

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE FOURTH DEKAD (1 – 10 FEBRUARY) OF 2016 AND CLIMATE OUTLOOK FOR THE SIXTH DEKAD (21 – 29 FEBRUARY) OF 2016

1.0 Highlights

- Wet conditions were mainly observed over much of the southern sector as well as southern central, and south-western parts of equatorial sector of the Greater Horn of Africa (GHA) during the fourth dekad (1-10 February) of 2016;
- Wet conditions are likely to be experienced over much of the southern sector and central and north eastern parts of the northern sector of Greater Horn of Africa (GHA), during the sixth dekad (20-29 February) of 2016;
- The observed rainfall conditions during the fourth dekad (1-10 February) of 2016 resulted in improved pasture and foliage, and crop conditions; replenishment of water resources; increase in water related diseases; and localized flooding.

2.0 Introduction

In this bulletin, the climatic conditions observed during the fourth dekad (1-10 February) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the sixth dekad (21-29 February) of 2016 is also provided.

3.0 Observed rainfall situation during the Fourth dekad (1–10 February) of 2016

Figure 1 shows the spatial pattern of observed rainfall over the GHA during the fourth dekad (1 – 10 January) of 2016 while Figure 2 shows that of rainfall severity index for the same period.

3.1 Northern sector

Much of the northern sector received less than 10mm of rainfall during the fourth dekad (1 –10 February) of 2016 (Figure 1) which resulted into generally dry conditions (Figure 2) except for parts of southern Ethiopia which received between 10mm and 30mm resulting dry to near-normal rainfall conditions.

3.2 Equatorial and Southern sectors

During the fourth dekad (1 –10 February) of 2016, most parts of southern sector as well as central, southern and south-western equatorial sector recorded wet conditions (Figure 2). These areas received between 30mm and more than 100mm of rainfall (Figure 1). Southern tip of Tanzania; eastern and northern Kenya; and southern parts of Uganda received less than 30mm of rainfall (Figure 1) resulting to near normal to dry conditions (Figure 2).

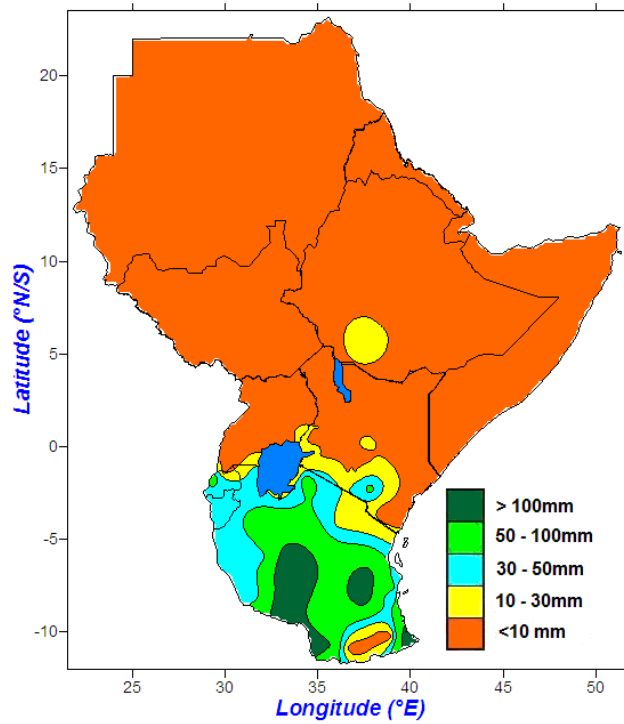


Figure 1: Spatial distribution of observed rainfall during the Fourth dekad (1–10 February) of 2016

