



## TERMS OF REFERENCE

Ref: PN/FJ/018/20

Consultancy Title	<b>VEGETATION ECOLOGIST/BOTANIST</b>
<b>Project Name:</b>	Implementing 'Ridge to Reef' approach to protect biodiversity and ecosystem functions in Tuvalu (Tuvalu R2R Project)
<b>Location</b>	Tuvalu
<b>Application deadline</b>	February 19, 2020
<b>Type of Contract</b>	Individual Contractor
<b>Languages required:</b>	English
<b>Duration of Initial Contract:</b>	70 days from February 21, 2020 to July 21, 2020  One trip in country for 21 days (starting March 14) as biorap team conducts assessments on 4 islands namely Niutao, Funafuti, Vaitupu and Nukulaelae

Consultancy Proposal (CV & Financial proposal Template) should be uploaded on UNDP e-tendering Portal (<https://etendering.partneragencies.org>) no later than, 19 February 2020 (New York Time). Any proposals received after the due date/time will not be accepted. Any request for clarification must be sent in writing, or by standard electronic communication to [procurement.fj@undp.org](mailto:procurement.fj@undp.org). UNDP will respond in writing or by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all consultants. Incomplete, late and joint proposals will not be considered and only offers for which there is further interest will be contacted. Failure to submit your application as stated as per the application submission guide (Procurement Notice) on the above link will be considered incomplete and therefore application will not be considered.

**NOTE:**

Proposals must be sent/uploaded through UNDP e-tendering Portal. Candidates need to upload their CV and financial proposal -using UNDP template.

*If the selected/successful Candidate is over 65 years of age and required to travel outside his home country; He/She will be required provide a full medical report at their expense prior to issuance to contract. Contract will only be issued when Proposed candidate is deemed medically fit to undertake the assignment.*



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## BACKGROUND

### A. Background:

The Global Environment Facility (GEF) embarked on the “R2R- Pacific Islands Ridge-to-Reef National Priorities – Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods” in the last decade to “provide an opportunity for Pacific SIDS [Small Island Developing States] to develop and implement truly integrated approaches for the sustainable development of island economies and communities”. Under the umbrella of this larger project, several Pacific Island nations including Tuvalu, established demonstration sites within their national boundaries. For Tuvalu, a sub-component of the larger Pacific R2R programme was initiated in 2015, the **“Implementing ‘Ridge to Reef’ approach to protect biodiversity and ecosystem functions in Tuvalu (Tuvalu R2R Project)”** which has the main aim “to preserve ecosystem services, sustain livelihoods and improve resilience in Tuvalu using a ‘ridge-to-reef’ approach”.

To achieve this objective, the Tuvalu R2R programme has four components: “enhancing and strengthening conservation and protected areas (Component 1); rehabilitating degraded coastal and inland forests and landscapes and supporting the delivery of integrated water resource management (IWRM) and integrated coastal management (ICM) at a national scale whilst piloting hands-on approaches at the island scale (on three selected pilot islands) (Component 2); enhancing governance and institutional capacities at the national, island, and community levels for enhanced inland and coastal natural resource management (Component 3); and improving data and information systems that would enable improve evidence-based planning, decision-making, and management of natural resources in Tuvalu (Component 4)”.

The Tuvalu R2R Project is a 5-year project, implemented by Ministry of Foreign Affairs, Trade, Tourism, Environment and Labour (MFATTEL) in partnership with the Department of Environment of MFATTEL, Ministry of Home Affairs and Rural Development (MHARD), Ministry of Natural Resources and UNDP. There are multiple outcomes projected with the most relevant to the Biorap survey being: “formalized community management systems of marine conservation areas across 9 islands equipped with functional management plans; enhance and/or develop a centralized GIS database system on biodiversity, natural resources, and governance systems; implement sustainable land management interventions and agroforestry interventions; and enhance awareness and build capacities on the Ridge to Reef approach”.

