

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR DEKAD 32 (11 – 20 NOVEMBER) 2015 AND CLIMATE OUTLOOK FOR DEKAD 34 (1 – 10 DECEMBER) 2015

1.0 Highlights

- Wet conditions were mainly observed over parts of the equatorial as well as western parts of the southern sectors of the Greater Horn of Africa (GHA) during the thirty second dekad (11-20 November 2015);
- Wet conditions are likely to be experienced over most parts of the southern sector as well as over several parts of the equatorial sector of the Greater Horn of Africa (GHA) during dekad 34 (1-10 December) 2015;
- The observed rainfall conditions during dekad 32 (11-20 November) of 2015 resulted in improved crop, pasture and foliage conditions, replenishment of water resources, increase in water related diseases, and flooding in some of the places.

2.0 Introduction

In this bulletin, the climatic conditions observed during the thirty second dekad (11-20 November) of 2015 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the thirty fourth dekad (1-10 December) of 2015 is also provided.

3.0 Observed rainfall situation during the Thirty-second (11–20 November) of 2015

Figure 1 shows the spatial pattern of observed rainfall over the GHA during the thirty second dekad (11 –20 November) of 2015 while Figure 2 shows that of rainfall severity index for the same period.

3.1 Northern sector

During the thirty second dekad (11 –20 November of 2015) most parts of the northern sector received less than 10mm of rainfall (Figure 1) resulting to dry and generally dry conditions (Figure 2). However the south western parts of Ethiopia received between 30mm to 100mm of rainfall (Figure 1) resulting to near normal or wet conditions (Figure 2) while eastern parts of Ethiopia and northern parts of Somalia received between 10mm and 30mm of rainfall (Figure 1), resulting to near normal to dry conditions (Figure 2).

3.2 Equatorial Sector and Southern Sector

During the thirty second dekad (11 –20 November of 2015) most parts of central and southern Uganda; western, central, northern and south eastern parts of Kenya; southern parts of Somalia; parts of Rwanda; most parts of Burundi; and northern and western parts of Tanzania received between 30mm to more than 100mm of rainfall (Figure 1) leading to near normal to wet conditions (Figure 2). North western parts of Uganda northern parts of Kenya; parts of central and southern Somalia; and southern parts of Tanzania received less than 30mm of rainfall (Figure 1) which resulted to dry or generally dry conditions (Figure 2).

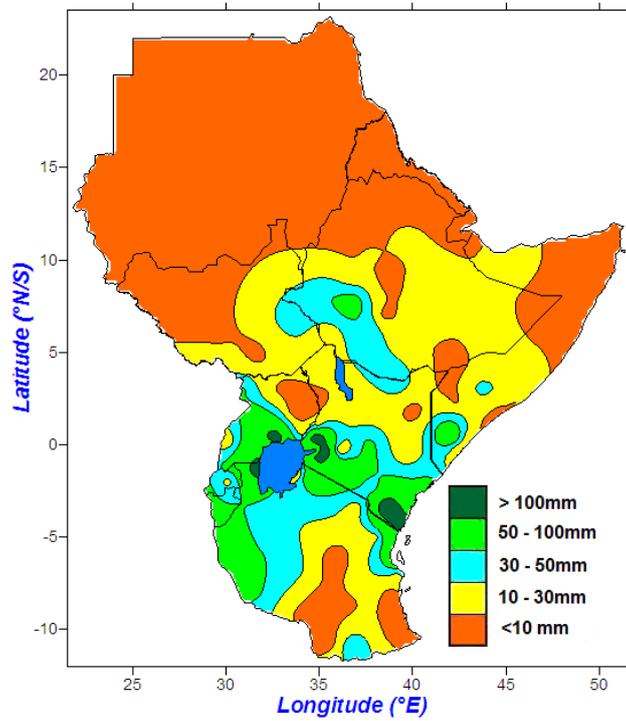


Figure 1: Spatial distribution of observed rainfall during dekad 32 (11–20 November) of 2015

