



REQUEST FOR PROPOSAL (RFP) (For Low-Valued Services)

INTERESTED FIRMS	November 28, 2020
	REFERENCE: 2020/MWI10/015

Dear Sir / Madam:

We kindly request you to submit your Proposal for professional consulting services – 2 LOTS
LOT ONE: DEVELOPMENT OF AN AGRO-WEATHER ICT DISSEMINATION SYSTEM FOR CLIMATE AND WEATHER -RELATED AGRICULTURE ADVISORIES
LOT TWO: DEVELOPMENT OF A PLATFORM FOR DISSEMINATION OF WEATHER ADVISORIES AND ALERTS FOR FISHERIES SECTOR

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before **December 14, 2020, COB – Lilongwe time zone** and via email to rym.ghazzali@undp.org and copy: procurement.mw@undp.org

Your Proposal must be expressed in **English**, and valid for a minimum period of **90 calendar days**.

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your Proposal by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all of the requirements, meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html>

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link :

https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscc/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

Rugare Mukanganise
Rugare Mukanganise
Operations Manager
11/25/2020

Description of Requirements

Context of the Requirement	<p>UNDP Malawi is seeking the services of a qualified firm to to develop two automated platforms;</p> <p>PLATFORME 1: Agro-weather ICT Dissemination Platform for Sharing Agricultural and Farm Advisories related to Climate and Weather.</p> <p>The targeted users will be principally 1- farmers, 2- district staff and 3- relevant stakeholders (as designated).</p> <p>The platform will collect and analyze weather forecasts from Department of Climate Change and Meteorological Services (DCCMS) and other appropriate sources, to automatically generate crop and livestock specific advisories specific to a location and agro-ecological zone that will be sent to farmers and relevant stakeholders through SMSs and other web-based means.</p> <p>PLATFORME 2: Platform for Dissemination of Weather Advisories and Alerts for Fisheries Sector</p> <p>The targeted used communities will be basically fishing communities including the fishers, fish processors and fish traders of Mangochi, Salima, Nkhata Bay and Nkhotakhota (four districts) along the shores of lake Malawi. Other stakeholders include Beach Village Committees (BVCs), Commercial Fishers Association (CFA), traditional leaders, District Councils and fisheries extension workers in the above mentioned four districts.</p>
Implementing Partner of UNDP	<p>(Multiple)</p> <p>Department of Agriculture Extension Services (DAES)</p> <p>Department of Climate Change and Meteorological Services (DCCMS),</p> <p>Department of Water Resources (DWR)</p> <p>Department of Agriculture Extension Services (DAES)</p> <p>Department of Fisheries, and the National Smallholder Farmers Association of Malawi (NASFAM)</p>
Brief Description of the Required Services ¹	<p>Development of an Agro-Weather ICT dissemination system for Climate and Weather -related Agriculture Advisories</p> <p>Development of a platform for dissemination of weather advisories and alerts for fisheries sector</p>
List and Description of Expected Outputs to be Delivered	<p>This RFP includes 2 lots</p> <p>Kindly refer to Annex 3-1 and Annex 3-2 – Terms of References for a detailed description of expected outputs to be delivered under each lot</p>
Person to Supervise the Work/Performanc	<p>This RFP includes 2 lots</p> <p>Kindly refer to Annex 3-1 and Annex 3-2 – Terms of References for details on the reporting line under each lot</p>

¹ A detailed TOR may be attached if the information listed in this Annex is not sufficient to fully describe the nature of the work and other details of the requirements.

e of the Service Provider	
Frequency of Reporting	<i>Monthly and as needed</i>
Progress Reporting Requirements	Kindly refer to Annex 3-1 and Annex 3-2 referring to the Terms of References for each LOT
Location of work	This assignment will be undertaken remotely and, in the locations, designated in the Terms of References – Annex 3.
Expected duration of work	3 man-months for product development 12 man-months post development support (15 man-months in total)
Target start date	15 December 2020
Latest completion date	01 March 2022
Travels Expected	Lilongwe, Blantyre and Mangochi
Special Security Requirements	<input checked="" type="checkbox"/> Completion of UN’s Basic and Advanced Security Training <input checked="" type="checkbox"/> Comprehensive Travel Insurance <input checked="" type="checkbox"/> Others Professional Insurance
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	<input checked="" type="checkbox"/> Others. Yes, please refer to Annex 3 – Terms or References paragraph “F” for further details under each Lot
Implementation Schedule indicating breakdown and timing of activities/sub-activities	<input checked="" type="checkbox"/> Required
Names and curriculum vitae of individuals who will be involved in completing the services	<input checked="" type="checkbox"/> Required
Currency of Proposal	<input checked="" type="checkbox"/> United States Dollars <input checked="" type="checkbox"/> Malawi Kwasha

