

GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title

Enhancing Coastal Adaptation and Resilience in Bangladesh (CARB)

Region

Asia

GEF Project ID

12014

Country(ies)

Bangladesh

Type of Project

FSP

GEF Agency(ies):

CI

GEF Agency ID

Executing Partner

Forest Department

Friendship

Department of Environment

Executing Partner Type

Government

CSO

Government

GEF Focal Area (s)

Climate Change

Submission Date

9/9/2025

Project Sector (CCM Only)

Climate Change Adaptation Sector

Taxonomy

Focal Areas, Climate Change, Climate Change Adaptation, Sea-level rise, Community-based adaptation, Ecosystem-based Adaptation, National Adaptation Plan, Small Island Developing States, National Adaptation Programme of Action, Least Developed Countries, Climate resilience, Livelihoods, Mainstreaming adaptation, Disaster risk management, Stakeholders, Indigenous Peoples, Local Communities, Civil Society, Non-Governmental Organization, Community Based Organization, Type of Engagement, Partnership, Consultation, Information Dissemination, Participation, Gender Equality, Gender results areas, Gender Mainstreaming, Capacity, Knowledge and Research, Capacity Development, Innovation, Learning, Theory of change, Adaptive management, Indicators to measure change, Knowledge Exchange, Training, Knowledge Generation, Workshop

Type of Trust Fund

LDCF

Project Duration (Months)

60

GEF Project Grant: (a)

8,840,826.00

GEF Project Non-Grant: (b)

0.00

Agency Fee(s) Grant: (c)

795,674.00

Agency Fee(s) Non-Grant (d)

0.00

Total GEF Financing: (a+b+c+d)

9,636,500.00

Total Co-financing

7,625,163.00

PPG Amount: (e)

PPG Agency Fee(s): (f)

150,000.00	13,500.00
PPG total amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
163,500.00	9,800,000.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? (iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”. (max. 250 words, approximately 1/2 page)

Bangladesh, a low-lying deltaic country, is highly vulnerable to climate change and natural disasters. Its coastal zone faces threats from increasingly frequent and severe cyclones, erosion, and climate-driven salinity intrusion. These factors are exacerbated by poverty, high population density, and gender inequalities. The Government of Bangladesh has prioritized nature-based solutions and places strong emphasis on the role of mangroves for climate adaptation in its National Adaptation Plan.

The project aims to **enhance coastal adaptation and resilience** in Bangladesh through community-led mangrove restoration and livelihood diversification for vulnerable coastal communities in the greater Sundarbans area in six sub-districts of the Khulna and Satkhira districts. This will be complemented by strengthening subnational institutional capacities and community-level access to finance and markets for effective, inclusive and mainstreamed ecosystem-based climate adaptation. These interventions support Bangladesh's national priorities under its National Adaptation Plan (NAP, 2023-2050) and more broadly contribute towards its Nationally Determined Contributions (NDC) and National Biodiversity Strategy and Action Plan (NBSAP). The project addresses multiple LDCF priority areas (Scaling Up Finance, Fostering Partnership for Inclusion, and Whole-of-Society Approach). The project will generate the following **Global Environmental Benefits**: 430 hectares of mangroves under restoration, 43,050 direct beneficiaries (50% female) benefiting from improved livelihoods and strengthened adaptive capacities, and sequestration of an estimated 178,962 metric tons CO₂e over a 20-year period. In addition, the project will strengthen local financial inclusion and market access for climate-resilient enterprises, benefiting at least 6,888 community members from improved financial literacy and access to formal financing for mangrove and ecosystem-based enterprises.

Indicative Project Overview

Project Objective

Enhance coastal climate adaptation and resilience in Bangladesh through community-led mangrove restoration and financial inclusion and market access for climate-resilient livelihoods.

Project Components

COMPONENT 1: Enhancement of Bangladesh's coastal climate resilience and climate adaptive livelihoods

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing (\$)	Co-financing (\$)
6,062,501.00	5,128,496.00

Outcome:

Outcome 1.1: Improved coastal climate resilience through community-led mangrove restoration and hybrid green-grey embankment stabilization

Outcome Indicator 1.1 (a): Number of hectares of mangroves under restoration

Target Outcome 1.1 (a): 430 hectares of mangroves under restoration

Outcome Indicator 1.1 (b): Amount of GHG Emissions Mitigated (in MT of CO₂e)

Target Outcome 1.1 (b): 178,962 Metric tons of CO₂e mitigated

Outcome Indicator 1.1 (c): Number of km of embankment stabilized to withstand the effects of climate change through hybrid green-grey stabilization

Target Indicator 1.1(c): 118 km of embankment segments stabilized through mangrove buffering

Outcome 1.2: Adoption of diversified and inclusive climate-resilient livelihood practices by vulnerable coastal households

Outcome Indicator 1.2 (a): Number of direct beneficiaries disaggregated by gender benefiting from improved livelihoods and strengthened adaptive capacities

Target Outcome 1.2 (a): 43,050 (Male: 21,525 and Female: 21,525) direct beneficiaries

Outcome Indicator 1.2 (b): Extent of land adoption under climate-resilient livelihood practices across number of hectares

Target Indicator 1.2 (b): 627 hectares under climate-resilient livelihood practices

Output:

Output 1.1.1: Local community trained in mangrove restoration through gender sensitive, participatory, field-based learning integrating indigenous knowledge with restoration principles

Output Indicator 1.1.1: Number of structured training sessions on mangrove restoration conducted

Target Indicator 1.1.1: 287 structured training sessions on mangrove restoration conducted (1 session for each community group)

Output 1.1.2: Site specific ecosystem- and hydrological-based mangrove restoration activities led by local communities implemented

Output Indicator 1.1.2: Number of sub-districts where ecosystem-and hydrological-based mangrove restoration activities are implemented

Target Indicator 1.1.2: Six sub-districts where restoration activities are implemented

Output 1.2.1: Green skills and sustainable livelihood practices demonstrated and adopted through a needs-based approach

Output Indicator 1.2.1(a): Number of sessions conducted to introduce and support the adoption of green skills and sustainable livelihood practices

Target Indicator 1.2.1(a): 861 sessions conducted (3 sessions for each community group)

Output Indicator 1.2.1(b): Number of in-kind grants allocated to communities for climate-adaptive livelihoods based on adoption readiness

Target Indicator 1.2.1(b): At least 8,610 in-kind grants allocated based on adoption readiness

COMPONENT 2: Strengthening subnational capacities and community-level access to finance and markets for effective and inclusive climate change adaptation in line with Bangladesh's National Adaptation Plan

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing (\$)	Co-financing (\$)
1,740,000.00	1,571,667.00

Outcome:

Outcome 2.1: Strengthened subnational institutional capacity for planning and mainstreaming ecosystem-based climate adaptation

Outcome Indicator 2.1: Number of subnational institutions with strengthened capacities **Target Indicator 2.1:** 30 subnational institutions (22 Union Parishads, 6 Upazila Parishads, 2 District Commissioner's Offices)

Outcome 2.2: Strengthened financial inclusion and market access for climate-resilient livelihood enterprises among vulnerable coastal communities

Outcome Indicator 2.2 (a): Number of community members with increased financial literacy and enhanced understanding of entrepreneurship and business planning

Target Outcome 2.2: At least 6,888 community group members with increased financial literacy and understanding (80% of total trained), out of which at least 50% are women and 30% are young people

Outcome Indicator 2.2 (b): Number of community members accessing formal financial mechanisms for mangrove and coastal ecosystem-based products/businesses

Target Outcome 2.2 (b): At least 6,888 community group members (80% of total trained) access formal financing mechanisms, out of which at least 50% are women and 30% are young people.

Output:

Output 2.1.1: Community vulnerability reduction measures designed and integrated into Union-level development plans informed by updated subnational risk and vulnerability assessments

Output Indicator 2.1.1(a): Number of Union-level risk and vulnerability assessments reviewed/updated

Target Indicator 2.1.1(a): 22 Union-level risk and vulnerability assessments reviewed/updated for each of the Union Parishads in the project areas

Output Indicator 2.1.1(b): Number of Union-level development plans integrating community vulnerability reduction measures

Target Indicator 2.1.1(b): 22 Union-level development plans integrating community vulnerability reduction measures

Output 2.2.1: Financial literacy and enterprise planning support delivered to eligible beneficiaries to enable business development and access to capital

Output Indicator 2.2.1: Number of financial literacy and enterprise planning sessions conducted

Target Output 2.2.1: 574 financial and enterprise sessions conducted (2 sessions per community group)

Output 2.2.2: Partnerships established with local financial institutions to facilitate access to climate-responsive credit and savings mechanisms

Output Indicator 2.2.2: Number of financial institution partnerships established

Target Indicator 2.2.2: 3 financial institution partnerships established

Output 2.2.3: Functional market linkages established across priority value chains for mangrove- and ecosystem-based products (fish/crab, non-timber products, poultry, agriculture) in coastal communities

Output Indicator 2.2.3: Number of formalized market agreements or partnerships established for coastal communities

Target Indicator 2.2.3: 24 formalized market agreements or partnerships

COMPONENT 3: Learning and knowledge management

Component Type

Trust Fund

Technical Assistance

LDCF

GEF Project Financing (\$)	Co-financing (\$)
360,000.00	325,000.00

Outcome:

Outcome 3.1 Gender-, youth, and Indigenous sensitive knowledge management and communication strategy for the project developed

Outcome Indicator 3.1: Number of gender, youth, and Indigenous sensitive knowledge management systems and communication strategy developed

Target Outcome 3.1: 1 gender, youth, and Indigenous sensitive Knowledge Management System developed and 1 communication strategy

Output:

Output 3.1.1: Knowledge Management products developed and disseminated, considering local contexts and restoration lessons from the project, promoting accessibility for women, Indigenous Peoples, and youth

Output Indicator 3.1.1: Number of knowledge management products developed and disseminated

Target Indicator 3.1.1: At least 5 knowledge briefs and 5 storytelling videos developed and disseminated by the end of the project

Output 3.1.2: Gender, youth, and Indigenous sensitive awareness raising sessions on climate change impacts, ecosystem restoration, mangrove stewardship, and climate adaptation designed and implemented

Output Indicator 3.1.2: Number of gender, youth, and Indigenous sensitive awareness raising sessions designed and implemented

Target Indicator 3.1.2: At least 300 awareness raising sessions

M&E

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing (\$)	Co-financing (\$)
257,499.00	225,000.00

Outcome:

Outcome 4.1. A functional M&E framework in place, integrating gender, Indigenous, and youth disaggregated monitoring

Outcome Indicator 4.1: Number of functional M&E systems

Target Indicator 4.1: 1 M&E system

Output:

Output 4.1.1. A M&E system developed and implemented to collect, analyze, and synthesize data and information, including gender, youth, and Indigenous disaggregated results

Output Indicator 4.1.1 (a): Number of quarterly and annual reports approved by CI-GEF, including gender, youth, and Indigenous disaggregated results

Target Indicator 4.1.1 (a): 5 Annual Project Implementation Reports (PIRs) and 20 Quarterly technical reports, with reports including gender, youth, and Indigenous specific results, approved by CI-GEF

Output Indicator 4.1.1 (b): Number of independent evaluations conducted in accordance with the GEF and CI-GEF Evaluation Policies, gender, youth, and Indigenous disaggregated results.

Target Indicator 4.1.1 (b): 2 - 1 Mid Term Review and 1 Terminal Evaluation

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
COMPONENT 1: Enhancement of Bangladesh's coastal climate resilience and climate adaptive livelihoods	6,062,501.00	5,128,496.00
COMPONENT 2: Strengthening subnational capacities and community-level access to finance and markets for effective and inclusive climate change adaptation in line with Bangladesh's National Adaptation Plan	1,740,000.00	1,571,667.00
COMPONENT 3: Learning and knowledge management	360,000.00	325,000.00
M&E	257,499.00	225,000.00
Subtotal	8,420,000.00	7,250,163.00
Project Management Cost	420,826.00	375,000.00
Total Project Cost (\$)	8,840,826.00	7,625,163.00

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as

population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Global environmental significance of the project

Bangladesh, a low-lying deltaic country, is highly vulnerable to climate change and natural disasters. Its coastal zone spans approximately 47,200 km² across 19 districts (Ahmad H, 2019) and is dominated by the Ganges-Brahmaputra-Meghna rivers which meet on the Bay of Bengal to form the world's largest contiguous mangrove forest – the Sundarbans. The Bangladeshi Sundarbans, covering 6,017 km² in the southwestern coastal region, supports between 3-4.5 million people who live in the villages nearby and depend on the mangrove forest's ecosystem services (World Bank 2014, GIZ 2023). Mangroves here provide a critical natural buffer that protects millions of people from the impacts of cyclones, storm surges, and coastal flooding. Their complex root networks stabilize coastlines, reduce erosion, and help regulate hydrological flows, directly enhancing the resilience of Bangladesh's vulnerable coastal communities. Bangladesh has been identified as one of the countries projected to benefit the most in terms of people protected by mangrove ecosystems due to the high density of its coastal populations (Menéndez et al., 2020) with estimates suggesting 1.1 million to 3.5 million people are currently being protected from coastal flooding during cyclones (Akber et al., 2018).

