



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Expanding the PA System to Incorporate Important Aquatic Ecosystems		
Country(ies):	Bangladesh	GEF Project ID:	5099
GEF Agency(ies):	UNDP	GEF Agency Project ID:	4620
Other Executing Partner(s):	Bangladesh Forest Department	Submission Date:	28 August 2012
		Resubmission:	13 September 2012 10 January 2013
GEF Focal Area (s):	Biodiversity	Project Duration:	60 months
Name of parent program: For SFM/REDD+ <input type="checkbox"/>	N/A	Agency Fee:	154,516

A. FOCAL AREA STRATEGY FRAMEWORK:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative grant amount (\$)	Indicative co-financing (\$)
BD1: Improve Sustainability of PA Systems	Outcome 1: Improved management effectiveness of existing and new protected areas.	Output 1. New protected areas and coverage for unprotected threatened mammal species (2) (102,000 ha).	GEF	1,545,984	8,027,500
Sub-total				1,545,984	8,027,500
Project management cost			GEFTF	80,500	422,500
Total project cost				1,626,484	8,450,000

B. PROJECT FRAMEWORK:

Project Objective: To build capacity to effectively increase and manage new protected areas to conserve globally threatened aquatic diversity whilst still meeting the livelihood needs of local communities

Project Component	Grant type	Expected Outcomes	Expected Outputs	Trust Fund	Financing (\$)	Indicative co-financing, (\$)
1. Important aquatic ecosystems with globally threatened species conserved through new protected area (PA) network establishment and management.	TA/ INV	<p>Conservation of globally significant aquatic biodiversity through the operationalization of 3 new wetlands PAs (52,000) and Reserve buffer area (50,000 ha)¹:</p> <ul style="list-style-type: none"> ❖ METT scores of at least 70 for all 3 PAs by project end ❖ increases or stable populations of 450 Irrawaddy Dolphins (<i>Orcaella brevirostris</i>) and 225 Ganges River (<i>Platanista gangetica</i>) and small-clawed otter (<i>Aonyx cinerea</i>), <p>1. Enhanced capacities of Forest Department (FD)</p>	<ul style="list-style-type: none"> • <u>Government's on-the ground gazettment of 3 new wetland PA</u> including boundary demarcation of PA and buffer zones, provision for public consultation and CBNRM; determination of governance arrangements, zoning and community use rights for different zones • <u>PA management operationalized:</u> including detailing plans and implementation of (i) surveillance, enforcement and reporting systems (ii) clarified roles, responsibilities and rights of local authorities, communities (including CBNRM) and the private sector in management (iii) brokerage of annual budgetary 	GEF	900,000	6,500,000

¹ categories of PA and permissible resource uses within the PA and buffer zone to be determined during the PPG phase

		to promote and undertake aquatic biodiversity conservation (<i>tracked by UNDP Capacity Scorecard, baseline and target to be established during PPG</i>)	<p>appropriations to underwrite the costs of PA functions at the new sites (staff/ equipment, infrastructure and maintenance) from government budgets</p> <ul style="list-style-type: none"> • <u>Capacity of Forest Department staff to undertake wetlands PA management emplaced-</u> training programme on wetland PA management (i) on ecosystem-based management including identifying, monitoring, mitigating and reporting on the impact of anthropogenic and natural threats; (ii) participatory management, (iii) business planning and facilitating income generating activities for local communities; (iv) law enforcement; (v) conflict resolution; (v) use of GPS for monitoring and surveillance • <u>Building capabilities to manage threatened species in the expanded PA system:</u> (i) National technical group on aquatic conservation established, bringing together government, non-government and international NGOs and academia to advise the FD on aquatic ecosystem conservation and to develop a long term National aquatic conservation plan developed conservation and financing ii) linking wetland PA management with ecologically critical area management 			
2. Community-based ecosystems management to support aquatic biodiversity conservation	TA	<p>Effective co-management for PA and buffer area reserve forest leading to</p> <ol style="list-style-type: none"> 1. Reduced threats to wetland biodiversity from over-fishing; use of harmful fishing gear and open access fishing all year; unsustainable collection of aquatic biomass, and accidental by catches of dolphins and mitigation of polluting 2. Management of river channels for the maintenance of ecological connectivity 	<p><u>Community capacities strengthened to plan and implement aquatic biodiversity conservation</u> through village conservation groups and inter-group partnerships, with support from local government and in coordination with relevant government agencies to ensure that there is:</p> <ul style="list-style-type: none"> • Community adoption of integrated conservation and sustainable use principles for land and aquatic ecosystems management; including maintenance of vegetation cover along river channels and pollution control from agricultural 	GEF	645,984	1,527,500