The Tuvalu archipelago consists of three islets (Nanumanga, Niutao and Niulakita) and six atolls (Funafuti, Nanumea, Nui, Nukufetau, Nukulaelae and Vaitupu), with a total land area of approximately 26 km<sup>2</sup>. Funafuti is the largest atoll, and includes numerous islets situated around a central lagoon that is approximately 25.1 x 18.4 km. The island nation’s exclusive economic zone (EEZ) covers an oceanic area of approximately 900,000 km<sup>2</sup> which is home to a highly diverse array of marine life, with estimates of species richness ranking amongst some of the highest in the Indo-Pacific realm. The predominant vegetation type (covering ~ 40% of land surfaces) on the islands of Tuvalu is said to be “coconut woodland”. Terrestrial fauna and flora communities are typically depauperate for isolated coral atoll/ reef islets, and are dominated by coastal/littoral pantropical species. With rising sea levels and subsequent land loss, Tuvalu’s terrestrial habitats are imminently threatened, and as a consequence, so too are the local and scientific knowledge of the biodiversity that exists within.

## DUTIES AND RESPONSIBILITIES



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## B. Scope of work and key responsibilities

The Tuvalu R2R Project partners plan to undertake a Biodiversity Rapid Assessment (Biorap) on four islets/atolls in the Tuvalu archipelago, namely Niutao, Funafuti, Vaitupu and Nukulaelae. It is intended that biodiversity surveys will be conducted at these four locations, involving baseline field ecological surveys of plants, vegetation, avifauna, and marine habitats, as well as information on mammals (native and introduced/invasive), reptiles and invertebrates. For this purpose, a specialist team of consultants are required to achieve the following objectives:

1. To develop specific and feasible methods for conducting baseline field ecological surveys of plants (vegetation), avifauna (birds), mammals (native and introduced/invasive), reptiles, amphibians, insects, and marine species, with a particular focus on species of cultural significance and unique to Tuvalu. Survey methodologies utilized in the Biorap are to be compatible and build on experiences of similar ecological surveys conducted in other Pacific Islands, but adapted to the specific focus of the Tuvalu R2R Project.
2. To conduct field work/surveys for an environmental baseline of the biodiversity of the four islets/atolls (Niutao, Funafuti, Vaitupu and Nukulaelae), implementing the developed methods (in 1 above).
3. Based on the data collected, subsequent analysis thereof, and described within consequent report(s), the consultants should provide a set of key management and policy options that national and local stakeholders should consider employing to strengthen existing conservation efforts, such as the protection and management of important ecosystems and species found in Tuvalu.
4. Whilst coordinating and conducting the Biorap surveys, the consultants are expected to work alongside, and build local capacity amongst a team of national (including local community) representatives. From the initial information collected the team of consultants are to provide specialized training for government staff in surveying and/or monitoring methods and the identification of biological indicator species.
5. From the surveys and the stakeholder interactions, the team is expected to generate a detailed technical and scientific report with results and findings, including conclusions and recommendations on (1) healthy ecosystems; and, (2) key biota indicators that could be used for monitoring changes in important ecosystems.

The Vegetation Ecologist/Botanist will be directly responsible for the following sub-components of the Biorap:

1. To develop the methodology for the Biorap vegetation surveys and stored carbon assessments that will be conducted on the four islets/atolls, taking into consideration the nature of the locations to be surveyed.
2. To conduct the vegetation surveys during the Biorap missions, collate the data and perform relevant analyses to describe the status and distribution of vegetation/habitat types. In doing so, the consultant will compile a baseline flora inventory, noting the status of resident species (i.e. in terms of international distribution and local abundance) and introduced/ invasive species.
3. Baseline maps indicating the extent of vegetation types and/or habitats, highlighting the level and nature of human disturbance that occurs on the four islets/atolls.
4. Above ground biomass and below ground carbon estimates, and thereby a total carbon estimate for a minimum of ten sampling localities on each islet/atoll.
5. Training materials for workshops/training sessions with government staff in surveying and/or monitoring methods and the identification of biological indicator flora species.
6. The vegetation ecology section of the final report, addressing the relevant aforementioned objectives.

It is essential for the individual consultant to maintain clear and effective communication with the team leader, and through the team leader with UNDP and the Tuvalu Department of Environment, providing regular updates via



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communication channels. Missions to the four islands are to be tentatively scheduled for mid-March. The Tuvalu R2R Project will provide transportation to and from sites of surveys within Tuvalu.