However, the Sundarbans and southwestern coastal region of Bangladesh face threats from extreme weather events such as increasingly severe cyclones and tropical storms, climate-driven soil salinity, sea-level rise, and erosion – all of which are intensifying ecosystem degradation and disrupting livelihoods. Between 2000 and 2019, Bangladesh experienced 185 extreme weather events, making it the seventh most vulnerable country to climate change (Huq et al., 2024). Evidence from Landsat-based assessments of the Bangladesh Sundarbans shows that major cyclonic events, including those in 1991, 2007 (Sidr), and 2009 (Aila), have contributed to erosion of forest margins and structural degradation, particularly along exposed riverbanks and the southern coastal edge (Aziz & Paul, 2015). At the same time, reduced upstream freshwater flows and increased saline water intrusion have shifted significant portions of the forest into more saline conditions, affecting species composition and reducing the survival of less salt-tolerant mangrove species. These interacting stressors, cyclonic disturbance, saline intrusion, and high monsoon discharge, are accelerating forest degradation and weakening the ecological stability of this fragile deltaic system, thereby increasing the vulnerability of adjacent coastal communities that depend on its protective and livelihood functions.

In addition, sea level rise has increased land affected by saline soil by 27% since the 1970s (Huq et al., 2024), with consequences for crops, livelihoods, and health as further elaborated below. Research from the Bangladesh University of Engineering and Technology (BUET) shows that the average sea level rise in Bangladesh from 1993 to 2019 was 5.8mm, much faster than the global average of 3.42 mm from 1993 to 2020 (IPCC). These threats are projected to intensify under future climate scenarios, thereby increasing exposure and sensitivity of both ecosystems and local communities. Under the highest emissions scenario (RCP8.5 or SSP5-8.5), sea level rise in Bangladesh is projected to potentially inundate between 12%-18% of the coastal zone this century (Ministry of Environment, Forest and Climate Change, 2022). With a mean elevation of less than 1 meter above sea level, the Sundarbans is particularly vulnerable to sea level rise. Short- to medium-term projections (2030–2050) indicate that sea levels along the Bangladesh coast are expected to rise by approximately 0.20–0.32 m relative to 1995–2014 levels, depending on the emissions pathway. Under the low-emission scenario SSP1-2.6, projected rise by 2050 is about 0.20–0.28 m, while under the medium stabilization pathway SSP2-4.5, projections increase to 0.24–0.32 m (Huq et al., 2024). Even under these mid-century scenarios, tidal flooding, salinity intrusion, shoreline erosion, and sediment instability are expected to intensify, threatening both ecosystem integrity and human settlements (Huq et al., 2024). Under a very high-emission scenario, extreme sea level rise could flood 918 km² (23%) of the Sundarbans by 2100 while under a medium-emission scenario, around 40 km² (1%) could still be flooded (Rashid et al., 2025).

The loss of the Sundarbans would not only impact local livelihoods who depend on the ecosystem's resources and biodiversity but also reduce its vital role in shielding Bangladesh from cyclones (Sarker et al. 2020). The projected sea level rise is estimated to displace 0.9 million people in southern Bangladesh by 2050 (Huq et al., 2024). In addition, sea level rise is expected to pose a risk to food security as agricultural lands are projected to be submerged and salinity intrusion is expected to disrupt fisheries (Huq et al., 2024), with findings showing that sea level rise would be responsible for 5.8%-9.1% decline of rice production in the country (Ministry of Environment, Forest and Climate Change, 2022).

The project aims to enhance coastal resilience and climate adaptation in Bangladesh by restoring blue carbon ecosystems — particularly mangroves in the Assashuni and Shyamnagar sub-districts of Satkhira and Paikgacha, Koyra, Dacope, and Batiaghata sub-districts of Khulna in the greater Sundarbans area — through community-based actions and strengthened capacities at subnational and community-level. The project is aligned with Bangladesh's National Adaptation Plan (NAP 2023–2050), which prioritizes ecosystem-based adaptation (EbA), coastal zone management, and nature-based solutions to enhance resilience against climate variability and disaster risk. The NAP's goals include reducing exposure to climate-induced hazards and supporting ecosystem conservation and restoration as core adaptation strategies, particularly for coastal and mangrove ecosystems that

provide critical protection against storm surges and sea-level rise. Restoring mangroves and promoting community stewardship, the project contributes directly to these strategic priorities, improving capacity at community and subnational scales while reducing vulnerability to climate hazards. The initiative also supports implementation of Bangladesh's updated Nationally Determined Contribution (NDC), which identifies ecosystem-based adaptation actions, including expansion of coastal greenbelts and restoration of mangroves, wetlands, and other natural habitats, as key commitments for addressing climate impacts and strengthening resilience. The project's focus on mangrove restoration, ecosystem conservation, and community livelihoods thus contributes to delivering on adaptation priorities articulated in the NDC, while reinforcing climate resilience through nature-based measures.

In the context of the National Biodiversity Strategy and Action Plan (NBSAP), Bangladesh has established national targets and priority actions for ecosystem management, conservation, and restoration, recognizing the intrinsic value of biodiversity for livelihoods and sustainable development. The NBSAP framework (aligned with CBD/Aichi targets) which spans multiple ecosystems, highlights the need for restoration of degraded habitats, sustainable use of biodiversity, and enhanced management of coastal and wetland ecosystems — all of which are directly advanced through mangrove rehabilitation activities. By restoring mangroves in areas where climate projections show increasing cyclone intensity and salinity intrusion, the project aligns with the adaptation rationale of addressing climate impacts and related problems, targeting vulnerable populations, and enhancing system resilience under future conditions.

The proposed project area is home to a population that relies heavily on the resources of the Sundarbans mangrove forest. The local economy is primarily based on farming, fishing, and shrimp cultivation, with many people also engaged in small-scale industries such as honey collection and eco-tourism (Aziz & Paul, 2015). A recent livelihoods study showed that income-generating activities for people living near the Bangladesh Sundarbans include wood collection, saline water fishing, shrimp fry fishing, crab and Nypa palm collection, hunting, and medicinal plant and fruit collection (Mallick et al., 2021). Annual monetary benefits have been estimated at US\$ 976 per ha from capture fishery, US\$ per ha from fuel energy, US\$ 53 per ha from honey, and US\$ 26 per ha from fodder (Rahman et al., 2018). On-the-ground evidence from the Executing Agency's (Friendship) mangrove projects shows that, once the saplings mature, the trees attract shrimp, fish, bees, and crabs, which allow local communities to access food and secure multiple sources of income. Given that climate stressors, particularly salinity intrusion, waterlogging, cyclones, and tidal surges, disproportionately affect these livelihood systems, the project's interventions directly reduce vulnerability by diversifying livelihoods and stabilizing the ecological base on which these local communities depend.

The Sundarbans also host exceptionally rich biodiversity, containing approximately 50% of the world's mangrove plant species (Aziz and Paul, 2015) and numerous species of wildlife, birds, and fish. It is the only mangrove habitat in the world inhabited by endangered species such as the Royal Bengal Tiger, Ganges and Irrawaddy dolphins, estuarine Crocodiles, and the endemic River Terrapin (IUCN, 2015). Climate-induced habitat shifts, saline intrusion, and extreme weather events threaten this biodiversity, making nature-based adaptation essential to sustaining these globally significant species under changing climatic conditions.

Implementing and scaling up nature-based solutions centered on the restoration of mangroves in the greater Sundarbans area and strengthening adaptive capacities at subnational and community-level, thus delivers multiple benefits: it strengthens Bangladesh's defenses against escalating climate risks, promotes sustainable adaptive livelihoods, while also providing co-benefits of global greenhouse gas reduction and biodiversity conservation.

Key System Drivers

In both India and Bangladesh, a significant decline in the original mangrove cover has been observed historically, with only around three-fifths of the 16,700 km² that existed 200 years ago remaining today (Padhy et al., 2021). Some of these areas were naturally degraded due to sea-level rise, extreme events such as cyclones and flooding, while the rest were impacted by human activities, including conversion to agriculture, aquaculture, and human settlement (Padhy et al., 2021). This long-term continuous degradation reflects both climate-driven stressors and non-climatic pressures; however, climate-induced hazards, particularly accelerated sea-level rise and increasing cyclone intensity, have amplified ecosystem sensitivity, underscoring the need for adaptation measures that address these climate-specific risks.

In recent decades, mangrove ecosystems in Bangladesh have undergone significant degradation. An analysis of satellite and geospatial data from 2000 to 2016 identifies five primary drivers of mangrove loss: erosion, extreme climatic events, commodity expansion, non-productive conversion, and settlement expansion (Goldberg et al., 2020). These drivers represent a combination of physical, climatic, and socio-economic pressures. Importantly, several of these drivers, especially erosion, extreme weather events, and hydrological shifts, are projected to intensify under climate change scenarios as described above, thereby increasing exposure and vulnerability of both ecosystems and dependent coastal communities. Many of these pressures are intensified by climate change, including sea-level rise and increasingly severe cyclones and further compounded by inadequate land-use planning and institutional

governance. A more recent study identifies the major direct drivers of forest cover change as illegal fuelwood collection and timber harvesting, encroachment for agriculture and settlement, and incomplete forest management capacity (Thompson et al 2017). In addition, in the coastal zone, direct drivers of deforestation and forest degradation include shrimp farming, agriculture, infrastructure development, and natural disturbances (REDD+ Strategy 2016-2030). (See **Annex H** for more details).

As Bangladesh is one of the most cyclone-prone countries in the world, in the coastal region these cause damage to the already fragile earthen embankments and cause widespread mangrove die-back through uprooting, prolonged flooding, and saline water intrusion. Saline water intrusion can have disastrous consequences for agriculture, livelihoods, and health. For example, Cyclone Aila in 2009 affected the socio-economic conditions of Bangladesh's coastal communities by making huge tracts of land unproductive for a long period of time (Subhani and Ahmad, 2019).

The proposed project will address these underlying drivers of degradation by scaling up proven nature-based solutions in priority coastal landscapes. Key interventions include:

Community-based mangrove restoration and afforestation over approximately 430 hectares, using climate-resilient and site-appropriate species; diversification and strengthening of sustainable livelihoods for communities dependent on mangrove ecosystems to reduce pressure on natural resources; and strengthening of subnational and community-level capacities through improved institutional frameworks and access to finance for effective and inclusive climate change adaptation in the coastal region.

Social-ecological systems description

High poverty rates, high population density, limited employment and education opportunities, and gender inequalities are factors that exacerbate the environmental challenges faced by the millions of people living in the villages near the Sundarbans. Approximately half of the population living in the region is estimated to live below the poverty line and most of these households rely on natural resources for their livelihoods.

The proposed project area is home to a diverse population, including Bengali communities and indigenous groups like the Munda, Santal, and Kharia, who face particular challenges such as limited access to land rights, healthcare, and education (Islam, 2005). Indigenous groups rely more heavily on mangrove resources for their livelihoods but have fewer opportunities for economic development compared to the broader population. Gender inequality is prevalent, with women often engaged in agriculture and family care, but they have limited access to financial resources and decision-making power.

Bangladesh ranks 131 on the Gender Inequality Index (GII), a measure of gender inequality along the dimensions of reproductive health, empowerment, and the labor market (UNDP, 2021). Gender disparities in income, education, and decision-making exacerbate women's exposure to environmental shocks. Despite their important role in managing forest resources, women are often excluded from decision-making processes due to societal, cultural, and patriarchal norms.

