

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR DEKAD 24(21 – 31 AUGUST) 2015 AND CLIMATE OUTLOOK FOR DEKAD 26 (11– 20 SEPTEMBER) 2015

1.0 Highlights

- Wet conditions were mainly observed over western and central parts of the northern sector of the Greater Horn of Africa (GHA) during the twenty fourth dekad (21-31 August 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 26 (11-20 September) 2015;
- The observed rainfall conditions during dekad 24 (21 – 31 August) of 2015 resulted in improved crop, pasture and foliage conditions, replenishment of water resources, while some areas within the northern and equatorial sector indicated stress on water and pasture resources.

2.0 Introduction

In this bulletin, the climatic conditions observed during the twenty fourth (21-31 August) of 2015 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the twenty sixth dekad (11-20 September) of 2015 is also provided.

3.0 Observed rainfall situation during the Twenty-fourth (21 –31 August) of 2015

Figure 1 shows the spatial pattern of observed rainfall over the GHA during the twenty fourth dekad (21-31 August) of 2015 while Figure 2 shows that of rainfall severity index for the same period.

3.1 Northern sector

During the twenty fourth dekad (21-31 August of 2015) most parts of South Sudan; northern and western parts of Ethiopia; south, south eastern and south western parts of Sudan; and southern 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). The rest of the region received rainfall amounts of between 10mm to 30mm or less than 10 mm in other places (Figure 1) resulting into dry and generally dry conditions respectively (Figure 2).

3.2 Equatorial and Southern Sector

During the twenty fourth (21-31 August 2015) Uganda and Tanzania lacked data while most of these regions received less than 10 mm of rainfall (Figure 1) results in dry to generally dry conditions (Figure 2), except western and coastal parts of Kenya which received between 10mm and 30mm of rainfall (Figure 1) resulting to near normal to dry condition (Figure 2).

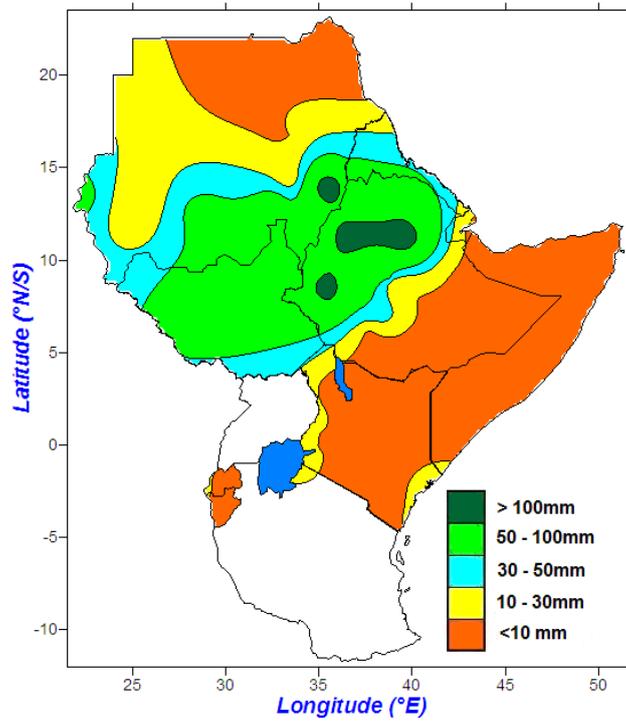


Figure 1: Spatial distribution of observed rainfall during dekad 24 (21– 31 August) of 2015