			practices (including community led monitoring to reduce illegal actions)			
			<ul style="list-style-type: none"> Local youth groups and school children are actively involved in aquatic biodiversity conservation and advocacy through eco-clubs and youth groups 			
Sub-total					1,545,984	8,027,500
Project management cost				GEF	80,500	422,500
Total project costs					1,626,484	8,450,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Government Agency	Department of Forest	Grant	3,000,000
Bilateral Agency	USAID	Grant	1,500,000
	EU	Grant	2,500,000
GEF Agency	UNDP	Grant	1,250,000
Others	International conservation NGOs (IUCN)	Grant	200,000
Total Co-financing			8,450,000

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY

GEF Agency	Type of Trust Fund	Focal area	Country name/Global	Project amount (a)	Agency Fee (b)	Total c=a+b
UNDP	GEF TF	Biodiversity	Bangladesh	1,626,484	154,516	1,781,000
Total Grant Resources				1,626,484	154,516	1,781,000

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1. THE GEF FOCAL AREA STRATEGIES:

The project is consistent with the GEF 5's BD Strategic Objective 1: Improve sustainability of PA systems. In line with this SO, and especially its Outcome 1.1: Improved management effectiveness of existing and new PAs, the project will fill a major gap in national PA system by expanding the PA estate by establishing three new PAs and buffer areas to conserve globally important aquatic biodiversity. These will conserve a host of globally important species, particularly critical populations of globally threatened Irrawaddy and Ganges river dolphins. Bangladesh is the only country in the world where both these species are found in large numbers, which provide a safety net for these species' survival against possible extinction threats. The project will assist the Forest Department to effectively manage these new PAs, which will be nested within a wider conservation management of the Sundarban Reserve Forest. The project will ensure that there is strong local communities, local government and other stakeholders' support for and involvement in these protected areas and buffer area management, so that their long term integrity and sustainability are ensured.

A.2. NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS:

This project is fully aligned with Bangladesh's Sixth Five Year Plan (FY2011-FY2015). The Plan, which serves as the primary development agenda for the country, has prioritized several environmental management actions including wetland management. It notes that "the government is very keen to see the change in (the) management paradigm and to consolidate the co-management system not only in the Tanguar Haor but also for overall wetland management in Bangladesh". It has further stressed that "watershed management, wetland conservation etc. will be initiated in new (protected) areas and also will be intensified in the (existing protected) areas for better conservation of nature in the country during the plan period." The project is also well aligned with the objectives of the National Biodiversity Strategy and Action Plan for Bangladesh (August 2004), which aims to (1) conserve and restore the biodiversity of the country; and (2) maintain and improve ecosystem integrity. The project further responds to the Bangladesh Biodiversity National Assessment and Programme of Action 2020 (BPA 2020) –especially Project 7 – "Community based conservation and management for aquatic species like Ganges River and Irrawaddy dolphin." This project will also advance Bangladesh's commitments under the CBD's Aichi targets. In particular, it will promote better understanding of aquatic and wetland biodiversity, which will directly contribute to Aichi Target 1 "By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably." Furthermore, the project will directly support Target 11 "By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes", Target 5 "By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced" and Target 6 "By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits." The project also addresses key elements of the Programme of Work on Protected Areas, including: 1.2 To integrate protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function; 1.4 To substantially improve site-based protected area planning and management; and 1.5 To prevent and mitigate the negative impacts of key threats to protected areas.

B. PROJECT OVERVIEW

B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:

