



Ministry of Environment
Republic of Maldives

REQUEST FOR PROPOSAL

Consultancy Services for Upgrade works of Moosun mobile app.

**“Supporting Vulnerable Communities in Maldives to Manage Climate Change-induced
Water Shortages Project”**

Issued on: 04th March 2021

Issued By:
GCF Project Management Unit
Water and Sanitation Department
Ministry of Environment

TERMS OF REFERENCE

Terms of Reference for Consultancy Services for Upgrade works of Moosun mobile app.

INTRODUCTION

The outer islands of the Maldives experiences drinking water shortages during dry season. These shortages have had significant adverse human, environmental and social impacts on the outer island communities. In response to this climate challenge, the Government of the Maldives, with the support of the UNDP received financing from Green Climate fund (GCF) is undertaking the “Supporting Vulnerable Communities in the Maldives to Manage Climate Change-Induced Water Shortages” project. The objective of the project is to deliver safe and secure freshwater to 105,000 people in the islands of Maldives in the face of climate change risks. This will be achieved by delivering the following results:

- a. Scaling up an integrated water supply system to provide safe water to vulnerable households.
- b. Introduction of decentralized and cost-effective dry season water supply systems.
- c. Groundwater quality improved to secure freshwater reserves for long term resilience.

The project is one of the first projects to be funded through the Green Climate Fund and is implemented by partnership between Ministry of Environment and UNDP. Under this project, Ministry of Environment (MoE) intends to procure the services of a consultancy firm for development of a rainfall advisory system for improving rainwater harvesting opportunities, through the existing smartphone application of Maldivian Meteorological Service (MMS), ‘Moosun’.

OBJECTIVE OF THE ASSIGNMENT

The main objective of this assignment is to introduce the possibility of providing probable areas for rainwater harvesting as information including graphics in the existing Moosun smartphone app, in a user friendly and attractive way, based on the information provided by the meteorologist at regular (e.g. daily) intervals.

As such, this assignment includes:

1. Development of the backend system for the duty meteorologist to enter the probable area for rainwater harvesting (PARH) as a (set of) polygons.
2. Development of the capability of the App to display that information.
3. Send a push alert to the users providing PARH.

Backend

- A web form on the backend to update required data.
- Draw relevant area(s) on the map (polygon or circle). Can draw multiple areas.
- By default, validity of this information will be for the next day. (information updated today, valid for tomorrow). Give option to change the validity period if needed.
- Support for both languages (English and Dhivehi)

Mobile App

- Display this information on a map with PARHs highlighted on the map. Make sure to match the existing graphics of the app when designing the new feature.
- Proper heading and validity period to be displayed at the top of the map.
- If multiple polygons are highlighted, each polygon to have its associated text details.
- Remove/hide the image if not updated next day or validity is expired.
- Display both language (English and Dhivehi) section of the app.

Some of the key features of existing Moosun app

a) Real-time Weather

Real-time weather information based on location. This section displays weather icon and additional parameters when required. Tide graph for the day and sun/moon times are also displayed when in the detailed area of the page.

b) Location:

The app checks for user's current location to provide weather information for that region

c) Real-time on a Map:

Near real-time map view of all the available automatic stations showing current weather condition (Weather Icon). Moreover, additional parameters are displayed if the user clicks on the station for more details.

d) Weather Forecasts:

In this section weather forecast for the next 24 hours and daily weather forecast for the next 5 days are displayed.

e) Daily Weather Bulletin:

MMS issues daily bulletin which is an overview of the weather forecast for the day.

f) Display Weather Images:

Display radar, satellite, and NWP image animations with time (+/- 3 hours) slider.

g) Recent Earthquake Events:

MMS provides information about specific earthquake events to the public. The app displays most 5 recent earthquake information.

h) Push Notification:

All alerts are generated and disseminated from the CAP Alert System of MMS. Once an alert is issued, the app sends push notification to all the users. Moreover, push notifications are also sent when:

- Critical weather updates.
- Announcements from MMS.
- For Specific Earthquake events.

i) CAP on MAP:

Display CAP alerts on a map with alert issued area highlighted on the map.