Salinity increases, often linked to reduced freshwater and sea level rise, means access to clean water is increasingly difficult for the communities living near the Sundarbans. High levels of salinity cause pre-eclampsia, gestational hypertension and can lead to miscarriages. This is a growing concern for women living in the coastal areas. Young people are also disproportionately affected as climate-induced disasters may limit their prospects and hamper social and mental development (Bangladesh NAP). People with disabilities in these communities also face social stigma and limited access to basic services (IUCN, 2015). Altogether, these dynamics present that Bangladesh's coastal belt, including the Sundarbans, functions as a single, interdependent ecosystem where environmental degradation, livelihood insecurity, and social inequality reinforce one another. Mangrove plantation along the coastal riverbank will shield these communities from tidal surges and cyclones, while diversifying livelihood options can reduce the stress on this ecosystem, benefiting the entire region.

Baseline understanding and projects

The project will be fully aligned with Bangladesh's National Adaption Plan (NAP 2023–2050) as well as its updated NDC and NBSAP, and commitments under the Paris Agreement and the Convention on Biological Diversity. The project is also directly addressing SDGs 13, 14, and 15 and contributing to SDGs 1, 2 and 5. This alignment ensures that the project responds to nationally identified climate risks—particularly coastal vulnerability, salinity intrusion, and cyclone impacts.

Within the NAP, the Government of Bangladesh has identified 21 interventions related to Nature-based Solutions, including three high-priority interventions related to mangroves, namely:

Extension and expansion of the coastal greenbelt for protecting coastal habitats, including the Sundarbans, mangroves, saltmarshes. This includes mangrove plantation at possible foreshore mudflats areas along the tidal rivers in the south-western coastal area and Sundarbans and other coastal areas.

Community-based afforestation and reforestation for biodiversity conservation, enhancement of ecosystem resilience, and increased carbon sequestration (nationwide). This includes suitable mangrove plantations at possible spaces in homesteads and pond banks in polder areas.

Expansion of ecosystem-based adaptation for the restoration of mangroves and other ecosystems to tackle the adverse impacts of climate change (nationwide). This includes mangrove plantation in the coastal belt.

In addition, the NAP places strong emphasis on the need for transformative capacity-building and innovation for climate change adaptation (Goal 6). Key NAP interventions include awareness-raising, training on skills for enhanced adaptive capacities and improved diversified livelihoods at the community level and capacity development for the implementation of nature-based solutions and locally led adaptation.

The Government of Bangladesh has undertaken several initiatives to develop a comprehensive inventory of mangroves and to identify potential areas for restoration. The Bangladesh Forest Department under the Ministry of Environment, Forest and Climate Change has established the Bangladesh Forest Inventory that includes mangroves ecosystems, particularly in the Sundarbans and coastal afforestation zones.

In addition to these national level initiatives, several site-specific initiatives such as UNDP's Integrating Community-Based Adaptation into Afforestation and Reforestation program, IUCN's Mangroves for the Future (MFF) program, World Bank's Coastal Embankment Improvement Project and other initiatives have collectively contributed to building a national-level understanding of mangroves distribution, degradation, and restoration/afforestation opportunities (as nature-based solutions for climate resilience).

This project will explore synergies with ongoing GEF and non-GEF projects, particularly ensuring coordination with other related coastal management interventions at national level. (see table below and further details under section B). By ensuring complementary action rather than duplication, the project integrates into a wider adaptation landscape, strengthening systemic resilience and climate informed programming.

This project will build on the existing government and site-specific initiatives listed above to further enhance Bangladesh's coastal resilience through Friendship's integrated model of mangrove restoration and afforestation and community-level empowerment.

GEF / non-GEF	Baseline Project (include name of donor if applicable)	Period of Performance/ Years active
GEF	1. Community Based Adaptation to Climate Change through Coastal Afforestation (UNDP)	2008-2016
	2. Integrating Community-based Adaptation into Afforestation and Reforestation Programmes in Bangladesh (UNDP)	
	3. Integrating Climate Change Adaptation into Sustainable Development Pathways of Bangladesh (UNDP)	2014-2022
	4. Building climate resilient livelihoods in vulnerable landscapes in Bangladesh (FAO)	2022-2026
		2021-2026
Non-GEF	1. Mangrove Plantation for Environmental Sustainability in Bangladesh (executing: Friendship / donor: Government of Luxembourg)	2018-2023
	2. Enhancing adaptive capacities of coastal communities, especially women, to cope with climate change induced salinity (executing: UNDP/ donor: GCF)	

[illegible]

Baseline values

111 39 11

0

7.000dfr.000:

Point, the Forest Department, the Environment Department and sub-district agencies to seek their inputs on the components and develop interventions aligned with the government's priorities.

Stakeholders	Role and Potential Involvement in Project							
Ministry of Environment, Forest and Climate Change	Consultations were held at different levels of the Ministry, including with the Advisor, the Secretary, and the Additional Secretary. The Ministry will provide overall policy guidance, regulatory oversight, and ensure that the project remains aligned with Bangladesh's national climate strategies and international commitments under the UNFCCC and related frameworks. It will also facilitate coordination with other ministries and agencies, support integration of project outcomes into national planning processes, and endorse achievements and outcomes of the project.							
Bangladesh Forest Department	The Bangladesh Forest Department contributed directly to the preparation of this PIF through multiple stakeholder assessments and technical consultations. A major portion of the PIF was developed with direct input from the Department, ensuring that the design is aligned with national forest management priorities, technical standards, and ongoing initiatives. Moving forward, the Department will serve as a key technical partner, providing technical expertise on mangrove afforestation, restoration, and sustainable management. It will also support the monitoring of forest growth, biodiversity, and carbon sequestration.							
Union Parishad (local level administrative bodies)	Consultations were conducted with five Union Parishad members from the target locations. The chairmen and members highlighted embankment protection, biodiversity conservation, and livelihood opportunities (including alternative livelihoods) as key challenges in their constituencies, and these priorities have been duly incorporated into the design of the PIF. The Union Parishads have assured their full cooperation and necessary support for the implementation of the envisaged project, particularly in mobilizing communities and facilitating coordination at the local level.							
Community members	SI	Village	Union	Upazilla/ sub-district	District	Participants		
						Female	Male	Total
	1	Choukuni	Moheswaripur	Koyra	Khulna	16	11	27
	2	Fokirabad	Goraikhali	Paikgacha	Khulna	12	10	22
	3	Chakla	Protapnagar	Assassuni	Satkhira	12	11	23
	4	Chunkuri	Munshigonj	Shyamnagar	Satkhira	14	15	29
	5	Kalinchi	Ramjannagar	Shyamnagar	Satkhira	11	8	19
	6	South Jhapa	Padmapukur	Shyamnagar	Satkhira	10	9	19
					Total	75	64	139
					Female %	54%		
Above is the breakdown of focus group discussions (FGDs) conducted in the levels of targeted communities. In total, 139 potential community members were consulted in the form of FGD, out of which 54% were female. The consultations also included participation from Indigenous Peoples. Specifically, members of the Munda (ethnic) communities living in and around the project areas of Khulna and Satkhira participated in the focus group discussions. For example, on 31 July 2025, consultations took place at Choukuni Village, Maheswaripur Union, Koyra Upazila, Khulna District, where 14 Munda community members (7 male and 7 female) participated out of a total of 27 participants from both Indigenous and Bengali communities, and at Kalinchi Village, Ramjannagar Union, Shyamnagar Upazila, Satkhira District, where 19 Munda community members (8 male and 11 female) participated. The community members are the primary beneficiaries of the project. They will actively participate in mangrove afforestation, soil and wetland restoration, biodiversity conservation, and the sustainable use of natural resources. They will contribute local knowledge on climate impacts and adaptation practices and will directly benefit from								

	alternative income-generating activities such as fisheries, tailoring, poultry rearing, handicrafts, and small businesses. The poor and extreme poor households emphasized their high dependency on natural resources, livelihood insecurity, and out-migration, and the project will address these issues through targeted livelihood diversification and improved access to markets.
Women participants	As mentioned above, out of the total FGD participants, more than 54% were female. The women highlighted their particular vulnerabilities, including the loss of access to fuel and forest products, the increased workload resulting from environmental degradation, reduced food and nutrition security, and limited livelihood opportunities. They will play an active role in afforestation and conservation activities, participate in alternative livelihood schemes such as tailoring, poultry, and handicrafts, and take part in nutrition-sensitive interventions and community committees. The project design will integrate women's priorities by providing gender-responsive livelihood support, promoting their leadership roles in co-management structures, and ensuring that gender outcomes are tracked within the project results framework.
Community leaders and local groups	In each FGD, there was participation of community leaders. The community leaders and local groups will facilitate collective decision-making, mobilization, and conflict resolution. They are expected to play leading roles in the co-management of afforested and restored areas, oversee the sustainable use of forests and wetlands, and enforce seasonal bans on resource extraction. They will also support community-based monitoring and awareness raising. Their involvement will strengthen local governance capacity and ensure that the project remains aligned with national natural resource management policies.

B. PROJECT DESCRIPTION

Project description

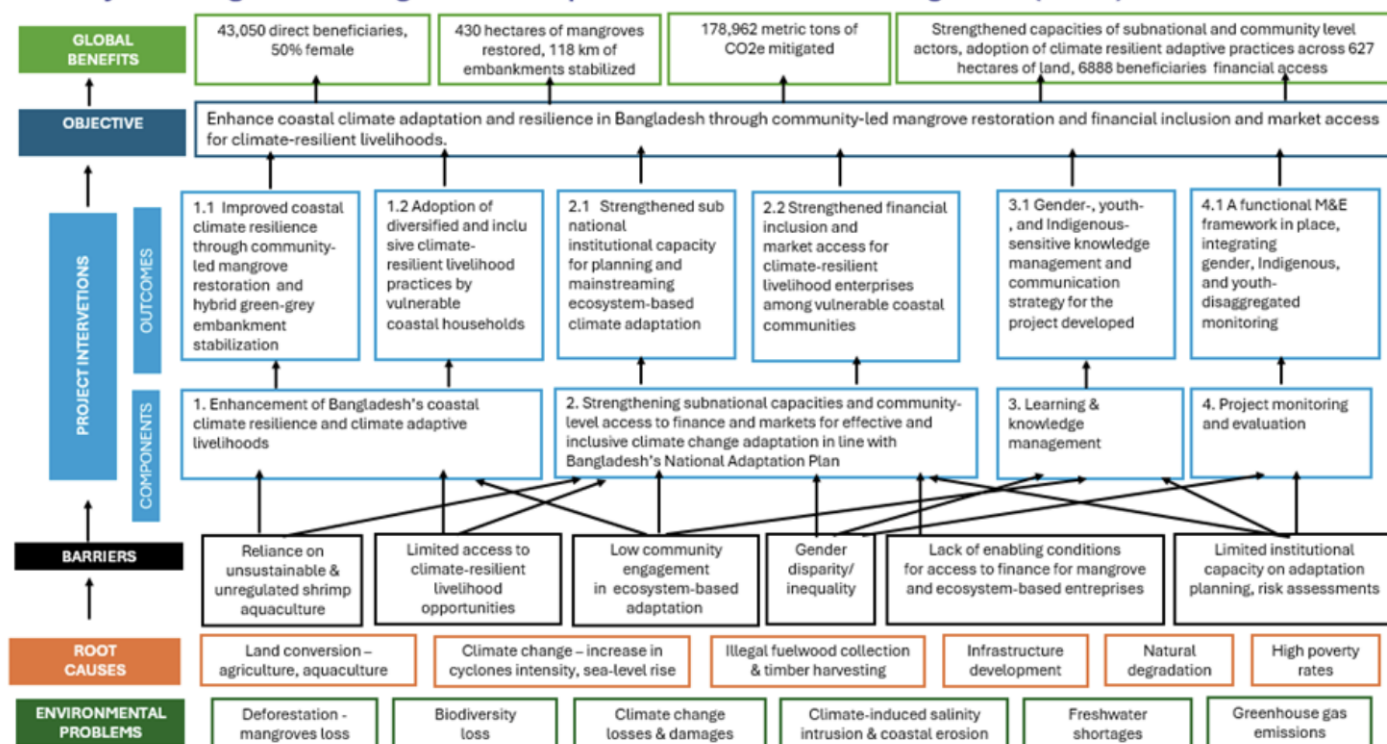
This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

Project Description

IF community-based mangrove restoration and afforestation is implemented, capacity of subnational actors is strengthened, and local community access to finance and market linkages for coastal ecosystem-based businesses is improved, **THEN** coastal ecosystems will be restored and strengthened and adaptation actions will become more effective, inclusive, and scalable, enabling communities to sustain climate-resilient livelihoods.

