



**Terminal Evaluation of Expanding the Protected Area System to  
Incorporate Important Aquatic Ecosystems project**

**(DOLPHIN – EPASIIAEP)**

**UNDP PIMS 4620**

**GEF ID 5099**

**UNDP AWRD ID 00085970**

***Final report***

***April 16th 2020***

***Submitted to UNDP Bangladesh***

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## Acronyms and Abbreviations

AIG	Alternative Income Generation
APR	Annual Progress Report
BFD	Bangladesh Forest Department
CBO	Community Based Organization
CMEC	Co-Management Executive Committee
CNRS	Centre for Natural Resource Studies
CO	Country Office
CODEC	Community Development Centre
CPAP	Country Program Action Plan
CPD	Country Programme Document
DCT	Dolphin Conservation Team
DoF	Department of Fisheries
ECA	Ecologically Critical Area
EMS	Ecosystems Management System
EOP	End of Project
EPASIIAEP	Expanding the Protected Area System to Incorporate Important Aquatic Ecosystems Project
GEF	The Global Environment Facility
GoB	Government of Bangladesh
Ha(s)	Hectare(s)
IMED	Implementation, Monitoring and Evaluation Division
IUCN	International Union for the Conservation of Nature and Natural Resources
LFM	Logical Framework Matrix
METT	Management Effectiveness Tracking Tool
M&E	Monitoring and Evaluation
MoEFCC	The Ministry of Environment, Forests and Climate Change
MoL	Ministry of Land
MTR	Mid-term Review
NPSC	National Project Steering Committee
NEX	Nationally Executed Project
NGO	Non-Governmental Organization
NIM	National Implementing Modality
NPD	National Project Director
PA(s)	Protected Area(s)
PMU	Project Management Unit
PPG	Project Preparation Grant
PSC	Project Steering Committee
SLGs	Sustainable Livelihood Groups
TAPP	Technical Assistance Project Proforma
TE	Terminal Evaluation
ToR	Terms of Reference
TPP	Technical Project Proposal
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNESCO	United Nations Education Science and Culture Organization
US\$	United States Dollar
VCG	Village Conservation Group
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

## Executive Summary

### Project Information Table

<b>UNDP/GEF Project Title:</b>	Expanding the Protected Area System to Incorporate Important Aquatic Ecosystems Project (DOLPHIN – EPASIIAEP)		
<b>GEF Project ID No:</b> <b>UNDP Project ID No:</b> <b>Implementing Agency:</b> <b>Co-Implementing Partners:</b>	5099 4620 Ministry of Environment, Forests and Climate Change Bangladesh Forest Department	<b>PIF Approval Date:</b>	21 February 2013
<b>Region and Countries included in the Project:</b>	East Asia and the Pacific, Bangladesh; Bangladesh Sundarbans and neighboring areas	<b>Project Document (ProDoc) Signature Date (date project began):</b>	30 June 2015
<b>GEF Focal Area:</b> <b>GEF Operational Programme:</b>	Biodiversity Eight (8) Water Body based Operational Programme	<b>Inception Workshop date:</b>	18 July 2017
<b>GEF Strategic Programme:</b>	<ul style="list-style-type: none"> <li>• Catalysing sustainability of protected area systems</li> <li>• Mainstreaming Biodiversity Conservation in Production Landscapes/River/Wetlands and Sectors</li> </ul>	<b>Midterm Review completion date:</b>	23 Oct 2019
<b>Implementing Agency</b> <b>Executing Agency:</b>  <b>Project Partners:</b>	UNDP Bangladesh Bangladesh Forest Department, Ministry of Environment, Forests and Climate change NGOs (IUCN-CNRS consortium, CODEC).	<b>Planned closing date:</b>	28 June 2020
<b>Project Budget:</b>	<ul style="list-style-type: none"> <li>• Cash: US\$ 1,626,484</li> <li>• Partner managed: US\$3,00,000 (Government);US\$5,500,000 UNDP</li> <li>• TOTAL budget: US\$10,126,484</li> </ul>		
<b>Funded By:</b>	The Global Environment Facility (GEF)		
<b>Programme/Project Goal:</b>	Contribute to sustainable management of important aquatic ecosystems of the Sundarbans.		
<b>Programme/Project Purpose:</b>	(i) To introduce an effective management system in the existing protected areas established for dolphin conservation in the Sundarbans. (ii) To expand the coverage of dolphin protected areas in and around the Sundarbans. (iii) To enhance alternative livelihood options for local fisher folk to reduce their dependency on aquatic resources. (iv) To enrich knowledge and information base of aquatic habitats in the region. (v) To provide sectoral policy recommendation for aquatic ecosystem friendly practices.		

### Project Description

The key objectives of the Terminal Evaluation (TE) of Expanding the Protected Area System to Incorporate Important Aquatic Ecosystems project (DOLPHIN – EPASIIAEP) are to assess the project's achievements, and to draw lessons that can both improve the sustainability of benefits from the project, and aid in the overall enhancement of UNDP programming.

The Sundarbans, the world's largest contiguous patch of mangrove, have a globally significant role in biodiversity conservation and are of immense ecological value. The Sundarbans in Bangladesh extend over an area of about 6,017 km<sup>2</sup> and support Asia's last two remaining species of freshwater and brackish water dolphins - the Endangered Ganges River Dolphin (*Platanista gangetica*) and the vulnerable Irrawaddy Dolphin (*Orcaella brevirostris*). The Ganges and Irrawaddy dolphins are under increasing threat due to unsustainable fishery

practices, increasing maritime traffic, unplanned economic development, poaching, land-use change and climate change. In order to ensure the long-term conservation of these cetaceans, it is imperative to consolidate their key habitats, while also taking into account development needs, livelihoods and the impacts of climate change. However, inadequate capacities at the level of government and communities hinder the sustainable management of the sites. The project was designed to address these barriers and to augment the conservation prospects of the region.

The long term **project goal** was to contribute to the sustainable management of important aquatic ecosystems of the Sundarbans.

The project's **development objective** (DO) was to build capacity to manage the existing protected areas established for dolphin conservation and also expand their operational coverage (new protected areas and buffer areas) while still meeting the livelihood aspirations of local communities especially the fishers.

The development objectives were to be achieved through the implementation of two outcomes (components):

- Outcome 1: Important aquatic ecosystems of the Sundarbans supporting the globally threatened species of cetaceans conserved.
- Outcome 2: Community-based ecosystems management systems in place to support aquatic biodiversity conservation.

### Evaluation ratings

The evaluation ratings are summarized in the Table A. Overall the project is rated as **Moderately Satisfactory**.

**Table A; Evaluation ratings**

1. Monitoring and Evaluation	rating	2. IA& EA Execution	rating
M&E design at entry	MU	Quality of UNDP Implementation	MS
M&E Plan Implementation	MU	Quality of Execution - Executing Agency	MS
Overall quality of M&E	MU	Overall quality of Implementation / Execution	MS
3. Assessment of Outcomes	rating	4. Sustainability	rating
Relevance	HS	Financial resources:	ML
Effectiveness	MS	Socio-political:	ML
Efficiency	MS	Institutional framework and governance:	MU
Overall Project Outcome Rating	MS	Environmental	MU
		Overall likelihood of sustainability:	MU
<b>OVERALL PROJECT RATING: Moderately Satisfactory</b>			

**Notes:** Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

The overall quality of Monitoring and Evaluation is rated as **Moderately Unsatisfactory**. The Logical Framework did not clearly set out a number of baselines and indicators, and the feasibility of the indicators, baselines and targets were neither questioned at the Inception stage of the project, despite a 2-year delay which enhanced the need for scrutiny, nor sufficiently revised following the MTR. Generally, not enough attention was paid to Results Based monitoring by the project, although additional indicators were added, systematic

reporting on progress towards the official targets in the Results Framework is not evident, and the project did not systematically adapt to M&E recommendations.

The quality of overall implementation and execution is rated as **Moderately Satisfactory**. The two year delay in start up is due to the 2 year timeframe to achieve TPP approval, there were also delays in procurement of the two key project partners. Given that the key project partners were not engaged until July 2018, the core activities of the project were in effective compressed to a 18 month timeframe. While the project has work hard to deliver the outputs of a 5 year project in 3 years, there are many approvals pending that are critical to the sustainability of the project's outputs that may not now happen within the project's timeframe. It was also strongly felt that more time was needed to embed the core community activities – namely the Dolphin Conservation Teams and the alternative livelihood support. The project intended to develop monitoring and evaluation frameworks and a replication strategy for effective aquatic PA management for the Sundarbans and for other aquatic ecosystems in the country, but this has done been done.

Overall the project outcome is rated as **Moderately Satisfactory**. The project is considered to be highly relevant both nationally and globally as it sought to protect a globally vulnerable species and its habitat. However, the project has only met 6 of its 12 targets. It has not been possible to rate 2 targets due to the uncertainty around the baseline<sup>1</sup>. The un-rated indicators have not materially affected the overall project rating as they are considered to *probably* show a positive trend towards the targets. For a number of indicators, this evaluation has provided an interpretation of the indicators / baseline / targets based on available evidence to rate the project as on track to meeting its target. Strict rating against the indicators would have indicated that the targets had not been achieved, but this is considered not to be a good reflection of the situation. There was no indicator tracking progress on gender, however the project has had notable achievements on gender, successfully targeting and empowering women in the project's selected communities which can serve as a case study for other sites in Bangladesh. The project's two indicators related to cross sectoral working and planning did not achieve their target but progress was made. This is an area requiring further attention as integrated working in the Sundarbans is critical to its sustainability.

The overall likelihood of sustainability is rated as **Moderately Unlikely**. It is not clear how the momentum will be sustained after the project has ended. On-going support for communities and the BFD conservation staff needs to be secured. The BFD is understaffed and unfunded and there is no approved budget for SMART patrolling or to continue other lines of project support related to awareness and capacity building and livelihoods. There are some nascent ideas around sustainable financing that need further development. Institutionally, BFD capacity requires further strengthening and approvals of many of the projects outputs need to be secured, namely knowledge products to embed project knowledge and approaches and facilitate replication, biodiversity friendly sector strategies to spur sectoral support for conservation and the national and regional committee to support integrated governance. The alternative income generating activities appear to be working well, but the sustainability of such initiatives will only become apparent overtime. The area is extremely vulnerable to climate change and storms which destroys homes on a recurring basis, putting pressure on very poor and vulnerable households.

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<sup>1</sup> The two indicators not rated are (i) Indicator 7: Reported mortality of dolphins by entanglement in nets and vessel hit. It is likely that mortalities have decreased but it is not possible to verify this against the baseline; and (ii) Indicator 10: Amount of resources flowing to local communities annually from community based ecotourism activities, which has not been measured and the target set was unrealistic.

## Conclusions, Lessons, Recommendations

The EPASIIAE project has been an innovative conservation project for Bangladesh aimed at protecting a flagship aquatic species within the Sundarbans with a focus on local community involvement. The project endeavored to take an holistic approach. It involved stakeholders at all levels (community to Regional and National Government) and worked with the key sectors active in the Sundarbans. Key achievements of the project are:

- Expanding the operational coverage of PAs. While the target set was overambitious and the project adapted its goal to designating new dolphin conservation sites, 3 new dolphin sanctuaries have been approved comprising 22 km<sup>2</sup> (core area) and 12.27 km<sup>2</sup> (buffer zone area).
- Awareness and capacity building. The project had an extensive awareness raising programme. It built awareness of dolphin conservation at the community to national level, sensitizing at least 50,000 people in dolphin conservation through a variety of approaches (e.g. community meetings, campaigns, international day observance, *shushuk mela* (dolphin fair) and television clips using a popular film actor). It has also built the capacity of the BFD in conservation.
- Linking dolphin conservation with livelihood enhancement and poverty alleviation and community engagement. The project formed seven DCTs who are working with the BFD in dolphin monitoring and patrolling activities. The alternative livelihoods support provided to 1,000 households has empowered women and reduced the pressure on fishing.
- Initiation of a move towards integrated sectoral planning and working, through the drafting of biodiversity friending sector guidance and its attempt to establish cross sectoral committees at the national and regional level.
- Production of a range of knowledge products, which can be used to strengthen aquatic conservation nationally.

## Lessons

- Attention needs to be paid to the Logical Framework at the Inception meeting to assess the realism and accuracy of the indicators, baseline and targets as set out in the Project Document. This is especially important when the project has faced extended delays in start up and /or when national circumstances have changed since the design phase.
- When selecting Alternative Income Generating Activities, it is important to understand and support the preferences of the beneficiaries as this encourages uptake and increases the likely of sustainability of the initiatives.
- Creation of sustainable financing solutions are crucial to embed local community initiatives.
- For complex conservation project such as this a strong working relationship between the different offices of the BFD is critical.
- Undertaking a five year program of work in three years has implications for impact and sustainability. Time is needed to embed awareness, learning and new approaches.



## Recommendations

The recommendations are summarized in Table B, highlighting the party responsible for addressing the recommendation and the timeframe for implementation. The recommendations are categorized as: (i) actions needed to reinforce the initial benefits from the project; and, (ii) proposals for future programming, which can be championed by a range of stakeholders including MoEFCC, BFD, and UNDP.

**Table B: Recommendations**

No	Recommendation	Responsible party	Completion date / Timeframe
<b>Actions needed to reinforce the initial benefits from the project</b>			
1	Secure approvals from MoEFCC of knowledge products and plans e.g. the Dolphin Atlas, Dolphin Action Plan, Halda dolphin conservation management plan, sectoral guidelines, CBRMP, and Strategic Livelihoods Sustainability Plan) and the formation of national and regional committees. A strategy should also be prepared for disseminating the knowledge products and plans once approved.	PM, PD, MoEFCC	June 2020
2	<b>Documentation of lessons learned.</b> Given that this is an innovative project in Bangladesh, it is especially important that lessons from the project are captured and disseminated to improve decisions on the management of aquatic habitats.	PM, PD, BFD, MoEFCC	June 2020
3	<b>Set out replicability of project's outputs and approaches.</b> Given that the replicability of the project's initiatives is a key design feature of the project, it is recommended that the project makes explicit how the knowledge products, plans and approaches developed by the project can be applied elsewhere in Bangladesh, conditions under which they are or are not applicable, challenges / barriers, lessons in applications (both technical and operational).	PM, PD, BFD, MoEFCC	June 2020
<b>Recommendations for future programming</b>			
4	Reach an agreement between the Government of Bangladesh, UNDP and GEF on the streamlining of the GEF and TPP approval processes	UNDP Bangladesh, Government of Bangladesh, GEF	On-going
5	Strengthen results based management and familiarity with GEF procedures among UNDP-CO and GEF PMs.	UNDP-CO, RTA	December 2020
6	Enhance enforcement capacity. On-going enforcement of the area and the new WS recently gazetted will be critical going forward. In particular, additional enforcement capacity for Pankhali Wildlife Sanctuary will be needed which is outside of the Sundarbans.	BFD, MoEFCC	Ongoing
7	Continued support for communities. In order to build on the project's progress in integrating communities into conservation efforts in the Sundarbans, the communities in the area need on-going expert support in sustainable livelihoods, awareness raising and monitoring activities.	BFD, MoEFCC	Ongoing
8	Continued support for integrated planning.	BFD, MoEFCC, UNDP	Ongoing
9	Increase revenue for protected area systems to meet expenditures required for management through the identification and development of sustainable financing and cost saving opportunities	MoEFF, BFD, MoF, UNDP	Ongoing
10	Raise awareness of contribution of biodiversity to economy and livelihoods	MoEFF, BFD, MoF, UNDP	Ongoing

# 1 Introduction

## 1.1 Purpose and objective of the TE

In line with UNDP Guidance on Terminal Evaluations of GEF projects (UNDP, 2012) the objectives of the Terminal Evaluation (TE) of Expanding the Protected Area System to Incorporate Important Aquatic Ecosystems project (DOLPHIN – EPASIAE) are to:

- promote accountability and transparency, and to assess and disclose the extent of project accomplishments.
- synthesize lessons that can help to improve the selection, design and implementation of future GEF financed UNDP activities.
- provide feedback on issues that are recurrent across the UNDP portfolio and need attention, and on improvements regarding previously identified issues.
- contribute to the overall assessment of results in achieving GEF strategic objectives aimed at global environmental benefit.
- gauge the extent of project convergence with other UN and UNDP priorities, including harmonization with other UN Development Assistance Framework (UNDAF) and UNDP Country Programme Action Plan (CPAP) outcomes and outputs.

## 1.2 Scope and Methodology

This TE was undertaken over the period December 2019 – March 2020 by an independent international consultant (the lead evaluator), contracted for 30 days with the support of a national consultant also contracted for 30 days. The Terms of Reference (TOR) for the TE are provided in Annex 1.

The TE followed the approach and method for conducting project terminal evaluations of UNDP supported GEF financed projects. Hence, the evaluation was framed around the following key criteria - relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. The **Evaluation matrix**, which sets out the evaluation questions covering each of these criteria along with indicators, sources and methodology, is presented in Annex 4. An inception report was completed prior to the TE mission which identified additional specific questions to be addressed as part of the TE.

A review was undertaken of key sources of information including: the project document, Inception report, Annual Project Implementation Reports (PIR), progress reports and work plans, midterm review (MTR), GEF focal area tracking tools, project reports (knowledge products and plans), awareness raising materials and national strategic documents. Documents reviewed are listed in Annex 3.

The TE has sought to follow a collaborative and participatory approach engaging closely with the Project Team, government counterparts (e.g. the National Project Director), the UNDP Country Office, UNDP-GEF Regional Technical Adviser (RTA), and other key stakeholders.

A mission was undertaken from the 22<sup>nd</sup> to 31<sup>st</sup> January 2020 during which time face to face interviews were held with key project partners and other stakeholders. The mission included four days in Khluna where the Project Management Unit (PMU) is based, with two days spent visiting the project sites. Consultations through group discussion were held with two Sustainable Livelihood Groups (SLG) whose members had received livelihood support from the project, covering 39 women in total across two villages. Focus group discussions were also held with two Dolphin Conservation Teams (DCT) established by the project, covering 18 men across two villages. Given that it is only possible to reach the project site by boat (1.5 hours by speedboat from Khulna) the evaluation appreciated the opportunity to spend two days meeting with project beneficiaries in the project area. Interviews were held with senior Government official in Dhaka (from the MoEFF and BFD), however the high turnover of staff

meant that it was not always possible to meet with people who had good knowledge of the project. While the project did not have an indicator related to gender, the project's approach to gender considerations was evaluated through stakeholder discussions and document review, particularly in relation to its livelihood component.

All verbal discussions were cross referenced with the available documentation and differences in opinion have been recorded in this report where relevant. The agenda for the mission and list of interviewees are presented in Annex 2. A draft report was made available to stakeholders for their review (11 March 2020) with all comments received addressed. Additional comments were also received on the 'final' report (27 March 2020) and incorporated.