Bangladesh's ecosystems range from the foothills of the Himalayan Mountains to the littoral, sub-littoral and benthic communities of the Bay of Bengal. It has a diversity of freshwater and coastal wetlands, and a great diversity of agro ecosystems. Its diversity of aquatic ecosystems includes *Haors* (seasonal wetlands that are created in large valleys during the Monsoon rains), mangrove forests, swamp forests, oxbow lakes, rivers and the coastal areas. One of its major wetlands, Sundarban Mangroves, is listed as one of WWF's Global 200 Ecoregions. Bangladesh is home to over 125 globally threatened species (IUCN Red list) – including 21 Critically Endangered, 34 Endangered and 69 Vulnerable species (1 extinct in wild). Aquatic ecosystems of Bangladesh house a significant numbers of such globally important species – including nine critically endangered species (or 43% of endangered species found in Bangladesh), 17 endangered species (50% of endangered species found in Bangladesh) and 27 Vulnerable species (39% of Vulnerable species found in the country). Key Critically Endangered species found in the country include *Anoxypristis cuspidate* (Knifetooth Sawfish); *Ardea insignis* (Imperial Heron), *Aythya baeri* (Baer's Pochard), *Batagur baska* (River Terrapin), *Batagur kachuga* (Bengal Roof Turtle), *Eurynorhynchus pygmeus* (Spoon-billed Sandpiper) *Gavialis gangeticus* (Gharial), *Pristis microdon* (Freshwater Sawfish) and the *Rhodonessa caryophyllacea* (Pink-headed Duck). Some notable Endangered species dependent on aquatic ecosystems include *Batagur dhongoka* (Three-striped Roofed Turtle), *Chitra indica* (Indian Narrow-headed Softshell Turtle), *Heliopais personatus* (Asian Finfoot); *Pangshura sylhetensis* (Assam Roofed Turtle), *Pelochelyscantorii* (Cantor's Giant Softshell Turtle *Platanista gangetica* (Ganges River Dolphin,) and the *Prionailurus viverrinus* (Fishing Cat). Interestingly, Bangladesh is the only nation in the world which has viable breeding populations for the last two remaining species of freshwater dolphins in Asia: the Endangered Ganges River dolphin and Vulnerable Irrawaddy dolphin.

Aquatic environments in Bangladesh are under direct threat due to habitat destruction and changes in landuse, overharvesting of aquatic species (particularly fish), pollution and the spread of invasive alien species. The pressures that cause habitat destruction and landuse changes of aquatic environments include conversion into agricultural lands, aquaculture, settlements (including increasing urbanization) and infrastructure development (such as barrages, flood

diversion systems and roads). Infrastructure development and land use conversion also cause siltation and loss of river channels and small lakes, and can even cause loss of connectivity between river channels, blocking migration paths of fish and dolphin species. *Overharvesting* of wetland products – particularly fish species, and eggs of turtles etc. are causing a decline in their populations and diversity in many areas. Losses of fish species and/or their population declines also impact other globally important species such as otters, fishing cats, and dolphins which feed on such fish species. The use of small sized fishing nets and indiscriminate fishing also often causes accidental by-catch and deaths of dolphins and non-target fish species as well. The use of high quantities of fertilizer and pesticide in agriculture, discharge of household waste (including untreated sewage) from urban areas and industrial discharges are causing *pollution* of many rivers and other wetlands, causing further loss in aquatic biodiversity. *Invasive alien species* such as *Eichhornia crassipes* have established themselves in wetlands and can choke river channels and lead to drying of lakes. Finally, Bangladesh is one of the most vulnerable countries to climate variability and change and some impacts attributed these on aquatic habitats include increased salinity in the estuarine region that is changing the species composition of freshwater fish species..

Bangladesh has instituted a national system of protected area to conserve some of its most significant biodiversity values. It has, so far, designated 34 protected areas comprising approximately 2654 square kilometres or about 1.8 percent of the country's land area. These protected areas cover around 11% of different forest ecosystems that exist in the country. However, several gaps exist in effective coverage of critical ecosystems under the current PA system, especially aquatic ecosystems and species. Aquatic ecosystems, particularly, riverine ecosystems that harbour globally important species such as the Gangetic and Irrawaddy Dolphins, have not received much attention and most of these ecosystems remain outside protected areas. There is a strong urgency to conserve some charismatic aquatic species – such as the freshwater dolphins, which are in immediate danger of extinction throughout their range in Asia. The recent disappearance of the Yangtze River dolphin (*Lipotes vexillifer*) has taught us that conservation efforts must begin early and focus on ecologically defined areas where human activities can be more effectively managed. Bangladesh is one of the few countries in Asia such an opportunity exists to conserve two species of freshwater dolphins.

The Forest Department, under the Ministry of Environment and Forests, are the lead Protected Areas management agency, who manages such areas along with other Reserve Forests in Bangladesh. Several classifications of protected areas have been defined under the newly enacted "The Wildlife (Preservation and Protection) Act, 2012". These include Wildlife Sanctuaries, National Parks, Community Conservation Areas, Safari Parks, Eco-parks, Botanical gardens, Wildlife Breeding Centres, Landscape Zone/Corridor, Buffer Zone, Core Zone as Protected Area under There are also provisions to declare Special Biodiversity Conservation Area, and National Heritage, Monumental Trees, Sacred Trees and Kunjabon under the Act. Moratorium on felling of trees has been imposed in the Natural Forests since 1989 (including other Reserve and Protected Forests). Thus Forest Department manages different ecosystems for biodiversity conservation.

