



Government of the People's Republic of Bangladesh
Ministry of Environment, Forests and Climate Change



Annual Progress Report
(January – December 2019)



Expanding the Protected Area System to Incorporate
Important Aquatic Ecosystems Project (2016-2019)



PROJECT SUMMARY

Country	Bangladesh
Title of the Programme/project	Expanding the Protected Area System to Incorporate Important Aquatic Ecosystems Project
Project ID	00093417
Implementing Agency	Ministry of Environment & Forests
Co-Implementing Partners	Bangladesh Forest Department
National Project Director	Mr. Md. Mdinul Ahsan, Divisional Forest Officer, Wildlife Management & Nature Conservation Division, Khulna
Project Period	July 2016 - December 2019
Reporting Period	January - December 2019
Reporting Agency	Ministry of Environment & Forests
Programme/Project Goal	Contribute to the sustainable management of important aquatic ecosystems of the Sundarbans.
Programme/Project Purpose	<ul style="list-style-type: none">(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.
Geographical Coverage	Bangladesh Sundarban and adjacent areas
Project Budget	USD 1,626,484
Funded By	Global Environment Facility(GEF)
Contact Person	Md. Rezaul Karim Chowdhury, Project Manager

INTRODUCTION

1.1 Project Background and Rationale

The project “*Expanding the Protected Area System to Incorporate Important Aquatic Ecosystems*” is funded by Global Environment Facility (GEF) with a total budget of US\$1.62 million. The project was approved in 16 March 2016 which was followed by an Inception workshop held on 18th July 2017, where the project was launched. The project is being implemented by Bangladesh Forest Department with support from UNDP.

The project is being implemented in Bagerhat district covering three dolphin protected areas namely: Chandpai, Dudmukhi and Daingmari wildlife sanctuaries and in the adjacent areas of Sundarbans. The goal of the project is to contribute to the sustainable management of important aquatic ecosystems of the Sundarbans. It will introduce an effective management system in the existing Protected Areas established for dolphin conservation in the Sundarbans, expand the coverage of dolphin protected areas in and around the Sundarbans, enhance alternative livelihood options for local fisher folk to reduce their dependency on aquatic resources, enrich knowledge and information base of aquatic habitats in the region and it will provide sectoral policy recommendation for aquatic ecosystem friendly practices.

More specifically, the project landscape supports one of the last remaining and viable populations of the Ganges and the Irrawaddy dolphins across the world. As such, if effective conservation actions are supported, the project landscape would hold the key for ensuring the long-term survival of these two species on a global level. The project landscape is also highly vulnerable in the context of climate change and the two cetacean species targeted by the project have high indicator values in understanding and monitoring the impacts of climate change.

Further the project area also has considerable national and local significance as it provisions vital ecosystem services, sustains human livelihoods (primarily through fisheries) and supports economic activities (e.g. ecotourism). Notwithstanding such high ecological, economic and livelihood significance, there is clear evidence that the region’s natural resources have been increasingly subjected to over-exploitation. In the classical case of “the tragedy of the commons”, the poor and marginalized communities (primarily fishers) are compelled to deepen their dependence on diminishing natural stock and the degraded resources further impoverish their resilience. The threatened status of cetaceans is an

indicator of this declining prospect of biological diversity in the Sundarbans. As an apex predator in the waterways of the Sundarbans, the conservation of cetaceans represents not only safeguarding them from the impending threats of extinction; but also restoring/maintaining the ecological health of the aquatic environments of the Sundarbans. However, it is only through reviving the integrity of already degraded ecosystems and more importantly through the prudent use of natural resources that local communities will be able to reinstate their resilience and improve their social and economic welfare that will ultimately reflect in the improved conservation prospects of the cetaceans. However, these require significant changes in the current management approaches being pursued in the region.

1.2 Project Goals, Impacts, Outcome and Key Activities

Project Goals

The long-term goal to which the project will contribute is the sustainable management of the globally significant aquatic biodiversity of Bangladesh

Project Outcomes & Outputs

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

Output 1.1: Decision making related to the management and sustainable use of aquatic habitats and resources is supported by knowledge generation and dissemination system.

Output 1.2: Existing dolphin hotspots/PAs are managed; additional areas to be identified and declared as Protected Areas and buffer areas; and capacities of conservation and economic sector staff are strengthened for management effectiveness of important aquatic ecosystems.

Output 1.3: Support provided to implement Management Plans in 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.

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.