### 1.3 Challenges and limitations

In addition to the challenges mentioned above relating to travel time to the project sites and the high turnover of Government staff at the national level with knowledge of the project, the terminal evaluation would have benefitted from closer engagement with UNDP and the project team prior to the mission to collectively discuss and agree the mission agenda and principles and purpose of the evaluation. Limited project documents were provided prior to the mission. There was also limited systematic monitoring and reporting of the project's activities, outputs and outcomes at the *project wide level* to inform results based monitoring, which was therefore built up from available documents as part of the evaluation.

### 1.4 Structure of the TE report

The rest of this report is organized as follows: Section 2 sets out the context to the study and describes the project; Section 3 presents key findings of the TE as they relate to three main areas – project design and formulation, project implementation and project results; Section 4 present conclusions, lessons and recommendations.

## 2 Project Description

### 2.1 Development context

The Peoples Republic of Bangladesh covers an area of 147,570 Km<sup>2</sup> and has a population of 163,847,992 (UN website). It's population density of 1,110 per km<sup>2</sup> is among the highest in the world. Around 75% of the population is rural and a significant proportion (around 35 million or 22%) live along the 710 km long coastal belt. With a population growth rate of around 1.34% per annum, Bangladesh's population is projected to reach 220 million by 2020 (Project Document).

Bangladesh reached lower middle-income country status in 2015 and in 2018 became eligible for graduation from the UN's Least Developed Countries (LDC) list and is on track to achieve this in 2024. Bangladesh has made significant progress in reducing poverty from 44% in 1991 to 14.8% in 2016/17 (based on the international poverty line of US\$1.90 (using purchasing power parity exchange rate)<sup>2</sup>, however poverty alleviation remains a huge challenge with 24 million people still living below the poverty line.

About 80% of the country is comprised of one of the world's largest deltas bordered by India in the West, North and Northeast, by Myanmar in the Southeast and by the Bay of Bengal in the South. The Sundarbans, the world's largest contiguous patch of mangrove, extends over 10,000 km<sup>2</sup> in Bangladesh and India, and is listed as one of WWF's Global 200 Eco-regions. The Bangladesh part of the Sundarbans extends over an area of about 6,017 km<sup>2</sup> between 89°00' and 89°55' East and 21°30' and 23°30' North. An estimated 411,230 ha is covered by forest; the rest is under water (although this is variable according to seasonal discharge) in the form of rivers and creeks (Project Document).

The Sundarbans have a globally significant role in biodiversity conservation and is of immense ecological value. It supports Asia's last two remaining species of freshwater and brackish water dolphins, the Endangered Ganges River Dolphin (*Platanista gangetica*) an obligate freshwater cetacean of the South Asian subcontinent, and the vulnerable Irrawaddy Dolphin (*Orcaella brevirostris*), a facultative freshwater cetacean found in the estuaries and some large rivers of the Indo-Pacific.

The Sundarbans was declared as Reserved Forests in 1875 and handed over to the Forest Department (FD) for management. Early management focused on revenue collection and the enforcement of felling rules to reduce over-cutting, particularly in the eastern section of the forest. However, more recently forest resource management has shifted towards an increased emphasis upon environmental and socio-economic issues. The Sundarbans Reserve Forest (SRF) was declared as a RAMSAR Site in 1992 and three **Wildlife Sanctuaries** (Sundarbans West, Sundarbans East and Sundarbans South) were declared as a World Heritage Site by UNESCO in 1997. In addition, a ten-kilometer periphery of the SRF has been declared as an Ecologically Critical Area (ECA) under the Bangladesh Environment Conservation Act of 1995. In 2012, the Government of Bangladesh declared **three Dolphins sanctuaries** - Chandpai, Dudhmukhi and Dhangmari with six channels each and five km segments, that support high densities of the two mentioned dolphin species<sup>3</sup>. This brought the total extent of protected areas to almost 1,400 km<sup>2</sup> or 23% of SRF. Then in August 2017, the Bangladesh government doubled the area of wildlife sanctuary bringing 52% of the area under protection and hence

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<sup>2</sup> World Bank <https://www.worldbank.org/en/country/bangladesh/overview>, accessed 5 January 2020

<sup>3</sup> The Sundarban Reserve Forest (SRF) of Bangladesh falls within the administrative districts of Satkhira in the west, Khulna in the middle and Bagerhat in the east. From a forest administration point of view, SRF lies in one Circle divided into two Divisions (Sundarbans East and Sundarbans West), four Forest Ranges and 55 compartments. The three dolphin sanctuaries fall under the Sundarbans East Division, which is headed by a Divisional Forest Officer. The Sundarbans East Division has two Range offices - Chandpai and Sarankhola - headed by Range Officers.

prohibiting access for local people in over 50% of the area.

The Sundarbans Reserved Forest (SRF) constitutes 52% of the forest coverage of the country and contributes about 41% of the total forest revenue. Interfaced with cultivated lands and intersected by tidal rivers, canals and streams, the Sundarbans supports the lives and assets of the three million people who live in its vicinity. Large human populations in fringe villages depend on the forests and waterways' ecological services for their subsistence and livelihood needs<sup>4</sup>. The Sundarbans also provide natural protection functions for the infrastructure and urban populations in Khulna and in Mongla international shipping port.

The Ganges and Irrawaddy dolphins are under increasing threat due to unsustainable fishery practices, increasing maritime traffic, unplanned economic development, poaching, land-use change and climate change. In order to ensure the long-term conservation of these cetaceans, it is imperative to consolidate their key habitats, while also taking into account development needs, livelihoods and the impacts of climate change. However, inadequate capacities at the level of government and communities hinder the sustainable management of the sites. The project was designed to address these barriers and to augment the conservation prospects of the region.

## 2.2 The project

The long term **project goal** was to contribute to the sustainable management of important aquatic ecosystems of the Sundarbans.

The project's **development objective** (DO) was to build capacity to manage the existing protected areas established for dolphin conservation and also expand their operational coverage (new protected areas and buffer areas) while still meeting the livelihood aspirations of local communities especially the fishers.

The development objectives were to be achieved through the implementation of two outcomes (components).

### ***Outcome 1: Important aquatic ecosystems of the Sundarbans supporting the globally threatened species of cetaceans conserved.***

This outcome mainly focused on the transformative change needed to address existing and emerging threats to biodiversity in the project area. The following outputs were to contribute to the achievement this outcome:

- **Output 1.1: Knowledge generation and dissemination system** improves decision making related to the management of aquatic habitats and sustainable use of resources in the protected areas and buffer zones.
- **Output 1.2: New and additional areas to be managed as Protected Areas** and buffer areas identified, notified and capacities developed among conservation and economic sector staff for strengthening the management effectiveness of biodiversity conservation efforts.
- **Output 1.3:** Support provided to the **implementation of Management Plans** of new PAs and buffer areas to address existing and emerging threats to aquatic biodiversity particularly the cetaceans.
- **Output 1.4: Monitoring and evaluation framework and replication strategy** developed for effective aquatic PA management specifically for the Sundarbans and other aquatic ecosystems across country.

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<sup>4</sup> The Sundarbans is a valuable source of timber, fuel wood, medicinal plants, honey, palm leaves, bees-wax, fish, shells and crustaceans and supports the recreational and tourism industry.

***Outcome 2: Community-based ecosystems management systems in place to support aquatic biodiversity conservation.***

This outcome was to strengthen community capacities for managing aquatic ecosystems, through the following two outputs:

- **Output 2.1:** Community based resource management plan prepared, capacities developed, and financial support extended for operationalizing sustainable resource use practices and conservation of aquatic biodiversity.
- **Output 2.2:** Strategies for alternate income generation and livelihood diversification developed and implemented leading to reduced dependence on natural resources.

The EPASIIAE project document was signed on the 30<sup>th</sup> June 2015, however its final Government approval was on the 16<sup>th</sup> March 2016 and the project started on the 1<sup>st</sup> July 2016. The project will close at the end of June 2020.

The project was executed according to UNDP's National Implementing Modality (NIM). It was implemented by the Ministry of Environment, Forests and Climate Change (MoEFCC), with the Bangladesh Forest Department (BFD) designated as the Responsible Party. The Project Management Unit (PMU) partnered with two NGOs – the Centre for Natural Resource Studies (IUCN-CNRS) consortium and Community Development Centre (CODEC) to implement the project.

The project was implemented in Bagerhat district and covers the three existing dolphin PAs, namely Chandpai, Dudmukhi and Dhangmari wildlife sanctuaries.

Local communities, particularly fishers, were considered to be the most important stakeholders. Other key stakeholders were the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Bangladesh Forest Department (BFD), especially at the district level. Other key public sector stakeholder identified in the Project Documented include the Ministry of Land, Ministry of Water Resources, Ministry of Industries, Ministry of Power, Ministry of Energy and Mineral Resources, Ministry of Fisheries and Livestock, Bangladesh Planning Commission, Disaster Management Bureau, Bangladesh Water Development Board, Water Resources Planning Organization, Bangladesh Meteorological Department, Ministry of Agriculture, Department of Agricultural Extension, National Agricultural Research System of Bangladesh, the Navy, Coast Guard and Port.

The project had a total budget of US\$10,126,484, comprised of US\$1,626,484 (128,493,000 Bangladeshi Taka) from the GEF, and US\$8.5 million in co-financing (US\$3 million from the Government of Bangladesh and US\$5.5 million from UNDP).



## 3 Findings

### 3.1 Project Design / Formulation

The project concept was in line with national development priorities and plans of the country, and was country driven. It aligned with Bangladesh's Sixth Five Year Plan (2011-2015), the primary development agenda for the country, which prioritized several environmental management actions including wetland management. The project also aligned with the objectives of the National Biodiversity Strategy and Action Plan for Bangladesh (August 2004), and responded 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." The project document also considered the National Capacity Self-Assessment carried out in Bangladesh in 2007.

The project design was consistent with the GEF5's *BD Strategic Objective 1: Improve sustainability of PA systems*. In particular, through Outcome 1 the project was designed to fill a gap in the national PA system by establishing new PAs and buffer areas to conserve globally important aquatic biodiversity. Bangladesh is the only country in the world where both the threatened Irrawaddy and Ganges river dolphin species are found in large numbers. The project therefore aimed to provide a safety net for these species against possible extinction.

The **Theory of Change** is not explicitly set out in the project document, and there is no summary diagrammatic overview of how project activities, outputs and outcomes link to the project's objectives and the barriers and drivers associated with each stage. The project document does however define the problem to be addressed and presents a detailed 'threat-scape evaluation' undertaken in consultation with stakeholders and experts during the project preparation phase which assesses threats, root causes and impacts. The desired outcomes and an analysis of barriers are also presented in the Project Document. However, a plan for the phased withdrawal of the project is not provided.

Gender received minimal consideration in the project document<sup>5</sup>. There is no gender mainstreaming analysis or strategy, although this was not a requirement for the project document at the time<sup>6</sup>, and no indicators measuring results from a gender perspective. Despite this, the project's achievement in terms of gender empowerment and equality are notable as discussed in the results section of this evaluation.

The Project Document presents a stakeholder analysis at both the national level and project site level.

#### 3.1.1 Analysis of Results Framework: project logic and strategy, indicators

The project's Logical Framework consisted of twelve indicators, two at the objective level and ten at the outcome level. The Indicators, baselines and targets were problematic for a range of reasons as discussed below<sup>7</sup>.

**Indicator 1: Extent of aquatic environment of the Sundarbans brought under effective conservation planning and management framework.** The end of project target was that 1,020 km<sup>2</sup> (102,000 hectares) were to be under effective conservation planning and

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<sup>5</sup> The main reference to gender in the Project Document is as part of the stakeholder analysis which states the intent to involve community level women's associations in the creation of opportunities for women and to ensure gender-specific roles in PA management, buffer area management and activities envisaged under Component 2 of the project. The "Environment and Social Screening Check List" (Project Document, Annex – 9, Pp. 85) provides minimal details on gender and human rights.

<sup>6</sup> The GEF-6 programme introduced the requirement of a gender analysis as part of project design.

<sup>7</sup> The MTR found that 4 indicators were SMART, 5 were SMART but it was questionable as to whether they could be achieved in the specified timeframe, and 3 required revision.

management. This target is not realistic. The Sundarbans in Bangladesh cover 6,017 km<sup>2</sup>, of which 3,100 km<sup>2</sup> (52%) had already been declared as a Wildlife Sanctuary at the start of project implementation. It is not politically feasible to impose further restrictions on use given that an estimate 3 million people depend on the area. This issue was raised in the Project Implementation Committee (PIC) Meeting on 14 August 2018. The MTR proposed to reduce the target to 800 km<sup>2</sup> (80,000 ha), but this target would still have been unrealistic. The project has contributed to this target by securing the gazettement of 22km<sup>2</sup> of new dolphin conservation areas. However, achievement of this indicator required the approval of the MoEFCC and therefore was outside of the project's control and should have been avoided at the design phase. The indicator could have been related to the identification and preparation of the files for the area to be designated, and other activities supporting the approval of the protected areas.

**Indicator 2: Population status of the Irrawaddy and Ganges dolphins remain stable or increases.** The baseline is based on a study by Wildlife Conservation Society (WCS) undertaken in 2006/7 and reported in 2009, and is therefore quite old. It also relates to the whole of Sundarbans, but no provision was made in the project document to undertake a survey at this scale in order to be able to track this indicator. The Project Manager included a dolphin survey in the Terms of Reference (TOR) of the Dolphin hotspot study in order to inform progress on this indicator.

**Indicator 3: Improved management effectiveness of PAs as measured and recorded by Management Effectiveness Tracking Tool (METT).** It is not clear where the baseline is from and if 46 out of 300 is the total across the 3 sites, or the average per site and therefore out of 100.

**Indicator 7: Reported mortality of dolphins by entanglement in nets and vessel hit.** The baseline is 90 mortalities reported in 2013. The baseline did not specify the time period but it was considered that it probably referred to a 10-year period. Hence, the MTR recommended revising the baseline to 9 mortalities per year, and the end of project (EOP) target to 4 mortalities per year.

**Indicator 8: Improvement in Systemic Level Indicators of Capacity Development Scorecard.** Baseline and targets are not clear, namely if they are a total for all sanctuaries or the average.

**Indicator 9: Number of fishers in the project area using sustainable fishing gear as evidenced by mesh size.** The EOP is 30% of fishers follow the mesh size norms set up by the project. The MTR recommended changing the indicator to: % of fishers moving away from harmful fishing gear, and the end of project target to: 60% of fishers moving away from harmful fishing. The project revised the target to 300 fishers by 2019.

**Indicator 10: Amount of resources flowing to local communities annually from community based ecotourism activities.** The EOP was that US\$ 0.1 million was to flow to low communities from ecotourism based activities. The project document (PD) stated that this target value should be re-confirmed during the first year of the project and the MTR recommended to revise the indicator to 'Number of ecotourism initiatives developed by the community and private tour operator', with an EOP target of 10 on the basis that the original target was too ambitious.

There were no gender-sensitive indicators in the Log-Frame of the project at design. The MTR recommended including a gender sensitive indicator, but this was not taken up by the project.



### 3.1.2 Assumptions and Risks

The project document sets out key risks and a strategy for their mitigation. The risks were all rated as Low to Medium and covered the challenges of working with communities, inter-sectoral working and climate change. Delays to start up and government approvals were not cited as risks to project delivery.

At project design, the results framework included key risks (no assumptions noted) relevant to the objectives and outcome. At the objective level it was noted that the dolphin population depends on various extraneous factors over which the project has little control.

### 3.1.3 Lessons from other relevant projects incorporated into project design

It is not evident from a review of the Project Document how lessons from other relevant projects have been incorporated. The Project Document states ‘there is extremely limited experience in linking protected area management with the wider landscape to mitigate ecosystem loss and degradation caused by development activities or how to effectively manage riverine ecosystems systems for conservation with the involvement of wide range of stakeholders at a wider ecosystems level’. The Inception Report confirms that there are no other relevant projects to draw on as this is the first initiative in biodiversity conservation in aquatic ecosystem involving the participation of stakeholders (both government sectors, local fishermen communities, NGOs). However, this is considered to be based on quite a narrow interpretation, and that it is likely, given the project’s holistic approach, that it could have drawn lessons from other projects in related focal areas of wildlife conservation, community management, and inter-sectoral working and mainstreaming (e.g. Bangladesh’s work with the the Poverty Environment Initiative (PEI) which is focused on mainstreaming environment and poverty considerations into policies, plans and financial mechanisms).

### 3.1.4 Planned stakeholder participation

There is no stakeholder engagement plan in the Project Document, but numerous references are made to the intended involvement of stakeholders in project implementation. The project was to promote a strong participatory and consultative approach to ensure that partnerships were strengthened amongst local communities, government agencies, NGO’s and other projects working on sustainable development initiatives in the project landscape.

The Project Document goes into detail on the barriers and challenges facing the involvement of stakeholders, particular local communities in aquatic biodiversity conservation (such as limited incentives and capacities). Fishers were to be trained in conservation management practices so that they could become active partners in conservation actions.

The Project Document identified the need to create regional and national level institutional mechanisms to bring together various actors (stakeholders/ decisions makers/ policy makers/ academicians/ donors) for effective cross-sectoral dialogue, programme coordination, joint action and policy engagement on aquatic biodiversity management. Preparation of biodiversity-friendly sectoral guidelines for the economic sectors operating in the region, supported by advocacy and high level policy engagement for mainstreaming biodiversity-friendly practices into economic operations was also built into project design. Extensive consultation with various stakeholders was envisaged in the formulation of the biodiversity-friendly sectoral guidelines to ensure the ownership of various agencies/ sectors for whom the guidelines are targeted.

Recognizing the limits to what the project could fund itself a related design principle was to leverage support (technical and financial) from various stakeholders particularly from NGOs, academia and donor communities for strengthening biodiversity conservation in the region. The Project Document, planned that research programmes would be conducted in partnership with universities and other institutions.

The arrangements with the projects two Responsible Parties (IUCN-CNRS and CODEC) were not negotiated prior to project approval but through competitive tender during project implementation. Their identification at the design stage could have potentially avoided delays in implementation.

### 3.1.5 Replication approach

The Project Document notes some key areas for replication such as sharing lessons learned from project implementation and training materials with training institutions, NGOs and Universities so that they become an accessible resource to be applied in other aquatic areas in the country. It was also envisioned that the National Technical Group on Aquatic Conservation constituted under the project would play a role in promoting the replication of the project's approach and knowledge on aquatic conservation.

### 3.1.6 UNDP comparative advantage

UNDP's comparative advantage is not discussed in the Project Document. However, UNDP Bangladesh has worked with the Government of Bangladesh for 48 years in areas of SDGs delivery, sustainable / integrated development and planning, institutional capacity development and biodiversity conservation.

### 3.1.7 Linkages between project and other interventions within the sector

This is not specified in the project document, see discussion above. However, the project partners did build on their expertise in related projects as discussed below.

### 3.1.8 Management arrangements

As set out in the Project Document, the project is managed according to the UNDP National Implementation Modality (NIM) and the NIM Project Implementation Guidelines, agreed with UNDP and the Government of Bangladesh.