#### **D. Expected Outputs and Deliverables**

The Vegetation Ecologist/Botanist is expected to deliver the following products by the end of the consultancy:

- Part of the Inception Report that details the vegetation survey and carbon assessment methodologies (to be implemented in the Biorap surveys) and an associated work plan.
- Training materials for training future government representatives in vegetation surveying and/or monitoring methods and the identification of biological indicator species for vegetation systems that occur on the four islands.
- A section in the final report detailing the following:
  1. A flora inventory with an indication of local status (endemic, native, introduced/invasive) and semi-quantitative or quantitative assessment of abundance and distribution.
  2. An assessment of the status of vegetation types or habitats present on the four islands, describing current and/or imminent threats (e.g. climate change, invasive species) which may affect species or vegetation communities on the four islets/atolls. The aforementioned inventory should highlight biological indicator species that could be used for monitoring change in the habitats present on the four islets/atolls.
  3. Recommended management and policy options that national and local stakeholders could utilize to strengthen existing conservation and management of vegetation on the four islands, with reference to national efforts. A particular focus on the assessment, monitoring and management plans for introduced and invasive species, in addition to species of conservation and/or cultural significance.
  4. Contributions to the discussion of lessons learnt and recommendations for national biodiversity surveys and local capacity building within the Pacific R2R programme, with a focus on capacity building at the local and national level.

#### **E. Payment Schedule**

Ten percent (10%) of the consultancy fee will be paid following signing of the contract and draft work plan by March 9;

Twenty percent (20%) percent of the consultancy fee will be paid following submission and acceptance of the inception (including methodologies) report by March 16;

Ten percent (10%) of the consultancy fee will be paid following submission and acceptance of a post mission (outlining key findings) report by April 22nd ;

Thirty percent (30%) of the consultancy fee will be paid following submission and acceptance of the draft report by 20 June;

Thirty percent (30%) of the consultancy fee will be paid following submission and acceptance of the final report by July 21;

#### **F. Institutional Arrangement**



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- The consultant will be monitored, overseen and supervised by UNDP Multi Country Office Fiji in close cooperation with the Department of Environment, Tuvalu.
- The consultant is expected to produce a final report upon successful completion of activities according to the agreed schedules.
- The consultant is expected to provide his/her equipment and gear for conducting the Biorap surveys and analyses.

#### **G. Duration of the Work**

- The consultancy is for 70 days commencing no later than Feb 21st, 2020 and completion no later than July 21 2020.
- The consultant shall be engaged to undertake the consultancy working according to a planned schedule to be completed by the latest July 21 2020.
- The consultant is expected to spend a minimum of three (3) weeks in Tuvalu, making the necessary arrangements for the missions, in consultation with the team members and relevant stakeholders.
- The consultant is expected to propose and utilize a work plan, budget and timelines to achieve the expected outputs with the appropriate methodology.

#### **H. Duty Station**

##### **I. Supervision / Reporting**

- i. The consultant (through the team leader) will report directly to UNDP Head of Resilience and Sustainable Development Unit and/or her/his representative and UNDP Regional Technical Specialist/Advisor based in Suva, Fiji / Bangkok, Thailand.
- ii. The consultant is expected to produce a final report upon successful completion of activities according to the agreed schedules. The consultant is expected to provide his/her own computer for reporting.

#### **COMPETENCIES**

##### **I. The following competencies are required for the individual consultant:**

- ✦ Demonstrates integrity and commitment to UN principles and values and ethical standards;
- ✦ Strong interpersonal and communication skills;
- ✦ Ability to work well as part of a multi-cultural team and displays gender, religion, race, nationality and age sensitivity and adaptability;
- ✦ Self-monitoring, emotional intelligence and conflict management;
- ✦ Analytical and strategic thinking/results orientation;
- ✦ Experience in participating and following the project cycle;
- ✦ Creative capacity for solving problems and conflict resolution;
- ✦ Computer literacy (e.g. Microsoft Word, Excel, and Power Point);
- ✦ Ability to engage with various partners and stakeholders from the grassroots to national level, and to build strong relationships with relevant stakeholders; and,
- ✦ Strong commitment and mental fortitude in dealing with competing deadlines, demands, and interests.



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## REQUIRED SKILLS AND EXPERIENCE

J. The following are the required qualifications and experience for the individual consultant:

### Educational Qualifications:

- ✦ Minimum master's degree in botany, plant biology, vegetation ecology, environmental science, natural resource management, or a related field and/or at least 10 years of relevant work experience.