Baseline project

The Government of Bangladesh invests around 120 million dollars annually through this Ministry of Environment and Forests for effective environmental management and conservation. The Forest Department receives around 43 million dollars annually from the Ministry's national budget allocation. Almost half of the fund that the Department receives is spent on staff salaries, allowances and travel, whilst the rest is invested mostly on forestry programs including reforestation, afforestation, local livelihoods support and some infrastructure development. The Government of Bangladesh also receives international development aid from bilateral donors for ecosystems and protected areas management – which currently averages an estimated 10 million dollars per year, much of which is invested to support co-management of forests and other ecosystems to support livelihoods and conservation. Additionally, in terms of aquatic ecosystems, there is also a significant national budget investment from the government on fisheries sector through its the Ministry of Fishery and Animal Resources, which is allocated around 112 million dollars annually, much of it is spent on supporting fisheries production through aquaculture, which is one of the biggest economic sectors in Bangladesh.

Despite the overall increase of attention accorded to biodiversity conservation in Bangladesh, especially conservation, there is currently significant under representation of aquatic ecosystems and habitats of endangered aquatic species in the national PA estate and there are limited capacities to manage these ecosystems and species effectively. The long-term solution to be implemented by this project is “Globally important aquatic ecosystems effectively protected under the national system of protected areas with active support and involvement of government, local communities and partners for their long term sustainability”.

Key barriers to achieving the above-mentioned long-term solutions include the following:

Barrier 1: Limited government capacities to mitigate threats to globally important aquatic habitats and species

The Forest Department is responsible for protected areas management in Bangladesh and it has considerable expertise on terrestrial wildlife conservation and forests management. The Department lacks the requisite capacity on wetland conservation and aquatic species conservation. It has hardly any qualified staff with wetlands management experiences and has extremely limited practical experiences on creating or managing PAs for aquatic biodiversity conservation. Past capacity building activities on aquatic biodiversity conservation have been ad hoc and opportunistic as opposed to strategic or long term. The government has also not been able to effectively mobilize existing national capacities and knowledge (from the academia, NGOs and others) systematically to promote aquatic biodiversity conservation throughout the country. Although many globally threatened aquatic species are protected under the Bangladesh Wildlife Protection Act, 1973, the legal provision alone has not been effective in preventing the decline or degradation of their habitats, thereby undermining their long term survival. As noted earlier in the PIF, the current PA system in Bangladesh was primarily established to represent the diversity of forest ecosystems in the country. Therefore, it does not adequately cover all the diversity of ecosystems in Bangladesh – particularly the riverine ecosystems. Riverine “hotspots” have been shown to host significant populations of globally threatened aquatic species- such as the Ganges and Irrawaddy dolphin species, particularly, remain outside the PA system and are poorly managed for biodiversity conservation

Barrier 2: Local stakeholders, especially local communities have limited incentives and capacities to support aquatic biodiversity conservation

Given the high population pressures that exist in Bangladesh on natural resources, conservation efforts in the country will not succeed without strong local community and local government commitment and support. Such support is particularly critical for riverine systems and other aquatic habitats, where upstream or downstream actions can have significant externalities for site level conservation work. For example, upstream water pollution can impact biodiversity downstream, whereas downstream river diversion can also impact movement of fish and other species upstream. Although the government has promoted some efforts at co-management of wetlands at some sites (particularly in the large seasonal wetlands called *Haors*), these have not been widely applied nationally and local communities in the wider landscape have limited access to information and incentives to support aquatic biodiversity conservation – particularly at some critical landscapes, such as those identified by this project, to mitigate threats from households level activities such as from fishing and overharvesting of other aquatic plants and animals (for food and other uses such as construction materials, medicinal plants) through community sanctions and to prevent outsiders from overharvesting products and from degrading ecosystems. Likewise, there is extremely limited local government involvement in promoting sustainable use of products from the wider landscape to mitigate ecosystem loss and degradation caused by development activities such as the construction of industries or water diversions that have significant negative impacts on aquatic ecosystems. Particularly, limited experiences and examples exist in the country on how to effectively manage riverine ecosystems systems for conservation with the involvement of wide range of stakeholders at a wider ecosystems level.

