



10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE TWENTY NINTH DEKAD (11– 20 OCTOBER) OF 2016 AND CLIMATE OUTLOOK FOR THE THIRTY FIRST DEKAD (1–10 NOVEMBER) OF 2016

1.0 Introduction

In this bulletin, the climatic conditions observed during the twenty ninth dekad (11-20 October) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the thirty first dekad (1-10 November) of 2016 is also provided.

For referencing within this bulletin, the Greater Horn of Africa (GHA) is generally subdivided into three sub-sectors: The equatorial sector lying approximately between -5o and 5o latitude, with the northern and southern sectors occupying the rest of the northern and southern parts of the region respectively

2.0 Highlights

Significant amount of **Rainfall** was recorded in few areas around south central and south western 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 ninth dekad (11-20 October) of 2016;

The observed rainfall conditions over most parts of the GHA exhibited near normal to severely dry conditions especially in areas around central and eastern equatorial sector and much of the southern sector. However a few areas within central and western parts of the northern sector corresponding to moderate to severely

wet conditions in the twenty ninth dekad (11-20 October) of 2016

The thirty first dekad (1-10 November) of 2016 is likely to present rainfall conditions in few areas in the southern parts of the northern sector and in the western and eastern part of the equatorial sector of Greater Horn of Africa (GHA);

3.0 Observed rainfall situation during the twenty ninth dekad (11-20 October) of 2016

Figure 1 shows the rainfall distribution, Figure 2a shows the percent of the average rainfall, and Figure 2b shows the standardized precipitation index (SPI) over the Greater Horn of Africa (GHA) during the twenty ninth dekad (11-20 October) of 2016.

Rainfall Distribution and Severity

During the twenty ninth dekad (11-20 October) of 2016, much of the GHA recorded less than 10 mm of rainfall, however rainfall amounts of between 10mm and 150mm was recorded over extreme southern part of Sudan; over western, southern Ethiopia; over much of South Sudan; central and north western Uganda, with western part of South Sudan, isolate parts of western and southern Ethiopia and north western Uganda recording mostly between 50 and 100mm (Figure 1).

During dekad 30 (11-20 October) of 2016 most of the GHA region recorded near average to below average rainfall depicting moderately dry to severely dry rainfall conditions, except for the a few areas around central and south western Sudan, north western coast of Eritrea, parts of Djibouti, north western and western Ethiopia, western South Sudan, and north western Uganda which recorded moderately wet to severely wet rainfall (Figure 2a and 2b).

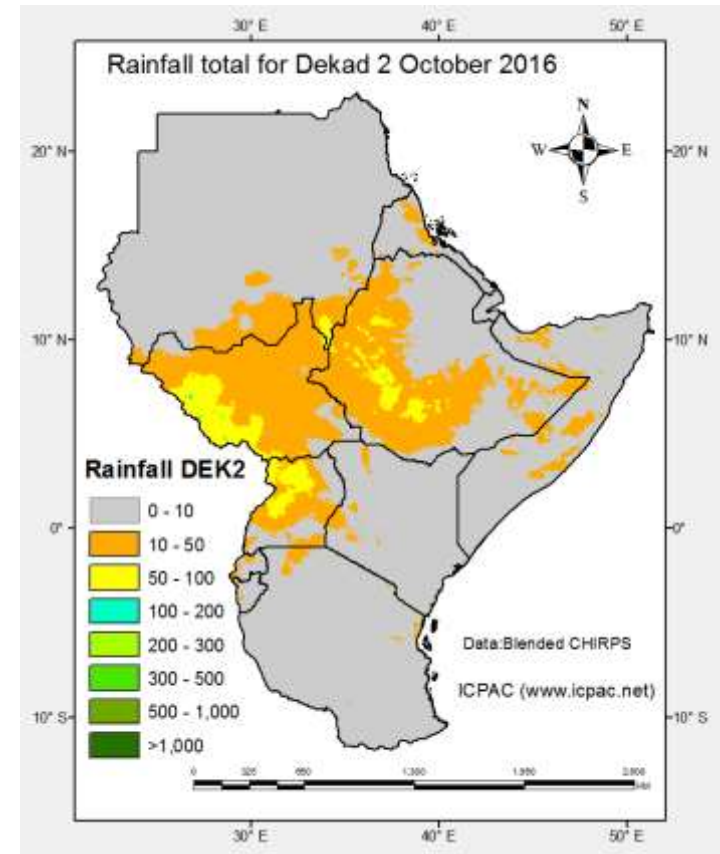


Figure 1: Rainfall distribution during the twenty ninth dekad (11–20 October) of 2016. (Source blended CHIRPS)

