

## IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

### 10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE NINTH DEKAD (21 – 31 MARCH) AND CLIMATE OUTLOOK FOR THE ELEVENTH DEKAD (11 – 20 APRIL) OF 2016

#### 1.0 Highlights

- Wet conditions were mainly observed over southwestern and central parts of the southern sector; western parts of the equatorial sector; and southwestern parts of the northern sector of the Greater Horn of Africa (GHA) during the ninth dekad (11-20 February) of 2016;
- The observed rainfall conditions during the ninth dekad (21-31 March) of 2016 resulted in improved pasture and foliage, and crop conditions; and replenishment of water resources;
- Wet conditions are likely to be experienced over the western and eastern parts of the equatorial sector; northwestern and northeastern parts of the southern sector as well as southwestern and central parts of the northern sector of GHA, during the eleventh dekad (11-20 March) of 2016;

#### 2.0 Introduction

In this bulletin, the climatic conditions observed during the ninth dekad (21-31 March) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the ninth dekad (11-20 April) of 2016 is also provided.

#### 3.0 Observed rainfall situation during the Ninth dekad (21–31 March) of 2016

Figure 1 shows the spatial pattern of observed rainfall over the GHA during the ninth dekad (21 –31 March) of 2016 while Figure 2 shows the rainfall severity index for the same period.

##### 3.1 Northern sector

During the ninth dekad (21 –31 March) of 2016 western and south western parts of Ethiopia, eastern parts of South Sudan received between 30mm-100mm of precipitation (Figure 1) which resulted in near normal to wet rainfall conditions (Figure 2). The rest of the northern sector recorded less than 30mm of rainfall which resulted in dry to generally dry rainfall conditions.

##### 3.2 Equatorial and Southern sectors

During the ninth dekad (21 –31 March) of 2016, western Uganda; parts of western Kenya; much of Rwanda; northern Burundi; northern, central and south western Tanzania recorded between 30mm to more than 100mm of rainfall (Figure 1) resulting in near normal to wet conditions (Figure 2). The rest of these regions which include much of Kenya; eastern parts of Uganda as well as western and eastern Tanzania received less than 30mm of rainfall resulting to dry and generally dry conditions (Figure 2).

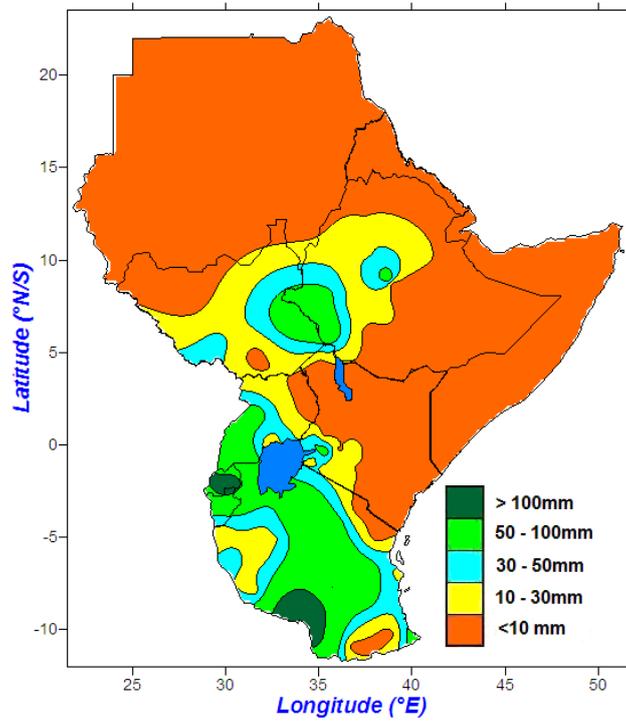


Figure 1: Spatial distribution of observed rainfall during the Ninth dekad (21–31 March) of 2016

