

Heavy Gu rainfall leads to widespread flooding

Rainfall totals during the first half of the April to June *Gu* season are some of the highest on the 1981-2017 record, equivalent to between 130 and over 200 percent of average (Figure 1). The heavy rainfall marks the end of prolonged drought across much of the country and is supporting crop development and the regeneration of pasture and water resources. However, the heavy rainfall and subsequent flooding has also led to fatalities, massive displacement, and damage to infrastructure and cropland. Needs are expected to increase in displacement sites and riverine areas in the near term. FEWS NET and FSNAU estimate 700,000 people in flood-affected areas will need livelihoods support through September, roughly 300,000 of whom are likely to need emergency food assistance.

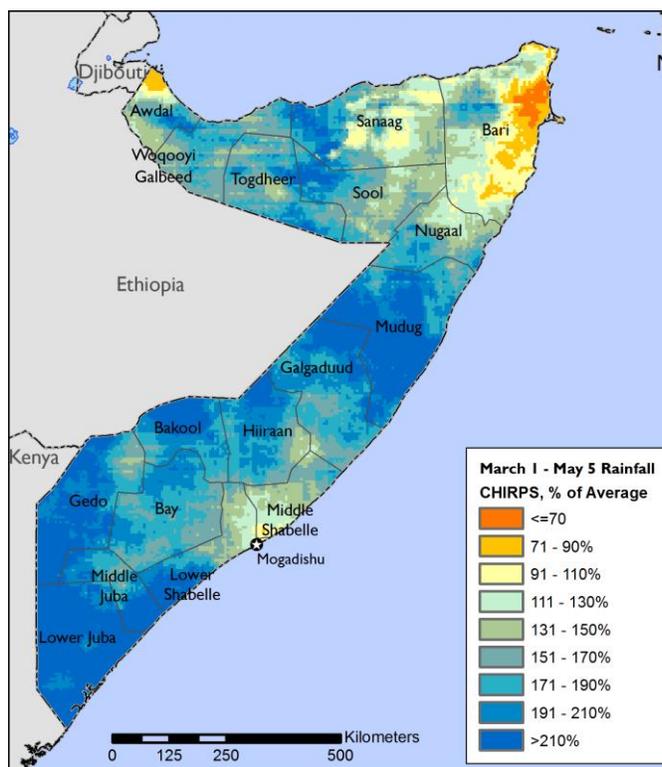
Rainfall started in March, two to four weeks earlier than normal, in many areas of Somalia, and heavy rainfall has persisted through early May. In several central, southern, and northwestern regions, the total quantity of rainfall received during the first two months of the season is the highest on record.

As a result of heavy rainfall in both Somalia and the neighboring Ethiopian highlands, river water levels increased sharply in mid-April and overflowed river banks. Flooding occurred in several riverine areas of Gedo, Hiraan, Lower and Middle Shabelle, and Lower and Middle Juba. Heavy rainfall also caused flash flooding in Bay and Togdheer.

In riverine areas of the Juba River, floods inundated an estimated 10,250 hectares (ha) of crops and an additional 18,000 ha of cultivatable land in Gedo, Lower Juba, and Middle Juba. Along the Shabelle River in Wanlawayne and Qoryole, floods destroyed an estimated 30,000 ha of cultivable land, 4,000 ha of which had been cropped. Of greatest concern is Hiraan, where flooding displaced approximately 180,000 people, including 22,500 households in Beletweyne town, and destroyed crops, stored commodities, and transportation infrastructure. It is estimated over 70 percent of farms in riverine areas of Hiraan have been inundated.

According to the Global Forecast System (GFS), moderate to heavy rainfall is expected to persist across much of the country through May. Similarly, the United Kingdom's Meteorological Office forecasts 100-200 mm of rainfall over parts of the country in mid-May. The most comparable season on the historical record is the 2006/07 *Deyr* season, when heavy rainfall followed a period of prolonged drought and low river levels. During the 2006/07 October to December *Deyr* rains, FSNAU estimated 454,500 people were impacted by flooding, 255,000 of whom were displaced. As of May 8, 2018, OCHA estimates over 700,000 people have been impacted by ongoing flooding, 219,800 of whom have been displaced. The relatively higher number of people impacted in 2018 is driven in part due to the increase of the population living in flood-prone areas. Further flooding is likely through the end of May, and some flooding is possible in June, though additional displacements are expected to be of a smaller scale, given that most populations from flood-prone areas have been displaced and the location of flooding is not expected to be significantly different than has already occurred.

Figure 1. Rainfall as a percentage of normal, March 1 to May 5, 2018, compared to the 1981-2010 average, CHIRPS prelim



Source: FEWS NET/USGS

The food security impacts of the ongoing rainy season are mixed. In many pastoral areas, where a prolonged drought occurred in 2016 and early 2017, heavy *Gu* rainfall has led to the regeneration of pasture and water, supporting livestock births and improved livestock productivity, both of which will increase pastoralists' access to food and income. In agropastoral areas, the heavy rainfall has also been largely beneficial. Crops in most agropastoral livelihood zones are in good condition, agricultural labor opportunities are available, and sorghum production is expected to be above average. Food security outcomes among many pastoral and agropastoral households are likely to improve in 2018.

However, food security outcomes are likely to be more severe than previously projected for many households in flood-prone areas, most notably in riverine areas of Hiraan, Middle Shabelle, Lower Shabelle, Gedo, Middle Juba, and Lower Juba, and some agropastoral areas of Bay, Bakool, and Togdheer. In these areas, several roads are now impassible and trade flows are expected to slow, driving higher food prices. Due to significant flood-related damage, *Gu* maize production in riverine areas is likely to arrive later than normal in July and be only 50 to 60 percent of average. In addition, many poor households in these areas will have lower than normal agricultural labor opportunities. Some households are likely to face difficulty meeting their food and non-food needs through September. An estimated 700,000 people impacted by flooding, many of whom have lost their homes and key livelihood assets, will be in need of livelihoods support through September. Approximately 300,000 of them are expected to face difficulty meeting their basic food needs and will be in Crisis (IPC Phase 3). It is also expected that the number of cases of AWD/cholera will increase through June. In a worst-case scenario, where significant flooding continues through June, it is expected that the spatial extent of flooding would increase, and the possibility of replanting crops would decline. The timing of the off-season (recession) *Gu* production would also be further delayed. In this scenario, the number of households in Crisis (IPC Phase 3) would further increase and many would continue to face Crisis (IPC Phase 3) outcomes through late 2018.

Food security is expected to improve for many households in riverine areas in late September, with likely above-average *Gu* off-season production. However, current forecasts indicated there is an increased probability that an El Niño event will occur during the October to December 2018 *Deyr* rainy season. There is low confidence in this forecast at this time, though should an El Niño event occur, above-average rainfall would be likely in late 2018 as well. Given that river water levels will already be higher than normal by the start of the *Deyr* season, additional flooding is possible between October and December.