



## 10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE TWENTY SEVENTH DEKAD (21– 30 SEPTEMBER) OF 2016 AND CLIMATE

### OUTLOOK FOR THE TWENTY NINTH DEKAD (11–20 OCTOBER) OF 2016

#### 1.0 Introduction

In this bulletin, the climatic conditions observed during the twenty seventh dekad (21-30 September) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the twenty ninth dekad (11-20 October) of 2016 is also provided.

#### 2.0 Highlights

**Rainfall** was recorded in areas around western, south western and south-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 seventh dekad (21-30 September) of 2016;

The observed rainfall conditions was generally **depressed** during the twenty seventh dekad (21-30 September) of 2016 resulting to drier conditions with effect of reduction in water, pasture and foliage, and crop conditions.

The twenty ninth dekad (11-20 October) of 2016 is likely to present rainfall conditions in few areas in the southern parts of the northern sector and in the western and north eastern part of the equatorial sector of Greater Horn of Africa (GHA);

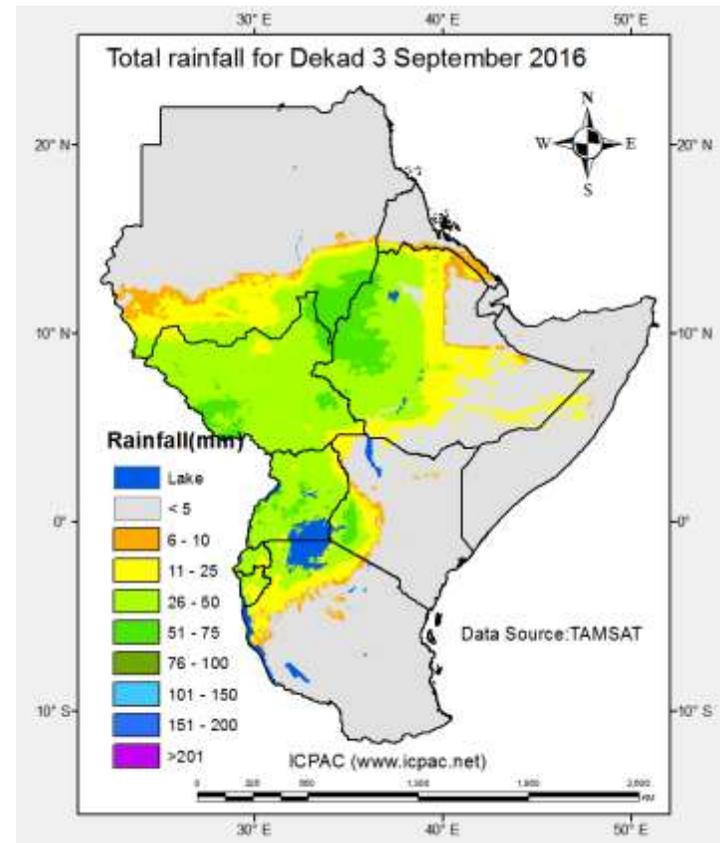
#### 3.0 Observed rainfall situation during the twenty seventh dekad (11-20 September) of 2016

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 seventh dekad (21-30 September) of 2016.