B. 2. INCREMENTAL COST REASONING AND THE ASSOCIATED GLOBAL ENVIRONMENTAL BENEFITS:

This project will overcome the barriers mentioned above to effectively conserve aquatic biodiversity in Bangladesh. through the implementation of the following two Components.

Component 1: Important aquatic ecosystems with globally threatened species conserved through new protected area (PA) establishment and their management: This project will promote the conservation of globally important aquatic hotspots within the Sundarban through the operationalization of three new protected areas of at least 52,000 ha to conserve globally threatened aquatic diversity in Bangladesh; based on sound science. These areas will be nested within the Sundarban Mangroves Reserve Forest, which is a part of Bangladesh’s permanent national forest estate (at least additional 50,000 ha) and will provide further buffer against direct threats to the protected areas. The Sundarban forest area is the world’s largest continuous mangrove forest encompassing 600,000 ha, with a complex network of estuarine waterways. The core of PAs will be governed under the new Wildlife (protection and safety) Act 2012 of Bangladesh. The three new Wildlife Sanctuaries will encompass the habitats of two globally threatened flagship species of cetaceans: the Ganges River dolphin and the Irrawaddy dolphin which occur in the Sundarbans in sufficient numbers and hence their conservation will serve as a global safety net against their global extinction. Legally, Wildlife Sanctuaries are areas closed for hunting, shooting or trapping of wild animals and are declared under Article 23 of the Bangladesh Wildlife (Preservation) Order, 1973 for the protection of wildlife and all natural resources such as vegetation soil and water therein (paragraph) (p) of Article 2). Such Sanctuaries equate to IUCN Protected Areas Management Category IV (Habitat/Species Management Area). The buffer areas will equate to IUCN Category VI Protected area with sustainable use of natural resources. Although the wider Reserve Forest areas in Bangladesh do not legally considered protected area, given the intention of the government of Bangladesh to maintain the globally important Sundarban forests, such forest areas are expected to continue to be under strong government protection. The protected areas and buffer areas

management will be led by the Wildlife and Nature Conservation Circle of the Forest Department, and the Reserve Forest management will continue to be under the Forest Management Circle. The project will support joint work between these two units within the Forest Department (in Khulna Circle) to effectively work together to implement and promote aquatic biodiversity conservation. Whilst the area of new PA has been tentatively defined, the project will finance their design (their external boundaries and internal zoning) and their management plans, in order to ensure that they adequately take into account landscape-wide considerations of connectivity, allocate resources correspondingly and make appropriate provision for their sustainability. Furthermore, the project will support the development and implementation of systems and equipment for monitoring, surveillance, enforcement and reporting. The project will support the formal declaration of PA and buffer areas around the protected areas. The project will support the delineation, gazettelement and establishment of the PAs and buffer areas and develop the management capacities of the Khulna Forest Division, which currently has weak capacities in aquatic biodiversity conservation planning and implementation. Under the newly enacted "The Wildlife (Preservation and Protection) Act, 2012, the Forest Department is the lead government agency for protected areas management in Bangladesh. However, relevant partnerships will also be developed with other government agencies that have relevance to wetlands management, particularly the Fisheries Department to build on the knowledge and capacities they have specifically on wetlands management. Appropriate coordination mechanism will be developed for the new PAs management at the site level. These will be detailed during the full project proposal development. The plans will be designed to facilitate joint conservation work across the three PAs (species and habitat monitoring and enforcement, amongst others). These three sites host very high populations of the two dolphin species as they have deep pools, sharp meanders and river confluences that are sheltered from the impacts of tides. These sites also serve as vital habitat for calves of both dolphin species. The PAs are ecologically linked through a network of estuarine waterways. These areas also support other globally important aquatic wildlife such as fishing cats, otters etc. It will accomplish this through innovative and interactive training programs for the PA staff that will include professional training opportunities and sustained mentoring support. Training programs will also include the use of MIST software, a user-friendly spatial management information system designed to service PA management, and participatory techniques to work with local communities and other stakeholders.

In order to ensure that the capacity of government and other stakeholders in aquatic PA management is sustained beyond the duration of the project, the project will also ensure strong coordination and collaboration with institutions and experts working on aquatic biodiversity conservation. To achieve this, a national technical group will be established. It is expected that this strong body will play a strong advisory and advocacy ("aquatic biodiversity champions") role to further conservation of aquatic biodiversity at the new protected areas and in other areas nationally. They will also help to ensure that there are no duplication of actions and that aquatic biodiversity conservation priorities nationally are developed through strategic visioning and prioritization, and the urgency of actions are communicated to all relevant stakeholders.