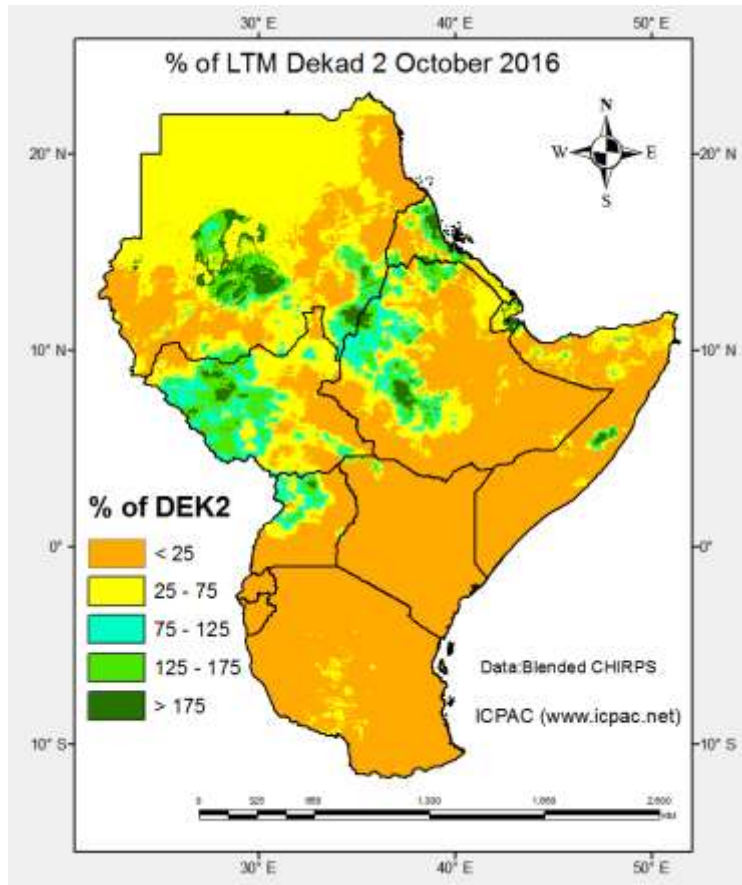


Figure 2a: Percent of average rainfall for the twenty Ninth dekad (11–20 October) of 2016 (Source blended CHIRPS)

