules																						
Activity 1.2.1. Technical support to help review existing **coordination modalities at national, district, upazila, union and community levels to assess effectiveness, track record, mandate and functionality of these institutional structures**	MOEFCC																					
Activity 1.2.2. identify what **mechanisms (coordination, capacity, institutional, policy and practices) are needed**	MOEFCC																					

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to be developed or strengthened to enhance and strengthen the effective operationalization of the 2016 ECA Management Rules at the Tanguar Hoar																							
Activity 1.2.3. facilitate the development/strengthening of existing rules/guidelines for improving institutional functioning, strengthening training and skills development for effective coordination and management, identify and establish modalities for public-private-community partnerships for resource management in the Tanguar Hoar etc	MOEFCC																						
Activity 1.2.4. Institutionalization of the National Scientific Body (NSB)	MOEFCC																						
Activity 1.2.5. Support capacity building, oversight and extension to strengthen the existing 40 VCGs that operate in the Tanguar Hoar and mobilization and establishment of the additional 34 new VGCs	MOEFCC																						
Output 1.3: Sustainable financing strategy for Tanguar Haor developed, approved and implemented through private-public partnerships supported by a range of new and innovative financial mechanisms																							
Activity 1.3.1 Based on the suite of environmental criteria and targets established for achievement of favorable ecological conditions in the Tanguar Hoar (Output 1.1), determine what actions need to be prioritized and funded in the short term	MOEFCC																						
Activity 1.3.2, Undertake economic analysis will enable DOE and MOEFCC to determine the range of costs to implement priority actions.	MOEFCC																						
Activity 1.3.3. Undertake an assessment to identify potential best financial options from an available or potential suite of mechanisms	MOEFCC																						
Activity 1.3.4. Reach agreement on a long-term financial strategy for meeting rehabilitation costs as well as cost-recovery	MOEFCC																						
Component 2: Strengthened community management of wetland resources																							
Outcome 2: Improved ecological condition of Tanguar Haor through sustainable resource use and sustainable livelihoods for communities in its proximity																							
Output 2.1. Developing and populating a wetland natural resource platform for Tanguar Hoar that includes information on status and trends in biodiversity, water quality, fisheries resources, and land degradation to inform its management.																							
Activity 2.1.1. Develop a simplified, standardized and dedicated information management system	MOEFCC																						
Activity 2.1.2. Wetland Information Management System/platform operationalized	MOEFCC																						
Activity 2.1.3. Information collection standards established	MOEFCC																						
Activity 2.1.4. Cross-agency and cross-sector collection and digitally cataloging existing information on forest planning, biodiversity and natural resources management best practices, etc.	MOEFCC																						

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Output 2.2: Participatory conservation investment plan for Tanguar Haor defines targets and locations of habitat restoration efforts, weed eradication, restoration of degraded forests and wetland shoreline, productive land improvements, sustainable resource use and livelihood improvement (fisheries, agriculture, tourism, alternative income generation, micro-enterprises, alternative clean sources of energy for domestic use, etc.), monitoring plans and co-management arrangements		
Activity 2.2.1. Consultancy Firm facilitating investment planning for Tanguar Haor	MOEFCC	
Activity 2.2.2, Rapid ecological mapping and establishment of baseline parameters	MOEFCC	
Activity 2.2.3. Pollution assessment of Tanguar Haor to identify pollution types sources and enforcement gaps	MOEFCC	
Activity 2.2.4. Tracking of condition of wetland	MOEFCC	
Activity 2.2.5. Investments for Tanguar Haor wetland (see under Outputs 2.3, 2.4 and 2.5)	MOEFCC	
Output 2.3: Improved conservation management through strengthening local co-management actions to conserve critical biodiversity and ecosystem services through strengthened conservation practices, eco-zoning, restoration of canals and beels to enhance water flows and restoration of degraded swamp forests, improved land and water management and monitoring of ecological conditions of the Tanguar Haor		
Activity 2.3.1. Based on the mapping undertaken in Output 2.2, reaching agreement of priority target locations for conservation interventions, community activities, bank and reed stabilization, weed removal, irrigation management, monitoring stations, and community activities in particular for other aquatic species conservation and management	MOEFCC	
Activity 2.3.2. Consultations with local communities (VCGs) on needs and expectation;	MOEFCC	
Activity 2.3.3. Defining the ecological and physical boundaries of the Tanguar Haor and reaching agreement on a pattern of zoning	MOEFCC	
Activity 2.3.4. Participatory planning to define sustainable investment options for participating VCGs in terms of fisheries, conservation, resource use and harvest, including preparation of VCG plans that define investments, participatory monitoring, patrolling and enforcement measures	MOEFCC	
Activity 2.3.5. Establishment of participatory norms for chemical usage, agricultural run-off through promotion of less intensive chemical usage and organic farming	MOEFCC	
Activity 2.3.6. Strengthening and capacity building of VCGs to implement VCG plans	MOEFCC	
Activity 2.3.7. Support for ecotourism in the Tanguar Haor through technical support, training and financing	MOEFCC	
Activity 2.3.8. Participatory monitoring of wetland benefits, threat reduction, surveillance and enforcement and documentation of lessons learned	MOEFCC	
Output 2.4: Sustainable land management practices applied to surrounding degraded agricultural lands (wetland paddy, home gardens, etc.) through various technological packages and incentives for nutrient management, organic inputs, limited tillage, agricultural and tree crop diversification and agro-forestry		

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Activity 2.4.1. Assessment to determine the type and range of agricultural, horticultural and aquacultural activities being practiced in and around the Tanguar Haor	MOEFCC																							
Activity 2.4.2. Undertake participatory planning exercises to define sustainable investment options for participating VCGs in terms of agriculture, MMSEs and income generation activities	MOEFCC																							
Activity 2.4.3. Technical support, training and extension services for promotion of enhanced and sustainable agricultural and horticultural practices	MOEFCC																							
Activity 2.4.4. Technical support, training and extension services for promotion of improved livestock interventions and aquaculture	MOEFCC																							
Activity 2.4.5. Assessment of environmental and social safeguard risks of investments	MOEFCC																							
Output 2.5: Range of activities piloted in Tanguar Haor to enhance ecologically-friendly community small enterprise and rural livelihood improvement (including most vulnerable populations affected by Covid-19 outbreak) through project-funded small grant investments, private-community partnerships for micro, small and medium enterprise and ecotourism, strengthening community organizations and skills and capacity building																								
Activity 2.5.1. a gender analysis related to livelihoods	MOEFCC																							
Activity 2.5.1. Assess technical, economic, social, and environmental feasibility of livelihoods appropriate for women	MOEFCC																							
Activity 2.5.1. Establish mechanisms for livelihood support for women	MOEFCC																							
Activity 2.5.1. Assess options for branding of local products with market linkages	MOEFCC																							
Activity 2.5.1. Provide technical support and capacity building	MOEFCC																							
Activity 2.5.1. Replicate successful livelihood models managed by women	MOEFCC																							
Component 3: Knowledge Management, M&E, Communications and Gender Mainstreaming																								
Outcome 3: Institutional capacity, knowledge management, gender mainstreaming and monitoring and evaluation contributes to identification of improved tools, approaches and best practices for replication and scaling up																								
Output 3.1: Knowledge Management, Communications and Gender Mainstreaming strategies developed and implemented																								
Activity 3.1.1. communication expert to undertake a KAP surveys	MOEFCC																							
Activity 3.1.2. Development of communication and gender awareness materials	MOEFCC																							
Activity 3.1.3. Gender specialist (intermittent) for Implementation of gender mainstreaming action plan	MOEFCC																							
Activity 3.1.3. Knowledge exchange through the wetland knowledge platform	MOEFCC																							
Output 3.2: Wetland Management and Compliance strengthened and supporting medium and long-term ecological monitoring in particular for Tanguar Haor																								
Activity 3.2.1. ECA MMCU established	MOEFCC																							

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Activity 3.2.2. Capacity building support to DoE in its establishment of an **ECA Management, Monitoring and Compliance Unit (ECA MMCU)**	MOEFCC																					
Activity 3.2.3. **ECA Scientific Advisory Panel** SAP functional	MOEFCC																					
Activity 3.2.4. Compliance monitoring of wetland	MOEFCC																					
Output 3.3: Knowledge Management and gender mainstreaming contribute to learning and advance replication and scaling up of gender sensitive wetland management approaches elsewhere in the country																						
Activity 3.3.1. Documentation and dissemination of knowledge management products	MOEFCC																					
Activity 3.3.2. **Policy guidance notes**	MOEFCC																					
Activity 3.3.3. Technical reports, publications and other knowledge management products	MOEFCC																					
Activity 3.3.4. National and district workshops/meetings to facilitate dissemination of information	MOEFCC																					
Activity 3.3.5. Institutionalization of best practices	MOEFCC																					
Activity 3.3.6. Public engagement pages	MOEFCC																					
Activity 3.3.7 **Replication and scaling up** strategy and actions	MOEFCC																					
Activity 3.3.8. Implementors manual and lessons learned guide	MOEFCC																					
Activity 3.3.9. End of project national seminar on outcomes	MOEFCC																					
Output 3.4: Monitoring and evaluation																						
Activity 3.4.1. Implementation of gender analysis and action plan	MOEFCC																					
Activity 3.4.2. Preparation and implementation of IPP	MOEFCC																					
Activity 3.4.3. Preparation, Monitoring the implementation of the ESMP and undertaking ESIA	MOEFCC																					
Activity 3.4.4 Development and implementation of monitoring framework	MOEFCC																					
Activity 3.4.5. Conduct of gender, indigenous people and wetland biodiversity focused training and development of training materials	MOEFCC																					
Activity 3.4.6. Review and regular update of M&E plan	MOEFCC																					
Activity 3.4.7. Conduct mid-term and terminal evaluation	MOEFCC																					
Other Activities																						
Monitoring social and environmental risks	MOEFCC																					
Oversight	UNDP and MOEFCC																					
Tracking tool update	MOEFCC																					
Audits	GOB																					

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Final Project Review	UNDP and MOEFCC																				

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ANNEX 4. SOCIAL AND ENVIRONMENTAL SCREENING TEMPLATE

Project Information

Project Information	
1. Project Title	**Ecosystem-based Management of Tanguar Haor Wetland in Bangladesh**
2. Project Number (i.e. Quantum project ID. PIMS+)	PIMS 6563
3. Location (Global/Region/Country)	Bangladesh
4. Project stage (Design or Implementation)	Design
5. Date	January 10, 2022

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the Project mainstreams the human-rights based approach

The objective of the project is to promote sustainable use of wetland resources by local communities to conserve globally significant biodiversity, improve ecosystem services and secure local livelihoods in Tanguar Haor. To achieve this objective, the project aims to promote an integrated community participatory process to ensure sustainable resource use and sustainable livelihoods for communities in its proximity to increase climate resilience and reduce vulnerability of the people and the environment. The overall aim in terms of safeguards concern is to promote a healthy environment centred around the Tanguar Hoar so that the more marginalized and vulnerable communities have access to more healthy and sustainable wetland resources. While wetland-related degradation and conflicts already exist in, and around the Tanguar Hoar, and through the implementation of activities developed through a collaborative participatory framework, the project aims to reduce the degradation of wetland resources, facilitate improved and sustainable agriculture and fisheries practices and improve livelihood opportunities so as to reduce resource conflicts and improve local rights.

During the PPG phase, extensive field consultation was undertaken with local communities, including IPs, vulnerable people and women to assess potential environmental and social risks/impacts of the project, which is addressed in this SES and the corresponding ESMF and IPF. This assessment included examining risks associated with human rights. The detailed design of this project has thus included the incorporation of a human-rights based approach following national and international guidelines such as the International Covenant on Economic, Social and Cultural Rights as well as the Universal Declaration of Human Rights, the UN Equality Act and Aarhus Convention principles. To address the human rights concerns, the project aims to encourage equality, inclusion and participation in biodiversity conservation, sustainable resource use (fisheries, agriculture, grazing, use of wetland resources, etc.), sustainable wetland management consultations, wetland management planning and implementation. Through this approach, a wide range of stakeholders (local communities, IPs, vulnerable groups and women) will be engaged, consulted and participate in project planning and implementation activities (i.e. including representatives from different levels of government, Non-Governmental Organizations as well as local communities).

As there are a small group of Garo and Hajong communities of indigenous people living in the northern part of the Tanguar Hoar, special efforts will be made and implemented to guarantee their meaningful, effective and informed participation throughout all parts of the project cycle. Initial consultations during the PPG stage with IPs, NGOs and Union Government were conducted. Consultations were undertaken using culturally appropriate methods of consultations with communities in a number of villages, in and around the Tanguar Hoar. This consultations at PPG stage was intended to reach initial agreement (and where necessary, particularly with IPs using FPIC) on any matters that may affect their rights and interests, lands, resources, territories and traditional livelihoods. They were consulted and informed of the objectives, activities and potential impacts of the project. Any activities that may adversely affect the existence, cultural value, indigenous lands, resources or territories shall not be conducted unless agreement has been achieved through an FPIC process. Potentially affected indigenous peoples have been informed of their right to withdraw consent at any time during project implementation, and have been informed of the various channels they may take to formally lodge a grievance/with the relevant authority.

The entire focus of the project is to empower the poor and marginalized groups, including youth and women. During the PPG phase, a detailed stakeholder analysis and engagement plan has been prepared together with a comprehensive list of all those stakeholders who

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have been consulted. Meeting minutes of each consultation with local communities have been documented, as has the process for establishing FPIC. The field consultations were aimed at capturing the existing systems, cultures, lifestyles, priorities and traditions of people in and around the wetland. Following the stakeholder analysis, the project design has sought to ensure that relevant (i.e. for the conservation of biodiversity, sustainable wet and fisheries and agricultural land management, and their traditional use of wetland resources) practices of indigenous and local communities are respected, subject to national legislation and relevant international obligations. A monitoring and evaluation process (including a Grievance Redressal Mechanism) has been incorporated into the project design with strong local participation, enabling human-rights abuses or grievances within project activities to be addressed effectively and in an open and transparent manner.

