

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR DEKAD 25(1 – 10 SEPTEMBER) 2015 AND CLIMATE OUTLOOK FOR DEKAD 27 (21– 30 SEPTEMBER) 2015

1.0 Highlights

- Wet conditions were mainly observed over south-central parts of the northern sector as well as parts of western equatorial sector of the Greater Horn of Africa (GHA) during the twenty fifth dekad (1-10 September 2015);
- Wet conditions are likely to be experienced over the western and central parts of the northern Sector of Greater Horn of Africa (GHA) during dekad 27 (21-30 September) 2015;
- The observed rainfall conditions during dekad 25 (1 –10 September) of 2015 resulted in improved pasture and foliage conditions and replenishment of water resources, while some areas within the northern and equatorial sector indicated deteriorated water and pasture resources.

2.0 Introduction

In this bulletin, the climatic conditions observed during the twenty fifth (1-10 September) of 2015 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the twenty seventh dekad (21-30 September) of 2015 is also provided.

3.0 Observed rainfall situation during the Twenty-fifth (1 –10 September) of 2015

Figure 1 shows the spatial pattern of observed rainfall over the GHA during the twenty fifth dekad (1 –10 September) of 2015 while Figure 2 shows that of rainfall severity index for the same period.

3.1 Northern sector

During the twenty fifth dekad (1 –10 September of 2015) western and central parts of Ethiopia; south, south eastern parts of Sudan; north eastern South Sudan; and south western Eritrea received between 30mm to more than 100mm of rainfall (Figure 1), with parts of western Ethiopia and south eastern Sudan receiving more than 100 mm of rainfall, resulting to near normal to wet conditions (Figure 2). Northern and central parts of Sudan; most of Somalia; southern Eritrea; Djibouti, and eastern Ethiopia received less than 10 mm of rainfall resulting to generally dry conditions. While the rest of the region received rainfall amounts of between 10mm to 30mm (Figure 1) resulting into dry conditions (Figure 2).

3.2 Equatorial and Southern Sector

During the twenty fifth (1 –10 September of 2015) south western Uganda; parts of Rwanda; parts of Burundi; 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), the rest 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).

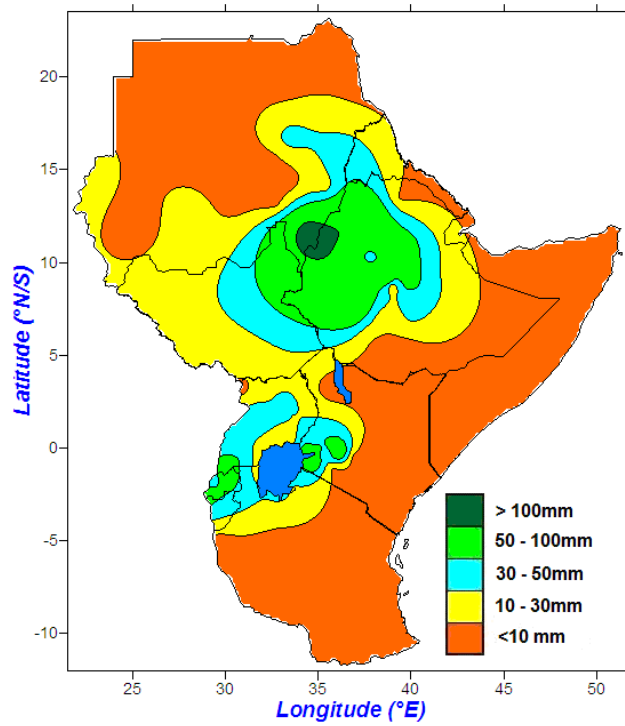


Figure 1: Spatial distribution of observed rainfall during dekad 25 (1 –10 September) of 2015