Theory of Change

Theory of Change : Enhancing Coastal Adaptation and Resilience in Bangladesh (CARB)



Assumptions of Theory of Change

There is sufficient political stability in Bangladesh to progress climate adaptation action

There is political goodwill to support collaboration and coordination across different ministries and at local and national levels

No major hazards, epidemics and pandemics to impede implementation of the project

Stakeholders support and actively participate in the project

The government remains fully committed to the project objective of improving coastal resilience and climate adaptation through mangrove conservation

There is inclusion of vulnerable and marginalized groups in the design and implementation of the project

Effective communication of project objectives, outcomes and outputs to all the relevant stakeholders

Strong buy-in from local communities and local government bodies, alignment with national government and relevant stakeholders, and innovations ensure the project's long-term sustainability and ability to adapt to the changing climate

Impact drivers of transformative change

Increased adoption of ecologically and hydrologically based restoration and afforestation approaches by coastal communities

Improved resilience of coastal communities and ecosystems to climate change

Strengthened and diversified livelihoods and sources of income for vulnerable coastal communities

Increased capacity of subnational government stakeholders to adopt and mainstream climate adaptive frameworks

Improved coordination and information sharing and learning

Effective gender-sensitive monitoring and evaluation systems

Transformative change will be achieved through two key pathways: (i) nature-based coastal resilience and climate adaptive livelihoods (ii) capacity, planning, and access to finance and markets for effective and inclusive climate adaptation. Potential lead indicators for transformative scaling linked to these pathways include:

Number of people benefiting from coastal adaptation [*increasing*]: The proposed project will support community-led nature-based adaptation actions and community-based coastal livelihoods which will unlock the pathway for improving resilience of coastal communities at scale.

Knowledge exchange and collaboration across local actors [*increasing*]: The proposed project will strengthen coordination and improve information sharing and learning at subnational levels by generating and disseminating knowledge products integrating gender, equality and inclusion aspects, and facilitating national and subnational levels capacity building workshops.

Theory of change risks

The following key risks to this theory of change have been identified:

Political instability in Bangladesh leading to delays in coordination with national and subnational government bodies

Cross-sectoral conflicts related to allocation of coastal lands for restoration/afforestation undermine effective coordination and participation

Government counterpart financing (co-financing) could change due to shifting and competing priorities

Ineffective communication of project objectives, outcomes, outputs and targets to key project stakeholders

Adverse weather effects or extreme weather events may impede the implementation of the proposed project

Project Components

COMPONENT 1: Enhancement of Bangladesh's coastal climate resilience and climate adaptive livelihoods

Outcome 1.1: Improved coastal climate resilience through community-led mangrove restoration and hybrid green-grey embankment stabilization. Improving coastal resilience in Bangladesh is crucial as erosion, climate-induced disasters, and salinity intrusion are threatening coastal communities and ecosystems. The project will carry out community-based mangrove restoration and afforestation in tidal mudflat and char land areas within the intertidal zone along the southern coastal riverbanks of Bangladesh, particularly in the Assashuni and Shyamnagar sub-districts of Satkhira and Paikgacha, Koyra, Dacope, and Batiaghata sub-districts of Khulna. The proposed project will support community-led mangrove restoration and afforestation (seeds collection, nurseries creation, land preparation, saplings plantation, etc.) and trees protection (fencing, community caretakers for maintenance and management) for coastal adaptation. Restoration will be guided by ecosystem- and hydrological-based principles to ensure site-specific alignment with tidal dynamics and sediment flows. The restored 430 hectares of mangrove belts will function as natural buffers that will reduce wave energy, stabilize sediments, and protect adjacent earthen

embankments, thereby contributing to the stabilization of approximately 118 km of vulnerable embankment segments under a hybrid green-grey approach. The capacities of communities to use ecosystem- and hydrological-based mangrove restoration activities will also be increased through participatory, field-based learning (regarding mangrove seeds, nurseries and plantation) integrated into restoration implementation. This will build upon indigenous and locally rooted knowledge of mangrove ecology and tidal dynamics to ensure that the restoration and afforestation approaches can be utilized and implemented effectively, thus creating ownership and generating livelihoods (e.g. via setting up nurseries to ensure supply of mangrove seedlings).

Outcome Indicator 1.1 (a): Number of hectares of mangroves under restoration

Target Outcome 1.1 (b): 430 hectares of mangroves under restoration

Outcome Indicator 1.1 (b): Amount of GHG Emissions Mitigated (in metric tons of CO₂e)

Target Outcome 1.1 (b): 178,962 Metric tons of CO₂e mitigated

Outcome Indicator 1.1 (c): Number of km of embankment stabilized to withstand the effects of climate change through hybrid green-grey stabilization

Target Indicator 1.1(c): 118 km of embankment segments stabilized through mangrove buffering

Output 1.1.1: Local community trained in mangrove restoration through gender sensitive, participatory, field-based learning integrating indigenous knowledge with restoration principles. Community groups will be formed to undertake the mangrove restoration with each group consisting of 30 people. The selection of group members will take into account gender balance, people living in adjacent areas of the plantation, different occupations, and special focus will be given to people in extreme poverty. For 430 hectares, 287 community groups of 30 participants each are expected to be formed. Each group will participate in one structured learning cycle embedded within field implementation, covering ecological site assessment, hydrological alignment, seed collection, nursery preparation and management, transplantation techniques, and long-term maintenance of mangrove plantation (287 total sessions, 1 session for each group). Refresher engagement will be conducted as needed during implementation to reinforce adaptive management practices.

Output Indicator 1.1.1: Number of structured training sessions on mangrove restoration conducted

Target Indicator 1.1.1: 287 structured training sessions on mangrove restoration conducted (1 session for each community group)

Output 1.1.2: Site specific ecosystem- and hydrological-based mangrove restoration activities led by local communities implemented: A total of 430 hectares of mangroves restoration and afforestation will be undertaken in the Assashuni and Shyamnagar sub-districts of Satkhira and Paikgacha, Koyra, Dacope, and Batiaghata sub-districts of Khulna, contributing to coastal resilience and embankment stabilization through mangrove buffering. Each community group (of 30 members each) will take care of a portion of the mangrove plantation and will be responsible on average for 1.5 hectares. The allocation of hectares per group may differ as it will depend on the location, accessibility, density of the population in nearby villages, etc. For 430 hectares, 287 community groups of 30 participants each are expected to be formed. The mangrove restoration and afforestation design will be finalized during full proposal development through hydrological assessment and inclusive stakeholder consultation to ensure ecological suitability and social acceptance.

Output Indicator 1.1.2: Number of sub-districts where ecosystem- and hydrological-based mangrove restoration activities is implemented

Target Indicator 1.1.2: Six sub-districts where restoration activities are implemented

Outcome 1.2: Adoption of diversified and inclusive climate-resilient livelihood practices by vulnerable coastal households.

Complementing livelihood creation through mangrove restoration (Outcome 1.1), additional sustainable livelihood initiatives will be undertaken to enable diversification of livelihood activities and sustainable resource use. In-kind support for climate adaptive livelihoods such as vegetable seeds, fruit and timber trees, or poultry will be provided through a performance-linked and needs-based approach. To make the best use of this support, and to improve and diversify the livelihood options of the community, this will be complemented by capacity strengthening sessions which will focus on green skills and climate-resilient production practices in alignment with locally identified value chains to ensure long-term sustainability. Community-aligned business models such as beekeeping, poultry-farming and horticulture will enable diversification of incomes and reduce pressure on nature resources from the nearby mangrove forest. Blue carbon business models that integrate the conservation and restoration of mangrove ecosystems into sustainable production of goods and commodities, such as integrated mud crab farming, climate smart shrimp farming, nutraceutical products and harvesting Nypapalm products, will also be encouraged. Livelihood diversification will be linked to value addition, market development, and financial inclusion mechanisms under Component 2 to ensure sustainability beyond project support. Through performance-linked livelihood support and value chain integration, Blue Carbon Plus (BC+) and community-aligned business models will be enabled. Usually, the land around the beneficiaries' homes is not used for vegetable gardening or poultry farming. Based on past projects by the Executing Agency (Friendship), we estimate the total land available for climate-resilient practices by the households involved in the project to be 627 hectares.

Outcome Indicator 1.2 Number of direct beneficiaries disaggregated by gender benefiting from improved livelihoods and strengthened adaptive capacities

Target Outcome Indicator 1.2: 43,050 (Male: 21,525 and Female: 21,525) direct beneficiaries

Outcome Indicator 1.2 (b): Extent of land adoption under climate resilient livelihood practices across number of hectares

Target Indicator 1.2 (b): 627 hectares under climate-resilient livelihood practices

Output 1.2.1: Green skills and sustainable livelihood practices demonstrated and adopted through a needs-based approach: In-kind support (vegetable seeds, fruit and timber trees, or poultry) will be allocated based on adoption readiness, and alignment with local value chains, corresponding to the family of each community group member taking part in the mangrove restoration and afforestation activities. The criteria for the needs-based performance-linked framework will be designed during the PPG phase to ensure site-specific alignment. Training on climate-adaptive vegetable cultivation, livestock and poultry rearing, aquaculture, legal services, small forest product processing, and basic enterprise alignment with value chains will be provided to help enhance and diversify climate-adaptive livelihood options. This distribution of seeds and/or fruit trees (when and where it is suitable to plant) is an opportunity to introduce varieties of plants tolerant to higher soil salinity and help families create climate adaptive livelihood options. The project will also introduce beneficiaries to poultry farming. This type of livestock farming often represents a farmer's first investment as a way to increase their income and get out of poverty. These sessions will be conducted in the first years of the project (3 sessions for each community group), with refresher sessions thereafter.

Output Indicator 1.2.1(a): Number of sessions conducted to introduce and support the adoption of green skills and sustainable livelihood practices

Target Indicator 1.2.1(a): 861 sessions conducted (3 sessions for each community group)

Output Indicator 1.2.1(b): Number of in-kind grants allocated to communities for climate-adaptive livelihoods based on adoption readiness

Target Indicator 1.2.1(b): At least 8,610 allocated based on adoption readiness

COMPONENT 2: Strengthening subnational technical capacities and community-level access to finance and markets for effective and inclusive climate change adaptation in line with Bangladesh's National Adaptation Plan

Outcome 2.1: Strengthened subnational institutional capacity for planning and mainstreaming ecosystem-based climate adaptation. At the subnational level, the project will collaborate with Union Parishad (the smallest rural administrative unit and local government body in Bangladesh) and Union Disaster Management Committee members to strengthen institutional capacities for mainstreaming ecosystem-based adaptation into local planning and implementation processes. During the PPG phase, preliminary screening and review of existing vulnerability and risk assessment reports will be conducted to inform restoration planning. During project implementation, these assessments will be refined and updated where necessary to ensure alignment with ecosystem-based restoration and climate-resilient livelihood interventions. The project will adopt an institutional mainstreaming approach. Capacity strengthening will emphasize practical integration of mangrove restoration, hybrid green-grey stabilization, and community-based adaptation measures into Union-level development plans and disaster management frameworks. It will organize sessions at the subnational level for Union Parishad, Union Disaster Management Committee members, Upazila Parishad (second lowest tier of regional administration in Bangladesh, sub-district level) members, and at the regional level, the District Commissioner's Office members, to ensure vertical alignment between local implementation and national climate strategies. These sessions will focus on operationalization of the National Adaptation Plan (NAP), Nature-based Solutions (NbS), and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). By doing so, the project will put particular emphasis on translating these frameworks into actionable local planning instruments and empowering them to effectively address climate adaptation challenges and promote sustainable development in the region.

Outcome Indicator 2.1: Number of subnational institutions with strengthened capacities

Target Indicator 2.1: 30 subnational institutions (22 Union Parishads, 6 Upazila Parishads, 2 District Commissioner's Offices)

Output 2.1.1: Community vulnerability reduction measures designed and integrated into development plans informed by updated subnational risk and vulnerability assessments. Existing risk and vulnerability assessment reports of the 22 Union Parishads will be reviewed during the PPG phase and a gap analysis undertaken. These reports will be updated during implementation where necessary to reflect current climate risks, ecosystem degradation patterns, and restoration priorities. Consultations will be conducted to integrate community-led mangrove restoration, hybrid green-grey stabilization, and climate-resilient livelihood initiatives into Union-level development and disaster management plans. Institutional strengthening will focus on systemic integration of risk and vulnerability findings into Union-level development plans, disaster management strategies, and restoration planning processes, ensuring that ecosystem-based adaptation measures are formally embedded within local governance systems. Structured orientation and planning sessions will be conducted for Union Parishad representatives, Union Disaster Management Committee members, Upazila Parishad members, and District Commissioner's Office staff to operationalize ecosystem-based adaptation within their jurisdictional mandates.

