



ICPAC

Observed Rainfall Patterns for May/June and July 2019 Forecast over the Greater Horn of Africa (GHA)

1. Rainfall Conditions during 1-31 May and 1-10 June 2019

Scattered showers during May brought relief to the extended dry conditions that persisted across much of South Sudan, southeastern Ethiopia (Gode), Djibouti, and northwestern, central, and southern Somalia (Hargessa, Bakool, Hiiraan, and Jubbada Hoose), while off-season rains extended into Eritrea and eastern Sudan during May 2019. Wetter than average rainfall was also observed in western Sudan, eastern Tanzania, Rwanda, and eastern half of Uganda. On the other hand, northwestern/northern Kenya extending from Turkana to Garissa remained dry during May 2019, although a few showers were experienced in late May to early June 2019.

Observed rainfall patterns in the first ten days of June indicate wetter than normal rainfall over most parts of the GHA including western parts of Kenya, most parts of Ethiopia, South Sudan and Uganda, eastern parts of Somalia and southern parts of Sudan. Drier than normal rainfall was recorded over the south eastern parts of Ethiopia, southern parts of Somalia, eastern parts of Kenya and Tanzania. Figure 1 depicts the performance of the observed May 2019 and first 10 days of June rainfall as a percentage of normal with respect to the long term (1981-2010) rainfall climatology over GHA.

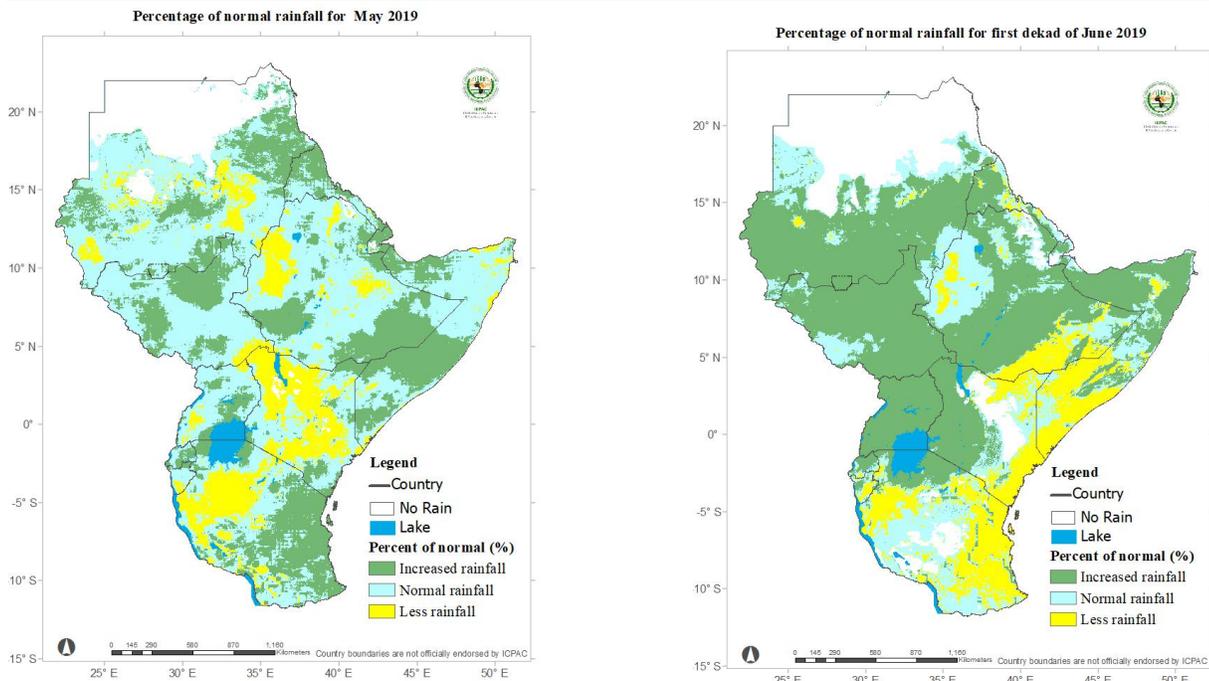


Figure 1: Rainfall performance for May (left) and first 10 days of June (right) 2019 as percent of normal measured relative to 1981-2010 climatology over GHA.