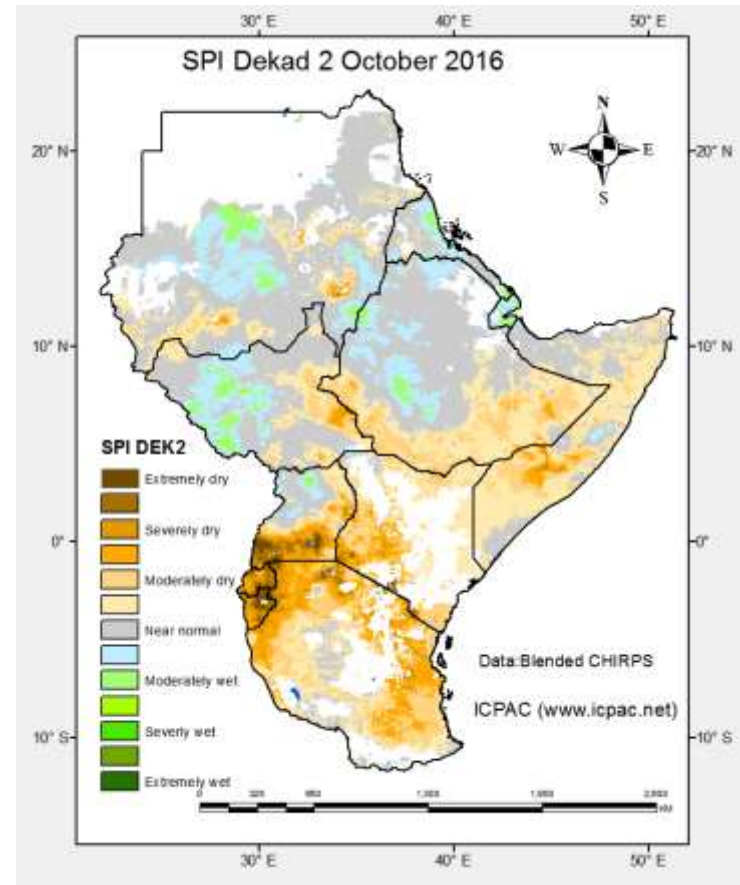


Figure 2b: Standardized precipitation index (SPI) for the twenty Ninth dekad (11–20 October) of 2016 (Source blended CHIRPS)

Maximum and Minimum Temperature Conditions

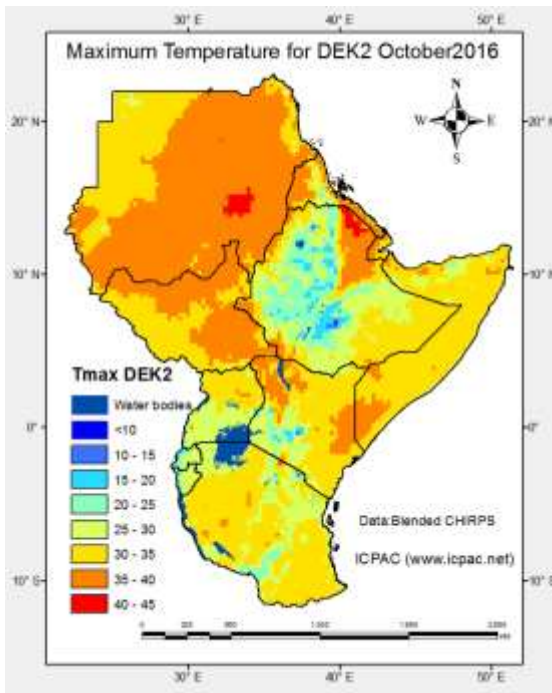


Figure 3a: Maximum temperature for twenty ninth dekad (11-20 October)2016

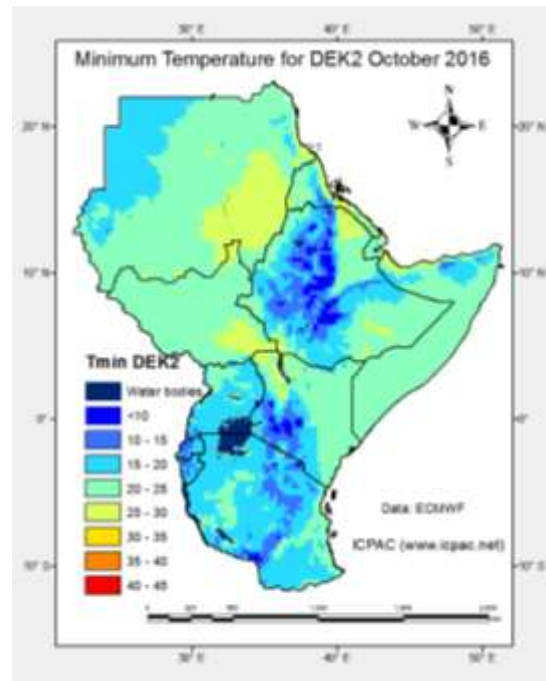


Figure 3b: Minimum temperature for twenty ninth dekad (11-20 October)2016

During dekad 29 (11-20 October) of 2016 maximum temperature exceeding 30°C was observed in most parts of the GHA except over the Ethiopian highlands, southern part of Uganda, over much of Rwanda and Burundi, in western and central Kenya and over a few places in north eastern and south western Tanzania that recorded maximum temperature of less than 30°C.