The Ministry of Environment, Forestry and Climate Change (MoEFCC) is the Implementing Partner (Project Executive) and designated the Bangladeshi Forest Department (BFD), as the Executing Agency. As specified in the Project Document, the MoEFCC was to be responsible for the overall project, reporting to the UNDP Bangladesh Country Office, establishing a Project Management Unit (PMU) in Dhaka, and appointing the Divisional Forest Officer, Wildlife Management and Nature Conservation Division, Khulna as the National Project Director (NPD). Deviations from the proposed approach at implementation were the establishment of the PMU in Khulna, to be close to the project site and the appointment of the Divisional Forest Officer (Wildlife Management and Natural Conservation Division, Khulna) as the NPD. The NPD was to be supported by the PMU. The Responsible party is responsible for the delivery of the results towards achieving the project objectives and accountable to the National Project Director.

UNDP Bangladesh was to provide operational oversight with the strategic guidance of the UNDP-GEF Regional Technical Advisor (RTA).

**The Project Board (PB) / National Project Steering Committee (NPSC)** was responsible for management decisions and providing strategic guidance at project inception, implementation and close. It was to play a role in project monitoring and quality insurance, conflict arbitration and approving work- plans. The Project Board was to be chaired by the National Project Director responsible for monitoring and controlling progress of the project at a strategic level. UNDP as the Senior Supplier on the board had a primary function to provide guidance regarding the technical feasibility of the project. Project beneficiaries were to be represented by persons from the Forest Department, Co-Management Committees, local communities and NGOs. They were to be responsible, among other things for monitoring the implementation of activities to ensure that met the beneficiary's needs and were progressing

towards their target.

**The Project Management Unit (PMU):** The PMU was to be composed of a Project Manager cum Technical Officer, and a Finance-Administrative assistant. The PMU is responsible for: (i) developing the Standard Operating Procedures for project implementation; (ii) developing Quarterly and Annual Work Plans and Budgets; (iii) providing technical, financial and administrative management support; (iv) preparing the Quarterly and Annual Financial and Technical Progress Reports to be submitted to the MoEFCC; and, (v) ensuring compliance with applicable UNDP/GEF / Government rules and regulations; and, (vi) providing technical support to various project components and activities.

**The Project Manager–cum-Technical Officer** has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager’s prime responsibility was to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

## 3.2 Project Implementation

### 3.2.1 Adaptive management

Minor changes were made to the logical framework during project implementation. No concerns relating to the indicators were raised at the Inception meeting or in the Inception report. This would have been the best opportunity to have revised the indicators, baseline and targets to ensure they were both clearly specified and realistic. Action at the inception stage was especially important given the delays to the project start up, in order to accommodate changes in circumstances since the finalization of the project document two years previously and the reduced timeframe to implement the project. The MTR recommended various changes to the indicators some of which were not acted on, as discussed above in section 3.1.1 and in the section on M&E below (section 3.2.4.2).

The MTR, as for all projects, was a key opportunity for identifying adaptive measures necessary to achieve project’s results, but the MTR was not done to standard or time and was unable to significantly influence the course of the project. For example, the MTR recommended hiring additional staff (an administrative officer and an internal monitoring expert) to support the PM who was overburden. The Management Response agreed with this recommendation and was considering recruiting an additional staff member to support monitoring activities and project closure. This did not happen. Additional project staff in the last year of the project could have supported the synthesis of lessons learnt and replication strategies and freed up the PM’s time providing more scope to push for approvals of key project outputs and other activities. Another recommendation that were not actioned is requesting a 1 year no-cost extension from GEF (which was rejected due to the lack of budget, meaning that the project spent all its budget in 3 rather than 5 years, while only 16% of co-financing was actualized).

PIR, 2017 stressed that even partial achievements of the project results by project closure (28 June 2020) required major adaptive management by early in 2018. It recommended a workshop be held in December 2017 to assess progress against the overall work plan and to develop a strategy for getting the project back on track, potentially facilitated by a management consultant. However, the PIR 2018 notes little evidence of such action, and that the PSC had not met since September 2017 to address the concerns raised in the 2017 PIR. According to PIR 2018 the following measures were to be considered to mitigate the delays in project implementation - a focus on effective procurement, a reduction in the timeframe of studies / consultancies and the allocation of more human and/or financial resources to speed up activities. It is not clear why the recommendations of PIR 2017 were not acted upon, but the approach adopted focused around a compressed programme to ensure that the project could

close on time, with various implications in terms on project monitoring, attainment of results, sustainability and learning, as elaborated on in the sections below.

However, there are a number of ways the project has adapted its approach as set out in the Project Document to support achievement of the project's objectives. These include:

- The project aimed to designate an additional 1,020 km<sup>2</sup> of the aquatic environment in the Sundarbans under an effective conservation planning and management framework. The Protected Area was only 23% when Project Document written, but increased to 52% in August 2017. As discussed above, given that 52% of the Sundarbans was already protected, it was not feasible for additional areas to be declared by the project. It was therefore agreed with the PSC would declare new **dolphin conservation areas** instead.
- The Project Document did not elaborate on how the project should support implementation of the Management Plan. This was discussed by the PIC on 18 September 2017 and it was agreed that monitoring activities were needed. The project therefore provided boat fuel to support this.
- At the request of the MoEFCC, the project supported a population census and analysis in Halda River. This additional activity outside of the project area was possible because UNDP was supportive and flexible. This work has provided an example of how the project's aquatic conservation work can be applied outside of the Sundarbans.
- The project is supporting the sustainability of the Dolphin Conservation Teams (DCT) through the establishment of a fund, the interest from which will be used to support the DCT activities.
- Celebrating Dolphin day was not mentioned in the Project Document, but was included in the TOR of consultants (IUCN-CNRS) as a mechanism for generating broad awareness of the importance of dolphin conservation.
- Around 30 **Sustainable Livelihood groups (SLG)**, with around 25 members per group have been set up, made up solely of beneficiaries of the project.

### 3.2.2 Actual stakeholder participation and partnership arrangements

Despite the fact that a stakeholder engagement plan was not prepared as part of the Project Preparation Grant (PPG), the project team has effectively engaged with relevant stakeholders such CSOs, local communities and the government partners.

Stakeholder participation has been strong at the community level. The project has successfully engaged with communities, the key project stakeholder, through awareness campaigns, livelihood support initiatives and capacity building both in livelihood alternatives and in dolphin conservation (notably through the DCT). The AIG support was targeted at the vulnerable fishers living near the dolphin sanctuaries as discussed below (see sections 3.3.1.1 and 3.3.6).

The project's livelihoods component specifically targeted women, through the provision of grants for alternative livelihoods. This has been path-breaking for Bangladesh. For the women involved it is the first time they have opened a bank account, and the support provided has encouraged them to establish all-women saving groups to further invest in livelihood activities and strengthen their independence. However, the MTR and CODEC note that the compressed timeframe for implementation limited the impact of the project results, and the AIG support covered 1,000 households out of the 5,000+ households in the area.

An objective of the project has been to increase awareness of the importance of dolphin conservation and hence awareness raising activities are linked to the achievement of the project's objectives. The project has undertaken awareness rising initiatives at both the national and local level. At the community level, the capacity building and awareness efforts of the project has built an appreciation of how dolphin conservation and sustainable ecosystem management is linked to resilience and livelihoods and built a vested interest among communities in the project's success. IUCN-CNRS set out and tracked its community

engagement through its Quarterly progress reports, which included separate reports on many individual meetings / activity as an annex. The 5<sup>th</sup> Quarterly Report (July 2019) records eight community based meetings over the project reaching over 1,200 participants and targeted at fishermen and crab collectors<sup>8</sup>, and 11 school campaigns benefiting 2,200 students.

National and local government stakeholders have supported the objectives of the project and have played an active role in project decision-making and implementation. This is illustrated most directly at the local level, where the Project's National Project Director is the Divisional Forest Officer (Wildlife Management and Natural Conservation Division). He has played an active role in the project. The Project Manager is seconded from the BFD.

The project has engaged 15 government agencies, 2 civil societies and Community Based Organizations (CBOs) as part of the Project Implementation Committee. The project has further engaged with a range of ministries and departments through work on the biodiversity friendly sectoral guidelines. There has been some engagement with the private sector especially with tour operators and industrialists through the development of the sectoral guidelines.

The project successfully engaged with the two partners who were responsible for delivering the majority of the project's activities. CODEC was engaged to deliver the livelihood component. They have extensive experience in development in coastal areas and with working with the BFD. They were also able to draw on their experience in two previous USAID projects – Integrated Protected Areas Co- Management (IPAC) and Climate Resilient Ecosystems and Livelihoods (CREL). IUCN-CNRS were engaged to support awareness and outreach programmes, capacity building for cetacean conservation and implementation of selected Management Plan Activities. They were able to build on their awareness raising experiences in other projects, such as vulture conservation awareness. In addition, the project worked with a number of universities including Khulna University, which has a focus on the Sundarbans and supported all five of the sector strategies, Chittagong University and Jahangir Nagar University.

### 3.2.3 Project Finance and Co-finance

The project has a total budget US\$ 10,126,484, comprised of US\$ 1,626,484 (128,493,000 Bangladeshi Taka) from the GEF, and US\$ 8,500,000 in co-financing (US \$3,000,000 from the Government and US\$ 5,500,000 from UNDP).

By the MTR (December 2018) cumulative expenditure was US\$ 632,202.86, 39% of the GEF grant budget, largely due the delays to project start up. Cumulative disbursements as of June 2019 were around 49% of the total approved amount (PIR, 2019), but accelerated to 93% by December 2019 (i.e. US\$ 1,512,279.23 out of total Budget US\$ 1,626,484.00) (Table 1). The significant disbursements in the last two quarters of 2019 related to payments to CODEC and IUCN and other consultancies which were completed over this period.

Annual disbursement against budgeted work plans were: 100% in 2017, 94% in 2018 and 92% of 2019 budget. Only 14% of the planned project management budget was spent in 2019 (US\$6,933 out of planned budget of US\$48,921). No explanation was provided for this, or for why over the project period only 2% of the budget was allocated to Project Management, when interviewees felt project management was under resourced.

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<sup>8</sup> Meetings were held in Dhangmari, Joymoni, Uttorjoymoni, Purbo Dhangmari, Assasuni, Satkhira, Kalabogi and Sarankhola.



**Table 1: Disbursements 2017-2019**

	2017	2018	2019	Total (%)
Unrealized loss / (Gain)	457.18	(500.54)	2,435.39	2,275.19 (0.1%)
Activity 1: Important Aquatic Ecosystems	93,375.52	297,112.28	487,905.51	878,236.38 (58%)
Activity 2: Community Based Ecosystem Management	12,025.62	202,328.28	387,049.39	601,403.29 (39%)
Activity 3: Project Management	9,350.41	14,080.80	6,933.16	30,364.37 (2%)
<b>Total</b>	<b>115,208.73</b>	<b>513,020.82</b>	<b>884,342.45</b>	<b>1,512,279.23</b>

**Source:** Combined Delivery Reports, 2017-2019

Around 60% of budget was allocated to the Responsible Parties - IUCN and CODEC (Table 2).

**Table 2: Allocation of budget by partners**

	2017	2018	2019	Total (%)
UNDP-DCOS	81,941.26	197,778.23	201,477.73	481,197.22 (31%)
Bangladesh Forest Department	33,267.47	30,717.42	42,824.53	106,809.42 (7%)
IUCN		95,723.77	253,197.76	348,921.53 (23%)
CODEC		188,801.40	386,549.66	575,351.06 (38%)
<b>Total</b>	<b>115,208.73</b>	<b>513,020.82</b>	<b>884,049.68</b>	<b>1,512,279.23</b>

NEX expenses were managed by the Forest Department overseen by the National Project Director, following UNDP National Implementation (NIM) policy and procedures. UNDP activities and expenses such as payroll, travel and local Consultants were managed by UNDP CO following the approved Annual Work Plan agreed between the Forest Department and UNDP Bangladesh. For the two Responsible Parties (IUCN and CODEC) engaged by UNDP through a Responsible Party Agreement, UNDP released Quarterly Advances and Record Adjustment at the end of each quarter.

No audits have been undertaken to date, however an audit by the Bangladesh Foreign Aided Project Directorate (FAPAD) was planned for early March 2020. No Harmonized Approach to Cash Transfer (HACT) audits were arranged by UNDP, although the Inception Report suggested that these would be undertaken.

**Co-financing** has not been systematically tracked and there is no information on co-financing in the PIRs or the MTR. It is however evident that the Forestry Department has supported the project through the provision of office space, boats and staff. The NPD reportedly spends around 50% of his time on the project. Table 3 provides estimates of BFD co-financing generated at the request of the TE. It suggests that BFD co-financing realized amounted to US\$490,912, which is far below the amount committed in the Project Document of US\$3 million (i.e. 16% of funds committed). UNDP committed US\$5.5 million in co-financing – this has not been tracked and no estimates of co-financed committed were made available to the TE. It is not possible on the information available on co-finance to provide a detailed explanation of the divergence between committed and actual finance on the part of BFD, for which estimates are available. However, the reduced duration of the project (3 years rather 5 years) would explain some of the difference, as might the limited capacity of the BFD.

No additional resources were leveraged by the project. The PIR, 2018 records that UNDP CO submitted a US\$2 million proposal to the south-south cooperation assistance fund to top up

support for dolphin conservation activities in the Sundarbans<sup>9</sup>. This proposal is not mentioned in PIR 2019, and it is assumed that it was not successful.

The project was routinely referred to as having a small budget and a value of US\$ 1.6 million, as co-financing was not recognized as part of the project budget. It was suggested that more resources and time were needed to cover all households around the area to strengthen livelihoods and reduce pressure on natural resources. It is also noted that it is expensive to undertake projects in aquatic areas. For example, the high cost of accessing the site via speed boats limited the ability to undertake more frequent monitoring activities.

**Table 3: Government Contribution to the EPASIAE (Dolphin) Project (July 2017 – June 2020)**

Name of the contribution/Item	Unit	Qty	Monthly salary & allowances (USD)	Total contribution to the project (USD)	Remarks (% of time)
Project Director	Month	36	800	14400	50%
Driver of Utility vehicle of the Project Director (PD)	Month	36	300	5400	50%
Speed boat driver of PD	Month	36	300	1080	10%
Office space, conference room, corridor, waiting room and pantry	Month	36	400	14400	100%
Electricity, water supply & security at the office premises	Month	36	40	1440	100%
Contribution of the Conservator of Forests, Khulna	Month	36	900	3240	10%
Contribution of the Divisional Forest Officer, Sundarban East Forest Division	Month	36	800	7200	25%
Contribution of the Divisional Forest Officer, Sundarban West Forest Division	Month	36	800	7200	25%
Staff salary, allowance of 8 forest camps under 3 dolphin sanctuaries	Month	36	20000	360000	50%
Utility vehicle support of DFO, Wildlife and Nature Conservation Division, Khulna (PD)	Month	36	350	6300	50%
Speed boat support of DFO, Wildlife and Nature Conservation Division, Khulna (PD)	Month	36	70	252	10%
<b>Total contribution</b>				<b>420,912</b>	

### 3.2.4 Monitoring & Evaluation:

Monitoring and Evaluation is rated over all as **Moderately Unsatisfactory**, design at entry is rated as **Moderately Satisfactory** and design at Implementation as **Moderately Unsatisfactory**.

#### 3.2.4.1 Monitoring and Evaluation at Design

The Project Document articulates the M&E activities at project start up, implementation and project close, and provides a M&E work plan specifying responsible parties, timeframe and budget. The overall budget was US\$76,200 and covers key activities such as the Inception Workshop and report, MTE and TE, synthesize of major achievements and lessons learned

<sup>9</sup> The project was to: (i) assess point and non-point source pollution in aquatic habitats and implement pollution management and enforcement measures facilities at Sundarbans; (ii) improve livelihood and income generation of the resources dependent community (e.g. fisherman) of the Sundarbans; and, (iii) enhance capacity of the Forest Department and relevant stakeholders to ensure sustainable management of aquatic ecosystems in Sundarbans.

and audits. As discussed above there are a number of issues with the indicators, baselines and targets.

#### *3.2.4.2 Monitoring and Evaluation – Implementation*

Interviewees stressed that the main reason why M&E was moderately unsatisfactory was because the project did not have a dedicated M&E staff member due to the lack of management budget (although it is not clear to the evaluator why spending on project management was significantly below planned for 2019 as discussed above). The project only had a project manager and administration officer with partial support on M&E from the UNDP Country Office, which made it difficult to meet all M&E requirements.

M&E at implementation is considered to be weak for the following reasons:

- The project did not consistently undertake follow-up actions in response to monitoring reports (e.g. MTR and PIRs), as discussed above.
- The Results Framework was not revised sufficiently for it to serve as a tool for accurately tracking the project's progress. The indicators were not reviewed at Inception workshop / Report, which is an oversight given the delay to project start up and the fact that a number of baselines were not clear and or unrealistic given changes in circumstances since project design. The MTR recommended revising a number of indicators as discussed above, while PIR 2019 notes that for several indicators gender disaggregated data reporting was not satisfactory or missing and recommended that the project improve the reporting with detailed gender disaggregate data, and conduct a gender analysis. The Management response to the MTR states that the 'Results Framework has been revised based on the recommendations of the MTR' but while some changes were made problems with the Results Framework remained. However, in reality there was no time to revise the indicators due to the compressed project period (3 years) and the fact that while the MTR was undertaken in December 2018 (eighteen months into actual implementation) it was not finalized until September 2019, leaving only 9 months of project implementation left. The TE was commissioned in December 2019, only 3 months after finalizing the MTR.
- There are no project level quarterly progress reports. The project does report to the Government every month using a standard format, but this is essentially a financial report – it does not cover progress on activities or specify how risks and challenges are being addressed.
- Data on specific indicators / Tracking Tools have not been gathered in a systematic manner. For example, the EOP assessment of the capacity scorecards only considered 8 out of the 15 criteria so it was not possible to measure achievement against the baseline for some sub-indicators. Due to a lack of clarity on the methodology used and the scores as presented in the Project Document it was argued that it was not possible for the project to undertake the capacity assessment, and it was decided that since only 8 criteria were relevant to the project that they would be used in discussions among the stakeholders in the METT workshop to supplement the METT discussions. A full capacity assessment could have served as a baseline going forward (see also the analysis below in Section 3.3.1 regarding indicator 8, where the evaluation provides an interpretation of the end of project findings against the targets).
- The M&E plan budgeted for major achievements and lessons learned report and audits, but these have not been done.
- PIR self-evaluation ratings are broadly consistent with the MTR and TE findings, however all of the PIRs show a divergence in rating between the Project Manager, UNDP Focal Point and the RTA, with the RTA giving the project lower ratings, which are more consistent with both the MTR and TE. It is noted that in 2018, the Project Manager and UNDP CO Programme Officer had tried to downgrade their overall assessment rating from Satisfactory to Moderately Satisfactory, following feedback from RTA, but missed the deadline for this to be recorded in the system on line.



