

## Request for Proposals

### Research support for two small studies on the Swatch of No Ground (SoNG)

#### Context

The coastal water of Bangladesh is important habitat for a diverse range of cetaceans, including the world's largest population of Endangered Irrawaddy dolphins, along with other species such as Indo-Pacific humpback dolphins, finless porpoises, and other marine megafauna like sharks, rays, whales and sea-turtles along with an incredibly diverse array of fish and fisheries resources with about 475 species of fish recorded.

The Swatch of No Ground (SoNG) is a submarine canyon over 900 meters deep, located at the Bay of Bengal. It was created by erosive flows from the Ganges-Brahmaputra-Meghna river system and underwater currents of the Bay, and was formed about 125,000 years ago. The SoNG supports large numbers of marine species including Indo-Pacific bottlenose, pantropical spotted and spinner dolphins, and a likely resident population of Bryde's whales.

In 2014, the Ministry of Environment, Forest and Climate Change (MoEFCC) declared SoNG as the country's first Marine Protected Area covering 1,738 km<sup>2</sup> of priority habitat for seven cetacean species as well as for whale sharks, marine turtles, fish and fisheries, and seabirds, occurring in the SoNG and surrounding coastal waters.

However, updated and sufficient data and information for knowledge-based decision-making for the management of SoNG MPA is lacking. In this context, from 1<sup>st</sup> December 2023 a project named "Updating Biodiversity data of SoNG MPA for Knowledge-based decision making" was started by IUCN Bangladesh along with Bangladesh Forest Department supported by GIZ on behalf of the German Federal Ministry for Economic Cooperation and Development.

Under this project research support will be provided to **two small grants** to different university students, with supervision from a renowned professor from the university, to conduct thesis or research work on various environmental and social aspects of SoNG, including nutrient content, sediment transportation, fish and fish market survey (including by-catch data), coastal benthos etc.

#### Small Grant 1

Topic: Proposal should be related to various environmental aspect of SoNG.

##### (a) Nutrients

- Measure concentrations of key nutrients (nitrogen, phosphorus) in selected areas of SoNG.
- Conduct preliminary temporal and spatial monitoring of nutrient fluctuations in specific locations.
- Study the impact on aquatic food webs and species composition in targeted zones.

### (b) Sediment transport

- Map sources of sediment including rivers, coastal erosion.
- Quantify sediment load contributions from major sources.
- Model sediment transport processes influenced by water currents, waves, and wind.
- Develop a plan for monitoring seasonal and event-based changes in sediment movement.

### (c) Coastal benthos

- Survey and document benthic organisms in selected coastal habitats.
- Monitor changes in benthic community structure in key areas.
- Assess the health of benthic habitats like coral reefs and mangroves.
- Study the impact of pollutants and physical disturbances on benthic communities.
- Develop a plan for long term monitoring of benthic community and interactions between benthic organisms and other trophic levels

## Small Grant 2

Topic: Proposal should be related to various fisheries aspects of SoNG.

### (a) Fish and Fisheries

- Conduct baseline surveys to determine fish population sizes and diversity.
- Initiate monitoring of fish population dynamics to establish baseline data and track short-term trends.
- Identify and map key habitats used by selected fish species (for spawning, feeding, and shelter) within the SoNG MPA.
- Perform an initial assessment of the impact of fishing activities on fish stocks using available data.
- Conduct a rapid assessment the effectiveness of current fishing regulations and enforcement.

### (b) Fish market biodiversity surveys

- Conduct regular surveys of fish species sold in local markets.
- Identify trends in species availability and market demand.
- Use genetic and morphological techniques to accurately identify fish species.
- Document rare and endangered species in the market trade.
- Analyze the economic importance of key fish species to local markets.
- Assess the impact of market demand on fish populations and biodiversity.
- Develop a plan to educate consumers about sustainable seafood choices and promoting certification schemes for sustainably sourced fish products
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## Application criteria

Proposal on above mentioned topic can be submitted by



1. **Team:** Masters level students along with 1 professor as supervisor/coordinator and one co-coordinator.
2. **Department/Discipline:** Environmental science/Zoology/Forestry/Marine Science/Fisheries/Oceanography and other related disciplines from any esteemed university of Bangladesh
3. **Language:** Proposal should be in English (Context, Objectives, Activities and methodology, Outcomes)
4. Work plan and budget should be clearly mentioned in the proposal.

#### Selection criteria:

1. **Team Composition** – 20 points
2. **Adequacy of the proposed, Context, Objectives, Activities and methodology/ Workplan, Outcomes** – 40 marks
3. **Research experience in a similar field** – 20 marks
4. **Justification of the budget** – 10 marks
5. **Capacity and experience** in project management and financial administration – 10 marks

**Time frame:** 06 month from the start date

**Submission deadline:** 10 October 2024

#### Deliverable:

Deliverable	Timeline
Deliverable 1- inception report with detailed methodology and approach	T1= T0 + 01 Month
Deliverable 2- Final report with all research findings	T2= T0+ 06 Month

**Submission process:** Full proposal with all required section should be directly via email to-

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