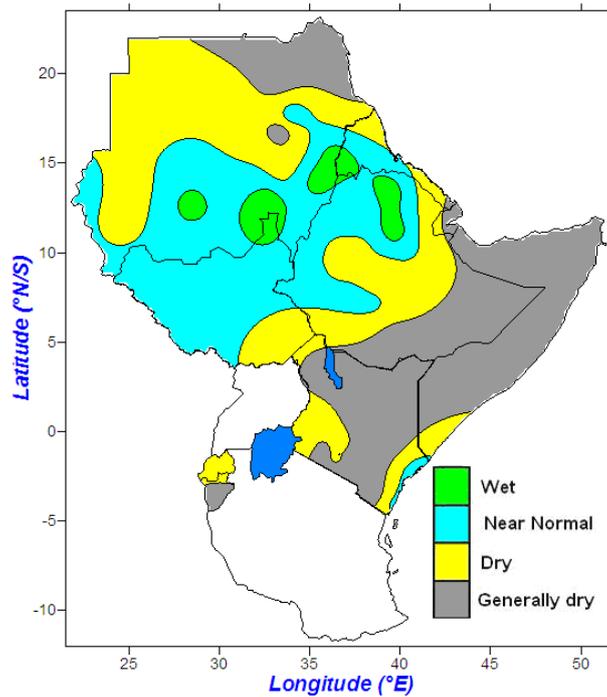


Figure 2: Rainfall Stress Severity Index for dekad 24(21 – 31 August) of 2015

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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 January 2015. Near normal to above normal rainfall conditions was observed over central and western parts of the northern (Figure 3a and 3b, 3c).