Output Indicator 2.1.1(a): Number of Union-level risk and vulnerability assessments reviewed/updated

Target Indicator 2.1.1(a): 22 Union-level risk and vulnerability assessments reviewed/updated for each of the Union Parishads in the project areas

Output Indicator 2.1.1(b): Number of Union-level development plans integrating community vulnerability reduction measures

Target Indicator 2.1.1(b): 22 Union-level development plans integrating community vulnerability reduction measures

Outcome 2.2: Strengthened financial inclusion and market access for climate-resilient livelihood enterprises among vulnerable coastal communities. Coastal mangrove ecosystems provide critical services that create opportunities for nature-based livelihoods, including forest- and non-timber forest products and other ecosystem-based on-farm and off-farm activities. However, limited access to formal financial services, low financial literacy, weak business planning skills, and constrained market

integration prevent coastal households in Bangladesh from effectively capturing value from these ecosystem services. Building on the adoption of climate-resilient livelihood practices under Outcome 1.2, this outcome will strengthen financial capability, enterprise development, and market integration for eligible livelihood beneficiaries. The project will support community members transition from subsistence-oriented production to viable, revenue-generating climate-resilient enterprises, while promoting gender equity, youth participation, and social inclusion. Structured financial literacy and enterprise planning support will enable beneficiaries to develop basic business plans aligned with mangrove- and ecosystem-based value chains. Training will focus on practical financial management, savings mobilization, cost-benefit analysis, risk management, and enterprise planning linked to market opportunities. Improved financial capability, together with facilitated access to appropriate formal financial services, will enable households to invest in, expand, and sustain adaptive enterprises, thereby strengthening the economic rationale for ecosystem conservation. As a result, financial inclusion and value-chain integration will reinforce the sustainability of livelihood investments supported under Component 1 while reducing pressure on mangrove ecosystems.

Outcome Indicator 2.2 (a): Number of community members with increased financial literacy and enhanced understanding of entrepreneurship and business planning training

Target Outcome 2.2: At least 6,888 community group members with increased literacy and understanding (80% of total trained), out of which at least 50% are women and 30% are young people.

Outcome Indicator 2.2 (b): Number of community members accessing formal financial mechanisms for mangrove and coastal ecosystem-based products/businesses.

Target Outcome 2.2 (b): At least 6,888 community group members access formal financing mechanisms (80% of total trained), out of which at least 50% are women and 30% are young people.

Output 2.2.1: Financial literacy and enterprise planning support delivered to eligible livelihood beneficiaries to enable business development and access to capital. Financial literacy and entrepreneurship planning support will be delivered to community members who have adopted climate-resilient livelihood practices under Outcome 1.2. Training content will be tailored to coastal ecosystem-based enterprises and will be developed based on a rapid assessment of local livelihood systems, financial access conditions, and market constraints. Training modules will emphasize practical application, including preparation of simple business plans, savings strategies, loan readiness, and investment prioritization aligned with local value chains. Sessions will be delivered in structured group formats to ensure inclusion of women and youth. The purpose of this output is to enable beneficiaries to move from input-supported livelihood adoption (Component 1) to enterprise-oriented income generation supported by financial and market integration mechanisms.

Output Indicator 2.2.1: Number of financial literacy and enterprise planning sessions conducted

Target Output 2.2.1: 574 financial and enterprise sessions conducted (2 sessions for each community group)

Output 2.2.2: Partnerships established with local financial institutions to facilitate access to climate-responsive credit and savings mechanisms. Building on financial literacy and enterprise planning support under Output 2.2.1, the project will establish structured partnerships with locally active financial service providers, including microfinance institutions and savings-based entities operating across the six target sub-districts. Beneficiaries will receive practical guidance to refine business plans, understand loan conditions, and complete application procedures. The project will engage with financial service providers to improve their understanding of small-scale, climate-resilient livelihood activities in coastal areas. Beneficiaries will receive practical support to prepare basic business plans, understand loan conditions, and complete application processes. Partnership agreements with local financial institutions will focus on improving accessibility of appropriate, small-scale credit and savings mechanisms suited to ecosystem-based livelihood enterprises. The identified mechanisms will be inclusive for women, men and those from disadvantaged/vulnerable groups. The financial partnerships will be based on the geographical spread and operational coverage of such institutions within the project areas. Through this, strengthened institutional linkages will reduce reliance on informal moneylenders and improve affordability of financing for adaptive enterprises.

Output Indicator 2.2.2: Number of financial institution partnerships established across the project area.

Target Indicator 2.2.2: 3 financial institution partnerships established.

Output 2.2.3: Functional market linkages established across priority value chains for mangrove- and ecosystem-based products (fish/crab, non-timber products, poultry, agriculture) in coastal communities. Weak market integration constrains income generation from ecosystem-based livelihoods. To address this, the project will support value-chain analysis across priority sectors, including (i) fish and crab, (ii) non-timber products (such as honey and pickles), (iii) poultry, and (iv) climate-resilient agriculture. Based on value-chain mapping, the project will facilitate formal linkages between community-based producers and relevant buyers, traders, and processors at local and regional levels. Support will include guidance on product quality standards, pricing, aggregation, and buyer requirements. Across the six target sub-districts, four priority trade categories will be supported per sub-district, resulting in 24 formalized market linkages. Strengthened value-chain integration will enhance the commercial viability of nature-positive products, stabilize income streams, and reinforce incentives for mangrove conservation.

Output Indicator 2.2.3: Number of formalized market agreements or partnerships established for coastal communities.

Target Indicator 2.2.3: 24 formalized market agreements or partnerships.

COMPONENT 3: Learning and knowledge management

Outcome 3.1: Gender-, youth-, and Indigenous-sensitive knowledge management and communication strategy for the project developed. This outcome will ensure the effective capture, documentation, sharing, and utilization of technical and practice-based information and best practices for collaboration, improved decision-making, and inclusive stakeholder engagement, supporting adaptive management, replication potential, and institutional learning.

Outcome Indicator 3.1: Number of gender-, youth-, and Indigenous-sensitive knowledge management systems and communication strategy developed

Target Outcome 3.1: 1 gender-, youth-, and Indigenous- sensitive Knowledge Management System developed and 1 communication strategy

Output 3.1.1: Knowledge Management products developed and disseminated, considering local contexts and restoration lessons from the project, promoting accessibility for women, Indigenous Peoples, and youth. Knowledge management products integrating gender, equality, inclusion, youth participation, and indigenous ecological knowledge aspects will be generated, and disseminated at local, national and regional levels, documenting lessons learned and best practices from community-led mangrove restoration, hybrid green-grey stabilization, and climate-resilient livelihood interventions. Using community insights, knowledge briefs and storytelling videos will be produced, with communities trained to capture and share their own perspectives on restoration and conservation. This will bring local voices to the forefront, ensuring representation of women, youth, and marginalized groups in conservation narratives.

Output Indicator 3.1.1: Number of knowledge management products developed and disseminated

Output Target 3.1.1: At least 5 knowledge briefs and 5 storytelling videos

Output 3.1.2 Gender-, youth-, and Indigenous-sensitive awareness raising sessions on climate change impacts, ecosystem restoration, mangrove stewardship, and climate adaptation designed and implemented. The project will undertake public awareness sessions on climate change impacts,

vulnerability, ecosystem restoration, and climate adaptation during World Environment Day and International Day for the Conservation of the Mangrove Ecosystem each year across the six sub-districts. Sessions will ensure inclusive participation of women, youth, marginalized groups, and indigenous community, and apply responsive facilitation approaches to encourage equitable dialogue and decision-making.

Output Indicator 3.1.2: Number of gender-, youth-, and Indigenous-sensitive awareness raising sessions designed and implemented

Target Indicator 3.1.2: At least 300 gender sensitive awareness raising sessions

COMPONENT 4: Project monitoring and evaluation

Outcome 4.1: A functional M&E framework in place, integrating gender, Indigenous, and youth-disaggregated monitoring. This outcome will provide an unbiased evaluation of the proposed project's effectiveness, efficiency, relevance, and impact, foster evidence-based decision-making by providing data and insights for strategic planning; identify potential risks and challenges encountered during project implementation, and ensure adherence to standards, regulations, and donor reporting requirements.

Outcome Indicator 4.1: : Number of functional M&E systems

Target Indicator 4.1: 1 M&E system

Output 4.1.1. An M&E system developed and implemented to collect, analyze, and synthesize data and information, including gender-, youth-, and Indigenous-disaggregated results: This output will track the project's progress and effectiveness, provide stakeholders with timely insights on the performance of the project, and facilitate evidence-based decision-making, allowing for adjustments and improvements to enhance project outcomes and resource allocation. The system will ensure collection and analysis of gender-, youth-, and Indigenous-, disaggregated data across relevant indicators. This output will also coordinate with an independent evaluator to enable assessment of project outcomes. Technical reports will include gender-, Indigenous-, and youth-disaggregated results.

Output Indicator 4.1.1 (a): Number of quarterly and annual reports approved by CI-GEF, including gender-, youth-, and Indigenous-disaggregated results

Target Indicator 4.1.1 (a): 5 Annual Project Implementation Reports (PIRs) and 20 Quarterly technical reports, with reports including gender, youth, and Indigenous specific results, approved by CI-GEF

Output indicator 4.1.1 (b):

Number of independent evaluations conducted in accordance with the GEF and CI-GEF Evaluation Policies, gender, youth, and Indigenous disaggregated results.

Target Indicator 4.1.1 (b): 2 - 1 Mid Term Review and 1 Terminal Evaluation

Long-term Sustainability of Project Outcomes

The project will be implemented through structured partnerships that emphasize community-ownership, institutional capacity building and policy integration. Throughout the project implementation phase, Friendship will implement the project in close collaboration with Bangladesh Forest Department, local authorities and community to ensure seamless transfer of responsibilities for long-term sustainability of the outcomes. To support this transition, capacity-building initiatives, knowledge management, and governance frameworks will be embedded from the outset, enabling effective handover upon project completion.

Global Environmental Benefits

The proposed project will contribute to the achievement of GEBs including at least 430 ha of mangroves in the greater Sundarbans area restored for climate resilience; 5 blue carbon papers developed and national and subnational level stakeholders engaged for policy action; development of national Safeguards approach and information system; 43,050 direct beneficiaries (Male: 21,525 and Female: 21,525) trained and made aware of climate change impacts, adaptation responses and on livelihood interventions. In addition, the proposed project will generate economic, social and environmental co-benefits to vulnerable and marginalized communities as follows:

Environmental resilience: The proposed project will support community-led mangrove restoration and afforestation (seeds collection, nurseries creation, land preparation, saplings plantation, etc.) and trees protection (fencing, community caretakers for maintenance and management) for coastal adaptation and enhancement of biodiversity.

Economic resilience: The proposed project will include distribution of in-kind support (seeds, seedlings or poultry), trainings on livelihoods diversification through nature-positive enterprises and additional income from natural resources of afforested lands for local communities. In addition, the project will improve financial inclusion and access to finance through trainings on financial literacy, entrepreneurship and business planning and by establishing partnerships with local financial institutions. It will also facilitate connections between community-based entrepreneurs, producer groups, and processors with relevant traders, buyers, and other market actors at local and regional levels

Social resilience: The proposed project will build capacity and raise awareness amongst the local communities and the authorities on the importance of mangroves and coastal adaptation strategies, in particular as regard to the above benefits, with a focus on gender equality and access to rights.

