

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE THIRTEENTH DEKAD (1 – 10 MAY) OF 2016 AND CLIMATE OUTLOOK FOR THE FIFTEENTH DEKAD (21 – 31 MAY) OF 2016

1.0 Highlights

- Wet conditions were observed over much western and central parts of the northern sector, western, central and coastal parts of the equatorial sector; as well as north western parts of the southern sector of the Greater Horn of Africa (GHA) during the thirteenth dekad (1-10 May) of 2016;
- Wet conditions are likely to be experienced over western and central parts of the northern sector as well as the western parts of the equatorial sector of Greater Horn of Africa (GHA), during the fifteenth dekad (21-31 May) of 2016;
- The observed rainfall conditions during the thirteenth dekad (1-10 May) of 2016 resulted in improved pasture and foliage, and crop conditions; replenishment of water resources; increase in water related diseases; and flooding over several places leading to displacement of people and loss of livelihood.

2.0 Introduction

In this bulletin, the climatic conditions observed during the thirteenth dekad (1-10 May) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the fifteenth dekad (21-31 May) of 2016 is also provided.

3.0 Observed rainfall situation during the Thirteenth dekad (1–10 May) of 2016

Figure 1 shows the spatial pattern of observed rainfall over the GHA during the thirteenth dekad (1-10 May) of 2016 while Figure 2 shows the rainfall severity index for the same period.

3.1 Northern sector

During the thirteenth dekad (1-10 May) of 2016 much of South Sudan; western, central and north eastern Ethiopia; and north western parts of Somalia recorded rainfall amounts of between 30mm to more than 100mm (Figure 1). This resulted into near normal to wet rainfall conditions (Figure 2). The rest of the northern sector recorded less than 10mm of rainfall (Figure 1), which resulted into dry or generally dry rainfall conditions.

3.2 Equatorial sector

During the thirteenth dekad (1 – 10 May) of 2016, south western parts of Uganda, eastern parts of Rwanda, north eastern parts of Burundi, north western and eastern parts of Kenya, and central parts of Somalia received between 10mm to 30mm or less than 10mm of rainfall (Figure 1), which resulted into dry or generally dry rainfall conditions (Figure 2). The rest of the equatorial sub-region recorded between 30mm to more than 100mm of rainfall (Figure 1), which resulted into near normal to wet rainfall conditions (Figure 2).

3.3 Southern sectors

Much of Tanzania recorded between 10mm to 30mm or less than 10mm of rainfall which resulted into dry or generally dry rainfall conditions during the thirteenth dekad (1 – 10 May) of

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2016. Northwestern parts of Tanzania recorded between 30mm to 100mm of rainfall (Figure 1) which resulted to near normal to wet rainfall conditions (Figure 2) during the same period.

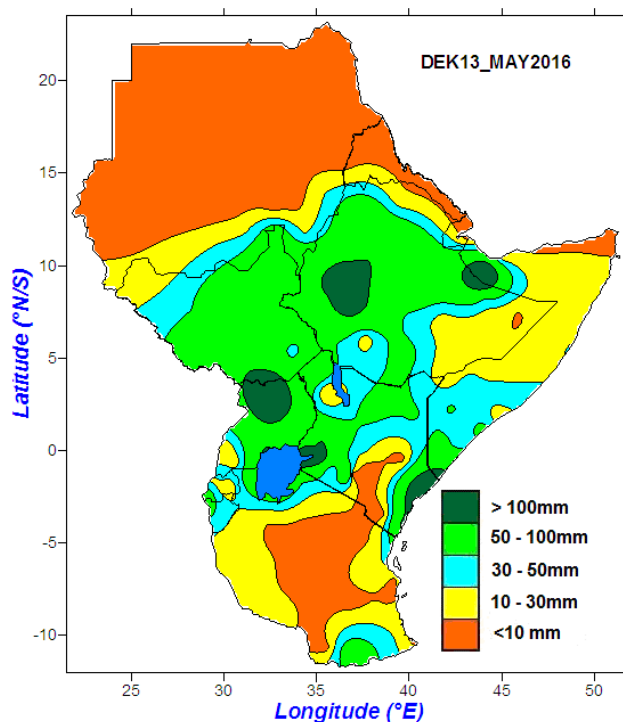


Figure 1: Spatial distribution of observed rainfall during the Thirteenth (1–10 May) of 2016