- There were quality issues with MTR (PIR, 2019). Explanations for this include that the consultant did not have the right background to undertake the evaluation, and that there was limited coordination between the UNDP Country Office and the RTA to ensure the MTR was to standard.
- The project did not systematically track risks or maintain a Risk Log. The Project Document provides a Risk and Assumption Table, which was adopted by the project as their risk mitigation strategy without any revisions or updates. The PIRs did not report any critical risks and the Risks and Assumptions table in the Project Document was not revised at the Inception stage. Quarterly project progress reports, which are also typically used to track risks, were not prepared by the project. As noted above delays to implementation were not considered to be a risk at project design, but became a key risk at the implementation stage. The Quarterly progress reports of CODEC reported risks related to the short timeframe available for implementation, this was not formally addressed in a risk log. While the 2016 PIR identified critical operational risks due to the long delays with the TPP, no risks were identified in the PIRs for 2017 onwards. In 2017 the RTA however noted that serious operational risks remained, as the project did not have a strategy for getting back on track agreed with the Project Steering Committee.

The following M&E activities are acknowledged:

- The project held an **Inception workshop** in Dhaka in **July 2017**, attended by a range of stakeholders (from Government agencies, research institutes, NGOs, civil society media and international organizations). It was chaired by the Deputy Chief Conservator of Forests. The workshop focused on explaining the rationale and strategy of the project to all stakeholders, presenting project implementation procedures and discussing roles and responsibilities of the key national stakeholders and opportunities for partnership during project implementation. The Inception workshop concluded that the programme had been designed based on the practical experiences and lessons gained through the implementation of other projects (although these are not detailed in the Project Document) and that the project outcomes, outputs, and activities as defined in the Project Document required no changes.
- The Inception workshop in Dhaka was followed by an inception workshop in Khulna in October 2017.
- PIRs are available for 2017, 2018 and 2019 and are reasonably candid. Annual progress reports are also available (2017, 2018, 2019).
- **Project M&E Plan.** The Results Framework was partially revised to address some of the problem with the baseline and targets and the project included eight supplementary indicators to track aspects of the project at the output level. These 'supplementary' indicators, have been reportedly used internally to capture the broader aspects of the project's progress. While this is good, arguably it would have been better to prioritize the suitability of the core project indicators against which the project is bound to be assessed at the mid term and terminal stages per GEF procedures. The Project M&E Plan also includes indicators at the corporate level – a Strategic Plan indicator (which is tracked through Indicator 1) and UNDAF / CPD indicator, which relates to number of UNDP-backed policy instruments that support low carbon economy, climate resilient economy in Bangladesh', which is recorded as achieved but it is not clear on what basis.
- A Rapid **Knowledge, Attitudes and Practices Assessment (KAP)**, as recommended by the MTR, was undertaken in September 2019 for the project by Khulna University to assess the current condition of project beneficiaries in order to inform future programming. The KAP survey targeted 4 different stakeholders - AIG beneficiaries, local fishermen, Dolphin Conservation Team members and school students. Draft reports are available.
- Quarterly reports were provided by the two main project partners (CODEC and IUCN-CNRS). For the Livelihood component three reports were submitted, each of which had a different format and provide high level information on project progress. The quarterly reports prepared by IUCN-CNRS are very detailed and include up to 10 annexed reports

on subjects such as community based awareness campaigns, schools campaigns, DCT formation in various locations and reports on dolphin monitoring and surveillance.

- **IMED (Implementing Monitoring and Evaluation Division)**, the project monitoring authority of the Government of Bangladesh oversaw project activities and the project provided quarterly reports to IMED, which largely covered financial information. Furthermore, while the project was rated as on track according to the evaluation by the IMED it is rated as Moderately Unsatisfactory by the RTA over the same period (PIR 2018), highlighting a discrepancy in the criteria of the two evaluation processes.
- **Site visits.** The Project Management Unit periodically monitored project activities through field visits. From the Government, the Conservator of Forests, Khulna and the Divisional Forest Officer, Sundarbans East and West First Division visited the project area and activities several times in 2019. The Additional Secretary and Deputy Secretary (Development) Ministry of Environment, Forest and Climate Change separately observed the project activities and consulted with the beneficiaries. A Director and an Assistant Director from IMED visited the project sites and reviewed project progress. UNDP senior management (Assistant Country Director and Portfolio Manager) also visited the project sites and reviewed progress (as stated in the MTR) as well as the RTA in the early stages of the project.

### 3.2.5 Project implementation/execution, coordination, and operational issues

Overall project implementation/execution, coordination, and operational issues are rated as **Moderately Satisfactory**. Implementing Agency (UNDP) implementation is rated as **Moderately Satisfactory** and Executing Agency execution as **Moderately Satisfactory**.

The MoEFCC designated the Bangladesh Forest Department (BFD) as a Responsible Party (RP) to implement the project. The BFD was best placed to carry out activities related to the project as they are the main focal agency for natural resources management in the region.

Designed as a 5-year project, the project has been implemented in three years as two years of project time were effectively lost between approval and inception. While the project was signed on the 30th July 2015, the Inception meeting was not held until the 18th July 2017. The explanation for this is the 'double approval' process now in place in Bangladesh. Once the Project Document is approved, a Technical Project Proposal (TPP) approval is required by the Government (BFD, MoEFCC and the Planning Commission for this project) before any money can be spent. The TPP was approved by the GoB on 16 March 2017. Such delays were not anticipated during the project design as the requirement that a Technical Assistance Project Proforma (TPP) be prepared and submitted to government by all donor funded projects in order for them to be officially registered was introduced in the latter part of 2015. This was thus new ground for both UNDP and the Implementing Partner, adding to the delay, but the excessive time taken for the project to be registered reflects shortcomings and inefficiencies among all parties (Government and UNDP). There were also delays on UNDP's side as the Country Office focal point position was vacant for long time (PIR, 2107). The start up delays were compounded by procurement delays, with contracts with the project's key partners (IUCN-CNRS and CODEC) not finalized until June 2018.

In the first year of the project, due to the pending approval of the TPP, it was not possible to implement activities. Planning improved in year 2 of the project along with overall delivery and implementation (PIR, 2019). Implementation was rated as Unsatisfactory in PIR 2017 as the project was largely at a standstill up until then awaiting the TPP approval. However subsequent PIRs (2018/2019) rated Implementation as Moderately Satisfactory, as project performance improved. However, management issues remained including: delays to the start up of the community development work as it took a year after the approval of the project's inception report to procure the two NGOs leaving only two years to complete the work (PIR, 2018); and, low disbursement (largely explained by the delays in procurement). Core project

activities undertaken through partners (CODEC and IUCN-CNRS) were compressed due to the reduced implementation time. For example, CODEC had 1.5 years to implement the livelihood component.

The project could have requested a longer extension and the RTA requested that this be considered (PIR, 2019), but reportedly this was not a favored approach. The NPD was attached to the project for 3.5 years, but there was a risk that he would be moved if the project duration had been longer, affecting continuity. The PM is also returning to the BFD at the end of March 2020, increasing the urgency for the project to complete by the end of June 2020. A longer project period would have enabled the project's processes and thinking to be more embedded and established. CODEC quarterly monitoring reports recommended a project time extension to ensure that the livelihood options and SLG groups were established properly and placed on a sustainable footing. Similar issues were raised concerning the DCTs. The MTR also concluded that the timeframe Outcome 2, had been underestimated and more time was needed to complete the livelihood related activities, and the communication and awareness activities in schools and villages.

The project completed three **Annual Work Plans (AWPs)**, in 2017 (from July to December) and 2018 and 2019 (full year). As per the financial statement shared by the PMU, the project delivered 100% of the 2017 AWP, 94% on the 2018 AWP and 92% of the 2019 AWP.

The project's key partners were well qualified to undertake the work and their performance was good. They were responsible for awareness, outreach activities, capacity building, management plan implementation and the livelihood development programme. Their additional expertise and manpower was central to the project being able to deliver at an accelerated pace from mid-2018 onwards. The IUCN PM did not have much of a presence in the field but this is not considered to have affected deliverables much as other officials were present. The project worked with 12 consultants overall, only 1 of whom was considered not to have delivered to the required standard (and did not come from a strong conservation background). A review process was put in place to quality assure the project's outputs. Consultant reports were first reviewed by the PM and NPD, before being sent to the BFD HQ, reports were also available on the BFD website for public review. The documents were finalized once comments from the the MoEFCC had been taken into consideration.

**The Project Management Unit (PMU)** headed by the National Project Director (NPD) was composed of a National Project Manager-cum-Technical Officer and a Finance / Administrative Associate. The Project Manager and Project Director were very committed to the project, however, the workload was significant across various technical and administrative roles. The project assistant left the project in June 2019 and while UNDP engaged another part time project assistant, this affected work flow. It is also argued that the issues identified with M&E related to the lack of human resources and the fact that the project did not have a dedicated M&E officer. While an attempt was made to revise the indicators at Mid Term there was no follow through. The MTR recommended adding a technical (M&E) and administrative staff member to the PMU, and in the project's management response to the MTR the project was considering recruiting additional staff to support monitoring activities and prepare exit plans. This did not happen. The GEF does not allow Project Management costs over 6%, but M&E can be built into the technical components.

As is standard practice in Bangladesh, the project was supported by two committees.

- The **Project Implementation Committee (PIC)** provided technical orientation and oversight and approved Annual Work Plans. It was chaired by the Chief Conservator of Forest Dhaka and consisted of 12 members<sup>10</sup>. The Project Implementation

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<sup>10</sup> According to the Inception Report the PIC consisted of: Chief Conservator of Forests; Deputy Chief,

Committee (PIC) held three meetings - on 18 September 2017, 14 August 2018, and 24 April 2019 . This is far fewer than was anticipated; the Inception Report suggested they would meet once per quarter.

- **The Project Steering Committee / Project Board** was chaired by Secretary of Ministry of Environment, Forests and Climate Change (MoEFCC) (not the NPD as proposed in the Project Document). As recommended in the Inception Report<sup>11</sup>, it had 19 members. The meetings were generally well attended, although it was sometimes difficult for Ministry staff to attend due to their other commitments. The PSC supported the project well steering it in the right direction and providing solutions to bottlenecks (for example orientating the project towards the declaration of new dolphin sanctuaries to meet project's objective of PA expansion, supporting the project's initiatives in Halda River beyond the project area of the Sundarbans, and supporting funding for the Dolphin Conservation Teams (DCT) to continue the protection activities beyond the project period). Over the project only two PSC meetings took place. The first was held on 19 September 2018 (attended by 21 people) and a second on the 20 October 2019. The PSC itself had emphasized the need of regular PSC meetings, this was reiterated by the MTR.

UNDP have provided good support to the project across a range of areas including technical issues, procurement of consultants, activities in the field (field visits), designing project documents, communicating with senior staff at the Ministry and project management. The project saw a good level of cooperation between UNDP and the Project Management Unit (PMU). The PMU appreciated the flexibility shown to the project and its support for BFD ownership of the project (with UNDP not taking the credit for itself). PIR, 2017 notes that, critical risk (operational) measures were undertaken, with UNDP CO stepping in to help the Forest Department prepare its TPP and initiate the procurement of project staff.

UNDP could have played more of a role in ensuring quality M&E. For example, the problems with the Results Framework could have been identified earlier and rectified following the inception meeting, and the PM could have benefited from more guidance regarding Results Based monitoring required for GEF project, including the standard requirements of GEF independent evaluations.

The project had three RTAs from the project design phase to the end of the project. There was a visit by the RTA during project implementation. The project would have benefitted from the Country Office supporting closer engagement and transparency with the RTA in order to better understand GEF procedures and M&E requirements. There were quality issues with

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Planning, MoEF; Representative, Forest, Fisheries & Livestock Wing, Planning Commission; Representative, IMED, Ministry of Planning; Representative, Department of Fisheries; Representative, Bangladesh Fisheries Research Institute; Selected members of Co-Management Committees(Chandpai / Sharonkhola); Representative from Local communities; Representative from NGOs (1 person); Representative of UNDP Bangladesh – Concern Desk Officer, Development Planning Unit, Bangladesh Forest Department; and, National Project Director.

<sup>11</sup> Secretary, Ministry of Environment and Forests; Director General, Department of Environment; Additional Secretary (Development), MoEF; Additional Secretary (Admin.), MoEF; Chief Conservator of Forest, Forest Department; Representative, Ministry of Fisheries and Livestock; Representative, Ministry of Water Resources; Representative, Ministry of Shipping; Representative, Bangladesh Coast Guard; Representative, Mongla Port Authority; Representative, Forest, Fisheries & Livestock Wing, Planning Commission; Representative, ERD, Ministry of Finance; Representative, IMED, Ministry of Planning; Deputy Chief, Planning, MoEF; Representative of UNDP, Bangladesh Country Office; Assistant Chief Conservator of Forest, Development Planning Unit, FD; Deputy Commissioners (DCs) from respective districts of the project site; Concerned Senior Assistant Chief / Assistant Chief, MoEF; National Project Director of the Project – Member-Secretary

the Mid Term Review which could have been avoided or mitigated through closer engagement with the RTA.

The inception report cited a number of project limitations: (i) The project site is in a remote area subject to tidal surges, and natural calamities and is not always accessible due to weather conditions. Access to the project sites is only possible via boat and is expensive. The project did not have its own boat, and was dependent on BFD boats to reach the sites; (ii) Monitoring is difficult due to the limited staff of Forest Department compounded by the limited number of boats and travel allowances. Furthermore, the communities do not have the power to exercise the Wildlife (Conservation and Security) Act, 2012 i.e. to arrest or file a case against dolphin poachers or illegal fishing activities; and, (iii) The limited AIG support does not cover the huge number of fishers in the project areas and it is difficult to ensure the sustainability of livelihood options.

### 3.3 Project Results

#### 3.3.1 Progress towards objective and expected outcomes (\*)

The Results Matrix is provided in Annex 5 and summarized in Table 4. The Results Matrix presents progress against project targets as of March 2020 and rates attainment at the Objective and Outcome level. Only six of the project's twelve indicators have been achieved. This is due to a range of reasons, but is largely explained by the poor design of project indicators, baselines and targets which were not substantially revised during project implementation. In addition, the 2 indicators at the objective level have been rated based on an interpretation of the Logical Framework (i.e. not a strictly measured against the baseline and targets in the Logical Framework). Measured against the Logical Framework they would need to be rated as 'not on target to be achieved', but this was thought not to well reflect project progress. Due to unverifiable baselines it is not possible to rate 2 indicators. Across all indicators partial progress has been made. Progress towards objectives and expected outcomes is therefore rate as **Moderately Satisfactory (MS)**.

**Table 4: Summary Results Matrix**

**Key:**

Green= Achieved	Yellow= On target to be achieved	Red= Not on target to be achieved	* = Not based on LogFrame baseline / target
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Description of Indicator	Level at Terminal Evaluation	Rating
<b>OBJECTIVE: TO BUILD CAPACITY TO MANAGE THE EXISTING PROTECTED AREAS ESTABLISHED FOR DOLPHIN CONSERVATION AND ALSO EXPAND THEIR OPERATIONAL COVERAGE (NEW PROTECTED AREAS AND BUFFER AREAS) WHILE STILL MEETING THE LIVELIHOOD ASPIRATIONS OF LOCAL COMMUNITIES ESPECIALLY THE FISHERS.</b>		
<b>Indicator 1:</b> Extent of aquatic environment of the Sundarbans brought under effective conservation planning and management framework	*	MS
<b>Indicator 2:</b> Population status of the following critical species remain stable or increases: Ganges freshwater dolphin, Irrawaddy dolphin	*	
<b>OUTCOME 1: IMPORTANT AQUATIC ECOSYSTEMS OF THE SUNDARBANS SUPPORTING THE GLOBALLY THREATENED SPECIES OF CETACEANS CONSERVED</b>		
<b>Indicator 3:</b> Improved management effectiveness PAs as measured and recorded by Management Effectiveness Tracking Tool (METT)		MS
<b>Indicator 4:</b> Biodiversity-friendly Sectoral Guidelines prepared and <b>implemented</b> leading to effective integration of biodiversity considerations into economic sector practices		
<b>Indicator 5:</b> Effective and functioning <i>cross-sectoral, multi-stakeholder institutions</i> (including conservation, livelihood and production) established at regional and national level.		
<b>Indicator 6:</b> Number of representatives from the key government sectors trained in effective management of aquatic biodiversity		
<b>Indicator 7:</b> Reported mortality of dolphins by entanglement in nets and vessel hit.	Not Rated	
<b>Indicator 8:</b> Improvement in Systemic Level Indicators of Capacity Development Scorecard		
<b>OUTCOME 2: COMMUNITY-BASED ECOSYSTEMS MANAGEMENT SYSTEMS IN PLACE TO SUPPORT AQUATIC BIODIVERSITY CONSERVATION</b>		
<b>Indicator 9:</b> Number of fishers in the project area using sustainable fishing gear as evidenced by mesh size		S
<b>Indicator 10:</b> Amount of resources flowing to local communities annually from community based ecotourism activities	Not Rated	
<b>Indicator 11:</b> Number of people shifting to alternative income generating options that reduce pressure on biodiversity		
<b>Indicator 12:</b> Number of people sensitized on aquatic biodiversity conservation particularly that of cetaceans		

**Notes:** <sup>1/</sup> Objective and outcome indicators are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU)

**OBJECTIVE: TO BUILD CAPACITY TO MANAGE THE EXISTING PROTECTED AREAS ESTABLISHED FOR DOLPHIN CONSERVATION AND ALSO EXPAND THEIR OPERATIONAL COVERAGE (NEW PROTECTED AREAS AND BUFFER AREAS) WHILE STILL MEETING THE LIVELIHOOD ASPIRATIONS OF LOCAL COMMUNITIES ESPECIALLY THE FISHERS.**

**Indicator 1: Extent of aquatic environment of the Sundarbans brought under effective conservation planning and management framework.** This indicator has not been achieved based on the set target of 1,020 km<sup>2</sup> (102,000 hectares) to be under effective conservation

planning and management by the end of the project. As discussed above this target is considered to be unrealistic given the area already under protection, while the gazettelement of the new proposed areas is also outside of the projects control<sup>12</sup>.

There are 160 km<sup>2</sup> of dolphin hotspots within the existing Wildlife Sanctuaries. A proposal to declare an additional 3 dolphin sanctuaries comprising 22 km<sup>2</sup> (core area) and 12.27 km<sup>2</sup> (buffer zone area) put forward by the project were declared on 4 March 2020 by the MoEFCC. The new dolphin conservation areas are:

- **Pankhali Wildlife Sanctuary:** core area 140 ha, buffer area 264 ha, total area 404 ha. Jhapjhopia-Ruphsa (Khulna Range)
- **Shibsa Wildlife Sanctuary:** core area 1,650 ha, buffer area 505 ha, total area 2,155 ha. Shibsa (Khulna Range)
- **Bhadra Wildlife Sanctuary:** core area 410 ha, buffer area 458 ha, total area 868 ha. Passur (Khulna Range)

Prior to their approval, there were three official meetings to discuss the declaration of the sites which the project supported by addressing the queries arising, such as providing maps. This indicator is rated as achieved, as although the area declared is below the target, the target was not realistic and should have been amended and the protected area designated is considered to be a significant achievement of the project.

