

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE FOURTEENTH DEKAD (11 – 20 MAY) OF 2016 AND CLIMATE OUTLOOK FOR THE SIXTEENTH DEKAD (1 – 10 JUNE) OF 2016

1.0 Highlights

- Wet conditions were mainly observed over much western and central parts of the northern sector, as well as western and central parts of the equatorial sector of the Greater Horn of Africa (GHA) during the fourteenth dekad (11-20 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 sixteenth dekad (1-10 June) of 2016;
- The observed rainfall conditions during the fourteenth dekad (11-20 May) of 2016 resulted in improved pasture and foliage, and crop conditions; replenishment of water resources; and increase in water related diseases.

2.0 Introduction

In this bulletin, the climatic conditions observed during the fourteenth dekad (11-20 May) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the sixteenth dekad (1-10 June) of 2016 is also provided.

3.0 Observed rainfall situation during the Fourteenth dekad (11–20 May) of 2016

Figure 1 shows the spatial pattern of observed rainfall over the Greater Horn of Africa (GHA) during the fourteenth dekad (11-20 May) of 2016 while Figure 2 shows the rainfall severity index for the same period.

3.1 Northern sector and equatorial sector

During the fourteenth dekad (11-20 May) of 2016 much of South Sudan; south eastern Sudan; western and central Ethiopia; north eastern tip of Somalia; parts of southern Uganda; and western and central Kenya recorded rainfall amounts of between 30 mm to more than 100 mm (Figure 1). This resulted into near normal to wet rainfall conditions (Figure 2). Much of the rest of the northern and equatorial sector of the GHA recorded less than 10 mm of rainfall with few places recording between 10 mm and 30 mm of rainfall (Figure 1), which resulted into dry or generally dry rainfall conditions (Figure 2).

3.2 Southern Sector

During the fourteenth dekad (11 – 20 May) of 2016, much of the southern sector recorded less than 10mm of rainfall (Figure 1), this resulted into dry or generally dry rainfall conditions (Figure 2). However southern part of Tanzania recorded between 10 mm and 30mm of rainfall which resulted to near normal rainfall conditions.

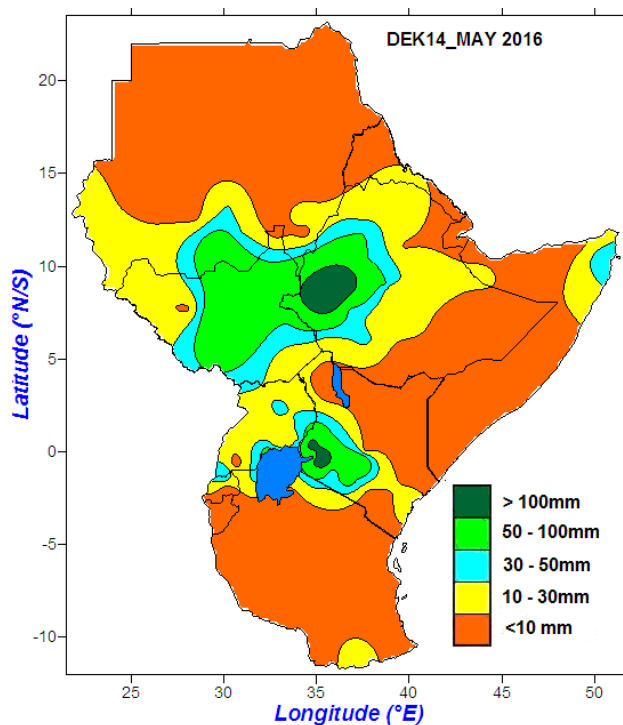


Figure 1: Spatial distribution of observed rainfall during the Fourteenth (11–20 May of 2016)

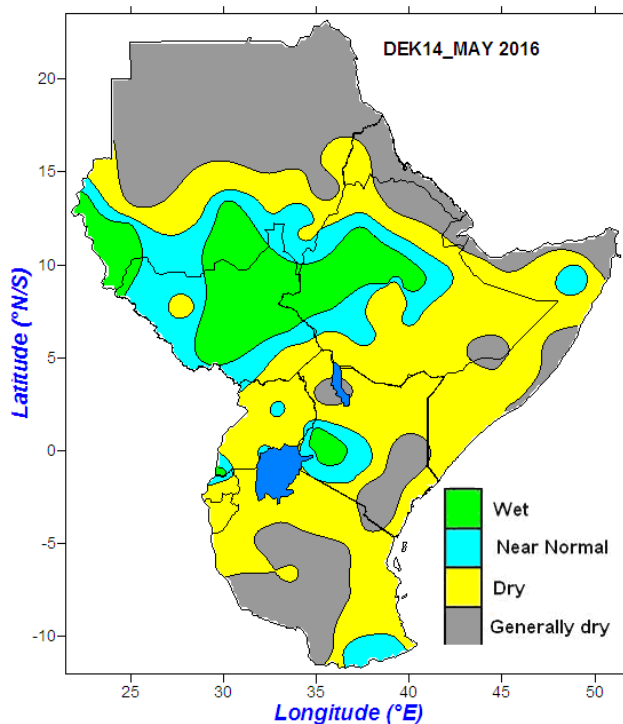


Figure 2: Rainfall Stress Severity Index for the Fourteenth dekad (11–20 May) of 2016

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 parts of the equatorial sector as well as north eastern coast of the southern sector of the GHA (Figure 3a, 3b, and 3c).