Gender Considerations

The development of the PIF addressed considerations relating to vulnerable groups and gender. The project consultation process was gender inclusive and appropriately considered the participation and

engagement of women as a major dimension of the proposed interventions. Deliberate efforts were made to ensure adequate representation of vulnerable members of communities such as women and youth during the field level consultations, where information was deliberately collected from men and women including the youth. At least 62% to 70% participation of women was noted in community consultations held by the Executing Agency. During project implementation it will be ensured that women are not overshadowed by men, whether in the households to take over their new incomes or in the group discussions and trainings to reduce their influence. Experiences from field visits show that women are free and willing to express their views and enforce their rights. Capacity building trainings on public services and human rights are particularly useful for women inclusion. The Executing Agency's gender mainstreaming curriculum tackles family and social issues, domestic violence, forced marriages, civic rights, legal aids, education, etc. Further, specific gender considerations will be included in the proposed project outcomes and outputs, by ensuring that at least 50% of the proposed project beneficiaries are women. A gender analysis and action plan will be conducted at the PPG phase to guide the mainstreaming of gender issues into the project results framework.

Learning and knowledge management

Learning and knowledge management has been deliberately designed as a separate component (Component 3) for the project to ensure that success stories, lessons learned and best practices including traditional knowledge captured during project implementation is codified and disseminated. A standalone component will also facilitate the development and implementation of a gender-sensitive knowledge management strategy that will cohesively address different target groups and their information needs. Knowledge generated from project implementation will be translated into local language and packaged into forms that can easily be accessed and utilized by the different stakeholders.

Innovation

In its design, the proposed project has incorporated the following innovations.

Nature-based solutions for climate change adaptation: The project creates a pipeline of nature-based projects that addresses a wide range of Bangladesh's coastal challenges with solutions that are regionally, culturally, and ecologically appropriate, offering a scalable and adaptable model for sustainable coastal resilience for low-lying climate vulnerable countries.

Nature-positive enterprise development for sustainable and diversified livelihoods: The project will promote nature-positive enterprises enabling resilient and sustainable livelihoods options to meet the needs of the community and to reduce their dependency on natural resources.

Diversity and inclusion: The proposed project will ensure that vulnerable and marginalized groups such as women, indigenous communities, and youth are consulted, adequately represented and participate in project design and implementation.

Exit and sustainability strategy: From the outset, the proposed project has been developed and will be implemented by local stakeholders in partnership with local, subnational and national government to ensure environmental, economic and social resilience benefits accruing from the project will continue well beyond the lifecycle of the project.

GEF-GCF long-term vision: This project has been developed as part of a broader vision to foster regional coordination and collaboration aimed at enhancing climate resilience and biodiversity in the Eastern Himalayas. It will serve as a pioneering effort to facilitate the seamless development of a regionally coordinated Green Climate Fund (GCF) project, which the Implementation Agency intends to advance as a follow-on initiative.

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

The proposed project will build and coordinate with relevant ongoing GEF and non-GEF projects in Bangladesh focused on climate adaptation at national and local level, by:

- **Building on and scaling up interventions:** The project will build on and scale up existing mangrove restoration and afforestation activities undertaken by the Executing Agency (Friendship) including information sharing on lessons learnt from past and ongoing projects (covering 218 hectares) and resource coordination with projects in-progress (covering 188 hectares). In particular, the project site locations for the proposed project have been chosen with these existing projects in mind to ensure continuation of mangrove restoration along the riverbanks. By scaling up existing initiatives with the help of GEF funding, this project will bring continuity in the mangrove ecosystems on the riverbanks, reducing embankments sensitivity and fragility to cyclones and storms.
- **Leveraging synergies with ongoing GEF and GCF-funded projects:** This project will leverage synergies with ongoing GEF and GCF-funded projects such as 'Integrating Climate Change Adaptation into Sustainable Development Pathways of Bangladesh' (GEF, UNDP), 'Building climate resilient livelihoods in vulnerable landscapes in Bangladesh (GEF, FAO)', 'Enhancing adaptive capacities of coastal communities, especially women, to cope with climate change induced salinity' (GCF, FAO), 'Resilient Homestead and Livelihood support to the vulnerable coastal people of Bangladesh' (GCF, Palli Karma-Sahayak Foundation). This project will particularly leverage synergies in relation to lessons learnt and ongoing activities on national-level conservation plans, government agencies coordination, capacity building for coastal communities, sustainable livelihood creation and opportunities.

Core Indicators

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

META INFORMATION – LDCF

LDCF true	SCCF-B (Window B) on technology transfer false	SCCF-A (Window-A) on climate Change adaptation false
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Is this project LDCF SCCF challenge program?
false

This Project involves at least one small island developing State(SIDS).
false

This Project involves at least one fragile and conflict affected state.
false

This Project will provide direct adaptation benefits to the private sector.
false

This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs).
true

This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below

Green Climate Fund true	Adaptation Fund false	Pilot Program for Climate Resilience (PPCR) false
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This Project has an urban focus.
false

This project will directly engage local communities in project design and implementation
true

This project will support South-South knowledge exchange
true

This Project covers the following sector(s)[the total should be 100%]: *

Agriculture	0.00%
Nature-based management	30.00%
Climate information services	0.00%
Coastal zone management	30.00%
Water resources management	20.00%
Disaster risk management	20.00%
Other infrastructure	0.00%
Tourism	0.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise true	Change in mean temperature false	Increased climatic variability true	Natural hazards true
Land degradation false	Coastal and/or Coral reef degradation true	Groundwater quality/quantity false	

CORE INDICATORS – LDCF

	Total	Male	Female	% for Women
CORE INDICATOR 1 Total number of direct beneficiaries	43,050	21,525.00	21,525.00	50.00%
CORE INDICATOR 2 (a) Area of land managed for climate resilience (ha)	430.00			
(b) Coastal and marine area managed for climate resilience (ha)	118.25			
CORE INDICATOR 3 Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	2.00			
CORE INDICATOR 4 Number of people trained or with awareness raised	2,270	1,135.00	1,135.00	50.00%
CORE INDICATOR 5 Number of private sector enterprises engaged in climate change adaptation and resilience	0.00			

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Substantial	Risk: Insufficient resilience against climate change, or a more rapid deterioration, may affect project activities and/or community buy-in. Mitigation Measures: Climate vulnerability and risk assessments will be conducted in the project's target sites and tailored climate adaptation strategies will be implemented in a coordinated and proactive manner.
Environmental and Social	Moderate	Risk: The proposed project activities have the potential to cause negative environmental and/or social impacts. Mitigation Measures: The impacts are anticipated to be site-specific and mitigation measures have been identified under the ESS screening that can be readily designed and implemented to manage those risks.
Political and Governance	Moderate	Risk: Local political developments (upcoming elections and shifts in politics) may impact the government alignment with project objectives or may change the relationship with project stakeholders. Mitigation Measures: 1) Proactive engagement of stakeholders from the government at national and subnational levels to ensure alignment with project objectives, and 2) An inclusive multi-stakeholder governance structure will be established for the coordination of project activities.
INNOVATION		
Institutional and Policy	Moderate	Risk: Inter-sectoral misalignment between ministries and subnational institutions resulting in lack of coordination Mitigation Measures: 1) Proactive

		inclusion of relevant ministries such as the Ministry of Environment, Forest and Climate Change in project committees; 2) Knowledge papers and capacity building workshops to enable collaborative planning.
Technological	Low	Risk: Inadequate adoption of ecological approaches for mangroves restoration and afforestation, and poor monitoring and evaluation of project activities. Mitigation Measures: 1) The proposed project will conduct capacity building trainings to ensure adoption of best practices; 2) Develop a detailed participatory M&E framework with the key project partners to track project activities; and 3) Conduct regular follow-ups and timely continuous monitoring and evaluation
Financial and Business Model	Moderate	Risk: The long-term sustainability of the project may not be sufficiently funded or inadequate funding during implementation as a result of counterparty non-delivery or insolvency etc. Mitigation Measures: Project financial monitoring with specific emphasis on incoming funds and identification of alternative funding sources as mitigation.
EXECUTION		
Capacity	Low	Risk: Lack of capability to achieve project objectives due to not being able to attract the skills required, poor monitoring and evaluation of project activities, and inadequate knowledge management to ensure transfer of skills. Mitigation Measures: Project plan allows for time and funding for targeted recruitment and for skills training and knowledge transfer.
Fiduciary	Low	Risk: Corruption, fraud, and misuse of funds by the project staff, volunteers, or any stakeholder on the project. Mitigation Measures: 1) Training of project stakeholders on GEF-prohibited practices including corruption, fraud, bribery, etc.; 2) Financial reports and audits will be conducted; and 3) Independent mid-term and end-of-term evaluations will be conducted.
Stakeholder	Moderate	Risk: Insufficient buy-in from cross-sectoral policymakers may result in unaligned objectives and priorities. Mitigation Measures: 1) Multi-stakeholder dialogues are facilitated through policy recommendation papers and workshops, and 2) Inclusive project governance structure enabling buy-in and participation of key stakeholders
Other		
Overall Risk Rating	Moderate	The overall risk for the project has been rated Moderate because 27% of the identified risks are rated Low, 55% of the identified risks are rated Moderate and 18% of the identified risks are rated as Substantial. Moreover, with the mitigation measures provided, the significant impacts of these risks are expected to be minimal. The project will also conduct feasibility assessments, environmental impact assessments, gender mainstreaming and stakeholder engagement plans to ensure inclusive participation of all the stakeholders throughout the project preparation and implementation phases.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

This project proposal will contribute to GEF's continuing goal of generating lasting Global Environmental Benefits that are critical to sustaining a 'Healthy Planet for Healthy People'. This proposal aligns with the GEF Programming Strategy on Adaptation to Climate Change for the GEF-8 period, GEF-8 Strategic Programming Directions, the Kunming-Montreal Global Biodiversity Framework (GBF), and the Paris Agreement.

The proposed project aligns with the GEF Adaptation Strategy, in particular Theme 4 on Nature-based Solutions. Mangroves provide a critical natural buffer that protects millions of people from the impacts of coastal erosion, cyclones, storm surges, and flooding. The project will carry out mangrove restoration in the tidal mudflat and char land areas within the intertidal zone along the southern coastal riverbanks of Bangladesh. The project will also focus on strengthening the enabling environment for policies and financial incentives that can help scale up blue carbon Nature-based Solutions. In addition, the proposed project will also support other adaptation themes and solutions as defined in the GEF Adaptation Strategy to address Bangladesh's government urgent priorities including on sustainable alternative livelihoods and ecosystem restoration.

The proposed project contributes to LDCF's Priority Areas. For example, Priority Area 1: Scaling Up Finance particularly through Component 2 as this project will support Bangladesh in addressing barriers which restrict flow and effective utilization of adaptation finance. It will do this by strengthening institutional capacity through support for robust safeguard systems and requirements to access finance under REDD+ mechanisms and through support for enabling policy environment to mobilize finance from the private sector for blue carbon projects. The project will also work to reinforce policy coherence across different national departments with capacity building for Forest Department, Department of Environment, Water Development Board, and Department of Fisheries. The project also contributes to LDCF's Priority Area 3: Fostering Partnership for Inclusion and Whole-of-Society Approach particularly through Component 1 as this project will partner with vulnerable groups such as women and girls, youth, Indigenous Peoples and local communities. As a locally-led adaptation solution the community-based mangrove restoration will also focus on targeted capacity building initiatives for relevant stakeholders at subnational level, particularly Union Parishad members (the smallest rural administrative unit and local government body in Bangladesh), Upazila Parishad members (second lowest tier of regional administration in Bangladesh), and District Commissioner's Office members.

The proposal is also complementary and contributes towards GEF-8 Programming Directions under Focal Area objectives of:

- (a) GEF-8 Biodiversity Focal Area: improving conservation, sustainable use, and restoration of natural ecosystems and increasing mobilization of domestic resources for biodiversity
- (b) GEF-8 Climate Change Focal Area: promoting Nature-based Solutions with high mitigation potential
- (c) GEF-8 Land Degradation Focal Area: reversing land degradation through landscape restoration

The project aligns and contributes to Bangladesh's National Adaptation Plan (NAP 2023-2050). Within the NAP, the Government of Bangladesh has identified 21 interventions related to Nature-based Solutions, including three high-priority interventions related to mangroves, namely:

- (a) Extension and expansion of the coastal greenbelt for protecting coastal habitats, including the Sundarbans, mangroves, salt marshes. This includes mangrove plantation at possible foreshore mudflats areas along the tidal rivers in the south-western coastal area and Sundarbans and other coastal areas.
- (b) Community-based afforestation and reforestation for biodiversity conservation, enhancement of ecosystem resilience and increased carbon sequestration (nationwide). This includes suitable mangrove plantations at possible spaces in homesteads and along pond banks in polder areas.

