



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

### OUTLOOK FOR THE TWENTY SIXTH DEKAD (11 – 20 SEPTEMBER) OF 2016

#### 1.0 Introduction

In this bulletin, the climatic conditions observed during the twenty fourth dekad (21-31 August) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the twenty sixth dekad (11-20 September) of 2016 is also provided.

#### 2.0 Highlights

Wet **rainfall conditions** were observed in areas around 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 fourth dekad (21-31 August) of 2016;

The observed rainfall conditions during the twenty fourth dekad (21-31 August) of 2016 is associated with depressed rainfall conditions which has **likely effect** of reduction in water, pasture and foliage and crop conditions. While a few places indicated improvement in water, and pasture conditions

The twenty sixth dekad (11-20 September) of 2016 is **likely to present** wet conditions in regions covering the western and central parts of the northern sector and western parts of the equatorial sector of Greater Horn of Africa (GHA);

#### 3.0 Observed rainfall situation during the twenty fourth dekad (21–31 August) of 2016

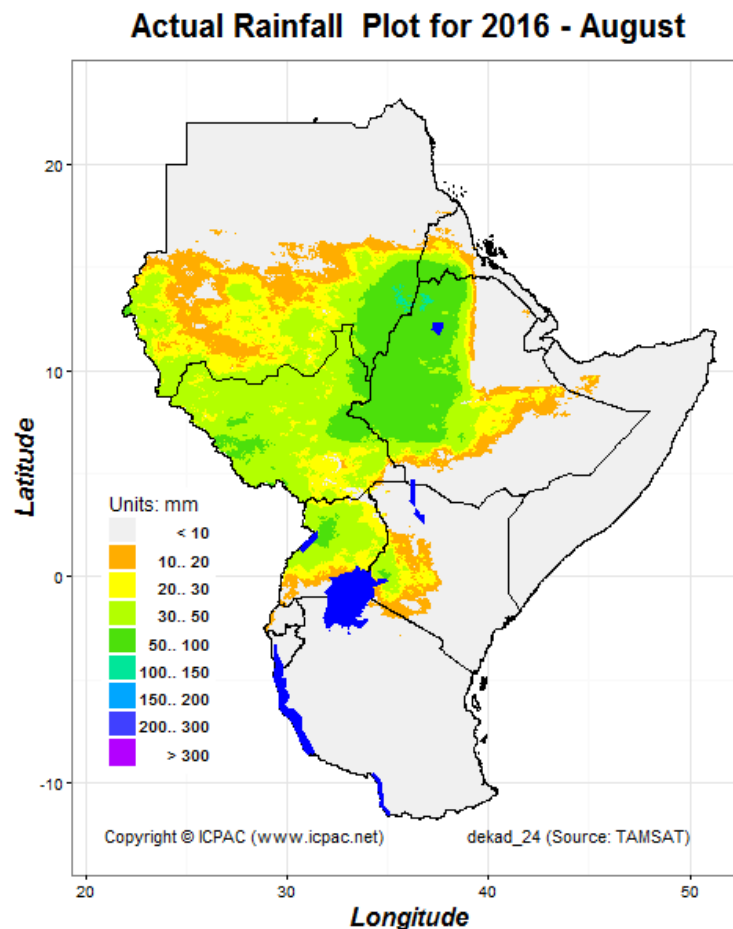
Figure 1 shows the rainfall distribution, Figure 2a shows the percent of the average rainfall, and Figure 2b shows the difference from the average rainfall over the Greater Horn of Africa (GHA) during the twenty fourth dekad (21-31 August) of 2016.