Component 2: Community-based ecosystems management to support aquatic biodiversity conservation: Under this project, conservation management in the three new PAs will be strengthened through strong community co-management of the buffer areas and through their strong involvement in aquatic biodiversity conservation within the Reserve Forests as well, in order to safeguard aquatic and other global biodiversity in the area as well as to maintain/ sustain their prey and habitats. At least an area of 100,000 ha will be targeted by the project for effective co-management for aquatic biodiversity conservation, with the area consisting of buffer areas. The project will promote a strong participatory and consultative approach to ensure that partnerships are strengthened amongst local communities, government agencies, NGO's and other projects working on sustainable development initiatives in the Sundarbans. The innovation in the project will come from strengthening community capacities for managing riverine ecosystems and aquatic biodiversity management, which has not been a strong focus in Bangladesh till date. Community co-management structures will be developed (such as village conservation groups at village level and inter-group coordination/ collaboration mechanisms) and explicit provisions will be made community level landuse management plans to facilitate and conserve biodiversity, derived from participatory analyses of resource management options and zoning options. The project will promote the role and capacities of village level participation mechanisms in the design and implementation of plans and programmes on the conservation and sustainable use of BD and the solution of priority environmental programmes, in order to maximize the relevance, local acceptance and therefore social sustainability of these. The project will ensure that local development plans and policies are also consistent with wetland PA management plans and biodiversity conservation is factored into them. Local communities and other stakeholders will be assisted to develop agreements/ codes of conduct, indicators and measures to monitor environmental status for this area along with concerned government agencies. Such support will include the promotion of appropriate fishing gears so that globally important species such as dolphins are not accidentally ensnared; that some areas are seasonally closed off to ensure that sensitive breeding grounds of species such as turtles are not disturbed or their eggs are not removed for consumption or sale. The project will ensure that there is increased

awareness and engagement of local communities and the private sector in landscape conservation and that strong gender concerns are built into project activities. Local youth groups and school children will also be involved in awareness raising activities. The project will ensure that livelihoods enhancement and or modification are targeted and promoted at existing and emerging livelihoods that have direct negative impacts on the biodiversity values of the sites so as to ensure the direct linkages between project supported actions and biodiversity impacts. These could include sustainable agriculture practices that promote reduced use of agrochemicals, maintenance of vegetations on river banks as opposed to clearing them, and appropriate fishing practices as noted earlier.

Summary of global environmental benefits

The direct global benefits the project will deliver include conservation of globally important habitats totalling around 100,000 ha in the Sundarbans of Bangladesh, that houses globally threatened populations of last two remaining freshwater dolphin species (including new protected areas, buffer areas). Through the support of this project Bangladesh will ensure that it is a global safety net for preventing the extinction of two threatened, iconic aquatic species as well as other globally threatened species. The areas identified to create protected areas have significant global populations of these species. In addition to protection of breeding populations of the two globally threatened cetacean species, the wetland also benefit other aquatic species including the Critically Endangered river terrapin (*Batagur baska*), Endangered masked finfoot (*Heliopais personatus*), Vulnerable small-clawed otter (*Aonyx cinerea*), and the estuarine crocodile (*Crocodylus porosus*). The Sundarban mangroves are also important bird areas (IBA), which host populations of *Pelecanus philippensis*, *Leptoptilos javanicus*, *Leptoptilos dubius*, *Haliaeetus leucoryphus*, *Heliopais personata*, *Eurynorhynchus pygmeus*, and *Rynchops albicollis*² and conservation of aquatic habitats, will also contribute directly to the conservation of several of such bird species

B.3. SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT INCLUDING GENDER DIMENSIONS:

Local communities living around the protected areas will directly benefit from the project through sustainable management of the buffer areas, through income generation from tourism as well as benefits from conserving wetlands that are also important habitats/ spawning grounds of fish species that the local depend on. In effect, the protected areas will also act as fish reserves, and an analysis in Bangladesh has noted that establishing fishing reserves are valuable management tools in floodplain river fisheries because they conserve fish stocks and may increase local catches; their high visibility makes illegal fishing easy to detect; they are conceptually simple with easily understood effects; and they are traditional approaches in many places with proven local acceptability³. Additionally, insights on the ecological impacts of climate change will support the development of adaptive management responses and their incorporation into sustainable strategies for local fisheries and local adaptation measures. The involvement of women in all aspects of the project, including key roles in research and educational outreach and consideration of their needs in local communities, will ensure that gender differences in resource use and management, as well as the types of incentives needed for successful conservation, are fully incorporated into management plans and their implementation. The socioeconomic benefits to be achieved by the project, the population benefiting (including women) will be quantified during the full project document preparation phase. At least 20,000 people are expected to be directly and indirectly benefited by this project (and will be confirmed during the PPG).