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

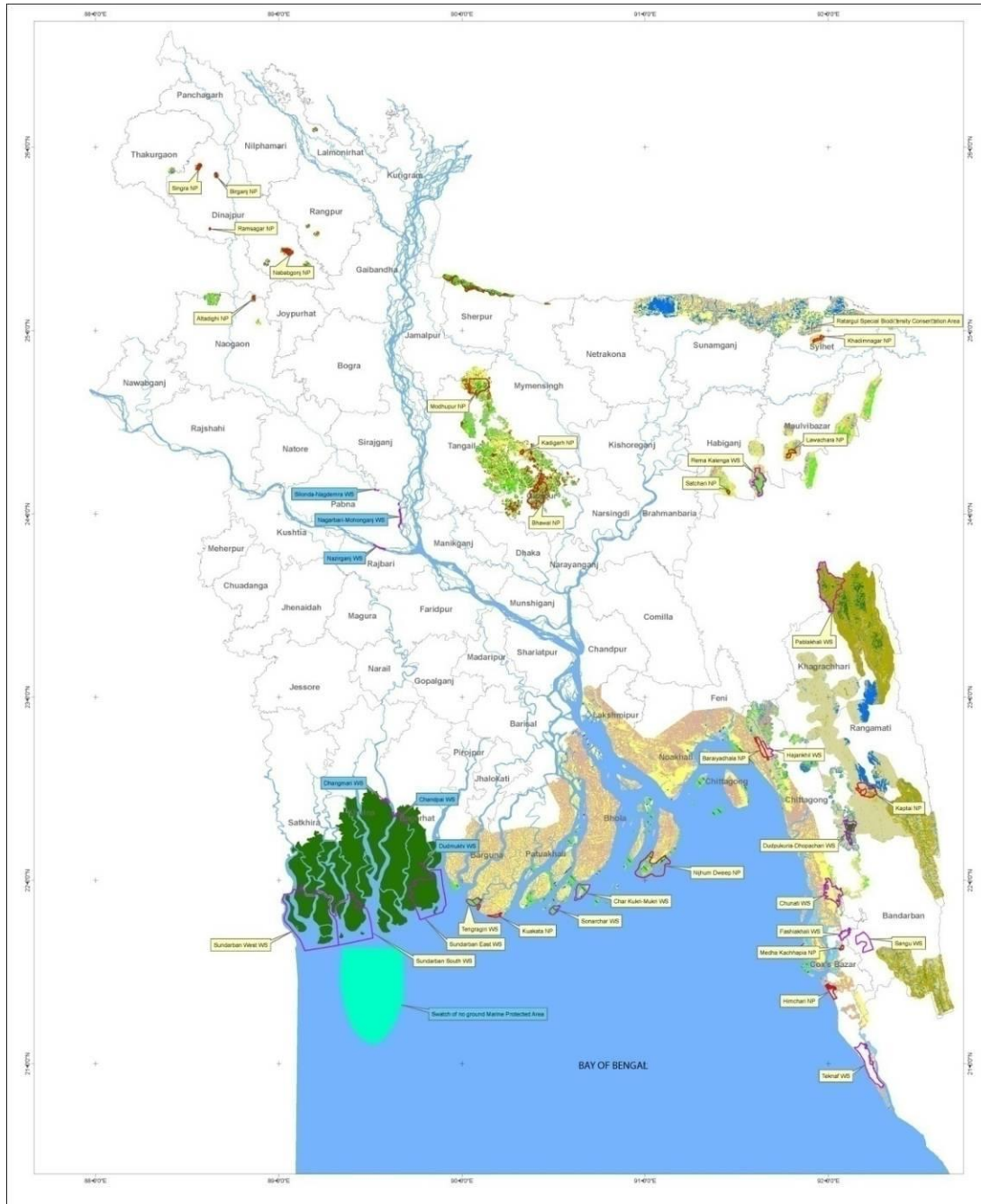
Key Activities

Major project activities to be implemented under contractual services

- Research gap analysis
- Conduct prioritized research program (including baseline)
- Identifying dolphin hotspots.
- Formulation of management plans for three existing Protected Areas for dolphin conservation.
- Formulation of community- based resource management plans.
- Implementation of selected activities identified in the management plans.
- Alternative livelihood generation activities
- Capacity building and awareness campaign
- Formulation of biodiversity friendly sectorized guideline

Project Area

Irrawaddy Dolphin (*Orcaella brevirostris*) and Ganges dolphin (*Platanista gangetica*) are two of the globally significant species and are threatened in their general distribution areas across the globe. However, the Sunderbans and its surrounding areas still support healthy populations of the two species. Yet unsustainable fishery, increasing maritime traffic, tourism, vessel collision, unplanned economic development, poaching, land-use change, climate change etc. are making the aquatic ecosystems of the Suundarbans more and more vulnerable. Therefore, the Sundarbans has been identified as implementation site for the project to ensure long term survivability of the two species at global scale.



1: Map showing 39 PAS of Bangladesh

Figure

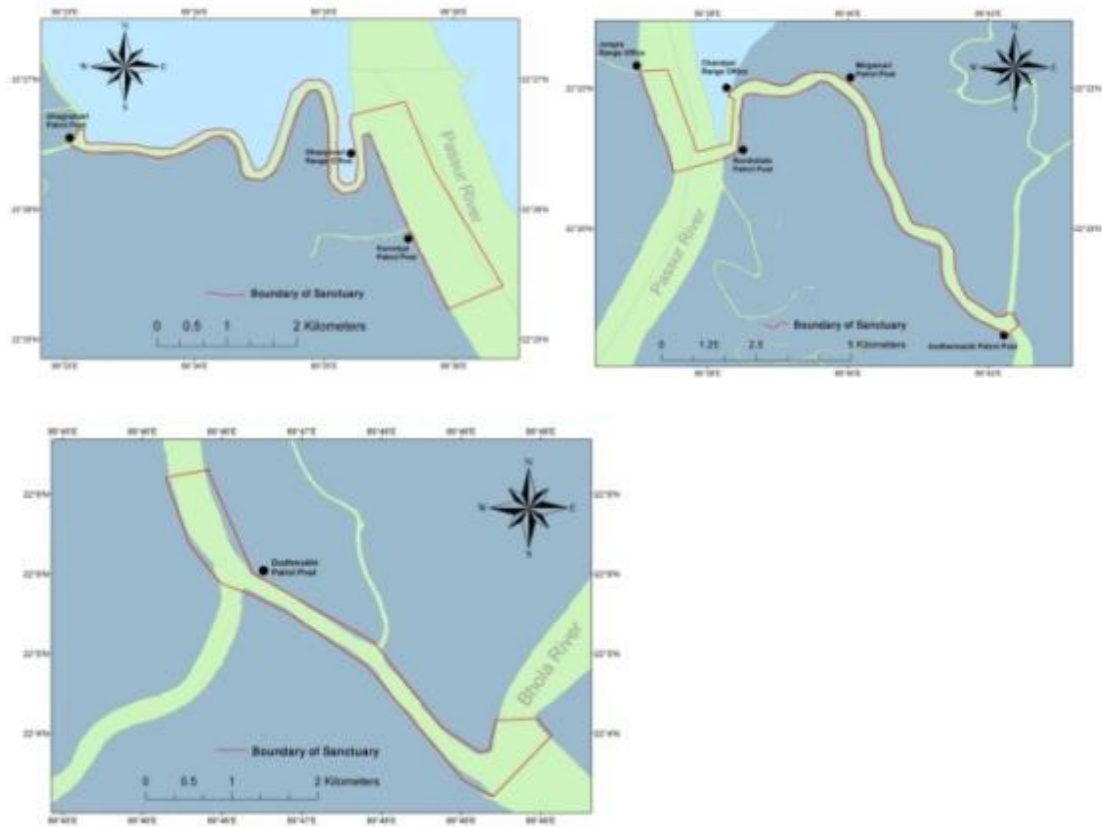


Figure:2 MAP OF DHANGMARI (3.4 SQ KM; TOP LEFT), CHANDPAI (5.6 SQ KM; TOP RIGHT), AND DUDMUKHI (1.7 SQ KM; BOTTOM) WILDLIFE SANCTUARIES FOR FRESHWATER DOLPHINS IN THE EASTERN SUNDARBANS RESERVED FOREST.

