



No: RDO-SANH-2023-08

TERMS OF REFERENCE FOR FIELD RESEARCH EXPERT

UKRI GCRF South Asian Nitrogen Hub (SANH)

Background:

Humans have massively altered flows of nitrogen on our planet, leading to both benefits for food production and multiple threats to the environment. There are few places on Earth more affected than South Asia, with levels of nitrogen pollution rapidly increasing. The result is a web of interlinked problems, as nitrogen losses from agriculture and from fossil fuel combustion cause air and water pollution. This damages human health, threatens biodiversity of forests and rivers, and leads to coastal and marine pollution that exacerbates the effects of climate change, such as by predisposing reefs to coral bleaching. Altogether, it is clear that nitrogen pollution is something we should be taking very seriously.

A major research hub established under the UK Global Challenge Research Fund ("GCRF) South Asian Nitrogen Hub" is a partnership that brings together 32 leading research organizations with project engagement partners from the UK and South Asia. All eight countries of the South Asia Co-operative Environment Program (SACEP) are included in this venture.

The overall goal of the GCRF South Asian Nitrogen Hub (SANH) is to develop an approach that links the many impacts of human alteration of the nitrogen cycle on environment, health, food security and climate resilience.

Maldives National University is the lead agency for the project in the Maldives. As the proceeds of the project, MNU requires the services of a field researcher to carry out specific activities that fall under objective 3 and 4 of the project.

Work Package 3.2: Address the threat of eutrophication to coral reefs, which can both predispose and prevent recovery following temperature driven coral bleaching.

Work Package 4.3: Understand the complex system of nutrient sources and demands, and to quantify the impact of various scenarios (agriculture, solid and liquid waste, landscape, consumption) on lives and livelihoods.

Description of work

The field researcher can propose to carry out the work with the aid of a field assistant. The field research expert will provide assistance to the SANH project as follows.

Liaise with SANH work package coordination team and provide technical assistance, including, but not necessarily limited to:

- Carry out field work in accordance with the methods, protocols/ procedure for sample collection as advised by the SANH project.
- Provide input to finalize data collection methods/ processes to carry out the coral reef health observation.
- Collect water samples in the frequency determined (No. of locations, No. of samples per location) in the workplan provided in the ToR in accordance with the guidelines provided by the project.
- Collect coral reef observation data including pictures.
- Provide input for research papers on the work as an when required during the field research period.

Deliverables

1. Conduct insitu monitoring using a handheld probe and submit the full log of the probe after each field3 visit. Take and handover water samples from the sampling points determined in K. Vilimale' and AA. Thoddoo by the project and in the frequency determined in the workplan.
2. Collect reef observation data and photos in the frequency determine in the workplan.
3. Presentation of Research experience and way forward at the completion of the field research

Duration of Input and work plan

The expert is expected to work intermittently to deliver the specific tasks outlined in this ToR. The tentative work schedule and time input is as follows;

	Deliverable	Time input (number of days)	Tentative schedule/ timing
1	Conduct insitu monitoring and Collect water samples from the locations identified in K. Vilimale' and AA. Thoddoo and hand over to MNU. Submit the full log of probe for the parameters assessed using the probe.	10	October 2023, November and December
2	Communicate with SANH research team and determine reef areas to observe during the field research period	1	October 2023
3	Reef observation data collection in K. Villimale' and AA. Thoddoo and hand over to MNU	3	November 2023
4	Presentation of Research experience and way forward	1	January 2024
5	Provide input for research paper		(To be determined)

Payment

- The consultant is expected to submit a cost proposal for the services included in this ToR.

Qualifications and Experience:

The interested individual should have:

- Post Graduate Qualification in Marine Science, Environmental Science or Environmental Management or equivalent a related field.
- At least 5 years of work experience as a field expert, in coastal and/ or nearshore areas in the Maldives.
- Experience as a lecturer in environmental science, environmental management will be an added advantage.
- Fluency in both written and spoken, Dhivehi and English language

Facilities and assistance provided by the Client

- Assistance to arrange meetings
- Provide financial support and materials to carry out the field activities as required

Duration of the Assignment

The assignment will be carried out in accordance with the schedule mutually agreed by MNU with the consultant, during a timeframe between 16th October to 15 January 2024.

Application Due Date

Interested Candidates please submit the CV and proposed cost for the field research work outlined in this Term of Reference.

For further information please contact Fathimath Fairooza (Project Coordinator) by:

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