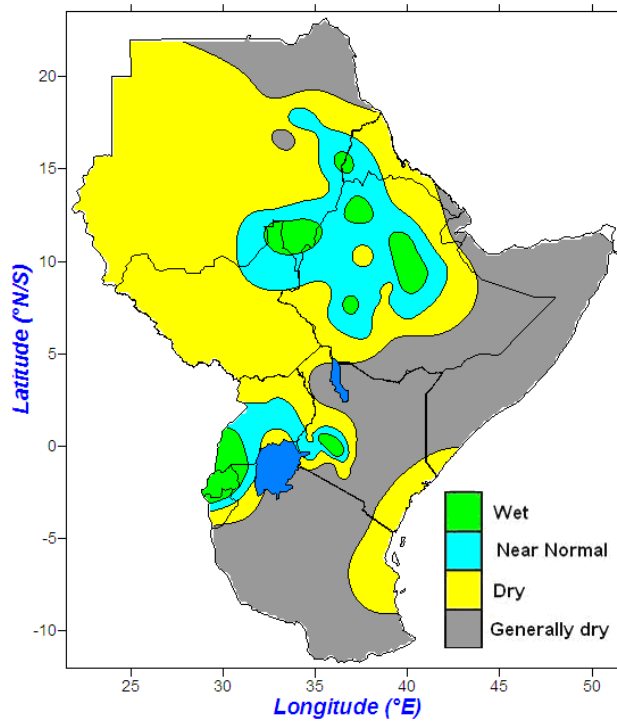


Figure 2: Rainfall Stress Severity Index for dekad 25 (1 –10 September) of 2015

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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).

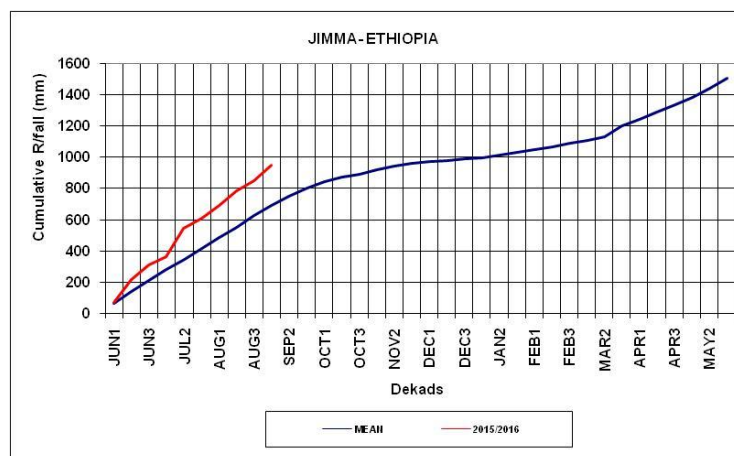


Figure 3a: Cumulative rainfall series for Jimma

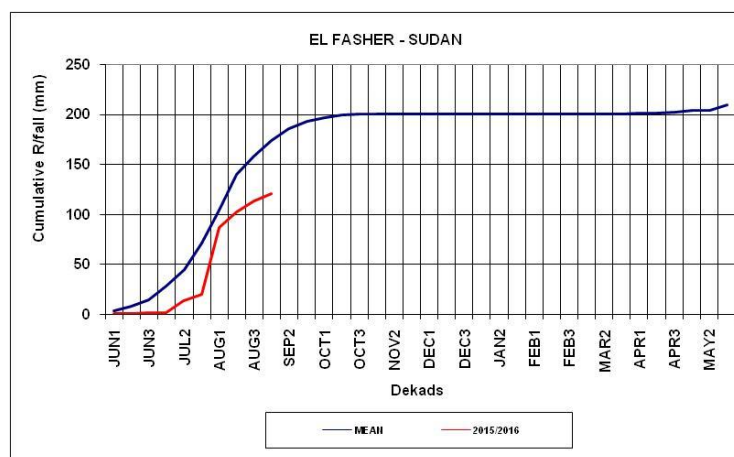


Figure 3b: Cumulative rainfall series for EL-Fasher

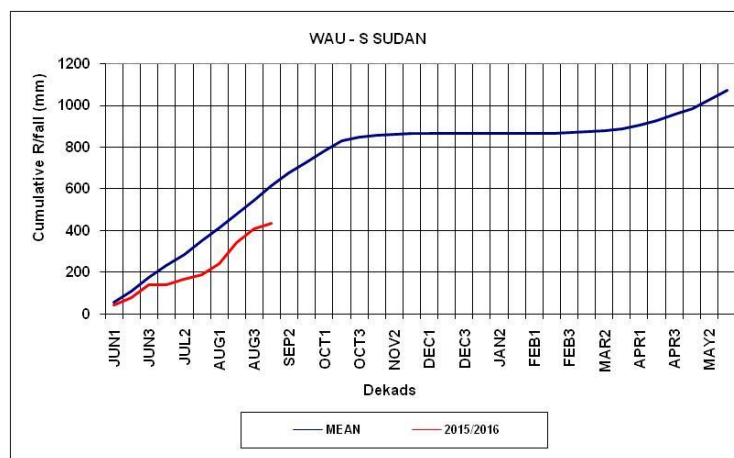


Figure 3c: Cumulative rainfall series for Wau

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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 comparison of the Normalized Difference Vegetation Index (NDVI) between dekad 25 (1-10 September 2015) and dekad 24 (21-31 August 2015) indicates improvement in vegetative conditions over parts of north western Ethiopia; southern eastern parts of Sudan; parts of southern Somalia; and south western parts of Uganda.(Figure 4). The rest of the region indicated deteriorated or no change in vegetative condition (Figure 4).

