

STATEMENT FROM THE THIRTY EIGHTH GREATER HORN OF AFRICA CLIMATE OUTLOOK FORUM (GHACOF 38) FOR SEPTEMBER TO DECEMBER 2014 SEASON: 25-26 AUGUST 2014; SHERATON HOTEL, ADDIS ABABA, ETHIOPIA

Summary

September to December (SOND) constitutes an important rainfall season over the equatorial sector of Africa (GHA) region. The regional consensus climate outlook for the September to December 2014 rainfall season indicates increased likelihood of near normal rainfall over most of the GHA, with higher likelihood of above normal rainfall over the western and eastern parts of the equatorial sector. Increased likelihood of near to below normal is indicated over the rest of the GHA. The key factors expected to influence the evolution of the regional climate during the SOND 2014 rainfall season include the Sea Surface Temperatures (SSTs) over the tropical Oceans including (i) the phase and strength of Indian Ocean Dipole mode (IOD), possible development of Cyclones over the western Indian Ocean; (ii) SST anomalies over equatorial eastern Pacific region and the evolution of the El Niño conditions during the forecasts period, and (iii) SST anomalies over the Atlantic Ocean. The influence of these ocean processes will be modulated by regional circulation patterns, and the influence of topography and large inland water bodies.

The outlook is relevant for seasonal time scales and relatively large areas. Local and month-to-month variations might occur as the September to December 2014 season progresses. It is likely that episodic weather events leading to flash floods might occur in areas with increased likelihood of near normal to below normal rainfall. Also dry spells may occur in areas with increased likelihood of near normal to above normal rainfall. ICPAC will provide regional updates on regular basis while the National Meteorological and Hydrological Services (NMHSs) will provide detailed national and sub-national updates.

The Climate Outlook Forum

The Thirty Eighth Greater Horn of Africa Climate Outlook Forum (GHACOF38) was convened from 25-26 August 2014 at Sheraton Hotel, Addis Ababa, Ethiopia by the IGAD Climate Prediction and Applications Centre (ICPAC) in collaboration with the World Meteorological Organization (WMO), and partners to formulate a consensus regional climate outlook for the September to December 2014 rainfall season over the GHA region. The GHA region comprises Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania and Uganda. GHACOF38 was preceded by capacity building training workshop for the National climate scientists to develop national and regional climate outlook products for the season. Two other capacity building training workshops were also held in parallel to the climate modelling workshop. These were for the water resources and physical oceanography experts.

Users of climate information who participated in GHACOF 38 were drawn from health, disaster management, agriculture and food security, water resources and media sectors as well as non-governmental organisations and development partners. They provided sector specific assessment of the skill and usefulness of the previous regional consensus climate outlooks and formulated mitigation strategies for specific sectors based on the consensus regional climate outlook for the rainfall season.

The forum reviewed the implications of Sea Surface Temperature (SST) anomalies over the tropical Oceans including (i) the phase and strength of Indian Ocean Dipole mode (IOD), possible development of Cyclones over the western Indian Ocean; (ii) SST anomalies over equatorial eastern Pacific region and the evolution of the El Niño conditions during the forecasts period, and (iii) SST anomalies over the Atlantic ocean. The influence of these ocean processes will be modulated by regional circulation patterns, and the influence of topography and large inland water bodies. Guidance and valuable forecast inputs were drawn from a wide range of sources including the World Meteorological Organisation's Global Producing Centres (WMO-GPCs), APEC Climate Centre and Korea

Meteorological Administration (KMA), The UK-Met Office and the National Oceanic and Atmospheric Administration (NOAA) Africa desk as well as the National Meteorological and Hydrological Services (NMHSs) of the Greater Horn of Africa. Inputs were also provided by the UNESCO, Western Indian Ocean Marine Sciences Association (WIOMSA) and the United States Geological Survey (USGS).

The Forum was also an interactive event that brought together climate information user experts from critical socio-economic sectors, governmental and non-governmental organisations, decision-makers, climate scientists, civil society stake holders among others. The experts from various sectors evaluated the implications of the consensus climate outlook on their respective sectors and formulated contingency plans for sector specific applications during the period September to December 2014.

