

Terms of Reference

Consultant for Addressing Gaps in National Marine Biodiversity

1. Background/Context of assignment

The GoM-USAID-IUCN Project REGENERATE is a six-year project, funded by USAID, aimed at strengthening the sustainable management of coastal resources, particularly coral reefs, thereby strengthening economic, social, and environmental resilience to the adverse effects of climate change in Maldives. This directly supports the Maldives strategy 'Climate Change Adaptation fostered through Economic, Environment, and Social Resilience'. It seeks to develop informed citizens, civil society, social capital, and governance structures for stakeholder ownership and responsibility in managing local and national marine ecosystems and ecosystem services. The current National Biodiversity Strategy and Action Plan (MEE,2015) not only highlights the lack of information and awareness of biodiversity but explicitly calls for the preparation and maintenance of biodiversity database. Prerequisites for any meaningful management of marine biodiversity are an understanding of extent of that biodiversity, and the ability to name species correctly.

The Marine Research Centre (MRC) has identified the need for scientifically accurate documentation of marine biodiversity. While some work has been done in the past, much more needs to be done.

IUCN Maldives will be providing technical assistance through Project REGENERATE to MRC to address the gaps in national biodiversity datasets by developing the following four outputs:

- **Checklist of Fishes of the Maldives:** The last national list of fishes of the Maldives was prepared over 20 years ago (Randall and Anderson, 1993). Since then a number of additions to the known fish fauna of the Maldives have been published (Adam et al.,1998), and MRC has accumulated many more specimens and as yet unpublished records. The update will allow to take into account the numerous changes to the taxonomy of indo-pacific fishes and new findings since 1993 checklist. It is anticipated that a revised Maldives fish list would include something of the order of 1200 species.
- **Understanding Cetacean Stranding in the Maldives:** Whales and dolphins are a significant component of Maldivian marine biodiversity but have been little studied. A review of cetacean stranding's was prepared by MRC nearly 20 years ago (Anderson et al., 1999). .
- **Checklist of Birds of the Maldives:** Seabirds are abundant and of great importance to the fisherman as indicators of tuna schools. The birds of the Maldives were last reviewed by Ash and Shafeeq (1994), since then several additions to the national list have been identified but have not been published. A review is also necessary due to changes to nomenclature and taxonomy.
- **Overarching review of Marine Biodiversity:** Upon completion of the checklists of fishes, birds and cetacean stranding's produce a wider overarching review on marine biodiversity in the Maldives.

The consultant will be working closely with IUCN Maldives and MRC in developing the outputs and shall create a schedule of work and report to IUCN Maldives and MRC. These outputs and schedule of work needs to be shared with and approved by IUCN Maldives and MRC.

2. Line Management

Najfa Shaheem Razee, Chief Technical Officer
Day to day Mr. Ahmed Basheer, Citizen Science Officer

Reporting requirements

1. The Consultant is expected to prepare a timeline and schedule for delivery of activities listed herein and report issues on a case by case basis providing updates to Chief Technical Officer and Mr. Basheer no less than on a monthly basis.
2. Consultant shall ensure that all outputs are delivered on time.

3. Main Responsibilities

The consultant will be primarily responsible for the development of four outputs

- Updated Checklist of Fishes of the Maldives
- Understanding Cetacean Stranding in the Maldives
- Updated Checklist of Birds of the Maldives
- Review of Marine Biodiversity: Upon completion of the checklists of fishes, birds and cetacean stranding's produce a wider overarching review on marine biodiversity in the Maldives.

Working closely with IUCN Maldives and MRC, the consultant will conduct all the necessary surveys and consultations in developing the following outputs.

A detailed breakdown of expected outputs is as follows:

1. Develop a fully updated and peer-reviewed annotated checklist of the fishes of the Maldives including but not limited to the following activities:
 - Review all specimens held in MRC collection
 - Diving survey to search out additional new fishes for Maldives
 - Update nomenclature for all Maldivian fishes.
2. Develop a peer-reviewed article detailing all known cetacean stranding's in Maldives
 - Critically review all stranding records held at MRC
 - Gather all additional information on cetacean stranding's in Maldives
 - Provide a review and recommendations cetacean reporting mechanism
3. Develop a fully updated and peer-reviewed annotated checklist of the birds of the Maldives.
 - Compile all available information on occurrence of birds in the Maldives
 - Critically review all records in the light of modern ornithological knowledge
 - Compile a detail report of all new records of birds in Maldives
4. Develop a peer-reviewed overview of all published information on Maldivian marine biodiversity
 - Review all available information on marine biodiversity in the Maldives
 - Review all other published literature in the UK
 - Compile an up-to-date summary listing

5. The Consultant is expected to strengthen the technical capacity of IUCN and MRC staff through;
- Engagement of relevant staff to assist/participate in activities
 - On the job training
 - Deliver all outputs including but not limited to all final documentation prepared, new specimens collected, photos etc.