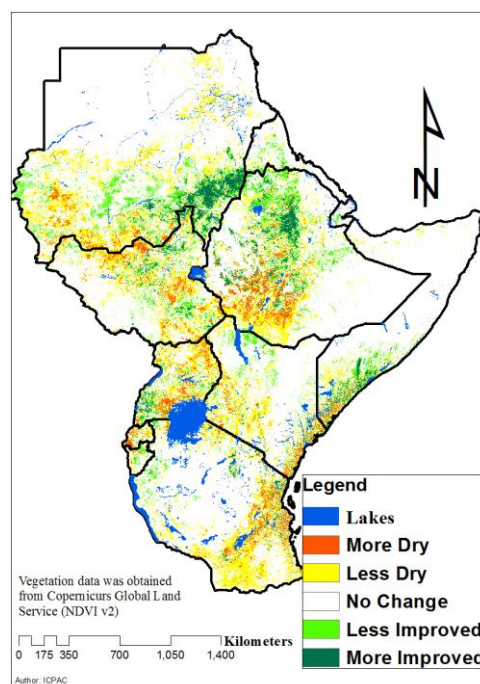


Figure 4: NDVI difference between dekad 25 (1-10) September and dekad 24 (21-31) August 2015

5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during dekad 25 (1 – 10 September) 2015 were associated with the following impacts:

- Improved pasture and foliage across south central parts of the northern sector of GHA leading to good prospects for livestock performance.
- Good water availability leading to replenishment of reservoirs and water pans.
- Increase in water related diseases
- Water stress for pasture and crop especially in the eastern parts of the northern sector and parts of the equatorial sector.

6.0 Climate outlook

The rainfall outlook for dekad 27 (21-30 September) 2015 indicates near to above normal rainfall conditions are likely to be experienced over southern parts of Sudan; western parts of Ethiopia; and northern parts of South Sudan. Most parts of Uganda; parts of Eritrea; Djibouti; northern and southern Somalia; western and coastal parts of Kenya; northern Rwanda; and central parts of Sudan are likely to receive near normal to below normal rainfall (Figure 4), while the rest of the Greater Horn of Africa (GHA) are likely to have generally dry rainfall conditions (Figure 4).

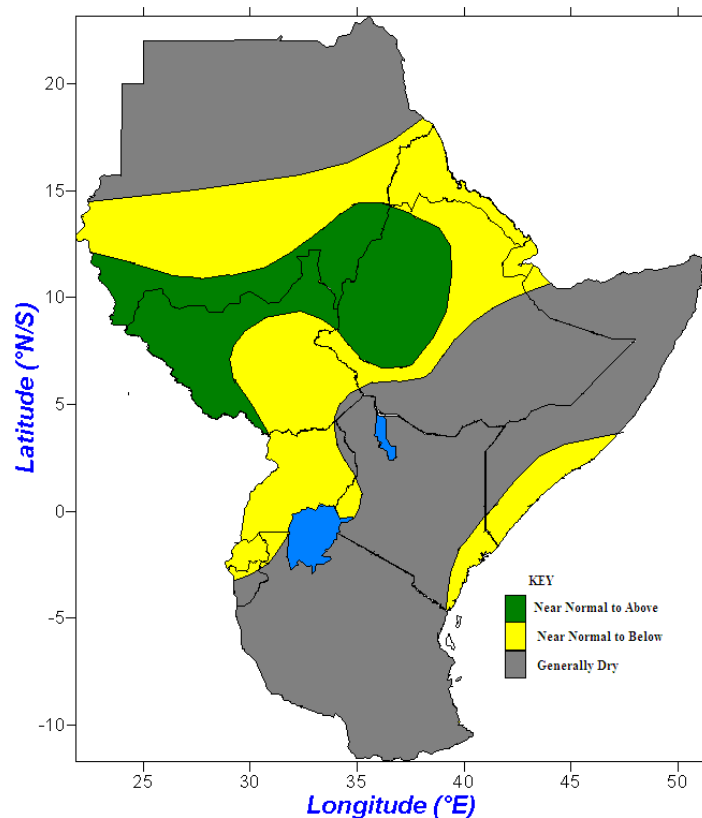


Figure 4: Climate outlook for dekad 27 (21 – 30 September) 2015