Most areas of the greater Horn of Africa recorded minimum temperatures of less than 25°C except for south western Sudan, part of central Eritrea extending to northern Ethiopia, and south eastern South Sudan extending to north western Kenya. The Ethiopian highlands, western Kenya including the Kenya's Rift Valley highlands, western Rwanda, north western Burundi, and Tanzania Rift Valley highlands recorded minimum temperature of less than 15°C.

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 6th and 13rd October 2016 in Figure 4 indicates deterioration in vegetation conditions over southern part of Sudan, southern and central part of Ethiopia, central and south eastern South Sudan, central and southern Uganda, south eastern Somalia, extreme western Kenya and coastal Kenya, eastern Rwanda, eastern Burundi, and north western and northern coast of Tanzania. Improvement in vegetation condition was indicated in upper part of the southern regions of Sudan; around south western Eritrea; north eastern and south western parts of South Sudan; western Rwanda; western and central parts of Kenya; and over areas around central and northern and south western Tanzania. The rest of the GHA showed little or no change in vegetation conditions.

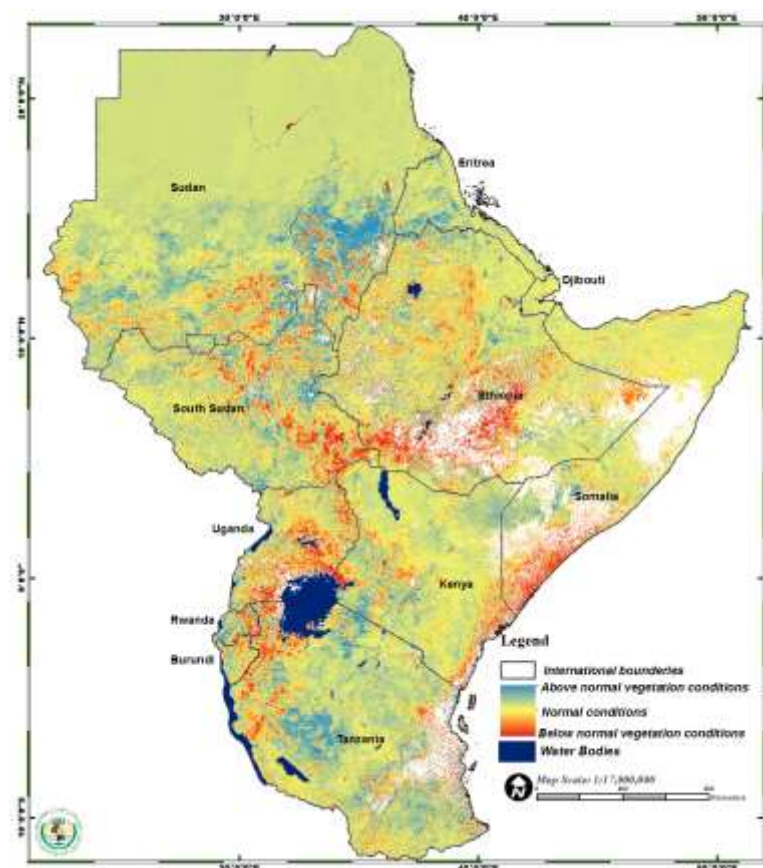


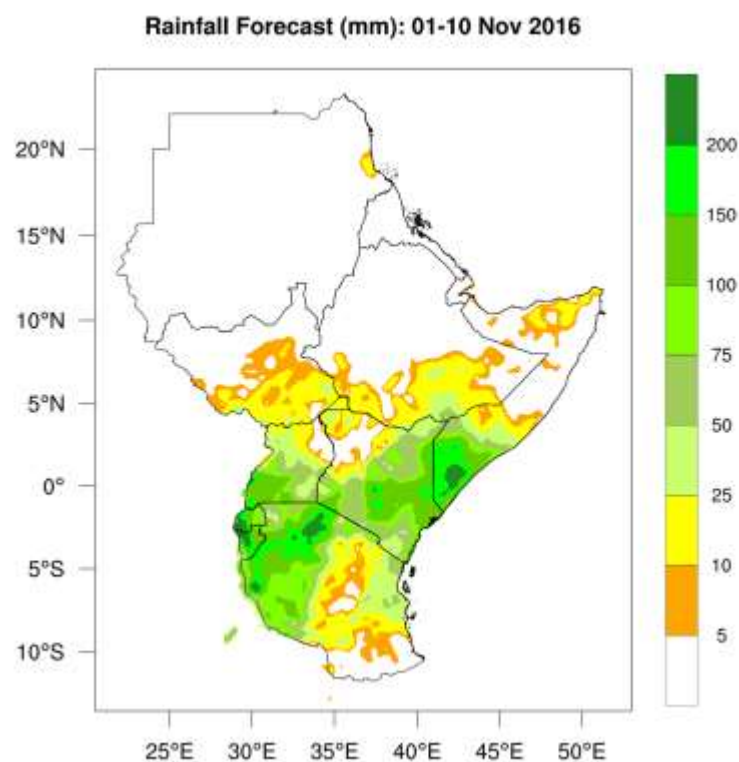
Figure 4: NDVI anomaly for the period 6th and 13rd October 2016

