# IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

## 10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE TWENTY SECOND DEKAD (1 – 10 AUGUST) OF 2016 AND CLIMATE OUTLOOK FOR THE TWENTY FOURTH DEKAD (21 – 31 AUGUST) OF 2016

## 1.0 Highlights

- Wet rainfall conditions were mainly observed over western, south western and central parts of the northern sector, as well as western and north-western parts of the equatorial sector of the Greater Horn of Africa (GHA) during the twenty second dekad (1-10 August) of 2016;
- The observed rainfall conditions during the twenty second dekad (1-10 August) of 2016 resulted in improved pasture and foliage, and crop conditions; replenishment of water resources; flooding and increase in water related diseases.
- Wet conditions are likely to be experienced in regions covering the western and central parts of the northern sector of Greater Horn of Africa (GHA) during the twenty fourth dekad (21-31 August) of 2016;

## 2.0 Introduction

In this bulletin, the climatic conditions observed during the twenty second dekad (1-10 August) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the twenty fourth dekad (21-31 August) of 2016 is also provided.

## 3.0 Observed rainfall situation during the twenty second dekad (1–10 August) of 2016

Figure 1 shows the spatial pattern of observed rainfall over the Greater Horn of Africa (GHA) during the twenty second dekad (1-10 August) of 2016 while Figure 2 shows the rainfall severity index for the same period.

During the twenty second dekad (1-10 August) of 2016, southern parts of Sudan; south western and central Eritrea; much of western, north western and central Ethiopia; western and north eastern South Sudan; western and north western parts of Uganda; and western parts of Kenya recorded rainfall amounts of between 10 mm to 100 mm (Figure 1).

The rainfall received translated to average or below average performance for most of these areas except for central and south central Sudan; central parts of Eritrea; parts of Djibouti; south western parts of South Sudan; and over western parts of Rwanda which indicated above average rainfall performance (Figure 2).
Much of the rest of the GHA recorded less than 10 mm of rainfall, which resulted into average and generally dry rainfall conditions (Figure 2).



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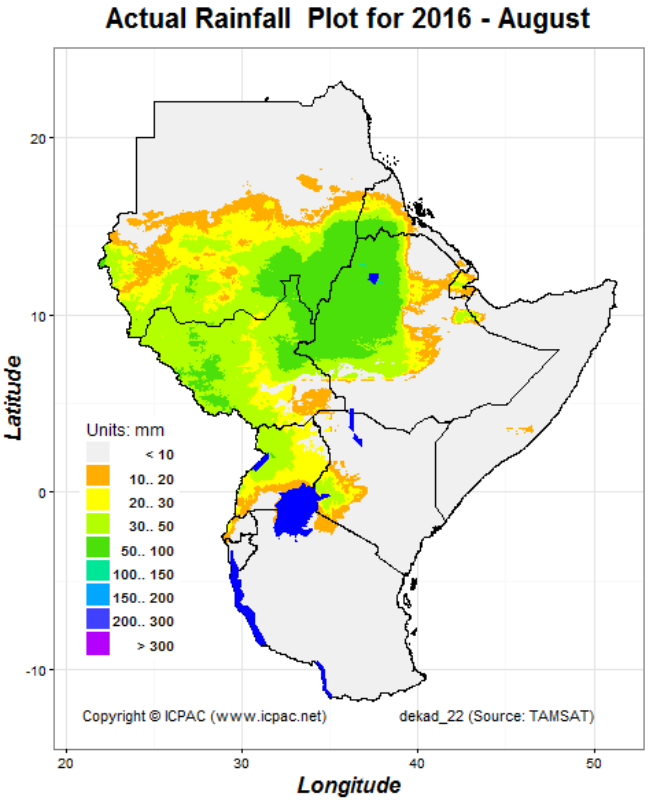


