

STATEMENT FROM THE THIRTY SIXTH GREATER HORN OF AFRICA CLIMATE OUTLOOK FORUM (GHACOF 36) FOR MARCH TO MAY 2014 RAINFALL SEASON: 26-28 FEBRUARY 2014

IMPERIAL BOTANICAL BEACH HOTEL,
ENTEBBE, UGANDA

Summary

March to May constitutes an important rainfall season over the equatorial parts of the Greater Horn of Africa (GHA) region. The regional consensus climate outlook for the March to May 2014 rainfall season indicates an increased likelihood of near normal to above normal rainfall over northern, western and southern Tanzania; Burundi; Rwanda; much of Uganda; western Kenya; western Ethiopia and much of South Sudan. Increased likelihood of near normal to below normal rainfall is indicated over much of the northern, eastern and coastal areas of the GHA region. Key processes considered as major drivers of the regional climate during March-May 2014 season include cooler than average Sea Surface Temperatures (SSTs) over the western Indian Ocean and Arabian sea as well as warmer than average SSTs over central and eastern Indian Ocean; ongoing and potential formation of tropical cyclones over south-western Indian Ocean.

The outlook is relevant for seasonal time scales and relatively large areas. Local and month-to-month variations might occur as the March-May 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 Sixth Greater Horn of Africa Climate Outlook Forum (GHACOF 36) was convened from 26th to 28th February 2014, at the Imperial Botanical Beach Hotel, Entebbe, Uganda by the IGAD Climate Prediction and Applications Centre (ICPAC) and partners to formulate a consensus climate outlook for the March to May 2014 rainfall season over the GHA region. The GHA region comprises Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania and Uganda. The forum reviewed the state of the global and regional climate systems and their implications on the March to May seasonal rainfall over the sub-region. Among the principal factors taken into account were the observed and predicted SSTs in the tropical Pacific, Atlantic and Indian Oceans. The dominant climate forcing processes included neutral ENSO conditions that are expected to persist through the forecast period, warmer than average SSTs over central Indian Ocean as well as colder than average SSTs over the western Indian Ocean and Arabian Sea, weak negative Indian Ocean Dipole (IOD); ongoing and potential formation of tropical cyclones over south-western Indian Ocean. Users from agriculture and food security, livestock, water resources, disaster risk management, health, Gender, Civil society, Non- Governmental Organisations and development partners formulated the potential implications of the consensus climate outlook and developed mitigation strategies for their respective countries and sectors. The media on the other hand formulated strategies for effective dissemination of the consensus climate outlook and its potential impacts.

Projected global climate forcing processes beyond May 2014

Most computer model forecasts and the recent WMO statement indicate likely development of a weak El Niño during the second half of the year 2014. Updates will be released on regular basis and detailed climate outlook for the June to August 2014 rainfall season will be provided at the Thirty Seventh Greater Horn of Africa Climate Outlook Forum (GHACOF37) to be held in Khartoum, Sudan in May 2014.

Methodology

The forum examined the prevailing and predicted SSTs over the Pacific Ocean as well as the Indian and Atlantic Oceans together with other factors that affect the climate of the region. These factors were assessed using dynamical and statistical models as well as expert interpretation. The regional consensus climate outlook also included inputs from National Climate Scientists who participated in the pre-COF 36 regional modelling workshop that was hosted by ICPAC from 16th to 25th February 2014. Additional inputs were obtained from various centres worldwide including the World Meteorological Organisation's Global Producing Centres (WMO GPCs). The current capability of seasonal to inter-annual forecasting allows prediction of spatial and temporal averages and may not fully account for the physical and dynamical factors that influence regional and national climate variability.

The experts established probability distributions to indicate the likelihood of above-, near-, or below-normal rainfall for each zone (Figure 1). Above-normal rainfall is defined as within the wettest third of recorded rainfall amounts in each zone; near-normal is defined as the third of the recorded rainfall amounts centred around the climatological median; below-normal rainfall is defined as within the driest third of the rainfall amounts. Climatology refers to a situation where any of the three categories have equal chances of occurring.