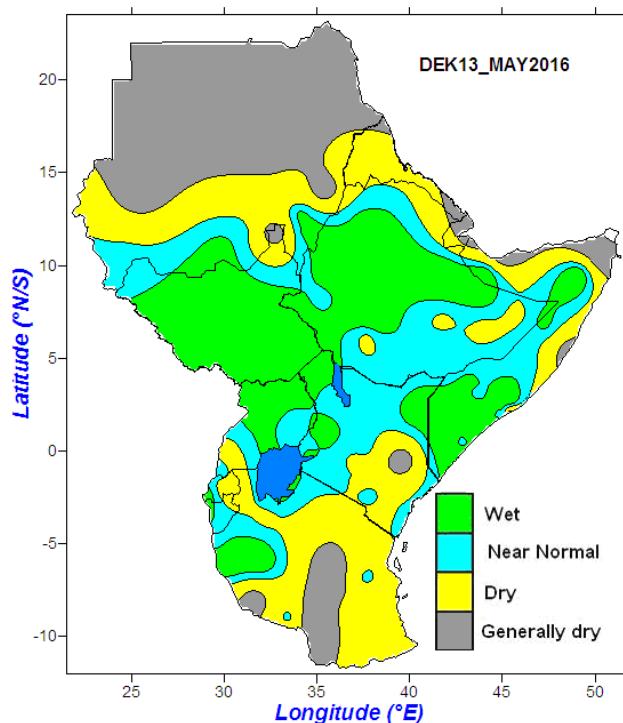


Figure 2: Rainfall Stress Severity Index for the Thirteenth dekad (1–10 May) of 2016

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4.0 Assessment of current rainfall performance

Figure 3 shows the cumulative dekadal rainfall performance since January 2015. Near normal to above normal rainfall conditions has been observed over western and coastal parts of the equatorial sector as well as north eastern coast of the southern sector of the GHA (Figure 3a, 3b, and 3c).

