Heavy June to September rains bring floods but generally support favorable cropping conditions

KEY MESSAGES

- The June to September seasonal rains are currently well established in the northern and western sectors with generally average to above-average cumulative performance since June. However, slight to moderate rainfall deficits persist in eastern Sudan and northern South Sudan.

- In July and early August, heavy rainfall resulted in severe flooding that displaced communities in eastern South Sudan, southern Somalia, Ethiopia, western Yemen, and parts of Sudan.

- Cropping and rangeland conditions generally remain favorable across much of East Africa, apart from localized flood-affected areas. However, rangeland in parts of the eastern Horn is presently on a declining trend after the early cessation of the March to May 2020 rains and prevailing hotter-than-normal conditions.

- The short-term rainfall forecast through August 20, 2020 shows an increased likelihood that the seasonal rains will intensify in the western and northern sectors. August is typically the seasonal peak. As a result, there is an elevated risk of flooding in Yemen, Ethiopia, Sudan, South Sudan, western Kenya, and Uganda.

SEASONAL PROGRESS

In July, seasonal rainfall in unimodal areas of the western and northern sectors, Yemen, and the southern coastal strip of Somalia was generally above average (Figure 1). However, parts of South Sudan, Sudan, and southwestern Uganda received slightly to moderately below-average rainfall. Meanwhile, the eastern Horn of Africa remained seasonally dry but with significantly hotter-than-normal conditions.

The heavy rains in July and early August resulted in floods along the Blue and White Nile rivers in Sudan and South Sudan and in northern Ethiopia, western Yemen, and southern Somalia. The floods displaced hundreds of thousands of people in the region and inundated cropland in parts of South Sudan, Ethiopia, and Somalia. In South Sudan, local authorities estimate up to 150,000 people have been displaced in eastern Jonglei state. In Sudan, OCHA estimates at least 1,100 people have been displaced in North Darfur and White Nile states. In Ethiopia, more than 30,000 people have been displaced in Afar, Gambella, Oromia, and SNNP regions, according to OCHA. In Somalia, OCHA estimates at least 130,000 people were displaced since late June. In Yemen, nearly 1,300 people have been displaced. In early August, the risk of flooding is highest in northern Ethiopia, Sudan, South Sudan, and northern Uganda (Figure 2). The recent floods and continued risk of flooding at the July/August peak of the June-September seasonal rains is also expected to heighten the risk of Rift Valley Fever (RVF), as was anticipated in the IGAD’s RVF alert for July 2020.

Outside of the flood-affected areas, the early to timely onset and distribution of the June-September rains have ensured favorable grain cropping conditions in key agricultural areas of Ethiopia, Sudan, and South Sudan. Most early-planted crops

Figure 1. CHIRPS preliminary rainfall anomaly in mm relative to the 1981-2010 mean, July 01-31, 2020

Figure 2. Basin Excess Rainfall Map, August 10, 2020
are currently in late vegetative stages and most late-planted crops range between the emergence and early vegetative stages. However, there are a few localized areas of mediocre to poor cropping conditions, mostly in parts of central and northern Sudan. According to satellite-derived data, vegetation conditions in the eastern Horn of Africa are generally good but show a trend of gradual deterioration (Figure 3). In particular, slightly drier-than-normal vegetation conditions are present in pastoral areas of northern and Somali region of Ethiopia, parts of northern Somalia, and parts of northeastern Kenya. The dryness is driven by prevailing dry, hotter-than-normal land surface temperatures. Despite the dryness, however, surface water pans are presently at above-average levels following the above-average rains in late 2019 into early 2020 in most pastoral areas. In the western and northern sectors and Yemen, most areas exhibit generally normal to greener-than-normal vegetation conditions, though prevailing cloud cover obscures land surface vegetation observations in some areas. The cloud cover is associated with the ongoing rains, which are generally positive for crop and pasture conditions except in localized flooded areas. However, atypical dryness is observed in parts of Sudan.

The threat of desert locusts persists in the region, especially in northern Ethiopia, northern Somalia, southeastern South Sudan, Sudan, and Yemen. The current locations are attributed to northward surface wind patterns, conducive environmental conditions, and control operations. Recent assessments indicate that locusts have largely been controlled in northwestern Kenya, including in Turkana county.

The following is a country-by-country update on recent seasonal progress to date:

- **In Somalia**, above-average hagaa rainfall in the southern coastal strip of Somalia in July resulted in riverine flooding in several areas, especially in Lower Shabelle, Middle Shabelle, and Lower Juba. On the one hand, the floods displaced at least 130,000 households and inundated farmland, especially in Afgoye, Balcad, Jowhar, Jamaame, and Jilib districts. On the other hand, the rains have alleviated crop moisture stress and maintained soil moisture for recessional cultivation. Vegetations conditions are declining seasonally, and dry pasture remains available.