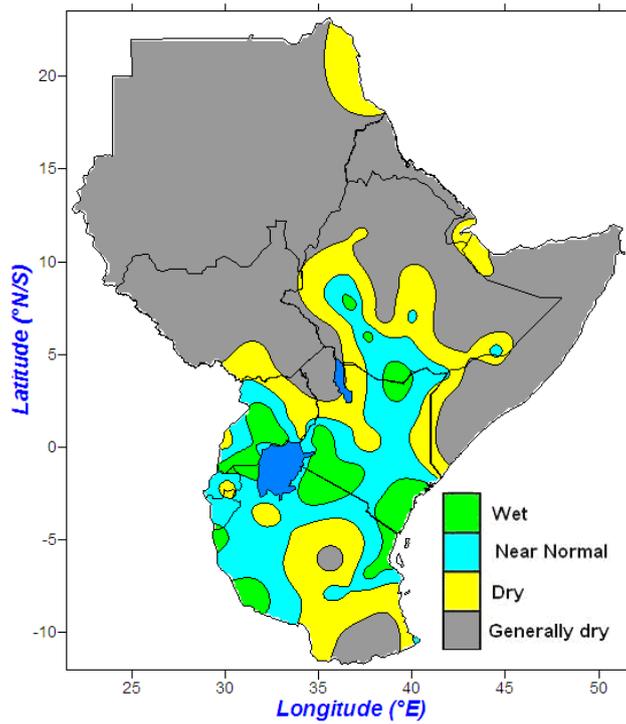


Figure 2: Rainfall Stress Severity Index for dekad 32 (11–10 November) of 2015

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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 western and central parts of the equatorial sector the GHA (Figure 3a, 3b and 3c).

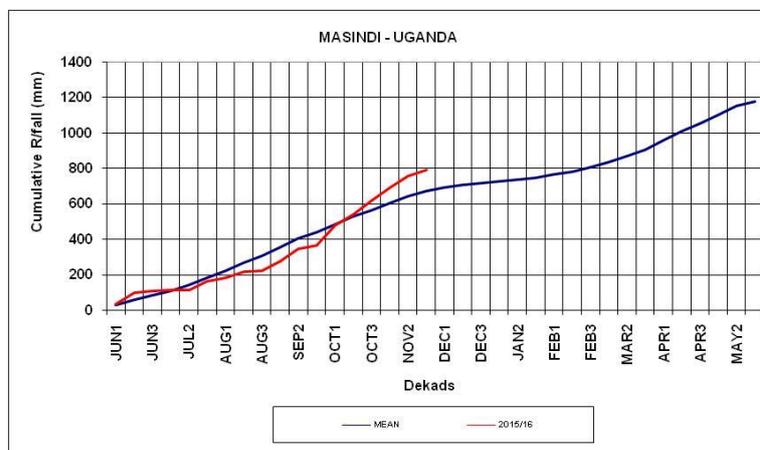


Figure 3a: Cumulative rainfall series for Masindi

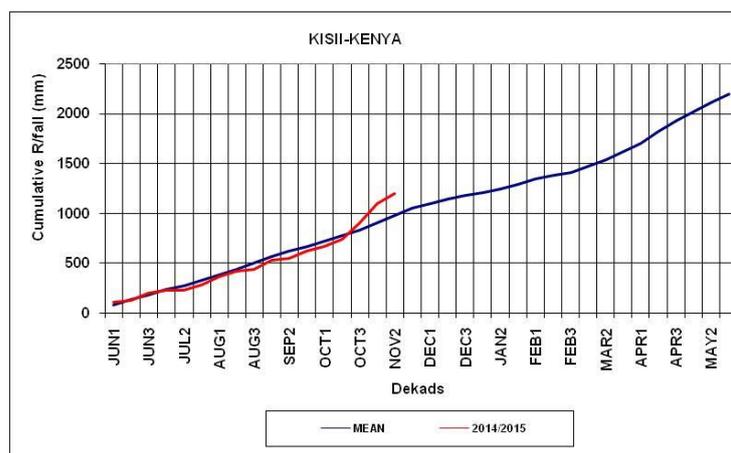


Figure 3b: Cumulative rainfall series for Kisii

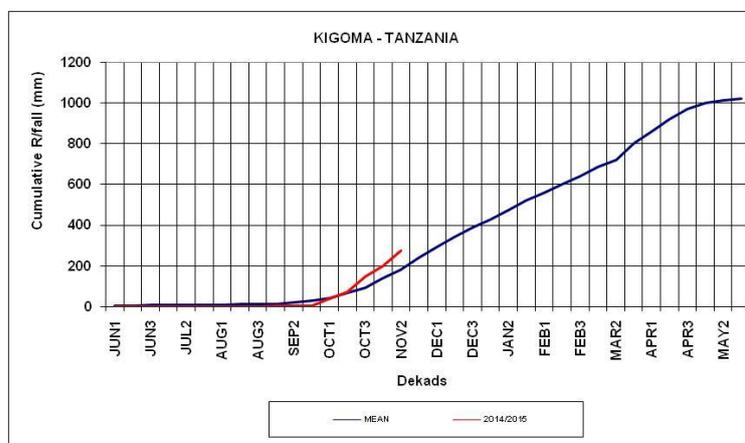


Figure 3c: Cumulative rainfall series for Kigoma

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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 32 (11-20) and dekad 31 (1 –10) November 2015 indicates deteriorated vegetative condition over southern parts of Sudan; western and north western Ethiopia; northern, western and central parts of South Sudan; parts of central and south western Uganda; parts of Rwanda; and parts of southern Somalia. Improvement in vegetative conditions was mostly indicated over southern parts of South Sudan; southern and eastern parts of Ethiopia; central parts of Somalia; western and central parts of Kenya; north eastern and southern parts of Uganda; and western, northern and southern parts of Tanzania (Figure 4). The rest of the GHA indicated little or no change in vegetative condition.