Value Added Tax on Price Proposal ²	<input checked="" type="checkbox"/> must be inclusive of VAT and other applicable indirect taxes <input type="checkbox"/> must be exclusive of VAT and other applicable indirect taxes
Validity Period of Proposals (Counting for the last day of submission of quotes)	<input checked="" type="checkbox"/> 90 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.
Partial Quotes	<input checked="" type="checkbox"/> Not permitted
Payment Terms	Kindly refer to the TOR under each Lot for further details
Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	UNDP Malawi CO will be managing this contract. The consulting firm will continually interact and report progress to NASFAM and DAES and will work closely with these two organizations to ensure the successful implementation of the assignment. Kindly refer to Annex 3 – para F for further details on the proposed contractual arrangement under each Lot.
Type of Contract to be Signed	<input checked="" type="checkbox"/> Contract for Professional Services
Criteria for Contract Award	<input checked="" type="checkbox"/> Highest Combined Score (based on the 70% technical offer and 30% price weight distribution) <input checked="" type="checkbox"/> Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.
Criteria for the Assessment of Proposal	Technical Proposal (70%) <input checked="" type="checkbox"/> Expertise of the Firm [<i>indicate percentage</i>] <input checked="" type="checkbox"/> Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan [<i>indicate percentage</i>] <input checked="" type="checkbox"/> Management Structure and Qualification of Key Personnel [<i>indicate percentage</i>] Financial Proposal (30%) Being the Ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.

² VAT exemption status varies from one country to another. Pls. check whatever is applicable to the UNDP CO/BU requiring the service.

UNDP will award the contract to:	<input checked="" type="checkbox"/> One or more Service Provider(s)
Contract General Terms and Conditions ³	<input checked="" type="checkbox"/> General Terms and Conditions for contracts (goods and/or services) Applicable Terms and Conditions are available at: http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
Annexes to this RFP ⁴	<input checked="" type="checkbox"/> Form for Submission of Proposal (Annex 2) <input checked="" type="checkbox"/> Detailed TOR
Contact Person for Inquiries (Written inquiries only) ⁵	<i>Rym Ghazzali</i> rym.ghazzali@undp.org Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.
Other Information	

³ Service Providers are alerted that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

⁴ Where the information is available in the web, a URL for the information may simply be provided.

⁵ This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL⁶

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery⁷)

[insert: Location].

[insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated [specify date] , and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions :

A. Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following :

- a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;*
- b) Business Licenses – Registration Papers, Tax Payment Certification, etc.*
- c) Latest Audited Financial Statement – income statement and balance sheet to indicate Its financial stability, liquidity, credit standing, and market reputation, etc. ;*
- d) Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;*
- e) Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.*
- f) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.*

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

⁶ This serves as a guide to the Service Provider in preparing the Proposal.

⁷ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

C. Qualifications of Key Personnel

If required by the RFP, the Service Provider must provide :

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.

D. Cost Breakdown per Deliverable*

	Deliverables <i>[list them as referred to in the RFP]</i>	Percentage of Total Price <i>(Weight for payment)</i>	Price <i>(Lump Sum, All Inclusive)</i>
1	Deliverable 1		
2	Deliverable 2		
3		
	Total	100%	

**This shall be the basis of the payment tranches*

E. Cost Breakdown by Cost Component [This is only an Example]:

Description of Activity	Remuneration per Unit of Time	Total Period of Engagement	No. of Personnel	Total Rate
I. Personnel Services				
1. Services from Home Office				
a. Expertise 1				
b. Expertise 2				
2. Services from Field Offices				
a . Expertise 1				
b. Expertise 2				
3. Services from Overseas				
a. Expertise 1				
b. Expertise 2				
II. Out of Pocket Expenses				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				
5. Equipment Lease				
6. Others				
III. Other Related Costs				

*[Name and Signature of the Service Provider's
Authorized Person]
[Designation]
[Date]*

LOT ONE**DEVELOPMENT OF AN AGRO-WEATHER ICT DISSEMINATION SYSTEM FOR CLIMATE AND WEATHER -RELATED AGRICULTURE ADVISORIES****TERMS OF REFERENCE**

Location :	Home-based with missions to Lilongwe and Blantyre (Malawi)
Type of Contract :	Consulting Firm
Languages Required :	English and Chichewa
Duration of Initial Contract :	15 man-months (3 man-months for product development followed by 12 man-months post development support)

A. Project Title:

Saving Lives and Protecting Agriculture-based Livelihoods in Malawi: Scaling Up the Use of Modernized Climate Information and Early Warning systems (M-CLIMES)

B. Project Description

The Government of Malawi, with the support of UNDP, secured funding from the Green Climate Fund to scale up the use of modernized climate information and early warning systems in the country. The project aims to increase the resilience of rural livelihoods to climate variability. This is planned to be achieved through scaling up the use of modernized early warning systems (EWS) and climate information in the country. The project has installed a number of hydro-meteorological equipment and built the capacity of staff to deliver more accurate and customized climate and weather information to vulnerable communities including small-holder farmers, fishing and flood prone communities. The M-CLIMES project aligns with the Government's priorities on climate information and early warnings set in the Malawi Growth and Development Strategy III and the National Adaptation Programme of Action.