**Indicator 2: Population status of the following critical species remain stable or increases: Ganges freshwater dolphin, Irrawaddy dolphin.** The baseline is based on a study by WCS undertaken in 2006/7 and reported in 2009, and is therefore quite old. It also relates to the whole of Sundarbans and there was no provision to undertake a population survey at this scale in the Project Document. The Project Manager therefore included a dolphin survey in the TOR of the Dolphin hotspot study, which counted 198 Irrawaddy Dolphins and 159 Ganges Dolphins, over the period December 2017-April 2018 which is lower than the baseline in the Results Matrix.

A **dolphin population survey** covering the three existing Sanctuaries was undertaken in December 2019 by a team consisting of BFD staff from offices outside of the Sundarbans, local community representatives, students and biologists supported by the BFD area staff. GPS was used to record the position of the dolphins. The results compared to the baseline observed at project inception in early 2018, indicate that Dolphin populations have increased by 55% overall. The results are considered to represent a lower bound estimate of the dolphin population as the survey only recorded siting above the water. A university professor is planning to use the data to model the total dolphin population within the Sanctuaries. The project reports increased dolphin sightings in the dolphin hotspots particularly of young dolphins indicating that breeding grounds are supportive of sustainable dolphin population. The project believes further population estimation of dolphin will show an increasing rate (PIR, 2019). Based on the evidence this target is therefore assessed as on track, although it is not possible to measure progress strictly against the targets in the Results Framework.

#### **OUTCOME 1: IMPORTANT AQUATIC ECOSYSTEMS OF THE SUNDARBANS SUPPORTING THE GLOBALLY THREATENED SPECIES OF CETACEANS CONSERVED**

**Indicator 3: Improved management effectiveness of PAs as measured and recorded by Management Effectiveness Tracking Tool (METT).** The BFD undertook a baseline in 2016 (published 2017). The project facilitated a revised METT assessment in September 2019, which was undertaken by a group of academics and students, some of whom had participated

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<sup>12</sup> This indicator links to Output 1.2 – PA identified and capacity developed. Activity: New and additional areas to be managed as Protected Areas and buffer areas identified, notified and capacities developed among conservation and economic sector staff.

in the METT assessment in 2016 and were therefore well placed to compare the current situation to the baseline. The scores were: Chandpai - 33 (2016) increasing to 59; Dadhmuki - 34 (2016) increasing to 56; and Dangmari – 33 (2016) increasing to 71. The total across the 3 sites is 186 and the average 62, and with a total increase of 86%. The revised EOP target is therefore achieved. The results reflect the fact that in 2016 there had been a lot of fishing nets in the area, which are now largely absent. Dangmari WS has the highest score as protection is good, the DCT is operating well and awareness is high.

**Indicator 4: Biodiversity-friendly Sectoral Guidelines prepared and implemented leading to effective integration of biodiversity considerations into economic sector practices.** Rated as on track. Given the development pressures facing the Sundarbans, the preparation of sector guidelines has been an important contribution of the project. The sector guidelines provide a foundation for integrated working and planning and can inform the cross sectoral committees proposed at the national and regional level. However, the sectoral guidelines are yet to be endorsed by the MoEFCC. Despite their unofficial status the guidelines are reportedly being adhered to to some extent, with improvements, for example, in the awareness and practices of tour operators and greater awareness on plastic waste.

**Indicator 5: Effective and functioning cross-sectoral, multi-stakeholder institutions (including conservation, livelihood and production) established at regional and national level.** The project was to set up two committees: (i) a Regional Cross Sectoral Committee to Implement the sector guidelines; and, (ii) a National Committee to support the sustainable management of aquatic ecosystems across the whole country. The final approval of National Technical Group/committee and the Regional Cross Sectoral Committee by the Ministry of Environment, Forest and Climate Change is still pending.

**Indicator 6: Number of representatives from the key government sectors trained in effective management of aquatic biodiversity.** This indicator has been achieved. Over 100 conservation sector staff have been trained on cetacean conservation, effective management and GPS handling by IUCN-CNRS. The training of economic sector staff is also completed (e.g. tourism, fisheries).

**Indicator 7: Reported mortality of dolphins by entanglement in nets and vessel hit.** The baseline is 90 mortalities reported in 2013. The MTR recommended revising the baseline value to 9, and EOP target to 4, as it was considered that the 90 mortalities related to a 10 year period. Due to the unreliability and uncertainty around the baseline, this indicator has not been rated, although there are indications that dolphin mortalities have declined. The project has been keeping records on dolphin mortality. Over the 2018-2019 PIR period, 14 dead dolphins were recorded. This is 15.55% of the baseline, however, if the baseline is taken as 9 mortalities a year, this would be an increase. A rise in reported deaths can be explained by the increase in information. Mortality would have been higher in the past due to the large number of fishing nets in use in the area, but the number of deaths would have remained largely hidden or unreported; 9 mortalities per year is therefore likely to be an underestimate. Dead dolphins were previously collected and sold for body parts, whereas now such activities are reported. The BFD is provided with reliable information through the DCT who report dolphin kill (due to illness or entanglement in fishing nets) and injury.

**Indicator 8: Improvement in Systemic Level Indicators of Capacity Development Scorecard.** The re-assessment of the capacity scorecards in 2019, undertaken at the same workshop at which the METTs were reassessed (see above), only evaluated selected criteria, such that it is not possible to track progress across all the sub-targets related to this indicator<sup>13</sup>.

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<sup>13</sup> Out of 15 indicators, only 8 capacity indicators were considered with a total of 24 points. Dhangmari Sanctuary obtained the highest score i.e. 15 (62.5%) where Chandpai and Dudhmukhi sanctuary obtained 13 (54.16%) and 14 (58.33%) respectively.



Specifically: (i) capacity for engagement sub-indicator only 2 out of 3 criteria were considered; (ii) capacity to generate, access and use information and knowledge only 2 out of 4 criteria evaluated; (iii) capacity for strategy, policy and legislation develop was not evaluated (covers 3 criteria); (vi) **Capacity for management and implementation- all 2 indicators assessed**; and, (v) capacity to monitor and evaluated was not assessed (covered 2 criterion). The score for capacity and management were Dudmukhi 2 out of 6 (33%); Chandpai - 3 out of 6 (50%), and Dhangmari 3 out of 6 (50%). The baseline and target are not clear, but assuming that the 30% EOP is the average across the three sites then the target has been met for this sub-indicator (44% average across the 3 sites). Assuming that criteria not scored have a zero value, the end of project targets were also met for sub indicators iii, iv and v (see Annex 5). This indicator is rated is therefore rated as on track on the balance of evidence available. This is supported by the fact that the targets for indicator 6, which relates to training in the management of aquatic diversity, has been met.

## **OUTCOME 2: COMMUNITY-BASED ECOSYSTEMS MANAGEMENT SYSTEMS IN PLACE TO SUPPORT AQUATIC BIODIVERSITY CONSERVATION**

**Indicator 9: Number of fishers in the project area using sustainable fishing gear as evidenced by mesh size.** The revised EOP is that 300 fishers in the project area are using sustainable fishing gear, as evidenced by mesh size. According to the Project's M&E Plan, 1,000 fishers were practicing sustainable activities by December 2019, so this target is achieved, although it is not clear where this estimate is from and it is assumed to have simply been equated with the number of households receiving alternative livelihoods support. The project believes that fishing activities in the Dolphin PAs has been reduced and there have been improvements pertaining to the mesh size of the fisher's net in the buffer areas (PIR, 2019). There are no more gillnets or set bag nets to collect shrimp, whereas according to the Project Document at project inception there were 42 / 45 nets per 1km<sup>2</sup>. According to the Project Manager there has been a 70% reduction in fishing activity. The Dolphin population survey, recorded fishing vessels and fishing gear within the Sanctuaries and supports the view that unsustainable fishing gear is being less used. For example, in Chandpai in one day, 8 observations were made of 3 fish hook sticks, 3 crab [hooks], 2 chorpata, none of which are illegal. Based on the evidence available (largely qualitative), this indicator is rated as being on track although it is not possible to rate achievement strictly against the baseline and the EOP.

**Indicator 10: Amount of resources flowing to local communities annually from community based ecotourism activities.** The EOP was that US\$ 0.1 million was to flow to communities from ecotourism based activities. The Project Document stated that this target value should be re-confirmed during the 1st year of the project and the MTR recommended to revise the indicator to 'Number of ecotourism initiatives developed by the community and private tour operator', with an EOP target of 10 on the basis that the original target was too ambitious. This indicator has not been measured by the project and has not been rated. A review of the beneficiary list indicators 13 households used their grant money to engage in tour boat operations. The economic viability of these schemes has not been estimated.

**Indicator 11: Number of people shifting to alternative income generating options that reduce pressure on biodiversity.** The EOP target is that at least 700 people have shifted to alternative income generating options. The project's view is that around 700 people will have permanently shifted, but this will only be verifiable in time. The project helped 1,000 people, but a percentage of these are likely to fall back into poverty due to initiatives failing (e.g. ducks may die) or personal hardship (e.g. hospital costs) requiring them to sell assets provided by the project and revert back to (illegal) fishing.

**Indicator 12: Number of people sensitized on aquatic biodiversity conservation particularly that of cetaceans.** The target of 5,000 by 2019 has been exceeded by the project, with the project reporting that 50,000 people had been sensitized by December 2019.

#### *3.3.1.1 Analysis by output / activity*

This section provides an overview of the achievements at the output and activity level, which are summarized in Table 5. Most activities have been completed. Activities on-going at the time of TE are:

- The project plans to set up a rewards initiative for dolphin conservation initiatives within BFD
- The project is in the process of setting up a fund for the 7 DCT. US\$350,000 is to be deposited in a bank (US\$5,000 for each DCT), the interest from which (around 3,000Tk a month) can be used to support conservation efforts, such as meetings. The money will be managed by Co-Management Committee, who will allocate the money to the DCT.
- Approval of project knowledge products and policy documents, namely - Dolphin Action Plan, Halda dolphin conservation management plan, Dolphin Atlas, 5 Sectoral Guidelines for the Sundarbans, Community Based Resource Management Plan, Strategic Livelihood Sustainability Plan of EPASIIAE project AIGAs
- Establishment of National and Regional level committees

**Table 5: Summary of project achievements at activity level**

Output		Key Activities
<b>Outcome 1: Important aquatic ecosystems of the Sundarbans supporting the globally threatened species of cetaceans conserved</b>		
1.1	Knowledge generation and dissemination system improves decision making related to the management of aquatic habitats and sustainable use of resources in the protected areas and buffer zones	<p><b>Knowledge products</b></p> <ul style="list-style-type: none"> <li>• <b>Research gap analysis (Published)</b></li> <li>• <b>Dolphin hotspot identification (Published)</b></li> <li>• <i>Dolphin Action Plan</i></li> <li>• <i>Halda dolphin conservation management plan</i></li> <li>• <i>Dolphin Atlas</i></li> <li>• <b>Population status report of dolphin in Halda river (Published)</b></li> <li>• <i>5 Sectoral Guidelines for Sundarbans</i></li> <li>• <i>Community Based Resource Management Plan (see 2.1)</i></li> <li>• <i>Strategic Livelihood Sustainability Plan of EPASIIAE project AIGAs</i></li> </ul> <p><b>Awareness program</b> (e.g. <i>Shushuk mela</i> (dolphin fair), activities in schools, social media)</p>
1.2	New and additional areas to be managed as Protected Areas and buffer areas identified, notified and capacities developed among conservation and economic sector staff	<ul style="list-style-type: none"> <li>• Declared 3 new dolphin sanctuaries comprising 22 km<sup>2</sup>. sanctuary (core) &amp; 12.27 km<sup>2</sup> buffer zone based on the dolphin hotspot report of the project.</li> <li>• Capacity building for 200 conservation staff (Forest Department)</li> <li>• Capacity building for 70 Dolphin Conservation Team members</li> <li>• DCT's operational manual</li> <li>• Awareness training/workshop for 200 economic sector people</li> <li>• Sensitized 50,000 local people on conservation</li> </ul>
1.3	Support to the implementation of Management Plans of new PAs and buffer areas to address existing and emerging threats to aquatic biodiversity particularly the cetaceans	<ul style="list-style-type: none"> <li>• SMART patrolling</li> <li>• Mobile phone bill provision</li> <li>• Fuel (diesel)</li> <li>• Clothing and equipment (patrol vest, raincoat, GPS, GPS batteries, fuel container, hand mike, torchlight)</li> </ul>
1.4	Monitoring and evaluation framework and replication strategy developed for effective aquatic PA management specifically for the Sundarbans and other aquatic ecosystems across country	<ul style="list-style-type: none"> <li>• National and regional level institutional mechanism (not yet established)</li> <li>• Replication strategy (not available)</li> </ul>
<b>Outcome 2: Community-based ecosystems management to support aquatic biodiversity conservation.</b>		
2.1	Community based fishery management plan prepared, capacities developed and financial support extended for operationalizing sustainable fishing practices and conservation of aquatic biodiversity	<ul style="list-style-type: none"> <li>• Community Based Resource Management Plan prepared</li> <li>• Elements of the plan are being implemented, although it is not yet approved</li> </ul>
2.2	Strategies for alternate income generation and livelihood diversification developed and implemented leading to reduced dependence on natural resources.	<ul style="list-style-type: none"> <li>• Livelihood Sustainability Plan</li> <li>• Alternate Income Generation (AIG) Activities</li> <li>• Training on selected alternative livelihoods</li> </ul>

**Outcome 1: Important aquatic ecosystems of the Sundarbans supporting the globally threatened species of cetaceans conserved**

Outcome 1 focuses on improving the management of the dolphin conservation area. Specifically, the project aimed to improve the METT scores, develop sectoral guidelines, improve cross-sectoral coordination and provide capacity development training to the government employees.

**Output 1.1: Knowledge generation and dissemination system improves decision making related to the management of aquatic habitats and sustainable use of resources in the protected areas and buffer zones**

The project has generated a range of knowledge products, intended to support conservation managers to improve the country's dolphin habitat, as summarized below. The Dolphin Atlas, Dolphin Conservation action plan and Management Plan of Ganges River Dolphin in Halda river are still to be approved by the Ministry of Environment, Forest and Climate Change. The Strategic Livelihood Sustainability plan of the EPASIIAE project AIGAs has been submitted to the Chief Conservator's office, Dhaka.

A **Research Gap Analysis** was undertaken to identify research gaps in dolphin conservation in the study area, prioritize research needs and suggest potential methods to address the gaps. The study was undertaken by a consultant from the Institute of Forestry and Environmental Sciences Chittagong University. The report summarizes the (limited) literature on dolphin research in Bangladesh and beyond. On the basis of the knowledge gap analysis the Bangladesh Government / MoEFCC decided to prepare a Dolphin Atlas of the country and a Dolphin Conservation Action Plan and to conduct a dolphin population survey in the Sundarbans and Halda river.

**Dolphin hotspot report.** Led by a professor at Jahangirnagar University this study identified five dolphin hotspots (high density areas) in the Sundarbans based on a dolphin population survey of abundance and distribution. The areas identified are Sela-Supati Rivers, Sibsa River, the estuarine area around Putney Island, Passur River and Baleshawr Estuary<sup>14</sup>. The findings were used to propose three new Dolphin sanctuaries Pankhali Wildlife Sanctuary (WS), Shibsha WS and Bhodra WS (see discussion under Indicator 1 above).

**'Conservation Action Plan for Ganges River Dolphin and Irrawaddy Dolphin of Bangladesh'**. The project prepared a dolphin conservation plan covering the period 2020-2030, in association with a consultant from Jahangirnagar University. The plan identifies habitat loss and degradation as the biggest challenge in dolphin conservation and proposes various initiatives to assist the continuity, healthy survival and sustainability of the dolphins. It states that successful implementation of the action plan will require 'adequate resource arrangements, engaging local actors and stakeholders in habitat management and alternative subsistence, and enhancing capacity of BFD at local level around dolphin habitats'. The Plan cautions that a coal fired power plant at about 15 km north of the Sundarbans at Rampal will cause serious pollution to the Sundarbans ecosystems.

The **'Atlas on Ganges river dolphin and Irrawaddy dolphin of Bangladesh'** was completed in 2019 by a national consultant. The rivers Padma, Jamuna, Meghna, Brahmaputra and Karnaphuli including their tributaries are cited as the principal habitats of these species in Bangladesh. Although all the major river systems of Bangladesh still have supportive ecosystems for the Ganges river dolphins, some of the rivers such as Dhorla, Teesta and Kushiya do not carry any dolphins, at least during winter months. A population of 225 Ganges river dolphin from the less saline zones of the Sundarbans and 125 individuals from the Karnafuli and Sangu river systems is estimated.

**Population survey of Halda Dolphin for Conservation and Management Plan.** This study was undertaken by a national consultant who estimated a viable and relatively health population of 45 dolphins. This census was conducted in the dry season and it is expected that the population will be higher in the wet season. The project methods can be replicated in other parts of the country.

**Sectoral Guidelines.** Biodiversity friendly sector guidelines for Dolphin Sanctuaries have been completed for five sectors – industrial development, maritime traffic, tourism, aquaculture and fisheries. They were led by two consultant professors from Khulna University (one

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<sup>14</sup> 4 semi hotspots were also identified within Sundarbans - Marjat, Mahmuda-Malanca, Arpangasia and Putney.

covering tourism, maritime and industrial development and the other fisheries and aquaculture). The sectoral guidelines were developed through a series of focus group meetings / workshops in Khulna and at the national level, inter-ministerial meetings led by the MoEFCC, and a review of existing laws and policies. They involved a wide range of stakeholders. The Industrial development guidelines states that setting of industries close to Sundarbans needs to be continuously examined to avoid water pollution. The tourism sector guidelines recommend pragmatic first steps to gradually habituate a conservation mind set and make sectors more accountable. For example, the use of renewable energy by boats, low frequency sound systems, and the avoidance of commercial / mass tourism. The report sets out guidelines for Bangladesh Forest Department, Bangladesh Port Corporation, Tour Operators, Department of Environment, Department of Shipping and BIWTA. The Fisheries guidelines suggests 19 areas where actions are needed to move towards biodiversity friendly fishing in the Sundarbans.<sup>15</sup>

While these biodiversity friendly sector guidelines are a good start to tackling the challenge of integrated planning they are yet to be endorsed by the concerned ministries and it is unknown if they will become binding and mainstreamed into sector policies strategies and plans and result in actual changes in practices.

A **Livelihood Sustainability Plan** was completed by a consultant in December 2019 but has not yet been approved. The objective of the study was to prepare a strategic plan for the institutionalization of alternative income generation activities (AIGA) and to assess changes in the status of beneficiaries as a result of the AIGAs supported by the project.