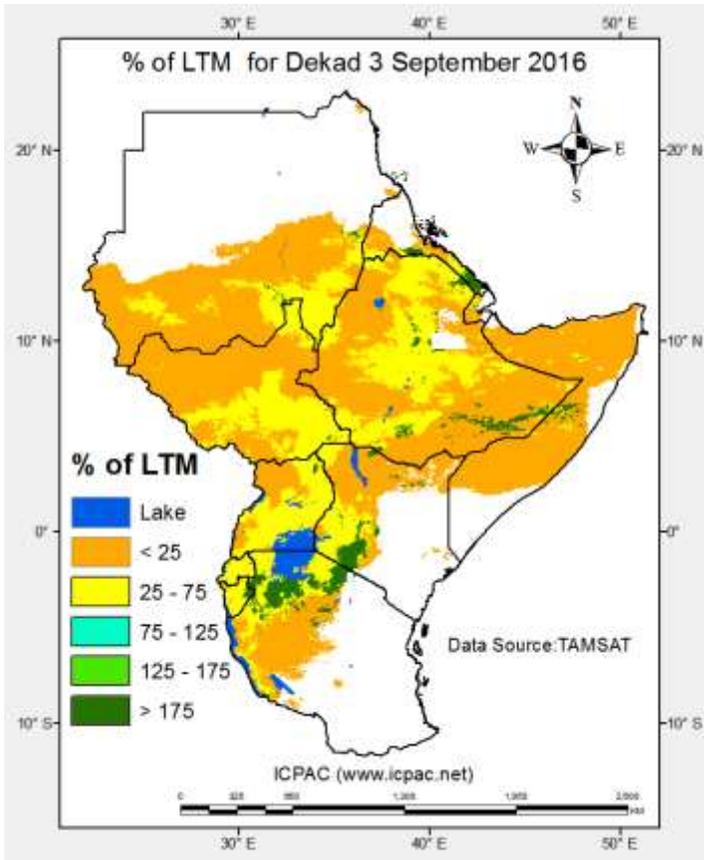
## Rainfall Distribution and Severity

During the twenty seventh dekad (21-30 September) of 2016, much of the GHA recorded less than 5mm of rainfall, however rainfall amounts of between 6mm and 75mm was recorded over southern part of Sudan extending to western and central Ethiopia; over much of South Sudan; Uganda, Rwanda, and Burundi; over western parts of Kenya and north western part of Tanzania. Much of northern and central Sudan; north western and central Eritrea; much of Djibouti; north eastern and southern Ethiopia; much of Somalia; most parts of Kenya excluding the western part; and much of Tanzania excluding the north eastern part recorded rainfall amount less than 5mm. (Figure 1).

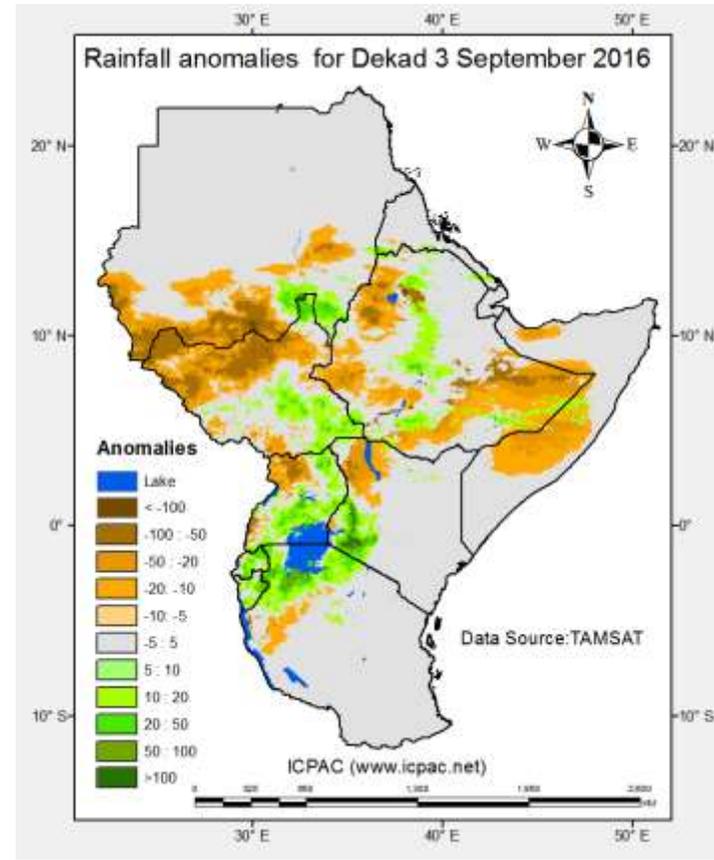
The rainfall received translated to below average or suppressed rainfall performance for most of these areas except in isolated areas around south eastern Sudan; central and southern Ethiopia; eastern Burundi; western Kenya; and north western Tanzania, which indicated above average rainfall performance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



