

FAO's Key Messages Based on the Greater Horn of Africa Climate Outlook Forum (GHACOF 41) - Kunduchi Beach Hotel, Dar es Salaam, Tanzania

The Greater Horn of Africa Climate Outlook Forum (GHACOF) is a regional interactive forum that brings together climate scientists, climate information users, experts, decision-makers from critical socio-economic sectors, governmental and non-governmental organisations, civil society to develop a regional climate outlook consensus for rainfall season and to formulate mitigation strategies to the implications of seasonal forecast on climate sensitive sectors of the region. The consensus outlooks are produced three times in a year for the periods of March-May, June-August and September-December.

The forty first GHACOF was convened from 24-25th August 2015 at Kunduchi Beach Hotel, Dar es Salaam, Tanzania by the IGAD Climate Prediction and Applications Centre (ICPAC) in collaboration with the World Meteorological Organization (WMO), National Meteorological and Hydrological Services (NMHSs) and Agencies of Djibouti; Eritrea, Ethiopia; Kenya; Somalia; Uganda; South Sudan; Sudan; Burundi and Tanzania. The forum used valuable inputs from the World Meteorological Organisation's Global Producing Centres (WMO-GPCs); APEC Climate Centre; Korea Meteorological Administration (KMA); UK-Met Office; National Oceanic and Atmospheric Administration (NOAA); National Meteorological and Hydrological Services (NMHSs) of the Greater Horn of Africa; UNESCO; and Western Indian Ocean Marine Sciences Association (WIOMSA).

Over 150 scientists and climate information users from the regions participated in the development of the seasonal forecast for September – December and a review of the implications. This September-December rainfall forecast is very critical in the cropping calendar and constitutes an important rainfall season over the equatorial sector of the Greater Horn of Africa (GHA) region.

An El Niño event is predicted to have strong influence on this seasonal outlook and agriculture performance. It was in view of this that the IGAD Climate Prediction and Applications Centre and partners organized the 41st GHACOF to provide climate early warning for early action regarding the 2015 El Niño impacts.

Climate outlook for South Sudan 2015:

Based on experts' opinions and judgments, the September-December 2015 rainfall forecast for South Sudan are as follows:

- There are 35-45 percent chances of receiving normal-to-above-normal rainfall in Southern and South-Eastern parts of South Sudan (Zone II: areas of WES, CES, LS, EES and JS);
- 2) In Northern parts of South Sudan, there is 40-35 percent chances of normal-to-belownormal rainfall (**Zone III**: areas of WBGS, WS, NBGS, Unity, UpperNile State)

Translating this forecast in terms of rainfall amount, areas in Zone II (especially, Kajo-keji, Morobo, Yei, Juba, Lainya, Magwi, most parts of WES and Pibor) are forecast to receive a total amount of 301-600 mm rainfall. Whereas, most of the areas of Zone III (WBGS, WS, NBGS, Unity, Upper Nile State) forecast to receive total amount of 101-300 mm of rainfall during September-December period.



Compared to long-term average rainfall for the period of September-December, counties like Maridi, Yei, Morobo, Kajo-keji, Juba, Mundri, Yirol, Terekeka, Ikwoto, Torit, Budi, Greater Kapoeta, Pibor and Pochalla are anticipated to receive 20-50 mm more rains than long-term average for period of September-December 2015. The rest of the parts of South Sudan will likely receive either normal amount or less than their long term average for the period of September-December 2015.

This forecast or outlook is relevant for seasonal time scales and relatively large areas. It might be possible to experience local and month-to-month variations in rainfall performance as the season progresses. Episodic weather events leading to flash floods might occur in areas with increased likelihood of near normal to above normal rainfall (CES, LS, EES and JS). Also dry spells may occur in areas with increased likelihood of below normal to near normal rainfall (WBGS,WS, NBGS, Unity, and Upper Nile State).



Fig.1 41st Greater Horn of Africa Climate Outlook Forum Consensus climate outlook for Sept-Dec 2015

Fig.2 South Sudan Consensus climate outlook for Sept-Dec 2015

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

