



ADAPTATION FUND



WORLD
METEOROLOGICAL
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Food and Agriculture
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United Nations



EUMETSAT

Concept Note: Training course on the use of Satellite based data and crop monitoring and forecasting tools for drought monitoring and agro-meteorological applications

06-10 May 2019, Nairobi, Kenya

Background

The Agricultural Climate Resilience Enhancement Initiative (ACREI) is a 3-year partnership program between the World Meteorological Organization (WMO), the Food and Agriculture Organization of the United Nations (FAO) and the IGAD Climate Prediction and Applications Center (ICPAC) funded by the Adaptation Fund. The program targets Ethiopia, Kenya and Uganda and supports community adaption practice, climate proofing of extension systems and climate informed decision making.

The goal of the ACREI project is to: “Develop and implement adaptation strategies and measures that will strengthen the resilience of vulnerable smallholder farmers, agro-pastoralists and pastoralists in the Horn of Africa to climate variability and change” in line with the IGAD Drought Disaster Resilience Sustainability Initiative (IDDRSI) programme, the National Adaptation Plans of Action (NAPAs) and Development Strategies/Visions of participating countries.” The overall objective of the project is: “Improved adaptive capacity and resilience to current climate variability and change among targeted farmers, agro-pastoralists and pastoralist communities.”

As part of component 3 activities, ICPAC in collaboration with WMO, FAO, and EUMETSAT are holding a training course on the use of Satellite based data and crop monitoring and forecasting tools for drought monitoring and agro-meteorological applications from 06-10 May 2019.

Objectives

The main objective of the training is to enhance the capacity of agro-met divisions at ICPAC and NMHS on the use of satellite based data and tools for the provision of reliable, timely and accurate early warning information to decision makers within the agriculture and food security sector including farmers.

Specific objectives of the training will be as follows:

1. Take advantage of ACREI project for regional developments expanding to other IGAD countries advanced knowledge in remote sensing and crop monitoring techniques.
2. Promote technical cooperation between Met.Services and Ministries of Agriculture for a better food security structure

The expected outcomes are:

1. Efficient modeling and production of reliable crop and pasture model outputs by Agrometeorology divisions at NMHSs.
2. Easier access to satellite data and products and operational use of maprooms and archive facilities.

Participants

Participants will include the following:

- ICPAC focal people for the project and other relevant ICPAC staff already at GHACOF;
- National Meteorological and Hydrological Services (NMHSs) staff from Ethiopia, Uganda, Kenya, Tanzania, Somalia, Sudan, South Sudan, Djibouti, Eritrea
- World Meteorological Organization (WMO)
- FAO
- EUMETSAT
- EU-Joint Research Centre

List of trainers:

- Trainers from EUMETSAT
- Dr. Hervé Kerdiles or Dr. Felix Rembold - EU- JRC (self-funded)
- Dr. Oscar Rojas - FAO
- Dr. Seydou Traoré - AGHRYMET Centre Niamey
- Dr. Ross Maidment – University of Reading, UK
- Dr. Alirio Arboleda – Meteo Belgique (to be confirmed)
- Dr. Jose Camacho – WMO
- Oliver Kipkogei, Kenneth Mwangi, Linda Ogallo, Paulino Omay, Ismael Mulama, George Kabaka (ICPAC)

Remote connection:

- Dr. Wolfgang Wagner – Technical University of Wien - SAF Hydrology
- Climate Services Toolkit expert from Tanzania (TBD)



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Agenda/ Programme

Local time in Nairobi (UTC+3 hrs)	Monday 6	Tuesday 7	Wednesday 8	Thursday 9	Friday 10
9h00	Opening ceremony. Introductory remarks (ICPAC, WMO)	Land SAF – Products, NDVI, vegetation indexes Alirio Arboleda – Meteo Belgique	WMO Climate Analysis Tools for Sectors. Climate Services Toolkit CST team - Tanzania	Coupling remote sensing data with crop models. SARRA-O AGRHYMET	National workplan. Use of remote sensing products and ICPAC datasets for drought monitoring and agro meteorology..
9h30	Introduction to EUMETSAT data and products- Web page Jose Prieto EUMETSAT				
10h30	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11h00	Remote sensing observation – Clouds, lands, water bodies and aerosols José Prieto EUMETSAT (11h00-12h00)	Land SAF – Products, ETP, forest fires., Data access and use Alirio Arboleda – Meteo Belgique	Drought monitoring data sets and tools – CHIRPS gridded rainfall time series and GeoCLIM ICPAC (Oliver, Mulama)	Crop monitoring and yield estimation procedures in Western Africa AGRHYMET	National workplans. Use of remote sensing products and ICPAC datasets for drought monitoring and agro meteorology. Training course evaluation Closing ceremony at 13:00
12h00	Data bases at ICPAC. CHIRPS and TAMSAT,, others (Kabaka, Paulino) (12h00-13h00)				
13h00	Lunch	Lunch	Lunch	Lunch	
14h00	Data bases, handling process, including data quality control, pre- processing ICPAC (Kabaka, Paulino)	Vegetation and crop monitoring- ASIS software, JRC tools FAO - JRC	Satellite derived rainfall estimation products TAMSAT Ross Maidment (remote) University of Reading	WMO Tools derived from drought monitoring and agricultural meteorology projects (Drought indexes, crop calendars, LDAS MF) José Camacho WMO	
14h45					
15h30	Coffee Break (15 :30 – 16 :00)	Coffee Break	Coffee Break	Coffee Break	
16h00 (Adjourn at 17h30)	Data bases, handling process, including data access EUMETSAT and SAFs.	Climate projections and agriculture SPIRITS (FAO and JRC)	Soil moisture monitoring. Products and access. Hydrology SAF (remote)	National Institutions Reports on drought & food security activities (All countries)	