4. Timeline and Deliverables

ID	Deliverable	Date of delivery
1	Developing a fully updated and peer-reviewed annotated checklist of the fishes of the Maldives	July 2019
2	Developing a peer-reviewed article detailing all known cetacean stranding's in Maldives	June 2019
3	Developing a fully updated and peer-reviewed annotated checklist of the birds of the Maldives	May 2019
4	Developing a peer-reviewed overview of all published information on Maldivian marine biodiversity	September 2019

5. Detail Breakdown of No. of Consultants Chargeable Days Allocated to Deliverables

Deliverable No	Task	Estimated No. of Days Needed
1.1	Reviewing all specimens held in MRC collection	
1.2	Diving survey to search out additional new fishes for Maldives	
1.3	Updating nomenclature for all Maldivian fishes	
1.4	Developing a draft of fully updated and annotated checklist of the fishes of the Maldives for peer-reviewed publication	
1.5	Incorporating feedbacks and finalizing the publication	
2.1	Critically reviewing all stranding records held at MRC	
2.2	Gathering all additional information on cetacean stranding's in Maldives	
2.3	Developing a draft article detailing all known cetacean stranding's in Maldives for peer-reviewed publication	
2.4	Incorporating feedbacks and finalizing the publication	
3.1	Compiling all available information on occurrence of previously unrecorded birds in the Maldives	
3.2	Critically reviewing all species records in the light of modern ornithological knowledge	
3.3	Developing a draft article detailing all new records of birds in Maldives for peer-reviewed publication	

3.4	Developing a draft of fully updated and annotated checklist of the birds of the Maldives for peer-reviewed publication	
3.5	Incorporating feedbacks and finalizing the publication	
4.1	Reviewing all available information on marine biodiversity in the Maldives	
4.2	Reviewing all other published literature in the UK	
4.3	Compiling an up-to-date summary listing	
4.4	Developing a draft overview of all published information on Maldivian marine biodiversity	
4.5	Incorporating feedbacks and finalizing the publication	
5.1	Summary report to be presented on staff engagement and capacity development	

6. Payment Schedule

The consultant may submit up to 4 invoices during the duration of the contract. Payment will be made in accordance with the deliverable listed below. Payment is subjected to review and approval of supporting progress reports.

	Date	Deliverables
Invoice 1	Upon delivery of first monthly report, with timeline and schedule of delivery	1
Invoice 2	Upon delivery of first deliverable for peer review	2
Invoice 3	Upon delivery of second and third deliverable for peer review	3
Invoice 4	Upon delivery of final deliverable for peer review	4

7. Travel

Direct expenses relating to any required visit to the Maldives (travel to and within Maldives and meals) will be invoiced upon approval by the Chief Technical Officer.

8. Reporting Structure

The consultant is expected to report progress to Chief Technical Officer and Citizen Science Officer at the end of every fortnight. Consultant may have to work extra hours in order to complete tasks assigned to him/her without any extra payment. Consultant shall ensure that all outputs are delivered on time.

9. Duration of Contract

The estimated duration of the contract will be initially until 15 September 2019.

10. Services and Facilities Provided by IUCN Maldives

IUCN shall make available to the Consultant for the purposes of the services and free of any charge, the required office space, and office facilities throughout the duration of the contract period.

Travel and accommodation costs for project related activities will be provided by IUCN Maldives. Any expenses not directly paid for by the project should be pre-authorized, logged with receipts and description of activity noted for later refund by IUCN.

11. Lodgement

Response are to be sent electronically in Word and PDF format to najfa.razee@iucn.org by 29 March 2019. Any enquiries relating to these Terms of Reference should be directed to the same email address.