ICPAC

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10 DAYS CLIMATOLOGICAL SUMMARY AND IMPACTS FOR THE FIRST DEKAD (01-10) OF SEPTEMBER 2019 AND FORECAST FOR THE THIRD DEKAD (21-30) OF SEPTEMBER 2019

1. Introduction

This bulletin reviews the climatic conditions observed during the first dekad (01-10) of September 2019 and gives the climate forecast for the third dekad (21-30) of September 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 5º S and 5º 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 first dekad of September 2019, most parts of South Sudan, central to southern part of Sudan, north, western and central Ethiopia, most parts of Uganda, Rwanda, northern Burundi, and western and central parts of Kenya recorded between 11 and 100 mm of rainfall. Parts of north, central and western parts of Ethiopia recorded rainfall exceeding 100mm. Much of the rest of the GHA recorded light rains of less than 10mm or remained generally dry (Fig 1 a). Several places in central and southern parts of Sudan, northeast Ethiopia, and eastern South Sudan recorded drier than the average conditions. Wetter than average conditions were recorded over much of southern part of the northern sector, western, central, and coastal parts of the equatorial sector. Some areas in central Somalia, northern and eastern Kenya, and central and western parts of Tanzania remained generally dry (, Figure 1b and Figure 1c).

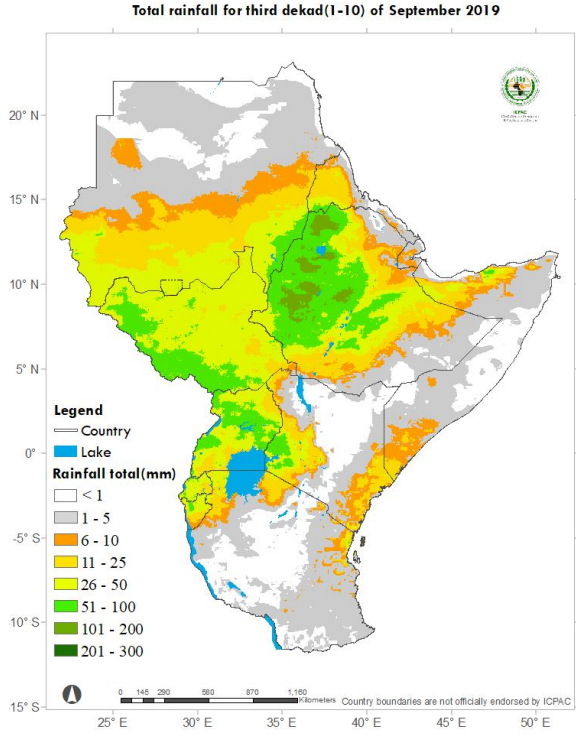

Figure 1a: heavy to very heavy rainfall was recorded in central and western Ethiopia, western South Sudan, western, central and southeastern Uganda, and western parts of Kenya. *(Data: ICPAC Blended CHIRP)*

Most areas in the equatorial sector, southern sector, and southeastern parts of the northern sector of the GHA recorded maximum and minimum temperatures that were warmer than the climatological mean. Much of the rest of the northern sector recorded maximum and minimum temperature that was cooler than or near the climatological mean during the first dekad of September 2019 (Figure 2 and Figure 3).

Areas in Central and western Ethiopia are forecasted to receive heavy rainfall. Moderate amounts of rainfall (25-100mm) are forecasted in southern Sudan, northwestern Eritrea, western South Sudan, northwest& central Uganda, western Kenya and central & northern Somalia. Much of the rest of the GHA region including: Tanzania, Burundi, Rwanda, most of Kenya, eastern South Sudan, northern Sudan, southern, eastern & north-eastern Ethiopia, Djibouti and parts of central Somalia are expected to remain generally dry during the third dekad (21-30) of the September 2019.

Areas in central Sudan, north-eastern Ethiopia, Djibouti, coastal region of Eritrea and north-western Somalia are forecasted to have above 30ºC mean daily temperatures. South Sudan, Uganda, Rwanda, Burundi, much of Tanzania, eastern and northern Kenya, much of Somalia and eastern & southern Ethiopia are forecasted to experience warm conditions in the range of 18-30ºC. Mild cold conditions with temperatures less than 14ºC are forecasted in regions of central Ethiopia, western & central Kenya and central Tanzania.