The project in partnership with IUCN (International Union for Conservation of Nature) – CNRS had a successful **awareness raising program** which covered a range of initiatives to increase understanding of the importance of biodiversity conservation in the Sundarbans and countrywide, and is estimated to have sensitized at least 50,000 people. Key initiatives are:

- Observation of International Fresh Water Dolphin Day (24 October) initiated in 2018. Dolphin Day 2019 was observed at the Liberation War Museum, Dhaka from 24-26 October 2019 and was attended by more than 5,000 people. The Honorable Minister, Deputy Minister, Secretary, MoEFCC, and the Chief Conservator of Forests were present.
- A **dolphin fair** (*Shushuk mela*) was organised by the project in Khulna and Dhaka, over a week in October / November in 2018 and 2019. Leaflets, brochures and posters were distributed and a boat-based, interactive exhibition shaped as a dolphin travelled to remote fishing villages for 10 days to raise awareness and gain support among the local people for aquatic wildlife, sustainable fisheries and climate change adaptation.
- Initiatives with local schools. In 2019 15 school awareness campaign were organized reaching more than 6,900 students, dolphin graffiti art were painted in two schools and two field trips were held.
- The project engaged a leading national media firm specializing in conservation to develop a documentary film and awareness raising video. It also produced a television clip featuring a famous actor Mr. Ferdous informing fishermen about the importance of dolphins to the river ecosystem and the protected status of dolphins under the Wildlife Act.

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<sup>15</sup> These are: Mesh size regulation, Habitat restoration, Controlling upstream river flow and tidal river management, Identification of fish and dolphin feeding nursery, Expansion of sanctuary areas, Fisheries stock assessment, Catching fish larvae beyond SRF, Control of pollution and industrial development, Impose fishing ban, Encourage sustainable fishery farms, Illegal (poison) fishing in Sundarban stopped, Alternative navigation route avoiding sanctuaries, Disposal of industrial wastes strictly restricted, Create alternative livelihood options, Studies done before dam and bridge construction, Task-force and volunteer, Fishing permit strictly imposed, Mobile court.

- Awareness raising program for tour operators.
- Awareness training/workshop among 200 economic sector people
- Awareness for communities, fishermen, boatmen, crab hunters who depend on the project areas. Consultees for this evaluation at Joymonir ghol stated that they now understand the benefits of dolphins and the importance for fish stocks and reportedly no longer fish in Sanctuary areas.
- Exchange visit for BFD and ministry officers to understand neighboring country's efforts in dolphin conservation
- Dolphin conservation awareness posters, brochures, folders and notepads developed and distributed among stakeholders.
- 8 digital signboards were prepared and installed around the Dolphin sanctuaries.
- Meetings, Seminars and Workshops. For example, a meeting was organized at Mongla on reducing river pollution for dolphin conservation. This meeting was attended by the Honorable Deputy Minister, MoEFCC and 200 stakeholders including fishermen, pesticide shop owners, government officers, boatmen, crab collectors businessmen and CMC.
- Social media platforms such as Facebook and twitter and print media (newspapers). The project set up a Facebook page which was linked with the Facebook page of BFD, MoEFCC and UNDP<sup>16</sup>. People can also visit to UNDP link at: <http://www.bd.undp.org/content/bangladesh/en/home/projects/expanding-the-protected-area-system-to-incorporate-important-aqu.html>

**Output 1.2: New and additional areas to be managed as Protected Areas and buffer areas identified, notified and capacities developed among conservation and economic sector staff.** Key activities related to this output include:

- Proposal submitted to declare additional three dolphin sanctuaries comprising 22 km<sup>2</sup> sanctuary (core) and 12.27 km<sup>2</sup> buffer zone based on the dolphin hotspot report of the project (discussed above). The areas were declared in March 2020.
- The project supported the Forest Department officials to effectively manage the sanctuary area.
  - Capacity building for 200 staff (50% of BFD staff in the area) across 8 Sanctuary Forest camps in dolphin biology, behavior, resource management and conducting GPS based patrolling (PIR, 2019)<sup>17</sup>. Staff were trained from all 8 camps in the Sundarbans, so that there is the possibility of disseminating knowledge to those who did not attend the training.
  - 130 staff received training in **SMART patrolling** over 2 days, plus an additional day on how to use a simple GPS data collecting and reporting process.
- Capacity building for 70 Dolphin Conservation Team members. The project has successfully raised awareness among the DCT such that they appreciate the importance of the project for the local area, and are aware that protecting dolphin habitat protects other animals too. Due to the training they received they were able to rescue dolphins, the first such case in the country. They have also rescued deer and wild pig with the BFD. The project trained the DCTs in dolphin conservation (biology and behavior). A 2 day training was provided on the DCT's operational manual prepared by the project (e.g. what is allowed in Sanctuary areas, role of dolphins in aquatic environment, dangerous fishing practices, such as poison fishing which is damaging aquatic and terrestrial wildlife in the area). The DCT's would reportedly have liked more training.

<sup>16</sup> These websites are: <https://www.facebook.com/DolphinProjectBD/> ; and <http://www.bd.undp.org/content/bangladesh/en/home/projects/expanding-the-protectedarea-system-to-incorporate-importantaqui.html>

<sup>17</sup> The 8 forest camps are – Gaghramari, Dhangmari, Karamjol, Jongra, Nondobala, Chandpai, Andharmanik, Horintana

Training modules and manuals were developed in both English and Bengali, building on and adapting existing materials (such as an existing training module for dolphin conservation from the Wetland Biodiversity Rehabilitation Project and other conservation training modules related to vultures, elephant response and community based biodiversity conservation in Tanguar haor). Two types of training modules and manuals were developed - one related to the ecology of dolphins (identifying features, distribution of range, population, migration pattern and behavior) and another on forest and biodiversity conservation, poaching, threats to dolphins, rescue and release of dolphins caught in fishing nets, carcass examination and identifying the causes of death, and relevant laws.

### **Output 1.3 Support to the implementation of Management Plans of new PAs and buffer areas to address existing and emerging threats to aquatic biodiversity particularly the cetaceans.**

The project has supported the implementation of the Community-Based Resource Management Plan activities in the existing 3 dolphin sanctuaries covering 1,070 ha through a range of initiatives, which have strengthened protection of the area:

- Demarcation of the three existing Dolphin Sanctuaries using floating buoys and sign boards. Before the project there was no demarcation and people did not know where the core protected area was. The *proposed* sanctuaries were also demarcated using floating buoys prior to their declaration.
- SMART patrolling in dolphin conservation areas was introduced. There are 8 SMART patrolling teams for the 8 forest camps of the three dolphin wildlife sanctuaries. Daily patrols have been conducted by the 8 Forest Camps and data collected in log books, which are submitted each month to the Divisional Forest Office and PMU. The reports over the period June 2018 – August 2019 have helped the BFD to ensure surveillance and law enforcement in protected areas. As a result of the SMART patrolling the three sanctuaries and neighboring areas have seen a significant decline in illegal fishing and poaching activities<sup>18</sup>. In addition to identifying the location of illegal fishing and poaching activities, the GPS technology-based patrolling in parallel provides dolphin monitoring data on abundance and location.
- The active participation of the DCTs has augmented the protection efforts of the government staff. The DCTs share information with the BFD staff, rescue live and dead dolphins and remove the illegal fishing nets from the river along with the Co-management Organizations (Box 1).
- The mobile bills of personnel working in dolphin conservation were paid for by the project.
- Boat fuel (diesel) was supplied to 8 BFD stations to facilitate their movements. Fuel is costly and prior to the project BFD could not afford the fuel to adequately monitor the area. Through the provision of 100 litres per month per camp the project has demonstrated that the provision of fuel can make a difference to conservation efforts.
- BFD staff were given equipment and clothing to facilitate their activities such as GPS batteries, vests, rain coats, fuel container and torchlights. Rechargeable batteries supplied in 2019 to the 8 patrol camps have been cost effective.
- For the WS proposed by the project the BFD set up floating bouys in Bhadra and people are already aware that it is a PA. In Pankhali a DCT has been formed, but, unlike the other proposed areas, it is outside of the Sundarbans and therefore not under the BFD's jurisdiction. The BFD will need to deplore staff there now it is designated. The Wildlife Act 2012 will support this designation as fishing is prohibited in Protected Areas.

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<sup>18</sup> The First dolphin offence under Wildlife (Conservation and Security) Act, 2012 was filed for a dolphin captured at Munshiganj, Satkhira in February 2018 (PIR, 2018).

**Box 1: Dolphin Conservation Teams (DCT).**

7 DCT have been established consisting of 10 members each and are operating along the whole northern periphery of the Sundarbans. The DCTs are modeled on Village Tiger Responses (VTR) teams and Elephant Responses Teams (RTR) already operating in parts of Bangladesh. The objective is to minimize human – animal conflict. They teams are totally voluntary and cover different villages. The DCTs assist the BFD to monitor and patrol the area and serve as an important source of information on actual or potential activities (e.g. fishing or tree cutting) in the dolphin sanctuaries. They also participate in meetings to raise awareness, for example in schools, and ensure tourists get permission from the BFD to enter the sanctuaries. They prepare and submit monthly patrol and monitoring reports.

The DCT receive no financial support, unlike Community Patrol Group who receive money from NGOs and sometimes the Government. The DCTs were provided uniform – vest, t-shirt, umbrella cap, jacket, bag, loudspeaker, and allowance for meetings, transport and refreshments. A discussion point of the TE was whether the DCT should be incentivized financially with different points of view expressed. DCT members have a range of jobs including haulage and working in fishing businesses.

**Output 1.4 – Monitoring and evaluation framework and replication strategy developed for effective aquatic PA management specifically for the Sundarbans and other aquatic ecosystems across country**

Under this output the project was to establish a regional and national level institutional mechanisms to ensuring cross-sectoral dialogue and joint action with regard to sustainable resource use and conservation of biodiversity in the Sundarbans and other aquatic environments in the country. Multi-sectoral institutional mechanisms are vital given that major threats to the biodiversity of the Sundarbans emanate from outside (e.g. upland water abstraction, unplanned industrial development) and /or are multi-sectoral in nature. The project was to establishment (i) a **National Technical Group on Aquatic Conservation** bringing together government, NGOs (national and International) and academia to advise the Forest Department on aquatic conservation and to develop a long-term National Aquatic Conservation Plan linking wetland management with Critical Area management; and, (ii) a **Regional Cross-Sectoral Stakeholder Committee** under the chairmanship of the Conservator of Forests in charge of the Khulna Circle. This would act as the first formal institutional mechanisms at the regional level, wherein various sectors and actors (public and private) could come together and discuss and initiate joint action to resolve issues. Both committees are yet to be established.

A replication strategy for piloting similar conservation approaches in other aquatic areas of the country including upstream policy engagements, was also meant to be developed under this output, but has not been undertaken.

**OUTCOME 2: COMMUNITY-BASED ECOSYSTEMS MANAGEMENT SYSTEMS IN PLACE TO SUPPORT AQUATIC BIODIVERSITY CONSERVATION**

**Output 2.1** Community based resource management plan prepared, capacities developed and financial support extended for operationalizing sustainable resource use practices and conservation of aquatic biodiversity.

**Community Based Resource Management Plan (CBRMP) of wildlife sanctuaries for Dolphin in Bangladesh Sundarban (2019 – 2028).** Before the development of the CBRMP, the BFD were following the BFD-WCS supported 10 year MP - the 'Integrated Management Plan for the three Wildlife Sanctuaries for Freshwater Dolphins in the Eastern Sundarbans Reserved Forest, Bangladesh (2015-2024)', which was provisionally approved on August 2016 and November 2017 (in both cases, for six months only on a trial basis) by the MoEFCC. It was also adhering to the earlier approved 'Integrated Resources Management Plan for Sundarbans (IRMP, 2010-2020)', and outlined frameworks for effective engagement of



communities in resource management under the purview of co-management organizations. CBRMP updates and super-cedes these past plans, incorporating additional aspects. The CBRMP places special emphasis on community well-being, including livelihood development, and coordinated services from GoB agencies and development partners in dolphin conservation. Leadership from the Forest Department is seen as key to harnessing coordinated support from all concerned agencies, projects and program along with effective engagement of communities in resources management through co-management organization. The CBRMP recommends that the Government allocates revenue to livelihoods (support) through projects or budget revenue.

The plan was developed through a 9 month consultancy by an independent consultant and is organized under five sections: (i) Scientific account of species; (ii) Conservation challenges for dolphins; (iii) Existing Management; (iv) Community-based Resources Management Plan (CBRMP) of the Wildlife Sanctuaries for Dolphins in Bangladesh Sundarbans; and (v) Community-Based Dolphins Action Plan: 2019 – 2028 and implementation strategy. The plan notes that coordinated efforts among GoB agencies, development partners and communities within sanctuary landscapes are required for effective dolphin conservation. While the Plan has been approved by the BFD, it is yet to be approved by MoEFCC. Nonetheless the plan is being implemented by the BFD to a certain extent, e.g. GPS patrolling GPS and community involvement in dolphin monitoring and protection.

**Output 2.2 AIG. Strategies for alternate income generation and livelihood diversification developed and implemented leading to reduced dependence on natural resources.**

The project partnered with CODEC to support alternative livelihood activities for 1,000 marginalized communities that depended on fishing in the sanctuary and neighbouring areas for their livelihood. CODEC were contracted for 18 months (July 2018 to December 2019). It provided support to communities in 3 Unions (Chilla, Chandpai, Baniasanta); in 2 Upazilas (Mongla and Dacope); and in 2 Districts (Khulna and Bagerhat). The total grant money allocate to communities to support the implementation of alternative livelihood activities was US\$ 614,339.

Under the Project's livelihood component a US\$500 grant was given to 1,000 households to help establish Alternative Income Generation Activities (AIGA). Joymonigol and Dhangmari areas were selected as they are near to the dolphin conservation area. The beneficiaries were selected using the following criteria: (i) living within 0.25 km of the dolphin sanctuaries; (ii) engaged in the collection of shrimp fry or other fish fry using 'very small mesh' type nets from the dolphin sanctuaries; (iii) living just outside the embankment, next to dolphin sanctuary area; and, (iv) priority was given to 'hard core' poor. Potential beneficiaries were initially identified by CODEC through field work. A primary list was prepared based on people who were observed to be fishing in the area, which was then verified by BFD, CMEC a co-management organization (CMO) in the area focused on the Sundarbans and established by the IPAC project. Selected beneficiaries were asked about their interests, and consideration was then given to how activities proposed by the beneficiaries aligned with their capacity, past experiences and the financial viability of the proposed venture. Allowing the beneficiaries to propose the livelihood alternatives of interest to them is considered to be an innovation of the project and a key factor contributing to the success of the AIGA support to date. Overall 26 types of activities have been supported including the purchase of rickshaws, sewing machines, crab fattening, sheep rearing, goat rearing, setting up small businesses (grocery shops, tea stall) and tailoring. The project provided training to the beneficiaries (both male and female members of selected households) on the trades they were interested in pursuing. A legal agreement drawn up between FD, CMO, CODEC and the beneficiary.

The project actively prioritized women and 95% of the beneficiaries were women. Previous projects in the area such as IPAC and CREL had tried to involve women but had not supported

them as directly. EPASIAE Project motivated women to be the 'lead member' in the households and is the first project in Bangladesh to have given a significant amount of money directly to women, who for the first time opened a bank account in their name. Beneficiaries did not received cash in hand, rather the materials needed for the AIGA were paid to vendors by Dutch Bangla Agent Banking. In rural areas women are reluctant to travel to banks in the district and the beneficiaries therefore used **Agent banks**<sup>19</sup>, they are also able to bank on-line through the use of their own or family owned cell phones. The project has served to empower women and incorporate them into the financial system of the country for the first time. The beneficiaries include the most vulnerable, namely widows and a woman with an autistic child and disabled husband (PIR 2019).

Based on consultations in the field for this evaluation, the alternative livelihoods supported through the project are allowing households to shift away from fishing and in some cases improve their standard of living. For example, in Vojonkhali village one women used the money to lease a shop area and stock it with supplies, which she runs with her husband. The grant money has reportedly transformed their lives. She is earning a profit of 300 TK a day and her income is also now more secure as previously, when they fished, their nets were often confiscated by the coastguard and they were prosecuted. She has been able to pay off her debts, repair her house and invest 70,000TK. She received livelihood training by the project which included advice on how to talk to customers and avoid selling on credit and how to keep a sales book to track sales and profit / loss.

The project undertook a business survey to understand the socio-economic conditions of the target communities. According to the project's annual report for 2019, beneficiaries who received grant money in the past year experienced a 17% monthly increase in income on average.

To support continued development and innovation of alternative sustainable livelihood activities, the project trained around 30 **Sustainable Livelihood groups (SLG)**, with around 25 members per group, made up solely of beneficiaries of the project, based on CARE model in Africa. The project wanted to establish 90 SLGs, but only managed 30 due to time restrictions. They operate in small amounts of money which are generally not of interest to a bank. In a SLG in Joymonir village women save up to 100 TK per week (5 shares can be brought each week valued at 20 TK each). If a member does not buy a share over a three week period, then she has to leave the group. Members can take out loans from the fund at 5% interest to develop their businesses or for education and health needs. All but 3 members of the group have taken a loan during the year of around 3,000-5,00 TK to invest in shop / buy materials. This loan facility means that the members of the group do not need to go to NGOs or money lenders for money and there is no middle man involved<sup>20</sup>. A savings and loan meeting is held each month. The SLG has three cashiers who have a key to the box where the money is kept and a president. At the end of the year the session is complete and the women are returned their savings plus any profit. After one year, the women had made a profit ranging from 900-3,000 TK. A new cycle then starts where the share may be different. The process is very open and transparent and is incentivizing women to save. Before the project these households were dependent on fishing. They are now able to sustain themselves through their diversification into alternative sources of incomes and in most cases are making a surplus to invest back into their small businesses. However, for the majority of households

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<sup>19</sup> Agent Banking is a service provided to rural customer who do not have access to formal banking. The service is provided through mobile phones and computers using biometric technology. It can be used for foreign remittance disbursement, small value loan disbursement and recovery, fund transfer, ATM withdrawal and insurance.

<sup>20</sup> Before the project when fishermen needed to repair boats and nets they went to traditional money lenders. They were then bound to catch more fish and/or sell fish at an unfair price to meet their repayment commitments, both factors incentivizing overfishing.

in the area fishing remains the main source of income.

The SLGs support sustainability of the AIG initiatives. As in December 2020, the SLG approach is functioning well however, sustainability of the groups may be at risk once the project ends and they are no longer supported by CODEC. To support sustainability, the Project has ensured that all beneficiaries are members of the Government's Amar-Bari-Amar Khamar ('My House, My Farm') scheme, which gives them access to very low interest government loans. By 31 December 2019, 865 beneficiaries were members of the government regulated 'Amar Abri Amar Khamar' project and some had taken soft loans from the Government's Polli Shanchoy Bank.

Coverage is also an issue as the majority of households did not benefit from support and it is not clear how this will be addressed. It is difficult to identify new livelihoods as people in the areas have depended for a long time on forestry and fishing so do not have other skills and are not well educated.

### 3.3.2 Relevance (\*)

The project is rated as **Highly Satisfactory** in terms of relevance.

