

IGAD CLIMATE PREDICTION AND APPLICATIONS CENTRE (ICPAC)

10 DAY CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE THIRD DEKAD (21 – 31 JANUARY) OF 2016 AND CLIMATE OUTLOOK FOR THE FIFTH DEKAD (11 – 20 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 third dekad (21-31 January) of 2016;
- Wet conditions are likely to be experienced over much of the southern sector of Greater Horn of Africa (GHA) during the fifth dekad (11-20 February) of 2016;
- The observed rainfall conditions during the third dekad (21-31 January) of 2016 resulted in improved pasture and foliage 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 third dekad (21-31 January) of 2016 over GHA are reviewed and the associated impacts highlighted. The climate outlook for the fifth dekad (11-20 February) of 2016 is also provided.

3.0 Observed rainfall situation during the third dekad (21–31 January) of 2016

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

3.1 Northern sector

Generally dry conditions prevailed over much of the northern sector during the third dekad (21 – 31 January) of 2016 (Figure 2). However southern and northeastern parts of Ethiopia reported near normal to dry conditions.

3.2 Equatorial and Southern sectors

During the third dekad (21–31 January) of 2016, most parts of southern sector as well as central, southern and south-western parts of equatorial sector recorded wet conditions (Figure 2). These areas received between 30mm and 100mm of rainfall (Figure 1). Isolated parcels over coastal and southern Tanzania received more than 100mm of rainfall (Figure 1). Southern and northern tips of Tanzania; much of Kenya; and eastern half of Rwanda received less than 30mm of rainfall (Figure 1) resulting to near normal to dry conditions (Figure 2). Uganda was not included in the assessment.

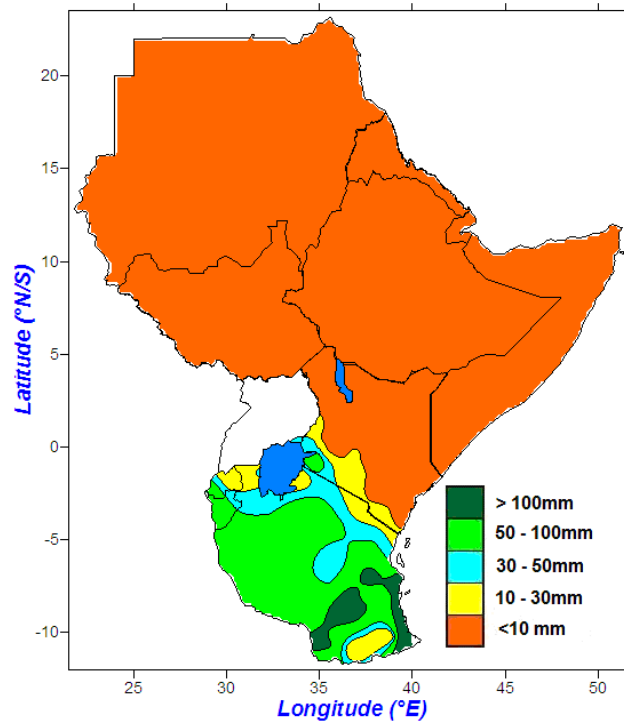


Figure 1: Spatial distribution of observed rainfall during the third dekad (21–31 January) of 2016

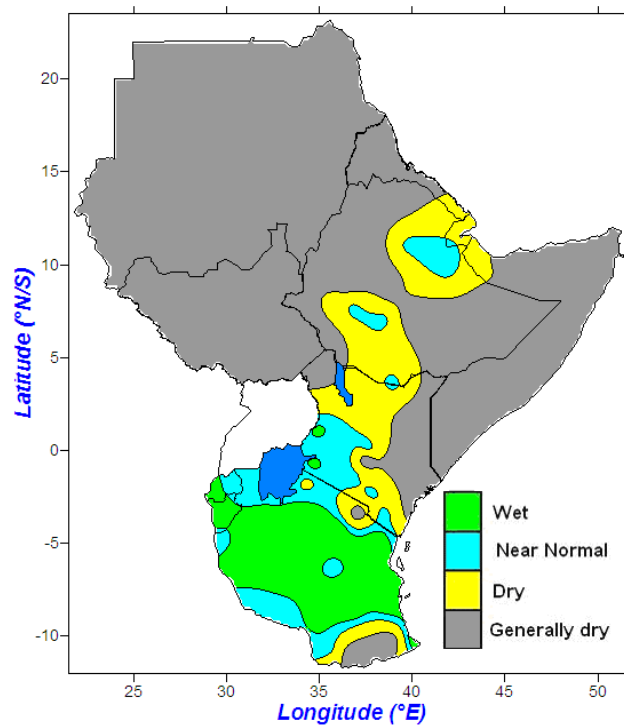


Figure 2: Rainfall Stress Severity Index for the third dekad (21–31 January) of 2016

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

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 southern sector (Figure 3b, 3c) while the eastern part of the equatorial sector received below normal rainfall (Figure 3a).