The project is being implemented in 21 districts by the Department of Disaster Management Affairs (DoDMA) in collaboration with a multiplicity of departments and institutions: the Department of Climate Change and Meteorological Services (DCCMS), Department of Water Resources (DWR), Department of Agriculture Extension Services (DAES), Department of Fisheries, and the National Smallholder Farmers Association of Malawi (NASFAM).

The project has three outputs:

- i. Expansion of networks that generate climate-related data to save lives and safeguard

livelihoods from extreme climate events

- ii. Development and dissemination of products and platforms for climate-related information/services for vulnerable communities and livelihoods
- iii. Strengthening communities' capacities for use of EWS and climate information in preparedness for response to climate-related disasters

B. Background to the Assignment;

DAES and NASFAM are responsible for the implementation of a range of activities under Output 2 of the project. This includes the development and dissemination of tailored weather and climate information and agro-meteorological advisories to small-holder farmers, district staff and other stakeholders through different channels including web-based platforms, telecom/mobile networks, print and radio channels. The target areas are the 14 food-insecure districts of Karonga, Rumphi, Mzimba, Nkhata-bay, Salima, Chiradzulu, Dedza, Zomba, Phalombe, Ntcheu, Lilongwe, Chikwawa, Ntchisi and Dowa.

It is against this background that DAES and NASFAM would like to hire a consulting firm to develop an automated Agro-weather ICT dissemination platform to disseminate agricultural and farm advisories related to climate and weather. The messages will be disseminated to farmers, district staff and relevant stakeholders. The platform will collect and analyse weather forecasts from DCCMS and other appropriate sources, to automatically generate crop and livestock specific advisories specific to a location and agro-ecological zone that will be sent to farmers and relevant stakeholders through SMSs and other web-based means.

The consulting firm will be required to further develop an android application which will provide geo-referenced short and medium-range weather forecasts and information, down-scaled seasonal forecasts and their related farm and agricultural advisories and practices based on the geographical area of the user. Thus, the system will use the combination of weather, climate, soils, agro-ecological zones and typical farming systems (crops and farm management practices) to generate accurate, relevant crop and livestock information for farmers and other stakeholders, including district officers and extension workers.

Objectives of the work

Develop an automated system for dissemination of Climate and Weather-related Agriculture Advisories.

The specific objectives of the assignment are to:

- i) Develop a user-friendly web-based Agricultural Observatory (AO) platform that will, among other things, automatically compile and send agricultural and farm advisories related to weather and climate in the form of SMSs to farmers, extension workers and other

- stakeholders. The web-based platform will allow for user editing and review before disseminating the advisories;
- ii) Develop an android app for accessing short and medium-range weather forecasts and information, seasonal forecasts, as well as area- and farming system-specific agriculture-related advisories. The app will further provide access and links to relevant literature, audio and video clips;
 - iii) Re-align, re-format and code (programme) existing advisories for crops and livestock that are related to weather and climate within the proposed system;
 - iv) Develop a feedback mechanism within the system/web-based platform which allows farmers and extension officers to provide feedback on the information content, its relevance and usefulness, as well as how easy/difficult it is to understand.
 - v) Train DAES, NASFAM and DCCMS staff in system administration of the web-based AO platform and the mobile application.

C. Scope of work

The consultant will work in close collaboration with DAES, NASFAM and DCCMS to design the content of advisories/information, ensure it effectively reaches the intended recipients, and test its effectiveness/relevance/understandability. The consultant will further work closely with DCCMS to ensure automatic access to data and relevant forecasts for Malawi and other relevant agencies. As part of the scope of work the consultant will undertake the following assignments;

- Develop a web-based Agricultural Observatory (AO) Platform in two languages (Chichewa and English) with the following modules:
 - A search component that enables the user to choose Region, District, Extension Planning Areas and Agro-ecological zones within the EPA. From this choice, the system should return a historical climate time-series in both graphical and tabular form (including seasonal rainfall, start, end and length of the season, dry spells, mean annual temperature for nearest weather stations), current national and downscaled seasonal forecasts, weather forecasts with graphs showing various weather components such as temperature, precipitation and their long-term average. It should also give a list of common crops, maturity days for the respective agriculture export zone and the seasonal crop water requirements based on data from the nearest weather station and average planting dates. Tables of current and expected (1 day to 3 months) climate risks associated with each crop should also be shown.