## Rainfall Distribution and Severity

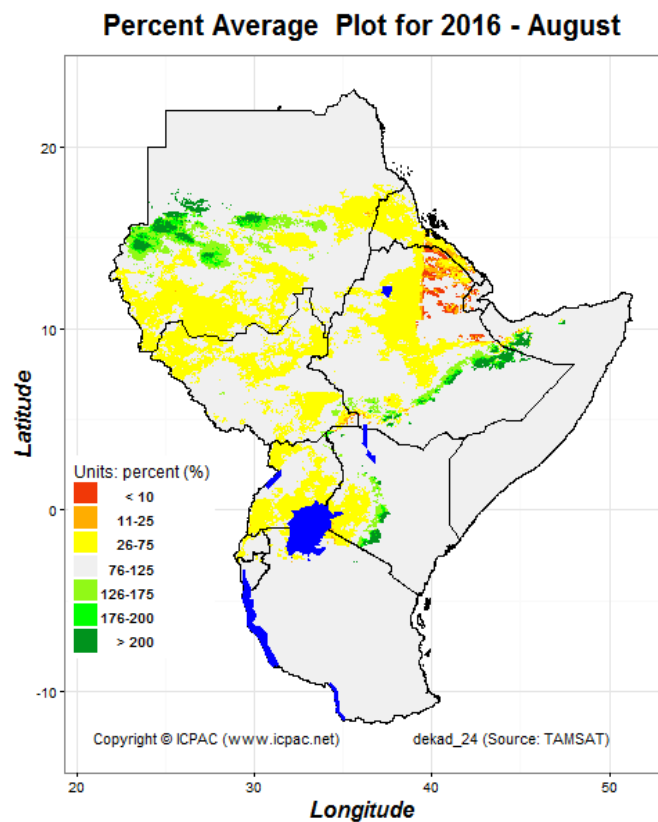
During the twenty fourth dekad (21-31 August) of 2016, southern parts of Sudan; south western Eritrea; much of western, north western and central Ethiopia; much of South Sudan; northern and central Uganda; and western part of Kenya recorded rainfall amounts of between 10 mm to 150 mm (Figure 1). Rainfall amounts of between 50mm to 150mm was recorded over south eastern Sudan; south western Eritrea; western Ethiopia; parts of eastern and western South Sudan; western Uganda; and western Kenya

The rainfall received translated to average or below average rainfall performance for most of these areas except in parts of western and central Sudan for central and south central Sudan; southern margins of central Ethiopia; and eastern margins of western Kenya which indicated above average rainfall performance (Figure 2a and 2b).

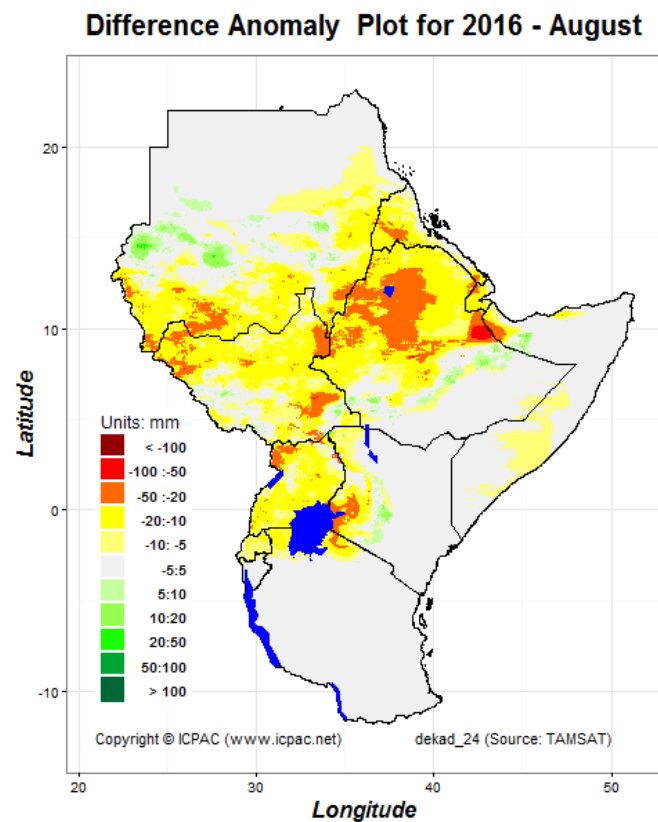
Much of the rest of the GHA recorded less than 10 mm of rainfall (Figure 1), which resulted into average or generally dry rainfall conditions (Figure 2a and 2b).