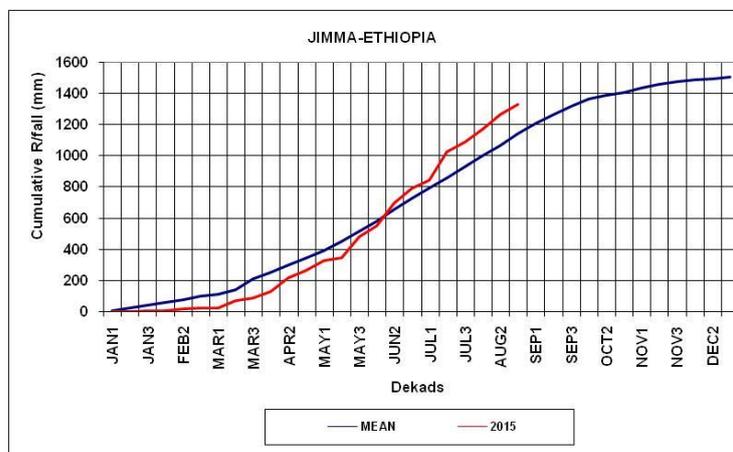


Figure 3a: Cumulative rainfall series for Jimma

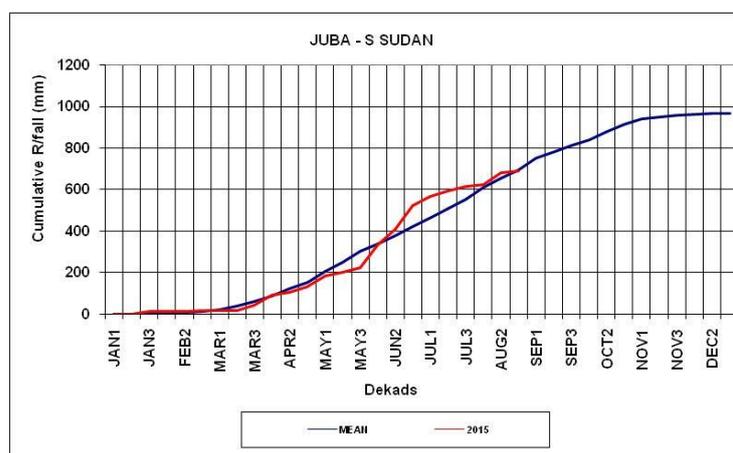


Figure 3b: Cumulative rainfall series for Juba

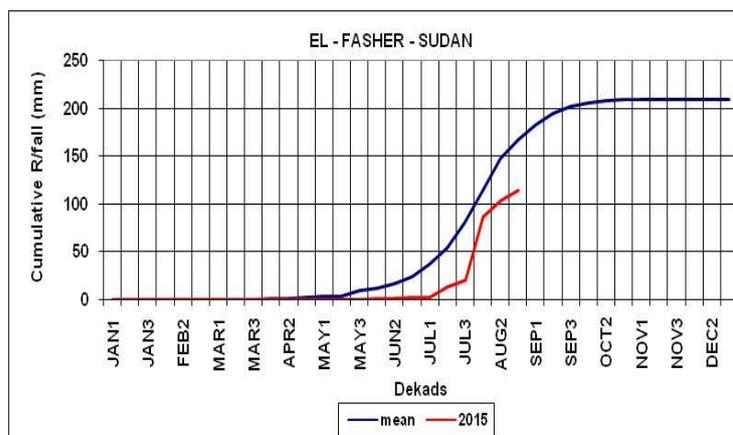


Figure 3c: Cumulative rainfall series for Garissa

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 24 (21-31) and 23 (11-20) of August 2015 indicates improvement in vegetative conditions over northern and central parts of Ethiopia; southern parts of Sudan; northern parts of South Sudan; southern Somalia; and north western parts of Eritrea.(Figure 4). The rest of the region indicated deteriorated or no change in vegetative condition (Figure 4).

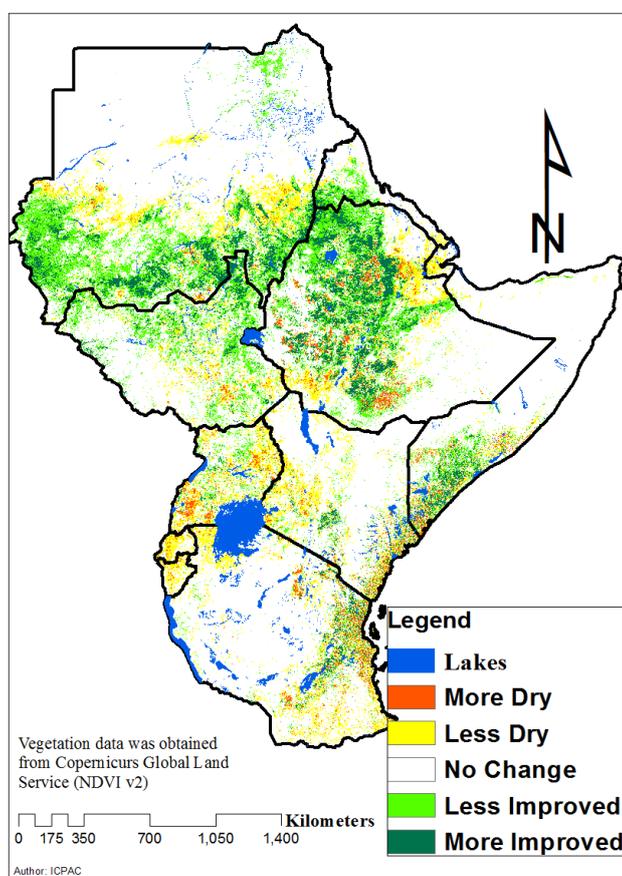


Figure 4: NDVI difference between dekad 24 (21-31) and 23 (11-20) August 2015

5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during dekad 24 (21 – 31 August) 2015 were associated with the following impacts:

- Improved pasture and foliage across central and western parts of the northern sector of GHA leading to good prospects for crop and 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 26 (11-20 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).

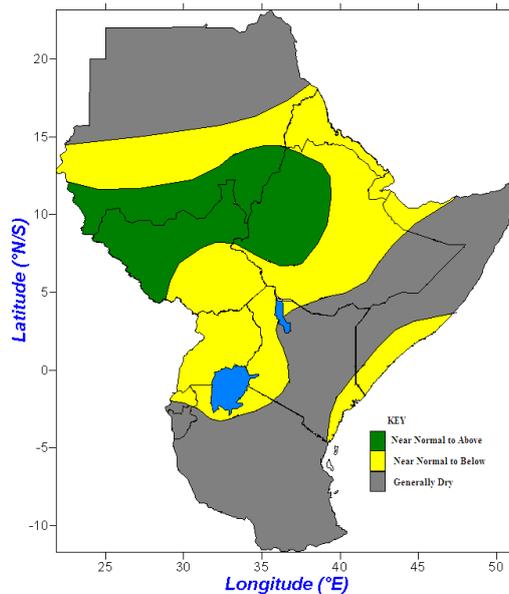


Figure 4: Climate outlook for dekad 26 (11 – 20 September) 2015