- A climate, weather and seasonal forecast and crop risk maps component that enables a person to search by region. The system should have a custom search module that enables searching by the name of a place.
- An SMS component as part of the online AO web-based platform that will be used to send text messages to farmers. Accessed via a dashboard, this will load up appropriate contact lists (based on farmer locations, AEZ and farming systems) and send as well as track SMS messages sent to farmers. This will allow for sending mass text messages as well as for reviewing and editing before sending.
- Feedback component – for collecting feedback from farmers and other stakeholders via SMS and/or USSD (depending on costs) and web-based tools.
- A System Administration component. The system should have a backend component that allows changes to the system, including data input and other administrative tasks, as well as user (Farmer/extension worker) management.
- Develop a mobile application in two languages (Chichewa and English). The mobile application should be linked to the agricultural web-based observatory detailed above and will allow the web-based information to be provided by a mobile application compatible with Android phones and available on the Google Play store. The phone application must make the information easily accessible and understandable to all Malawians with access to the app. Farmers and other users in the agricultural sector should be able to access the outputs of the web-based application through the mobile phone app, which will provide all crop and livestock advisories directly to mobile phone users.
- Provide options and recommendations for hosting both the web-based application and mobile application.
- Provide a comprehensive guide to using the AO web-based platform and mobile app as well as conduct user testing and revisions based on user feedback.
- Integrate user feedback mechanisms (reports, comments and suggestions) into both the AO web-based platform and the mobile app, as well as allow for feedback via SMS and/or USSD (depending on costs and capacity to pay for these services in the future).
- Review literature and consultant reports on farmer requirements for information in each agro-ecological zones and each Extension Planning Areas (EPAs), and to align messages and advisories based on the literature and reports, as well as the current and forecast weather/climate conditions.

- Train DCCMS, DAES and NASFAM staff in system administration of the web-based AO platform and the mobile application.
- Provide 1 year of direct online and remote support to manage, operate and maintain the web-based AO platform and mobile app.

D. Expected deliverable and outputs.

Deliverables/Outputs	Review and Approval	Indicative timeline
Inception Report and a methodology to undertake the assignment including preliminary designing for advisory formats and information content for both web-based and mobile app /SMS based content. Identification of data sources and required access from various sources and software requirements	DAES, NASFAM, DCCMS and UNDP	Within 10 man-days from contract signature
Prototypes for the 2 systems (web platform and mobile app) developed and presented to DAES, NASFAM, DoDMA, DCCMS and other stakeholders.	DAES, NASFAM, DCCMS and UNDP	By 60 man-days from contract signature
Complete and demonstrate the full operational web platform and mobile app	DAES, NASFAM, DCCMS and UNDP	By 75 man-days from contract signature
User Acceptance Testing for both systems	DAES, NASFAM, DCCMS and UNDP	By 80 man-days from contract signature
Training and capacity building plan	DAES, NASFAM, DCCMS and UNDP	For 80 man-days following the submission of final report
Technical Training of DAES, NASFAM and DCCMS staff and handover	DAES, NASFAM, DCCMS and UNDP	Within 85 man-days from contract signature
End of project reports including user documentation (for both end-users and system administrators) and source code	DAES, NASFAM, DCCMS and UNDP	By 90 man-days from contract signature
Provide support to manage, operate and maintain the web-based AO platform and mobile app for 1-year period	DAES, NASFAM, DCCMS and UNDP	12 calendar months post development support (Maintenance Contract)

E. Management arrangement

UNDP Malawi CO will be managing this contract. The consulting firm will continually interact and report progress to NASFAM and DAES and will work closely with these two organizations to ensure the successful implementation of the assignment. In addition, NASFAM and DAES will collaborate with DoDMA, M-CLIMES PCU and UNDP in supervising the consulting firm. The firm will provide weekly updates to NASFAM and DAES.

DAES and NASFAM will provide to the consultant:

- Existing Agro-advisory messages for all crops
- Current farming and cropping systems for Malawi
- Main crops for Malawi
- Major pests and diseases for Malawi.
- Project document

DCCMS will provide the consultant with access to:

- Current weather and seasonal forecasts produced by DCCMS in digital form (as a raster or vector format file);
- Historical data or the derivative statistics (seasonal rainfall, start, end and length of the rainfall season, dry spells, mean annual temperature etc) for stations closest to each EPA.
- Weather information and trends of the past 10 years for Malawi and selected districts.

F. Duration of the assignment:

The consulting firm will be allocated a total of 90 man-days to this assignment and 12 calendar months post development support

G. Duty station:

Home based with missions to Malawi. The consultants will be operating from their own offices and expected to regularly update DAES and NASFAM through emails, phone calls and in-person where needed.

H. Qualification and experience:

The consulting firm should have qualified consultants with the following minimum qualification and experiences as below:

Qualifications of the firm

The consulting firm should have a minimum of five (5) years' experience with a proven track record in the following areas:

- Farming systems and development of agro-meteorological services preferably in developing

countries and Sub-Sahara African farming ecosystems.

- Analyzing and modeling weather data for crop/livestock production and research.
- Developing and instituting agricultural/farm advisory services based on weather forecasts.
- Excellent skills in communicating and training farmers/extension workers, researchers and policymakers on the importance of climate science on crop production and risk management.