**Figure 1: Spatial distribution of observed rainfall during the twenty second dekad (1–10 August) of 2016**

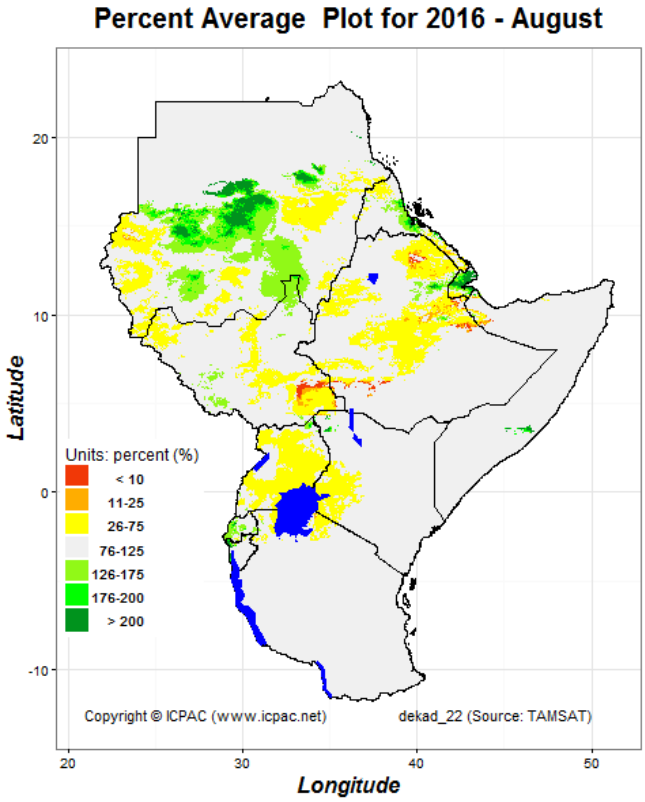


**Figure 2: Percent of average rainfall for the twenty second dekad (1–10 August) of 2016**



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## 4.0 Assessment of current rainfall performance

Figure 3 shows the cumulative dekadal rainfall performance since January 2016 over some selected rainfall stations over the GHA. Near normal to above normal rainfall conditions have been observed over western and central parts of the northern sector and western parts of the equatorial sector of the GHA (Figure 3a, 3b and 3c).

