ICPAC

Bulletin for Dekad 28 of 2019
Issue Number: ICPAC/02/1000

10 DAYS CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE THIRD DEKAD (21-30) OF SEPTEMBER 2019 AND FORECAST FOR THE SECOND DEKAD (11-20) OF OCTOBER 2019

1. Introduction

This bulletin reviews the climatic conditions observed during the third dekad (21-30) of September 2019 and gives the climate forecast for the second dekad (11-20) of October 2019 with the associated climate impacts over the Greater Horn of Africa (GHA) region. The observed conditions are compared to the average of the climatological period of 1981-2010 for rainfall and mean surface temperature.

For referencing within this bulletin, the Greater Horn of Africa (GHA) region is generally subdivided into three sub-sectors: The equatorial sector lying approximately between 5° S and 5° N, with the northern and southern sectors occupying the rest of the northern and southern parts of the region respectively while average is computed based on the period 1981 - 2010.

2. Climate Brief

During the third dekad of September 2019, southern parts of Sudan, western and central Ethiopia, in several parts of South Sudan, Uganda, Rwanda, over parts of Burundi, western Kenya and northern Somalia, rainfall recorded was between 11-100mm, with rainfall exceeding 100mm occurring in southeast South Sudan and western part of Ethiopia. These areas generally experienced rainfall conditions that was wetter than or near the average.

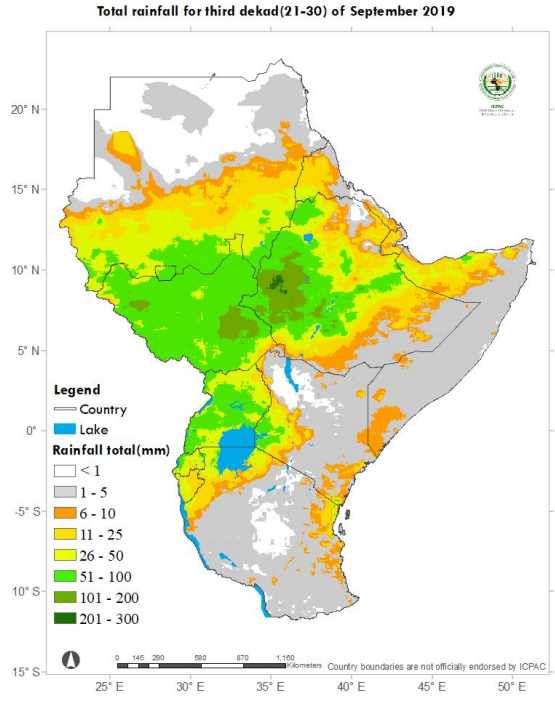

Figure 1a: heavy to very heavy rainfall was recorded in central and western Ethiopia, southern parts of Sudan, , western Kenya, and over much of South Sudan, Uganda, Rwanda and Burundi. *(Data: ICPAC Blended CHIRP)*

Southern parts of Sudan, Several parts of Eritrea, Djibouti,northeast Somalia, Djibouti, Uganda, Rwanda Burundi, and western parts of Kenya recorded rainfall that was less than 10m. Most of these areas received rainfall that was near the average amount or remained generally dry, Some areas in central Somalia and eastern parts of Kenya which recorded rainfall that was lower than the average (Figure 1a, Figure 1b and Figure 1c).

Maximum and minimum temperature was warmer than or nearer the climatological average over most parts of the equatorial sector, and southern sector, and southeastern parts of the northern sector of the GHA. Maximum and minimum temperature that was cooler than the climatological average was

observed in western and central parts of the northern sector and over northeastern parts of the equatorial sector of the GHA. Much of the rest of the northern sector recorded maximum and minimum temperature that was near the climatological mean during the third dekad of September 2019 (Figure 2 and Figure 3).