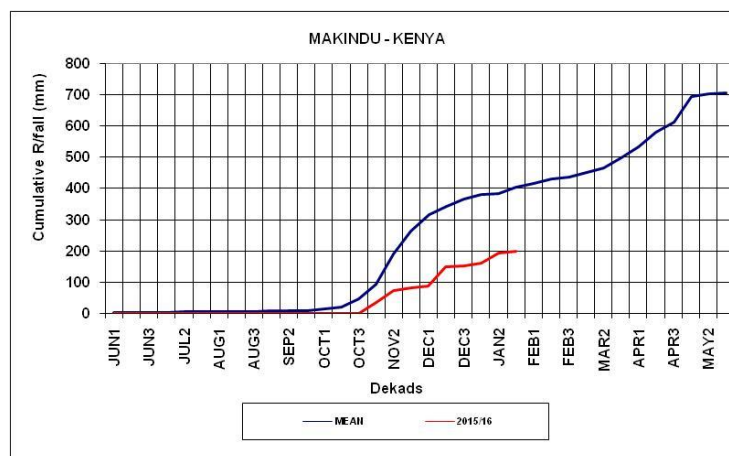


Figure 3a: Cumulative rainfall series for Makindu

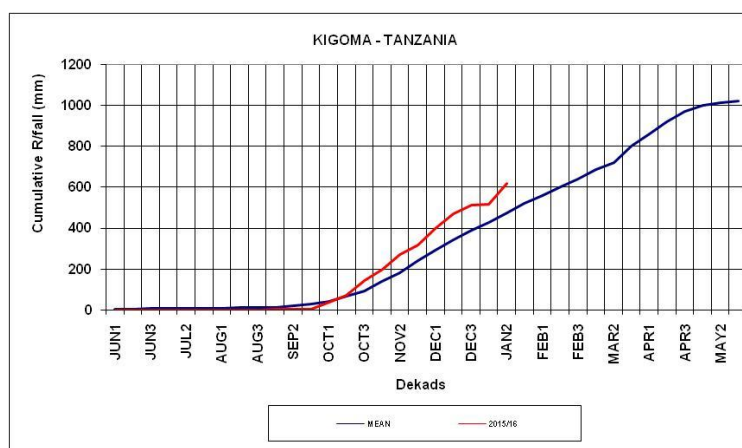


Figure 3b: Cumulative rainfall series Kigoma

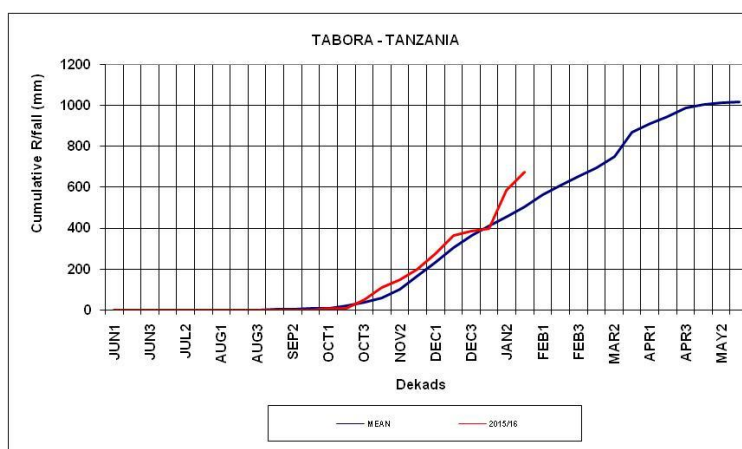


Figure 3c: Cumulative rainfall series for Tabora

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

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 third dekad (21-31 January) and the second dekad (11-20 January) of 2016 indicates deteriorated or little change in vegetative conditions over much of the GHA. However much of Rwanda and Burundi; central and south central Kenya; western parts of South Sudan; parts of central Ethiopia; parts of north eastern, central and southern Tanzania showed improvement in vegetative conditions (Figure 4).

