

## **Statement from the Twenty Second Greater Horn of Africa Climate Outlook Forum, 28 – 29 August 2008, Nairobi, Kenya**

### **Summary**

There is increased likelihood of near-normal rainfall over much of the Greater Horn of Africa during the September to December 2008 season. A high likelihood of near normal to above normal rainfall is indicated over much of Burundi; Rwanda; Uganda; western and northern Tanzania; southern, central and western Kenya; central and northeastern Somalia; western and northern Ethiopia as well as central Sudan. Southern and central Tanzania; western Burundi; eastern and northern Kenya; southern and northwestern Somalia; much of Djibouti; Eritrea; eastern and southern Ethiopia; southern and northeastern Sudan and northwestern Uganda have high likelihood of near to below normal rainfall. It should be noted that near normal is close to zero in arid areas and very high in wet areas. Thus the knowledge of baseline seasonal climate information and their importance to the livelihood systems during the period of the forecast is critical. Further heavy and short duration episodic events and flash floods are common in some parts of the sub-region even during the seasons with anticipated below normal rainfall conditions. The current vulnerability of the livelihood systems and mitigation strategies adopted will determine how the September - December 2008 climate outlook will impact on the specific sectors and locations within the region.

Warm than average Sea Surface Temperatures (SSTs) have been observed over much of the Atlantic Ocean and central parts of the Indian Ocean as well as eastern Pacific Ocean while colder than average SSTs were observed over eastern and western Indian Ocean and Arabian Sea. Near Average SSTs dominated much of the central and western Pacific Ocean.

The outlook is relevant only for seasonal time scales and relatively large areas. Local and month-to-month variations may occur. Regular forecast updates will be provided by the National Meteorological and Hydrological Services (NMHSs) and the IGAD Climate Prediction and Applications Centre (ICPAC). The users are therefore strongly advised to keep in contact with their respective National Meteorological and Hydrological Services for interpretation of this outlook, finer details, updates and guidance.

### **The Climate Outlook Forum**

From 28 to 29 September 2008, the Twenty second Greater Horn of Africa Climate Outlook Forum (GHACOF 22) was convened in Nairobi, Kenya by the IGAD Climate Prediction and Applications Centre (ICPAC) in collaboration with the National Meteorological and Hydrological Services (NMHSs) and partners to formulate consensus climate outlook for the September to December 2008 rainfall season over the Greater Horn of Africa (GHA). The forum reviewed the state of the global climate system and its implications on the seasonal climate of the sub-region. Among the principal factors taken into account were the observed and predicted SSTs in the tropical Pacific Ocean and over much of the tropical Atlantic and Indian Oceans. Users from Agriculture and food security, disaster management, health, livestock, water resources and media among other sectors were active participants in the forum. The users formulated the potential implications of the outlook for the September to December 2008 season and developed mitigation strategies for the respective countries and sectors.

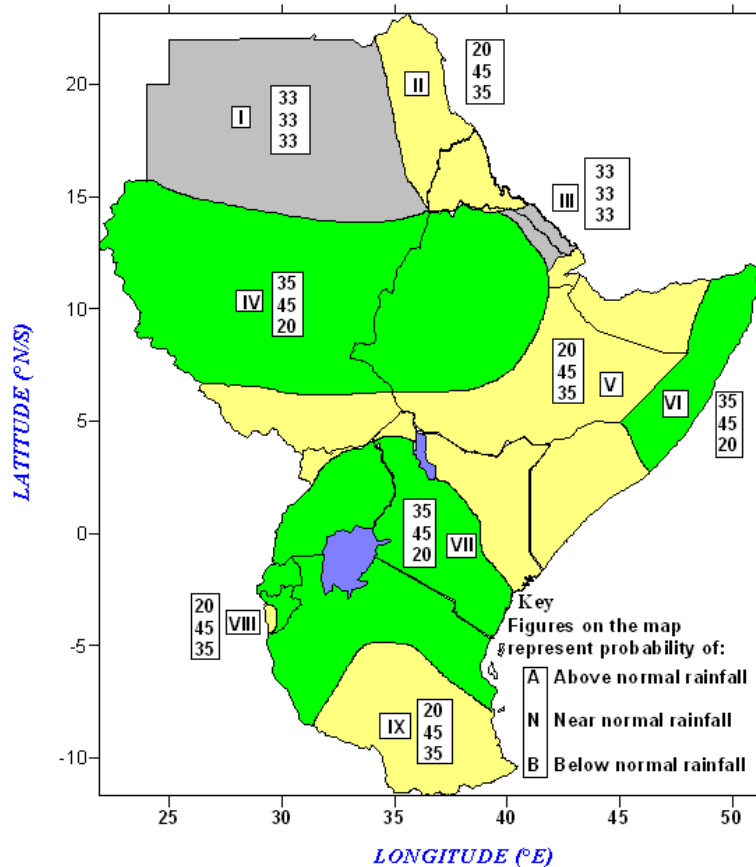
## Methodology

The forum examined the current and expected SST anomalies over the Pacific Ocean as well as the Indian and Atlantic Oceans together with other factors that affect the climate of the sub-region. These factors were assessed using coupled ocean-atmosphere and Regional Dynamical Climate models as well as empirical statistical models and expert interpretation. 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 (see Map). 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.

## Outlook

September to December constitutes an important rainfall season over much of the Greater Horn of Africa sub-region. The rainfall outlook for each zone within this sub-region is given below.



**Greater Horn of Africa Consensus Climate Outlook for September to December 2008**

- Zone I:** Climatology is indicated over northern Sudan.
- Zone II:** Increased likelihood of near normal to below-normal rainfall over northeastern Sudan; and much of Eritrea.
- Zone III:** Climatology is indicated over southern Eritrea and extreme northeastern Ethiopia.
- Zone IV:** Increased likelihood of near normal to above normal rainfall over central Sudan; as well as western and northern Ethiopia.
- Zone V:** increased likelihood of near to below normal rainfall over much of Djibouti; northern western and southern Somalia; eastern and northern Kenya; eastern and southern Ethiopia; southern Sudan; and northwestern Uganda.
- Zone VI:** Increased likelihood of near normal to above normal rainfall over central and northeastern Somalia.
- Zone VII:** Increased likelihood of near normal to above normal rainfall over much of Burundi; Rwanda; Uganda; western, central and southern Kenya as well as northern and western Tanzania.
- Zone VIII:** Increased likelihood of near to below normal rainfall over western Burundi.
- Zone IX:** Increased likelihood of near to below normal rainfall over southern and central Tanzania.

**Note:**

*The numbers for each zone indicate the probabilities (chances of occurrence) 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 the near normal and the bottom number for the below-normal category. For example, in case of central and southern Tanzania (zone IX), 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 emphasized that boundaries between zones should be considered as transition areas*

**Contributors**

Contributors to this consensus climate outlook included representatives of the Meteorological Services from ten GHA countries (Insitut Geographique du Burundi; Meteorologie Nationale de Djibouti; Eritrea Meteorological Services; National Meteorological Services Agency of Ethiopia; Kenya Meteorological Department; Rwanda Meteorological Service; Somalia Meteorological services; Sudan Meteorological Authority; Tanzania Meteorological Agency and Uganda Department of Meteorology) and climate scientists and other experts from national, regional and international institutions and organisations such as ICPAC; International Research Institute for Climate and Society (IRI); UK Met Office; ACMAD; and University of Nairobi. Additional inputs were provided by the National Centres for Environmental Prediction/Climate Prediction Centre (NCEP/CPC); and ECMWF.