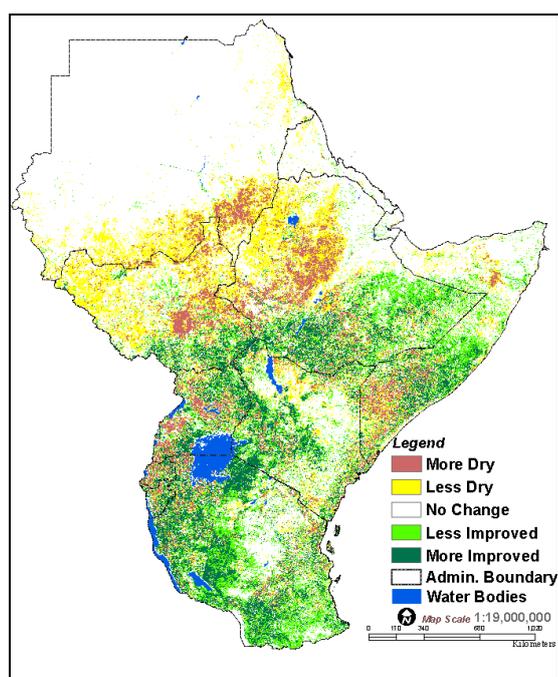


Figure 4: NDVI difference between dekad 32(11-20) and dekad 31 (1 –10 November)

5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during dekad 32 (11 – 20 November) 2015 were associated with the following impacts:

- Improved crop, pasture and foliage across southern parts of the northern sector and parts of equatorial and southern sectors of GHA leading to good prospects for crop and livestock performance.

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- Good water availability leading to replenishment of reservoirs and water pans.
- Increase in water related diseases
- Flooding was also reported over several parts which led to disruption of livelihoods.
- Water stress for pasture and crop especially in parts of the northern sector taht are expected to remain dry.

6.0 Climate outlook

The rainfall outlook for dekad 34 (1-10 December) 2015 indicates near to above normal rainfall conditions are likely to be experienced over most parts of Uganda, western central and coastal parts of Kenya, most parts of Rwanda; most parts of Burundi; southern parts of Somalia; southern parts of South Sudan; south western parts of Ethiopia; and most parts of Tanzania. Most parts of Sudan; southern parts of Eritrea; northern and north eastern parts of Ethiopia; northern parts of South Sudan; and most of Djibouti are likely to remain generally dry, while the rest of the region is likely to receive near normal to below normal rainfall (Figure 4).

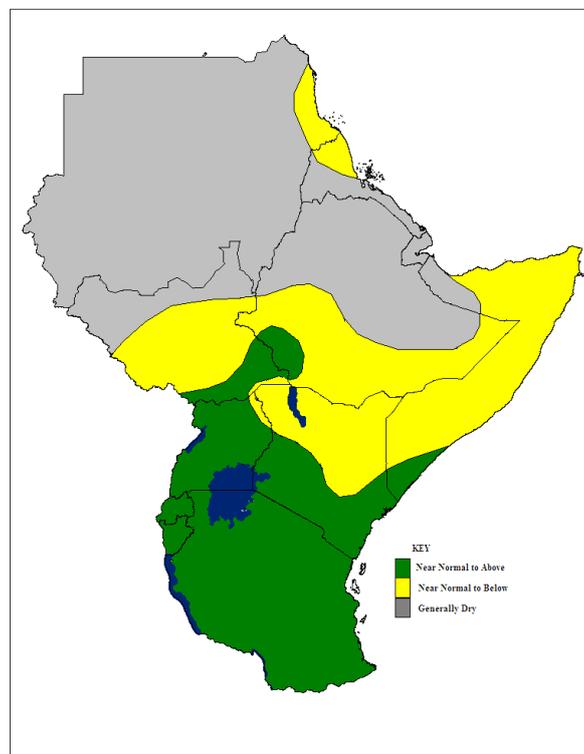


Figure 4: Climate outlook for dekad 34 (1 – 10 December) 2015