Heavy rainfall exceeding 200 mm is forecasted in central Somalia, southern and western Ethiopia and western Kenya. Moderate rainfall between 20-150 mm is forecasted over most of Somalia, South Sudan, Uganda, Rwanda, Burundi, coastal and northeastern Kenya, and parts of coastal, southern and western Tanzania. Regions in central Tanzania, northwestern Kenya, southeastern South Sudan, northern Ethiopia, much of Eritrea and northern Sudan are expected to remain dry or receive less than 5 mm of rainfall during the second dekad (11-20) of the October 2019.

High daily-mean temperatures above 30˚C is forecasted in central Sudan, parts of northern Ethiopia and central Eritrea. Moderate daily-mean temperatures between 20 - 30˚C forecasted in South Sudan, Uganda, northern and eastern Kenya, central and southern Tanzania, Somalia and southeastern Ethiopia. Cold conditions expected in central Ethiopia, western and central Kenya, parts of Rwanda, Burundi and southern Tanzania, with daily-mean temperatures below 20˚C.

3. Observed rainfall during the third dekad (21-30) of September 2019

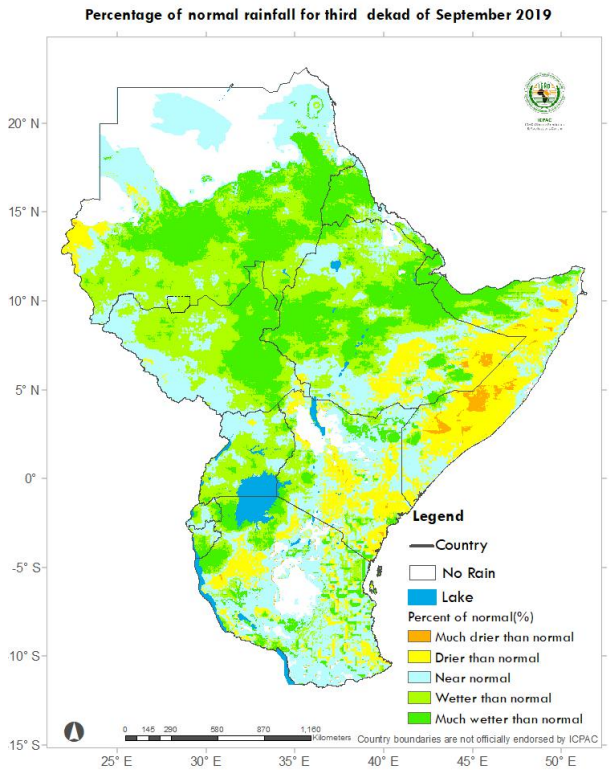

Figure 1b

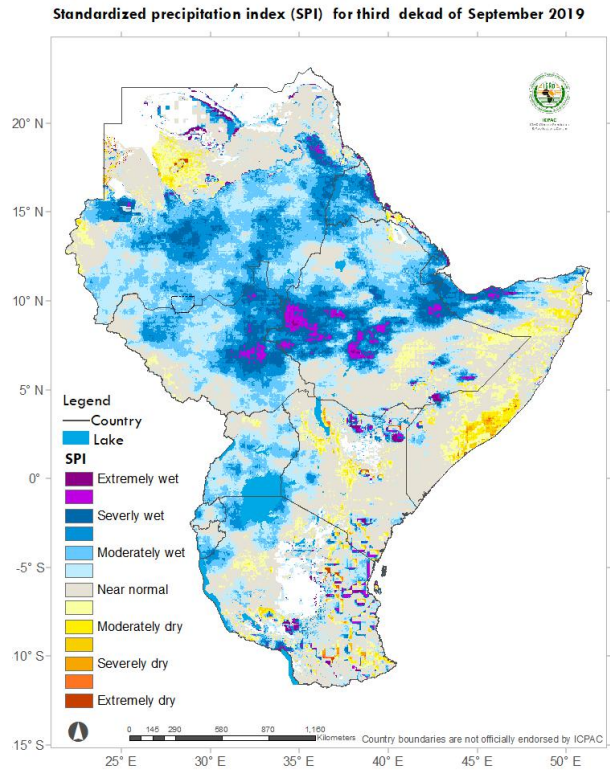

Figure 1c

The central and southern parts of Somalia, southeast Ethiopia and in parts of central and eastern Kenya rainfall was drier than the climatological average. Much of South Sudan, southern parts of Sudan, Eritrea, Djibouti, north and central Ethiopia, northern Somalia, Uganda, Rwanda, and Burundi recorded rainfall that was wetter than the climatological average, however some areas in northern parts of Sudan, northwestern Kenya, and central and northern Tanzania remained generally dry *(Data: ICPAC Blended CHIRP)*