Qualification of the proposed team

Team Leader:

- Masters degree in Computer Science or Information & Communications Technology (ICT) or related disciplines
- 5 years' experience in Systems development, database architecture design, systems integration, communication, data mining and modeling.
- Knowledge of the farming systems of Malawi, Agriculture Extension, Malawian cultural diversity, gender issues related to dissemination of agro-meteorological information and farm advisory services to farmers will be added advantage

One (1) ICT and software communication expert

- Master's degree in agriculture, agro-meteorology or climatology or related disciplines 5 years' experience of developing agricultural/farm advisories using ICT in communicating/disseminating agro-meteorological information and farm advisory services.
- Knowledge of the farming systems of Malawi, Agriculture Extension, Malawian cultural diversity, gender issues related to dissemination of agro-meteorological information and farm advisory services to farmers will be added advantage

One (1) ICT and development expert

- Masters in Mass Communication, Agriculture Extension, Agriculture Communication
- 5 years' experience in research and development relevant to climate, agriculture and the development of decision support tools, its translation and delivery.
- Knowledge of the farming systems of Malawi, Agriculture Extension, Malawian cultural diversity, gender issues related to dissemination of agro-meteorological information and farm advisory services to farmers will be added advantage

G. Scope of Price Proposal and Schedule of Payments

A Payment is envisaged upon submission of deliverables and acceptance/approval by UNDP CO for each identified task (reflected in the agreed and signed specific TOR). All planned costs related to this consultancy must be specified in the proposal by contractor for this assignment. The bidding price

proposal should include the following categories of budget:

- i. Professional fees (This should include the types and number of staffs hired)
- ii. Travel
- iii. Questionnaire printing
- iv. Meeting/workshop costs
- v. Others (specify)

Lump Sum Amount payable modality is envisaged upon submission of the initial setup deliverables and acceptance/approval by UNDP CO for each identified task (reflected in the agreed and signed specific TOR). The lump sum amount is inclusive of all the costs related to the assignment. DAES and NASFAM will pay all costs related to the SMS transmission (subscription fee and message fees) directly to the SMS service provider. Operational and technical support will be provided by the contractor at a pro-rata hourly rate

Payments are based upon output (i.e. upon delivery of the goods and/or services specified in each deliverable of the TOR). All planned costs related to this project must be specified in the proposal. The contract will be paid in US Dollars (US\$).

Deliverable	Indicative timeline *	Proposed Payment (%)
Deliverable 1: Inception report	10 man-days from signing the contract	20
Deliverable 2: Prototypes for the 2 systems (web platform and mobile app)	By 60 man-days from contract signature	30
Deliverable 3: User acceptance for both systems	80 man-days following the submission of final report	20
Deliverable 4: Completion of technical training for the user agencies	85 man-days from contract signature	20
Deliverable 5: Final report	90 man-days from contract signature	10
Deliverable 6: Operational and technical support after the setup phase has been completed- for 1-year period	As needed (up to 12 months)	Pro-rata hourly rate

**Payment will be based on acceptance of the deliverable by UNDP (and not submission) based on inputs from key relevant stakeholders (i.e. government and regional agencies).*

H. Recommended Presentation of Offer

Interested and qualified consulting firms are invited to apply. The consultants must submit the following documents/information to demonstrate their qualifications:

1. A technical proposal detailing applicant's understanding of ToRs, proposed methodology, applicants' key members CV.
2. A financial proposal breaking down cost for each operational line and professional fees.

3. Contacts (email and phone) of 3 former clients or referees.
4. A detailed list of similar assignments (copies of these may be requested as necessary) that the consultant has conducted in the past.

I. Criteria for Selection of the Best Offer

The award of the contract shall be made to the consultant who has received the highest score out of pre-determined technical and financial criteria specific to the solicitation as follows;

Technical criteria weight – 70 %. Financial criteria weight – 30 %

The proposer who received 70% of the total technical point will be consider for the financial evaluation.

The detail technical points are follows.

Section 1. Bidder’s qualification, capacity and experience (300)		Max. Points
1.1	Reputation of Organization and Staff Credibility / Reliability / Industry Standing	80
1.2	General Organizational Capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted	70
1.3	Relevance of specialized knowledge and experience on similar engagements done in the region/country	70
1.4	Quality assurance procedures and risk mitigation measures	50
1.5	Organizational Commitment to Sustainability (mandatory weight) -Organization is compliant with ISO 14001 or ISO 14064 or equivalent – 20 points -Organization is a member of the UN Global Compact -5 points -Organization demonstrates significant commitment to sustainability through some other means- 5 points, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues	30
Section 2. Proposed Methodology, Approach and Implementation Plan (400)		
2.1	Understanding of the requirement: Have the important aspects of the task been addressed in sufficient detail? Are the different components of the project adequately weighted relative to one another?	90
2.2	Description of the Offeror’s approach and methodology for meeting or exceeding the requirements of the Terms of Reference	80
2.3	Details on how the different service elements shall be organized, controlled and delivered	80
2.4	Description of available performance monitoring and evaluation mechanisms and tools; how they shall be adopted and used for a specific requirement	50
2.5	Assessment of the implementation plan proposed including whether the activities are properly sequenced and if these are logical and realistic	50
2.6	Demonstration of ability to plan, integrate and effectively implement sustainability	50

