

STATEMENT FROM THE FORTY-SEVENTH GREATER HORN OF AFRICA CLIMATE OUTLOOK FORUM (GHACOF47) FOR OCTOBER TO DECEMBER 2017 RAINFALL SEASON: 21-22 AUGUST 2017; ZANZIBAR BEACH RESORT, ZANZIBAR, UNITED REPUBLIC OF TANZANIA

Summary

October to December (OND) constitutes an important rainfall season over the equatorial sector of the Greater Horn of Africa (GHA) region. The regional consensus climate outlook for the October to December 2017 season indicates increased chance for above normal rainfall over much of the southern and equatorial sectors. Increased likelihood of near normal to below normal rainfall is indicated over eastern and north-eastern parts of the equatorial and southern parts of the northern sector. There is also increased likelihood of above normal mean temperatures over much of the region. Increased likelihood for below normal mean temperatures is indicated over north-eastern parts of the GHA. Key factors expected to influence the regional climate during the OND 2017 season include the evolution of Sea Surface Temperature (SST) anomalies over the tropical Oceans and anomalies in monsoonal wind circulation. The influence of the ocean processes will be modulated by regional circulation systems, 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 October to December 2017 season progresses. It is likely that episodic rainfall events leading to flash floods might occur even in areas with an increased likelihood of near to below normal rainfall. Also, episodic dry spells may occur in areas with an increased likelihood of above to near normal rainfall. The WMO, in collaboration with Global Climate Centres, will continue to provide the status of global climate including ENSO updates. ICPAC will also provide regular regional climate updates while the National Meteorological and Hydrological Services (NMHSs) will provide downscaled and detailed national and sub-national updates.

The Climate Outlook Forum

The Forty Seventh Greater Horn of Africa Climate Outlook Forum (GHACOF47) was convened from 21-22 August 2017 at the Zanzibar Beach Resort, Zanzibar, United Republic of Tanzania by the IGAD Climate Prediction and Applications Centre (ICPAC) in collaboration with WMO, AfDB, UNDP, USAID, DFID and other partners to formulate a consensus regional climate outlook for the October to December 2017 rainfall season over the region. The GHA region comprises Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania and Uganda. GHACOF47 was preceded by a training workshop for the National climate scientists that was held from 14 to 19 August 2017 in Zanzibar, United Republic of Tanzania to develop national and regional climate outlooks for the season.

Guidance and valuable forecast inputs were drawn from a wide range of sources including the World Meteorological Organisation's Global Producing Centres (WMO-GPCs), Met Office, the International Research Institute for Climate and Society (IRI), African Centre of Meteorological Applications (ACMAD), the US Geological Survey (USGS) and the National Meteorological and Hydrological Services (NMHSs) of the Greater Horn of Africa.

The Forum brought together climate information service providers and users from key socio-economic sectors, governmental and non-governmental organisations, decision-makers, climate scientists, civil society stakeholders, among others. It reviewed the implications of the factors expected to influence the evolution of the regional climate during the OND 2017 rainfall season, including Sea Surface Temperature (SST) anomalies over the tropical oceans, and the predicted near neutral phase of the Indian Ocean Dipole (IOD) mode, and neutral ENSO conditions over the equatorial Pacific Ocean. The influence of these large-scale processes could be modulated by regional circulation systems, topography and large inland water bodies.

Users of climate services who participated in GHACOF 47 were drawn from various sectors including agriculture and food security, disaster risk management, livestock, water resources, health and media as well as non-governmental organisations and development partners. The participants provided sector-specific assessment of the usefulness of the previous regional consensus climate outlook and formulated sector specific mitigation strategies based on the consensus regional climate outlook for the October to December 2017 rainfall season.

Methodology

The forum examined the prevailing and expected ocean-atmosphere processes as well as the evolving large scale and regional scale circulation systems that have significant implications on climate over the GHA during October to December 2017. Key among these processes were current and evolving Sea Surface Temperature (SST) anomalies over global oceans, and the high probability for neutral ENSO and Indian Ocean Dipole (IOD) phases through the October to December 2017 period. Implications of these systems on regional rainfall were integrated during a Pre-COF 47 Training Workshop. The Pre-COF 47 workshop also considered the global forecasts from World Meteorological Organization/ Global Producing Centres (WMO/GPCs) as inputs to the consensus regional climate outlook for the October to December 2017 season.

Consensus Climate Outlook for October to December 2017

The consensus rainfall and temperature outlooks for the GHA region are given in Figures 1 and 2 below.