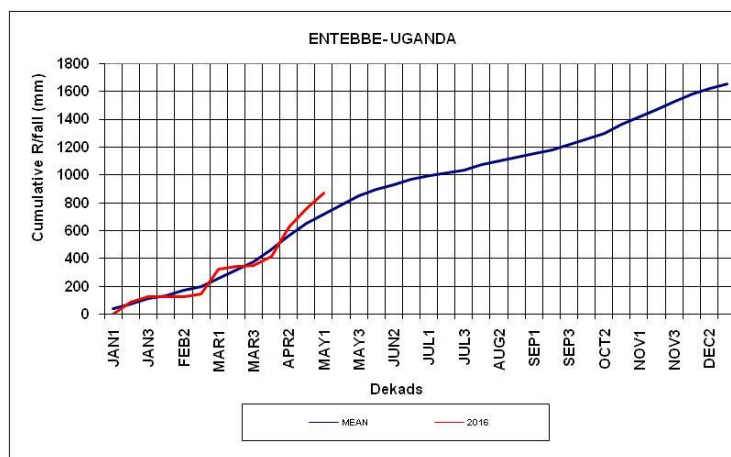


Figure 3a: Cumulative rainfall series for Entebbe

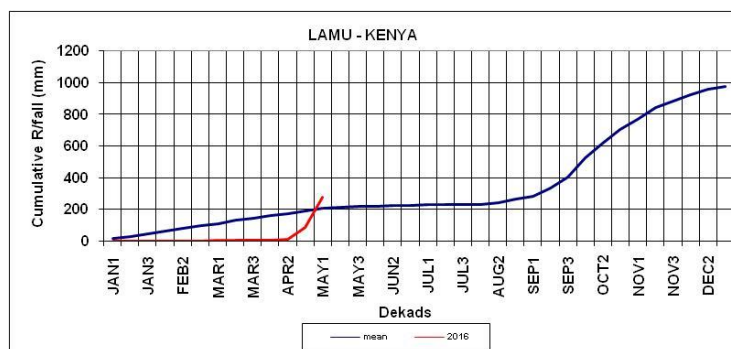


Figure 3b: Cumulative rainfall series Lamu

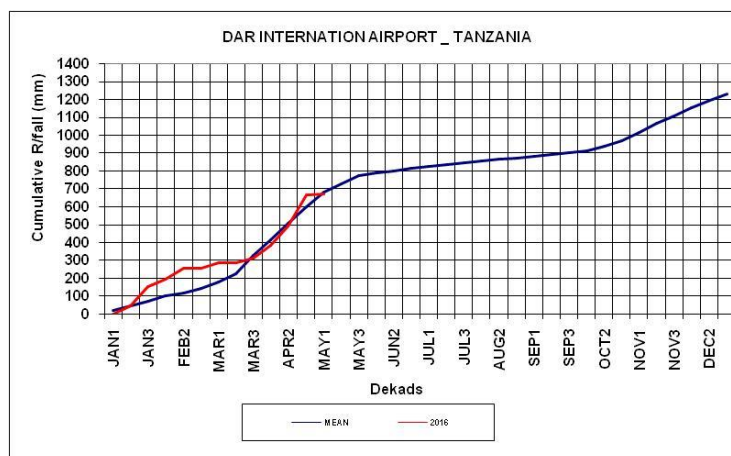


Figure 3c: Cumulative rainfall series for DAR. I. AIRPORT

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 the thirteenth dekad (1-10 May) and twelfth dekad (21-30 April) of 2016 indicates improved vegetative conditions over several places across the GHA region, these include: much of central Ethiopia; several parts of South Sudan; parts of northern and eastern Uganda; western, central and north eastern parts of Kenya, southern parts of Somalia; and over north western and eastern parts of Tanzania. Deteriorated vegetative conditions was mainly observed over south eastern parts of Sudan; north eastern, and south western parts of Ethiopia; southern and central parts of Uganda; north eastern parts of Kenya; parts of Rwanda, parts of Burundi; and over central and western Tanzania. The rest of the GHA indicated little or no change in vegetative conditions (Figure 4).