- (c) Expansion of ecosystem-based adaptation for the restoration of mangroves and other ecosystems to tackle the adverse impacts of climate change (nationwide). This includes mangrove plantation in coastal belt.

The NAP estimates the cost of these three interventions at approximately US\$ 960 million (BDT 117 billion). This project, through mangrove restoration in the southwestern coastal area near the Sundarbans, national Safeguards approach and information system, and policy-enabling blue carbon initiatives, will contribute towards bridging these gaps as described under Components 1 and 2.

The project's objective is also to support the Government of Bangladesh achieve REDD+ Readiness in line with the Bangladesh National REDD+ Strategy 2016-2030 (BNRS) and the Forest Department objectives of developing an operational national Safeguards approach and Safeguards Information System as described in Component 2. It is further in line with the BNRS through Component 1 as the BNRS acknowledges the critical role of these coastal forests and prioritizes restoration of degraded forests and afforestation of newly accreted coastal lands.

The project will also contribute towards Bangladesh's updated Nationally Determined Contributions (NDCs) under the Paris Agreement. The NDC targets include 27.56 Mt CO₂e (6.73%) unconditional emissions reduction and 61.9 Mt CO₂e (15.12%) conditional emissions reduction by 2030. The conditional mitigation measures will be implemented by Bangladesh, only if there is external financial/technology support. Under the Agriculture, Forestry and other Land use (AFOLU) sector, the NDC notes activities in terms of increase in forest cover as well as 150,000 ha of afforestation and reforestation in the coastal areas, islands and degraded areas (unconditional contribution) and additional coastal afforestation activities and maintaining the restoration of degraded or deforested areas (conditional contribution). While Bangladesh's NDC recognizes mangroves afforestation and restoration as a climate mitigating measure, the NDC does not explicitly include blue carbon accounting, this project will help fill that gap as described under Component 2.

Guided by the Government of Bangladesh, this project will also align and contribute to Bangladesh's National Biodiversity Strategy and Action Plan (NBSAP) goals as the NBSAP gets updated and the Kunming-Montreal Global Biodiversity Framework (GBF) global targets for 2030 in particular Target 2 (Restore 30% of all Degraded Ecosystems), Target 8 (Minimize the Impacts of Climate Change on Biodiversity and Build Resilience), and Target 11 (Restore, Maintain and Enhance Nature's Contributions to People). The proposed project will also build on Bangladesh's Climate Change Strategy and Action Plan (BCCSAP 2009), particularly regarding the goals of ecosystem-based adaptation and community resilience.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities: Yes

Civil Society Organizations: Yes

Private Sector:

Provide a brief summary and list of names and dates of consultations

Date	Meeting (in-person/online)	Organizations	Description
National-level Administrative Consultations			
04/08/25	Meeting with Md. Rakibul Hasan Mukul, Deputy Chief Conservator of Forests (DCCF), Planning Wing and officials of Bangladesh - (In-person)	Forest Department and Friendship	The meeting focused on reviewing the GEF-8 PIF application. The Bangladesh Forest Department recommended clarifying national-level mapping and planning, aligning with past efforts, and reconsidering blue carbon market components. The department stressed early coordination for land availability and the 'handing-over' process post-project. Friendship reaffirmed its commitment to aligning with government priorities and collaborating on identifying capacity and policy gaps
18/08/25	Meeting with Md. Hasan Hossainur Rahman, Director, Planning Wing and officials of Department of Environment - (In-person)	Department of Environment, Friendship, and Conservation International (CI)	The meeting assessed the need for support from the Department of Environment to address gaps in Blue Carbon Policy. Friendship and CI discussed potential collaboration to strengthen the policy framework and ensure it aligns with national priorities.
18/08/25	Meeting with Md. Rakibul Hasan Mukul, Deputy Chief Conservator of Forests (DCCF), Planning Wing and officials of Bangladesh Forest Department - (In-person)	Forest Department, Friendship, and Conservation International (CI)	The meeting reviewed the incorporation of previous feedback into the PIF. Further feedback from the Forest Department included re-evaluating "restoration" with "afforestation" in Outcome 1.1 of Component 1 and incorporating the REDD++ Strategy and National Safeguarding Policies in Outcome 2.2 of Component 2. The team also recommended focusing on the Southern Coastal Areas and the Sundarbans context. Additionally, discussions included MRV piloting, which was later dropped due to the project's 5-year timeline.
18/08/25	Meeting with Dr. Fahmida Khanom, Additional Secretary and Dr. Farhina Ahmed, Secretary of the Ministry of Environment, Forest and Climate Change -- (In-person)	Ministry of Environment, Forest and Climate Change, Friendship, and Conservation International (CI)	The meeting focused on reviewing updates to the PIF application. Dr. Fahmida Khanom emphasized advancing the carbon market, aligning it with national policies and global climate finance mechanisms. Dr. Farhina Ahmed discussed the necessity of translating project terms into community context, ensuring that the local population understands the project's goals and their role in it. She also suggested clearer communication strategies to improve local engagement.
20/08/25	Meeting with Md. Rakibul Hasan Mukul, Deputy Chief Conservator of Forests (DCCF), Planning Wing and officials of Bangladesh Forest Department, Md. Hasan Hossainur Rahman, Director, Planning Wing and officials of Department of	Forest Department, Department of Environment, Ministry of Environment, Forest, and Climate Change, Friendship, and Conservation International (CI)	The meeting reviewed the PIF application. Dr. Fahmida Khanom, alongside the Department of Environment and Forest Department, examined whether their priorities were reflected in the application. She also mentioned that the endorsement letter for the PIF application should be issued by 22 August 2025.

	Environment, and Dr. Fahmida Khanom, Additional Secretary of the Ministry of Environment, Forest and Climate Change -- (online)		
28/08/25	Meeting with Dr. Fahmida Khanom, Additional Secretary Ministry of Environment, Forest and Climate Change -- (In-person)	Ministry of Environment, Forest and Climate Change, Friendship, and Conservation International (CI)	The meeting reviewed the current status of the PIF application. Dr. Fahmida Khanom emphasized the importance of enhancing climate-adaptive livelihood support, stressing the need for synergy between project activities and livelihood interventions to build long-term resilience for affected communities.
Local-level Administrative Consultations			
08/04/25	Discussion on mangrove plantation plans with Goroikhali Union Parishad, Goroikhali union, Paikgacha upazila, Khulna district - (In-person)	Union Parishad and Friendship	The meeting was conducted with the Chairman, Secretary, and elected members of the Goroikhali Union Parishad to discuss plans for mangrove plantation in char land. The participants recognized the importance of coastal erosion prevention through mangrove restoration. They also discussed alternative livelihood options for local farmers and emphasized the role of community involvement in ensuring the sustainability of the restoration efforts. The Union Parishad assured their full cooperation in the project.
24/05/25	Discussion on mangrove plantation plans with UNO and Government Officials of UNO's Office, Paikgacha upazila, Khulna district - (In-person)	Upazila Nirbahi Officer (UNO) Office and Friendship	The meeting was held with the Upazila Nirbahi Officer (UNO) and government officials of Paikgacha Upazila to discuss the mangrove plantation plans. The discussion highlighted the importance of flood control and the role of mangroves in coastal defense. Additionally, the participants focused on creating livelihood opportunities for local communities through eco-tourism and sustainable fishing practices. The UNO and officials confirmed their support and cooperation in the project's implementation.
24/05/25	Discussion on mangrove plantation plans with Sub-divisional Engineer (SDE) and Officials of Bangladesh Water Development Board (BWDB) of Paikgacha upazila, Khulna district - (Online)	Bangladesh Water Development Board (BWDB) and Friendship	The consultation was held with the Sub-divisional Engineer (SDE) and officials of BWDB to discuss dredging plans in the proposed mangrove plantation areas. The SDE recommended avoiding locations that have already been planned for re-excavation, as these areas could be adversely affected by the dredging process, which may interfere with the mangrove restoration efforts. The BWDB expressed their support for the long-term mangrove restoration initiatives and assured their cooperation in maintaining the project's objectives.
23/06/25	Discussion on mangrove plantation plans with UNO and Government Officials of UNO's Office, Shyamnagar upazila, Satkhira district - (In-person)	Upazila Nirbahi Officer (UNO) and Friendship	The consultations with the UNO and government officials of Shyamnagar Upazila focused on mangrove plantation efforts in char land. The discussion addressed the issues of saltwater intrusion and the need for mangrove restoration. Participants also discussed alternative livelihood options needs for communities affected by environmental changes. The UNO and officials provided their assurance of support and commitment to the successful implementation of the project.
14/07/25	Discussion on mangrove plantation plans with UNO and Government Officials of UNO's Office, Assasuni upazila,	Upazila Nirbahi Officer (UNO) and Friendship	The meeting was held with the UNO and officials of Assasuni Upazila to discuss the availability of land for mangrove plantation. The authorities confirmed the availability of suitable land for the project and stressed the importance of coastal protection through mangrove

	Satkhira district - (In-person)		restoration. They also emphasized the role of local participation in both the restoration and the development of sustainable livelihoods for farmers.
25/08/25	Discussion on mangrove plantation plans with Forester and Officials of Forest Department, Paikgacha upazila, Khulna district	Forest Department and Friendship	The meeting with the Forester and officials of the Forest Department focused on identifying potential sites for mangrove plantation and understanding the initiatives of the Forest Department in the region. They assisted in selecting suitable sites, provided recommendations on species selection, and offered guidance on the alignment of sapling rows during the plantation. Additionally, they emphasized the importance of community engagement in protecting the plantation. The Forest Department assured their support and cooperation to ensure the success of the project.
25/08/25	Discussion on mangrove plantation plans with Chairman, Secretary, and Elected Members, Koyra Union Parishad, Koyra upazila, Khulna district - (In-person)	Upazila Parishad and Friendship	The meeting was held with the Chairman, Secretary, and elected members of Koyra Union Parishad to discuss mangrove plantation efforts. The discussion highlighted embankment protection, biodiversity conservation, and the important role of local communities in maintaining the plantation areas. The participants expressed their commitment to the project and emphasized the importance of community-led restoration efforts.
Community Consultations			
31/07/25	Understanding community vulnerabilities at Chakla village, Protapnagar union, Assasuni upazila, Satkhira district - Focus Group Discussion (FGD) (In-person)	Community and Friendship	The discussions focused on challenges related to mangrove afforestation, livelihood security, and climate adaptation. Women highlighted their increased workload due to environmental degradation, including the loss of forest resources, and the growing need to gather more fuel and food. They expressed their active participation in afforestation, conservation, and alternative livelihood activities. Community leaders underscored their role in mobilizing efforts, managing resources, and ensuring long-term sustainability.
31/07/25	Understanding Specific Vulnerabilities at Fokirabad village, Goroikhali union, Paikgacha upazila, Khulna district - Focus Group Discussion (FGD) (In-person)	Community and Friendship	The consultation focused on the loss of natural resources and its impact on food security. Women expressed the need for alternative livelihoods, such as tailoring and small businesses. Community leaders emphasized their role in mobilizing the community and managing shared resources to protect the local environment.
31/07/25	Understanding Specific Vulnerabilities at Choukuni village, Maheswaripur union, Koyra upazila, Khulna district - Focus Group Discussion (FGD) (In-person)	Community and Friendship	The session addressed biodiversity conservation, alternative livelihoods, and climate change adaptation. Women stressed the need for gender-responsive livelihood support, while community leaders emphasized sustainable mangrove afforestation and raising awareness within the community.
31/07/25	Understanding Specific Vulnerabilities at Kalinchi village, Ramjannagar union, Shyamnagar upazila, Satkhira district - Focus Group Discussion (FGD) (In-person)	Community and Friendship	The discussion focused on soil erosion and declining fisheries, with participants emphasizing the importance of sustainable land use practices. Women expressed concerns about their increased workload and lack of access to forest products. Community leaders emphasized in protecting forest areas and supporting collective mangrove afforestation initiatives.