- **In Ethiopia**, cropping conditions are favorable in key meher cropping zones in the western and central highlands. Most early-planted crops in the western and central highlands are currently in the vegetative to early reproductive stages, while late-planted crops in northeastern Tigray and Afar regions are in the early vegetative stages. Yield prospects are average. However, the flooding of the Awash River in Afar displaced nearly 20,000 people and the risk of additional flooding in Afar remains high. Additionally, several dams across the country have reached the maximum level and some of them (Gibe and Tekeze) started to discharge, increasing the floods risk across the downstream localities. Meanwhile, vegetation conditions in southern, northeastern, and eastern pastoral zones show gradual deterioration.

- **In Kenya**, above-average rainfall in unimodal areas of western Kenya and the northern Rift Valley has maintained favorable cropping conditions at the critical reproductive to early maturation stages. These regions are the key maize growing regions of Kenya. There is an increased likelihood of average maize yield prospects in these areas, to be harvested starting in October. In marginal agricultural and agropastoral areas in the rest of the country, however, crops were adversely affected by floods and excess rainfall early in the long-rains (March to May) season. In some areas in the east and southeast, harvests are likely to be locally below average. The worst-affected crops were late-planted crops that had a shortened growing period due to the early cessation of the long rains. In pastoral areas, rangeland resources remain favorable but are deteriorating. Currently, livestock body conditions and milk production are normal. Finally, below-average rainfall in parts of Kenya’s coastal strip in July has resulted in atypically dry conditions for this period.

- **In Sudan**, July marked a gradual but full establishment of the June-September seasonal rains. Although the rains were generally early to timely in southern and central Sudan, the northern States had a slightly delayed onset. Recently planted crops are in the emergence to early vegetative stages, while early-planted crops are in the late vegetative stages. Crops are generally in very good to good condition. However, there is a continued, elevated threat of flooding due to above-average rainfall in flood-prone areas in Red Sea State, the Darfur region, and along the Nile river basins. Rangeland...
resources range from below-normal to above-normal with an improving trend.

- **In South Sudan**, cumulative rainfall to date in the June to September rainfall season is generally above average in eastern South Sudan and below average in parts of northwestern, southwestern, and northeastern South Sudan. According to available field information, sustained cumulative rainfall deficits in parts of Fashoda and Manyo counties of Upper Nile state prompted local farmers to replant sorghum. For the rest of the country, cropping conditions have remained largely favorable. However, floods have displaced up to 150,000 people and damaged crops in eastern Jonglei state, particularly in Bor, Duk, Twic East, Ayod, and Pochalla.

- **In Uganda**, according to field information and remotely sensed information, the first season harvest in bimodal regions is generally average. However, crop production shortfalls are likely in parts of the northern, western and central regions, where flooding occurred during the March to June rainfall season. In Karamoja, poor rainfall distribution and a delayed rainfall onset in April/May has led to below-average production prospects. The risk of flooding is currently elevated in the northern and eastern regions, with moderate to heavy rains forecast for the remainder of August. Meanwhile, in the southwest, rainfall deficits are observed during the off-season. Overall, rangeland conditions remain generally favorable.

- **In Rwanda and Burundi**, overall crop production for season B is average to above average at the national level due to favorable rainfall. However, localized flooding and landslides reduced the harvest in localized areas. Vegetation conditions are currently near normal with prevailing cooler-than-normal and seasonally dry conditions. Season C (July-October) crop production prospects are favorable, as water resources and soil moisture are adequate to support irrigated farming.

- **In Yemen**, atypically very heavy rains (exceeding 100 mm) caused severe flooding over western Yemen. This is likely to maintain high-levels of flood risks over the western sector of the country. Al Hudaydah and Sana’a are among the worst-affected areas. Vegetation conditions are exceptionally greener-than-normal, particularly in the western coastal and highland areas. However, current climatic and vegetation conditions are also likely to support ongoing locust breeding.

**FORECAST**

The Global Ensemble Forecast System rainfall forecast through August 20, 2020 depicts an increased likelihood of continued heavy to localized very heavy rains in western Ethiopia, Sudan, South Sudan, and Uganda, as well as parts of western and central Rift Valley in Kenya and parts of western Yemen (Figures 3 and 4). The sustained heavy rains over the past month, coupled with saturated soils, high river levels, and forecast of heavy rains elevate the risk of flooding in the northern sector. The risk of flooding is highest in the Nile river basins of Sudan and South Sudan, flood-prone areas of eastern Sudan and western Darfur regions, and low-lying areas in the western Ethiopia highlands and Afar region. Western Kenya and eastern Uganda also have an increased risk of floods. In contrast, coastal regions of Somalia, Kenya, and Tanzania are expected to receive light to no rains. Meanwhile, the eastern Horn is expected to remain typically sunny and unusually hot. In the highland regions in Tanzania, Kenya, and Ethiopia, as well as Rwanda and Burundi, cool to cold conditions are expected in August.