Methodology

The forum examined the prevailing and expected ocean-atmosphere processes as well as evolving large scale and regional scale circulation mechanisms with significant implications over the GHA during September to December 2014. Key among these processes were the Sea Surface Temperature (SST) anomalies over global oceans, together with the modulation of these processes by regional circulation systems including regional monsoonal winds; complex topography and the large inland water bodies. Implications of these on regional rainfall were integrated during a Pre-COF 38 Capacity Building Training Workshop (CBTW) that was hosted by ICPAC from 18 to 24 August 2014 in Nairobi, Kenya. The Pre-COF 38 workshop also considered the global forecasts from the twelve World Meteorological Organization (WMO) Global Producing Centres (GPCs) to generate the regional consensus climate outlook for the September to December 2014 rainfall season.

Rainfall Outlook for September to December 2014

The rainfall outlooks for the GHA region is given in figure 1.

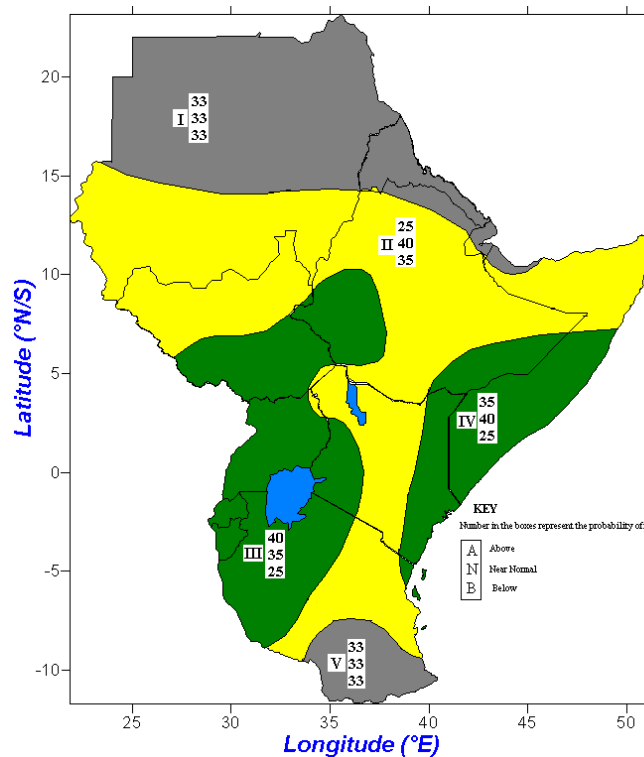


Figure 1: Greater Horn of Africa Consensus Climate Outlook for September to December 2014 rainfall season

Zone I & V: These areas are usually dry during September to December season

Zone II: Likelihood near normal to below normal rainfall

Zone III & IV: Increased likelihood of near normal to above normal rainfall

Note:

The numbers for each zone indicate the probabilities of rainfall in each of the three categories, above-, near-, and below-normal. The top number indicates the probability of rainfall occurring in the above-normal category; the middle number is for near-normal and the bottom number for below-normal category. For example, in zone IV, there is 35% probability of rainfall occurring in the above-normal category; 40% probability of rainfall occurring in the near-normal category; and 25% probability of rainfall occurring in the below-normal category. It is emphasised that boundaries between zones should be considered as transition areas.

Contributors

The Thirty Eighth Greater Horn of Africa Climate Outlook Forum (GHACOF38) was organised jointly by the IGAD Climate Prediction and Applications Centre (ICPAC), World Meteorological Organization (WMO) and the National Meteorological and Hydrological Services (NMHSs) of GHA countries as well as the Intergovernmental Oceanographic Commission (IOC) of UNESCO's Sub Commission for Africa and the Adjacent Island States (IOC-Africa); the Western Indian Ocean Marine Sciences Association (WIOMSA), UNESCO-Water and USGS. It was hosted by the Ethiopia Meteorological Agency. Much of the support was from the African Development Bank (AfDB) within the framework of the Institutional Support to African Climate Institutional Project (ISACIP).

Contributors to the GHACOF38 consensus regional climate outlook included representatives of the Meteorological Services from GHA countries (Insitutit Geographique du Burundi; Meteorologie Nationale de Djibouti; Eritrea Meteorological Services; National Meteorological Agency of Ethiopia; Kenya Meteorological Service; Rwanda Meteorological Agency; South Sudan Meteorological Services; Sudan Meteorological Authority; Tanzania Meteorological Agency and Uganda National Meteorological Authority) and climate scientists as well as other experts from national, Mauritius Meteorological Services and regional and international institutions and organizations: IGAD Climate Prediction and Applications Centre (ICPAC); The UK Met Office, World Meteorological Organization (WMO) and Global Producing Centres (GPCs); Korea Meteorological Administration (KMA), the EU project High-End Climate Change Impacts and Extremes (HELIX), the University of Nairobi (UoN), UNESCO and FEWSNET.