PROGRESS ON OUTCOME AREAS in 2019

Overall project objectives

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 project has made its outstanding progress in 2019. The project has continued the conservation support and livelihood support activities like previous years. More capacity building training for conservation staff i.e. BFD officials, exposure visit for BFD and ministry officers to understand about the neighbouring country's effort for dolphin conservation, capacity building more training of seven Dolphin Conservation Teams(DCT) along the periphery of the Sundarbans, Awareness programme for tour operators, observance of World Freshwater Dolphin Day on 24 October, conducting Shushuk Mela(Dolphin Fair), school programmes, Rescue of live dolphin by Dolphin Conservation Teams, submitting Monthly Monitoring report of GPS based patrolling by 8 Dolphin Sanctuary forest camps, conducting dolphin population survey in the existing three dolphin sanctuaries, documentary films making and telecasting through popular TV channels, awareness programme by engaging famous film artist etc.

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

The Project has done further various works on Awareness and Outreach activities, Capacity building for Conservation and Production Sector staff, Implementation of Selected Management Plan Activities. Livelihood Development for the local fishing communities has also been performed well by the partner NGO. Consequently, the dolphin sanctuary areas have been supporting the dolphin population as safe breeding grounds for dolphins and fishes Along with that the project engaged top leading media firm for conservation activities in the country for developing documentary video films and awareness video clip, engaged one national consultant to prepare livelihood sustainability plan for the project AIGAs. The project has also engaged two Terminal Evaluation consultants (National & International) to review the result outcome and lesson learned, whether the project has achieved its targeted milestones.

Output 1.1:

Decision making related to the management and sustainable use of aquatic habitats and resources is supported by knowledge generation and dissemination system

Progress during 2019

The project has received the following final deliverable from the National Consultants in 2019.

1. Mid-Term Evaluation report of EPASIIAE Project.
2. Atlas on Ganges River Dolphin and Irrawaddy Dolphin of Bangladesh
3. Dolphin Conservation Action of Bangladesh.
4. Report on Population Estimation of Ganges River Dolphin of Halda River
5. Management Plan of Ganges River Dolphin in Halda river of Bangladesh
6. Strategic Livelihood Sustainability plan of EPASIIAE project AIGAs.

The Dolphin Atlas, Dolphin Conservation action plan and Management Plan of Ganges River Dolphin in Halda river are in approval process in the Ministry of Environment, Forest and Climate Change. The Strategic Livelihood Sustainability plan of EPASIIAE project AIGAs has also been submitted to the Chief Conservator's office, Dhaka.

Output 1.2: Existing dolphin hotspots/PAs are managed; additional areas to be identified and declared as Protected Areas and buffer areas; and capacities of conservation and economic sector staff are strengthened for management effectiveness of important aquatic ecosystems.

Progress during 2019

Existing dolphin Protected Areas (PA) are being managed effectively; the gazette notification process for declaring additional areas as Dolphin Sanctuaries is in final stage to be notified. The capacities of conservation and economic sector staff are strengthened for management effectiveness of important aquatic ecosystems. In this context, a workshop was designed and facilitated by the project to evaluate the change of effectiveness of the management system of three protected areas. The approach is based on the WWF / World Bank - Management Effectiveness Tracking Tool (METT). The assessment involves selection of one among four (4) alternative text answers (ideal to worst) that best represent a particular issue for the Protected Area (PA), with a corresponding score from 3, 2, 1 and 0. Maximum score of the 30 questions and supplementary questions is 102. Final score is calculated as percentage of 102 or % of total score from relevant questions.

The facilitators discussed with the participants and thus the final scorecards have been prepared for three protected areas for dolphins. From the final METT scorecard, it has been observed through participant's eyes that, the management system is excellent now in Dhangmari sanctuary attained the highest score of 71(as it obtained 33 in 2015-16). The other two PA i.e. Chandpai and Dudhmukhi sanctuary received 59 and 56 respectively. Whereas, the earlier scores were for Chandpai & Dudhmukhi in 2015-16 as 33 & 37 respectively. Therefore, it is revealed that, the management of these PA has improved significantly than the previous state in 2015-16. The workshop also evaluate these sanctuaries using GEF's Capacity Development Scorecard where 8 capacity indicators were considered with total 24 points. In that evaluation the Dhangmari Sanctuary again obtained highest score i.e. 15(62.5%) where Chandpai and Dudhmukhi sanctuary obtained 13(54.16%) and 14(58.33%) respectively.

It should be mentoned that the government of Bangladesh is declaring 22 sq. Km. dolphin hotspot areas as Dolphin Sanctuaries and 12.27 sq. Km as Buffer zone adjacent to these new proposed sactuaries. The area of these sanctuaries have already been demarcated by the floating buoys.

In terms to the capacity building of conservation staff of dolphin sanctauaries, continuous mentoring is being done to maintain alltime surveillance of existing 3 Dolphin Santuaries viz. Dhangmari Wildlife Sanctuary (Dolphin), Chandpai Wildlife Sanctuary (Dolphin) and Dudhmukhi Wildlife Sanctuary (Dolphin) by tracking log with Global Positioning System(GPS receiver). Field based training on Dolphin Conservation (Biology & Behavoieur) and GPS handling have also been conducted for another 150 Forest Department staff. Dolphin Conservation Team members received the training on Dolphin Conservation (Biology & Behavoieur) and dolphin rescue techniques too.

Output 1.3: Support provided to implement Management Plans in new PAs and buffer areas to address existing and emerging threats to aquatic biodiversity particularly the cetaceans.