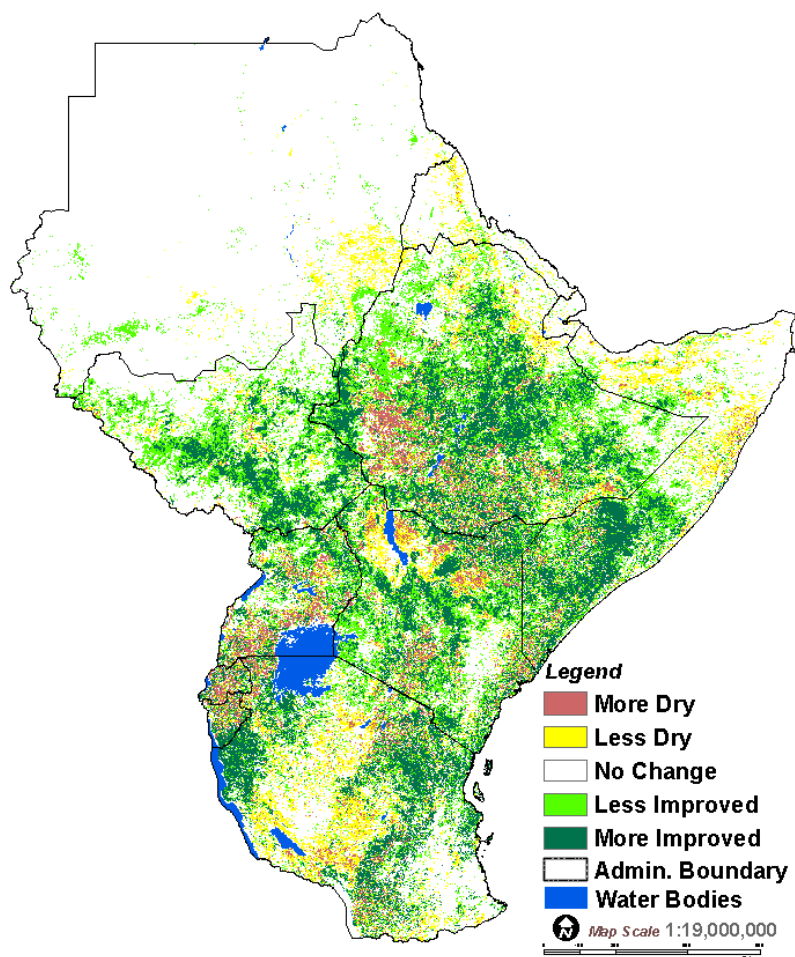


Figure 4: NDVI difference between the thirteenth (1-10 May) and the twelfth dekad (21-30 April) of 2016

5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during the thirteenth dekad (1-10 May) of 2016 were associated with the following impacts:

- Improved water availability leading to replenishment of reservoirs and water pans.
- Improved pasture and foliage across several regions of GHA leading to good prospects for livestock performance.
- Increase in water related diseases
- Localised flooding over some areas leading to loss of livelihood and displacement of people

6.0 Climate outlook

The rainfall outlook for the fifteenth dekad (21-31 May) of 2016 indicates near normal to above normal rainfall conditions are likely to be received in zone III (Figure 5) which covers southern parts of Sudan; much of South Sudan; western and central parts of Ethiopia; much of Uganda, western parts of Rwanda western parts of Burundi; western and central parts of Kenya; and north western of Tanzania. Near normal to below normal rainfall conditions are likely to be received in zone II which covers much of Eritrea, Djibouti and Somalia; northern and eastern parts of Ethiopia; northern and eastern parts of Kenya; and much of of Tanzania (Figure 5), while the rest of the GHA region are likely to remain dry (Figure 5).

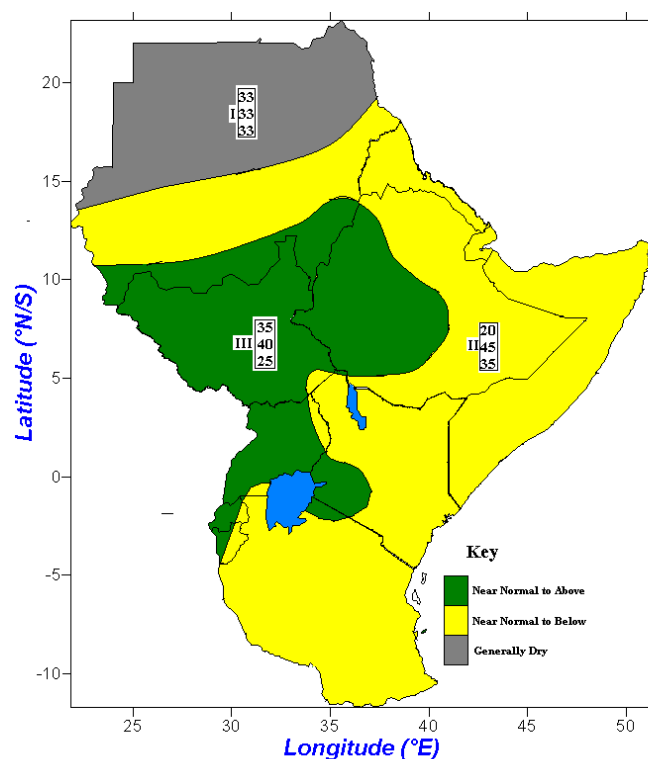


Figure 5: Climate outlook for the fifteenth dekad (21 – 31 May) of 2016