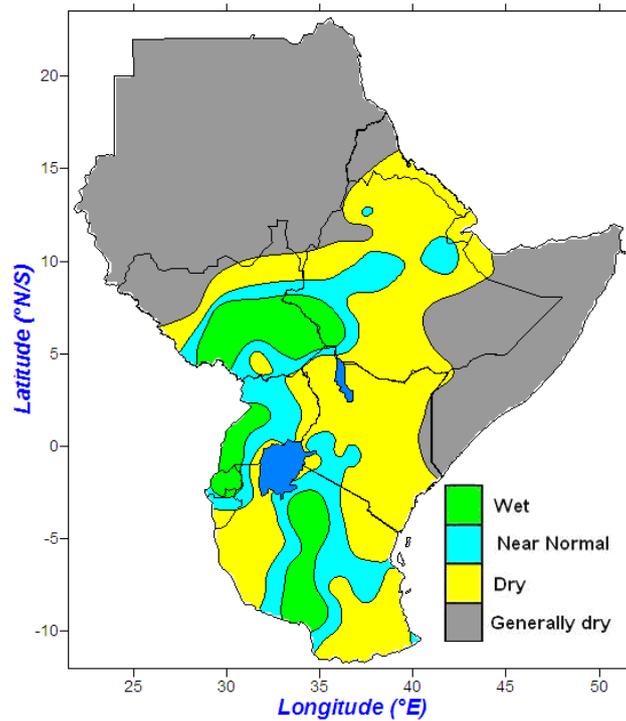
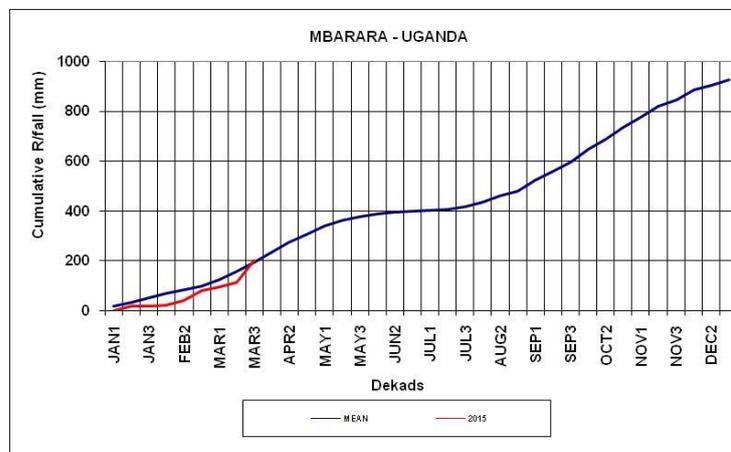


Figure 2: Rainfall Stress Severity Index for the Ninth dekad (21–31 March) of 2016

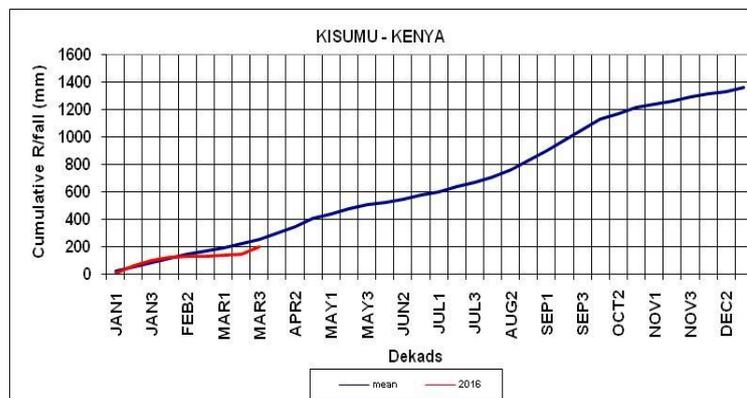
For more information contact  
 ICPAC P.O. Box 10304, 00100 Nairobi, KENYA; Tel: +254-020-3514426  
 E-mail: [director@icpac.net](mailto:director@icpac.net); Website: [www.icpac.net](http://www.icpac.net)

#### 4.0 Assessment of current rainfall performance

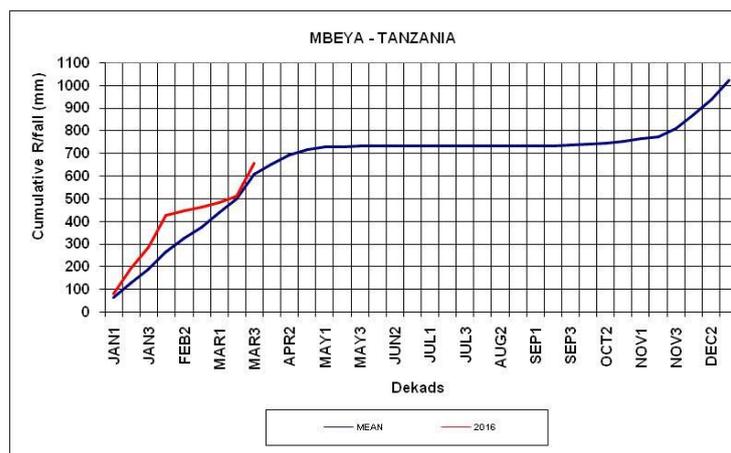
Figure 3 shows the cumulative dekadal rainfall performance since January 2015. Near normal rainfall conditions were observed over western parts of the equatorial sector as well as western parts of the southern Sector (Figure 3a, 3b and 3c).



**Figure 3a: Cumulative rainfall series for Mbarara**



**Figure 3b: Cumulative rainfall series Kisumu**



**Figure 3c: Cumulative rainfall series for Mbeya**

## 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 ninth dekad (21-31 March) and the eighth dekad (11-20 March) of 2016 indicates improved vegetative conditions over western parts of South Sudan; western parts of Ethiopia; northwestern parts of Uganda; and localised parts of southern Tanzania. Deteriorated vegetative conditions was indicated over southern parts of Sudan, southern parts of South Sudan; parts of eastern Eritrea; southern and eastern parts of Ethiopia; southern Somalia; much of western, central and coastal Kenya; south western parts of Uganda; over much of Rwanda; much of Burundi; and over much of Tanzania. The rest of the GHA received little or no change in vegetative conditions (Figure 4).

