Drought Forecasting for East Africa
Natural Sciences for the 2030 Agenda

37 C/4 Strategic Objective 4: Strengthening science, technology and innovation systems and policies – nationally, regionally and globally

Harnessing the sciences, including the basic sciences, technology, and innovation and knowledge for sustainable development (MLA 1)

37 C/4 Strategic Objective 5: Promoting international scientific cooperation on critical challenges to sustainable development

Advancing science for sustainable management of natural resources, disaster risk reduction and climate change action (MLA 2)

Improving knowledge and strengthening capacities at all levels to achieve water security (MLA 3)
UN 2030 Agenda – AU Agenda 2063 - Paris Agreement- Sendai Framework

Agenda 2063
The Africa We Want

Sendai Framework for Disaster Risk Reduction 2015 - 2030
The three pillars of IDRM (adapted from The World Bank Group, based on Gutierrez et al. (2014)).

1. Monitoring and forecasting/early warning
   Foundation of a drought plan
   Indices/indicators linked to impacts and action triggers
   Feeds into the development/delivery of information and decision-support tools

2. Vulnerability/resilience and impact assessment
   Identifies who and what is at risk and why
   Involves monitoring/archiving of impacts to improve drought characterization

3. Mitigation and response planning and measures
   Pre-drought programs and actions to reduce risks (short and long-term)
   Well-defined and negotiated operational response plan for when a drought hits
   Safety net and social programs, research and extension
Drought is often the precursor to disaster, but getting leads on its stealthy approach through remote or war-torn areas can be so difficult that relief agencies sometimes have little time to react before a bad situation becomes a calamity.

Current capacity building workshop for early warning in the region is focused on IGAD and EAC Regional countries.
• In this workshop we brought 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

• 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, 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

• Improved 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 regarding implementing the Global Framework of Climate Services.
The three-day workshop will consist of:

- **Day 1**: Knowledge exchange on drought monitoring and management in the region;
- **Day 2**: Training on the early warning methods and the AFDM tool;
- **Day 3**: Applied exercises focused on participant country needs, and discussion of ways forward.