

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR DEKAD 27(21 – 30 SEPTEMBER) 2015 AND CLIMATE OUTLOOK FOR DEKAD 29 (11– 20 OCTOBER) 2015

1.0 Highlights

- Wet conditions were mainly observed over south-central and south western parts of the northern sector as well as parts of western equatorial sector of the Greater Horn of Africa (GHA) during the twenty seventh dekad (21-30 September 2015);
- Wet conditions are likely to be experienced over the south western, south central and south eastern parts of the northern Sector as well as western and eastern parts of the equatorial sectors of Greater Horn of Africa (GHA) during dekad 29 (11-20 October) 2015;
- The observed rainfall conditions during dekad 27 (21 –30 September 2015) resulted in improved crop, pasture and foliage conditions and replenishment of water resources. Most Agricultural areas, however, experienced dry conditions leading to negative impact to crop, pasture and water resources.

2.0 Introduction

In this bulletin, the climatic conditions observed during the twenty seventh (21-30 September) of 2015 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the twenty ninth dekad (11-20 October) of 2015 is also provided.

3.0 Observed rainfall situation during the Twenty-seventh (21 –30 September) of 2015

Figure 1 shows the spatial pattern of observed rainfall over the GHA during the twenty seventh dekad (21 –30 September) of 2015 while Figure 2 shows that of rainfall severity index for the same period.

3.1 Northern sector

During the twenty seventh dekad (21 –30 September of 2015) most parts of the this region received rainfall amount of between 10mm-30mm or less than 10mm (Figure 1) resulting to dry and generally dry conditions (Figure 2) except western and central parts of the region which includes: western and eastern Sudan; Western South Sudan; and western Ethiopia, which received between 30mm to more than 100 mm, (Figure 1) with more than 100mm of rainfall being recorded in western Ethiopia, resulting to near normal to wet conditions (Figure 2)

3.2 Equatorial and Southern Sector

During the twenty seventh (21 –30 September of 2015) most of these regions received rainfall amounts of between 10mm and 30mm or less than 10mm (Figure 1) resulting to dry condition or generally dry conditions (Figure 2) except western, and eastern Uganda; north western parts of Rwanda; north western Tanzania; as well as parts of western Kenya received rainfall amounts of between 30mm to 100mm (Figure 1) results in near normal to wet conditions (Figure 2).

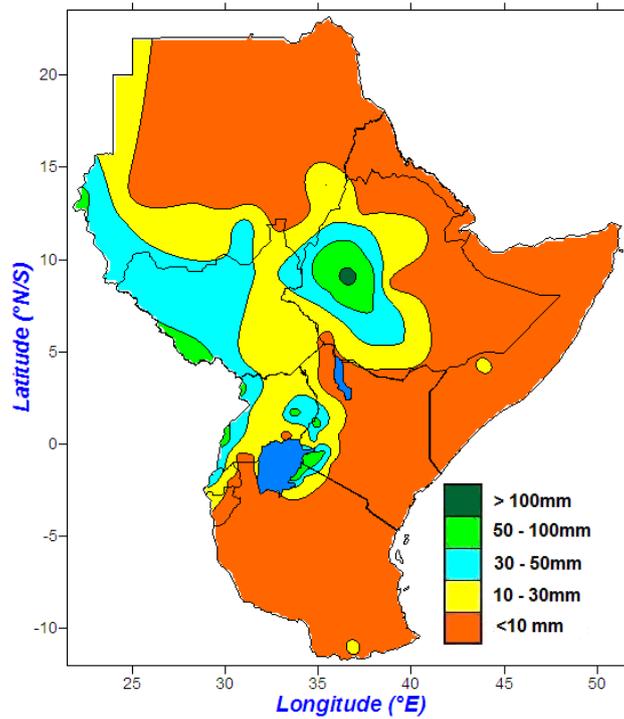


Figure 1: Spatial distribution of observed rainfall during dekad 27 (21– 30 September) of 2015