Deliverables and timeline of work

Activity No.	Activity	Deadline
1	Develop and provide a Work Plan for the project including detailed requirement analysis with respective stakeholders	3 days from contract signing
2	Provide and present the design template for the project and obtain approval from MoE	5 days from completion of activity 1
3	Progress meetings shall be conducted with the focal point appointed by MoE	As required
4	Develop and present first iteration of the application for comments	20 days from contract signing
5	Final presentation of application for comments	1 month from contract signing

6	Addressing the comments during final presentation	20 days after final presentation
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Qualification and Experience of developer

The Consultant should submit full CV's for each of the proposed staff members highlighting the criteria given below.

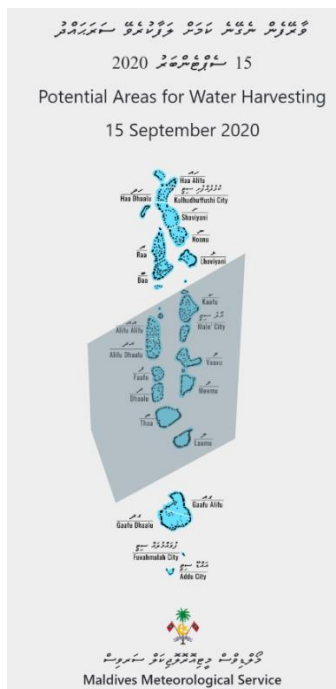
	DEVELOPER		Sub- Category		Total Score	Sub-Score
Education & Qualification	Bachelor's degree in Software Engineering/Programming, IT or related field. Advanced diploma with demonstrable experience in programming and mobile application development will be considered as a viable alternative to a degree.				9.0	
General Experience	<ul style="list-style-type: none"> • Proven experience of mobile application development and web application development evidenced by a solid portfolio of work. • Strong experience in developing well known and widely used platforms. • Understanding of End Users needs to match with suitable technical solutions. 	(a)	Experience of 07 Years	7	15.0	15.0
		(b)	Experience of 05 Years	5		10.7
		(c)	Experience of 03 Years	3		6.4
Specific Experience	<ul style="list-style-type: none"> • Should have strong knowledge and skills in front-end (JavaScript – including a few libraries and frameworks like JQuery, D3, Plotly; HTML5, CSS3) and back-end (one/a few of PHP, Python, .NET, etc.) technologies. 	(a)	Experience of 04 Years	4	20.0	20.0
		(b)	Experience of 03 Years	3		15.0
		(c)	Experience of 02 Years	2		10.0

Reporting Requirement

- Report directly to the Project Manager on all aspects throughout the duration of the contract unless otherwise advised by the Client.

Annex 1

Sample graphical representation of how the alert is displayed on the application.



1. Financial Proposal (40%)

Financial proposal will be evaluated as per total cost quoted on Financial Proposal form in Annex A.

Financial Score (Sf)) will be calculated by the following formula:

The formula for determining the financial scores is the following:

$Sf = 40 \times F_m / F$, in where Sf is the financial score, Fm is the lowest price and F the price of the proposal under consideration.

1. Fee Proposal/ Price Schedule

The consultant is expected to include his/her proposal a lump sum fee in Maldivian Rufiyaa (MVR) for carrying out this task as in the FORMAT provided in the ANNEX A, fees will be paid based on completion of deliverables as detailed in the scope of work.

2. Required Documents for submitting proposals

The following documents shall be submitted with the application for this consultancy:

1. Completed proposal submission form (Form-1)
2. A cover letter indicating why the candidate considers himself/herself suitable for the required consultancy;
3. CV of the applicant (in format provided ANNEX B)

- i. Summary on similar works (experiences) performed in the past
 - ii. Reference letters of works carried out
4. Copy of identification (National Identity Card or Passport Copy) and contact details
5. Copies of Educational Certificates (copies taken from accredited original certificates)
6. Financial Proposal (All fees inclusive of tax should be included) as in the FORMAT provided in the ANNEX A (**all prices must be in MVR**).

