



**Food and Agriculture Organization
of the United Nations**

CALL FOR EXPRESSIONS OF INTEREST

International Consultant in Agro-Meteorology/Cva Software Development

Project GCP /ANG/050/LDF

“Integrating climate resilience into agricultural and agro-pastoral production systems through soil fertility management in key productive and vulnerable areas using the Farmer Field School approach” (IRCEA)

Contract duration: 6+3 Months

Vacancy No. IRC4038

Location: Lubango, Angola

Deadline for Applications: 20 April 2017

Background

The objective of project IRCEA is to strengthen the climate resilience of the agro-pastoral production systems in key vulnerable areas in the Provinces of Bié, Huambo, Malange and Huila. This will be achieved through: (i) mainstreaming Climate Change Adaptation (CCA) into agricultural and environmental sector policies, programmes and practices; and (ii) capacity building and promotion of CCA through soil fertility and Sustainable Land Management (SLM) practices using the FFS approach. The project strategy is built on four main components. The first is to strengthen knowledge and understanding of climate change vulnerability and adaptation. The second is scaling up of improved CCA/SLM practices through FFS. The third is mainstreaming CCA into agricultural and environmental sector policies and programmes. The last component focuses on monitoring and evaluation.

The analysis made for the IPCC 2007 report in the Angolan central plateau predicts a combination of increased aridity, temperatures, and extreme rainfall events. If such predictions were to become true, given the rainfall dependency of most staple crops, combined with unsustainable agricultural practices and prevalent soil erosion, it would have severe impacts on smallholder farmers who do not have the technical and capacities to properly adapt to these changes. This is relevant to the provinces of intervention, where the majority of the population are subsistence farmers.

Tasks and responsibilities:

The overall objective of this assignment is to support the National Meteorological Institute (INAMET) and the Cabinet on Food Security (GSA) to improve the technical and institutional capacities for better climate analysis for the provinces of Bié, Huambo, Huila and Malanje. This consultancy will benefit the other ongoing and future projects and programs.

The consultant will be hired by FAO Angola. Under the general supervision of the FAO Representative in Angola and the National Project Manager (PM), with the technical guidance of the Chief Technical Advisor (CTA), the consultant will be responsible for the following tasks and duties:

1. Institutional assessment and Capacity development including the following

- Capacity assessment of human resources of INAMET and GSA
- Update the analysis of the observation networks including meteorological and observations, data collection and quality assurance/quality control system
- Update the assessment of ICT systems, meteorological data processing and storage, weather forecasting of INAMET and crop monitoring of GSA
- In collaboration with IDAs/EDAs and farmers conduct a participatory assessment of data and information requirements of main users in the four provinces.

2. Technical support and capacity strengthening of INAMET and GSA

- Propose a short-term capacity development program for the INAMET and GSA, in the use of agro-meteorological software for real-time agro-meteorological analysis
- Design and provide a training for INAMET and GSA staff on the practical use of relevant FAO agro-meteorological software's (FAO-AMS, FAO-New_LocClim, FAO-WinDisp, FAO-ASIS/GIEWS)
- Design a training on how to cope to with climate variability and climate change as well as with extreme meteorological events

- Provide inputs to the FFS experts and EDAs at Municipal and communal level to incorporate climate variability and climate change into the FFSs' modules

3. Rapid vulnerability and resilience assessment of the Province of Bie, Huambo, Huila e Malange

- Support INAMET and GSA in the consolidation of the historical climate archive 1971-2000 and meteorological database 2005-2015 for all available stations in the Provinces of Bié, Huambo, Huila and Malanje. (ClimSoft is the preferred software for data storage)
- Support the identification and technical liaison of recognized regional climatic center in the design of the methodology and production of Climate Vulnerability Assessment (CVA) for the provinces of Bie, Huambo, Huila, Malange which also includes:
 - Long term climatic baseline (expected intermediate results historical meteorological records, agro-ecological regions, agro-climatic classification, crop calendar, planting dates, type of crop and varieties, livelihood zones)
 - Climate change scenarios of each of the four provinces (Bie, Huambo, Huila, Malange)
 - Rainfall probability
- Identification of suitable adaptation options for main crops in the four provinces based on the outputs of the CVA.
- Develop capacity within national institutions, to conduct climate resilience analysis at scale, including mapping and assessing the quality of existing country-level datasets and developing specific learning packages, guidelines and tools to offer on-the-job training of INAMET and GSA. For instance, a light version of SHARP¹ or HHBAT can be envisaged
- Vulnerability and impacts (agriculture, rural areas, health, water resources, ecosystems, energy)