31/07/25	Community Consultations: Understanding Specific Vulnerabilities at Jhapa village, Padmapukur union, Shyamnagar upazila, Satkhira district - Focus Group Discussion (FGD) (In-person)	Community and Friendship	The consultation focused on agricultural loss, depletion of natural resources, and migration. Women emphasized the importance of nutrition-sensitive interventions and taking on leadership roles, while community leaders highlighted their role in conflict resolution and ensuring the sustainable use of local resources.
09/7/25	Community Consultations: Discussion on land availability and community engagement for mangrove restoration at village, Deluti union, Paikgacha upazila, Khulna district – (In-person)	Community and Friendship	The discussion focused on land availability in Deluti Union, an island-type settlement highly vulnerable to riverbank erosion, tidal surges, and frequent embankment failures. Given these challenges, char plantation has become an urgent need for the community. The importance of identifying suitable areas for the plantation was also emphasized, with communities expressing strong support for the initiative and committing to its long-term maintenance and sustainability.
10/07/25	Discussion on land availability and community engagement for mangrove restoration at Bhagba village, Amadi union, Koyra upazila, Khulna district – (In-person)	Community and Friendship	The meeting was centered on selecting suitable areas for mangrove plantation and discussing how local communities can help maintain them.
21/07/25	Discussion on land availability and community engagement for mangrove restoration at Bhagba village, Amadi union, Koyra upazila, Khulna district – (In-person)	Community and Friendship	The meeting focused on mangrove plantation area identification, including land assessments, and discussed the role of mangroves in coastal protection and biodiversity conservation.
28/07/25	Discussion on land availability and community engagement for mangrove restoration at Lalua village, Bagali union, Koyra upazila, Khulna district– (In-person)	Community and Friendship	The discussion focused on mangrove plantation site assessment and highlighted the need for restoration efforts and the importance of community involvement in managing these areas over time.

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

And if so, has its role been described and justified in the section B project description?

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
CI	LDCF	Bangladesh	Climate Change	LDCF Country allocation	Grant	8,840,826.00	795,674.00	9,636,500.00
Total GEF Resources (\$)						8,840,826.00	795,674.00	9,636,500.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

150000

PPG Agency Fee (\$)

13500

GEF Agency	Trust Fund	Country/	Focal Area	Programming of Funds	Grant / Non-Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
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		Regional/ Global						
CI	LDCF	Bangladesh	Climate Change	LDCF Country allocation	Grant	150,000.00	13,500.00	163,500.00
Total PPG Amount (\$)						150,000.00	13,500.00	163,500.00

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
Total GEF Resources					0.00

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
CCA-1-1	LDCF	8,840,826.00	7625163
Total Project Cost		8,840,826.00	7,625,163.00

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Others	Friendship Luxembourg	Grant	Investment mobilized	540000
GEF Agency	CI	Grant	Investment mobilized	2260000
GEF Agency	CI	In-kind	Recurrent expenditures	1410996
Private Sector	Standard Chartered Bank	In-kind	Recurrent expenditures	421667
Others	Foundation Koepon (Netherlands)	In-kind	Recurrent expenditures	80000

Private Sector	Banque Raiffeisen in Luxembourg	In-kind	Recurrent expenditures	202500
Others	AFD	Grant	Investment mobilized	210000
Recipient Country Government	Ministry of Environment, Forest and Climate Change	In-kind	Recurrent expenditures	2500000
Total Co-financing				7,625,163.00

Describe how any "Investment Mobilized" was identified

The Investment Mobilized reflected in the co-financing table represents Friendship's financial resources that will be applied to support project-aligned interventions, including community-led mangrove restoration, climate-adaptive livelihoods, and capacity building at community and local government levels. While these resources originated from Friendship's broader programme portfolio, their allocation under this project scope and timeframe constitutes a complementary investment contributing to the achievement of the project results.

Through this contribution, Friendship's Investment Mobilized will complement GEF financing by strengthening implementation capacity, expanding the coverage of project activities, and supporting the sustainability and effectiveness of outcomes.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

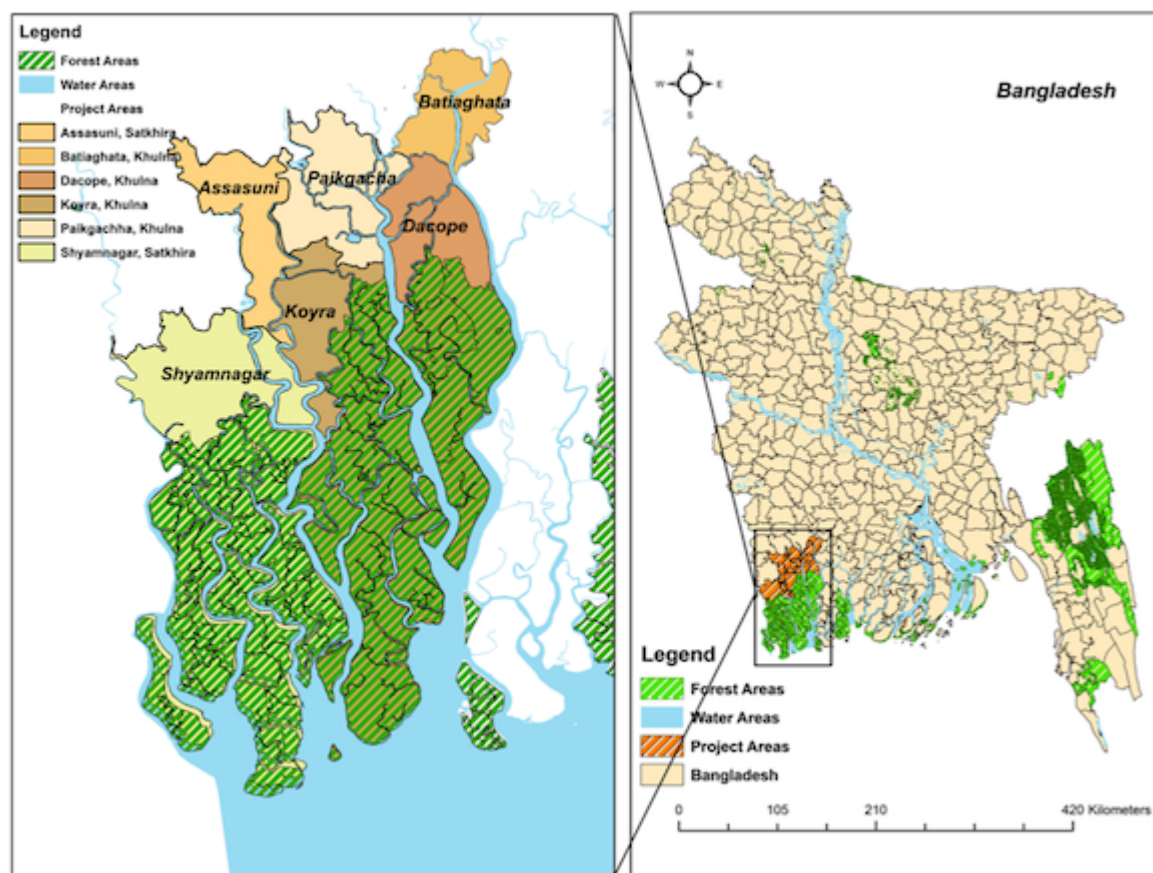
GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Orissa Samaroo	9/9/2025	Prapti Bhandary		pbhandary@conservation.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Dr Farhina Ahmed	Secretary/ OFP	Ministry of Environment, Forest and Climate Change	8/21/2025

ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place



Geo Name ID <i>Required field if the location is not an exact site</i>	Location Name <i>Required field</i>	Latitude <i>Required field</i>	Longitude <i>Required field</i>	Location Description <i>Optional text field</i>	Activity Description <i>Optional text field</i>
4764	Paikgacha	22°35'09"N	89°23'14"E	Sub-district of Khulna, Bangladesh	Restoration of 128 hectares of mangrove to the proposed sites.
4717	Dacope	22°30'58"N	89°25'47"E	Sub-district of Khulna, Bangladesh	Restoration of 30 hectares of mangrove to the proposed sites.
4753	Koyra	22°13'25"N	89°19'57"E	Sub-district of Khulna, Bangladesh	Restoration of 86 hectares of mangrove to the proposed sites.
4712	Batiaghata	22°41'03"N	89°26'16"E	Sub-district of Khulna, Bangladesh	Restoration of 30 hectares of mangrove to the proposed sites.
8704	Assasuni	22°28'11"N	89°16'11"E	Sub-district of Satkhira, Bangladesh	Restoration of 80 hectares of mangrove to the proposed sites.
8786	Shyamnagar	22°19'03"N	89°15'44"E	Sub-district of Satkhira, Bangladesh	Restoration of 76 hectares of mangrove to the proposed sites.

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

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ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Principal Objective 2	Significant Objective 1	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
☒ Focal Area/Theme	☒ Biodiversity		
			Terrestrial Protected Areas
		☒ Species	
			☒ Threatened Species
		☒ Financial and Accounting	
			☒ Conservation Finance
		☒ Mainstreaming	
			☒ Forestry (Including HCVF and REDD+)
		☒ Biomes	
			☒ Mangroves
		☒ Forest and Landscape Restoration	
			☒ REDD/REDD+
	☒ Climate Change		
		☒ Climate Change Adaptation	
			☒ Private Sector
			☒ Community-based Adaptation
			☒ Livelihoods
			Disaster Risk Management
			☒ Least Developed Countries
			Adaptation Tech Transfer
			☒ Sea-level rise
			☒ Climate information
			☒ National Adaptation Plan
			Innovation

			☒ Climate Finance
			National Adaptation Programme of Action
			☒ Ecosystem-based Adaptation
			Complementarity
			☒ Climate Resilience
			Mainstreaming Adaptation
		☒ Climate Change Mitigation	
			☒ Agriculture, Forestry, and other Land Use
	☒ Land Degradation		
		☒ Land Degradation Neutrality	
			☒ Land Cover and Land cover change
			☒ Land Productivity
			☒ Carbon stocks above or below ground
		☒ Sustainable Land Management	
			☒ Ecosystem Approach
			Sustainable Fire Management
			☒ Income Generating Activities
			☒ Restoration and Rehabilitation of Degraded Lands
			☒ Improved Soil and Water Management Techniques
			☒ Sustainable Livelihoods
			☒ Sustainable Agriculture
		☒ Food Security	
	☒ Sustainable Development Goals		
		☐ Green Chemistry	
		☐ Industrial Emissions	
		☐ Mercury	
			Cement
			Artisanal and Scale Gold Mining
			Coal Fired Power Plants
			Non-Ferrous Metals Production
			Coal Fired Industrial Boilers
☒ Influencing Models			
	☒ Transform policy and regulatory environments		
	☒ Enable innovative financial instruments		

	☒ Strengthen institutional capacity and decision-making		
	Convene multi-stakeholder alliances		
	☒ Demonstrate innovative approaches		
☒ Stakeholders			
	☒ Private Sector		
		☐ SMEs	
		☒ Financial intermediaries and market facilitators	
		☐ Capital providers	
		☐ Individuals/Entrepreneurs	
		☐ Large corporations	
		☐ Non-Grant Pilot	
		☐ Project Reflow	
	☒ Type of Engagement		
		☒ Partnership	
		☒ Participation	
		☒ Consultation	
		☒ Information Dissemination	
	☒ Civil Society		
		☒ Community Based Organization	
		☒ Non-Governmental Organization	
	☒ Communications		
		☒ Awareness Raising	
		☒ Strategic Communications	
		☒ Education	
		☒ Behavior Change	
		☒ Public Campaigns	
	☒ Indigenous Peoples		
	☒ Beneficiaries		
	☒ Local Communities		
☒ Gender Equality			
	☒ Gender Mainstreaming		

		☒ Women groups	
		☒ Sex-disaggregated indicators	
		☒ Beneficiaries	
	☒ Gender results areas		
		☒ Capacity development	
		☒ Awareness raising	
		☒ Access to benefits and services	
		☒ Participation and leadership	
		☒ Knowledge generation and exchange	
	☒ Food Security		
		☒ Diversified Farming	
		☒ Gender Dimensions	
		☒ Land and Soil Health	
		☒ Resilience to climate and shocks	
		☒ Sustainable Production Systems	
		☒ Agroecosystems	
	☒ Food Systems, Land Use and Restoration		
		☒ Landscape Restoration	
☒ Capacity, Knowledge and Research			
	☒ Enabling Activities		
	☒ Learning		
		☒ Adaptive Management	
		☒ Theory of Change	
	☒ Knowledge Generation		
		☒ Training	
		☒ Workshop	
	☒ Innovation		
	☒ Capacity Development		
	☒ Knowledge Exchange		
		☒ Conference	
		☒ Field Visit	

	☒ Peer-to-Peer	
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