3. REGISTRATION AND CLARIFICATIONS

1. The Bidder shall be registered to submit a bid upon submission of a written application to the email address proc.gcfws@environment.gov.mv not later than **1200 hours on 9th March, 2021**. Unregistered parties will not be able to participate in the bid.
2. Any clarifications to the bid may be sent to the email addresses proc.gcfws@environment.gov.mv on or before **1200 hours on 09th March 2021**.

4. SUBMISSION

The Bidder shall be registered to submit a bid upon submission of the attached bidders registration form to the email address proc.gcfws@environment.gov.mv not later than **1200 hours on March 9, 2021**. Unregistered parties will not be able to participate in the bid.

Interested individuals may **submit their proposals on or before 1100hrs 15th March 2021**, to the following address in a sealed envelope. The proposals are expected to be submitted to the address on local time **1100 hrs 15th March 2021**. Only bids submitted at this time will be eligible to proceed to evaluation and **Late bids will be rejected**.

Those wishing to be considered for this consultancy should submit their technical and financial proposals in a sealed envelope to:

GCF Project Management Unit
Ministry of Environment
Green Building, Handhuvaree Hingun,
Maafannu, Male', 20392,
Republic of Maldives.
Tel. (960)-3018-395
Email: proc.gcfws@environment.gov.mv

ANNEX 1

1. STANDARD FORMS

1.1 FORM -1: PROPOSAL SUBMISSION FORM

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

[I/We], the undersigned, offer to provide the **“Request for Proposal – Consultancy Services for Upgrade works of Moosun mobile app”** in accordance with your Terms of Reference dated [Insert Date] and our Proposal. [I am/We are] hereby submitting [my/our] Proposal; [my/our] financial offer is for the sum of [*Insert amount(s) in words and figures (Should quote the amount in Maldivian Rufiyaa)*] which is inclusive of the all applicable taxes.

[I/We] hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to [my/our] disqualification.

Proposal validity is for a period of [*Insert number of days, 45 days minimum*] days. If negotiations are held during the period of validity of the Proposal, we undertake to negotiate on the basis of the price and work plan. [My/Our] Proposal is binding upon [me/us] and subject to the modifications resulting from Contract negotiations.

[I/We] undertake, if our Proposal is accepted, to initiate the services and fulfil the requirements of the terms of reference.

[I/We] understand you are not bound to accept any Proposal you receive.

[I/We] remain,

Yours sincerely,

Authorized Signature [*In full and initials*]: _____

Name and Title of Signatory: _____

Name of Company/Partnership/Institution/Individual: _____

Address: _____

ANNEX A – FINANCIAL PROPOSAL (FORMAT)

Deliverables/ Outputs	Total amount (MVR)
Total :	
GST :	
Total with GST:	

Indicate the total cost with detail cost to be paid in Maldivian Rufiyaa.

Note: The total contract price should be quoted inclusive of Goods and Services Tax (GST) as per the GST Legislation and Circulars where applicable.

ANNEX B – CURRICULUM VITAE (CV) (FORMAT)

1. Proposed Position [*only one candidate shall be nominated for each position*]: _____

2. Name of Firm [*Insert name of firm proposing the staff*]: _____

3. Name of Staff *Insert full name* _____

E-mail Address _____

4. Date of Birth: _____ **Nationality:** _____

5. Education [*Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment*]: _____

6. Membership of Professional Associations: _____

7. Other Training [*Indicate significant trainings since degrees under 5 - Education were obtained*]: _____

8. Countries of Work Experience: [*List countries where staff has worked in the last ten years*]:

9. Languages [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]: _____

10. Experience/ Employment Record [*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.*]:

From [Month/Year]: To [Month/Year]: ____

Employer: _____

Positions held: _____

Summary of Projects Undertaken/Role: ____

11. Current commitments in Ongoing Projects with the Ministry of Environment

Name of the Contract/Project: _____

From [Month/Year]: _____ To [Month/Year]: _____

Positions held: _____

Summary of Role: _____

