STATEMENT FROM THE THIRTIETH GREATER HORN OF AFRICA CLIMATE OUTLOOK FORUM (GHACOF 30): 27-29 FEBRUARY 2012, KIGALI, RWANDA

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 2012 rainfall season indicates increased likelihood of near normal to below normal rainfall over much of the Greater Horn of Africa (GHA) region. Increased likelihood of near normal to above normal rainfall is indicated over southwestern Tanzania, southwestern Ethiopia, South Sudan and southwestern Sudan.

The outlook is relevant only for seasonal time scales and relatively large areas. Local and month-to-month variations might occur. For example episodic heavy rainfall events leading to flash floods might occur in areas with increased likelihood of near normal to below normal rainfall. Additionally long dry spells may occur in areas with increased likelihood of near normal to above normal rainfall. Some of these dry and wet spells are linked to indirect impacts of the unseasonal tropical cyclones in western Indian Ocean areas during February to April months. Forecast updates will be provided by ICPAC and the respective National Meteorological and Hydrological Services. The users are therefore strongly advised to contact their National Meteorological Services for National and local details.

The Climate Outlook Forum

The Thirtieth Greater Horn of Africa Climate Outlook Forum (GHACOF 30) was convened from 27th to 29th February 2012, at the Serena Hotel, Kigali, Rwanda by the IGAD Climate Prediction and Applications Centre (ICPAC) and partners to formulate a consensus climate outlook for the March to May 2012 rainfall season over the GHA region. The GHA region comprises Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania and Uganda. Users from sectors such as health, disaster risk management, Gender, Civil society , agriculture and food security, water resources and the media, as well as other Non- Governmental Organisations and development partners actively participated in the formulation of the potential impacts of the climate outlook on their respective sectors. The forum reviewed the state of the evolving status and implications of global climate system to the GHA climatic conditions, including the influence of sea surface temperature anomalies over the adjacent tropical Indian and Atlantic Oceans, the La Niña conditions over the Pacific Ocean and evolving atmospheric circulation with implications for March - May 2012 seasonal rainfall. Guidance and valuable prediction information was drawn from various sources including the World Meteorological Organisation's Global Producing Centres (WMO GPCs), operational research and expert opinion and interpretation of impacts. These inputs were combined using deterministic and probabilistic modelling alongside expert analysis to obtain the regional rainfall forecast for the period March to May 2012.

Methodology

The forum examined the prevailing and expected ocean-atmospheric predictors and indicators including sea surface temperature anomalies over the Pacific, Indian and Atlantic Oceans as well as circulation systems and features most likely to impact on regional rainfall during the season. The process included use of coupled and non-coupled dynamical models, generation of dynamical multi-model ensemble (MMEs) forecasts, dynamical-process identification and tracking to pin-point the most likely rainfall evolution

during March to May 2012 over the GHA. The forum assessed among others the potential impacts of the Indian Ocean dipole circulation and the weakening La Niña conditions during the period March to May 2012 alongside warmer than average sea surface temperatures over southwestern Indian Ocean . It also considered the forecast from the regional downscaling capacity building workshop for the ICPAC member countries that was held at ICPAC from 13 to 25 February 2012.

