Background

Drought is a recurring natural hazard that has large and important impacts on livelihoods, economies and ecosystems across East Africa. Reducing the impacts of droughts requires a range of actions, including the development and use of early warning systems as part of an integrated drought mitigation plan. Early warning systems consist of tools for monitoring and forecasting of evolving drought conditions and their impacts, and the timely provision of this information to government and stakeholders in actionable forms. Early warning should also be accompanied by evaluations of drought risk that includes assessment of vulnerable populations and their coping capacities.

Current capacity for early warning in the region is focused on IGAD and EAC Regional countries, some of the regional institutions like Africa Climate Policy Centre, Regional Centre for Mapping of Resources for Development and IGAD Climate Prediction & Applications Centre (ICPAC) that provides monitoring and forecasting for drought and assessments of drought related impacts (e.g. agricultural production), including contribution to consensus seasonal outlooks as part of the Greater Horn of Africa Climate Outlook Forum (GHACOF). National capability may then combine this with their own analysis to provide more targeted national outlooks and provision of this to stakeholders. There is a need to improve capacity across the region to provide more targeted and sector specific drought information, and in particular to draw from the wealth of information from...
state-of-the-art data sources, such as satellite remote sensing, models and information systems that provide real-time and forecast information.

Introduction

A workshop is proposed to bring together national representative practitioners from across the region to learn and apply state-of-the-art methods for drought monitoring and forecasting. The training will be focused on using the African Flood and Drought Monitor, which is an online tool that brings together ground observations, hydrological and climate modelling and remote sensing to provide integrated drought monitoring and forecasting in support of risk analysis and early warning. The workshop will also serve to promote broader learning on drought risk management, and development of knowledge sharing networks.

Objectives

The overall aim is to strengthen the capacity of EAC and IGAD member countries in drought monitoring and forecasting. The specific objectives are:

- To build capacity of country focal points from EAC and IGAD member countries on drought monitoring and forecasting, and its use as an operational tool for near real-time monitoring and seasonal forecasting.
- To raise awareness of drought issues in the region through exchange of information and knowledge between member countries.
- To develop knowledge exchange network for future collaboration on drought issues in the regions, in particular focused on the use of new technologies for monitoring and forecasting, and their sustainable use.
- To understand the challenges in providing tailored climate services to decision-makers.

Expected Outcomes

A range of outcomes are expected including:

- Improved participant understanding of best practices in drought monitoring and management across the region.
- Enhanced capacity to monitor and forecast drought using state-of-the-art tools.
- Improved understanding of how best to use these tools to reduce impacts.
- A growing network of connected professionals who share common experiences of training and application in water resources management and disaster risk reduction.
Completed comprehensive assessment of the needs and capacity gaps with regard to implementing the Global Framework of Climate Services.

Workshop Format

A three-day workshop is proposed that would consist of:
- Day 1: Knowledge exchange on drought monitoring and management in the region;
- Day 2: Training in the early warning methods and the AFDM tool;
- Day 3: Applied exercises focused on participant country needs, and discussion of ways forward.

Participants would include one expert each from the Ministry of Water / Agricultural and Meteorological departments from IGAD and EAC Countries. The workshop would be led by water experts and scientists from Princeton Climate Analytics (Princeton University (USA) and other) and UNESCO International Hydrology Programme (IHP).

Profile of the Participants

Participants to this training should have relevant experience on flood and drought analysis with emphasis on water, energy, agriculture and food security and climate change initiatives either from an academic / research institutions, public service (Ministry of Agriculture/Food Security/Irrigation, Ministry of Water, Ministry of Environment, Ministry of Power) with the background knowledge on remote sensing data analysis. Participants will be nominated/identified from government agencies and universities and private sector addressing water, climate change, meteorology or related fields. All participants are expected to submit one-page justification how this training will help them in their professional work or research. They have to articulate how they would be interested to take up any pilot study from their country. In total 20 participants will be invited to the training.

Date and Venue
- 8-10 October 2019
- United Nations Economic Community for Africa (UNECA), Addis Ababa, Ethiopia

Nomination and application procedure
- All nominations should have a detailed CV and a copy of passport. All participants are expected to submit one-page justification how this training will help them in their
professional work or research. They must articulate how they would be interested to take up any pilot study from their country.

● Nominations should be sent via email at the latest by **Friday, September 13th**, to:
  - Mr. Jayakumar, UNESCO, Nairobi: r.jayakumar@unesco.org
  - Mr. Frank Rutabingwa, UNECA, Addis Ababa: rutabingwa@un.org

  With copy to
  Mr. Samuel Partey, UNESCO, Nairobi: s.partey@unesco.org
  Mr. Mushabe, Norman, UNESCO Addis Ababa n.mushabe@unesco.org

**Funding Source**

● Participants travel, accommodation and reduced allowance will be covered by UNESCO as per the UNESCO rules and regulations.
● Princeton Climate Analytics will provide international experts and facilitate training.
● Africa Climate Policy Centre, UNECA will provide all local logistical support
● East Nile Technical Regional Office will provide its technical support as one of the local hosts.

**Coordinators:**

**Ms Ana Elisa Santana Afonso**, Director, UNESCO Addis Ababa,

**Mr Jayakumar Ramasamy**
Senior Programme Specialist, UNESCO Regional Office for Eastern Africa

**Mr Frank Rutabingwa**, Senior Natural Resources Expert, African Climate Policy Centre

**Mr Vojislav Mitrovic**
Global Business Director, Princeton Climate Analytics, Inc.