	measures in the execution of the contract	
Section 3. Management Structure and Key Personnel (300)		
3.1	Composition and structure of the team proposed. Are the proposed roles of the management and the team of key personnel suitable for the provision of the necessary services?	60
3.2	Qualifications of key personnel proposed	240
3.2 a	Team Leader	100
	Master's degree in computer science or Information & Communications Technology (ICT) or related disciplines	20
	5 years' experience in Systems development, database architecture design, systems integration, communication, data mining and modeling.	20
	Knowledge of the farming systems of Malawi, Agriculture Extension, Malawian cultural diversity, gender issues related to dissemination of agro-meteorological information and farm advisory services to farmers will be added advantage.	60
3.2 b	ICT and communication expert	70
	Master's degree in agriculture, agro-meteorology or climatology or related disciplines	15
	5 years' experience of developing agricultural/farm advisories using ICT in communicating/disseminating agro-meteorological information and farm advisory services.	15
	Knowledge of the farming systems of Malawi, Agriculture Extension, Malawian cultural diversity, gender issues related to dissemination of agro-meteorological information and farm advisory services to farmers will be added advantage	40
3.2. c	ICT and development expert	70
	Master's in mass communication, Agriculture Extension, Agriculture Communication	15
	5 years' experience in research and development relevant to climate, agriculture and the development of decision support tools, its translation and delivery.	15
	Knowledge of the farming systems of Malawi, Agriculture Extension, Malawian cultural diversity, gender issues related to dissemination of agro-meteorological information and farm advisory services to farmers will be added advantage	40

LOT TWO

**DEVELOPMENT OF A PLATFORM FOR DISSEMINATION OF WEATHER ADVISORIES
AND ALERTS FOR FISHERIES SECTOR**

TERMS OF REFERENCE

Location	Home-based with missions to Malawi (Lilongwe, Blantyre and Mangochi)
Languages Required	English and Chichewa
Duration of Initial Contract	15 months (3 months for product development and 12 months post development support)

Project Title

Saving Lives and Protecting Agriculture-based Livelihoods in Malawi: Scaling Up the Use of Modernized Climate Information and Early Warning systems (M-CLIMES)

B. Project Description

The Government of Malawi, with the support of UNDP, secured funding from the Green Climate Fund to scale up the use of modernized climate information and early warning systems in the country. The project aims to increase the resilience of rural livelihoods to climate variability. This is planned to be achieved through scaling up the use of modernized early warning systems (EWS) and climate information in the country. The project has installed a number of hydro-meteorological equipment and built the capacity of staff to deliver more accurate and customized climate and weather information to vulnerable communities including small-holder farmers, fishing and flood prone communities. The M-CLIMES project aligns with the Government's priorities on climate information and early warnings set in the Malawi Growth and Development Strategy III and the National Adaptation Programme of Action (NAPA).

The project is being implemented in four districts by the Department of Fisheries (DoF) in collaboration with a multiplicity of departments and institutions including the Department of Climate Change and Meteorological Services (DCCMS), Department of Water Resources (DWR), Department of Disaster Management Affairs (DoDMA), and the National Smallholder Farmers Association of Malawi (NASFAM).

The project has three outputs:

- iv. Expansion of networks that generate climate-related data to save lives and safeguard livelihoods from extreme climate events
- v. Development and dissemination of products and platforms for climate-related information/services for vulnerable communities and livelihoods
- vi. Strengthening communities' capacities for use of EWS and climate information in preparedness for response to climate-related disasters

I. Background to the Assignment

The fishing sector is impacted by a number of factors such as overfishing, use of destructive fishing gears, removal of aquatic weeds due to trawling along the shores as well as unsustainable farming practices that lead to an increase in surface run-off, soil erosion and the influx of sediments and excessive nutrients causing algal blooms on Lake Malawi. In recent years, the reduced water levels in Lake Malawi have had an adverse impact on aquatic life. Fishing communities have also suffered from losses of lives and livelihoods due to inclement weather conditions on the lake. In the recent years, inclement weather including strong winds (easterly "Mwera" and north easterly "Mpoto"), high waves, lightning and stormy weather have all contributed to the loss of lives, assets and livelihoods. In part this is due to limited available information to forewarn the fishing communities (including fishers, fish processors and traders) about inclement weather. Fishing communities, especially those engaged in fishing, experience bad weather which lead to accidents such as capsizing and sinking of boats and drowning of fishers and fishing crew. In the above context the MCLIMES project is supporting the development and dissemination of tailored warnings and advisories for fishing communities including the fishers, fish processors and fish traders of Mangochi, Salima, Nkhata Bay and Nkhotakhota along the shores of lake Malawi. Other stakeholders include Beach Village Committees (BVCs), Commercial Fishers Association (CFA), traditional leaders, District Councils and fisheries extension workers in the above mentioned four districts. The advisories are to be disseminated through different channels including web based platforms, telecom/mobile networks, print and radio channels. Currently the project is in the process of developing daily weather advisories for fishermen and weekly advisories for the fish processors and traders for the four project districts. Through a profiling exercise the DoF has establish a data base of fish traders, fishermen and fish processors in the four project districts who will receive weather information/alerts on their phones. The database, inter-alia contains mobile numbers of various stakeholder and their location.