From an institutional perspective, modalities for working with various sectors and institutions in an effective manner has been assembled at the different administrative levels and their individual roles and responsibilities have been defined to ensure a participatory, transparent and mutually acceptable process for co-management of the Tanguar Hoar. This includes, creation of 24 new CMC and existing 50 CMC (Conservation Management Committee (CMC) and strengthening their capacity on NRM, biodiversity conservation, and eco-tourism. Beside this, Project design has ensured the following: (i) engaging stakeholders in an inclusive, transparent and equitable manner by means of processes, protocols and other mechanisms that ensure either an open-door policy (e.g. consultation meetings) or representation of relevant, interested stakeholder groups. Consultation during project implementation will ensure: (ii) adopting and further enhancing the recent 2016 ECA Management Rules that define an institutional structure and process for co-management of the Environmental Critical Areas ECAs, with committees established at all levels of government administration, from union to national levels; and (iii) by monitoring and reporting on the ecological condition of ECAs in a transparent manner and ensuring that the results are readily accessible by citizens via the Department of Environment's website and other means.

To ensure that the effective integration of a human-rights based approach, measures have been incorporated into the project document to support the project Board, staff team, consultants and duty bearers to follow this rights-based approach. Human rights standards and considerations have been embedded within the capacity building and awareness raising of the team and local community.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

Gender Equality is also a stated priority of the Government of Bangladesh, and all ministries and sectors share the responsibility for achieving gender equality. Traditional norms influence gender relations in terms of division of labor, property rights, and decision making. Key societal gender concerns include access to legal and judicial support, health, education, economic empowerment, decision-making and leadership, violence against women. In keeping with the national priority afforded to ensure effective participation of women, the project incorporates gender considerations into all resource use and livelihoods interventions, including for all training, support and awareness raising activities to women and girls, indigenous community, Covid-19 affected families, person with disabilities on biodiversity conservation, NRM, ECA, environmental awareness, environmental pollution control and prevention. A gender marking of GEN2 has been assigned for this project.

A comprehensive gender analysis specific to Bangladesh, and Hoar in particular, was developed during the PPG phase. The gender analysis aimed to determine the roles of women, identify inequalities or vulnerabilities, cultural, social, religious, and other constraints on women's potential participation. This Gender Analysis also reviewed best practices achieved by previous local initiatives at Tanguar Hoar and other wetlands in the country. The key gender related actions are captured in the Gender Action Plan, incorporated into gender disaggregated data with measurable indicators related to gender equality and empowerment. Gender related issues have been incorporated into the ESMF and will be further developed and detailed during the preparation of the ESMP, IPP and other project related assessments to be conducted during project implementation.

Specific project activities will support the engagement of women in project activities during the project implementation phase and the following actions will be taken:

- Full implementation of the gender mainstreaming action plan prepared for delivery during project implementation. This Plan will ensure that gender equity and social inclusion opportunities, will include a minimum of 50% female representation in beneficiary selections for all small grant adaptive livelihoods interventions, VCGs, CMC during project implementation.
- Ensuring that women are engaged in participatory consultative processes in beneficiary selections for all small grant adaptive livelihoods interventions, VCGs, CMC during project implementation thereafter, by means of implementing the gender mainstreaming plan. Particular attention will be given to ensuring that representation of women on the ECA committees at local, union, upazila, district and national levels achieves parity and thereby women empowerment is upheld
- Ensuring that at the program and project level implementation arrangements, gender expert will be solicited to provide guidance for gender mainstreaming, training and monitoring in Gender Gap Analysis (GAP) Framework
- Women representation in all capacity building workshops and training, as well as at any working group or committee for project implementation and monitoring will be ensured during implementation.
- All vulnerable groups' needs, including women's, in all small grant adaptive livelihoods interventions are to be incorporated into the project cycle in all the phases to ensure social and economic sustainability.
- The project results framework contains measurable indicators related to gender equality and women's empowerment which is mentioned RFA in output 3.1

Briefly describe in the space below how the Project mainstreams sustainability and resilience

The project will not adversely impact on environmental sustainability, rather it will promote, enhance and mainstream such sustainability in the following ways that are aligned mostly with **Standard 1 (Biodiversity Conservation and Natural Resource Management)**:

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The project will focus on developing an ecosystem-based management approach for the Tanguar Haor, based on a common and participatory-defined ecological framework that is adequately institutionalized and resourced through sustainable financing mechanisms. Application of the ecological framework will generate a set of ecological conditions determined as being necessary to maintain (or first restore and then maintain) the salient biodiversity features of the wetland, ensuring the sustainable availability of wetland resources (fish, fodder, wetland resources, etc.) and providing a basis for monitoring compliance towards achieving the management objective(s) for the site. The project will develop cost-effective and sustainable solutions for effective management of forests, Tanguar Haor wetland aquatic habitats, improve landscape of TH soil and water fertility and productivity and develop new, environmentally-friendly fresh water swamp forest plantation management, all of which are expected to ensure the sustainability and resilience of the wetland.

- The project will ensure that environmental sustainability is mainstreamed into all activities of the project. In terms of Ecosystem-based adaptation measures, the project will support community-based forest restoration that will provide biodiversity co-benefits and provide mitigation co-benefits through carbon sequestration. The interventions will use and promote UNDP's precautionary approach to natural resource conservation, and ensure that all activities under the project will not cause negative environmental impacts. The project will also integrate low-emission, climate-resilient objectives, avoid unwarranted increase in greenhouse gas emissions, and reduce GHG intensity for 400 ha swamp forest 100 km swamp trees plantation.
- All national environmental laws will be respected during the selection and implementation of adaptation interventions. The project will also not introduce known invasive species in the project. Moreover, culture of native fish species, planting of indigenous swamp forest species will be promoted.
- Environmental sustainability will be promoted by generating environmental co-benefits through the establishment of alternate energy measures in reducing the dependence on fuelwood or fossil fuels.
- In general, such measures are likely to benefit biodiversity, by preserving species and genetic diversity and protecting the integrity of natural ecosystems and production systems, all of which is beneficial to human well-being, livelihoods and economic prosperity.
- Strengthening capacities of communities for implementing effective biodiversity-friendly fisheries, agriculture and income generation, including alternative livelihood activities.
- Improving awareness and knowledge and strengthening gender sensitive implementation, monitoring and evaluation as means to improve and sustain conservation impacts.
- Ensuring an adaptive management approach that progressively identifies and addresses threats to biodiversity and natural resources and associated challenges, including those related to ecological, demographical, climatic, market, technological, social and economic factors in the ECAs.

Briefly describe in the space below how the project strengthens accountability to stakeholders

The project has worked closely with local community members, including women groups, representation of ethnic groups, vulnerable people and women that depend heavily on the wetland resources to meet the basic necessities (food, clean drinking water, shelter, and livelihoods) through a participatory approach during the PPG phase. This engagement will continue throughout project implementation through the four-tiered participatory ECA institutional structures that exists, but will be strengthened during project implementation. During the PPG stage, the extensive consultation with local communities and their institutions was important in establishing priorities and inputs in the design of the project. Key stakeholders listed in the Stakeholder Engagement Plan will continue to be directly involved in all stages of project implementation to share ideas, aims and goals to be achieved through this project, as well as overviews of social and environmental standards, including UNDP's grievance and redress mechanism.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5 below before proceeding to Question 6.*			**QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High.**
Risk Description (broken down by event, cause, impact)	***Impact and Likelihood (1-5)***	***Significance (Low, Moderate, Substantial, High)***	***Comments (Optional)***	***Description of assessment and management measures for risks rated as Moderate, Substantial or High***
Risk 1: The project proponent and right-holders may not have the capacity to effectively engage and ensure participation of all stakeholders, including	**I =3** **L=3**	**Moderate**		Conducted consultations with stakeholders including small group of ethnic communities, local community and small holders, vulnerable groups through focus group discussions, to the extent feasible under the current Covid-19 restrictions. Based on these, and discussions with other stakeholders, the following

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women, smallholders, farmers, IPs and marginalized groups during implementation phase could result in violation of human rights. They might also not effectively apply FPIC procedures. Principle: P.2; P.3; P.4; P.5; P.6; P.13 and P. 14 Standard 5: 5.2 and 5.4 Standard: 6.1, 6.2, 6.3, 6.4, 6.5 and 6.7 Standard 7: 7.3				management plans/frameworks were prepared at PPG stage to understand and address the potential environmental and social impacts of the project. These included the following: • A Stakeholder Engagement Plan (Annex 9) that defines the clear role and responsibilities of each stakeholder, including local TH communities to effectively engage and ensure participation of all stakeholders, including women, smallholder farmers, IPs and marginalized groups in the implementation of the project. • A grievance redress mechanism for the project, based on the existing locally acceptable and UNDP mechanisms to provide an avenue to articulate any project specific grievances and have a transparent system address such grievances. • An ESMF has been prepared and covers this risk and all others in this SESP. The ESMF lays out procedures and actions to identify and assess potential impacts of project activities, including in particular activities that have still not been fully designed (and likely to be better defined in early implementation of the project) following the participatory conservation of fresh water swamp forest protection and rehabilitation and sustainable agricultural and fisheries practices, agro-forestry and livelihood planning process. The ESMF includes procedures for screening investments as and when these are identified, on the basis of which these activities will be excluded (if these fall within the category of restricted activities) and for others, appropriate impacts, mitigation and monitoring measures, will be instituted before these are financed. The ESMF includes list of potential impacts and mitigation/management actions for each potential impact. An oversight and monitoring mechanism is instituted to ensure that management actions are effective. • IPF/SECDF: An IPF (or Small Ethnic and Vulnerable Community Development Framework/SEVCDF is a term that GoB uses to describe ethnic minorities or IPs) was developed at PPG stage with guidelines for FPIC to ensure FPIC to be secured multiple times during the project timeline, ensure that IPs are actively engaged in project activities, their cultural, social and traditional practices are recognized, maintained and enhanced, that they share equitable benefits from the project (livelihoods, resource use and other benefits derived from the project). • For those activities that present a significant risk, additional consultations will be made as part of

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				undertaking a scoped ESIA(s) assessment and developing scoped ESMP(s) to address specific risks posed by the project. • Interventions for managing the wetland, or restoration activities will be selected giving high priority to avoiding restrictions on access to resources and direct or indirect economic displacement. Where such restrictions are unavoidable and there is no other feasible way to achieve the biodiversity protection objective, mitigation methods must be employed to minimize such economic displacement. • **A Livelihood Action Plan(s)** will be developed (in accordance with applicable national laws), if required for SES compliance (e.g. in case there is any inadvertent or intentional restriction on access to resources by communities on account of project activities. A process framework will be developed early in Year 1 to provide the mechanism to ensure that decisions on resource access, restrictions and mitigation measures (including LAPs) are defined through a transparent consultative process • As a complement to the above measures, the project will apply participatory processes and approaches to all activities relevant to local communities where principles of FPIC will be further emphasized and demonstrated through providing timely information related to opportunities and risk of the proposed interventions for the beneficiaries to enable them to make decisions. In case community concern or inability to secure FPIC emerge, the following mechanisms would be applied as adaptive management: (i) Additional stakeholder consultations/workshops will be conducted using technical support to further refine project activities and approaches to address any concerns. Any such changes would be captured in the annual work planning process and summarized in PIRs; (ii) If a situation arises where FPIC could not be obtained for whatever reason, any activities requiring FPIC such as forest rehabilitation, grazing management, ecotourism will not take place. • UNDP CO is committed to ensuring monitoring investment proposals to ensure that these comply with FPIC processes during the implementation phase of the project as part of their responsibilities for project oversight.
Risk 2: Application of management practices might potentially restrict access to resources or basic services, in particular for	**I =4** **L=3**	**Substantial**	With the improved management of ECAs and improved sustainable wetland management for	An initial assessment was undertaken at PPG stage to better understand the potential impacts of restrict ons of access to resources for conservation activities in the Tanguar Hoar. While, it is unlikely that there will be physical displacement, this will be accessed dur ng

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marginalized individuals or IP groups. Principle P.6 Standard 5.1, 5.2 and 5.4; Standard 6.6			multiple different uses, community rights of access may be restricted in targeted TH project areas.	project implementation using the process framework and measures instituted if case there is possible intentional or unintentional physical or economic displacement (e.g. wetland resource) restriction. • Project will ensure that, all activities are detailed in collaboration with Upazila and Union governments and TH local communities (including small ethnic groups). Sustainable use of TH natural resources (for fisheries, wetland resource collection and farming) are planned and managed under community governance mechanisms (based exclusively on community decision-making) on current uses of these resources. • An initial screening of activities developed during stakeholders consultation conducted with community and Upazila level as part of the SESP indicated that all decisions regarding resource use and management will be defined through a collective agreement amongst the community and not imposed by the government, for which purpose a process framework will be developed by the time of the inception workshop to ensure this. • The ESMF recognizes this as a potential risk, and suggests that specific actions, including scoped ESIA(s) be defined following screening and assessments undertaken to mitigate and manage any such potential risks. This will entail the preparation of scoped management plans/ESMP(s) developed with local communities and stakeholders. Should there be an inadvertent possibility of a manifestation of the risks, the management measures as outlined in Risk 1 will be instituted, including the GRM process, livelihood action plan(s) and other related prescriptions that might emerge from the targeted assessment. • The preparation of an Ecosystem based management framework for the Tanguar Hoar will follow the Strategic Environmental and Social Assessment (SESA) approach. The project document specifically states that SESA will be applied during the development of new policies and legislation/regulations/ordinances prior to approval by Government and this has been built into detailed project design.
Risk 3: Motivation of local communities who are largely dependent on fuel wood and other ecosystem products and services for their livelihoods to shift to other sources of sustainable energy could be difficult	**I =3** **L=3**	**Moderate**	Local community fully depends on swamp forest for fuel wood, Hijol/Koroch branches, dry wood, grass, reeds or nolkhagra for their	Project design and implementation phase conducted a comprehensive participatory consultation process that engaged with communities from the wetland to secure local support and ensure that their immediate and long-term livelihood needs are addressed in the management plans through ecosystem-based approaches. The source of fuel for cooking, cow dung(goshi), fuel wood, Hijol/Koroch branches, dry