B.4. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS AND MEASURES THAT ADDRESS THESE RISKS:

Risk	Level	Mitigation
Lack of community and stakeholder support due to perception that PAs will adversely affect livelihoods.	Low to Medium	The project will have a strong focus on community co-management that will ensure participation of local people and stakeholders. The project will also ensure that local communities are consulted and involved in the design of the project. The benefits to them in establishing protected areas will be explained and mitigation measures will be designed for any loss of livelihood opportunities brought about by the creation of protected areas.
Climate change impacts make the PAs unsuitable for conserving aquatic diversity.	Low	The PA management plan in Component 1 will include a mechanism to periodically review to determine if the location, size and configuration of the PAs should be altered to protect aquatic diversity every ten years to ensure that the PAs are relevant for the objectives

² <http://www.birdlife.org/datazone/userfiles/file/IBAs/AsiaCntryPDFs/Bangladesh.pdf>

³ http://www.fmsp.org.uk/Documents/r8486/r8486_7.pdf

		of aquatic conservation.
Inter-community conflicts may arise due to different interests of communities on use of aquatic biodiversity	Medium	Inter and intra-community conflicts may arise due to differential dependence and interests of stakeholders on the use/ conservation of aquatic biodiversity. The project will ensure that effective stakeholder analysis is undertaken and rights and interests of different stakeholder groups are effectively considered – and if any negative livelihood impacts are likely due to project actions, then adequate substitution or compensations are factored in by the government. Appropriate community level mediation mechanisms will also be promoted, with help and involvement of local government officials and NGOs working in the area.

B.5.KEY STAKEHOLDERS INVOLVED IN THE PROJECT:

Stakeholders	Relevant roles
Forest Department	The Forest Department will be the lead institution for this project. Its office at Khulna Division will be the primary project implementation unit and will be the recipient of capacity building under Component 1 and, The Forest Department will be involved in the overall project implementation, coordination and in ensuring cooperation / collaboration with other stakeholders identified below. At the national level, the FD will ensure that lessons learnt from this project are fed into developing other aquatic protected areas creation and in integrating aquatic biodiversity conservation in existing PAs as well.
Local communities	Local communities will benefit from the creation of PAs as outlined in the PIF above. The project will ensure a strong collaborative approach in spearheading the conservation agenda. The project will also foster close coordination with local environmental management committees in each Union subdivision. Extensive consultations will be undertaken during project preparation through community workshops.
Women's associations	Community level women's associations have been promoted in Bangladesh by the government and many NGOs as a means to empower them economically and politically, Such associations will be involved to create opportunities for women and to ensure gender specific roles are built into PA, buffer area management
Nature tourism operators	Small scale tourism exists in the Sudarbans that is based on dolphin watching. Some boat captains have been involved in documenting locations where sightings of dolphins occur, in order to build a more comprehensive data on where the species are located at different times of the year. The project will strengthen capacities of local tourism operators, such as by promoting the existing boat captain's sighting network, providing guidance for dolphin-watching within tourism programs, including input from tourism operators into PA management plans.
Local social service, conservation NGOs	Local NGOs will be involved, as appropriate, to provide information to communities on aquatic conservation, sustainable fisheries management, and strategies to cope with climate change and declining freshwater flows – local NGOs including Prodipan, CARINAM, Rupantar, and Coastal Development Partnership,. They may also be involved in community mobilization and awareness raising activities and in conflict mitigation. Since some of these NGOs are involved in promoting sustainable livelihoods, the project will partner with them to strengthen appropriate actions and to ensure that the NGO promoted activities are compatible with conservation actions being promoted by this project,
International conservation organizations	Several international conservation organizations have been active partners in conservation actions in Bangladesh. For example, WCS has been providing support through capacity building, research and monitoring, educational outreach, and the development of management plans for aquatic conservation. Other international conservation organizations active in Bangladesh include IUCN, WWF, and CARE International etc. Such organizations will have a strong role under Component 1, where a partnership has been envisioned to strengthen national capacities to manage threatened aquatic species by exchanges of information, knowledge, expertise and experiences. Additionally, specific organizations may be used for implementing certain aspects of the project – such as to support PA management planning – and these will be