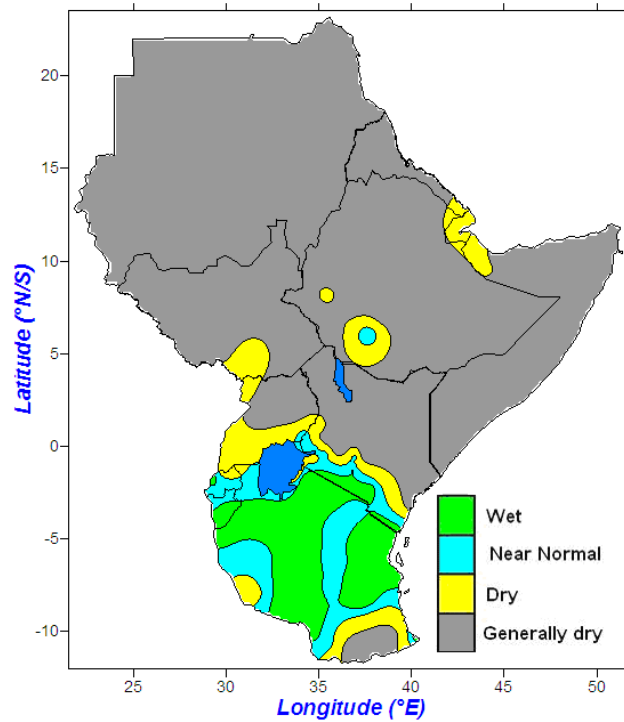


Figure 2: Rainfall Stress Severity Index for the Fourth dekad (1–10 February) of 2016

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. Below normal rainfall conditions was observed over eastern parts of the equatorial sector (Figure 3a). The western and central parts of the southern sector received near normal to above normal rainfall (Figure 3b and 3c).

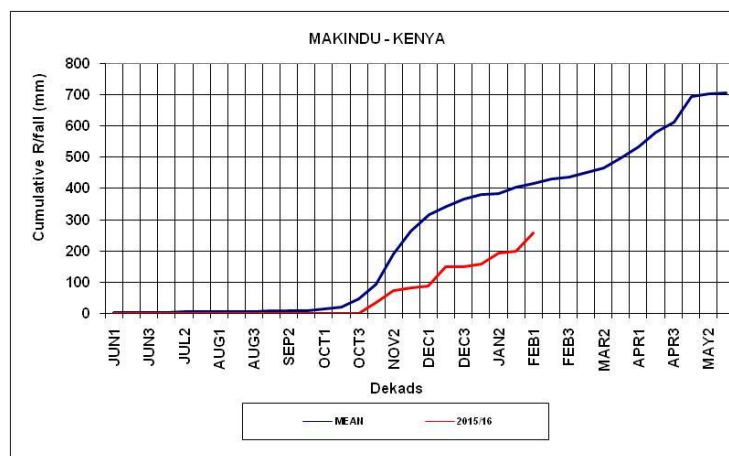


Figure 3a: Cumulative rainfall series for Makindu

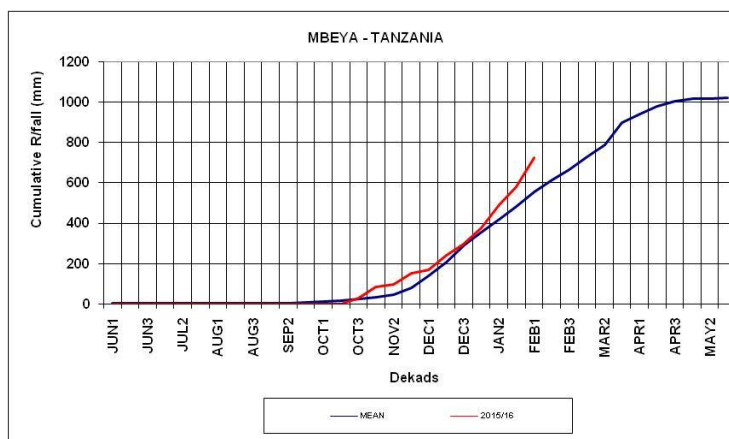


Figure 3b: Cumulative rainfall series Mbeya

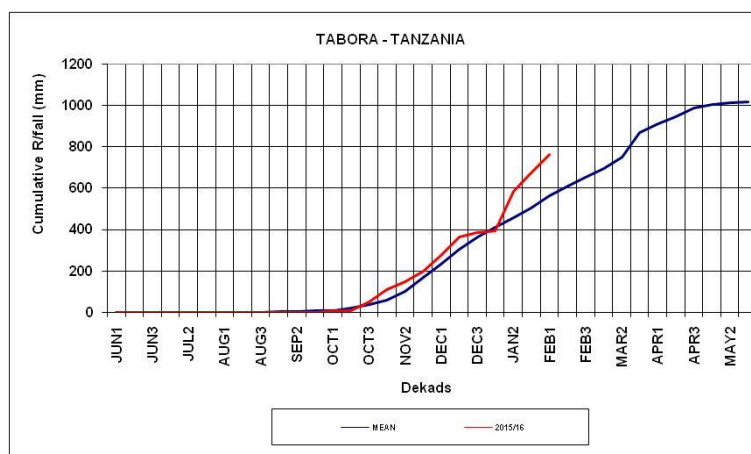


Figure 3c: Cumulative rainfall series for Tabora

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 fourth dekad (1-10 February) and the third dekad (21-31 January) of 2016 indicates deteriorated or little change in vegetative conditions over much of the GHA. However, much of northern, western and southern parts of Tanzania showed improvement in vegetative conditions (Figure 4).