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resulting in continued destruction of swamp forests Standard 5.2 and 5.4			fuel source and project will introduced alternative fuel for clean energy reduce forest dependency.	wood, grass, reeds or nolkhagra was common. While, some of these measures are likely to continue without any negative impacts, cutting of trees for fuelwood would be replaced by the following measures: • Introduction of alternative fuel-efficient measures such as improved cooking stoves and use of bio-gas plants: and • Finding alternate sources of fuel such as briquettes. existing IAS etc.
Risk 4: Women and other disadvantaged groups may not be fully involved in planning, implementation and monitoring of project interventions and secure benefits from such initiatives, rather influential leaders and/or groups may have more control on.local level decision making. Principle P.9, P.10 and P.11	**I =3** **L=3**	**Moderate**	There are gender disparities in the project areas to reflect the views of women and girls and other disadvantaged groups. Women have limited role in decision-making in the plantation and fish harvesting work. The impact on women is further exacerbated as men are the chief decision makers within the individual families.	A gender specialist assigned as part of the PPG team developed a Gender Assessment and Gender Mainstreaming Action Plan to identify measures to ensure that the project contributes to gender equality and creates equitable opportunities for women and men at all levels of engagement. The gender analysis and plan focuses on specific measures to ensure gender discrimination is avoided and provides an effective means to improve women's participation in decision-making, have access to wetland resources and receive benefits from the project in an equitable manner. The gender action plan identifies the following actions to enhance the role of women and ensure their more active participation in project activities: • Review and updating of the previous co-management system. develop and piloting of an inclusive and gender responsive system for the implementation of new framework. • Specific awareness and training to sensitize district, Upazila and Union ECA Committee members and project staffs on gender related issues and opportunities to improving women's role in decision making and access to benefits: • Ensuring adequate representation and active participation of women in relevant decision-making bodies (District. Upazila. Union and Village Co-management committees): • Involving women in sustainable fisheries. agriculture and livelihood activities: • Provide technical trainings for women on climate smart agriculture practices, organic farming. sustainable tourism, handicraft production. start up and business development and support women union to promote women's participation in all livelihood activities. In addition. the project will support training in value chains and entrepreneurship. and establishment of women's groups in wetland resources. Refer Annex II of UNDP Project Document that focuses on livelihood opportunities for women): • Gender consultant will be recruited to help oversee and monitor implementation of the gender action plan. train key staff and Union and Upazila

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				staff and ensure collection of gender disaggregated data to validate participation of women and their role in decision-making and sharing of benefits: • Strengthening women groups and their institutions; • Engage CMC members, men, women, young boys and girls in accessing small grant for livelihood improvement, ecotourism, conservation of ecosystem and biodiversity. • Training Government officers on NRM. Gender Responsive budgeting, gender responsive services. etc.
Risk 5: Development interventions in terms of habitat and stream restoration (Output 2.3), community livelihoods and community-based enterprises in Output 2.4 and 2.5 (e.g. natural resources based enterprise, value addition, etc.) can have adverse impacts on species and habitats. Standard 1.1, 1.2, 1.3, 1.4, 1.6, 1.10 and 1.11	**I =3** **L=3**	**Moderate**	Unless, carried out with scientific rigor and with appropriate expert advice, restoration and other work while beneficial to support conservation and livelihoods may cause impacts to other non-target species. The project intends to have interventions that will benefit improved conservation, support environmentally friendly agricultural, fisheries, grazing and wetland use practices to reduce impacts on species and ecosystems, improved monitoring of species and ecosystem health, participation of a four tiered coordination committees in environmentally-friendly practices (including reduced wetland degradation and improved management of	The sites selected for project investment will conform to the project's objective of conservation of wetland biodiversity and maintaining its ecosystem services. The SESP will be applied to screen all investments to ensure that they comply with sound social and environmental principles and are sustainable. Such a checklist would also include the identification of wetland locations in relation to conservation, sustainable wetland resource use, agricultural and fisheries management, etc. The following are potential actions to reduce impacts on biodiversity: • Survey and inventory of species and diversity within the target sites as means to identify appropriate actions to enhance conservation; • Develop ecological baselines to access and monitor outcomes of conservation actions; • The village co- management plans will be adaptive in nature enabling revisions based on outcomes of monitoring; etc. • Monitoring indicators are selected to reflect the health of species and ecosystems. • In terms of community-based enterprises, specific criteria and procedures will be used to assess potential impacts from any livelihood investment activities and define management responses before these activities are financed; • Technically qualified biodiversity specialists will support the PMU to coordinate and monitor this risk.

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			wetland resource use) and more importantly enhanced environmental stewardship of wetland resources by local communities through co-management arrangements.	
Risk 6: Interventions proposed under this project could fail or be severely reduced due to natural calamities, disasters or extreme weather conditions. Moreover, climate change impacts may limit the success of interventions. Standard 2.1, 2.2 and 2.3	**I =3** **L=3**	**Moderate**	Unpredictable weather patterns could influence long-term effectiveness of project initiatives, in the wetland. There could be potential climate change risks including precipitation and temperature changes that could impact productivity of the wetland system and associated agriculture and on people's livelihoods as well as on ecological systems.	The initial environmental and social assessment that has been undertaken as part of the preparation of ESMF, included the consideration of climate vulnerability on habitats or communities that could be affected. Climate vulnerability has been included throughout project design, given the intersection with threats from wetland degradation. A separate pre-screening climate change assessment was undertaken at the PIF stage, which has informed the design of the full project. To address climate risks, the following measures are to be implemented: • The establishment of an integrated participatory ecosystem-based management framework for the Tanguar Hoar will be based on consideration of many factors, and will also include protocols for tracking the effects of climate change to the wetland, its biodiversity and ecosystem functions; • In establishing co-management plans for the Tanguar Hoar, climate adaptation and strengthening of community resilience will be important considerations; • A major part of this effort will be to enhance capacity of the related stakeholders (VCGs, CMC, Beel based community leaders and respective government departments) to monitor climate change trends/impacts and establish counter measures. A climate-proofing plan has been prepared and attached with the ESMF. • Climate change mitigation and adaptation measures have been embedded in the project design through improved natural wetland resources management, sustainable fisheries and agricultural management, rehabilitation of natural ecosystems and improved and diversified environmental friendly livelihoods; • The Environment Court Act (2000), describing environment related legal proceedings recognizes that adaptation to climate change requires efforts to enhance adaptability to climate change, including climate diversity and extreme climate so as to reduce potential of damage attributed to

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				climate change, utilize opportunities arising from climate change and overcome consequences arising from climate change. This will be a major consideration for the project.
Risk 7: Indigenous peoples (Garo and Hajong tribes) may be directly or indirectly affected by the project, and might not be adequately involved in project design and therefore not engaged in, supportive of, or benefitting from project activities. Due to existing inequalities, right holders may not have the capacity to claim their rights. Given, the Covid situation at the time of PPG, consultations with IPs was limited. Some activities of the project (including on-the-ground activities and establishing the integrated framework for the TH and related strategy work) will require continuous FPIC during project implementation. Standard 6.1, 6.2, 6.3, 6.4, 6.5, 6.7 and 6.9	**I =4** **L=3**	**Substantial**	There is a small Garo & Hajong) group of IPs living in 11 villages in the northern part of the wetland. Due to marginalization, or a lack of literacy and education these groups may not be equally represented within the project.	During the PPG phase, comprehensive engagement with key stakeholders, particularly the communities of indigenous people was undertaken to assess existing inequalities and will define measures to ensure they are addressed within the full project design documentation. • Following consultations at PPG stage, a stakeholder engagement plan has been prepared (Annex 9). As some project sites and activities have not been finalized in detail at the time of project design (because of COVID restrictions), formal FPIC will be obtained before any relevant implementation starts. • The consultations undertaken during the PPG phase will continue during project implementation and Indigenous communities will be further informed of their rights and their ability to withhold consent on certain activities of the project during implementation. • In addition, a grievance redress mechanism has been designed and incorporated within the project's ESMF and IPPF/SEVCDF. The ESMP and IPP when completed in early project implementation will serve as the primary risk management measure. Monitoring and evaluation process have been designed to record any complaints or grievances that arise within the project and wider community, with attention being brought to the Project Board. The GRM has been designed to be culturally sensitive and accessible to all stakeholders.
Risk 8: Existing resource conflicts may be exacerbated and result in inequitable or discriminatory for poor or marginalized people if activities are planned without adequate consultation and consideration of the needs and aspirations of marginalized groups Principal P.7	**I =3** **L=3**	**Moderate**	Existing benefit sharing and revenue generating mechanisms from fisheries and wetland resources conflicts may be exacerbated and result in inequitable or discriminatory for poor or marginalized people if activities are planned without adequate consultation and consideration of the needs and	Following consultation and assessment at PPG stage, and the following management measures are proposed to mitigate this risk: • The project will conscientiously promote inclusive measures to ensure equitable participation in project activities and benefits/opportunities for all stakeholders; • Ensure adequate social and monitoring expertise within the project provide guidance on measures to diffuse tensions and enhance relationships; • The ESMF identify measures to manage the risks, including ensuring that design processes with detailed mechanisms for collaboration with Upazila and Union governments and local communities, so that actions for management and sustainable use of resources can avoid discrimination and inequalities and hence reduce conflict;

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			aspirations of marginalized groups	• Ensuring that any decision regarding resource use is made through a consultative community participatory process: • Preparation of a livelihood plan, if community's livelihoods are affected: • A project's grievance redress mechanism or GRM system was developed at PPG that will be applied to address any specific community concerns and help resolve conflicts: • A comprehensive stakeholder engagement plan has been developed. • The ESIAs and ESMPs will serve as the main management measure to address this risk.
Risk 9: The COVID19 and other potential zoonotic disease outbreaks could pose disruptions to effective project implementation. Standard 3.4 and 3.6	**I =3** **L=3**	**Moderate**	Unless the COVID19 outbreak is contained and managed it could accelerate wetland resource exploitation, and associated biodiversity loss	• During the preparation of ESMF, an assessment of the social and economic impacts of ongoing Covid19 was done. The following mitigation measures are identified in the prodoc during implementation. (Please refer project document for specific Covid-19 analysis) • During the early part of project implementation particularly for the site level interventions, an assessment will be undertaken to assess any potential future risks. This assessment will focus on potential social and economic risks, in particular on vulnerable and poor populations and identify potential options for provision of income generation opportunities. • In case of potential delays in project start up due to COVID situation - the project team will take this into consideration when developing annual plans and implementation schedules, using best possible means to try to reduce and minimize delays. While this is a reality, the project will ensure that effective methods for bio-secure implementation are planned and implemented including the use of remote communication, where feasible, and following the safe COVID-19 guidelines and protocols of the government. • The project will develop, through its communication and KM strategy in the target sites to maintain a system of on-going communication to foster improved coordination and efficiency of disseminating awareness of COVID-19 protocols for management and control of the disease.
Risk 10: Beneficiary selection could create discrimination Principle P.13	**I=3** **L=3**	**Moderate**	There is the potential for conflict to arise if community members feel that they should be prioritized for certain interventions. The beneficiary criteria will be based on	The project is based on similar existing programs currently being undertaken in Bangladesh. • A clear beneficiary selection process that will be communicated to target communities during the project inception that would include the following criteria (to be further validation at project start-up), namely HHs: (i) poor/marginal and highly vulnerable to floods, droughts and climate change; (ii) with one or very minimum livelihood strategies and limited scope for diversification of incomes; (iii) Little

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			vulnerability assessments, but subjective self-perceptions of vulnerability may be contradicted by the assessments.	or no ownership of productive asset; (iv) Low level of income or poverty stricken; (v) Women, widows and IP headed households; (vi) with persons having disabilities or handicapped and (viii) fuel wood or forest dependent • Furthermore, in the event that any community members feel they are being discriminated against, they can file a complaint through the project's grievance redress mechanism mentioned in the ESMF.
Risk 11: Interventions to make agriculture climate resilient may negatively impact the environment if chemical fertilizer is used in the agriculture field instead of IPM. Standard 3.5 and 3.6; Standard 8.5	**I=3** **L=2**	**Moderate**		Based on an assessment at PPG stage, there is some level of chemical fertiliser use (the extent of which and impacts will be assessed during the ESIA process) . To help farmers and smallholders meet acceptable level of internationally recognized pesticide application standards, the project will support the following actions: • Using ESIAs/ESMPs to access risks and mitigation measures • Support capacity building of local institutions and farmer organizations in meeting chemical application procedures and standards) to enable them to support alternative pest management and chemical practices: • Provide training and extension to small holders and on the safe use (use of protective gear and other precautions), storage and disposal of chemicals • Support co-management committees to promote restrictions on chemical applications, particularly in important sites; • Support smallholder farmers to develop approaches to promote organic fertilizer. The Project will support farmers to adopt improved farming techniques (e.g. organic agriculture, soil and water conservation) that would reduce the use of chemical fertilizers and harmful pesticides, thus reducing the contamination of soil and water bodies.
Risk 12: While, the project will not result in waste creation, management and control of existing urban waste (coal transportation, single use plastic and human excreta), agro-chemical pollutants and untreated industrial waste may involve occupational health and safety risks. Standard 7.6 Standard 8.1 and 8.2	**I=3** **L=2**	**Moderate**	There is currently discharge of waste into the wetland that must be contained.	A rapid assessment was undertaken during the PPG phase to assess the extent of pollution, source of pollution and means to contain this. Based on this, the following management measures will be instituted: • Putting in place an agreed ecosystem management framework for the Tanguar Hoar with clear rules and guidelines and indicators to monitor the health of the wetland, including standards for discharge into the wetland; • Based on the above, applying a 'polluter pays' principle to enforce and agreed standards necessary to maintain the health of the wetland for coal transporting boat owners; • Enhancing co-management of the wetland by 74 village conservation committees who will take

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QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	QUESTION 3: What is the level of significance of the potential social and environmental risks? *Note: Respond to Questions 4 and 5 below before proceeding to Question 6.*			QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High.
				added responsibility for -managing and maintaining the condition of the wetland; • Strengthening wetland management, monitoring and compliance systems to support long-term monitoring of the wetland to assess trends and institute mechanisms to maintain the quality of the wetland; • Providing technical support to small industries to retrofit with simple cost-effective pollution abatement and control measures.