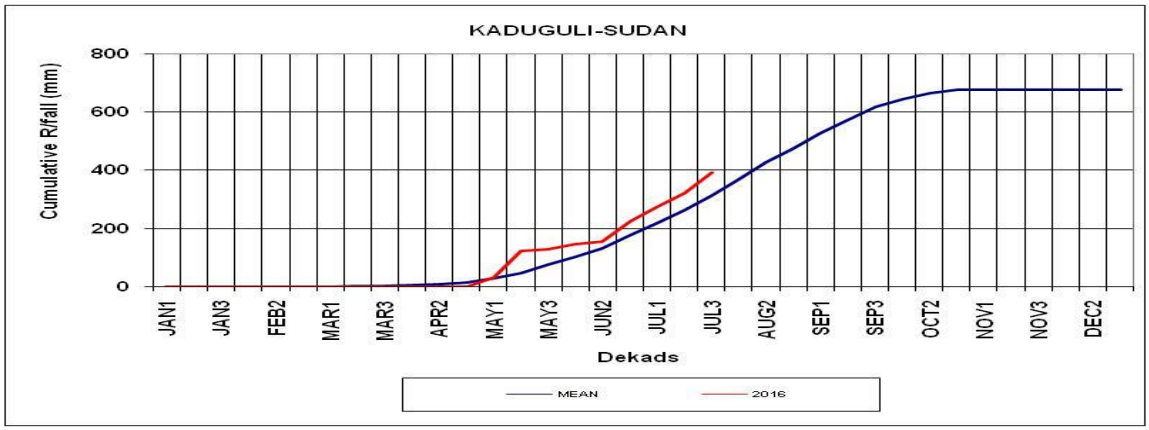


**Figure 3a: Cumulative rainfall series for Kaduguli**

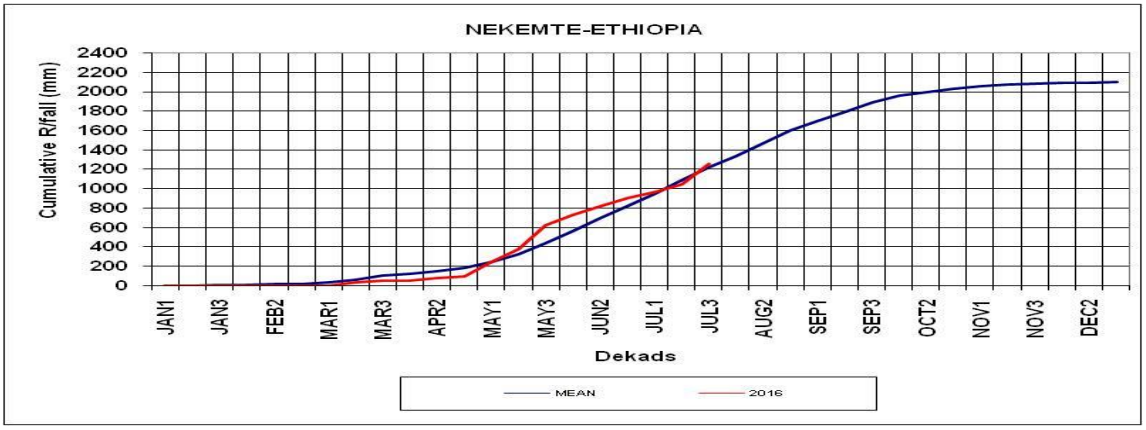


**Figure 3b: Cumulative rainfall series for Nekemte**

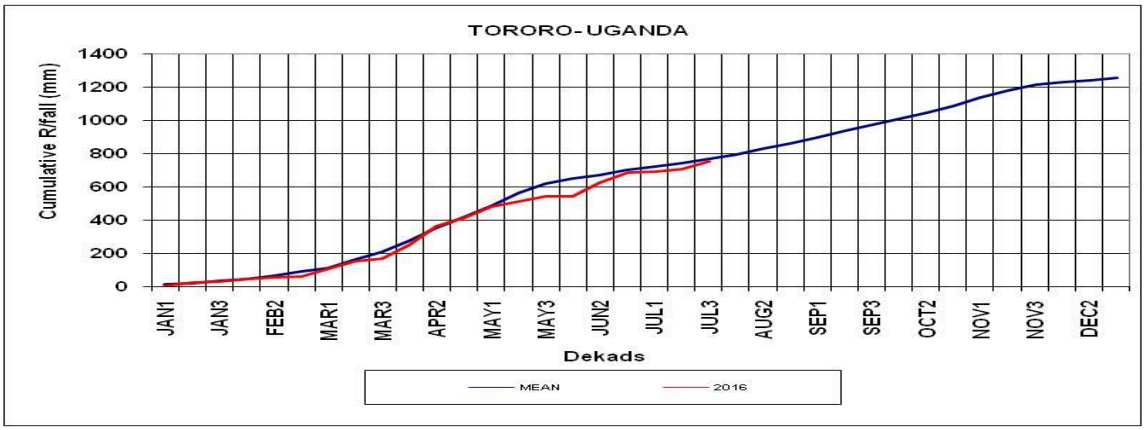


**Figure 3c: Cumulative rainfall series for Tororo**



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## 5.0 Impacts on socio-economic sectors

The socio-economic impacts associated with the observed rainfall conditions are highlighted below:

## 5.1 Vegetation condition indicators

The Normalized Difference Vegetation Index (NDVI) anomaly from the average for the period between 3rd and 10th August 2016 in Figure 4 indicates improvement in vegetation conditions over northern parts of the southern regions of Sudan; over southern parts of Sudan extending to the northern and southern eastern parts of South Sudan; eastern parts of Ethiopia; north eastern parts of Uganda; north western and central parts of Kenya; and over few areas around central and south eastern Tanzania. Southern parts of Sudan; south western Eritrea; north western Ethiopia; south eastern Somalia; coastal Kenya and parts of eastern Tanzania indicated deterioration in vegetative conditions. The rest of the GHA showed little or no change in vegetation conditions.

