Terms of Reference (TOR)
Development of Turtle Hatchery for conservation
Host and Rohingya Enhancement of Lives Project (HELP)

1. Background

Bangladesh has been coping with the presence of around one million Forcibly Displaced Myanmar Nationals (FDMNs) since 2017, which has resulted in a protracted crisis requiring longer term support to host and Rohingya communities. The Government of the People's Republic of Bangladesh (GoB) has received credit and grant from the International Development Association (IDA) for the Host and Rohingya Enhancement of Lives Project (HELP). The objective of the project is to improve access to basic services and enhance disaster and climate resilience of the host communities and FDMNs.

HELP is comprised of four components. Table 1 summarizes the components that HELP plans to implement, including resilient water, sanitation, and hygiene (WASH), climate and disaster-resilient infrastructure, energy, emergency response, strengthening institutional systems to enhance service provision and support resilient development, and contingent emergency response.

As part of the technical assistance under Component 3.1., the project will finance a comprehensive damage assessment of areas affected by the FDMNs and support a sustainable, ecosystem-based approach to development. The Department of Environment (DoE) under the Ministry of Environment, Forest and Climate Change (MoEFCC) will carry out the environmental impact and damage assessment followed by ecosystem restoration project development and ecosystem conservation and restoration activities. The Project Director (PD) of the DoE Project Management Unit (PMU) intends to hire a firm to carry out turtle hatchery development and management activities.

Table 1: HELP Components

#	Component
1	Resilient water, sanitation, and hygiene (WASH)
2	Climate and disaster resilient infrastructure, energy, and emergency response 2.1. Rural Infrastructure Development 2.2. Rural Roads Improvement 2.3. Renewable Energy
3	Strengthening institutional systems to enhance service provision and support resilient development 3.1. Capacity Building and Technical Assistance 3.2. Host Communities and FDMN Awareness Raising and Skills Building Programs 3.3. Reinforcement of Emergency Management Capacity 3.4. Technology-driven Monitoring and Evaluation and Project Management
4	Contingent Emergency Response

Environmental Issues in FDMNs' habitation area

Ukhia and Teknaf in Cox's Bazar, Bangladesh, known for their rich wildlife and forests, have experienced significant environmental changes due to human activities, including the establishment of massive FDMNs camps. A satellite image study revealed that between 2010 and 2020, agricultural land, settlements, and refugee camps expanded significantly, while vegetation, water bodies, and sandy land decreased. Approximately 21,000 hectares of land underwent transformation over three decades, with a substantial portion transformed into FDMNs camp settlements. Predictive models indicate further decreases in vegetation and increases in settlement areas by 2030.

The influx of FDMNs has placed significant strain on the local community and exacerbated environmental impacts, particularly in natural forests, protected areas, and marine and freshwater ecosystems. FDMN influx intensified ecological challenges such as landslides, deforestation, land infertility, loss of farming lands, depletion of water resources, and disturbances to wildlife and marine ecosystems. These disturbances

threaten the livelihoods of both the local population and those living beyond the region. There is clear evidence of environmental degradation due to the haphazard settlement of FDMNs, necessitating urgent action to mitigate impacts on agricultural land, sandy areas, settlements, vegetation, water bodies, and refugee camps.

In response, the GoB began relocating FDMNs from Cox's Bazar camps to Bhasan Char island in late 2020, with plans to relocate up to 100,000 people. The 2023 Joint Response Plan (JRP) for the FDMNs Humanitarian Crisis, led by the Bangladesh Government, involves 10 UN agencies, 38 international NGOs, 57 Bangladeshi NGOs, and 11 other organizations. This plan calls for global financial support to address the needs of both the Rohingya and host communities.

The habitation of Bhasan Char by FDMNs has brought about environmental challenges, particularly in terms of habitat loss, resource strain, and increased vulnerability to climate-induced risks. The island's fragile ecosystem, combined with its low-lying, flood-prone geography, makes it particularly susceptible to degradation.

Despite extensive humanitarian efforts, no organization directly addresses environmental concerns in Cox's Bazar and Bhasan Char. Studies on environmental and ecological damage in the Chattogram division have not been conducted, preventing the government from implementing appropriate policies and programs to mitigate further degradation.

The turtle hatchery development and management under HELP is expected to conserve sea turtles and contribute to restore ecosystems in Sonapara, Cox's Bazar.

2. Objectives

The ultimate objective of this assignment is to facilitate hatchling production for conservation of sea turtles in Sonapara, Cox's Bazar. The specific objectives are to: (1) understand sea turtle nesting sites' current situation, threats, and necessary conservation actions in Sonapara; (2) establish and operationalize turtle hatchery; and (3) conduct awareness raising activities.

3. Scope of Work

1) Conduct an assessment and year-round monitoring of sea turtle nesting at Sonapara Beach

The Consultant will identify and map sea turtle nesting sites and conduct focus group discussions (FGDs) with fishers to identify threats (including bycatch, predation, human disturbance, and habitat degradation). The Consultant will monitor nesting throughout the year to capture seasonal patterns and inform conservation actions. Develop a situational report which will cover: (i) identification and characterization of critical nesting habitats; (ii) migration and population studies using appropriate, ethical methods; (iii) development of an inventory of nesting events and hatching success; (iv) documentation of mortality, nesting frequency, and nest fate; and (v) identification and quantification of sources and levels of threats (including bycatch). The Consultant will prepare a comprehensive conservation strategy report summarizing findings and proposing a Conservation Management Plan (CMP) with actionable, long-term strategies, responsibilities, and a time-bound implementation schedule. The report also summarizes the results of all the activities conducted under this assignment.