QUESTION 4: What is the overall Project risk categorization?

Select one (see SESP for guidance)		Comments
Low Risk	☐	
Moderate Risk	☐	
Substantial	☑	
High Risk	☐	

QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)

Question only required for Moderate, Substantial and High Risk projects

Is assessment required? (check if "yes")	☑			*Status? (completed, planned)*
if yes, indicate overall type and status		☑	Targeted assessment(s)	Completed - Gender Analysis, Stakeholder Analysis, Climate Risk Analysis, COVID-19 analysis
		☑	ESIA (Environmental and Social Impact Assessment)	Planned at Implementation stage
		☑	SESA (Strategic Environmental and Social Assessment)	Planned at Implementation stage
Are management plans required? (check if "yes)	R			
If yes, indicate overall type		☑	Targeted management plans	Completed - Gender Action Plan, Stakeholders Engagement Plan
		☑	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	Planned at implementation stage
		☑	ESMF (Environmental and Social Management Framework)	ESMF, IPPF prepared

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QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	QUESTION 3: What is the level of significance of the potential social and environmental risks? *Note: Respond to Questions 4 and 5 below before proceeding to Question 6.*		QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High.
	Based on identified risks, which Principles/Project-level Standards triggered?		Comments (not required)
	Overarching Principle: Leave No One Behind		
	Principle 1: Human Rights	☑	
	Principle 2: Gender Equality and Women's Empowerment	☑	
	Accountability	☑	
	1. Biodiversity Conservation and Natural Resource Management	☑	
	2. Climate Change Mitigation and Adaptation	☑	
	3. Community Health, Safety and Working Conditions	☑	
	4. Cultural Heritage	☐	
	5. Displacement and Resettlement	☑	
	6. Indigenous Peoples	☑	
	7. Labour and Working Conditions	☑	
	8. Pollution Prevention and Resource Efficiency	☑	

Final Sign Off

Final Screening at the design-stage is not complete until the following signatures are included

Signature	*Date*	*Description*
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

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SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
INSTRUCTIONS: The risk screening checklist will assist in answering Questions 2-6 of the Screening Template. Answers to the checklist questions help to (1) identify potential risks, (2) determine the overall risk categorization of the project, and (3) determine required level of assessment and management measures. Refer to the SES toolkit for further guidance on addressing screening questions.		
Overarching Principle: Leave No One Behind **Human Rights**		**Answer (Yes/No)**
P.1	Have local communities or individuals raised human rights concerns regarding the project (e.g. during the stakeholder engagement process, grievance processes, public statements)?	N
P.2	Is there a risk that duty-bearers (e.g. government agencies) do not have the capacity to meet their obligations in the project?	Y
P.3	Is there a risk that rights-holders (e.g. project-affected persons) do not have the capacity to claim their rights?	Y
Would the project potentially involve or lead to:		
P.4	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	N
P.5	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups, including persons with disabilities? [16]	Y
P.6	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalized individuals or groups, including persons with disabilities?	Y
P.7	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	Y
Gender Equality and Women's Empowerment		
P.8	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g. during the stakeholder engagement process, grievance processes, public statements)?	N
Would the project potentially involve or lead to:		
P.9	adverse impacts on gender equality and/or the situation of women and girls?	Y
P.10	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	Y
P.11	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	Y
P.12	exacerbation of risks of gender-based violence? *For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.*	Y

[16] Prohibited grounds of discrimination include race, ethnicity, sex, age, language, disability, sexual orientation, gender identity, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender and transsexual people.

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Sustainability and Resilience: Screening questions regarding risks associated with sustainability and resilience are encompassed by the Standard-specific questions below		
Accountability		
Would the project potentially involve or lead to:		
P.13	exclusion of any potentially affected stakeholders, in particular marginalized groups and excluded individuals (including persons with disabilities), from fully participating in decisions that may affect them?	Y
P.14	grievances or objections from potentially affected stakeholders?	Y
P.15	risks of retaliation or reprisals against stakeholders who express concerns or grievances, or who seek to participate in or to obtain information on the project?	N
Project-Level Standards		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
Would the project potentially involve or lead to:		
1.1	adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes*	Y
1.2	activities within or adjacent to critical habitats and/or environmentally sensitive areas, including (but not limited to) legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Y
1.3	changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	Y
1.4	risks to endangered species (e.g. reduction, encroachment on habitat)?	Y
1.5	exacerbation of illegal wildlife trade?	N
1.6	introduction of invasive alien species?	Y
1.7	adverse impacts on soils?	Y
1.8	harvesting of natural forests, plantation development, or reforestation?	Y
1.9	significant agricultural production?	Y
1.10	animal husbandry or harvesting of fish populations or other aquatic species?	Y
1.11	significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	Y
1.12	handling or utilization of genetically modified organisms/living modified organisms?[17]	N
1.13	utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)[18]	N
1.14	adverse transboundary or global environmental concerns?	Y
Standard 2: Climate Change and Disaster Risks		
Would the project potentially involve or lead to:		

[17] See the Convention on Biological Diversity and its Cartagena Protocol on Biosafety.

[18] See the Convention on Biological Diversity and its Nagoya Protocol on access and benefit sharing from use of genetic resources.

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2.1	areas subject to hazards such as earthquakes, floods, landslides, severe winds, storm surges, tsunami or volcanic eruptions?	Y
2.2	outputs and outcomes sensitive or vulnerable to potential impacts of climate change ordisasters? *For example, through increased precipitation, drought, temperature, salinity, extreme events, earthquakes*	Y
2.3	increases in vulnerability to climate change impacts or disaster risks now or in the future (also known as maladaptive or negative coping practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	Y
2.4	increases of greenhouse gas emissions, black carbon emissions or other drivers of climate change?	N
Standard 3: Community Health, Safety and Security		
Would the project potentially involve or lead to:		
3.1	construction and/or infrastructure development (e.g. roads, buildings, dams)? (Note: the GEF does not finance projects that would involve the construction or rehabilitation of large or complex dams)	N
3.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	N
3.3	harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	N
3.4	risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	Y
3.5	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	N
3.6	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	Y
3.7	influx of project workers to project areas?	N
3.8	engagement of security personnel to protect facilities and property or to support project activities?	N
Standard 4: Cultural Heritage		
Would the project potentially involve or lead to:		
4.1	activities adjacent to or within a Cultural Heritage site?	N
4.2	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	Y
4.3	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	N
4.4	alterations to landscapes and natural features with cultural significance?	N
4.5	utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	N
Standard 5: Displacement and Resettlement		
Would the project potentially involve or lead to:		
5.1	temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	Y

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5.2	economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	Y
5.3	risk of forced evictions?[19]	N
5.4	impacts on or changes to land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	Y
Standard 6: Indigenous Peoples		
Would the project potentially involve or lead to:		
6.1	areas where indigenous peoples are present (including project area of influence)?	Y
6.2	activities located on lands and territories claimed by indigenous peoples?	Y
6.3	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to screening question 6.3 is "yes", then the potential risk impacts are considered significant and the project would be categorized as either Substantial Risk or High Risk*	Y
6.4	the absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	Y
6.5	the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	Y
6.6	forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources? *Consider, and where appropriate ensure, consistency with the answers under Standard 5 above*	Y
6.7	adverse impacts on the development priorities of indigenous peoples as defined by them?	Y
6.8	risks to the physical and cultural survival of indigenous peoples?	N
6.9	impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices? *Consider, and where appropriate ensure, consistency with the answers under Standard 4 above.*	Y
Standard 7: Labour and Working Conditions		
Would the project potentially involve or lead to: (note: applies to project and contractor workers)		
7.1	working conditions that do not meet national labour laws and international commitments?	N
7.2	working conditions that may deny freedom of association and collective bargaining?	N
7.3	use of child labour?	Y
7.4	use of forced labour?	N
7.5	discriminatory working conditions and/or lack of equal opportunity?	N
7.6	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	Y

[19] Forced eviction is defined here as the permanent or temporary removal against their will of individuals, families or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection. Forced evictions constitute gross violations of a range of internationally recognized human rights.

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Standard 8: Pollution Prevention and Resource Efficiency		
Would the project potentially involve or lead to:		
8.1	the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Y
8.2	the generation of waste (both hazardous and non-hazardous)?	Y
8.3	the manufacture, trade, release, and/or use of hazardous materials and/or chemicals?	N
8.4	the use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Montreal Protocol, Minamata Convention, Basel Convention, Rotterdam Convention, Stockholm Convention*	N
8.5	the application of pesticides that may have a negative effect on the environment or human health?	Y
8.6	significant consumption of raw materials, energy, and/or water?	N

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ANNEX 5: UNDP QUANTUM RISK LOG

#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
1	Government's limited finances and capacity to effectively support activities at Tanguar Haor may constrain its ability to ensure long-term sustainability of project interventions.	Regulatory, operational	Consolidating and expanding the government's capacity to address environmental outcomes in the Tanguar Haor will be supported by the development and implementation of a sustainable Financing Strategy that will identify potential opportunities through public and private sectors. This will be targeted at the national five year planning process, effective enforcement of the polluter-pays principle, using policies (existing and new) and mechanisms to incentivize pollution reduction and mitigation measures. I=3, L=2 Moderate	The strategy will be informed by assessing costs of its delivery versus financial benefits of having rivers and wetlands with relatively clean (unpolluted) water that can be used for local consumption, irrigation and public water supplies.	NPD
2	Government (including sub-national administration) may be unable to provide adequate human resources capacity to support implementation of the project and beyond.	Operational, Strategic	Government considers this project to be a priority for Bangladesh as the Tanguar Haor is the most important freshwater wetland like ECA & Ramsar site. It will be important, therefore, to ensure that the full-size project is designed appropriately to match the capacities of government during the initial years of implementation. The project will ensure design of appropriate skills development and training to match the capacities of government during the initial years of implementation, following which implementation of the financing strategy should provide for institutionalization of more human resources before project ends. I=3, L=3 Moderate	A key initiative to build and sustain technical capacity will be to institutionalize the project's module training program in wetland management, monitoring and enforcement at all levels of governance. The project's exit strategy will systematically document the costs of continuing to expand human and technical capacities post-project, implementation responsibilities, and sources of financial support as per the Financing Strategy.	NPD, Project Manager
3	As the Tanguar Hoar is located close to the international boundary	Political/ Regulatory	As there are 54 transboundary rivers in Bangladesh, this is an issue that is not unique to the Tanguar Haor alone and needs to be addressed	While, the project will not deal directly with these complex and politically sensitive transboundary issues, the application of an ecological and ECA management approach to	PSC, NPD, Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
	with India, there is potential that activities across the border can affect the spatial and temporal distribution of water availability in the wetland		at a high political level that is beyond the scope of the GEF project. I=3, L=3 Moderate	management of the Tanguar Haor, will to a small extent facilitate achieving some ecological balance within the Haor, itself. Further the drainage of the Tanguar Hoar is within Bangladesh itself, and likely not cause any transboundary impact	
4	Co-financing contributions from partners will be not realized as committed.	Financial	The project is designed to feed into baseline activities funded by national and subnational governmental programmes and projects. I = 4; L = 2 Moderate	Co-financing contributions are primarily represented by parallel, baseline funding for initiatives and investments that have been approved or are ongoing. The project will regularly monitor co-financing contributions and report results to the MoEFCC and the PSC.	Project Manager; NPD
5	Impacts of exchange rate fluctuations and/or a possible global economic recession on project delivery.	Financial	Project delivery may be impacted by macroeconomic externalities such as exchange rate fluctuations and a possible economic recession. I = 3; L = 3 Moderate	Disbursements will be made based on annual work plans, which will be adjusted to possible currency fluctuations. In fact, exchange rate gains will benefit the project output deliveries as most of the expenses are made in local currency.	MoEFCC and UNDP
Risks identified through the Social and Environmental Screening Procedure (see Annex 4 to the Project Document).					
6	**Risk 1:** The project proponent and right-holders may not have the capacity to effectively engage and ensure participation of all stakeholders, including women, smallholders, farmers, IPs and marginalized groups during implementation phase could result in violation of human rights. They might also not	Social	Conduct extensive consultations with stakeholders including Small Ethnic Communities, local community and small holders, vulnerable groups through focus group discussions, to the extent feasible under the current Covid-19 restrictions. I =3, L=3 Moderate	Conducted consultations with stakeholders including small group of ethnic communities, local community and small holders, vulnerable groups through focus group discussions, to the extent feasible under the current Covid-19 restrictions. Based on these, and discussions with other stakeholders, the following management plans/frameworks were prepared at PPG stage to understand and address the potential environmental and social impacts of the project. These included the following: • A Stakeholder Engagement Plan (Annex 9) that defines the clear role and responsibilities of each stakeholder,	PMU/Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
	effectively apply FPIC procedures. Principle: P.2; P.3; P.4; P.5; P.6; P.13 and P. 14 Standard 5: 5.2 and 5.4 Standard: 6.1, 6.2, 6.3, 6.4, 6.5 and 6.7 Standard 7: 7.3			including local TH communities to effectively engage and ensure participation of all stakeholders, including women, smallholder farmers, IPs and marginalized groups in the implementation of the project. • A grievance redress mechanism for the project, based on the existing locally acceptable and UNDP mechanisms to provide an avenue to articulate any project specific grievances and have a transparent system address such grievances. • An ESMF has been prepared and covers this risk and all others in this SESP. The ESMF lays out procedures and actions to identify and assess potential impacts of project activities, including in particular activities that have still not been fully designed (and likely to be better defined in early implementation of the project) following the participatory conservation of fresh water swamp forest protection and rehabilitation and sustainable agricultural and fisheries practices, agro-forestry and livelihood planning process. The ESMF includes procedures for screening investments as and when these are identified, on the basis of which these activities will be excluded (if these fall within the category of restricted activities) and for others, appropriate impacts, mitigation and monitoring measures, will be instituted before these are financed. The ESMF includes list of potential impacts and mitigation/management actions for each potential impact. An oversight and	