Rainfall Outlook for March to May 2012

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

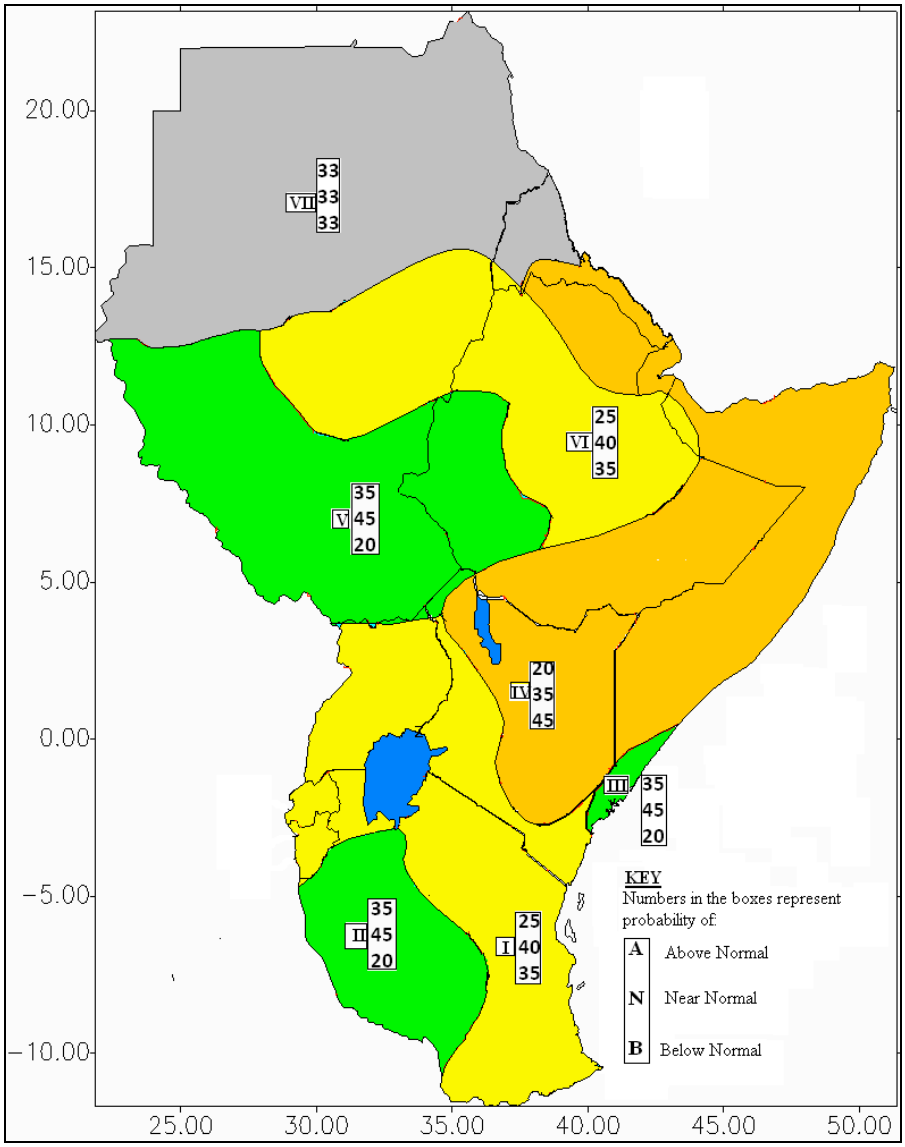

Figure 1: Greater Horn of Africa Consensus Climate Outlook for the March to May 2012

Zone I: Near normal to below normal rainfall is indicated over southern, eastern and northern Tanzania, Burundi; Rwanda; Uganda as well as western and southern Kenya

Zone II: Increased likelihood of normal to above normal rainfall over much western Tanzania.

Zone III: Increased likelihood of near normal to above normal rainfall over southern coast of Somalia and northern coast of Kenya.

Zone IV: Increased likelihood of below to near normal rainfall over much of eastern and northern Kenya; southern, eastern and northeastern Ethiopia; Somalia and Djibouti.

Zone V: Increased likelihood of normal to above normal rainfall over South Sudan; southwestern Sudan and southwestern Ethiopia.

Zone VI: Near normal to below normal rainfall is indicated over southeastern Sudan as well as north-western and central Ethiopia.

Zone VII: Climatology is indicated over much of northern Sudan.

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 covering western Tanzania, there is 35% probability of rainfall occurring in the above-normal category; 45% probability of rainfall occurring in the near-normal category; and 20% probability of rainfall occurring in the below-normal category. It is emphasised that boundaries between zones should be considered as transition areas.

Contributors

The Thirtieth Greater Horn of Africa Climate Outlook Forum (GHACOF 30) was organised jointly by the IGAD Climate Prediction and Applications Centre (ICPAC) and National Meteorological and Hydrological Services (NMHSs) of ICPAC member countries within the framework of *ClimDev-Africa* project funded by AfDB. It was hosted by the Rwanda Meteorological Agency. Partial support for capacity building workshop for the climate scientists was provided by WMO while World bank/GFDR provided support to Redcross societies, Civil societies, Gender and disaster management experts. UNISDR also supported the participation of the disaster risk reduction focal points from EAC Partners States.

Contributors to the GHACOF30 regional consensus climate outlook included representatives of the Meteorological Services from GHA countries (Insititut Geographique du Burundi; Meteorologie Nationale de Djibouti; Eritrea Meteorological Services; National Meteorological Agency of Ethiopia; Kenya Meteorological Department; 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 Meteorological Office and Hadley Centre (UKMOH); World Meteorological Organization (WMO) and WMO Global Producing Centres (GPCs); Korea Meteorological Administration (KMA); African Centre of Meteorological Applications for Development (ACMAD); SADC Climate Services Centre; University of Nairobi; North Carolina State University, University of Connecticut and NOAA International desks.