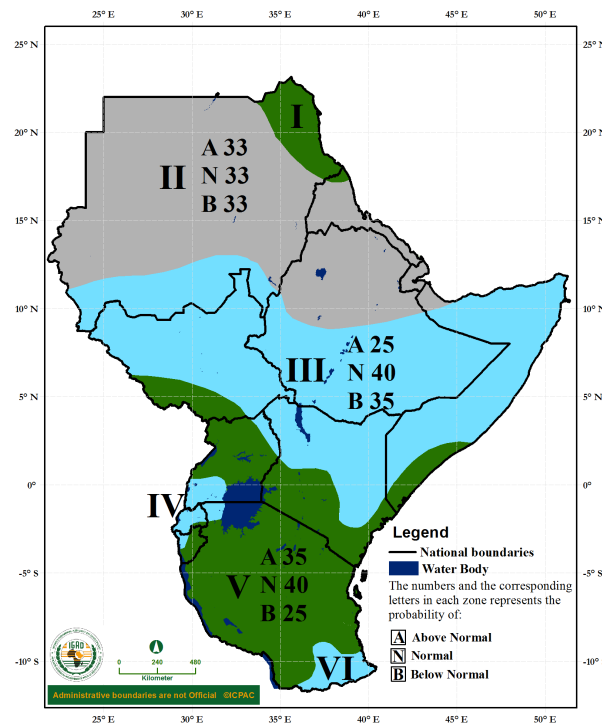


Figure 1: Greater Horn of Africa Consensus rainfall Outlook for the October to December 2017 rainfall season

- Zone I:** Increased chance for above normal rainfall
- Zone II:** Usually dry
- Zone III:** Increased likelihood of near to below normal rainfall
- Zone IV:** Increased chance for near to below normal rainfall
- Zone V:** Increased chance for above normal rainfall
- Zone VI:** Increased likelihood of near to below normal rainfall

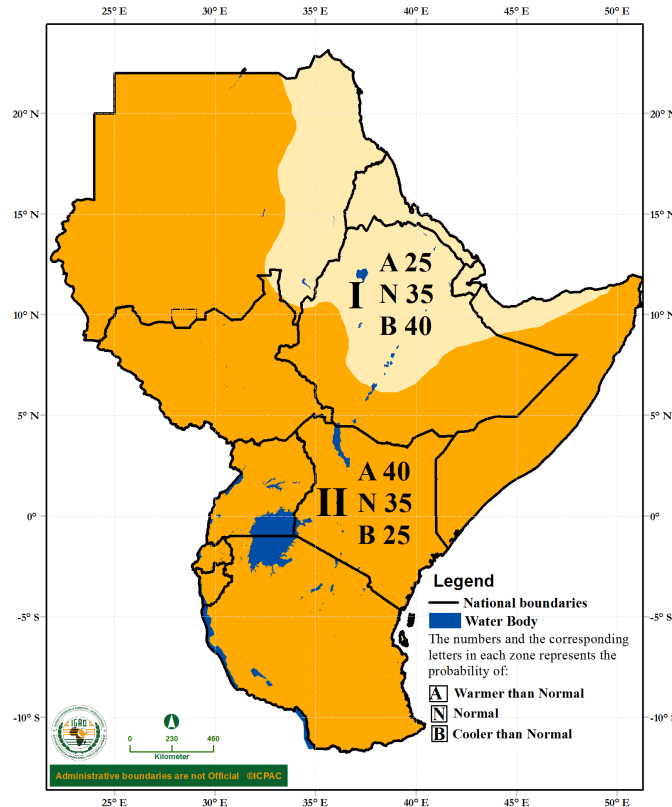


Figure 2: GHA Consensus Mean Temperature Outlook for October to December 2017

Zone I: Increased likelihood of below (cooler) normal mean temperatures.

Zone II: Increased likelihood of above (warmer) normal mean temperatures.

Note:

The numbers for each zone indicate the probabilities of rainfall and mean temperature in each of the three categories, above-, near-, and below-normal. For example, in Zone III, Figure 1, there is a 25% probability of rainfall occurring in the above-normal category, a 40% probability of rainfall occurring in the near-normal category, and a 35% probability of rainfall occurring in the below-normal category. In Zone II, Figure 2, there is a 40% probability of mean temperature occurring in the above-normal category, a 35% probability of mean temperature occurring in the near-normal category, and a 25% probability of mean temperature occurring in the below-normal category. The boundaries between zones should be considered as transitional areas.

Contributors

The Forty Seventh Greater Horn of Africa Climate Outlook Forum (GHACOF 47) was supported by AfDB, UNDP, USAID, UNISDR, ACMAD and DFID. Contributors to the consensus regional climate outlook included representatives of the National Meteorological and Hydrological Services from the GHA countries (namely: Institut Geographique du Burundi; Meteorologie Nationale de Djibouti; National Meteorological Agency of Ethiopia; Kenya Meteorological Department; Rwanda Meteorological Agency; South Sudan Meteorological Service; Sudan Meteorological Authority; Somalia Meteorological Service, Tanzania Meteorological Agency and Uganda National Meteorological Authority) and climate scientists as well as other experts from national, regional and international institutions and organizations: ICPAC, ACMAD, USGS, Met Office, WMO Global Producing Centres (GPCs), and IRI.