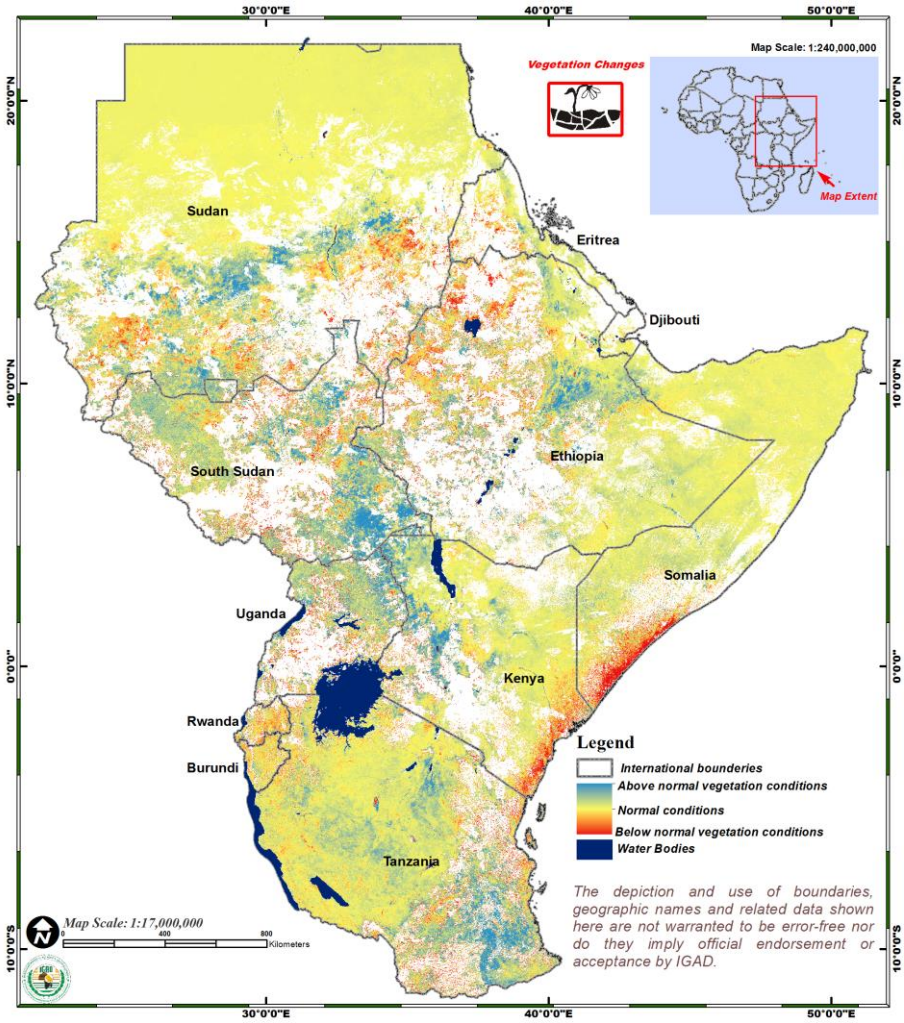


**Figure 4: NDVI anomaly for the period 3-10 August 2016**



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## 5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during the twenty second dekad (1-10 August) of 2016 were associated with the following impacts:

- Improved water availability leading to replenishment of reservoirs and water pans.
- Improved pasture and foliage across several regions of GHA leading to good prospects for livestock and crop performance over some regions.
- Flooding in some parts leading to disruption of livelihoods and destruction of property.
- Increase in water related diseases.

## 6.0 Rainfall outlook

The rainfall outlook for the twenty fourth dekad (21-31 July) of 2016 in Figure 5 indicates the likelihood of near normal to above normal rainfall conditions in regions indicated by Zone II covering southern parts of Sudan; western and central Ethiopia; and the larger South Sudan. Zone III covering much of Eritrea; much of Djibouti; central portion of Sudan, eastern parts of Ethiopia, north western Kenya and central and eastern Uganda have likelihood to experience near normal to below normal rainfall conditions. The Zones I and IV are likely to remain generally dry during the 21st dekad of 2016.

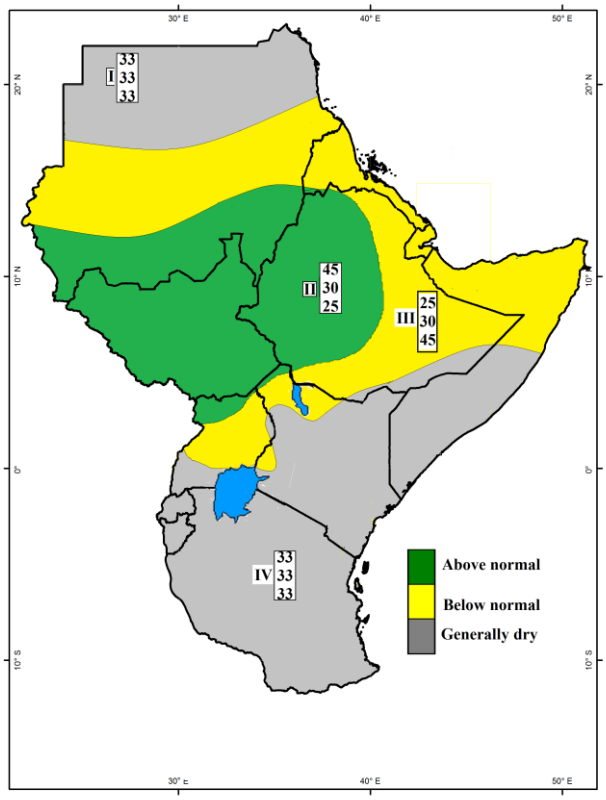


**Figure 5: Climate outlook for the twenty fourth dekad (21 –31 August) of 2016**



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