### Experience

- ✦ At least 10 years of experience in conducting vegetation surveys, and the analysis and reporting of botanical datasets for Biorap assessments (whether as an individual or as a team member) in the Pacific and/or small island developing nations;
- ✦ Demonstrated experience in conducting vegetation surveys on coralline islets and atolls, with similar habitats to those present on the four islets/atolls to be surveyed.
- ✦ Proven track record of being a member of a related project team and experience with working alongside government, NGO, and other key stakeholders in the Pacific Islands;
- ✦ At least 10 years of experience in developing local community/stakeholder capacity for vegetation surveys and monitoring; and,
- ✦ Demonstrated experience in reporting for GEF/UNDP projects and/or other development agency supported projects.

### Language requirements

- ✦ Fluency of English language is required (verbal and written).

### K. Price Proposal and Schedule of Payments

The team leader must send a financial proposal based on a **Lump Sum Amount**. The total amount quoted shall be all inclusive and include all cost components required to perform the deliverables identified in the TOR, including professional fees, travel costs, living allowance, and any other applicable cost to be incurred by the team in completing the assignment. The contract price will be a fixed output-based price regardless of extension of the herein specified duration. Payments will be done upon completion of deliverables/outputs.

In general, UNDP shall not accept travel costs exceeding those of an economy class ticket. Should the consultant(s) wish to travel on a higher-class ticket, he/she should do so using their own resources.

In the event of unforeseeable travel not anticipated in this TOR, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and the consultant(s), prior to travel, and will be reimbursed.

## L. Evaluation Method and Criteria

The individual consultants will be evaluated based on the following methodology:



### Cumulative analysis

The award of the contract shall be made to the team of consultants whose offer has been evaluated and determined as a) responsive/compliant/acceptable; and b) having received the highest score out of set of weighted technical criteria (70%). and financial criteria (30%). Financial score shall be computed as a ratio of the proposal being evaluated and the lowest priced proposal received by UNDP for the assignment.

Criteria	Max. Point
<b>Qualification</b> <ul style="list-style-type: none"> <li>▪ Minimum master's degree in botany, plant biology, vegetation ecology, environmental science, natural resource management, or a related field and/or at least 10 years of relevant work experience.</li> </ul>	10%
<b>Experience</b> <ul style="list-style-type: none"> <li>✦ At least 10 years of experience in conducting vegetation surveys, and the analysis and reporting of botanical datasets for Biorap assessments (whether as an individual or as a team member) in the Pacific and/or small island developing nations;</li> <li>✦ Demonstrated experience in conducting vegetation surveys on coralline islets and atolls, with similar habitats to those present on the four islets/atolls to be surveyed.</li> <li>✦ Proven track record of being a member of a related project team and experience with working alongside government, NGO, and other key stakeholders in the Pacific Islands;</li> <li>✦ At least 10 years of experience in developing local community/stakeholder capacity for vegetation surveys and monitoring; and,</li> <li>✦ Demonstrated experience in reporting for GEF/UNDP projects and/or other development agency supported projects.</li> </ul>	20%  10%  10%  10%
<b>Total</b>	70%

Only candidates obtaining a minimum of 49 points (70% of the total technical points) would be considered for the Financial Evaluation.

Shortlisted candidates shall be called for an interview which will be used to confirm and/or adjust the technical scores awarded based on documentation submitted.



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### **M. Documentation required**

Interested individual consultants must submit the following documents/information to demonstrate their qualifications.

- ✦ **Personal CV** , indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references.
- ✦ **Technical proposal**, including a) a brief description of why the individual considers him/herself as the most suitable for the assignment;
- ✦ **Financial proposal**, using UNDP confirmation of Interest and submission of financial proposal Template

Incomplete proposals may not be considered. Failure to submit these documents may result in disqualification of proposal.

Relevant templates can be obtained from the UNDP Fiji website under the procurement section:

[www.pacific.undp.org](http://www.pacific.undp.org)

### **Bid Submission Address**

<https://etendering.partneragencies.org>

**BU Code: FJ10**

**Event ID: 0000005321**

If you have not registered in the system before, you can register now by logging in using:

**Username:** event.guest

**Password:** why2change

Please use the bidder's guide for submission of proposal

For any clarification regarding this assignment please write [procurement.fj@undp.org](mailto:procurement.fj@undp.org)

Women candidates are encouraged to apply.

*\*The Fiji Office covers Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Solomon Islands, Tonga, Tuvalu and Vanuatu*