The project landscape supports one of the last remaining and viable populations of the Ganges and the Irrawaddy dolphins in the world. Effective conservation within the project landscape can therefore ensure the survival of these two species globally. The project landscape is also highly vulnerable to climate change and the two cetacean species targeted by the project have high indicator values in understanding and monitoring the impacts of climate change (Project Document). The project has also played a role in poverty alleviation, and inclusive growth.

The project is aligned with the objectives of **National Biodiversity Strategy and Action Plan** for Bangladesh (August 2004) to: (i) conserve and restore the biodiversity of the country; (ii) maintain and improve environmental stability for ecosystems; and, (iii) ensure preservation of the unique biological heritage of the nation. It is consistent with the **Bangladesh Capacity Development Action Plan for Sustainable Environmental Governance** (December 2007), and addresses Principal Environmental Issues (PEIs) related to anthropogenic factors that have caused damage to ecosystems such as unregulated fishing. The project's components are included in the Bangladesh Biodiversity National Assessment and Programme of Action 2020 (BPA 2020) Focal Area 1 Coastal and Marine Ecosystems Conservation, Project 4 Conservation of Irrawaddy dolphins and other cetaceans, including finless porpoises, Indo-Pacific humpback dolphins, Indo-Pacific bottlenose dolphins and Bryde's whales, and Project 7 Community-based conservation and management for cetaceans such as Ganges River and Irrawaddy dolphins (PIR, 2017).

The project contributes to the delivery of the Sustainable Development Goals (SDGs). It is aligned with the Sustainable Development Goal-14 'sustainably use the oceans, seas and marine resources for sustainable development', contributing to targets 14.2, 14.4 and 14.5<sup>21</sup>. The project has support the achievement of SDG 14.5 through the declaration of 22 km<sup>2</sup> of

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<sup>21</sup> **Target-14.2:** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans. **Target-14.4:** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics. **Target-14.5:** By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

wildlife sanctuary for dolphin and 12.27 km<sup>2</sup> buffer zone.

The project responds to Bangladesh's obligations to the CBD and contributes to achieving the CBD's Aichi targets. In particular, it directly contributes 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 expansion in PA achieved through the project means Bangladesh has achieved Aichi Target-11 (By 2020, at least 17% of terrestrial and inland water, and 10% 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).

At design the project aligned with: (i) UN Development Assistance Framework (UNDAF) Outcome 5.2: by 2016, vulnerable populations benefit from natural resource management, environmental governance and low-emission green development; (ii) UNDP Strategic Plan Primary Outcome – sustainable human development is embedded substantively in development debate and action at all levels; (iii) Expected UN Country Program Action Plan (CPAP) 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. Currently the project contributes to achieving the UNDAF Outcome 2: Sustainable and Resilience Environment, which states "By 2020, relevant State institutions, together with their respective partners, enhance effective management of the natural and man-made environment focusing on improved sustainability and increased resilience of vulnerable individuals and groups".

The project supported the Country Programme Document (CPD) for Bangladesh 2017-2020, specifically in relation to output 3.2: The Government has the capacity to set up regulatory and to implement a range of pro-poor, resilience-focused green economic initiatives.

The project is consistent with the GEF 5 Biodiversity Results Framework for the conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services, specifically with Objective 1: Improve sustainability of PA systems and Outcome 1.1: Improved management effectiveness of existing and new PAs. As the project endeavored to influence other developmental sectors in the region, it served to advance Strategic Objective Two: Mainstream biodiversity, conservation and sustainable use into production landscapes, seascapes and sectors.

Participation of stakeholders in the project has been high. The BFD has been actively engaged throughout and the NPD has been committed to the project. Local community involvement has also been high through the engagement of the DCTs and communities supported through the AIGs component.

The project was formulated according to the needs and interests of all targeted and/or relevant stakeholder groups. Project implementation has secured the involvement of a wide range of stakeholders illustrating the relevance of the project. Notably project livelihood interventions were based on the interests of stakeholders, the DCT have shown leadership within their communities for dolphin conservation and the biodiversity sensitive sectoral plans developed under the project have required the engagement of key sectors active within the Sundarbans.

### 3.3.3 Effectiveness (\*)

Effectiveness is rated as **Moderately Satisfactory**.

There is some discrepancy between what was planned and what was achieved largely due to the over ambitious project design and the fact that no changes were made to the indicators or

targets during project implementation. This is particularly apparent at the objective level. For example, the expansion of the protected area is well below what was planned, but was unrealistic given the socio-economic context and extent of protection already in place. At the outcome level the project had a number of successes, in some cases exceeding the planned target and in other cases introducing additional activities. Component 2 is considered to have been a particular success (despite the fact that not all indicators were met), on account of its gender empowerment, and reduction in fishing pressure (although it remains to be seen if this can be sustained). In the important but challenging area of cross sectoral working, the project has had some success in developing sector strategies in collaboration with key sectors, but these are yet to be approved. More significantly the project has not been able to secure the established of a cross –sectoral institution at the regional level and national level.

The project will contribute to the conservation of globally significant biodiversity, if the alternative income opportunities established through the project are sustained. If communities fall back into hardship there is a risk that they will revert to illegal and over fishing. It is also true that industrial development and pollution still pose a significant risk to the area's ecosystems and to the progress made by the project.

The project has been constrained by a compressed timeframe. It was generally felt that a number of the project's initiatives would have been more embedded and hence more resilient if there had been more time. The project funds were however all spent over the 3 year implementation period, although co-financing was 16% of that committed on available estimates.

The project was designed to ensure strong support and involvement of local communities, and other stakeholders in protected area and buffer area management, as a sustainability mechanism. Good stakeholder engagement during project implementation has contributed to the effectiveness of the project and there has been a shift in awareness and behavior towards dolphin compatible practices, at least in the short term among the project direct beneficiaries.

The project has made a significant contribution to gender equality and the empowerment of women through its livelihood component which prioritized women. The project can serve as an example for Bangladesh on women's empowerment. While there is no project indicator tracking results in terms of gender equality, the discussion with project stakeholder and beneficiaries in the field indicate commendable results in this respect.

#### 3.3.4 Efficiency (\*)

Project Efficiency is rated as **Moderately Satisfactory**.

**Resource allocation and cost effectiveness:** Following the MTR it was recommended that the project review the existing budget and explore the possibility of a 1 year no-cost extension. The management response was that after a careful review there was not enough money for an extension and that the funding modality did not support it. The project funds were largely all spent over the 3-year implementation period, with 50% spent in the last six month of 2019, while co-financing was only 16% of the committed amount from the Government. The project accelerated spending after the delays, which means that a lot was produced in a much reduced project time frame, but there was no time towards the end of the project to embed the project's outputs and mechanisms and a number of approvals have not been secured.

Resources were specifically allocated under the livelihood component to support women and hence targeted at the most vulnerable. The project promoted cost savings through cooperation with local communities (such as community patrolling) and joint activities between the three PAs (such as joint capacity building, pooling information on dolphin sightings, illegal fishing, wildlife poaching and strayed animal).

**Project management and timeliness.** The project suffered a 2-year delay at start up, largely due to the time taken to achieve TPP approval. Arguably the project should have asked for an even longer extension than the one year proposed by the MTR to allow activities to have been implemented over a more realistic timeframe. This 5-year project has essentially been undertaken in 3 years. The inefficiency in the TPP approval process was counterbalance by the efficient delivery of the project activities within the reduced timeframe, by the PMU and project partners, but this is not without its costs in terms of impact and sustainability. Project disbursements and activities were also delayed due to procurement issues, and activities were rushed through from mid-2018 onwards.

The project management structure, as outlined in the project document, is considered to have been efficient and contributed to the project results. The PM comes from the BFD. Furthermore, the fact that the NPD is the Divisional Forest Officer for Wildlife Management and Nature Conservation in Khulna has greatly contributed to project efficiency, facilitating a strong working relationship between the offices of the FD<sup>22</sup>. The NPD also had experience forming 39 Village Response teams, which could be applied to the establishment of the DCTs.

M&E activities include MTR and PIRs. However, recommendations do not seem to have been consistently incorporated into project management, and the lack of quarterly progress reports for the project as a whole means that there is no clear record of progress at the activity level, detailing challenges and how these were to be addressed.

### 3.3.5 Country ownership

The project concept was in line with development priorities and plans of the country as discussed above.

Key representatives from government and civil society were involved in project implementation, and were part of the project steering committee. The BFD has shown ownership of the project. The Conservator of Forest Khulna described the project as exceptional and based on strong teamwork across the BFD. The MoEFCC engaged at the national and site level, with a number of field visits. It is reported that the Chief Conservator of Forests intends to declare the dolphin as an aquatic mammal of Bangladesh on the back of the project.

The project has attempted to promote inter-ministerial working through the development of sectoral guidelines and efforts to establish a national and regional co-ordination committee. These are important efforts but have not yet been formally approved. A number of the project's knowledge products are also still to be approved by the MoEFCC. These approvals would be a strong indicator of country ownership, however, it is not certain they will be granted within the project's timeframe if at all.

### 3.3.6 Gender

The project has been highly effective in contributing to gender equality and women's empowerment as discussed in detail above. The project actively prioritized women and 95% of the beneficiaries were women. The AIG support targeted at marginalized women has contributed to a reduction in non-sustainable fishing while increasing the resilience of

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<sup>22</sup> Under "the Wildlife (Preservation and Protection) Act, 2012, the Forest Department is the lead government agency for protected area management in Bangladesh. Management of the PAs and buffer areas in the project landscape are led by the Wildlife and Nature Conservation Circle of the Forest Department, while the Reserve Forest management is under the Forest Management Circle. Effective joint work between these two units within the Forest Department (in Khulna Circle) is central to aquatic biodiversity conservation in the Sundarbans.



vulnerable communities, at least in the short term<sup>23</sup>. One indicator that these benefits may be sustainable is the fact that women supported by the project have set up SLGs to pool savings and lend money to members to invest in their businesses. The project has contributed to: (i) closing the gender gap in the access to and control over resources (by establishing bank accounts for women); (ii) improving the participation and decision-making of women in natural resource governance (by enabling households to move away from fishing); and, (iii) targeting socio-economic benefits and services for women.

### 3.3.7 Other Cross-cutting Issues

The project has had positive effects on local populations through income generation/job creation which was a core component of the project, improved natural resource management arrangements with local groups directly through the DCT and indirectly through the AIG initiative and improvement in policy frameworks for resource allocation and distribution (CBMP). The provision of alternative incomes sources to fishing have reportedly reduced risks for households as they do not face the risk of having fishing equipment confiscated. As discussed above the project has benefitted local women and vulnerable people (including a few families with disabled family members) and is contributing to poverty reduction. In general, the project has served very poor communities, who are highly dependent on the area's natural resources in a hard to reach area of the country.

### 3.3.8 Social and Environmental Standards

The project followed the approach identified in the Environmental and Social Screening undertaken in 2014. For example, the project did not force a ban on fishing in PAs, but rather identified the fisher folks fishing in PAs in order to engage them in more sustainable livelihood practices. The project advocated the use of less harmful gear that does not kill or entangle Dolphin and trained the DCT on how to detangle dolphins from nets. The restriction or ban on harmful gear (nets with very fine mesh size) should lead to more fish in the long run and an increase in the dolphin population.

### 3.3.9 Sustainability

Sustainability overall is rated as **Moderately Unlikely**. Financial sustainability is rated as **Moderately Likely**, socio-economic as **Moderately Likely**, institutional framework and governance as **Moderately Unlikely**, and environmental as **Moderately Unlikely**.

#### 3.3.9.1 Financial sustainability

Financing of the project activities after the project ends is a concern. It is not certain that adequate funding will be made available to sustain the project's outcomes, although some mechanism to support specific aspects of the project are in place or under discussion.

- Ideally the Forest Department's Conservation orientated work would be incorporated into their regular work through the revenue budget (i.e. funding would be clearly allocated to conservation activities). This however requires MoEFCC convincing the the Ministry of Finance (MoF) to change the budget lines, which is not a trivial exercise and could take a long time. The BFD reportedly intends to continue SMART patrolling, and acknowledges its benefits in terms of monitoring dolphin numbers and controlling illegal activities. In the immediate future SMART patrolling will be supported from the 'normal patrolling' budget line, but there are reportedly efforts underway to set up a specific budget line for SMART patrolling.

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<sup>23</sup> Inside the Sundarbans most fishers are male. Women are mainly involved in the collection of shrimp fry along the periphery of the Sundarbans.

- The AIG initiative in addition to providing opportunities for communities to develop alternatives to fishing has led to the establishment of a number of SLGs, which provide a local mechanism to support and grow livelihood operations.
- The project is planning to establish a financing system to support the DCTs, which has been approved by the PSC on 20 October 2019 . The DCT are nascent organizations and need time to consolidate and establish themselves. Currently no financial incentives are provided to the DCT and there is a concern that it will be difficult for the teams to retain interest and momentum after the project without on-going support. The project plans to deposit US\$ 350,000 with the Co Management Executive Committees – the Government body responsible for the management of the Sundarbans. The interest on this deposit will be used to support DCT activities.
- There are some ideas around sustainable financing, which need to be further developed – e.g. a green tax on industries using Mongla port, which could be then used to support conservation or a payment by tourists for dolphin sightings (e.g. 10 TK, of which 5 TK could go to CMC, and 5 TK to the BFD for Dolphin conservation).
- The MTR Management Response states that the project, in response to a recommendation of the MTR, organized a workshop in Dhaka in April 2019 to develop a countrywide dolphin project and drafted an outline for a new project. The status of this project is unknown or if any resources have been mobilized for it.

### 3.3.9.2 *Socio-economic sustainability*

There is a risk that ownership by the government will be insufficient to allow for the project outcomes/benefits to be sustained. The inability to operationalize the regional committee suggests that Government sectors do not fully grasp the importance of green growth and integrated planning. Under the Constitution 18A the Government is bound to conserve the country's wildlife, however development and conservation are still largely regarded as trade offs and a green growth paradigm is not being adopted. As a result threats to the Sundarbans from industrial development are intensifying<sup>24</sup>. These pressures highlight the importance and need for cross sectoral engagement and working. Increasing public awareness of the contribution of ecosystems such as the Sundarbans to the national economy, key sectors, livelihoods and poverty reduction is also important.

While the project through its AIG support has reduced the dependence of 1,000 households in the areas adjoining the dolphin conservation site on fishing, 5,000 additional households need support to achieve full coverage. Unless more households in the area can benefit from alternative incomes from fishing and forestry, the environmental and social benefits are likely to be only partially realized. It is also challenging to identify additional AIG activities that increase incomes enough to reduce dependency on resources extraction, given the skills, education level and market potential. The KAP survey found that the most prominent income earning activity both before and after the AIG support is fishing.

It is felt that local communities see the benefits of the project activities, but they remain vulnerable to shocks outside of their control. The sustainability of the results depends on the area not suffering any adverse climatic shocks and the on-going viability of the livelihood initiatives. The main challenges facing the communities are very frequent floods and storms which destroy houses on a recurring basis, river erosion encroaching on land, water shortages and poor sanitation.

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<sup>24</sup> Rampal coal-fired power plant, covering an area of around 750 hectares and located 8.75 miles north of the Sundarbans in Bagerhat, Khulna, has been approved despite public protest and recommendations from environmentalists that no coal fired power plants should be built within a distance of 20 miles of sensitive natural ecosystems. The plant will use low quality coal from India.



The project has definitely raised awareness of the importance of dolphin conservation. However, this awareness is likely to wane when the project stops if awareness raising activities are not on-going. Given the limited manpower of the BFD it does not seem likely that it will be able to match the activities undertaken by the project's NGO partners, who led on the project's capacity building, awareness raising and livelihoods components. The Livelihoods Plan identified the availability of expert support post the project as a main challenge to sustainability.

The project has not systematically documented lessons learned and this should be a priority activity before the project closes. There is no replication plan and it is important that the project's successful aspects are transferred to appropriate parties for replication.

### 3.3.9.3 Institutional sustainability and governance

A number of knowledge products, and the committees, are yet to be approved posing a risk to the institutional uptake of the project's outputs.

The preparation of biodiversity friendly good practice guidelines for key sectors and capacity building programmes for the staff of these sectors for implementing these guidelines, was expected to generate their interest and buy-in in project activities and conservation issues. The five Sectoral guidelines are yet to be endorsed and so it is unclear if they will be mainstreamed into sector policies and plans and implemented, or lead to greater integrated working to manage the Sundarbans.

The institutionalization of cross sectoral committees is relatively new to Bangladesh and previous attempts to establish such cross sectoral mechanisms have reportedly not fared well. It is unclear if the stakeholder institutions have adequate interest in the regional stakeholder committee and if they are willing to share information and adapt their behavior to align with the sustainable management of the area.

The Government (MoEFCC and BFD) expressed the intention to continue with the project's activities, although precisely how this is to be achieved and funded is not clear.

In terms of the capacity development of Government staff an issue is the high staff turnover. The project has trained people who have then been transferred. High turnover of government staff at senior levels in the Ministry has affected continuity of the project and means that the project does not have an obvious champion going forward. The project has helped to develop a conservation mind set among camp offices in the Sundarbans and to promote data collection on dolphins. However, Khulna Wildlife Division is understaffed and more capacity building in conservation is thought to be needed.

The BFD was not described as high priority department in Bangladesh. The project has provided a lot of manpower, largely through the two key partners – IUCN-CNRS and CODEC, and it is not clear how the project's initiatives will be sustained once the project has completed. The proposed Pankhali WS is outside of the Sundarbans and therefore not under the BFD's jurisdiction. The BFD will need to deplore additional staff there if it is designated. There is an acute shortage of staff at all levels within the BFD with only 45% officers in position (Table 6), the reasons for this are not clear. At present there is no deputy who can easily be promoted to the rank of CCF, when the incumbent retires as is expected soon

**Table 6: BFD Officer (as of 11<sup>th</sup> Feb 2020)**

Category	Sanctioned	Filled	Vacant
Cadre	204	99	105
Revenue post	46	24	22
Other post	92	31	61
Total Class I	342	154	188

**Source:** BFD 2019

#### 3.3.9.4 *Environmental sustainability*

Climate change, increases in salinity and natural calamities are realities in the area as discussed above. Storms have the potential to destroy homes and livelihoods in the project areas as they have in the past, pushing communities into poverty and increasing the chance that they will revert to unsustainable fishing practices to survive.

The project document noted climate change as a risk and that its impacts could make the PAs unsuitable for conserving aquatic diversity. It suggested that this be mitigation through a dynamic management approach where by the PA boundaries were reviewed and if needed altered to protect representative aquatic diversity every ten years to ensure that the PAs are relevant for the objectives of aquatic conservation.

#### 3.3.10 *Additionality*

The project aimed to fill a gap in the national coverage of freshwater / marine ecosystems and threatened aquatic species. As discussed above the project area supports one of the last remaining and viable populations of the Ganges and the Irrawaddy dolphins in the world, and thus the project's conservation efforts contribute to the survival of these two species globally. As an apex predator in the waterways of the Sundarbans, the conservation of cetaceans also restores and maintains the ecological health of the aquatic environments of the Sundarbans and benefits a range of other aquatic species and birds.