4.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during the twenty ninth dekad (11-20 October) 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.

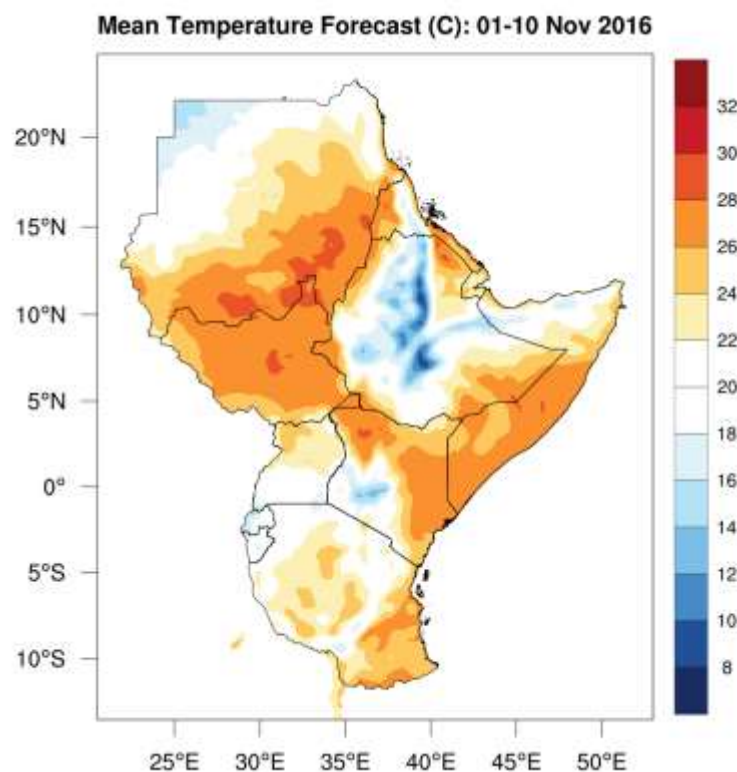
5.0 Climate outlook



Rainfall outlook

The rainfall outlook for the thirty first dekad (1-10 November) of 2016 in Figure 5 indicates that rainfall is likely to be experienced in southern part of South Sudan, southern Ethiopia, southern Somalia, central and southern Uganda, over western, central and eastern Kenya, over Rwanda, Burundi, north western, northern and north eastern Tanzania. The rest of the Greater Horn of Africa Region is likely to experience generally dry conditions.

Figure 5: Climate outlook for the thirty first dekad (1 –10 November) of 2016



Temperature outlook

The average temperature outlook for the thirty first dekad (1-10 November) of 2016 in Figure 6 indicates the likelihood of warm mean temperature conditions over much of southern parts of Sudan, extending to much of South Sudan and western Eritrea, over north western and eastern Kenya, central and southern parts of Somalia, and over central and southern Tanzania. The northern part of Sudan, much of Ethiopia, northern Somalia, southern Uganda, extending to western and central Kenya, Rwanda, Burundi, and northern Tanzania are likely to record cool average temperatures.

Figure 6: Climate outlook for the thirty first dekad (1 –10 November) of 2016

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