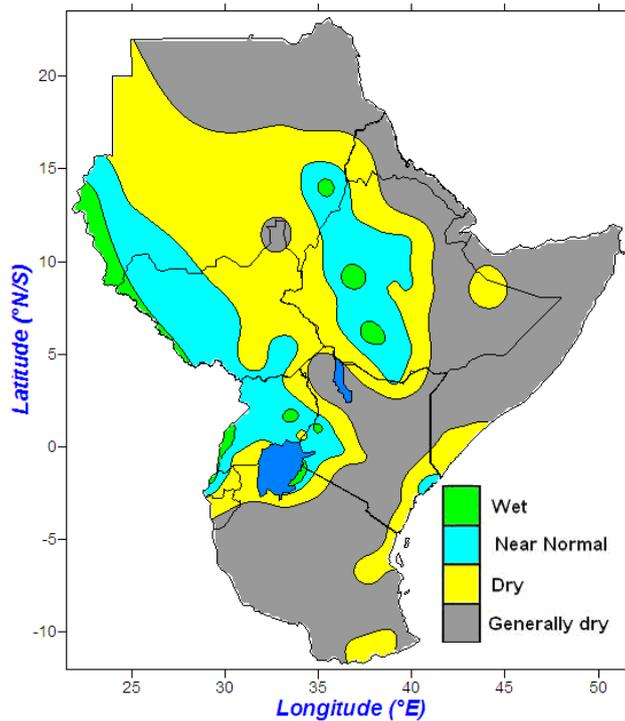


Figure 2: Rainfall Stress Severity Index for dekad 27 (21 – 30 September) of 2015

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4.0 Assessment of current rainfall performance

The cumulative dekadal rainfall was used to evaluate the rain water stress over GHA region. Figure 3 shows the cumulative dekadal rainfall performance since June 2015. Near normal to above normal rainfall conditions was observed over south central parts of the northern (Figure 3a) while near normal to below normal rainfall was observed over western parts of the northern sector (Figure 3b and 3c).

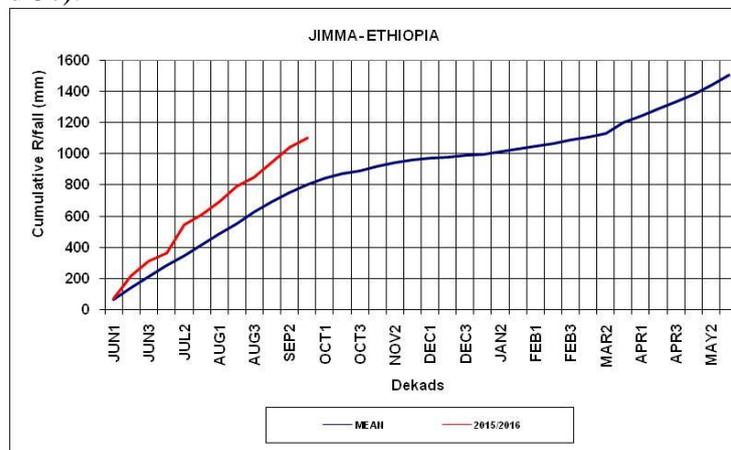


Figure 3a: Cumulative rainfall series for Jimma

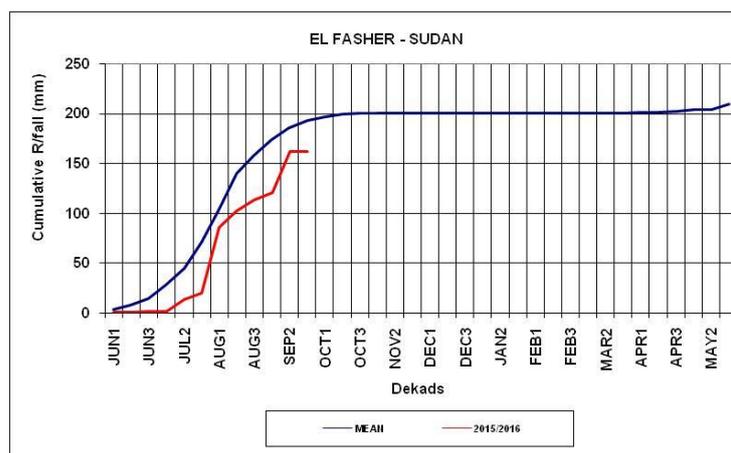


Figure 3b: Cumulative rainfall series for EL-Fasher

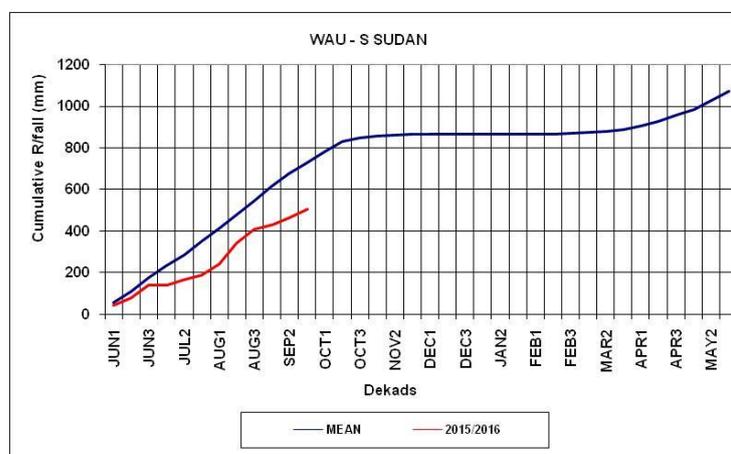


Figure 3c: Cumulative rainfall series for Wau

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 comparison of the Normalized Difference Vegetation Index (NDVI) between dekad 26 (20-30) and dekad 25 (1-10) September 2015 indicates that most places within the GHA region had deteriorated or no change vegetative condition except over isolated past in the south eastern Sudan, and parts of south western Uganda (Figure 4).