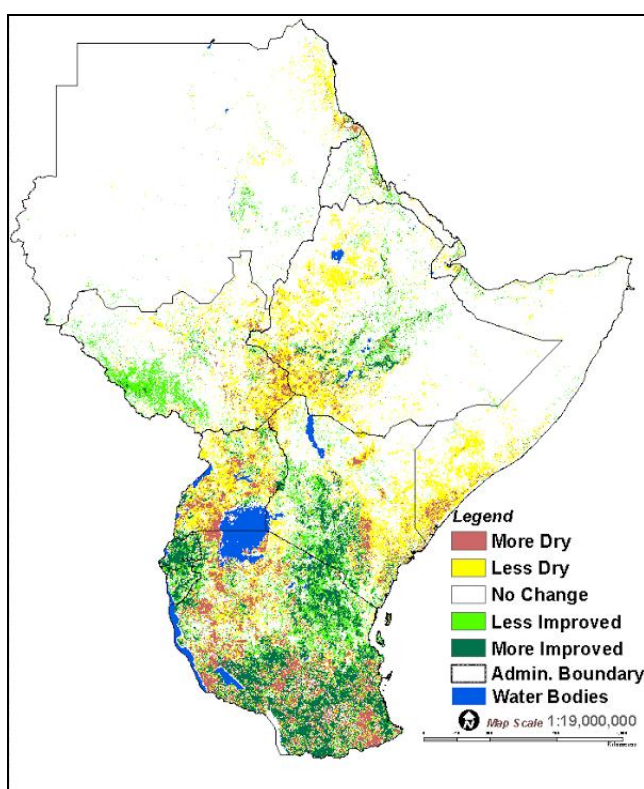


Figure 4: NDVI difference between the third dekad (21-31 January) and second dekad (11-20 January) of 2016

5.2 Impacts associated with observed climate conditions

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

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

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

- Water stress for pasture and crop especially in some parts of eastern equatorial sector and much of northern sector.

6.0 Climate outlook

The rainfall outlook for the fifth dekad (11-20 February) of 2016 indicates near normal to above normal rainfall conditions are likely to be received in zone IV (Figure 5) which covers much of Tanzania and Burundi; southern half of Rwanda; southeastern part of Uganda; and central and western Kenya. Near normal to below normal rainfall conditions are likely to be received in zone II and III which covers much of Uganda; most parts of Kenya; southern Somalia; southern Eritrea; and central and northern parts of Ethiopia (Figure 5). The rest of the GHA region are likely to remain dry (Figure 5).

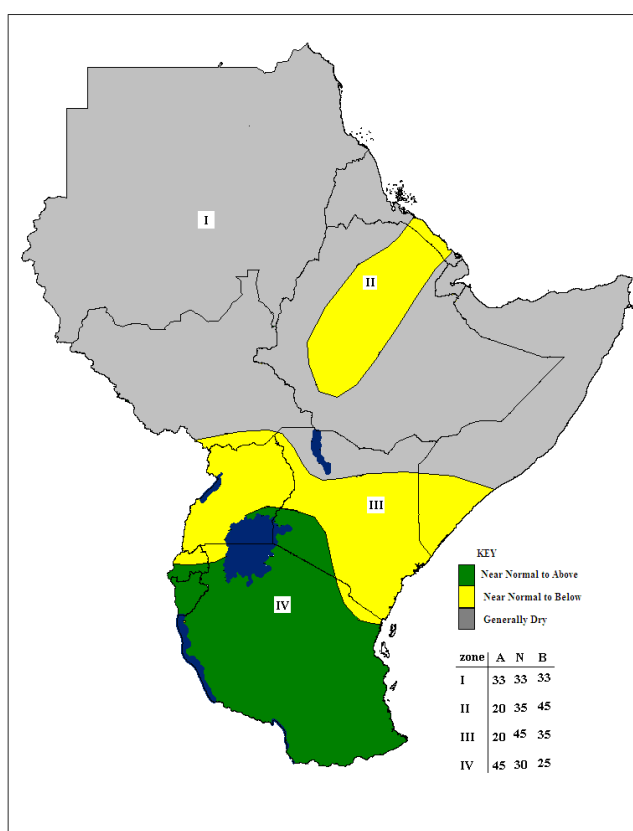


Figure 5: Climate outlook for the fifth dekad (11 – 20 February) of 2016