Rainfall Outlook for March to May 2014

The rainfall outlook for various zones within the GHA region is given in figure 1 below.

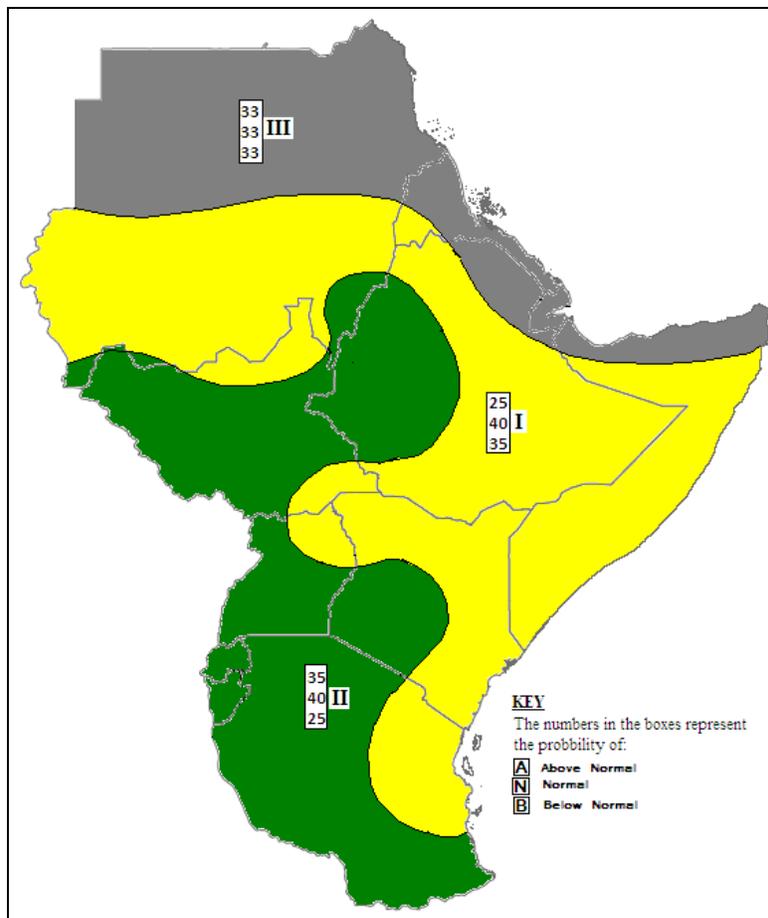


Figure 1: Greater Horn of Africa Consensus Climate Outlook for the March to May 2014 rainfall season

Zone I: Increased likelihood of near normal to below normal rainfall.

Zone II: Increased likelihood of near normal to above normal rainfall.

Zone III: This zone is usually dry during March to May season.

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 the below-normal category. For example in zone II, 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. The boundaries between zones should be considered as transition areas.

Contributors

The Thirty Six Greater Horn of Africa Climate Outlook Forum (GHACOF 36) was organised jointly by the IGAD Climate Prediction and Applications Centre (ICPAC) and National Meteorological and Hydrological Services (NMHSs) of ICPAC member countries. Much of the support for the forum was from the African Development Bank (AfDB) within the framework of the Institutional Support to African Climate Institutional Project (ISACIP). Partial support for forum was also provided by the World Meteorological Organisation (WMO).

Contributors to the GHACOF36 consensus regional climate outlook included representatives of the Meteorological Services from GHA countries (Insitut Geographique du Burundi; Meteorologie Nationale de Djibouti; National Meteorological Agency of Ethiopia; Kenya Meteorological Services; Rwanda Meteorological Agency; South Sudan Meteorological Services; Sudan Meteorological Authority; Tanzania Meteorological Agency and Uganda Meteorological Authority) and climate scientists as well as other experts from national, regional and international institutions and organizations: IGAD Climate Prediction and Applications Centre (ICPAC); Met Office, UK; World Meteorological Organization (WMO) and WMO Global Producing Centres (GPCs); Korea Meteorological Administration (KMA); University of Nairobi; North Carolina State University and University of Connecticut.