Progress in 2019

Daily patrolling duties conducted by 8 Forest Camps of 3 dolphin Sanctuaries were being conducted like last previous years. The dolphin sanctuary camps had been continuously receiving 800 litres diesel fuel (100 litres per camp per month) and mobile phone bill, GPS

batteries etc. The rechargeable batteries were supplied in 2019 to the 8 patrol camps which was really cost effective than the single use batteries for GPS. Thus, protection duty has been strengthened further in and around the dolphin Protected Areas. The active participation of the DCTs added with as an additional force to the government staff. These DCTs shared very important information with the BFD staff, rescued live and dead dolphins and removed the illegal fishing nets from the river along with Comanagement Organizations.

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.

Progress in 2019

The Project Management Unit is continuing periodical monitoring the conservation activities in the Sundarbans through field visit, information sharing. From the Government, the Conservator of Forests, Khulna and the Divisional Forest Officer, Sundarban East & West Forest Division visited the project area and activities several times during last year and appreciated a lot. Except this, the Additional Secretary, Ministry of Environment, Forest and Climate Change and the Deputy Secretary (Development) of the same ministry separately observed the project activities as well as evaluated the activities, examined the impact, consulted with the beneficiaries and thus found almost all satisfactory. The Hon'ble Deputy Minister, Ministry of Environment, Forest and Climate Change (MoEFCC) is very much keen and kind to implement and phase of the present EPASIAE Project.

The EPASIAE project has recently conducted a third party dolphin counting in the three dolphin sanctuaries to estimate the dolphin population of the three existing wildlife sanctuaries of the Sundarbans for evaluating the population. The intention was that to monitor the population trend between before and after the project intervention. The survey was done from 20 December to 22 December 2019 and travelled 31.4 km sanctuary length from Ghagramari forest camp (Chandpai Range) to Dudhmukhi-Bhola river intersection/segment. The day time was only utilized for dolphin sighting and recording with GPS location, sighting time, number of individuals, counting adult and/or calf, distance from the individuals. All data were recorded in the pre-designed data sheets by two teams (Team

Alpha and Team Beta) comprising 5 members each, signed together and submitted report. Since the total estimation of the dolphins of the mentioned three sanctuaries has not been completed but the survey team directly encountered 55% more dolphin than it was in the initial period of the project inception in early 2018.

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.

The approval of the Community Based Resource Management Plan (CBRMP) is under progress of approval of the ministry although some important conservation activities were done in light of the selected activities of the CBRMP.

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

The partner NGO Community Development Center (CODEC) has completed the AIGA input distribution, provided related trainings, monitored AIGA input distribution last year and reported. In 2019 CODEC distributed this input support among 635 beneficiaries. Now in total there are 1000 beneficiaries (fisher household) have been operating 26 types of AIGAs and earning satisfactorily. In an average, there is about 17% monthly income has been increased of the beneficiaries those who received the project grant last year. By 31 December 2019, 865 beneficiaries are also the member of the government regulated 'Amar Abri Amar Khamar' project and some of them have taken the soft loan from Polli Shanchoy Bank of the government too.

In terms of ensuring sustainability of the AIGAs, thirty Sustainable Livelihood Groups (SLG) have been formed from which 645 female beneficiaries have started to deposit weekly savings to cope up their sudden shock from the natural calamity or any family crisis.

MAJOR ACTIVITY PROGRESS AND RESULTS IN 2019

The Project has passed another successful year in terms of the implementation of designed activities, continuing some selected management plan activities. In 2019, The Project has disbursed maximum amount of fund and completed enormous important activities through the contracted NGO viz. IUCN-CNRS as consortium has been involved for Awareness and Outreach activities, Capacity building for Conservation and Production Sector staff, Implementation of Selected Management Plan Activities where Community Development Committee(CODEC) was involved for Livelihood Development for the local fishing communities. Some important events have drawn the attention of the natural resource users, managers and conservationists by this time like the following:

1. Awareness development among local fishermen & whole sale fishers through conducting 'Anti poison fishing campaign' at Mongla. The hon'ble Deputy Minister, Ministry of Environment, Forest and Climate Change was the chief guest there. This meeting was designed and facilitated by IUCN-CNRS on 28.3.19.
2. Awareness development among local tour operators, Hhulna region through 'Role of tour operators in dolphin conservation' at Khulna, organized by PMU, UNDP-BFD
3. Overall awareness development on dolphin conservation importance nationally and locally through 'International Fresh water Dolphin Day Observance' and Dolphin Fair (Shushuk Mela programme) by UNDP, IUCN-CNRS (from 24 October 2019- 5 Nov 2019)
4. Increased awareness through school programming & local level awareness programmes.
5. Printing and distribution of Communication materials like poster for Tour Operators, Poster for Tourist, Shushuk mala poster, etc.
6. Setting up of digital signboard and digitally printed billboard regarding dolphin conservation and sustainable harvesting of fishes.
7. Conducted exposure visit for stakeholders abroad, exposure visit of students, teachers and stakeholders in the donplin sanctuaries of Sundarbans.
8. Countrywide Mass awareness through preparing awareness video clip for dolphin conservation with the participation of popular film artist Mr. Ferdous and telecasting through popular government and private TV channels.
9. Prepared another two documentary films to inform GO/NGO sector, conservetionists, academicians, wildlife biologists, policy makers, donors, etc. about the current status of the aquatic ecosystems, importance of dolphins in the river and oceans, government initiatives for the dolphins including the EPASIIAE Project achievement so far.