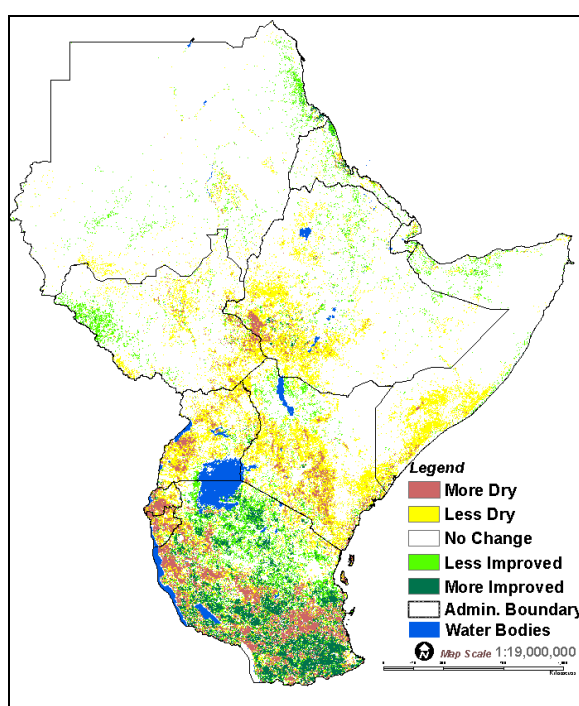


Figure 4: NDVI difference between the fourth dekad (1-10 February) and the third dekad (21-31 January) of 2016

5.2 Impacts associated with observed climate conditions

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

- Improved water availability leading to replenishment of reservoirs and water pans.
- Improved pasture and foliage across parts of the southern sectors of GHA leading to good prospects for livestock performance.
- Increase in water related diseases

6.0 Climate outlook

The rainfall outlook for the sixth dekad (21-29 February) of 2016 indicates near normal to above normal rainfall conditions are likely to be received in zone III (Figure 5) which covers much of Tanzania; Rwanda; Burundi; southern parts of Uganda; and western, and central Kenya. Near normal to below normal rainfall conditions are likely to be received in zone II and IV which

covers much of Uganda; northern coast and eastern Kenya; southern Somalia; southern Eritrea; and central and northern parts of Ethiopia; (Figure 4), while the rest of the GHA region are likely to remain dry (Figure 4).

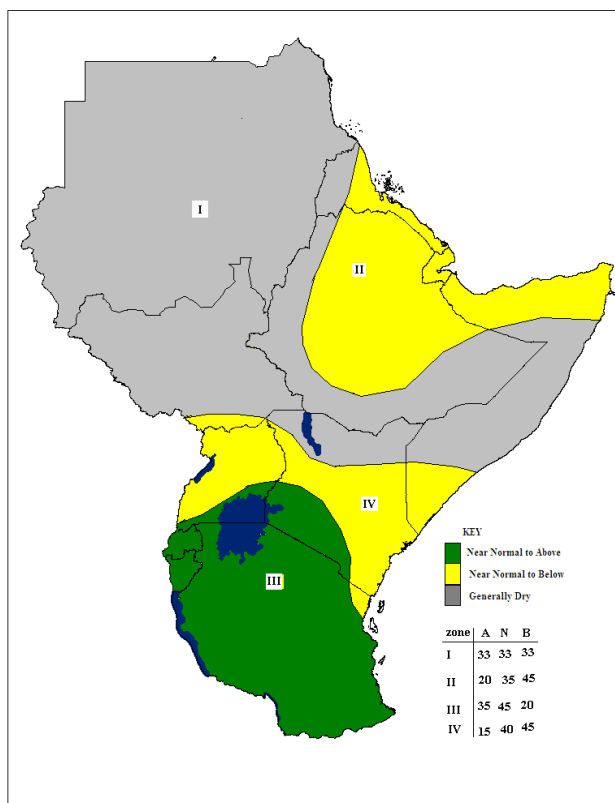


Figure 5: Climate outlook for the sixth dekad (21 – 29 February) of 2016