4. Linking agrometeorological information to local communities

- In close collaboration with INAMET, GSA and IDA/EDAs, and with the support of the FFS expert design a delocalized meteorological information system, to be piloted in 1 province, for communicating agrometeorological information to farmers and agropastoralists, including seasonal (if available by INAMET) and short term forecasting, to be made accessible through mobile technology (Apps and SMS), Media (Radio, Television, newspaper, community Noticeboards), Agricultural Extension, venues of aggregation, (markets, churches, FFS meetings Etc.)
 - Support INAMET to identify the data and technological gaps for the deployment of mobile applications for weather forecasting (i.e. Smart Campo from University of Florida)
 - Identify options for effective mobile outreach to farmers (e.g. SMSfrontline)
- Support the FFS experts in the design of a methodology to be included into FFS trainings and activities, for translating agrometeorological information into agricultural decisions such as crops and varieties to grow, soil moisture conservation strategies, use of conserved forage, purchase of feed before price increases, livestock breeding and sales, flood protection measures, application of external inputs, irrigation, weed and pest control, movement of livestock, forage conservation, crop harvesting and drying
- Design a training program for EDAs for decision making based on the monitoring and forecasting of weather and climate
- Support the FFS experts in the formulation of a proposal for a strategy for assessing the performance of agricultural decisions based on agrometeorological information (e.g. comparative plots)

5. Reporting

- Providing a detailed end-of-assignment report describing the work undertaken, gaps and recommendations towards achieving assignment objectives together with a detailed work plan concerning the activities to be performed by national staff
- Compile all relevant thematic reports and mapping

Candidates should meet the following requirements:

Minimum Requirements

- Advanced degree(s) agro-meteorology, hydrology, climatology or related fields
- Minimum of 10 years of experience on agro-meteorology, hydrology, climatology or related fields
- Technical and practical knowledge of the impact assessment of climate variability and climate change on agriculture
- Past working experience in Southern Africa
- Excellent knowledge of English; Good knowledge of Spanish or Portuguese (spoken and written)

¹ SHARP: <http://www.fao.org/in-action/sharp/en/>

Competencies

- Results Focus
- Teamwork
- Communication
- Building Effective Relationships
- Knowledge Sharing and Continuous Improvement

Technical/Functional Skills

- Extent of experience in the design and implementation of climatological observations network
- Extent of knowledge and experience in modeling and forecasting
- Extent of experience in providing trainings to a diverse audience
- Extent of experience in agro-meteorology activities for agriculture and food security, particularly in developing countries
- Extent of experience in the use of specific agro-meteorological software for crop monitoring and yield forecasting
- Extent of experience in producing and disseminating agro-climate information for rural farming communities
- Excellent understanding of the linkages among agriculture, climate variability and climate change adaptation in rural farming communities

Key FAO/GEF References:

- FAO FFS practical guide
- Land Degradation Assessment in Drylands (LADA) tool
- Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP)
- Adaptation monitoring assessment tools (AMAT)
- Climate change Adaptation and Mitigation (UNFCCC)
- GEF focal areas and relevant tracking tools
- Relevant national documents related to climate change national adaptation plan of action
- Smart Campo mobile application from University of Florida
- FAO agrometeorological software's (FAO-AMS, FAO-New_LocClim, FAO-WinDisp, FAO-ASIS/GIEWS)

Additional Information

FAO Angola may contact the contractor at any time during working hours and request the contractor's expert support, technical inputs, participation in meetings or elaboration of a legal or working document pertaining to the development of this consultancy. Payment is also conditional on meeting of indicated deadlines and quality of deliverables.

FAO seeks gender, geographical and linguistic diversity in its staff and international consultants in order to best serve FAO Members in all regions.

All candidates should adhere to FAO values of Commitment to FAO, Respect for All and Integrity and Transparency.

How to apply

All applications are to be made through FAO's [iRecruitment](#) system. Click on the link below to access [iRecruitment](#), complete your online profile and apply for this Call for Expression of Interest.

<http://www.fao.org/employment/irecruitment-access/en/>

In order for your application to be properly evaluated, please ensure that all sections of your iRecruitment account are completed. Incomplete applications will not be evaluated.

If you need help, or have queries, please contact: iRecruitment@fao.org