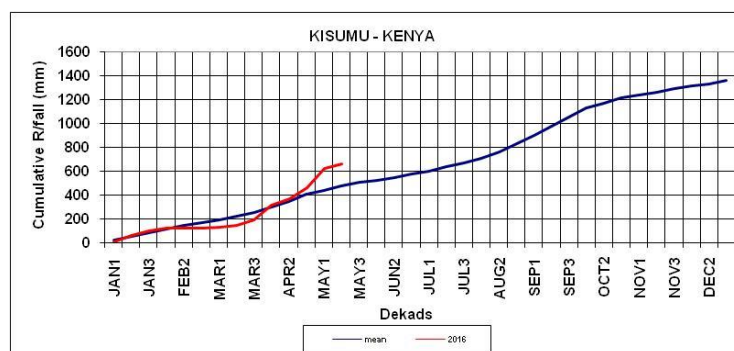


Figure 3a: Cumulative rainfall series for Kisumu

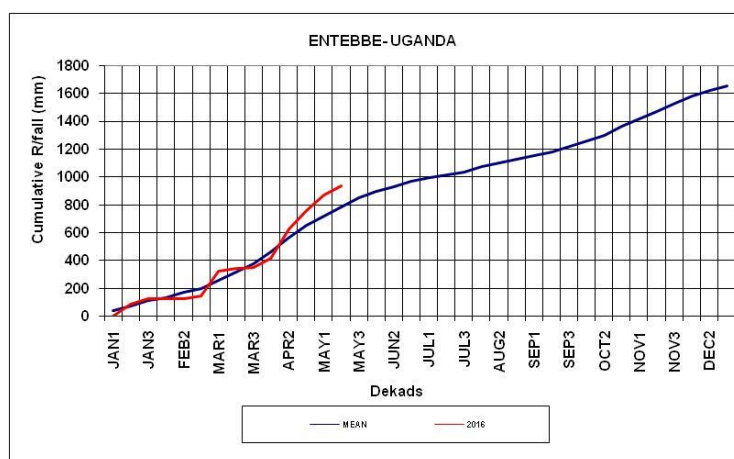


Figure 3b: Cumulative rainfall series Entebbe

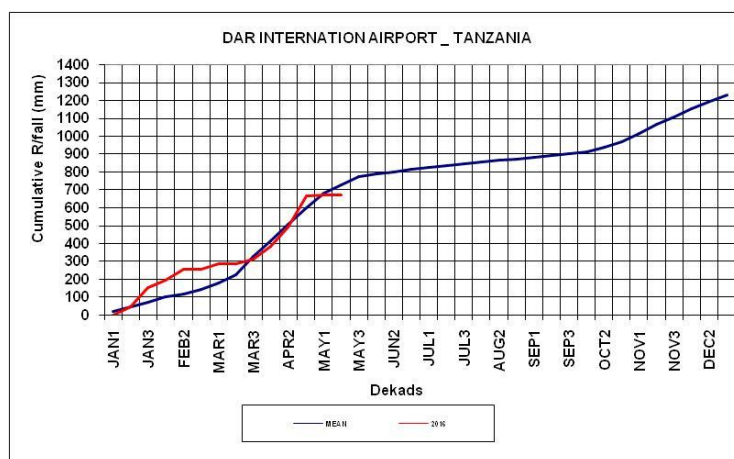


Figure 3c: Cumulative rainfall series for DAR. I. AIRPORT

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 fourteenth dekad (11-20 May) and the thirteenth dekad (1-10 May) of 2016 indicates improved vegetative conditions over south-central parts of Sudan; much of South Sudan; western and north western parts of Ethiopia; much of Uganda; western, central, north eastern and northern coast of Kenya; southern parts of Somalia; and much of Rwanda and Burundi. Deteriorated vegetative conditions was mainly observed over southern parts of Sudan; eastern, and southern parts of Ethiopia; north eastern, north western and southern parts of Kenya; and over much of Tanzania. The rest of the GHA indicated little or no change in vegetative conditions (Figure 4).