outlined in the full project document. Some of the organizations will also provide co-finance to this project.
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B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The project will develop effective coordination with ongoing projects to build synergies and to avoid duplication of work. Key relevant projects include the Integrated Coastal Zone Management (ICZM) Program, which aims to reduce poverty, develop sustainable livelihoods, and integrate coastal zone issues into national planning. This is a multi-sectoral and multi-ministerial initiative led by the Ministry of Water Resources (MoWR) and the Water Resources Planning Organization (WARPO). The project will also have strong collaboration with the USAID funded Integrated Protected Area Co-management (IPAC) project that supports the FD to develop and implement a conservation strategy for ecologically and economically significant PAs, and develop a Sundarbans Reserved Forest (SRF) co-management plan. The project will coordinate with activities of the EU funded Sundarbans Environmental and Livelihoods Security Project (SEALS), which supports sustainable use of resources by local communities, forests restoration and cyclone-proofing projects, and the development of an Information Management System to guide forest protection and management in SRF. This project will also cooperate with the Sundarbans Tiger Project of the Bangladesh FD, Wildlife Trust of Bangladesh and the Zoological Society of London to increase the effectiveness of educational, capacity building, and field research and monitoring activities conducted by both projects.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

UNDP Bangladesh has supported several projects, included several GEF funded projects, in the past that are relevant to this project. UNDP is Bangladesh supported the development of “Bangladesh Biodiversity Strategic Action Plan” and well as the “National Capacity Self Assessment for Global Environmental Management”. UNDP also implemented the UNDP-GEF “Coastal and Wetland Biodiversity Management at Cox's Bazar and Hakaluki Haor”. UNDP also implemented a 26 million dollar Sustainable Environment Management Program (SEMP) between 1998- and 2003, which has several components – including a component to strengthen Policy and Institutions, one on promoting Participatory Eco-System Management, Community Based Environmental Sanitation, Awareness and Advocacy and Training and Education. Further UNDP, in partnership with GoB, UN agencies and partners, has embarked on the formulation of new programme with the overall objective to improve environmental governance including biodiversity conservation and protected area management in Bangladesh. It is expected that a sizable programme (at least to the tune of 5 million) will be designed to complement the proposed GEF funded proposal for securing a future for aquatic diversity.

C.1. INDICATE THE CO-FINANCING AMOUNT THE GEF AGENCY IS BRINGING TO THE PROJECT:

UNDP will provide co-finance worth 1,250,000 dollars.

C.2. HOW DOES THE PROJECT FIT INTO THE GEF AGENCY'S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROJECT IMPLEMENTATION:

UNDP's new global Strategic Response Framework for Biodiversity includes a Signature Programme on protected areas as one of its three signature programmes. UNDP has been supporting numerous protected areas strengthening projects in Asia and the Pacific on PA estate expansion and management, in partnership with the GEF. UNDP has a very strong comparative advantage to work on PA issues. This project is aligned with Bangladesh's UNDAF Pillar 5: Climate Change, Environment, and Disaster Risk Reduction & Response for Bangladesh⁴ for the period 2012 -2016 for which UNDP has been designated as the lead UN agency in the country. The project will contribute directly to Outcome 5.2: By 2016, vulnerable populations benefit from natural resource management (NRM); environmental governance and low- emission green development; and the Output 5.2.1: Communities and local and National authorities are better able to conserve biodiversity and manage natural resources in a pro-poor and Sustainable manner. The geographic location of the proposed protected areas also falls within the 20 priority districts identified under this document.

UNDP Bangladesh's Climate Change, Environment and Disaster Management (CCED) is comprised of 7 senior technical staff with combined experience of 93 years. At least one senior professional, with expertise on biodiversity conservation and environmental management, will be assigned to manage this project, along with support and administrative staff under the overall supervision of Assistant Country Director (CCED) from UNDP Bangladesh.

⁴ <http://www.un-bd.org/UNDAF/Doc/BANGLADESH%20UNDAF%202012-2016%20-Final.pdf>


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

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template).

NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Mesbah UI Alam	GEF Operational Focal Point and Secretary (MOEF)	Ministry of Environment and Forests	12/09/2012

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator	Signature	Date	Project Contact	Telephone	Email Address
Yannick Glemarec, UNDP-GEF Executive Coordinator		January 10, 2013	Sameer Karki Regional Technical Adviser-EBD UNDP	+662 304 9100 Ext. 2729	sameer.karki@undp.org

Annex: Location of the new protected areas within the Sudarbans