3. Observed rainfall during the first dekad (01-10) of September 2019

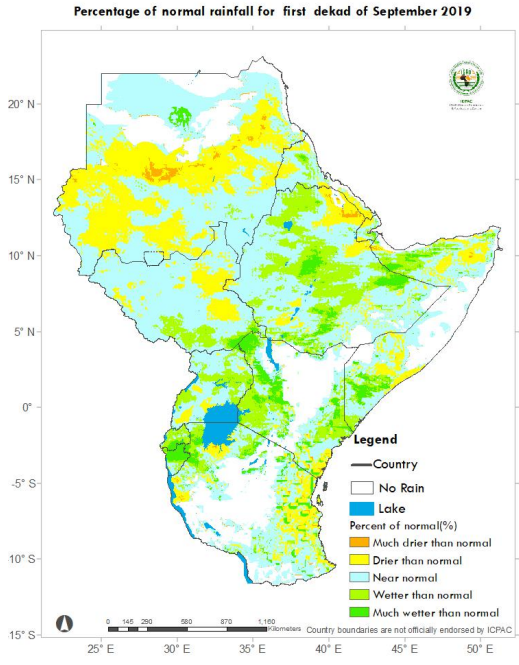

Figure 1b

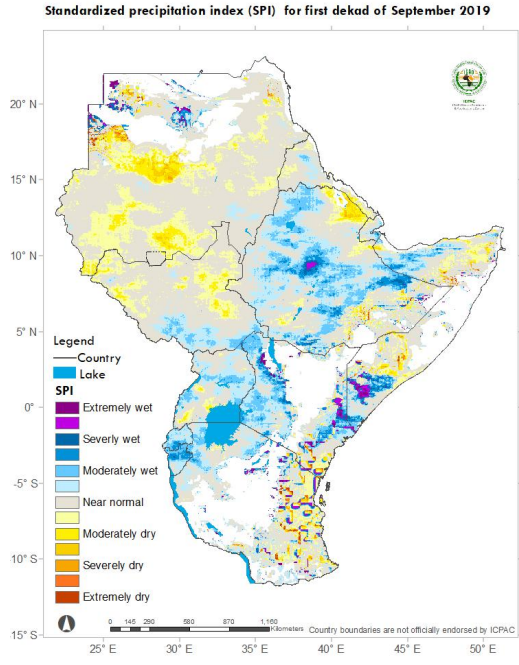

Figure 1c

Drier than average conditions recorder over several parts of south and central Sudan, eastern parts of South Sudan , north eastern Ethiopia, southern Eritrea, and southwest Uganda. Much of the rest of the northern sector and equatorial sector of the GHA received near or wetter than average rainfall conditions, however some areas in central Somalia, southeast Ethiopia north and eastern Kenya, and central and western Tanzania remained generally dry *(Data: ICPAC Blended CHIRP)*

4. Maximum and Minimum Temperature during the first dekad (01-10) of September 2019

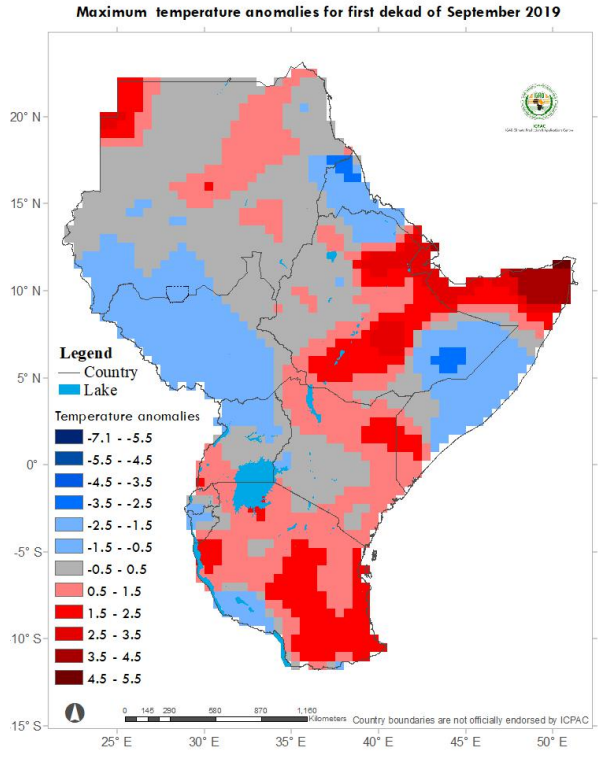

Figure 2: several parts of South Sudan, Eritrea, southwest part of Sudan, northern Uganda, eastern Ethiopia and central Somalia recorded maximum temperatures cooler than the climatological mean. Much of the rest of the GHA recorded maximum temperatures warmer than or near the climatological mean *(Data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