It is against this background that UNDP, Malawi would like to hire a consulting firm to develop an automated ICT platform to disseminate weather warnings and advisories to various stakeholders in the

target districts. The platform will collect and analyse weather forecasts and related information from DCCMS and other appropriate sources to automatically generate location specific advisories to different stakeholders located in the four districts through SMSs and other web-based means. The web-based platform must allow the owner of the system to edit and review the advisories and warnings before being disseminated. . The consulting firm will be required to further develop an android application which will provide geo-referenced weather advisories and alerts based on the same information sources.

J. Objectives of the work

Develop an automated system for collection of information, creation of content, and dissemination of climate and weather-related fisheries advisories. The specific objectives of the assignment are to:

- vi) Develop a user-friendly web-based platform that will, among other things, automatically compile relevant information and send weather advisories and alerts to various stakeholders including fishermen, fish processors and fish traders within the fish supply chain in Nkhata Bay, Nkhotakota, Salima and Mangochi;
- vii) Develop an android app for accessing weekly and daily weather forecasts and other relevant information. The app should have the functionality to further provide access and links to relevant literature, audio and video clips;
- viii) Re-align, re-format and code (programme) existing advisories for fishing activities related to weather and climate within the proposed system, based on feedback from users of the system;
- ix) Develop a feedback mechanism within the system/web-based platform which allows users to provide feedback on the information content, its relevance and usefulness, as well as how easy/difficult it is to understand.
- x) Train DoF and DCCMS staff in system administration of the web-based platform and the mobile application.

K. Scope of work

The consultant will work in close collaboration with DoF and DCCMS to design the content of advisories/information, ensure it effectively reaches the intended recipients, and test its effectiveness/relevance/understandability. The consultant will further work closely with DCCMS to ensure automatic access to data and relevant forecasts for Malawi and other relevant agencies. As part of the scope of work the consultant will undertake the following assignments;

- Develop a web-based Platform in two languages (Chichewa and English) with the following modules:

- A publicly available search component that enables the user to choose District and Fishing Areas (Minor Stratum). From this choice, the system should return a weather forecasts showing various weather components such as temperature, precipitation, wind speeds/direction and wave heights/direction.
- An SMS component as part of the online web-based platform that will be used to send text messages to targeted users. Accessed via a dashboard, this will load up appropriate contact lists (based on location) and send as well as track SMS messages sent to targeted beneficiaries. This will allow for sending mass text messages as well as for reviewing and editing before sending.
- Feedback component – for collecting feedback from users and other stakeholders via SMS and USSD (depending on costs) and web-based tools.
- A System Administration component. The system should have a backend component that allows changes to the system, including data input and other administrative tasks, as well as user management.
- Develop a mobile application in two languages including Chichewa and English. The mobile application should allow the web-based information to be provided by a mobile application compatible with Android phones and available on the Google Play store. The phone application must make the information easily accessible and understandable to all Malawians with access to the app. Fishermen and other users in the fisheries sector should be able to access the outputs of the web-based application through the mobile phone app, which will provide weather advisories and alerts directly to mobile phone users.
- Provide options and recommendations for hosting both the web-based application and mobile application.
- Provide a comprehensive guide to using the web-based platform and mobile app as well as conduct user testing and revisions based on user feedback.
- Integrate user feedback mechanisms (reports, comments and suggestions) into both the web-based platform and the mobile app, as well as allow for feedback via SMS and USSD (depending on costs and capacity to pay for these services in the future).
- Review existing literature and reports (including MCLIMES user surveys) to ensure alignment of messages and content related to the current and forecast weather/climate conditions.
- Train the DoF and DCCMS staff in system administration of the web-based platform and the mobile application.

- Provide one year of direct online and remote support to manage, operate and maintain the web-based platform and mobile app.

L. Expected deliverable and outputs.

Deliverables/Outputs	Review and Approval	Indicative timeline
1. Inception report and a methodology to undertake the assignment including preliminary designing for advisory formats and information content for both web-based and mobile app /SMS based content. Identification of data sources and required access from various sources and software requirements	DoF and DCCMS	Within 10 man-days from contract signature
2. Prototypes for the 2 systems (web platform and mobile app) developed and presented to DoF and other stakeholders.	DoF and DCCMS	By 60 man-days from contract signature
3. Complete and demonstrate the full operational web platform and mobile app. Including User Acceptance Testing for both systems. Training and capacity building plan.	DoF and DCCMS	By 80 man-days from contract signature
4. Technical Training of DoF and DCCMS staff and handover. End of project reports including user documentation (for both end-users and system administrators) and source code	DoF and DCCMS	By 90 man-days from contract signature
5. Provide support to manage, operate and maintain the web-based FO platform and mobile app for 1-year period	DoF and DCCMS	12 -month post development support.

M. Management arrangement

The consulting firm will continually interact and report progress to DoF and will work closely with these two organizations to ensure the successful implementation of the assignment. In addition, DoF will

collaborate with DoDMA, M-CLIMES PCU and UNDP in supervising the consulting firm. The firm will provide weekly updates to DoF.