10. Milestone achievement in receiving consultant's report viz.
 - Atlas of Ganges River Dolphin and Irrawaddy dolphin of Bangladesh
 - Conservation Action Plan for Ganges River Dolphin and Irrawaddy dolphin of Bangladesh.
 - Population status of Ganges River Dolphin in Halda river
 - Management Plan for Ganges River Dolphin of Halda river
 - Strategic Sustainable Livelihood Plan for the EPASIIAE Project AIGAs

11. Enhanced capacity building and protection duties by conservation sector staff through practicing the GPS based patrolling along with the active participation of the Dolphin Conservation Teams and as a result of reduced to the minimum fishing activities in Dolphin PAs.
12. Monthly reporting on Dolphin Sanctuaries monitoring and surveillance through customized SMART patrolling.
13. Provided continuous supply of diesel fuel to 8 forest camps of 3 Dolphin Sanctuaries in the Sundarbans along with GPS batteries.
14. Two live dolphins were rescued and released in the river successfully by the Dolphin Conservation Teams (DCT).
15. Two rewards given by the project for outstanding work for dolphin conservation(One for the community & another for the forest department).
16. Progress in the declaration of new additional 22.0 sq.km. Dolphin Sanctuaries and 12.27 sq.km buffer zone in and around Sundarbans which is going to be gazetted soon.
17. Progress in approval of a) Dolphin Atlas and b) Dolphin Conservation Action Plan which will be able to guide policy makers and Forest Department for the long term conservation of the globally threatened cetaceans.
18. Livelihood programmes with high value input support in chosen trade(s) by the beneficiaries. There were 635 beneficiaries received the project inputs (AIGA) including the relevant trainings. Enrolment of 865 beneficiaries in the government's Amar Bari Amar Khamar Project which is appearing as the safeguard device to face their family crisis and to mitigate by the loan support from 'Polli Shanchoy Bank' with small interest.



Photo: Billboard to support dolphin conservation



Photo: Project visit by hon'ble Ministers, MoEFCC

Detailed Field activities on Awareness & outreach activities, Capacity Building & Implementation of Selected Management Plan Activities done against the workplan in 2019

Activities	Methodology and Approach	Progress up to January 2019 to December 2019
Developing awareness materials including Books, Posters and Brochures	Contents will be developed for awareness materials. Awareness materials like posters, brochures and leaflets will be made and developed. The materials will be distributed among local communities and relevant stakeholders during awareness campaigns, workshops etc. There will be two types of communication materials designed for local communities and the other for children. Colorful book will be printed for stakeholders and scientific communities.	Dolphin conservation awareness poster, brochure, folder and notepad developed and distributed among the stakeholders. -Through the materials the awareness messages reached more than 4000 people.
Prepare and setup digital signboards, graffiti and attaching posters on walls of important institution premises	Digital signboards will be installed at suitable spots after initial surveys to identify those spots. The signboards will be installed in selected local Forest Department offices and in surrounding areas of the sanctuaries. The signboards will contain information on dolphins, conservation implications, laws and penalties, dos and don'ts in the sanctuaries, boundaries of the sanctuaries. The signboards will be preferably powered by solar panels, but in some places can be powered by electricity. Furthermore, walls of selected local Forest Department offices, Livestock Offices and Fisheries Offices and schools will be painted with graffiti relevant to dolphins and conservation to raise awareness of general public visiting those offices. Along with this, posters will be attached on the walls of these places as well.	<ul style="list-style-type: none"> • 8 digital signboards were prepared and installed around Dolphin sanctuaries. • 4 digital signboards were prepared and installed in 4 selected areas of PMU. • Graffiti were painted in two schools. <p>The awareness messages reached more than 10,000 people around Sundarbans periphery near Dolphin dominant Wildlife Sanctuaries.</p>
Community based awareness	Important local stakeholders like fishermen communities, boatmen, crab hunters and others who depend on the rivers of the project	10 events of community based awareness meetings were organized.

campaigns	area will be identified. Awareness campaigns will be organized to disseminate knowledge about dolphins and conservation implications at local levels through the distribution of the developed awareness materials. Along with this, video documentaries will also be arranged in each awareness campaign to further engage and aware communities. The campaigns will be similar to other community-based awareness programs done by IUCN in other projects, like vulture conservation projects.	2 additional events were organized on CF/PMU request. More than 1800 participants including Forest Department, UP Chairman, UP member, fishermen, boatmen, crab collectors, CMC, CPG, VTRT, journalist and others joined the meeting & pledged to avoid fishing in protected areas to save dolphin and its habitat.
School Campaigns	Schools will be selected in and around the sanctuaries. Each school will be visited and lectures will be given to the school children about the importance of dolphins and the need to conserve them. The campaigns will help inspire the younger generation to be more aware of the conservation of dolphins. The children are also expected to take this knowledge home and disseminate it to their families as well. Awareness materials developed especially for children will be handed out along with small gift items. The campaigns will be similar to other school programs done by IUCN in other projects, like vulture conservation projects.	15 school awareness campaign has been organized. 11 additional event will be organized on PMU request. More than 6,900 students joined the events and aware through educational and awareness materials on dolphin conservation.
Organizing Fairs and Festivals	The Shushuk Mela (dolphin-themed festivals) will be organized in a large scale where all important fisherman and villages will be targeted where various activities will be done. Activities including dramas, sports, local folk concerts, documentaries, exhibitions etc. will be conducted. All these activities will be focused around dolphin and dolphin conservation. The main focus of the festival will be to spread knowledge and awareness among the local stakeholders in a grand way.	Shushuk Mela 2019 was organized from 29 Oct 2019 to 05 Nov 2019 around Sundarbans periphery. More than 10,000 people of different stakeholders joined this event and got aware about dolphin conservation.
Meetings, Seminars and Workshops	This will bring together various national and regional level stakeholders, including policy makers, politicians, conservationists, teachers, scientists, researchers, civil society etc. These activities will help in spreading knowledge and shape future policies.	A meeting was organized at Mongla where Honorable Deputy Minister, MoEFCC joined the event. - Around 200 significant stakeholders including fishermen, pesticide shop owners, relevant government officers, boatmen, crab collectors, businessmen and CMC representatives joined the event to know their significant

		roles, responsibilities in order to reduce river pollution for dolphin conservation.
Celebrating Dolphin Day	Freshwater Dolphin Day will be celebrated in the administrative level in Khulna and Bagerhat districts. Important stakeholders representing the local government offices will be invited to join the events. Rallies, exhibitions and other events will be arranged to mark the event. The day will be open to the general public and will be important to raise awareness in the local level. Knowledge from experiences of organizing similar events like the International Vulture Awareness Day will be used to make this event successful.	The Dolphin Day was celebrated on 24 October 2019. More than 1,000 people joined and made aware about dolphin conservation.
Media Outreach	Social and electronic media will be engaged to spread awareness to the general public. Reports and documentaries will be made and published for effective dissemination of knowledge about dolphins and the need to conserve dolphin. Facebook posts and tweets will be posted about the event tagging relevant national and international entities. Blogs and op-eds on dolphin conservation will be written on IUCN and other pertinent platforms and national dailies.	Project page on Facebook created and a live posting of the awareness activities for dolphin conservation has been updated. Page link below, https://web.facebook.com/DolphinProjectBD/ Large amount of news published media regarding awareness activities for dolphin conservation. 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 More than Ten million people are now aware about dolphin conservation initiatives.
Student Field Trip	School children, guardians and teachers from selected schools will be taken to field trips to Dangmari and Karamjal on a boat, where they will be able to see dolphins through binoculars. Students will be given awareness materials and lectures will be arranged to inform the students about the need to conserve dolphins.	Two field trips were organized in 2019