**Figure 1: Rainfall distribution during the twenty seventh dekad (11–20 September) of 2016. (Source TAMSAT)**



**Figure 2a: Percent of average rainfall for the twenty seventh dekad (11–20 September) of 2016 (Source TAMSAT)**



**Figure 2b: Difference from average rainfall for the twenty seventh dekad (11–20 September) 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 20<sup>th</sup> and 27<sup>th</sup> September 2016 in Figure 3 indicates deteriorated vegetative condition in south western and south eastern parts of Sudan; over north eastern and central and south eastern South Sudan; over much of southern margins of central Ethiopia; over southern and western part of Uganda; western and coastal Kenya; south eastern Somalia; over much of Rwanda; northern parts of Burundi; and over north western and coastal areas of Tanzania. Improvement in vegetation conditions was observed mostly over northern part of the southern regions of Sudan; over south western parts of Eritrea; over eastern parts of South Sudan; and over western and southern parts of Tanzania. The rest of the GHA showed little or no change in vegetation conditions during this period.

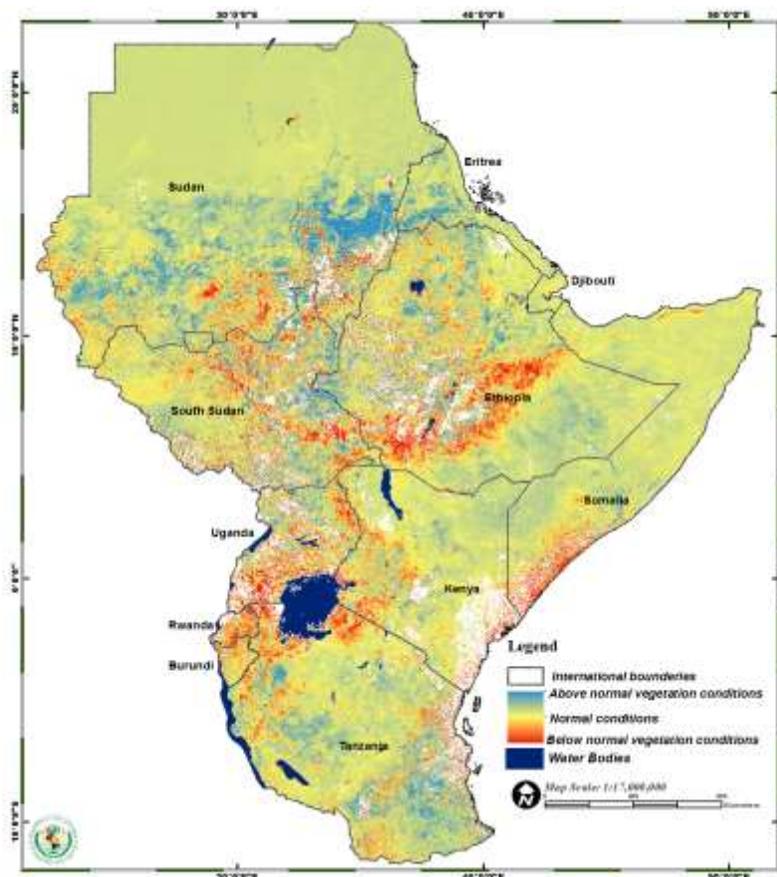


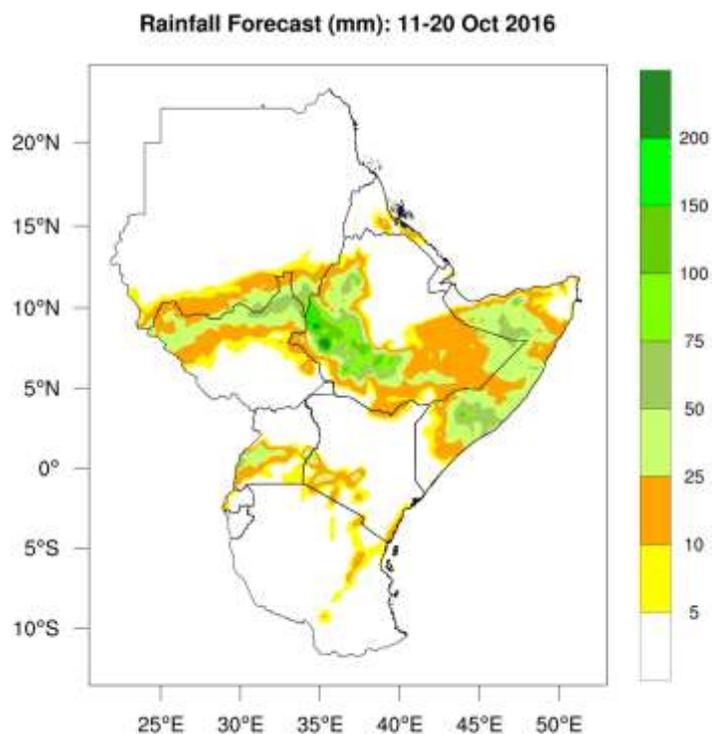
Figure 3: NDVI anomaly for the period 20<sup>th</sup> and 27<sup>th</sup> September 2016

## 4.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during the twenty seventh dekad (21-30 September) of 2016 were associated with the following impacts:

- Several areas experienced dry conditions leading to deterioration in water and pasture conditions, and poor prospects of crop performance.