4. Maximum and Minimum Temperature during the third dekad (21-30) of September 2019

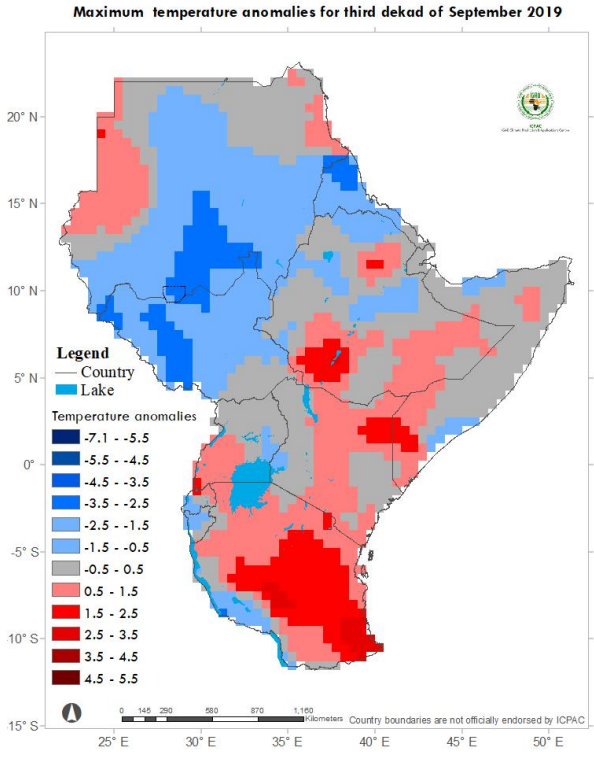

Figure 2: several parts of South Sudan, Eritrea, southern part of Sudan, and northern Ethiopia recorded maximum temperatures that was cooler than the climatological mean. Much of the rest of the GHA recorded maximum temperature that was warmer than or near the climatological mean *(Data Sourced from: the* NOAA-*NCEP CPC. GTS gridded data)*

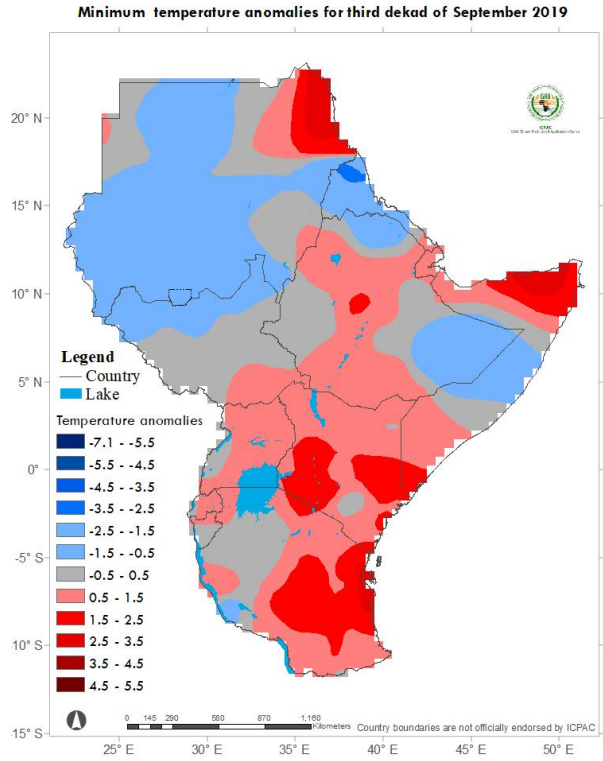

Figure 3: Most areas of the Sudan, Eritrea, northern parts of South Sudan, northern and eastern Ethiopia, and central Somalia recorded minimum temperature that was cooler than than the climatological average. Much of the rest of the GHA recorded minimum temperature that was warmer than or near the climatological mean. *(Data Source: Data Sourced from: the NOAA-NCEP CPC. GTS gridded data)*