2) Establish and manage turtle hatchery

The Consultant will establish a turtle hatchery and guard shed with appropriate equipment and security measures. Nests will be managed for safe in-situ incubation and hatching; where in-situ protection is not feasible, the Consultant will implement ex-situ conservation (egg relocation) following accepted protocols and required permits. The Consultant will deploy guards as needed, control predators (e.g., dogs, crows, and other predatory animals), and prevent egg poaching consistent with legal and ethical standards. The Consultant will maintain records of nests managed, relocation activities, hatching success, and predator control actions.

3) Conduct awareness raising activities

The Consultant will conduct awareness meetings with fisher communities on safe handling and release of entangled turtles. The Consultant will identify turtle egg collectors and hold dialogue with them to reduce poaching and promote stewardship. The Consultant will prepare and post informational signboards at key locations, develop and print a sea turtle information poster or leaflet (1,000 copies), and organize media campaigns around turtle hatchling releases and relevant observances (e.g., World Sea Turtle Day), in coordination with local authorities and community groups.

4. Deliverables and Schedule

The assignment will be completed within 12 months after signing of the contract. However, the duration might be modified depending on the assignment's needs. All reports shall be written in English and presented and illustrated in a clear and concise manner including relevant data, maps, diagrams, plans, tables. The key deliverables schedule from the commencement of work is shown in the following table. The Consultant will submit monthly reports summarizing monitoring, hatchery management, awareness activities, and findings.

SL no	Deliverables	Submission	Payment
1	**Inception Report (work plan)**	**Month 1**	**10%**
2	**Situational Report**	**Month 3**	**30%**
3	**Mid-Term Progress Report**	**Month 6**	**20%**
4	**Comprehensive Conservation Strategy Report**	**Month 10**	**30%**
5	**The final report consolidating all Deliverables**	**Month 12**	**10 %**

All outputs are to be prepared as draft versions and finalized upon review by the DoE. The consultant shall allow at least seven business days for the DoE to review all preliminary draft outputs, and two business days to review all final draft outputs. The consultant must integrate these feedbacks into the report with clear track records of updates. All reports shall be provided in both Microsoft Word and PDF formats. All graphics will be delivered in high resolution files. All final deliverables shall be in English.

The Consultant will be procured on a lump sum basis (payment against milestones) that shall include all services needed to carry out the scope of services. This shall include all technical consulting fees and expenses, workshop facilitation expenses, translation and simultaneous interpretation costs, travel-related costs, professional editing and design of outputs, and any other administrative fees related to the assignment. The Consultant shall be paid at relevant milestones according to the expected implementation schedule and submission of deliverables. Invoices shall be submitted promptly to the PD, DoE PMU for approval after the completion of outputs per the schedule. All the reports must be submitted electronically and physically (10 copies for reports).

Upon completion of the study, the consultant shall submit all data used and produced in the study in usable formats (e.g., tables in excel or .csv format), in addition to the visualizations of these data already incorporated into the assignment's reports and presentations. The DoE retains the right to utilize these data for any follow-up studies, presentations, and publications.

Upon completion of the assignment, the consultant shall submit all data used and produced in the assignment in editable formats. The final materials must be delivered on cloud storage platforms and via USB/external hard drive with logical file naming. The DoE retains the right to utilize these data for any follow-up studies, presentations, and publications.

5. Key Qualifications

General Experience of the Firm in providing services (core business and years in business. The Consultant must have at least 10 years of in-depth working experience on Development of Turtle hatchery in Bangladesh. Following is an indicative allocation of manpower for the service. The Consultant is free to employ additional resources as they see fit. The consultant may also engage support staff to assist them in carrying out the assignment. At least the Team Leader must be a Bangladesh national. The team requires excellent verbal and written communication skills and report writing capacity in both Bangla and English.

Team members

Designation	Qualifications	Experience
Team Leader	Having MSc in Zoology or Marine Biology.	Having progressive experience of 10 years to manage turtle hatchling ground with release of hatchlings
Supervisor	SSC or equivalent	Having practical knowledge on all the process and practices of turtle hatching ground management.
Guard	N/A	Having experience on patrolling of turtle hatchling grounds for 5 years.

6. Implementation Arrangement

The Consultant will work closely with the DoE PMU and relevant ministries and agencies. The Consultant will report to the PD, DoE PMU and other focal points assigned by the PD, DoE PMU. PD will be the point of contact for contractual issues, with support from the PMU team. The working language for this project shall be English for communication between the Consultant and the DoE.

The DoE PMU will provide access to the data, information, and reports owned by the DoE. It also provides insights from other contracts implemented in parallel where possible. DoE PMU will facilitate communication with government agencies and relevant stakeholders and resolve administrative issues which may arise during the assignment. However, the DoE PMU cannot guarantee access to in-country experts and stakeholders for the data collection.

The Consultant shall submit a succinct monthly progress report to outline key updates on progress of the consultancy assignment, issues to be addressed, and upcoming activities and deadlines. These will be followed by bi-weekly progress meetings via teleconference following project initiation unless otherwise agreed between the DoE PMU.

It is a World Bank financed project and it has Project Administration Manual, Procurement Regulations. The Consultant is to comply with those, attend & cooperate with review missions and provide reports, information as required by the Bank.

The Consultant will lead the other teams working on the parallel assignments package no S-9. The team is responsible for coordination and communication between the teams, management of the work schedule, sharing of the outputs necessary for each team, and coherent reporting to the DoE PMU. This coordination modality intends to ensure a consistent flow of information and results across all teams and allow for the integration of findings into the different stages of each study.

7. Selection Method

A consulting Firm will be selected following the "**Consultant Qualification Selection**" method as set forth in the World Bank Procurement Regulations for IPF Borrowers, September 2023.

8. Reference

- Host and Rohingya Enhancement of Lives Project Consultant Qualification Selection