<p>Exposure visit for FD staffs and other similar stakeholders</p>	<p>Exposure visits will be arranged for selected Forest Department staffs, Co-Management Committee members and other similar stakeholders so that they have more clear understanding of dolphin ecology, threats, and conservation needs. This will help them to connect more to the dolphin conservation work and also gain important knowledge and awareness.</p>	<p>One exposure visit has been arranged where Additional Secretary, MoEFCC, CF Khulna, DFO's, DC Bagerhat, UNO Mongla and other prime stakeholders have participated actively.</p>
<p>Preparation of Training modules and conduct training</p>	<p>Training modules and manuals will be developed in both English and Bengali with consultation from previous training module for effective training of stakeholders. There is a training module for Dolphin conservation team from Wetland Biodiversity Rehabilitation Project. New one will be developed by overcoming the limitations of the past ones and will include the latest developments in a dolphin issue. There are another modules for Vulture conservation team, Elephant response team and module for community based biodiversity conservation in Tanguar haor training module for different conservation and programme team which will be developed with the new knowledge and experience as well.</p> <p>Two types of training modules and manuals will be developed in the project period. One type of training modules and manuals will have information on ecology of dolphins, identifying features, distribution of range, population, migration pattern and behavior. The other will have information on forest and biodiversity conservation, poaching, poaching patterns, poaching mitigation, anti-poaching techniques, threats to dolphins, rescue and release of dolphins caught in fishing nets, carcass examination and identifying the causes of death, and important and relevant laws. The modules will be used to train stakeholders (selected from local communities, Forest Department, CMCs) and build capacity for dolphin conservation.</p>	<p>Module were prepared and training was provided to more than 250 stakeholders including Forest Department and other stakeholders.</p>
<p>Module preparation for SMART patrolling techniques</p>	<p>Modules will be prepared in both English and Bengali, where techniques and the application of SMART patrolling will be provided. Besides, knowledge and experiences on Module preparation and training from Bagh and SMP project will be assimilate for</p>	<p>SMART patrol module was prepared and distributed among the stakeholders.</p>

	preparing the module. SMART patrolling will have protocols to monitor animals, identify threats and make patrols more effective.	
Module for the reduction of natural resource consumption	Module will be developed in both English and Bengali that will show methods to reduce the use of natural resource consumption. It will also have ways to sustainably harvest natural resources.	Module prepared and distributed among the stakeholders.
Training on SMART patrolling	Training workshops will be arranged, where the modules developed will be used to teach SMART patrolling, SMART data collection, and processing and conservation to Forest Department staffs and Community Patrol Groups.	2 SMART trainings were provided at Chandpai, Sarankhola, Khulna and Satlhira ranges. 2 SMART training provided to Sundarbans East and West Division staffs. 3 additional training organized. 130 FD staff from Chandpai, Sarankhola, Khulna and Satlhira ranges and East & West division offices received training.
Conduct training on natural resource management and reporting with SMART data	Trainings will be arranged for the stakeholders where the impacts of unsustainable use and overexploitation of natural resources will show. The training will also show mitigation measures. Furthermore, the training will show ways to produce monthly reports using the SMART data.	Training provided to more than 70 relevant stakeholders including DCT members.
Workshops and consultation meetings	Meetings and workshop will be arranged with the stakeholder to conduct the trainings and also to mentor and monitor activities.	2 meetings were organized at Mongla where Honorable Deputy Minister, MoEFCC joined in one event. More than 300 significant stakeholders including fishermen, pesticide shop owners, relevant government officers, boatmen, crab collectors, businessmen, CMC, Dolphin Conservation Team and VTRT joined the event to get informed about their significant roles, responsibilities in order to reduce river pollution for dolphin conservation.
Regular monitoring, mentoring and reporting	Regular monitoring will be done every two weeks and a monthly report will be submitted to conservation sector staff using the SMART data. The patrolling staff of 20 person will each receive 300 BDT as mobile bill.	Monitoring report and feedback have been provided to patrolling staff to improve surveillance in protected areas. -GPS based patrolling capacity and skills of 8 Forest department

		staff has been improved which plays effective role in dolphin conservation.
Preparation of workshop module for local communities	Workshop module will be made in both Bengali and English for the local communities living in the buffer zones, on the importance of biodiversity of aquatic ecosystem, conservation, sustainable harvesting of natural resources and adaptation measures in case of oil pollution by the buffer area people.	Module prepared and distributed among the stakeholders.
Buffer zone mapping, declaration of buffer zones, and identified new Protected Areas	Areas will be surveyed and buffer zones maps will be produced by using GIS software. Buffer zones will be identified and will be proposed for declaration. Surveys for new dolphin hotspots will be conducted and identified. New hotspots will be proposed to be declared as sanctuaries.	New protected areas have been surveyed and dolphin hotspots and buffer zones identified. Map produced accordingly and proposed to be declared as sanctuaries.
Boundary demarcation of buffer zones using buoys	Buoys anchored to the river bed will be used to clearly demarcate the areas of existing and new dolphin sanctuaries. Forest Department, UNDP and other related stakeholders will be consulted prior to deploying the buoys.	Boundary demarcation points has been identified and 40 buoys prepared to setup around wildlife sanctuaries.
Formation of Dolphin Conservation Teams(DCT)	Multi-tiered community-based Dolphin Conservation Teams will be formed from district, upazilla and village levels. The teams will work for the conservation of dolphins and dolphin habitat, management of sanctuaries and hotspots, and raise awareness.	Four Dolphin Conservation Teams (DCT) formed in Sharonkhola, Nalian and Pankhali. A total of 40 DCT members are now actively participated in dolphin conservation activities.
Engagement of fishermen community for sustainable natural resource use	Fishing community will be used to form cooperatives to increase benefits from sustainable harvesting of resources processing and marketing.	More than 1000 fishermen were engaged in sustainable natural resource utilization through awareness activities.
Formulation of National Technical Group and Regional Stakeholder Committee	National Technical Group and Regional Stakeholder committee will be selected from different stakeholders and formed the committees accordingly	Primary selection has been completed and proposal has been forwarded to Ministry through CCF office.