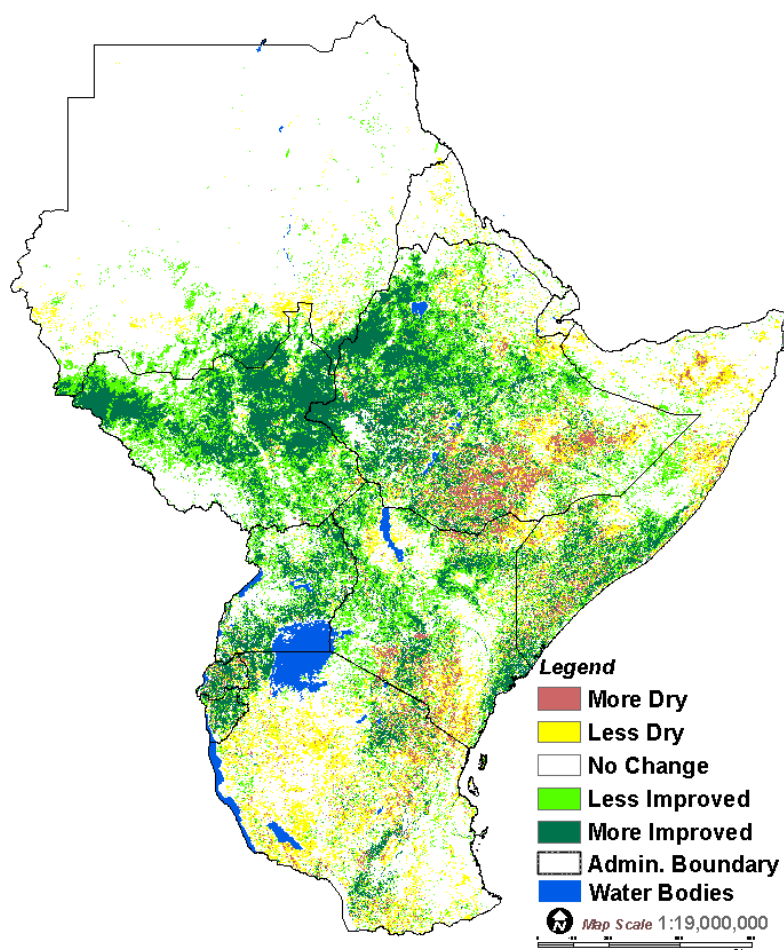


Figure 4: NDVI difference between the thirteenth (1-10 May) and the twelfth dekad (21-30 April) of 2016

5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during the fourteenth dekad (11-20 May) of 2016

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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

6.0 Climate outlook

The rainfall outlook for the sixteenth dekad (1-10 June) of 2016 indicates near normal to above normal rainfall conditions are likely to be received in zone III (Figure 5) which covers south western parts of Sudan; much of South Sudan; western and central parts of Ethiopia; much of Uganda; western parts of Rwanda; western parts of Burundi; and western parts of Kenya. Much of the northern parts of Sudan which fall within Zone I are likely to remain generally dry, while the rest of the GHA sub-region of Zone II is likely to receive near normal to below normal rainfall conditions (Figure 5), while the rest of the GHA region are likely to remain dry (Figure 5).

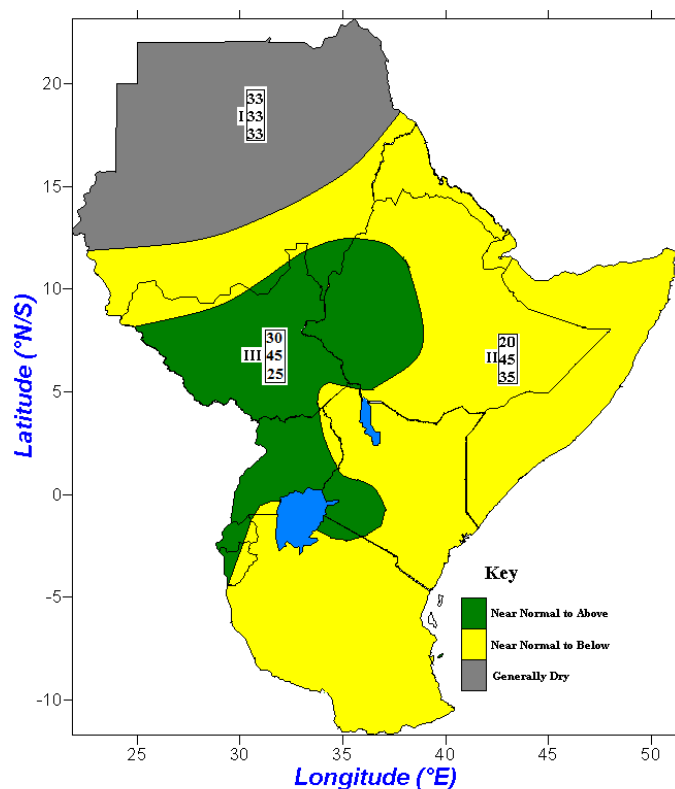


Figure 5: Climate outlook for the sixteenth dekad (1 –10 June) of 2016