**Figure 1: Rainfall distribution during the twenty fourth dekad (21–31 August) of 2016.** (Source TAMSAT)



**Figure 2a:** Percent of average rainfall for the twenty fourth dekad (21–31 August) of 2016 (Source TAMSAT)



**Figure 2b:** Difference from average rainfall for the twenty fourth dekad (21–31 August) of 2016 (Source TAMSAT)

## 4.0 Impacts on socio-economic sectors

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

### 4.1 Vegetation condition indicators

#### Normalized Difference Vegetation Index Anomaly

The Normalized Difference Vegetation Index (NDVI) anomaly from the average for the period between 27<sup>th</sup> August and 3<sup>rd</sup> September 2016 in Figure 3 indicates improvement in vegetation conditions over upper part of the southern regions of Sudan; over western and eastern parts of South Sudan; central and north eastern parts of Ethiopia; north western Uganda; north western and central parts of Kenya; and over areas around central and southern Tanzania. Southern and south eastern parts of Sudan; south western Eritrea; north western and south western Ethiopia; over much of Uganda; south eastern Somalia; western and coastal Kenya; parts of eastern Rwanda; north western and northern coast of Tanzania indicated deterioration in vegetative conditions. The rest of the GHA showed little or no change in vegetation conditions.

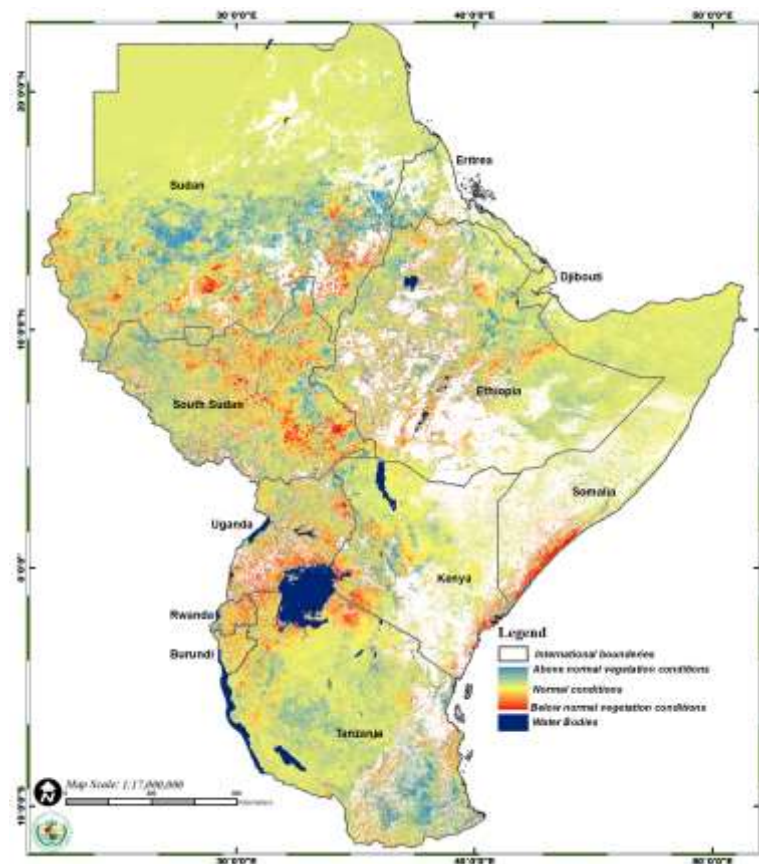


Figure 3: NDVI anomaly for the period 27<sup>th</sup> August and 3<sup>rd</sup> September 2016

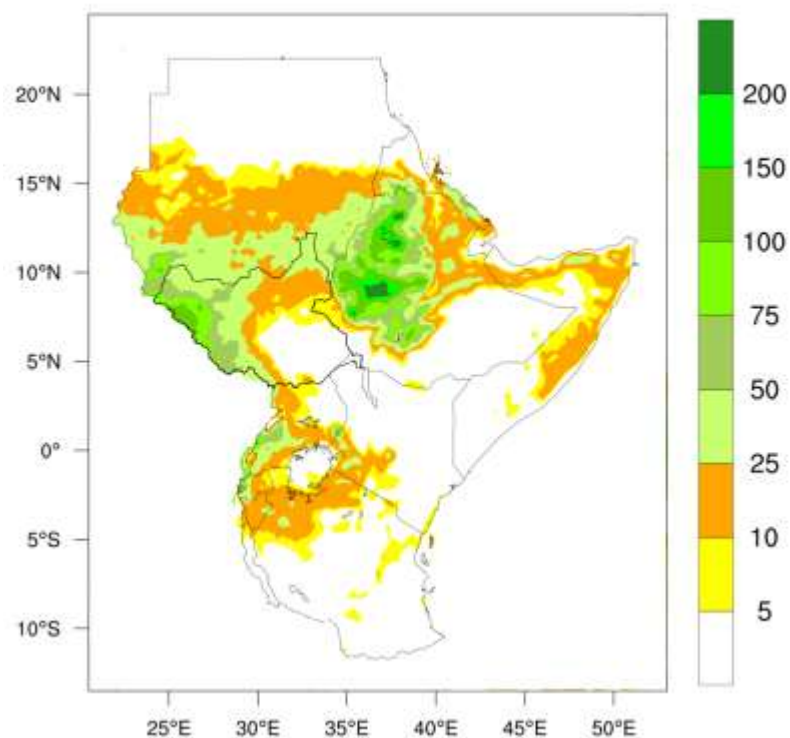
## 4.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during the twenty fourth dekad (11-20 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.
- Increase in water related diseases.