Department of Fisheries will provide to the consultant:

- Existing fisheries-advisory messages
- Location specific mobile contact numbers of target beneficiaries

DCCMS will provide the consultant with access to:

- Weather information including daily and weekly forecasts for the four districts;
- Examples of current observations of winds, waves and lightning or other data being developed by DCCMS;
- Historical weather and lake data (including available wind, wave, rainfall and temperature data).

N. Duration of the assignment

The assignment will run for a total of 15 months that includes 90 working days for the development of the system and 12 months for post development support.

O. Duty station

Home based and Malawi with possible trips to Lilongwe, Blantyre and Mangochi district. The consultants will be operating from their own offices and expected to regularly update DoF through emails, phone calls and in-person where needed.

P. Qualification and experience

The consulting firm should have people with the following minimum qualification and experiences as below:

The consulting firm should have a minimum of five years' experience with a proven track record in the following areas:

- Development of similar platforms and tools preferably in developing countries and Sub-Saharan African farming ecosystems.
- Experience in developing similar tools and platforms for fisheries sector will be a plus.
- Analysing and modelling weather data for fisheries/livestock production and research.
- Developing and instituting advisory services based on weather forecasts.
- Excellent skills in communicating and training farmers/extension workers, researchers and policymakers on the importance of climate science on crop production and riskmanagement.

Team Leader

The team leader for this assignment should have;

- Masters' degree in Computer Science or Information & Communications Technology (ICT) or related disciplines
- 5 years' experience in Systems development, database architecture design, systems integration, communication, data mining and modeling.
- Knowledge of the fishing sector in Malawi and meteorological information will be added advantage

ICT and software communication expert

- 5 years' experience of developing ICT and SMS platforms/systems for dissemination of meteorological/weather information
- Master's degree in related disciplines

Fisheries expert

- Masters' in Mass Communication, Agriculture Extension, Agriculture Communication
- 5 years' experience in relevant field.
- Knowledge of the fishing technologies/practices on Lake Malawi, Fisheries Extension, Malawian cultural diversity, gender issues related to dissemination of fisheries-related meteorological information and fisheries advisory services to users including fishers and transporters will be added advantage

G. Scope of Price Proposal and Schedule of Payments

A Payment is envisaged upon submission of deliverables and acceptance/approval by UNDP CO for each identified task (reflected in the agreed and signed specific TOR). All planned costs related to this consultancy must be specified in the proposal by contractor for this assignment. The bidding price proposal should include the following categories of budget:

- vi. Professional fees (This should include the types and number of staffs hired)
- vii. Travel
- viii. Questionnaire printing
- ix. Meeting/workshop costs
- x. Others (specify)

H. Recommended Presentation of Offer

Interested and qualified consulting firms are invited to apply. The consultants must submit the following documents/information to demonstrate their qualifications:

5. A technical proposal detailing applicant's understanding of ToRs, proposed methodology, applicants' key members CV.
6. A financial proposal breaking down cost for each operational line and professional fees.
7. Contacts (email and phone) of 3 former clients or referees.

8. A detailed list of similar assignments (copies of these may be requested as necessary) that the consultant has conducted in the past.

I. Criteria for Selection of the Best Offer

The award of the contract shall be made to the consultant who has received the highest score out of pre-determined technical and financial criteria specific to the solicitation as follows;

Technical criteria weight – 70 %. Financial criteria weight – 30 %

The proposer who received 70% of the total technical point will be consider for the financial evaluation.

The detail technical points are follows.

Section 1. Bidder’s qualification, capacity and experience		Max. Points
1.1	Reputation of Organization and Staff Credibility / Reliability / Industry Standing	80
1.2	General Organizational Capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted	70
1.3	Relevance of specialized knowledge and experience on similar engagements done in the region/country	70
1.4	Quality assurance procedures and risk mitigation measures	50
1.5	Organizational Commitment to Sustainability (mandatory weight) -Organization is compliant with ISO 14001 or ISO 14064 or equivalent – 20 points -Organization is a member of the UN Global Compact -5 points -Organization demonstrates significant commitment to sustainability through some other means- 5 points, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues	30
Section 2. Proposed Methodology, Approach and Implementation Plan		
2.1	Understanding of the requirement: Have the important aspects of the task been addressed in sufficient detail? Are the different components of the project adequately weighted relative to one another?	100
2.2	Description of the Offeror’s approach and methodology for meeting or exceeding the requirements of the Terms of Reference	90
2.3	Details on how the different service elements shall be organized, controlled and delivered	90
2.4	Description of available performance monitoring and evaluation mechanisms and tools; how they shall be adopted and used for a specific requirement	50
2.5	Assessment of the implementation plan proposed including whether the activities are properly sequenced and if these are logical and realistic	50

2.6	Demonstration of ability to plan, integrate and effectively implement sustainability measures in the execution of the contract	50
Section 3. Management Structure and Key Personnel		
3.1	Composition and structure of the team proposed. Are the proposed roles of the management and the team of key personnel suitable for the provision of the necessary services?	60
3.2	Qualifications of key personnel proposed	
3.2 a	Team Leader	100
3.2 b	ICT and communication expert	70
3.2. c	ICT and development expert	70