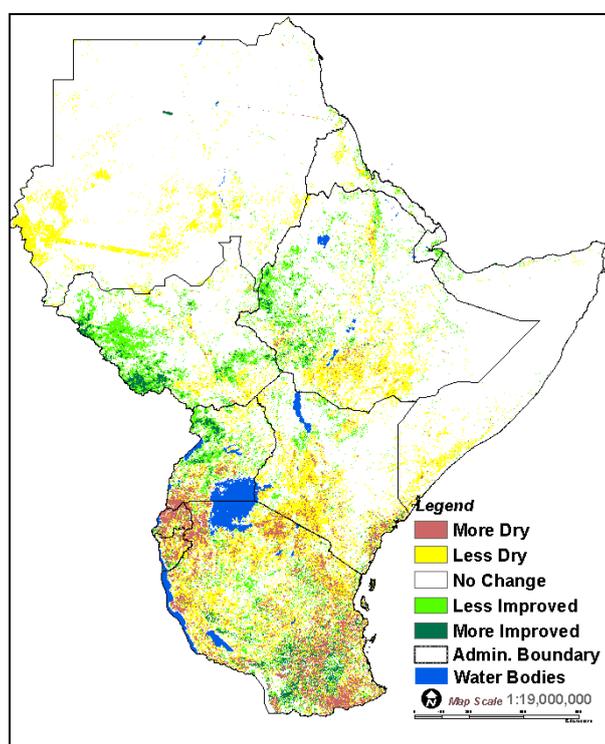


Figure 4: NDVI difference between the ninth dekad (21-31 March) and the eighth dekad (11-20 March) of 2016

### 5.2 Impacts associated with observed climate conditions

The observed rainfall conditions over GHA during the ninth dekad (21-31 March) of 2016 were associated with the following impacts:

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

## 6.0 Climate outlook

The rainfall outlook for the eleventh dekad (11-20 March) of 2016 indicates near normal to above normal rainfall conditions are likely to be received in zone III and IV (Figure 5) which covers southern parts of South Sudan; southwestern and central parts of Ethiopia; much of Uganda; western and eastern parts of Kenya; southern parts of Somalia; much of Rwanda; much of Burundi; and north western and northern coast of Tanzania. Near normal to below normal rainfall conditions are likely to be received in zone II, while the rest of the GHA region is likely to remain generally dry (Figure 5).

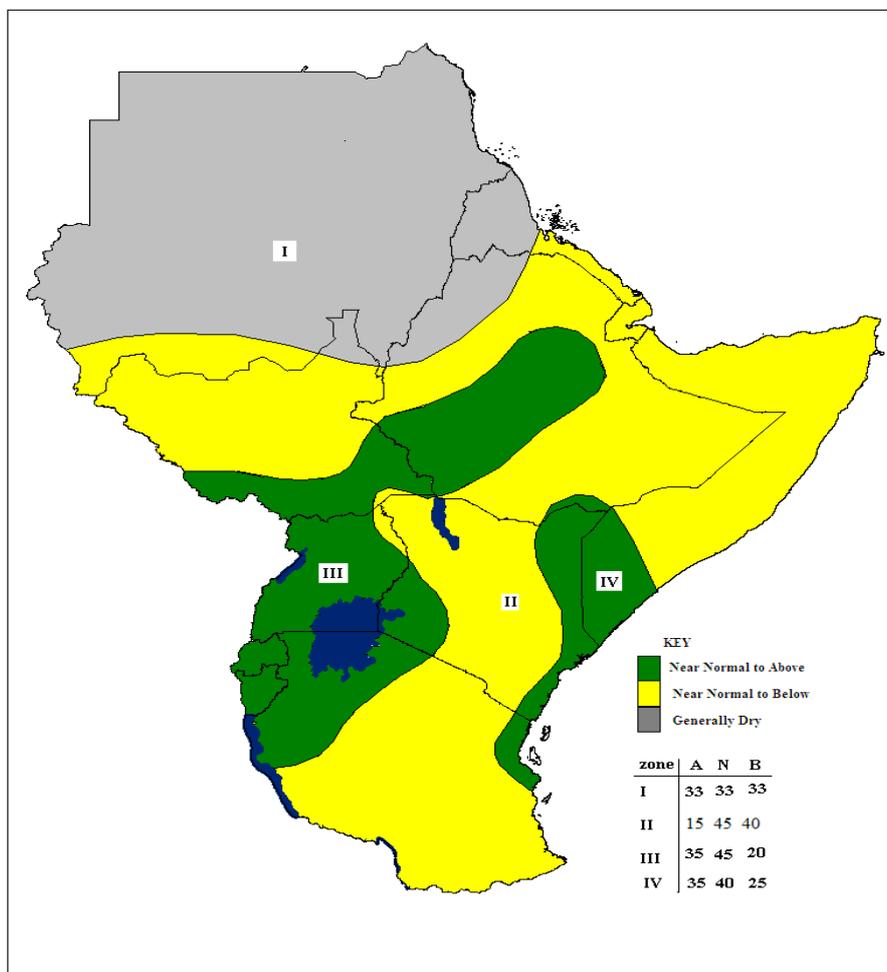


Figure 5: Climate outlook for the eleventh dekad (11 – 20 April) of 2016