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Celebration of Dolphin Day in Dhaka	Freshwater Dolphin Day will be celebrated in the capital. Important stakeholders representing the government offices and civil societies, teachers, conservationist and scientists will be invited to join the events. Rallies, exhibitions and other events will be arranged to mark the event. The day will be open to the general public and will be important to raise awareness in the local level. Knowledge from experiences of organizing similar events like the International Vulture Awareness Day will be used to make this event successful.	Dolphin Day 2019 observed at Liberation War Museum, Dhaka from 24-26 October 2019 where more than 5000 people joined and aware about dolphin conservation. The event commenced with the Inaugural Session where the Honorable Minister, Deputy Minister, Secretary, MoEFCC, were present along with the Country Director of UNDP Country Representative of IUCN Bangladesh and Chief Conservator of Forests, DCCF's and DFO's.
Dolphin rescuing, and support of law enforcement agencies	Law agencies will be approached to support the dolphin conservation by ensuring laws are enforced to reduce poaching, rescue dolphins, ban of illegal nets, illegal harvesting of natural resources, and illegal activities inside sanctuaries.	More than 20 rescue operations were conducted and information was recorded as well. BFD, UNO, UP members, EPASIIAEP staff and local influentials joined the rescue mission.
Prepare and set up of two types of digital signboards	Two types of digital signboards (25x12 feet and 15x12 feet) will installed at suitable spots after initial surveys to identify those spots. The signboards will be installed at important points and even in the surrounding areas of the sanctuaries. The signboards will contain information on dolphins, conservation implications, laws and penalties, dos and don'ts in the sanctuaries, boundaries of the sanctuaries. The signboards will be preferably powered by solar panels, but in some places can be powered by electricity. Forest Department, UNDP and other related stakeholders will be consulted before the installations of the signboards.	8 digital signboards were prepared and installed around Dolphin sanctuaries. 4 digital signboards were prepared and installed in 4 selected areas of PMU. The awareness messages reached more than 10,000 people around Sundarbans periphery near Dolphin dominant Wildlife Sanctuaries.
Regular monitoring and surveillance of dolphin deaths and entanglement	The community-based Dolphin Conservation Team will keep track and monitor any deaths of dolphin, especially through entanglement in fishing nets, in and around the dolphin sanctuary areas. Reports from new media will also be recorded to understand dolphin mortalities in other parts of the country.	Dolphin survey and monitoring has been conducted in three wildlife sanctuaries to measure the dolphin distribution, abundance, habitat use as well as environmental conditions. Interview was conducted among fishermen and also watercraft data was collected.
SMART patrolling data for decision	The data of the SMART patrolling data will be presented to the Bangladesh Forest Department every month to update about the current situation and help BFD to make	SMART patrolling data has been collected monthly and analysis report has been submitted to BFD.

making of BFD	important decisions accordingly.	- Analyzed reports of 15 months (Jun'18-Aug'19) helped BFD to ensure surveillance and law enforcement in protected areas.
Awareness campaigns to reduce dolphin poaching and declaration of National Aquatic Animal	<p>Awareness through Shushuk Mela and other campaigns in local communities to reduce poaching of dolphins.</p> <p>Government will be approached and it will be proposed that Ganges River Dolphin be declared as National Aquatic Animal of Bangladesh.</p>	Already proposed to govt. to declare the Ganges River Dolphins as National Aquatic Animal.
Arrange consultation meeting and workshops for conservation and production staff	Meetings and workshop will be arranged with the stakeholder to conduct the trainings and also to mentor and monitor activities following developed module.	<p>One event was organized and more than 100 production sector staff joined the workshop.</p> <p>It was a very interactive consultation workshop with Production Sector Stakeholders, Focusing on River Pollution and Dolphin Conservation at CSS AVA Center, Khulna. Mr. Nischinta Kumar Podder, Additional Divisional Commissioner, Khulna Division was the Chief Guest of the event. Mr. SM Shafiullah, BPM, Superintendent of Police, Khulna District was the Guest of Honour. Mr. Md. Moyeen Uddin Khan, Conservator of Forests, Khulna Circle, BFD Chaired the workshop. Divisional Forest Officers, Project Director Mr. Modinul Ahsan and other relevant</p>
Setting up floating digital signboards	Buoys anchored to the river bed will be used to clearly demarcate the areas of existing and new dolphin sanctuaries. Forest Department, UNDP and other related stakeholders will be consulted prior to deploying the buoys. Two types of digital signboards (25x12 feet and 15x12 feet) will installed at suitable spots after initial surveys to identify those spots. The signboards will be installed at important points and even in the surrounding areas of the sanctuaries. The signboards will contain information on dolphins, conservation implications, laws and penalties, dos and don'ts in the sanctuaries, boundaries of the sanctuaries. The signboards will be preferably powered by solar panels, but in some places	<p>40 floating flags have been prepared and setup for the demarcation of wildlife sanctuaries. New 10 buoys have been set up around the two proposed dolphin sanctuaries and older buoys those were affected by cyclone 'Bulbul'.</p> <p>More than 5000 local fishermen and the daily tourists made aware with the help of floating flags.</p>

	can be powered by electricity. Forest Department, UNDP and other related stakeholders will be consulted before the installations of the signboards.	
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Detailed Field activities and progress on Livelihood Development in 2019

SL	Name of Component & Activities	Target/Unit	Time Line				Status against activities as of 31 Dec.'19	Remarks
			Q1	Q2	Q3	Q4		
1.1	SLG members selection & group formation	30 groups					Done/2019	30 Groups are organized & continuing their group activities
1.2	Staff Basic Training	1					Done/2019	Initially 1 staff basic training has been conducted. Project PD & PM participated as facilitator in the training.
2.0	Livelihood Options identification	635					Done/2019	635 members' trade/options have been identified & supports have been providing on the selected trade.
	Trade Base Beneficiaries	635					Done/2019	BDT. 39,282 per beneficiaries support

	Training						have ensured.
	Ensuring Input Supports	635				Done/2019	
2.1	Activities with “Amar Bari Amar Khamar(ABAK)”	865				Done/2019	865 members listed in the ABAK Prakaalpa, rest of the beneficiaries we didn't bring them in the listing as because of crossing the age limit (As ABAK officer mentioned).