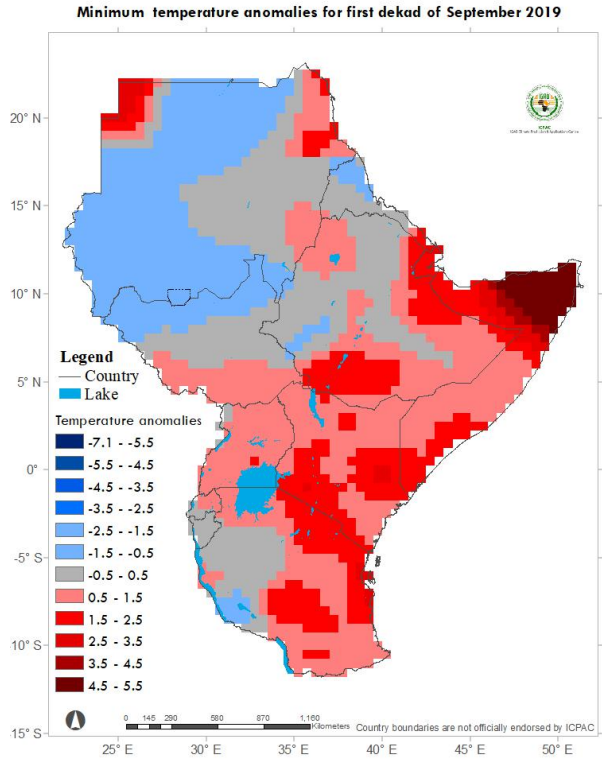

Figure 3: Most areas of the equatorial sector, the southern sector and southeastern parts of the northern sector of the GHA recorded minimum temperature cooler than the climatological average. Much of the western parts of northern sector recorded minimum temperatures cooler than or near the climatological mean. *(Data Source: Data Sourced from: the NOAA-NCEP CPC. GTS gridded data)*

5. Climate Forecast

Rainfall and Temperature Forecast

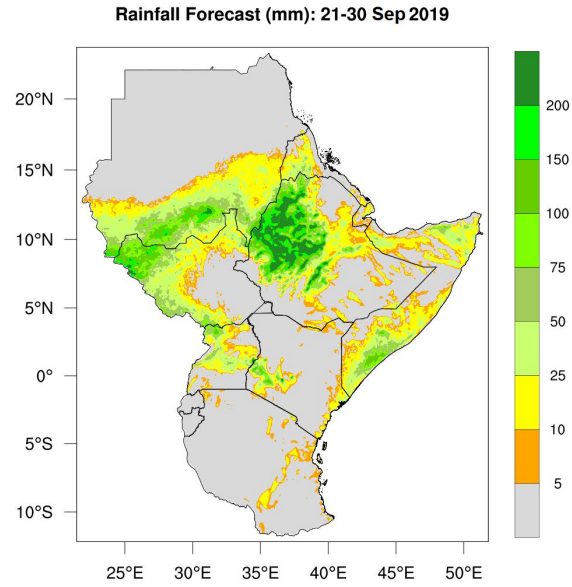

Figure 4: southern parts of Sudan, northwestern and central parts of Ethiopia, southwestern Eritrea, north and western South Sudan, northwest, central and southeast Uganda, western and central parts of Kenya, and north and southeast part of Somalia are expected to receive moderate to very heavy rainfall. Most of the rest of the region is expected to record light rainfall conditions or remain generally dry (Source: WRF-ICPAC**).**

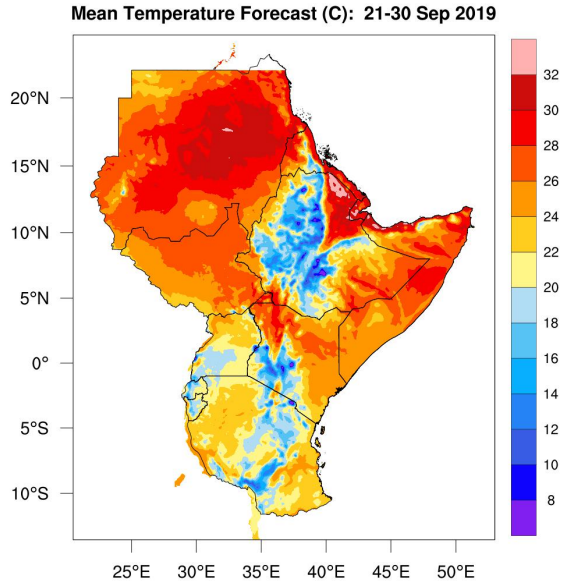

Figure 5: Most parts of Sudan, Eritrea, Djibouti, Somalia, northeast and southeast Ethiopia, South Sudan, and northern and eastern Kenya, are expected to record very warm to hot weather. Cooler weather is expected in western and central highlands of Ethiopia, southwestern parts of Uganda, western and 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%

Average/normal refers to climatological mean (1981-2010)

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