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				monitoring mechanism is instituted to ensure that management actions are effective. • IPF/SECDF: An IPF (or Small Ethnic and Vulnerable Community Development Framework/SEVCDF is a term that GoB uses to describe ethnic minorities or IPs) was developed at PPG stage with guidelines for FPIC to ensure FPIC to be secured multiple times during the project timeline, ensure that IPs are actively engaged in project activities, their cultural, social and traditional practices are recognized, maintained and enhanced, that they share equitable benefits from the project (livelihoods, resource use and other benefits derived from the project). • For those activities that present a significant risk, additional consultations will be made as part of undertaking a scoped ESIA(s) assessment and developing scoped ESMP(s) to address specific risks posed by the project. • Interventions for managing the wetland, or restoration activities will be selected giving high priority to avoiding restrictions on access to resources and direct or indirect economic displacement. Where such restrictions are unavoidable and there is no other feasible way to achieve the biodiversity protection objective, mitigation methods must be employed to minimize such economic displacement. • **A Livelihood Action Plan(s)** will be developed (in accordance with applicable national laws), if required for SES compliance (e.g. in case there is any	

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				inadvertent or intentional restriction on access to resources by communities on account of project activities. A process framework will be developed early in Year 1 to provide the mechanism to ensure that decisions on resource access, restrictions and mitigation measures (including LAPs) are defined through a transparent consultative process • As a complement to the above measures, the project will apply participatory processes and approaches to all activities relevant to local communities where principles of FPIC will be further emphasized and demonstrated through providing timely information related to opportunities and risk of the proposed interventions for the beneficiaries to enable them to make decisions. In case community concern or inability to secure FPIC emerge, the following mechanisms would be applied as adaptive management: (i) Additional stakeholder consultations/workshops will be conducted using technical support to further refine project activities and approaches to address any concerns. Any such changes would be captured in the annual work planning process and summarized in PIRs; (ii) If a situation arises where FPIC could not be obtained for whatever reason, any activities requiring FPIC such as forest rehabilitation, grazing management, ecotourism will not take place. • UNDP CO is committed to ensuring monitoring investment proposals to ensure that these comply with FPIC processes during	

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				the implementation phase of the project as part of their responsibilities for project oversight.	
7	**Risk 2:** Application of management practices might potentially restrict access to resources or basic services, in particular for marginalized individuals or IP groups. Principle P.6 Standard 5.1, 5.2 and 5.4; Standard 6.6	Social	With the improved management of ECAs and improved sustainable wetland management for multiple different uses, community rights of access may be restricted in targeted TH project areas. I =4, L=3 Substantial	An initial assessment was undertaken at PPG stage to better understand the potential impacts of restrictions of access to resources for conservation activities in the Tanguar Hoar. While, it is unlikely that there will be physical displacement, this will be accessed during project implementation using the process framework and measures instituted if case there is possible intentional or unintentional physical or economic displacement (e.g. wetland resource) restriction. • Project will ensure that, all activities are detailed in collaboration with Upazila and Union governments and TH local communities (including small ethnic groups). Sustainable use of TH natural resources (for fisheries, wetland resource collection and farming) are planned and managed under community governance mechanisms (based exclusively on community decision-making) on current uses of these resources. • An initial screening of activities developed during stakeholders consultation conducted with community and Upazila level as part of the SESP indicated that all decisions regarding resource use and management will be defined through a collective agreement amongst the community and not imposed by the government, for which purpose a process framework will be developed by the time of the inception workshop to ensure this.	PMU/Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				• The ESMF recognizes this as a potential risk, and suggests that specific actions, including scoped ESIA(s) be defined following screening and assessments undertaken to mitigate and manage any such potential risks. This will entail the preparation of scoped management plans/ESMP(s) developed with local communities and stakeholders. Should there be an inadvertent possibility of a manifestation of the risks, the management measures as outlined in Risk 1 will be instituted, including the GRM process, livelihood action plan(s) and other related prescriptions that might emerge from the targeted assessment. • The preparation of an Ecosystem based management framework for the Tanguar Hoar will follow the Strategic Environmental and Social Assessment (SESA) approach. The project document specifically states that SESA will be applied during the development of new policies and legislation/regulations/ordinances prior to approval by Government and this has been built into detailed project design.	
8	**Risk 3:** Motivation of local communities who are largely dependent on fuel wood and other ecosystem products and services for their livelihoods to shift to other sources of sustainable energy could be difficult resulting in	Social/Environmental	Local community fully depends on swamp forest for fuel wood, Hijol/Koroch branches, dry wood, grass, reeds or nolkhagra for their fuel source and project will introduced alternative fuel for clean energy reduce forest dependency. I =3, L=3 Moderate	Project design and implementation phase conducted a comprehensive participatory consultation process that engaged with communities from the wetland to secure local support and ensure that their immediate and long-term livelihood needs are addressed in the management plans through ecosystem-based approaches. The source of fuel for cooking, cow dung(goshi), fuel wood, Hijol/Koroch branches, dry wood, grass, reeds or nolkhagra was common. While, some of these measures are	Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
	continued destruction of swamp forests Standard 5.2 and 5.4			likely to continue without any negative impacts, cutting of trees for fuelwood would be replaced by the following measures: • Introduction of alternative fuel-efficient measures such as improved cooking stoves and use of bio-gas plants; and • Finding alternate sources of fuel such as briquettes, existing IAS etc.	
9	**Risk 4**: Women and other disadvantaged groups may not be fully involved in planning, implementation and monitoring of project interventions and secure benefits from such initiatives, rather influential leaders and/or groups may have more control on local level decision making. Principle P.9, P.10 and P.11	Social	There are gender disparities in the project areas for reflect of the views of women and girls and other disadvantaged groups. Both men and women in the plantation community have limited role in decision-making in the plantation and fish harvesting work environment. The impact on women is further exacerbated as men are the chief decision makers within the individual families. I =3, L=3 Moderate	A gender specialist assigned as part of the PPG team developed a Gender Assessment and Gender Mainstreaming Action Plan to identify measures to ensure that the project contributes to gender equality and creates equitable opportunities for women and men at all levels of engagement. The gender analysis and plan focuses on specific measures to ensure gender discrimination is avoided and provides an effective means to improve women's participation in decision-making, have access to wetland resources and receive benefits from the project in an equitable manner. The gender action plan identifies the following actions to enhance the role of women and ensure their more active participation in project activities: • Review and updating of the previous co-management system, develop and piloting of an inclusive and gender responsive system for the implementation of new framework. • Specific awareness and training to sensitize district, Upazila and Union ECA Committee members and project staffs on gender related issues and opportunities to	Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				improving women's role in decision making and access to benefits; • Ensuring adequate representation and active participation of women in relevant decision-making bodies (District, Upazila, Union and Village Co-management committees); • Involving women in sustainable fisheries, agriculture and livelihood activities; • Provide technical trainings for women on climate smart agriculture practices, organic farming, sustainable tourism, handicraft production, start up and business development and support women union to promote women's participation in all livelihood activities. In addition, the project will support training in value chains and entrepreneurship, and establishment of women's groups in wetland resources. Refer Annex 11 of UNDP Project Document that focuses on livelihood opportunities for women); • Gender consultant will be recruited to help oversee and monitor implementation of the gender action plan, train key staff and Union and Upazila staff and ensure collection of gender disaggregated data to validate participation of women and their role in decision-making and sharing of benefits; • Strengthening women groups and their institutions; • Engage CMC members, men, women, young boys and girls in accessing small grant for livelihood improvement, ecotourism, conservation of ecosystem and biodiversity.	

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				• Training Government officers on NRM, Gender Responsive budgeting, gender responsive services, etc.	
10	**Risk 5:** Development interventions in terms of habitat and stream restoration (Output 2.3), community livelihoods and community-based enterprises in Output 2.4 and 2.5 (e.g. natural resources based enterprise, value addition, etc.) can have adverse impacts on species and habitats. Standard 1.1, 1.2, 1.3, 1.4, 1.6, 1.10 and 1.11	Social/ Environmental	Unless, carried out with scientific rigor and with appropriate expert advice, restoration and other work while beneficial to support conservation and livelihoods may cause impacts to other non-target species. I =3; L=3 Moderate	The sites selected for project investment will conform to the project's objective of conservation of wetland biodiversity and maintaining its ecosystem services. The SESP will be applied to screen all investments to ensure that they comply with sound social and environmental principles and are sustainable. Such a checklist would also include the identification of wetland locations in relation to conservation, sustainable wetland resource use, agricultural and fisheries management, etc. The following are potential actions to reduce impacts on biodiversity: • Survey and inventory of species and diversity within the target sites as means to identify appropriate actions to enhance conservation; • Develop ecological baselines to access and monitor outcomes of conservation actions; • The village co- management plans will be adaptive in nature enabling revisions based on outcomes of monitoring; etc. • Monitoring indicators are selected to reflect the health of species and ecosystems. • In terms of community-based enterprises, specific criteria and procedures will be used to assess potential impacts from any livelihood investment activities and define management responses before these activities are financed;	Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				• Technically qualified biodiversity specialists will support the PMU to coordinate and monitor this risk.	
11	**Risk 6:** Interventions proposed under this project could fail or be severely reduced due to natural calamities, disasters or extreme weather conditions. Moreover, climate change impacts may limit the success of interventions. Standard 2.1, 2.2 and 2.3	Social/ Environmental	Unpredictable weather patterns could influence long-term effectiveness of project initiatives, in the wetland. There could be potential climate change risks including precipitation and temperature changes that could have the productivity of the wetland system and associated agriculture and on people's livelihoods as well as on ecological systems I =3; L=3 Moderate	The initial environmental and social assessment that has been undertaken as part of the preparation of ESMF, included the consideration of climate vulnerability on habitats or communities that could be affected. Climate vulnerability has been included throughout project design, given the intersection with threats from wetland degradation. A separate pre-screening climate change assessment was undertaken at the PIF stage, which has informed the design of the full project. To address climate risks, the following measures are to be implemented: • The establishment of an integrated participatory ecosystem-based management framework for the Tanguar Hoar will be based on consideration of many factors, and will also include protocols for tracking the effects of climate change to the wetland, its biodiversity and ecosystem functions; • In establishing co-management plans for the Tanguar Hoar, climate adaptation and strengthening of community resilience will be important considerations; • A major part of this effort will be to enhance capacity of the related stakeholders (VCGs, CMC, Beel based community leaders and respective government departments) to monitor climate change trends/impacts and establish counter measures. A climate-	Project Manager

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				proofing plan has been prepared and attached with the ESMF. • Climate change mitigation and adaptation measures have been embedded in the project design through improved natural wetland resources management, sustainable fisheries and agricultural management, rehabilitation of natural ecosystems and improved and diversified environmental friendly livelihoods; • The Environment Court Act (2000), describing environment related legal proceedings recognizes that adaptation to climate change requires efforts to enhance adaptability to climate change, including climate diversity and extreme climate so as to reduce potential of damage attributed to climate change, utilize opportunities arising from climate change and overcome consequences arising from climate change. This will be a major consideration for the project.	
12	**Risk 7**: Indigenous peoples (Garo and Hajong tribes) may be directly or indirectly affected by the project, and might not be adequately involved in project design and therefore not engaged in, supportive of, or benefitting from project activities. Due to existing inequalities, right holders may not have the capacity to claim their rights. Given, the	Social	There is a small (Garo & Hajong) group of IPs living in 11 villages in the northern part of the wetland. Due to marginalization, or a lack of literacy and education these groups may not be equally represented within the project. I =4; L=3 Substantial	During the PPG phase, comprehensive engagement with key stakeholders, particularly the communities of indigenous people was undertaken to assess existing inequalities and will define measures to ensure they are addressed within the full project design documentation. • Following consultations at PPG stage, a stakeholder engagement plan has been prepared (Annex 9). As some project sites and activities have not been finalized in detail at the time of project design (because of COVID restrictions), formal FPIC will be obtained before any relevant implementation starts.	PMU/Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
	Covid situation at the time of PPG, consultations with IPs was limited. Some activities of the project (including on-the-ground activities and establishing the integrated framework for the TH and related strategy work) will require continuous FPIC during project implementation. Standard 6.1, 6.2, 6.3, 6.4, 6.5, 6.7 and 6.9			• The consultations undertaken during the PPG phase will continue during project implementation and Indigenous communities will be further informed of their rights and their ability to withhold consent on certain activities of the project during implementation. • In addition, a grievance redress mechanism has been designed and incorporated within the project's ESMF and IPPF/SEVCDF. The ESMP and IPP when completed in early project implementation will serve as the primary risk management measure. Monitoring and evaluation process have been designed to record any complaints or grievances that arise within the project and wider community, with attention being brought to the Project Board. The GRM has been designed to be culturally sensitive and accessible to all stakeholders.	
13	**Risk 8:** Existing resource conflicts may be exacerbated and result in inequitable or discriminatory for poor or marginalized people if activities are planned without adequate consultation and consideration of the needs and aspirations of marginalized groups Principal P.7	Social	Existing benefit sharing and revenue generating mechanisms from fisheries and wetland resources resource conflicts may be exacerbated and result in inequitable or discriminatory for poor or marginalized people if activities are planned without adequate consultation and consideration of the needs and aspirations of marginalized groups I =3; L=3 Moderate	Following consultation and assessment at PPG stage, and the following management measures are proposed to mitigate this risk: • The project will conscientiously promote inclusive measures to ensure equitable participation in project activities and benefits/opportunities for all stakeholders; • Ensure adequate social and monitoring expertise within the project provide guidance on measures to diffuse tensions and enhance relationships; • The ESMF identify measures to manage the risks, including ensuring that design processes with detailed mechanisms for collaboration with Upazila and Union governments and local communities, so that actions for management and	PMU/Project Manager