- Some areas have had increase in the prevalence of water related diseases.
- A few areas have experienced improved water availability leading to replenishment of reservoirs and water pans.

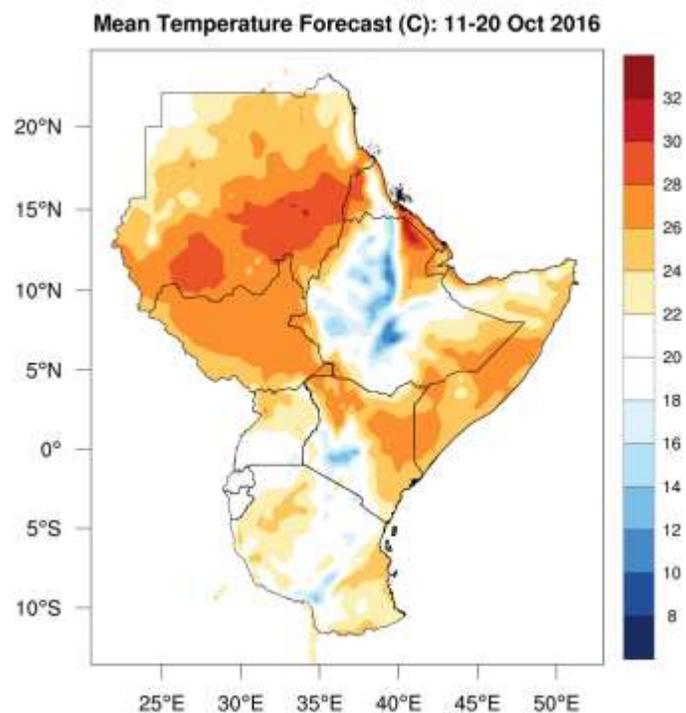
## 5.0 Climate outlook



**Figure 4: Climate outlook for the twenty ninth dekad (11 –20 October) of 2016**

### Rainfall outlook

The rainfall outlook for the twenty ninth dekad (11-20 October) of 2016 in Figure 4 indicates that rainfall is likely to be experienced in extreme southern parts of Sudan extending to northern part of South Sudan; central part of Eritrea; western, southern and eastern part Ethiopia extending to northern and central Somalia; over south western and southern parts Uganda; and in western and central parts of Kenya. The rest of the Greater Horn of Africa Region is likely to experience generally dry conditions.



**Figure 5: Climate outlook for the twenty ninth dekad (11 –20 October) of 2016**

### Temperature outlook

The average temperature outlook for the twenty ninth dekad (11-20 October) of 2016 in Figure 5 indicates the likelihood of warm mean temperature conditions over much of the GHA area except for central and western Ethiopia; western and central Kenya; and central and south western part of Tanzania, which are likely to record cool temperatures.

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