It is felt that the GEF project has resulted in a shift in management approaches for dolphin conservation in Bangladesh. GEF funding has leveraged new skills and practices through capacity building and direct grant support, knowledge generation and cross –sectoral working.

#### 3.3.11 *Catalytic Role / Replication Effect*

Processes and mechanisms developed by the project (e.g. DCT, livelihood approach, sector strategies) could be replicated in other areas of Bangladesh, but would need to be adapted to the socio-economic conditions of the new areas to which they are applied. For example, the Sundarbans area is very important for fishing, people are very poor and tourism and shipping are significant. Tourism and shipping may not be very significant in other areas of the country so site specific sectoral guideline would need to be developed. However, the project has demonstrated how sector guidelines can be developed and why they are important.

Also, while the Sundarbans are controlled by the BFD rivers are not. In riverine areas co-ordination and good collaboration is needed between concerned departments (e.g. Fisheries and Land Department). Approval of the sectoral guidelines and institutionalization of the proposed committees would help with this. The work in Halda River and Pankhali Dolphin Sanctuary can provide insights about how activities can be replicated in areas outside of BFD control.

The forthcoming World Bank supported SUFAL project (US\$175 million) covers all of Bangladesh and includes funding to prepare Management Plans (MP) for three Dolphin Sanctuaries. It can build on the experiences and lessons of EPASIIAEP.

A consolidation of the lessons learned (technical, managerial, political) emanating from the project's knowledge products and other project outputs would improve the scalability and replication of project's approaches and knowledge products. It was also envisioned that the National Technical Group on Aquatic Conservation constituted under the project would play a role in promoting the replication of the project's approach and knowledge on aquatic conservation, but this is yet to be approved. The project did not have an exit strategy.

### 3.3.12 Impact

The project has contributed to the long term project goal of the sustainable management of important aquatic ecosystems of the Sundarbans.

It has also partially met its Development Objective – it has built capacity to manage existing protected areas established for dolphin conservation, proposed and secured areas for expansion (albeit below the area envisage at design), and made positive strides in meeting the livelihood aspirations of fishers through supporting alternative income sources.

While the real impact of the project will depend on the sustainability of its achievements, some impacts within the project timeframe can be noted.

- The project has built awareness at site and national level and trust with local communities.
- The project has increased incomes for the 1,000 households supported by the project's AIG initiative by around 17% and empowered women (Livelihood Sustainability Plan). The Livelihood Sustainability Plan found that the number of households on a low level of income (up to 10,000 Tk. Per month) decreased from 241 (84%) before the project to 213 (74%) after the project.
- Before the project there was fishing and illegal activities taking place across the Sundarbans. The illegal fishing in the dolphin sanctuaries has been reduced due to smart patrolling and other monitoring activities (coupled with the awareness raising and alternative income support).
- While it has been problematic to measure the change in dolphin population due to the unreliability of the baseline in the project document, it is considered likely that the population has increased and mortality rates declined. The visibility of the dolphins especially calves have become more frequent, which is a good indicator of the dolphin population trend (PIR, 2019).

## 4 Conclusions, Lessons and Recommendations

### 4.1 Conclusions and key findings

The EPASIAE project has been an innovative conservation project for Bangladesh aimed at protecting a flagship aquatic species within the Sundarbans with a focus on local community involvement. The project endeavored to take an holistic approach. It involved stakeholders at all levels (community to Regional and National Government) and worked with the key sectors active in the Sundarbans. Key achievements of the project are:

- Expanding the operational coverage of PAs. While the target set was overambitious and the project adapted its goal to designating new dolphin conservation sites, 3 new dolphin sanctuaries have been approved comprising 22 km<sup>2</sup> (core area) and 12.27 km<sup>2</sup> (buffer zone area).
- Awareness and capacity building. The project had an extensive awareness raising programme. It built awareness of dolphin conservation at the community to national level, sensitizing at least 50,000 people in dolphin conservation through a variety of approaches (e.g. community meetings, campaigns, international day observance, *shushuk mela* (dolphin fair) and television clips using a popular film actor). It has also built the capacity of the BFD in conservation.
- Linking dolphin conservation with livelihood enhancement and poverty alleviation and community engagement. The project formed seven DCTs who are working with the BFD in dolphin monitoring and patrolling activities. The alternative livelihoods support provided to 1,000 households has empowered women and reduced the pressure on fishing.
- Initiation of a move towards integrated sectoral planning and working, through the drafting of biodiversity friending sector guidance and its attempt to establish cross sectoral committees at the national and regional level.
- Production of a range of knowledge products, which can be used to strengthen aquatic conservation nationally.

The evaluation ratings are summarized in Table 7. Overall the project is rated as **Moderately Satisfactory**.

The overall quality of Monitoring and Evaluation is rated as **Moderately Unsatisfactory**. The Logical Framework did not clearly set out a number of baselines and indicators, and the feasibility of the indicators, baselines and targets were neither questioned at the Inception stage of the project, despite a 2-year delay which enhanced the need for scrutiny, not sufficiently revised following the MTR. Generally, not enough attention was paid to Results Based monitoring by the project, although additional indicators were added, systematic reporting on progress towards the official targets in the Results Framework is not evident, and the project did not systematically adapt to M&E recommendations.

The quality of overall implementation and execution is rated as **Moderately Satisfactory**. The two year delay in start up is due to the 2 year timeframe to achieve TPP approval, there were also delays in procurement of the two key project partners. Given that the key project partners were not engaged until July 2018, the core activities of the project were in effective compressed to a 18 month timeframe. While the project has work hard to deliver the outputs of a 5 year project in 3 years, there are many approvals pending that are critical to the sustainability of the project's outputs that may not now happen within the project's timeframe. It was also strongly felt that more time was needed to embed the core community activities – namely the DCT and the alternative livelihood support. The project intended to develop monitoring and evaluation frameworks and a replication strategy for effective aquatic PA management for the Sundarbans and for other aquatic ecosystems in the country, but this has not been done.

Overall the project outcome is rated as **Moderately Satisfactory**. The project is considered to be highly relevant both nationally and globally as it sought to protect a globally vulnerable species and its habitat. However, the project has only met 6 of its 12 targets, while it has not been possible to rate 2 targets due to the uncertainty around the baseline. For a number of indicators, this evaluation has provided an interpretation of the indicators / baseline / targets based on available evidence to rate the project as on track to meeting its target. Strict rating against the indicators would have indicated that the targets had not been achieved, but this is considered not to be a good reflection of the situation. There was no indicator tracking progress on gender, however the project has had notable achievements on gender, successfully targeting and empowering women in the project's selected communities which can serve as a case study for other sites in Bangladesh. The project's two indicators related to cross sectoral working and planning did not achieve their target but progress was made. Integrated working in the Sundarbans is critical.

The overall likelihood of sustainability is rated as **Moderately Unlikely**. It is not clear how the momentum will be sustained after the project has ended. On-going support for communities and the BFD conservation staff needs to be secured. The BFD is understaffed and unfunded and there is no approved budget for SMART patrolling or to continue other lines of project support related to awareness and capacity building and livelihoods. There are some nascent ideas around sustainable financing that need further development. Institutionally, BFD capacity requires further strengthening and approvals of many of the projects outputs need to be secured, namely knowledge products to embed project knowledge and approaches and facilitate replication, biodiversity friendly sector strategies to spur sectoral support for conservation and the national and regional committees to support integrated governance. The alternative income generating activities appear to be working well, but the sustainability of such initiatives will only become apparent overtime. The area is extremely vulnerable to climate change and storms which destroys homes on a recurring basis, putting pressure on very poor and vulnerable households.

**Table 7: Evaluation ratings**

1. Monitoring and Evaluation	rating	2. IA& EA Execution	rating
M&E design at entry	MS	Quality of UNDP Implementation	MS
M&E Plan Implementation	MU	Quality of Execution - Executing Agency	MS
Overall quality of M&E	MU	Overall quality of Implementation / Execution	MS
3. Assessment of Outcomes	rating	4. Sustainability	rating
Relevance	HS	Financial resources:	ML
Effectiveness	MS	Socio-political:	ML
Efficiency	MS	Institutional framework and governance:	MU
Overall Project Outcome Rating	MS	Environmental	MU
		Overall likelihood of sustainability:	MU
<b>OVERALL PROJECT RATING: Moderately Satisfactory</b>			

**Notes:** Outcomes, Effectiveness, Efficiency, M&E, I&E Execution, Relevance are rated on a 6-point rating scale: 6 = Highly Satisfactory (HS), 5 = Satisfactory (S), 4 = Moderately Satisfactory (MS), 3 = Moderately Unsatisfactory (MU), 2 = Unsatisfactory (U), 1 = Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4 = Likely (L), 3 = Moderately Likely (ML), 2 = Moderately Unlikely (MU), 1 = Unlikely (U)

## 4.2 Lessons Learned

- Attention needs to be paid to the Logical Framework at the Inception meeting to assess the realism and accuracy of the indicators, baseline and targets as set out in the Project Document. This is especially important when the project has faced extended delays in start up and /or when national circumstances have changed since the design phase.
- When selecting Alternative Income Generating Activities, it is important to understand and support the preferences of the beneficiaries as this encourages uptake and increases the likely of sustainability of the initiatives.
- Creation of sustainable financing solutions are crucial to embed local community initiatives. The Sustainable Livelihood Groups and use of 'Box money' approach have inspired women to save and invest in their small businesses.
- For complex conservation project such as this a strong working relationship between the different offices of the BFD is critical. The Divisional Forest Officer, Wildlife Management and Nature Conservation Division, Khulna acting as NPD, facilitated good cooperation with other divisional officers across the Sundarbans, which was essential for project implementation.
- Managers and consultants on conservation projects should be from a conservation background.
- Undertaking a five year program of work in three years has implications for impact and sustainability. Time is needed to embed awareness, learning and new approaches.

## 4.3 Recommendations

The recommendations are summarized in Table 8, highlighting the party responsible for addressing the recommendation and the timeframe for its implementation. The recommendations are elaborated on below categorized as: (i) actions needed to reinforce the initial benefits from the project; and, (ii) proposals for future programming, which can be championed by a range of stakeholders including MoEFCC, BFD, and UNDP.

### 4.3.1 Actions to reinforce initial benefits of project

- **Every effort should be made to secure approval of project proposals and documents from the MoEFCC before the project closes.** The approvals required are - knowledge products and plans (e.g. the Dolphin Atlas, Dolphin Action Plan, Halda dolphin conservation management plan, sectoral guidelines, CBRMP, and Strategic Livelihoods Sustainability Plan), and formation of the national and regional



committees. This should be a priority for the Project Manager before he leaves the project at the end of March 2020. If approvals are not in place for the end of March 2020, the project should set out a strategy for ensuring that such approvals do not fall through the cracks and that someone is given the responsibility to follow-up with the relevant parties to secure the approvals required. A strategy for disseminating the knowledge products and plans once approved should also be determined.

- **Documentation of lessons learned.** Given that this is an innovative project in Bangladesh, it is especially important that lessons from the project are captured and disseminated to improve decisions on the management of aquatic habitats. Lessons learned have not be systematically collated by the project and this activity is important to allow others to learn from and replicate the project's work. Dolphins are under threat elsewhere in the country and the lessons of this project have national applicability.
- **Set out replicability of project's outputs and approaches.** Given that the replicability of the project's initiatives is a key design feature of the project, it is recommended that the project makes explicit how the knowledge products, plans and approaches developed by the project can be applied elsewhere in Bangladesh, conditions under which they are or are not applicable, challenges / barriers, lessons in applications (both technical and operational). The project has generated a lot of information but this needs to be synthesized into a reader friendly format to promote replication.

Given that the project manager was only engaged until the 31 March 2020, it is unclear how these activities will be actioned within the project timeframe if at all, but remain important outputs for the project's continuity and replication.

#### 4.3.2 Proposals for future programming and direction

- **An agreement needs to be reached between the Government of Bangladesh, UNDP and GEF on the streamlining of the GEF and TPP approval processes.** The TAPP is required for all donor projects in Bangladesh and hence all future GEF projects are liable to the delays faced by EPASIIAEP unless the two approval processes can be managed to run [more] simultaneously. It was suggested that given that the TAPP is not very different to the project document, it could be prepared alongside the project document and ideally the two documents would be signed at the same meeting. More cooperation between the Planning and Finance Department is needed to streamline the approval process. Alternatively, it will be necessary to factor the time needed to prepare TAPPs into the GEF Project Preparation Grant (PPG) process to avoid such delays. It is acknowledged that reaching agreement on this matter will take time and requires the input and willingness of all parties.
- **Strengthen results based management and familiarity with GEF procedures among UNDP-CO and PMs.** M&E needs to be strengthened across the GEF project cycle. Projects should ensure a close review of indicators at Inception and at the MTR, and ensure that results are systematically tracked and progress against indicators recorded (this could be introduced as part of the PIRs). Reporting against outputs and activities should be provided at the project level along with a candid narrative of the challenges facing the project and strategies to address these challenges, ideally through the Quarterly Report format typically used by GEF projects. Independent MTR and TE could be more efficient through start up skype calls with the evaluator prior to the mission to agree mission planning, sharing of all project documents ahead of the mission, awareness of the need to talk to a broad range of stakeholders and for interviews to be held on a one-to-one basis as far as logistics allow to ensure confidentially and candid discussions, and closer working with the RTA. Project management could be improved through management staff at UNDP Country Office and GEF PMs being more familiar with GEF procedures and better engagement with the RTA. This could be achieved through, for example, a detailed assignment to UNDP

Regional office in Bangkok to learn about GEF procedures. For example, GEF co-financing reporting requirements which have recently become more stringent.

- **Enforcement capacity needs to be enhanced.** On-going enforcement of the area and the new WS recently gazetted will be critical going forward. In particular, additional enforcement capacity for Pankhali Wildlife Sanctuary will be needed which is outside of the Sundarbans.
- **Continued support for integrated planning.** The project has made a good start on developing integrated planning and working, essential for conservation success in the Sundarbans and for the delivery of the SDGs in general. There is limited integrated working in Bangladesh, activities are not well coordinated across Ministries and there is generally a low appreciation of conservation outside of the MoEFCC, success in this area therefore requires sustain efforts beyond the project, to ensure that the initial steps taken by the project are built on. The proposed GEF 6 Project (awaiting CEO endorsement) - Implementing Ecosystem-based Management in Ecologically Critical Areas in Bangladesh has a focus on integrated working<sup>25</sup>.
- **Continued support for communities.** In order to build on the project's progress in integrating communities into conservation efforts in the Sundarbans, the communities in the area need on-going expert support in sustainable livelihoods, awareness raising and monitoring activities.
- **Increasing revenue for protected area systems to meet expenditures required for management - Sustainable Financing.** The project was designed to help promote income generation through tourism, partnerships with NGOs and local government, in addition to ensuring national funds for the PAs. There has been little concrete success in this area and on-going efforts are required to raise funds for conservation from a variety of sources.
  - Ensuring additional national funds for the project's PAs is a priority. Ideally the Forest Department's Conservation orientated work should be incorporated in their regular work through the revenue budget. This requires the MoEFCC to work with the Ministry of Finance to establish separate budget lines for activities such as SMART patrolling.
  - There are some ideas around sustainable financing, which need to be further developed (e.g. a green tax on industries using Mongla port, which could be then be used to support conservation, or a payment by tourists for dolphin sightings (e.g. 10 Taka, of which 5 Taka could go to CMEC or BFD for Dolphin conservation). Other mechanisms may also be possible, such as attracting Impact Investors and private sector support. While Bangladesh is not part of BIOFIN it could draw on the work of BIOFIN at the regional level plus other global sustainable financing initiatives, and on-going work of Poverty Environment Action (PEA, UNDP-UNEP) in Bangladesh which is focused on mainstreaming poverty and environment issues into budgeting and finance.
  - Donor funding. There is reportedly a focus on donor funding for climate change, with limited finance being allocated to biodiversity conservation. Finance is needed to conserve wildlife in general, not just dolphins, although a national-wide dolphin project could be supported to build in the work in Sundarbans by this project.
  - A study could be undertaken to identify innovative sustainable financing options for the area, covering public and private financial mechanisms. This would

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<sup>25</sup> This project intends to remove barriers towards establishing an integrated management plan operational at all levels of conservation action including planning, implementation, monitoring and assessment to drive adaptive management processes to restore and improve Ecologically Critical globally significant biodiversity in the Halda river in Chittagong and Morjat Baor – an oxbow-lake in Jhenaidah district.



include a review of cost saving approaches for managing the area, which are important given the high cost of accessing the sites.

- Raise awareness of the contribution of biodiversity to the economy and livelihoods. Biodiversity makes a significant contribution to the GDP of the country through agriculture, fisheries and forestry, but it is not reflected in National Accounts leading to under investment in these sectors and promoting overuse. Natural Capital Accounts and the valuation of ecosystem services are tools that can be utilized to better illustrate the value of natural resources and ecosystems at the macro and sub-national scale to increase awareness and improve decision making and the sustainability of investments. Biodiversity Public Expenditure Reviews can be used to measure and track investments in biodiversity,

**Table 8: Recommendations**

No	Recommendation	Responsible party	Completion date / Timeframe
<b>Actions needed to reinforce the initial benefits from the project</b>			
1	Secure approvals from MoEFCC of knowledge products and the formation of national and regional committees.	PM, PD, MoEFCC	June 2020
2	Documentation of lessons learned.	PM, PD, BFD, MoEFCC	June 2020
3	Set out replicability of projects outputs and approaches	PM, PD, BFD, MoEFCC	June 2020
<b>Recommendations for future programming</b>			
4	Reach an agreement between the Government of Bangladesh, UNDP and GEF on the streamlining of the GEF and TPP approval processes	UNDP Bangladesh, Government of Bangladesh, GEF	On-going
5	Strengthen results based management and familiarity with GEF procedures among UNDP-CO and GEF PMs.	UNDP-CO, RTA	December 2020
6	Enhance enforcement capacity.	BFD, MoEFCC	Ongoing
7	Continued support for communities	BFD, MoEFCC	Ongoing
8	Continued support for integrated planning.	BFD, MoEFCC, UNDP	Ongoing
9	Increase revenue for protected area systems to meet expenditures required for management through the identification and development of sustainable financing and cost saving opportunities	MoEFF, BFD, Ministry of Finance (MoF), UNDP	Ongoing
10	Raise awareness of contribution of biodiversity to economy and livelihoods	MoEFF, BFD, MoF, UNDP	Ongoing

## 5 Annexes

(Provided as a separate document)

- 5.1 TE ToR (excluding annexes)
- 5.2 TE Mission itinerary and persons interviewed
- 5.3 Documents reviewed
- 5.4 Evaluation Question Matrix
- 5.5 Results matrix (detailed)
- 5.6 Signed Evaluation Consultant Code of Conduct and agreement form
- 5.7 Signed TE Report Clearance form
- 5.8 TE Audit Trail (separate file)