#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				sustainable use of resources can avoid discrimination and inequalities and hence reduce conflict; • Ensuring that any decision regarding resource use is made through a consultative community participatory process; • Preparation of a livelihood plan, if community's livelihoods are affected; • A project's grievance redress mechanism or GRM system was developed at PPG that will be applied to address any specific community concerns and help resolve conflicts; • A comprehensive stakeholder engagement plan has been developed. • The ESIAs and ESMPs will serve as the main management measure to address this risk.	
14	**Risk 9:** The COVID19 and other potential zoonotic disease outbreaks could pose disruptions to effective project implementation. Standard 3.4 and 3.6	Environmental	Unless the COVID19 outbreak is contained and managed it could accelerate wetland resource exploitation, and associated biodiversity loss I =3; L=3 Moderate	• During the preparation of ESMF, an assessment of the social and economic impacts of ongoing Covid19 was done. The following mitigation measures are identified in the prodoc during implementation. (Please refer project document for specific Covid-19 analysis) • During the early part of project implementation particularly for the site level interventions, an assessment will be undertaken to assess any potential future risks. This assessment will focus on potential social and economic risks, in particular on vulnerable and poor populations and identify potential options for provision of income generation opportunities. • In case of potential delays in project start up due to COVID situation - the project team will take this into consideration when	

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				developing annual plans and implementation schedules, using best possible means to try to reduce and minimize delays. While this is a reality, the project will ensure that effective methods for bio-secure implementation are planned and implemented including the use of remote communication, where feasible, and following the safe COVID-19 guidelines and protocols of the government. • The project will develop, through its communication and KM strategy in the target sites to maintain a system of on-going communication to foster improved coordination and efficiency of disseminating awareness of COVID-19 protocols for management and control of the disease.	
15	**Risk 10**: Beneficiary selection could create discrimination Principle P.13	Social	There is the potential for conflict to arise if community members feel that they should be prioritized for certain interventions. The beneficiary criteria will be based on vulnerability assessments, but subjective self-perceptions of vulnerability may be contradicted by the assessments. I =3; L=3 Moderate	The project is based on similar existing programs currently being undertaken in Bangladesh. • A clear beneficiary selection process that will be communicated to target communities during the project inception that would include the following criteria (to be further validation at project start-up), namely HHs: (i) poor/marginal and highly vulnerable to floods, droughts and climate change; (ii) with one or very minimum livelihood strategies and limited scope for diversification of incomes; (iii) Little or no ownership of productive asset; (iv) Low level of income or poverty stricken; (v) Women, widows and IP headed households; (vi) with persons having disabilities or	PMU/Project Manager

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				handicapped and (viii) fuel wood or forest dependent • Furthermore, in the event that any community members feel they are being discriminated against, they can file a complaint through the project's grievance redress mechanism mentioned in the ESMF.	
16	**Risk 11:** Interventions to make agriculture climate resilient may negatively impact the environment if chemical fertilizer is used in the agriculture field instead of IPM. Standard 3.5 and 3.6; Standard 8.5	Environmental	I = 3; L = 2 Moderate	Based on an assessment at PPG stage, there is some level of chemical fertiliser use (the extent of which and impacts will be assessed during the ESIA process) . To help farmers and smallholders meet acceptable level of internationally recognized pesticide application standards, the project will support the following actions: • Using ESIAs/ESMPs to access risks and mitigation measures • Support capacity building of local institutions and farmer organizations in meeting chemical application procedures and standards) to enable them to support alternative pest management and chemical practices; • Provide training and extension to small holders and on the safe use (use of protective gear and other precautions), storage and disposal of chemicals • Support co-management committees to promote restrictions on chemical applications, particularly in important sites; • Support smallholder farmers to develop approaches to promote organic fertilizer. The Project will support farmers to adopt improved farming techniques (e.g. organic agriculture, soil and water conservation) that would reduce the use of chemical fertilizers	Project Manager

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#	Description	Risk Category	Impact and Likelihood	Risk Treatment / Management Measures	Risk Owner
				and harmful pesticides, thus reducing the contamination of soil and water bodies.	



ANNEX 6: OVERVIEW OF TECHNICAL CONSULTANCIES/SUBCONTRACTS

Summary of TORS for Key Staff and Consultants and Contractual Services Financed by the Project

National Project Director

The National Project Director (NPD) will be a senior officer from MOEFCC and financed through co-financing from the government. S/he will work on full-time basis for the project. S/he will have an overall responsibility for managing the organization, work plans, programs and activities, as well as progress and financial reporting to Project Board and UNDP and overseeing day-to-day activities of the project. The National Project Director will be the head of the Project Management Unit. The PMU will have operational and financial autonomy, including the authority to select and sub-contract specific project activities or components to local consultants and local institutions. The NPD will perform a liaison role with government, UNDP and stakeholders. Terms of reference for this position include the following:

The roles and responsibilities of the NPD are:

- Establishment of the staffing and operational functions of the Project Management Unit;
- Guiding the preparation of annual work plans, monitoring and evaluation plans, etc.;
- Overseeing the drafting/reviewing of terms of reference key staff;
- Guiding and overseeing funds requisition, six-monthly progress and financial reporting and monitoring of outputs and outcomes as per GEF standards;
- Coordination with regional and local authorities and stakeholders in implementing project activities;
- Ensuring the disbursement of funds as per operational procedures consistent with financial management standards of the Government and GEF;
- Providing secretariat services to the Project Board;
- Prepare revisions to the multi-year work plan, as needed, as well as annual and quarterly plans if required.
- Prepare the inception report no later than one month after the inception workshop.
- Ensure that the indicators included in the project results framework is monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR.
- Assess major and minor amendments to the project within the parameters set by UNDP-GEF;
- Reporting to the Project Board and UNDP on the progress and issues in project implementation; and
- Facilitation of monitoring and evaluation missions by UNDP or designated consultants to UNDP.

Financial and Administration Associate

The FAA will be responsible for the financial and administrative management of the project activities and assists the PC in the preparation of quarterly and annual work plans and progress reports for review and monitoring by the Project Director and UNDP.

The FAA will have the following responsibilities:

- Responsible for providing general financial support to the FIPI Accountant for the project
- Take own initiative and perform daily work in compliance with annual work schedules;
- Assist project management in performing budget cycle: planning, preparation, revisions, and budget execution;

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- Provide assistance to partner agencies involved in project activities, performing and monitoring financial aspects to ensure compliance with budgeted costs in line with UNDP policies and procedures;
- Monitor project expenditures, ensuring that no expenditure is incurred before it has been authorized;
- Assist project team in drafting quarterly and yearly project progress reports concerning financial issues;
- Ensure that UNDP procurement rules are followed during procurement activities that are carried out by the project and maintain responsibility for the inventory of the project assets;
- Perform preparatory work for mandatory and general budget revisions, annual physical inventory and auditing, and assist external evaluators in fulfilling their mission;
- Prepare all outputs in accordance with the UNDP administrative and financial office guidance;
- Ensure the project utilizes the available financial resources in an efficient and transparent manner;
- Ensure that all project financial activities are carried out on schedule and within budget to achieve the project outputs;
- Perform all other financial related duties, upon request
- Facilitate organization of workshops, training and publicity events
- Support other administrative tasks as requested by the PC

Qualifications and Skills:

- At least a bachelor's degree in finance, business management, or related fields;
- Experience related to project implementation;
- A demonstrated ability in the financial management of development projects and in liaising and cooperating with government officials, NGOs, etc.;
- Self-motivated and ability to work under the pressure;
- Team-oriented, possesses a positive attitude, and works well with others;
- Flexible and willing to travel as required;
- Excellent interpersonal skills;
- Excellent verbal and writing communication skills in English and local languages;
- Good knowledge of Word, Outlook, Excel, and Internet browsers is required;
- Previous experience working with a GEF-supported project is considered an asset.

National Technical Coordinator

The National Technical Coordinator's key role is to provide technical support for all components of the project for 70% of the time. The balance 30% of the time will be spent on supporting the Project Director on project management related technical aspects. The specific tasks would be the following:

Technical Aspects (70% of time)

- Manage the overall coordination and guidance of the technical aspects of the project, in particular to provide technical oversight and guidance for the preparation of the ecosystem management framework and VCG plans; estsblishment of monitoring framework and plans and oversee the implementation of technical aspects related to wetland management, conservation and restoration practices, training of field staff, community co-management of wetland resources and establishment of community protocols.
- Overseeing, guiding and coordination of the technical inputs from the national consultants and consultancy firms, in particular technically guiding the biodiversity conservation and forest and wetland restoration activities, monitoring of key species status and indicators, condition of the wetland and the effective functioning of MOEFCC Monitoring cell.

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- Support the development, preparation and conduct of capacity building and training programs for all relevant district , upazila, union and community entities, and, ethnic minorities
- Provide technical input and support for conduct of technical consultations and workshops to develop guidelines, tool kits and manuals for facilitating of planning at wetland resources, rules and regulations for co-management, financial mechanism for conservation of biodiversity, etc.
- Development and organization of awareness and publicity programs and materials
- Support and guide the preparation of plans and protocols for inter-agency coordination during the preparation of VCG plans that integrated biodiversity
- Support the M&E Associate to monitor events as determined in the project monitoring plan, and updated plan as required.
- Train, guide and support the Community Development Associates in supporting the community planning, development and monitoring of community activities
- Manage and monitor the project risks – including social and environmental risks, impacts on indigenous communities - initially identified and submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the project risks log;
- Capture lessons learned during project implementation.
- Ensure that the indicators included in the project results framework is monitored annually in advance of the GEF PIR submission deadline so that progress can be reported in the GEF PIR.
- Assess major and minor amendments to the project within the parameters set by UNDP-GEF;
- Monitor implementation plans including the gender action plan, stakeholder engagement plan, and any environmental and social management plans;
- Monitor and track progress against the GEF Core indicators.
- Support the Mid-term and Terminal Evaluation process

Project Management Aspects (30%)

This will entail supporting the NPD on management of technical inputs of the project as described below:

- Provide support for completion of assessments required by UNDP, spot checks and audits on technical aspects
- Monitor technical progress for plan deviations and make course corrections when needed within project board-agreed tolerances to achieve results.
- Ensure that changes in project design, in particular related to technical aspects on wetland framework development and community development activities are controlled and problems addressed.
- Perform regular progress reporting to the project board as agreed with the board, including measures to address challenges and opportunities.
- Plan the technical activities of the project and monitor progress against the approved work plan.
- Prepare revisions to the multi-year work plan, as needed, as well as annual and quarterly plans if required.
- Prepare the inception report no later than one month after the inception workshop.

Qualifications

- Master's degree or higher in Biodiversity Management, or related fields;
- At least 10 years of Project technical experience, showing a progressive increase in scope and responsibilities;
- Demonstrated coordination and project leadership skills, and ability to multi-task;
- Demonstrated experience on policy and institutional matters, and technical knowledge on aspects relating to biodiversity conservation and wetland management;
- Familiarity with the goals and procedures of government institutions, including those of UNDP and GEF as it relates to the Project goals and objectives;

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- Availability for extensive domestic travel;
- Strong leadership and team-building skills;
- Self-motivated and ability to work under the pressure;
- Demonstrable ability to organize, facilitate, and mediate technical teams to achieve stated project objectives;
- Familiarity with logical frameworks and strategic planning;
- Strong computer skills;
- Flexible and willing to travel as required;
- Excellent communication and writing skills in English and local languages;

M&E Associate

This M&E associate will be directly responsible for timely and high quality monitoring of the project activities. The key responsibilities are the following:

- Organize and faciliate inception workshops and prepare and communicate key highlights to key decision makers
- Organize and faciliate the convening of preparatory meetings at the ecovillage levels, including meetingswith key regional partners and stakeholders
- Oversee and monitor the progress in achievement of RFA targets and ensure adaptive management to correct for any shortcomings
- Coordination the preparation of the ESMPs, IPPs, safeguard management planning and monitoring of social and environmental aspects
- Faciliate the operation of the GRM and implementation of gender action plan and stakeholder action plan
- Coordinate the timely conduct of planning and reporting processes by all responsible partners and lead in the preparation of draft overall work plans and reports in accordance to GEF/UNEP protocols

Qualifications:

- Master's degree related to natural resource management, public administration or another field with direct relevance to the project;
- At least 7 years of experience in managing community-based projects on natural resource management, biodiversity conservation, sustainable agriculture or integrated area development in Bangladesh;
- Close familiarity with the roles, activities, and priorities of the Government of Bangladesh in wetland or ECA management, biodiversity conservation, agriculture, sustainable wetland resource management;
- Basic technical understanding of wetland resources management and biodiversity conservation and sustainable agriculture and;
- Demonstrated ability to work effectively with a broad range of stakeholders;
- Demonstrated ability to work effectively under minimal supervision;
- Superior skills in organization and management, including experience with planning, tracking, evaluation, and supervision of consultants and/or employees;
- Strong skills in financial tracking and budget management;
- Preferably have close familiarity with the operations and rules of UNEP;
- Fluency in English (reading, writing, speaking) with added advantage of fluency in local languages

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Community Development Associates (2)

Under the direct supervision of the National Technical Coordinator, the Community Development Associates will undertake the following tasks:

- Responsible for organizing, consulting, and informing community leaders, IPs, and all rural inhabitants about project planned activities on a regular basis, as well as ensuring a warm working relationship is maintained throughout the project
- Coordination and planning with all the community beneficiaries in the planning, development and monitoring activities
- To secure agreement on project activities, coordinate community activities with significant community members
- Spearheads and actively participate in project and community planning initiatives.
- Liaison with target areas on planned activities on a regular basis
- Assist in coordination of workshops and trainings at the community level
- Assist the project's implementation on the ground with effective logistical support
- Facilitates and guarantees that community project activities with wetland residents are carried out
- Conduct site visits and monitoring trips to target sites to capture lessons learned.