## 5.0 Climate outlook

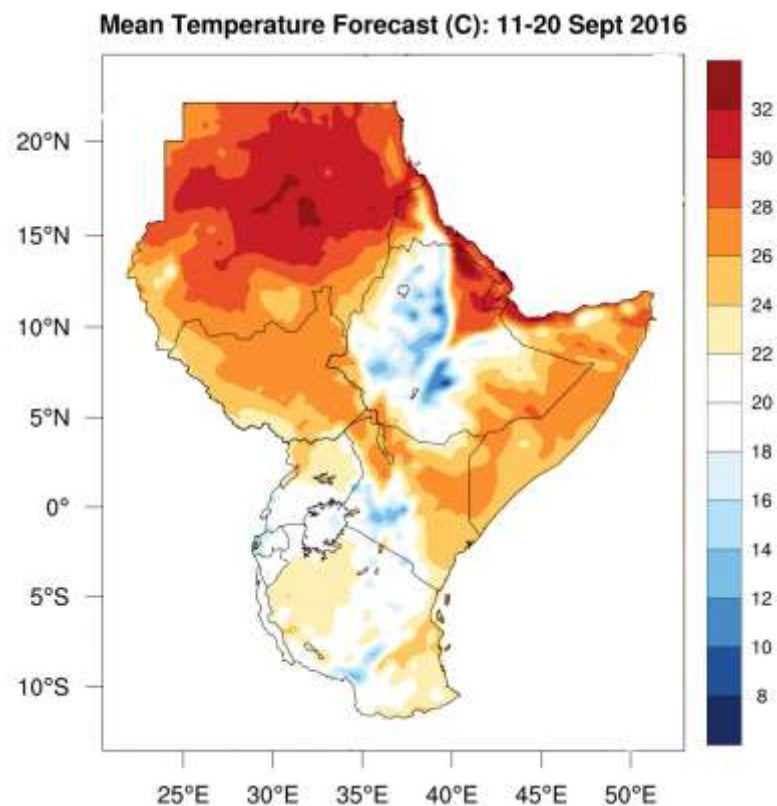
Rainfall Forecast (mm): 11-20 Sept 2016



### Rainfall outlook

The rainfall outlook during the twenty sixth dekad (11-20 September) of 2016 in Figure 4 indicates that wet conditions are likely to be experienced in southern parts of Sudan; south western Eritrea; western and central Ethiopia; western and northern South Sudan; over parts of western Uganda; and over parts of western Kenya. The rest of the Greater Horn of Africa Region is likely to record less wet conditions or generally dry conditions.

**Figure 4: Climate outlook for the twenty sixth dekad (11 –20 September) of 2016 (Generated using WRF Model).**



**Figure 5: Climate outlook for the twenty sixth dekad (11 –20 September) of 2016(Generated using WRF Model).**

### Temperature outlook

The average temperature for the twenty sixth dekad (11-20 September) of 2016 in Figure 5 indicates the likelihood of cooler temperature in central and western Ethiopia; over southern Uganda; Rwanda; Burundi; western, central and southern Kenya; and central and south western Tanzania. Warmer conditions are expected over much of Sudan; north-eastern Ethiopia; north western and southern Eritrea; much of Djibouti; over parts of South Sudan; much of Somali; and northern and eastern parts of Kenya

For more information contact  
 ICPAC P.O. Box 10304, 00100 Nairobi,  
 KENYA;  
 Tel: +254-020-3514426  
 E-mail: [director@icpac.net](mailto:director@icpac.net)  
**Website: [www.icpac.net](http://www.icpac.net)**