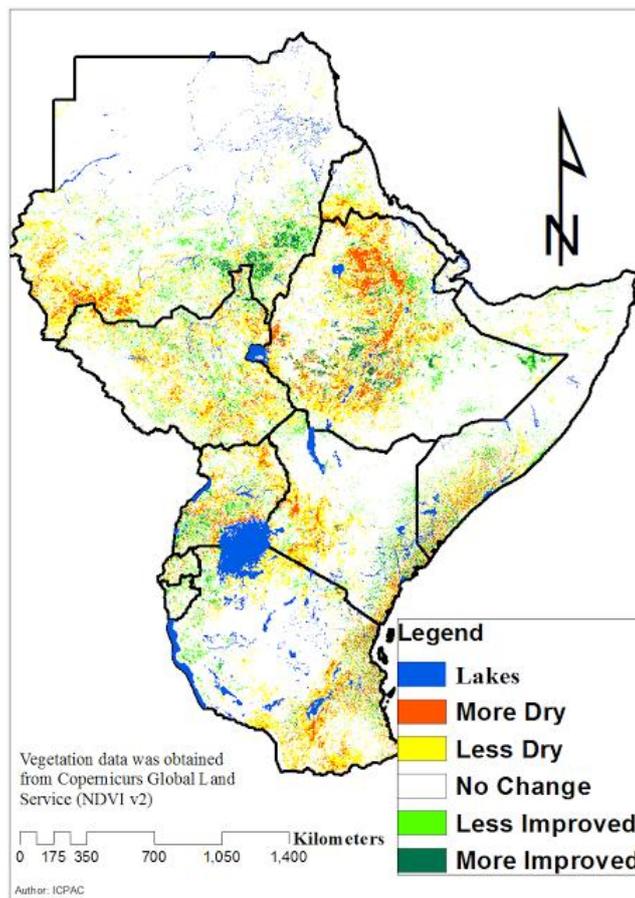


Figure 4: NDVI difference between dekad 26 (20-30 September) and dekad 25 (1-10) September 2015

5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during dekad 27 (21 –30 September 2015) were associated with the following impacts:

- Improved crop, pasture and foliage conditions across south-central and south western parts of the northern sector as well as parts of western equatorial sector of the Greater Horn of Africa leading to good prospects for crop and livestock performance;
- Good water availability leading to replenishment of reservoirs;

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- Increased risk of water related diseases;
- Water stress for pasture and crops especially in the areas that they experienced drier than normal conditions.

6.0 Climate outlook

The rainfall outlook for dekad 29 (11-20 October) 2015 indicates near to above normal rainfall conditions are likely to be experienced over southern parts of Sudan; western and southern parts of Ethiopia; western and northern parts of South Sudan; central and southern parts of Somalia; central and southern parts of Uganda; western, coastal and north eastern parts of Kenya; as well as parts of Rwanda. Most parts of northern Sudan; Eritrea; and central and southern Tanzania are likely to have generally dry rainfall conditions, while the rest of the Greater Horn of Africa sub-regions are likely to receive near normal to below normal rainfall (Figure 4).

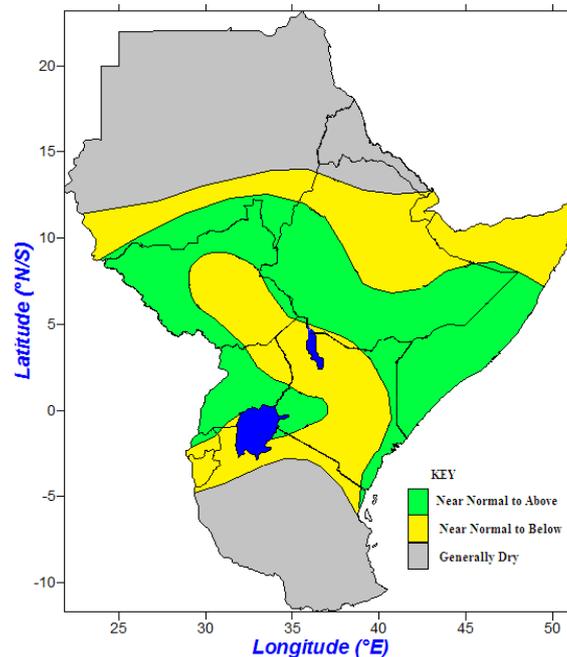


Figure 4: Climate outlook for dekad 29 (11 – 20 October) 2015