Qualifications:

- At least the candidate attended high school and can read simple English and able to write
- He or she must frequently be regarded as an influencer as well as a doer who tries to improve people's lives by addressing problems and highlighting critical concerns in order to highlight the need for change. He or she should concentrate on bringing people together in their communities to work toward a common objective
- A community leader who is dependable, respectable, and trustworthy, has respect for all members of the community, regardless of gender, and can talk to and influence people
- Good inter-personal and teamwork skills, networking aptitude, ability to work in multicultural environment
- Must have held some leadership responsibilities in the community in past years
- Excellent communication skills in local languages

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A) Summary of Key Consultants and Contractual Services

Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
International Consultants		
Mid-Term evaluation Conduct the formal Mid-Term Evaluation (MTE) according to UNDP and GEF templates and requirements. The overall objective of the MTE is to review for categories of project progress – project design, progress towards the project'sobjectives and outcomes, adaptive management, and sustainability. The MTE will identify strengths and weaknesses in implementation, and identifyrisks and counter-measures. Specifically, the MTE IC assessment will be based on document review (i.e. PIF, UNDP Initiation Plan, Project Document, SESP, Project Inception Report, PPRs, MTE Tracking Tools, Project Appraisal Committee meeting minutes, financial and administration guidelines, project operational guidelines, Project Steering Committee minutes, etc.), as provided by the Project Team, followed by targeted interviews and site visits. An important aspect of the evaluation is to assess the likelihoodof the project achieving its objectives and delivering its intended outputs, and to providerecommendations and lessons to help the project design and modifications to increase thelikelihood of success, as appropriate. 137.	Generic key qualifications for the MTE IC include: • Master's degree or higher in biology, ecology, biodiversity conservation, forest management, integrated natural resources management, social sciences and sustainable development, , environmental management, or other field with close relevance to the assignment. • At least 10 years of demonstrated professional experience in technical areas relevant to the project. • Recent experience with result-based management evaluations and methodologies, specifically related to donor project evaluations. • Profound competency in working with international, national and site-level state agencies and other relevant stakeholders during evaluations. • Excellent English language skills;. • Excellent analytical, writing and communication skills, specifically in English. • Previous evaluation/review experience with the UN, UNDP, and/or GEF is an advantage.	20 days in end Year 3 $15,000 (plus travel costs separate)
Terminal Evaluation: Produce formal Terminal Evaluation according to UNDP and GEF templates and requirements. The objectives of the evaluation are to assess (i) the achievement of project results, against expectations set out in the Project Logical Framework/Results Framework; (ii) the key financial aspects of the project, including the extent of co-financing planned and realized; (iii) to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming. The evaluation must provide evidence-based information that is credible, reliable and useful. Following a participatory and consultative approach ensuring close	Generic key qualifications for the TE IC include: • Master's degree or higher in biology, ecology, biodiversity conservation, forest management, integrated natural resources management, social sciences and sustainable development, , environmental management, or other field with close relevance to the assignment. • At least 10 years of demonstrated professional experience in technical areas relevant to the project. • Recent experience with result-based management evaluations and methodologies, specifically related to donor project evaluations.	20 days in end Year 5 $15,000 (plus travel costs separate)

Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser and other key stakeholders, the evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment.	• Profound competency in working with international, national and site-level state agencies and other relevant stakeholders during evaluations. • Excellent English language skills; • Excellent analytical, writing and communication skills, specifically in English. • Previous evaluation/review experience with the UN, UNDP, and/or GEF is an advantage.	
National Consultants		
National Consultant -Ecosystem Management Output 1.1 • Review existing management and governance structures for TH • Assess ecosystem management actions and track record • Identify key gaps in achieving ecosystem based management outcomes in TH • Prepare updated time bound and SMART ecosystem-based management and monitoring framework for TH	• Master's degree related in Natural Resources management, environmental legislation, development studies or relevant course • At least 10 years' experience in the design, monitoring and evaluation of programs in natural resources management • Excellent analytical and report writing skills in English. 138.	40 days@$300/day = $12,000
National Consultant – Ecologist Output 1.1 • Access and compile available information on the biological, hydrological and socio-economic and institutional aspects related to TH • Identify gaps in this information • Based on gap analysis undertake rapid surveys and ground work to collect information on aspects related	• Master's degree related in Natural Resources management, environmental sciences, development studies or relevant course • At least 10 years' experience in the design, monitoring and evaluation of programs in natural resources management • Experience in previous work in TH would be an advantage • Excellent analytical and report writing skills in English. 139.	40 days at $250/day = $10,000

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Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
top biodiversity, socio-economic parameters that would be required for improving management of TH		
National Consultant – Land Use/Geospatial specialist (Output 1.1) • Using available previous data assess land use and land changes that have taken place in TH • Based on above mapping, identify key factors leading to these changes and trends • Prepare a standard set of maps that track changes over time	• Master's degree related in Natural Resources management, environmental sciences, Geography or relevant course • At least 10 years' experience in the geospatial mapping exercises • Experience in previous work in wetlands would be an advantage • Excellent analytical and report writing skills in English.	40 days at $250/day = $10,000
National Consultant – Wetland Institutional expert Output 1.2 • Review existing coordination modalities at national, district, upazila, union and community levels to assess effectiveness, track record, mandate and functionality of these institutional structures • Based on above, identify gaps and measures needed to revitalize and strengthening the existing ECA coordination arrangements at the different levels • identify mechanisms (coordination, capacity, institutional, policy and practices) needed to be developed or strengthened to enhance and strengthen the effective operationalization of the 2016 ECA Management Rules • Recommend and facilitate the development/strengthening of existing rules/guidelines for improving institutional functioning, strengthening training and skills development for effective coordination and management	• Master's degree related in Natural Resources management, environmental sciences, environmental law or relevant course • At least 10 years' experience in the design, monitoring and evaluation of governance structures for natural resources management • Experience in previous work in TH would be an advantage • Excellent analytical and report writing skills in English.	40 days @ $300/day = $12,000

Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
National Consultant – PPP Output 1.2 • Develop cost-benefit analysis on engaging private sector in sustainable management of river ECA/ wetland through pollution control and abatement. • Prepare guidance note on structuring of PPPs, with standard governance and management architecture; • Explore the provision of several potentially feasible models, as appropriate: financial sustainability and revenue model (including cash flow forecast, profit and loss forecast; primary revenue model; and beneficiary revenue model)	• Master's degree in business administration, economics, finance, Environmental Sciences, Natural resources or any other related field. • At least 10 years of experience working in the corporate and/or international development sectors, with particular focus on environmentally sustainable partnership approaches; • At least five years of experience in working as part of donor-funded projects; • Excellent facilitation and negotiating skills, with a strong track record of establishing partnerships between private and public-sector stakeholders; - • Working experience with UN agency is an added advantage, • Working experience with DoE is an added advantage, • Working experience in Tanguar Haor area is an added advantage. •	40 days at $250/day = $10,000
National Consultant – Environmental Financing (Output 1.3) • Make an assessment of the financing requirements for achievement of favorable ecological conditions in the Tanguar Hoar and assess funding requirements for the short term and what additional actions will be the next focus (in terms of the medium and long-term actions) to ensure that financial consideration is taken at the appropriate levels for all sectors which would be part of this process. • Based on the above undertake an assessment to identify potential best financial options from an available or potential suite of mechanisms that are possible within the country, and access their viability	• Master's degree related in Natural Resources management, environmental sciences, environmental economics or relevant course • At least 10 years' experience in the design, monitoring and evaluation of conservation financing options in Bangladesh • Experience in previous work in TH would be an advantage • Excellent analytical and report writing skills in English.	40 days @ $300/day = $12,000

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Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
• Based on above and after consultation with key government agencies, develop a financing plan for TH		
National Consultant – Conservation management (Output 2.2) • Facilitate consultation with ECA committees and local communities to assess their needs and aspiration from the TH, in particular in relation to wetland resources • Based on the above and guided by the finding related to the integrated ecological framework for the TH and make recommendations for management of the TH • Facilitate and guide the process of preparation of a project-specific investment plan for the TH building and being guided by the existing management plan for TH • Develop a monitoring framework to track implementation of the project specific investment plan for TH	• Master's degree related in Natural Resources management, environmental sciences, PA management or relevant course • At least 10 years' experience in conservation planning in Bangladesh • Experience in previous work in wetlands be an advantage • Excellent analytical and report writing skills in English.	80 days @$300/day = $24,000
National Consultant Ecosystem-based management, (Output 2.2, 2.3 and 2.4) • Develop ecosystem-based management framework; • Identify sector and/or local planning systems for addressing gender considerations in ecosystem-based management; • Assess institutional capacity gaps for implementation of the ecosystem and community-based management system and framework; and • Assess the institutional and technical capacity of the Department of Environment (DoE) and relevant local	• Master's degree in conservation science/ natural resource management/ wetland management/ ecology/ forestry/ environmental science/ Marine Sciences or relevant subjects; • Minimum 10 years of work experience in biodiversity conservation, ecosystem, community-based wetland management, livelihoods, and other relevant fields; • Demonstrated understanding of the political, legal, and institutional context for biodiversity conservation and wetland management in Bangladesh. • Working experience with UN agency is an added advantage, • Working experience with DoE is an added advantage, • Working experience in Tanguar Haor area is an added advantage.	120 days @ $300/day = $36,000 141.

Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
government authorities on the framework implementation, compliance monitor, and ecological status monitor; • Conduct 4 FGDs with VCG members.	140. =	
National Consultant _ Monitoring Framework (Output 2.5) • Identify current trends in livelihood activities, in and around TH • Assess existing mechanisms if any to evaluate cost-benefits of such livelihoods measures • Based on above, design a simple monitoring mechanism to access benefits derived	• Master's degree related in Natural Resources management, social sciences, environmental economics or relevant course • At least 10 years' experience in social development in Bangladesh • Experience in previous work in wetlands be an advantage • Excellent analytical and report writing skills in English. 142.	50 days @ $350/day = $14,000
National Consultant – KAP surveys (Output 3.1) • Develop a suitable methodology to access knowledge. Attitudes and perceptions of local people in TH • Based on above methods (and agreed with the PMU) undertake a rapid KAP survey in a sample of villages in TH to access their awareness of the value of TH, its threats and measures needed for its sustainability • Provide a report that provides baseline situation that could be monitored and accessed for change through the life of the project	• Master's degree related in Natural Resources management, social sciences, environmental economics or relevant course • At least 10 years' experience in social development in Bangladesh • Have experience in undertaking social surveys • Excellent analytical and report writing skills in English. 143.	20 days @$250/day = $5,000
National Consultant -Gender (Output 3.1) • Review the gender analysis and action plan developed for the project	• Master's degree related in Natural Resources management, social sciences, environmental economics or relevant course • At least 10 years' experience in social/gender development in Bangladesh • Have experience in undertaking gender related training • Excellent analytical and report writing skills in English.	40 days @$300./day = $12,000

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Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
• Based on this plan, develop a training program and curriculum for enhancing gender sensitization among the different ECA committees, staff and sector entities • Conduct training to enhance sensitization on gender aspects	144.	
National Consultant IP (Output 3.1) • Review the IP framework for the project • Based on this, have consultations with IPs and identify key actions needed to improve FPIC procedures, identify investments that are specific to IPDS and measures to mitigate any impacts on IPS • Based on this consultation develop an IP action plan for the project • Based on this plan, develop a training program and curriculum for enhancing IP sensitization among the different ECA committees, staff and sector entities	• Master's degree related in social sciences or relevant course • At least 10 years' experience in social development in Bangladesh • Have experience in IP related work an advantage • Excellent analytical and report writing skills in English. 145.	20 days at $250/day = $5,000
National Consultant -Environment Policy (Output 3.3) • Review current policies that are applicable to wetlands/PAs in Bangladesh, in particular those that are relevant to TH • Assess the extent to which these policies are understood and applied • Identify key gaps in the effective implementation of these policies • Based on this analysis make recommendations to improve the application of these policies	• Master's degree related in Natural Resources management, environmental law or relevant course • At least 10 years' experience in policy work related to natural resources in Bangladesh • Excellent analytical and report writing skills in English. 146.	32 days @$250/day = $8,000

Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
National consultant for MTR Output 3.4 • Conduct the midterm review including updating of GEF tracking tools • Recommend project design modifications, work program Year 3	• Master's degree related in Natural Resources management, development studies or relevant course • At least 10 years' experience in the design, monitoring and evaluation of programs in natural resources management • Excellent analytical and report writing skills in English.	$350 @25 days (plus travel) $10,500
National Consultant for TE Output 3.4 • Conduct the Project terminal review including accomplishment of GEF tracking tools • Review sustainability plans and advice modifications and post project impact surveys as needed Year 5	• Masters' degree related in Natural Resources management, development studies or relevant course • At least 10 years' experience in the design, monitoring and evaluation of programs in natural resources management • Excellent analytical and report writing skills in English.	$350 @25 days (plus travel) $10,500
Consultancy Services - Companies		
Consultancy Firm – Baseline assessment Output 1.1 • Access and compile available information on the biological, hydrological and socio-economic and institutional aspects related to TH • Identify gaps in this information • Based on gap analysis undertake surveys and ground work to collect information on aspects related top biodiversity, socio-economic parameters that would be required for improving management of TH • Based on above, identify environmental criteria to evaluate the ecological health of the wetland • In consultation with technical staff and other stakeholders identify realistic targets to be achieved on a time-bound scale. • Identify roles of key stakeholders to deliver on the different targets for the TH, including resource users and their collectives	• Firm with technical specialists in environmental conservation, community planning and management or related theme • Previous experience in wetland conservation work, and/or related work an advantage, or at least team members having such expertise and experience • Proven track record in similar exercises nationally • Team members with at least ten years experience in awareness program development and implementation	LS - $62,000

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Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
• Develop a monitoring framework to access and monitor progress towards achieving the targets • Identify specific measures needed to improve collaboration and coordination to achieve these targets 147.		
(i) Baseline surveys (3000 Beneficiaries baseline information collection and database development) (Output 1.1) • Develop a detailed baseline questionnaire including major of basic information, demographic, socio-economic, climate change vulnerability, land use, disaster etc. • Develop a baseline data collection plan; the baseline collection may be through the KOBO Tool box and or hard copy questionnaire based on the feasibility. • Feed all the collected data into the computer system MS excel or access. • Develop a data base with a rigorous dashboard.	• Firm with technical specialists in data collection and data base development. • Previous experience in baseline data collection, conducting survey is required. • Proven track record in similar exercises nationally. • Team members with at least seven years experience in baseline data collection and data base development.	LS $10,000
Consultancy services for participatory formation of 34 VCGs and 2 Upazila Conservation Group (UGC), and Strengthening of 40 existing VCGs. (34 new VCG formed and facilitated for regular meetings as per VCG guidelines), training and capacity development. (Output 1.2) • Formation of Village Conservation Groups • Formation of Upazila level Conservation Groups • Strengthening of the existing conservation groups. • Facilitation of the Conservation Group's meeting. • Capacity development of the group members	• Firm with technical specialists in conservation groups. • Previous experience in community mobilization, group's formation, conduction of meetings etc. • Proven track record in similar exercises nationally • Team members with at least 10 years experience in Community Conservation Group Formation, Conducting meeting, capacity building etc.	148. $190,000

Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
• Mobilization of the community conservation groups		
Consultancy services for providing branding of local products (Output 2.5) • Identify the local products for branding online and or offline with market linkage • Develop a healthy and hygienic and sustainable branding mechanism. • Develop a smooth market channel through online and or offline. • Maintain a continuous goods delivery system. •	• Firm with technical specialists in branding the local products. • Previous experience in branding the local products. • Proven track record in similar exercises nationally. • Team members with at least 5 years experience in similar activities.	$ 15000 (3 @ 5000 $)
Consultancy services for replicating successful livelihood interventions (Output 2.5) • Identify the successful and sustainable interventions in the project areas. • Develop a plan of best practices replication implementation. • Selection of site for expansion. • Selection of HHs for replication. • Distribution of inputs for the best practices. • Follow up with technical assistance.	• Firm with technical specialists in agriculture and horticulture, fisheries and livestock as well as women friendly different activities. • Previous experience in livelihood activities an advantage, or at least team members having such expertise and experience • Proven track record in similar exercises nationally • Team members with at least 5 years experience in livelihood interventions implementation in the Haor and or wetland areas.	$ 25000 (10 @ 2500 $)
Consultancy Firm – Information management system development (Output 2.1) - Develop a functional wetland resource management platform. - Setting up information collection standards. - Establish sectoral coordination mechanism to collect and digitally catalog existing information on biodiversity and natural resources management best practices.	• Firm with technical expertise in Environmental Information Management System (EIMS). • Previous experience in environmental impacts and improvements documentation. • Team members with at least 5 years' experience in similar activities.	$ 52,000
Consultancy Firm – Conservation/Restoration Zonation (Output 2.2)	• Firm with technical specialists in Forestry, Ecology, Conservation Science. • Proven track record in similar exercises nationally.	$ 12,000

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Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
- Identify specific locations within Tanguar Haor for conservation and restoration including rehabilitation of swamp forests, sustainable grazing, sustainable agriculture, livestock grazing, and ecotourism. - Spatial prioritization and zoning of suitable sites for conservation and restoration including rehabilitation of swamp forests, sustainable grazing, sustainable agriculture, livestock grazing, etc. 149.	• Team members with at least 5 years' experience in similar activities.	
Consultancy Firm – Environmental Pollution Assessment and Control (Output 2.2) - Pollution assessment of the Tanguar Haor ecosystem. - Identify pollution types and key sources. - Identify gaps in enforcement or legislation. - Provide recommendations on pollution mitigation measures.	• Firm with technical specialists in Environmental science/Chemistry. • Proven track record in similar exercises nationally. • Access to necessary equipment's to run the relevant tests. • Team members with at least 5 years' experience in similar activities	$ 12,000
Consultancy Firm – Reforestation and wetland restoration (Output 2.3) - Drone survey to identify suitable sites for conservation, plantation, restoration, etc. - Site selection for rehabilitation of swamp forests, beels, canals, river systems and reed banks. - Site selection for establishment of fish and bird sanctuaries. -	• Firm with technical specialization in Forestry, Wetland management and Conservation. • Proven track record in similar exercises nationally. • Team members with at least 5 years' experience in similar activities	$ 25, 000
Consultancy Firm – Ecotourism Promotion and Management (Output 2.3) - Promotion of regulated tourism. - Engage VCG members, men, women, young boys and girls for promoting ecotourism. - Awareness raising campaign, including 4 billboards, distribution of bin, leaflet, environment conservation message on boat and key points.	• Firm with technical specialists in branding, media, communication, and tourism. • Excellent promotional skills. • At least 5-year experience in ecotourism.	$ 24,000

Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
Consultancy Firm – Livelihood Feasibility Analysis (Output 2.4) - Livelihood mapping in selected villages in and around Tanguar Haor. - Conduct Assessment/study of IEE/ESIA and development management plan/ESMP and capacity building/awareness raising of stakeholders engagement, IPs and institutional strengthening for Tanguar Haor Habitat restoration. -	• Firm with technical specialists in sociology, agriculture, fisheries and livestock as well as women friendly different activities. • At least 5 year experience in livelihood related studies.	$ 24,000
Consultancy Firm – Hydrological survey (Output 2.4) - Site selection for rehabilitation of beels, canals, and river system. - Identification of water quality and flow. - Identification of sites that requires dredging, excavation, etc.	• Firm with technical specialists in Hydrology, Geology, Civil Engineering. • Proven track record in similar exercises nationally or internationally. • Access to necessary equipment's to run the relevant tests. • Team members with at least 5 years' experience in similar activities	$ 31,500
Consultancy Firm – Communications (Output 3.1) - Develop communication, awareness program - Based on above, identify key communication tools and programs that are necessary to enhance awareness	• Firm with technical specialists in communication and media = • Proven track record in similar exercises nationally. • 150.	$6,000
Consultancy Firm – KM (Output 3.3a) Overall responsible for the following • 'Documentation of lessons and best practices • Preparation of technical reports and publications on KM • Develop public engagement pages • Preparation or replication strategy and manual for ECAs	• Firm with technical specialists in biology, communication and KM tools • Proven track record in similar exercises nationally. • Team members with at least 5 years' experience in related fields	$78,000

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Consultancy Theme and Main Tasks	Qualifications	5-Year Level of Effort (in person days) or Lump Sum (LS)
Consultancy Firm – Safeguards and monitoring (Output 3.4) Overall responsibility for: • Review the ESMF framework for the project • Based on this, have consultations with local communities and identify key actions needed to enhancement management of environmental and social safeguards related to the project • Provide TA support for further development of monitoring framework for the project with methodology and targets • Support regular update of M&E plan, TTs, ToC etc.	• Firm with technical specialists in biology, social and institutional aspects • Good understanding and experience in undertaking safeguard related assignments • Proven track record in similar exercises nationally. • Team members with at least 5 years' experience in related fields of environment, social and monitoring aspects	$20,200

Annex 7: Stakeholder Engagement Plan

https://pims.undp.org/attachments/6563/217427/1752395/1796319/Annex%207%20Stakeholder%20Engagement%20Plan%20_SEP__10Feb.docx

Annex 8: Environmental Social Management Framework (ESMF) or other SES frameworks/plans, if required, draft ESMF and IPF available

- Annex (8a) BD ESMF-Environmental and Social Management Framework

https://pims.undp.org/attachments/6563/217427/1752369/1794993/Annex%20_8a_%20BD%20ESMF-Environmental%20and%20Social%20Management%20Framework%20TH-1-4.docx

Annex 9: Gender Analysis and Gender Action Plan

https://pims.undp.org/attachments/6563/217427/1752371/1794995/Annex%209_%20Gender%20Equality%20.docx

Annex 10: Procurement Plan – for first year of implementation especially GEF focal area specific annexes (e.g. METT, GHG calculations, target landscape profile, feasibility study, other technical reports)

https://pims.undp.org/attachments/6563/217427/1752746/1796320/Annex%2010%20Procurement%20plan_TH%20_DoE%20_1_-1.docx

Annex 11: GEF and/or LDCF/SCCF Core indicators

https://pims.undp.org/attachments/6563/217427/1752372/1794996/Annex%2011%20GEF%20Core%20Indicators-1.docx

Annex 12: GEF Taxonomy

https://pims.undp.org/attachments/6563/217427/1752373/1794997/Annex%2012%20Taxonomy%20Worksheet.docx

Annex 13: Partners Capacity Assessment Tool and HACT assessment (*Please refer to the HACT policies for guidance on applicability and financial thresholds –*

- HACT

https://pims.undp.org/attachments/6563/217427/1752385/1795013/DOE%20HACT%20Assessment%20Report%20November%207%2C%202018.pdf

Annex 14: UNDP Project Quality Assurance Report (to be completed in UNDP online corporate planning system)

Annex 15: Legal, Policy and institutional approaches to ecosystem-based management of Environment Critical Areas

https://pims.undp.org/attachments/6563/217427/1752374/1794998/Annex%2015-%20Legal%2C%20Policy%20and%20Institutional%20Approaches%20to%20Ecosystem-based%20management%20in%20ECAs-1.docx

Annex 16: Ecosystem-based management framework for ECAs

https://pims.undp.org/attachments/6563/217427/1752375/1794999/Annex%2016%20Ecosystem%20Based%20Framework.docx

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Annex 17: Strategies for forest rehabilitation

https://pims.undp.org/attachments/6563/217427/1752376/1795000/Annex%2017%20Strategies%20for%20forest%20rehabilitation%20in%20TH-2.docx

Annex 18: Livelihood Opportunities at Tanguar Hoar

https://pims.undp.org/attachments/6563/217427/1752377/1795001/Annex%2018-%20Proposed%20Livelihood%20Action%20Plan.docx

Annex 19: PPG consultation report partly done

https://pims.undp.org/attachments/6563/217427/1752378/1795002/Annex%2019_Meeting%20minutes_in%20the%20PPG%20Phase%202021.docx

Annex 20: METT Tracking Tool

https://pims.undp.org/attachments/6563/217427/1752379/1795003/Annex%2020%20GEF7-BD-TrackingTool-TH%20ECA-1.xlsx

Annex 21: Capacity Development Scorecard

https://pims.undp.org/attachments/6563/217427/1752380/1795004/Annex%2021%20capacity%20score%20card%20TH%20project-2.xlsx

Annex 22: Covid-19 and Health Hazard Assessment

https://pims.undp.org/attachments/6563/217427/1752381/1795005/Annex-%2022%20Covid%20-19%20Risk%20Analysis%20of%20TH-1.docx

Annex 23: Climate Change and Disaster Risk Management

https://pims.undp.org/attachments/6563/217427/1752382/1795006/Annex%2023%20Climate%20Change%20Risk%20analysis%20of%20TH%20Project-1.docx

Annex 24: Co-financing letters

Co-finance letter, Department of Environment, Ministry of Environment, Forest and Climate Change

https://pims.undp.org/attachments/6563/217427/1752791/1796323/Co-finance%20letter_DoETanguar%20Haor.pdf

Annex 25: UNDP checklist

https://pims.undp.org/attachments/6563/217427/1752391/1796574/PIMS%206563_GEF%20Checklist%20for%20CEO%20endorsement_final%20version_11%20Feb%202022.docx.pdf

Annex 26: Institutional Structures for ECAs

https://pims.undp.org/attachments/6563/217427/1752383/1795007/Annex%2026-%20Institutional%20structure%20existing%20in%20TH-2.docx

Annex 27: FAO-EXACT Tool

https://pims.undp.org/attachments/6563/217427/1752384/1795008/Annex%20%2027a_%20FAO%20EXACT.docx

Annex 28: UNDP's grant policies and Financial Regulations and Rules

https://pims.undp.org/attachments/6563/217427/1752658/1796321/Annex%2028_On%20granting%20provisions_10Sep2021.docx

Annex 29: Department of Environment (DOE) Grant policies for Environmentally Critical Areas (ECAs)

https://pims.undp.org/attachments/6563/217427/1752790/1796322/Annex%2029_DOE%20Guidelines%20for%20the%20Micro%20Capital%20Grant.doc