2. Forecast for July 2019

The latest global climate model ensemble forecast for July 2019 (Figure 2) indicates high chances of drier than average conditions over South Sudan, western Uganda, and northern and eastern Ethiopia, and parts of eastern Sudan. On the other hand, parts of Sudan and western Eritrea are likely to experience wetter conditions. Off-season rains are anticipated over some parts of equatorial and southern GHA, which are normally dry and cold in July. Warmer mean temperatures are expected in most regions during the coming months.

Considering that the month of July is one of the most significant months contributing to the June-September season in northern sector of the GHA, the drier than average rainfall forecast over northern Ethiopia and South Sudan should be closely monitored. ICPAC will provide regional updates on a regular basis while the National Meteorological and Hydrological Services (NMHSs) will provide detailed national and sub-national updates.

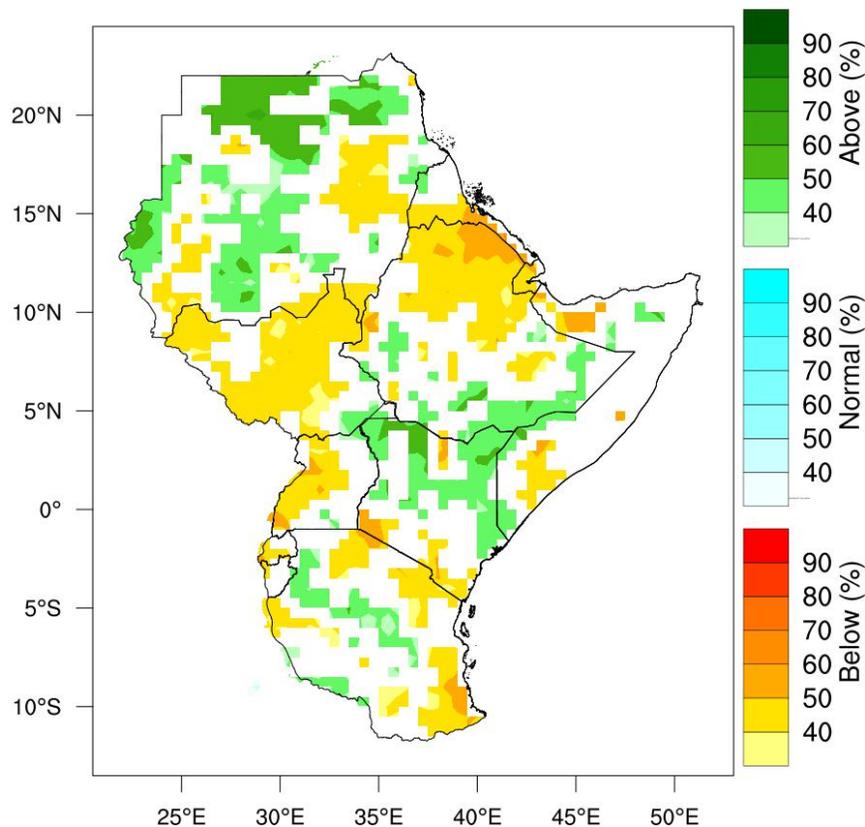


Figure 2: Probability-based rainfall forecast for July 2019, showing higher chances for depressed rainfall over northern Ethiopia and South Sudan, and increased probabilities for wetter conditions in northern Sudan.

This product is an ensemble forecast from 7 Global Climate Models (ECMWF, UK Met Office, and 5 models participating in the North American Multimodel Ensemble, NMME) generated through statistical downscaling for GHA. Data for NMME forecasts were downloaded from the International Research Institute for Climate and Society (IRI) Data Library. ECMWF and UK Met Office forecasts were obtained from the Copernicus Climate Data Store.