



VACANCY ANNOUNCEMENT

SATELLITE AND WEATHER INFORMATION FOR DISASTER RESILIENCE IN EASTERN AFRICA (SAWIDREA)

TERMS OF REFERENCE FOR REGIONAL NUMERICAL PREDICTION EXPERT

1 Background

The IGAD Climate Prediction and Applications Centre (ICPAC) is a specialized Institution of the Inter-Governmental Authority on Development (IGAD). The mission of ICPAC is to foster climate services and knowledge to enhance community resilience for prosperity in the Greater Horn of Africa. Hydro-meteorological hazards account for over 90% of disasters of natural origin in Eastern Africa region, impacting most socio-economic sectors and nearly every country. These hazards have several unique characteristics, including being recurrent and trans-boundary in nature; hence regional impacts. They are caused or aggravated by climate and therefore are highly sensitive to climate variability and change.

The Satellite and Weather Information for Disaster Resilience in Eastern Africa (SAWIDREA) project component has been prepared with a regional wide coverage to provide the National Meteorological and Hydrological Services with relevant data and numerical prediction capability to facilitate provision of severe weather early warning in order to meet the needs of Disaster Risk Management. It will contribute to improved livelihood in the region through reduction of risks related to severe weather in building resilience and adaptation capacity of the communities. It is funded by African Development Bank within the framework of Climdev-Africa Special Fund (CDSF).

2. The objectives of the project

- i. To enhance NWP regional capacities including assimilation of high resolution satellite data;
- ii. To enhance capacities of the NMHS in the Horn of Africa to receive NWP model or to run national-scale NWP model in order to raise relevant warnings of extreme weather events to their respective DRM agencies;
- iii. Demonstration on the use of severe weather forecasts in risk management (e.g., flood prevention) and expand the use of lesson learned on all the territories through NMHS.
- iv. Support to the Regional Climate Outlook Forum for integrating DRM aspects.

3. Duties of the Regional Numerical Prediction Expert

- I. To support Numerical Weather Prediction Unit at ICPAC;
- II. Review WMO pilot Severe Weather Forecast Demonstration Projects (SWFDP);
- III. Post process the NWP model ensemble data and create archive mass store of the model runs. Prepare map patterns of the NWP model outputs for the eastern Africa region and assess skills of key NWP models;
- IV. Develop Extreme Forecast Indices (EFI) for key weather parameters;
- V. Design techniques to translate EFI into severe weather forecasts;
- VI. Support the National Meteorological and Hydrological Services (NMHSs) to strengthen NWP capacity;
- VII. Build capacity of the region in sub-seasonal predictions of extreme weather;
- VIII. Develop a vision for the medium term and long term evolution of such systems and their use in generation of severe weather forecasts;
- IX. Define and develop, whenever feasible, justifications and scenarios for the development of emerging application systems using Numerical Models and observations;
- X. Establish a list of the observations/geophysical parameters (including characteristics) available from Ensemble Prediction System (EPS) and METEOSAT Second Generation (MSG) required for initialization and validation purposes;
- XI. Conduct on the job training of the NWP Experts on attachment at ICPAC.

4. Language Skills

Proficiency in English Language is required, and French language skill is an asset

5. Functional Responsibility

The Regional Numerical Weather Prediction Expert will report to the Project Team Leader.

6. Duration

The duration of the assignment will be one year with a possibility of renewal depending on performance and availability of funds.

7. Remuneration

As per IGAD Project salary scale and policy which is attractive based on applicant's qualification and experience.

8. Qualification and experience

- Master of Science degree in Meteorology with specialization in NWP. A Ph.D. in Meteorology will be an added advantage;
- Five (5) years of working experience in operational NWP (At least one year experience for a PhD holder)
- Evidence of good knowledge and applications of NWP models.

9. Key Skills and Competencies

- Excellent computing skills under Unix and Linux operating systems, including working with Fortran and other compiled computer languages such as. C, C++, Java, etc. are necessary
- Good programming systems
- Ability to communicate effectively orally and in writing
- Ability to prepare written reports in a clear, concise and meaningful manner
- Ability to work with minimum supervision

10. Work Station

IGAD Climate Prediction and Applications Centre (ICPAC)
Kenya Meteorological Department Compound
Ngong Road, Dagoretti Corner
Nairobi, Kenya
P.O. Box 10304 GPO 100 Nairobi, Tel (+254) 20-3514426,
Email: director@icpac.net
Web site: www.icpac.net

11. How to apply

Send the following:

- i. Application Letter,
- ii. Detailed Curriculum Vitae,
- iii. Scanned Copies of academic and work experience evidences

to the address above or by e-mail to the following address: director@icpac.net with copies to ahussein@icpac.net and jkubo@icpac.net not later than Friday 13th April 2018 at 1:00 p.m.