International Freshwater Dolphin day celebration on 24 October 2019 in Dhaka



Dolphin Conservation awareness meeting at Mongla, Bagerhat (Chief Guest: Hon'ble Deputy Minister, MoEFCC)



Dolphin Fair(Shushuk mela), 2019 Khulna



Digital signboard/TV for dolphin conservation awareness



Dolphin rescue from Chila canal, Mongla on 29 Oct 2019



Dolphin population survey in December 2019



Final Report sharing of Strategic Sustainable livelihood plan in 2019 at Forsest Dept. Headquarter, Dhaka



Respected Additional Secretary, MoEFCC sharing views with the Sustainable Livelihood Group(SLG) at Rekhamari, Dakope, Khulna in 2019



Raped earning AIGAs

OVERALL RESULTS FROM THE 2019 ACTIVITIES

- More than 100 forest staff and dolphin conservation team members have received training on dolphin conservation and enforcement.
- GPS based patrolling system in all 8 forest camps under 3 Dolphin Sanctuaries of Sundarbans and continuous patrol duties through field visit and GPS track log in place. The dolphin sanctuary areas are being effectively managed. Consequently the fishing activities in the dolphin sanctuary areas has been reduced to almost zero.

- Dolphin vigilance is more in the sanctuary areas especially more dolphin calves are being sighted frequently.
- 635 more households have developed their livelihood with project support.
- 865 beneficiaries are the member of “Amar Bari Amar Khamar Project” from where beneficiaries are able to avail loan facility from the government’s Palli Shanchay Bank with small interest.
- Newly formed 4 more Dolphin Conservation Teams are additional force in the community.
- Live dolphins are being also rescued and released in the river too.

Individual contract & engagement of media firm (Consultancy)

Sl.	Out come	Title of Position	Contract Modality	Assignment	Tenure
1	2	National Consultant- Livelihood Sustainability Plan	Individual Contract	To prepare strategic livelihood sustainability plan for the project AIGAs	26 Aug 2019- 26 Oct-2019
2	1 & 2	Hiring Media firm	Firm	To prepare two video documentaries and one awareness video clip for television covering the importance of the dolphin species in the river systems, threats to them and probable way to reduce, scope to declare more protected areas to maintain viable population of dolphin and fishes.	30 Sep 2019- 31 Dec 2019
3	1 & 2	Terminal Evaluation (National consultant)	Individual consultant	To assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.	22 Dec 2019- 31 March 2020
3	1 & 2	Terminal Evaluation (International consultant)	Individual consultant	To assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP	12 Dec 2019- 31 March 2020

				programming.	
6	1	National Consultant(Dolphin Atlas & Dolphin Conservation Action Plan,	Individual Contract	Preparation of Dolphin Atlas, Dolphin Conservation Action Plan in Bangladesh	23 Sep 2018-28 Feb 2019
7	1	Status survey of Halda river dolphin and Preparation of Integrated Management Plan of Halda River basin.	Individual Contract	Identify status survey of Halda river dolphin & Preparation of Integrated Management Plan for Halda River basin	23 Sep 2018-28 Feb 2019
8	1	National Consultant (Graphic Designer)	Individual Contract		30 Oct 2018-30 June 2019

OC = Outcome

FINANCIAL PROGRESS

Table 1: Quarterly Progress of EPASIIAE Project from 2019

Year	Quarter	Budget (USD)	Expenditure (USD)	Percent (%)
2019	Q1	100,000.00	57,388.46	57.39
	Q2	200,000.00	105,537.21	52.77
	Q3	300,000.00	492,533.14	164.18
	Q4	391,275.00	228,883.64	58.50
Total		961,275.00	884,342.45	92.00

Table 2: Summary of Financial Progress for 2019

Outcome Areas	AWP for 2019 (Version-B)	Total Exp. for 2019	Achievement AWP-B (%)
Activity 1-Important aquatic ecosystems of the Sundarbans supporting the globally threatened species of cetaceans conserved.	472,572.00	487906.51	103%
Activity 2-Community-based ecosystems management systems in place to support aquatic biodiversity conservation.	439,782.00	387049.39	88%
Activity 3-Project Management.	48,921.00	6933.16	14%
TOTAL	961,275.00	884,342.45	92%

Table 3: Procurement

SL	Implement Agent	Type of Supply	Description	Quantity	Total Cost (USD.)	Status
1	UNDP	Consultancy Service	To prepare strategic livelihood sustainability plan for the project AIGAs	01 Staff	5950.0	Product received by EPASIIAEP
2	UNDP	Media firm	To prepare two video documentaries and one awareness video clip for creating dolphin conservation awareness	Team	23785.0	Product received by EPASIIAEP
7	UNDP	Consultancy Service	Terminal Evaluation-National Consultant	01 Staff	6726.0	Final report is yet to receive
8	UNDP	Consultancy Service	Terminal Evaluation-International Consultant	01 Staff	18984.00	Final report is yet to receive
9	UNDP	Consultancy Service	NC- Dolphin Atlas & Action Plan	01 Staff	5424.41	Product received by EPASIIAEP
9	UNDP	Consultancy Service	NC-Halda	01 Staff	5,364.37	Product received by EPASIIAEP
10	UNDP	Consultancy Service	NC-Designer	01 Staff	2253.21	Product received by EPASIIAEP
11	UNDP	Goods	Communication Materials Printing	LS	4464.0	Product received by EPASIIAEP

OC = Outcome