STATEMENT FROM THE THIRTY FIFTH GREATER HORN OF AFRICA CLIMATE OUTLOOK FORUM (GHACOF 35): 21-23 AUGUST 2013, BOMA INN, ELDORET, KENYA

Summary

September to December constitutes an important rainfall season over the equatorial sector and the southern parts of the northern sector of the Greater Horn of Africa (GHA) region. The regional consensus climate outlook for the September to December 2013 rainfall season indicates increased likelihood of near normal to above normal rainfall over the western parts of the GHA region as well as the coastal parts of the equatorial sector. Increased likelihood of near normal to below normal is indicated over other parts of the region. Temperature outlook indicates increased likelihood for warmer than average temperatures over the southern and equatorial sectors during the September to December 2013 season. The key factors which are expected to influence the evolution of regional climate during the September to December 2013 rainfall season include Sea Surface Temperatures (SSTs) over all Global Oceans, anticipated neutral ENSO conditions, evolution of weak negative Indian Ocean dipole (IOD) mode, among many other global climate processes. The influence of these processes will be modulated by regional and local scale features including large inland lakes and the complex topographical patterns.

The regional climate outlook is relevant for seasonal timescale and covers relatively large areas with local and month-to-month rainfall variations. The IGAD Climate Prediction and Applications Centre (ICPAC) in collaboration with the World Meteorological Organization (WMO), and other Climate Centres will issue regional climate updates regularly during the season, while the National Meteorological and Hydrological Services (NMHSs) will downscale this regional climate outlook and provide detailed forecasts and updates at National levels. All climate information users are strongly advised to contact their respective National Meteorological and Hydrological Services for national and local details during the season.

The Climate Outlook Forum

The Thirty Fifth Greater Horn of Africa Climate Outlook Forum (GHACOF35) was convened from 21 - 23 August 2013 at Boma Inn, Eldoret, Kenya 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 2013 rainfall season over the GHA region. The GHA region comprises Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania and Uganda.

Users of climate information who participated in the forum were drawn from health, disaster management, gender, civil society, 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 September to December 2013 rainfall season.

The forum reviewed the implications of the current and evolving global and regional climate driving global mechanisms including the current and projected Sea Surface Temperatures (SSTs) over all Global Oceans; anticipated neutral ENSO conditions over eastern equatorial Pacific Ocean region, evolution of weak negative Indian Ocean dipole (IOD) mode; among many other global processes that influence on GHA climate. The influence of global processes is modulated by regional and local scale features including large inland lakes and the complex topographical patterns. 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, Met Office Hadley Centre (MOHC) 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.

The forum was also an interactive event that brought together application 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 2013.

**Methodology**

The forum examined the prevailing and expected oceanic-atmospheric processes as well as evolving large scale and regional scale circulation mechanisms with significant implications over the GHA during September to December 2013 and the likely implications of regional and local scale features on distribution of rainfall during the season. Key among these processes was the Sea Surface Temperature anomalies over the Indian, Atlantic and Pacific Oceans. Implications of these processes on regional rainfall were modelled using statistical techniques through a pre-COF 35 Capacity Building Training Workshop that was hosted by ICPAC from 12 - 19 August 2013 in Nairobi, Kenya. The Pre-COF 35 workshop also considered the global forecasts from the twelve World Meteorological Organization (WMO) Global Producing Centres (GPCs) and merged output for the GHA with outputs from statistical models to generate the regional consensus climate outlook for the September to December 2013 rainfall season.

**Rainfall Outlook for September to December 2013**

The rainfall and temperature outlooks for the GHA region are given in figure 1 and figure 2 respectively.

![Figure 1: Greater Horn of Africa Consensus Climate Outlook for the September to December 2013 rainfall season](image)

**Zone I & V:** The area is usually dry during September to December 2013 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 II, there is 20% probability of rainfall occurring in the above-normal category; 45% probability of rainfall occurring in the near-normal category; and 35% probability of rainfall occurring in the below-normal category. It is emphasised that boundaries between zones should be considered as transition areas.

**Figure 2: Greater Horn of Africa Temperature Outlook for September to December 2013**

**Contributors**

The Thirty Fifth Greater Horn of Africa Climate Outlook Forum (GHACOF35) 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 ICPAC member countries as well as the Intergovernmental Oceanographic Commission of UNESCO’s Sub Commission for Africa and the Adjacent Island States (IOC-Africa); the Western Indian Ocean Marine Sciences Association (WIOMSA) and United Nations International Strategy for Disaster Reduction (UNISDR). It was hosted by the Kenya Meteorological Services. 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 GHACOF35 consensus regional climate outlook included representatives of the Meteorological Services from GHA countries (Institut 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 Meteorological Agency) and climate scientists as well as other experts from national, regional and international institutions and organizations: IGAD Climate Prediction and Applications Centre (ICPAC); United Kingdom Met. Office Hadley Centre (MOHC); CMCC; World Meteorological Organization (WMO) and WMO Global Producing Centres (GPCs); APEC Climate Center and University of Nairobi.