5. Climate Forecast

Rainfall and Temperature Forecast

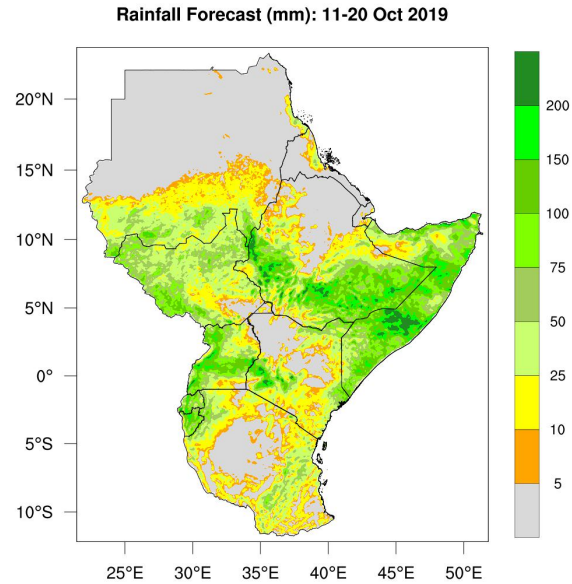

Figure 4: southern parts of Sudan, southern and western Ethiopia, over several parts of South Sudan, Somalia, Uganda, Rwanda, Burundi, and in parts of western and central Kenya, and north and eastern Tanzania are expected to receive moderate to very heavy rainfall. Most of the rest of the region is expected to record light rainfall conditions or remain generally dry (Source: WRF-ICPAC).

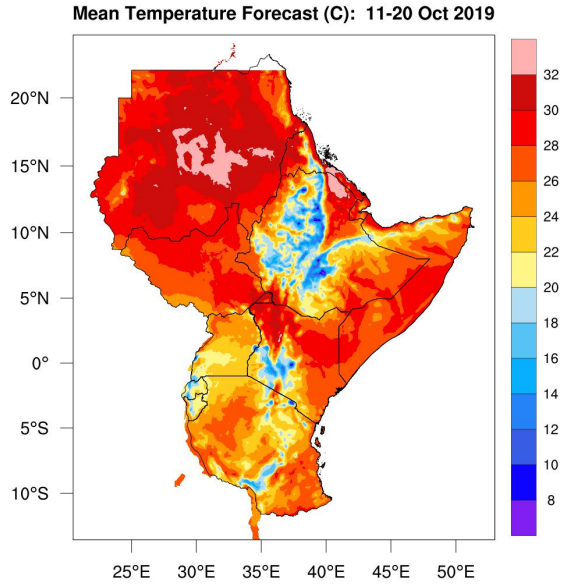

Figure 5: Most parts of Sudan, Eritrea, Djibouti, Somalia, northeast and southeast Ethiopia, South Sudan, and northern and eastern Kenya, are expected to record very warm to hot weather. Cooler weather is expected in western and central highlands of Ethiopia, southwestern parts of Uganda, western and central Kenya, much of Rwanda and Burundi, and northeast, central and southwestern parts of Tanzania (Source: WRF-ICPAC).

Reference terminology

Rainfall categories	
Range	**Category**
<10 mm	Light
10 - 25mm	Moderate
20 - 50mm	Heavy
>50mm	Very heavy

Rainfall coverage	
Coverage	**Range**
Most Places	Between 66% and 100%
Several Places	Between 33% and 66%
Few Places	Below 33%

f: "https://www.facebook.com/IGAD-Climate-Prediction-and-Applications-Centre-381499298564618/"

t: "https://twitter.com/icpac_igad?lang=en"

: "https://www.youtube.com/user/icpac1"

For more information:
IGAD Climate Prediction and Applications Centre
E-mail: director@icpac.net
www.icpac.net