

*FEWS NET publishes a Seasonal Monitor for Somalia every 10 days (dekad) through the end of the current April to June gu rainy season. The purpose of this document is to provide updated information on the progress of the gu season to facilitate contingency and response planning. This Somalia Seasonal Monitor is valid through January 10, 2022, and is produced in collaboration with [U.S. Geological Survey \(USGS\)](#), [the Food Security and Nutrition Analysis Unit \(FSNAU\) Somalia](#), [the Somali Water and Land Information System \(SWALIM\)](#), a number of other agencies, and several Somali non-governmental organizations (NGOs).*

### *Severe drought intensifies due to the failure of the 2021 deyr rains in much of Somalia*

The October to December 2021 *deyr* rainfall season has concluded in Somalia, marked by rainfall failure across much of the country. A long delay in rainfall onset, erratic rainfall distribution, and significant rainfall deficits rendered the 2021 *deyr* among the worst *deyr* seasons on the historical record (1981-2020). Most of southern Somalia received only 25-75 millimeters (mm) of rain, while most of central and northeastern Somalia received 10-25 mm of rain, according to CHIRPS estimates from rain gauge and satellite observations (Figure 1). Compared to the long-term average (1981-2018), these rainfall totals generally translate to deficits of 25-100 mm in most southern, central, and northeastern regions, and even larger deficits of 100-200 mm are recorded in several southern cropping areas (Figure 2). As a result, drought conditions are currently severe in southern, central, and northeastern Somalia. Meanwhile, the northwest is experiencing atypically dry conditions. Despite near- to above-average rainfall totals in the northwest, poor spatial and temporal rainfall distribution has still placed stress on rangeland resources. Finally, according to the most recent [FAO SWALIM river station gauge data](#), water levels along the Shabelle and Juba Rivers are largely below the long-term average. Overall, the failure of the *deyr* rains has adversely affected crop and livestock production and, in turn, led to a steep decline in household purchasing power and access to food in both rural and urban areas.

**In the northwest**, the *deyr* rains were never fully established and ended early in most of Awdal, Woqooyi Galbeed, Togdheer, Sanaag, and Sool regions. Localized light to moderate rain of 10-50 mm fell across most pastoral areas in early October, but little to no rainfall occurred during the rest of the season. The poor rainfall distribution, coupled with significant livestock in-migration from rainfall-deficit areas both within the northwest and the neighboring areas of Nugaal, Bari, and Mudug, has significantly reduced access to pasture and water among pastoral households. Pasture and water shortages are likely to occur during the upcoming January to March *jilaal* season, which is typically hot and dry. As a result, livestock body conditions and saleability are expected to decline in the near term, reducing a critical food and income source for pastoral communities.

**In the northeast**, most pastoral livelihood zones in Bari, Nugaal, and northern Mudug experienced a delayed start of the *deyr* rains and significantly below-average rainfall amounts throughout the season. Most areas received less than 25 mm of rain, while localized areas of Coastal Deeh and East Golis Pastoral livelihood zones received only periodic, light to moderate rainfall in mid-September, early October, and early November. Intensifying drought has led to pasture and water shortages, forcing pastoral households from northern Mudug, Nugaal, and parts of Bari regions to migrate to areas with relatively better resource availability in Sool, Sanaag, and parts of Bari regions.

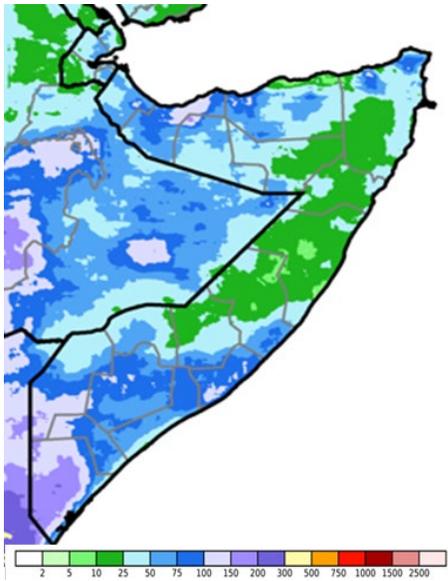
**In the central regions**, the *deyr* rains failed to become established in most pastoral and agropastoral livelihood zones of Galgaguud and southern Mudug regions, where seasonal totals amount to less than 25 mm. Rainfall failure has led to severe drought, and central Somalia is one of the worst-affected areas nationally in terms of poor availability and access to pasture and water. As a result, local cowpea crops have failed and livestock body conditions, reproduction, milk production, and value have severely declined. There are reports of excess livestock deaths in areas with the most acute drought conditions, especially in Hawd Pastoral, Addun Pastoral, and Cowpea Agropastoral livelihood zones.

**In the South**, the *deyr* rains were delayed by over 30 days and performed poorly throughout the season. Most areas received little to no rainfall until late November, when localized light to moderate rainfall totaling 25-75 mm fell across large areas. The highest rainfall amounts of 50-75 mm reportedly occurred in the southernmost part of Gedo and in Lower Juba. However, dry conditions returned to most areas throughout December, with the exception of light to moderate rainfall in pastoral and agropastoral areas of Lower and Middle Juba and southern Gedo. The below-average performance of the *deyr* rains over Somalia and in the upper river catchments in the Ethiopian highlands also reduced river water levels along the Juba and Shabelle Rivers, reducing water availability for irrigation. The failed *deyr* rains have led to one of the poorest cereal harvests on the 1995-2021 record. Additionally, drought has reduced the availability of rangeland resources and significantly affected livestock health, reproduction, milk production, and value. Reports of excess livestock deaths due to drought and diseases occurred as early as November, especially in cattle-dependent pastoral and agropastoral areas in Gedo and Juba regions.

According to the satellite-derived **eMODIS Normalized Difference Vegetation Index (NDVI)** for the period of December 21-30, vegetation conditions are significantly below typical levels in many areas of the country, especially in southern, central, and parts of northeastern Somalia. Poor vegetation reflects both the impact of meteorological drought and the impact of significant livestock migration on pasture and water availability in the few areas that did receive some rainfall (Figure 3). Widespread vegetation deficits are still visible even in areas that received light to moderate rainfall in late November and early December, such as southern Gedo and the Juba regions, implying only marginal relief for livestock production. In the northwest, vegetation remains relatively better compared to the rest of the country, but the speed of pasture and water depletion is occurring more rapidly than a typical year. The seven-day weather forecast from the **NOAA Climate Prediction Center** ending January 10<sup>th</sup> shows dry conditions across all areas of the country, which is typical at this time of year and confirms the end of the *deyr* season.

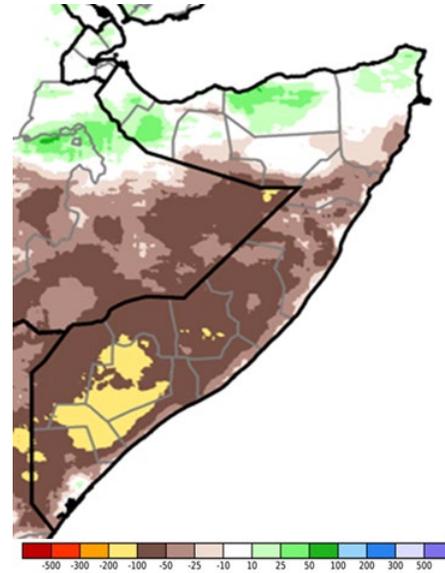
For more rain gauge data, please contact [So-Hydro@fao.org](mailto:So-Hydro@fao.org) or visit [www.faoswalim.org](http://www.faoswalim.org).

**Figure 1.** Estimated rainfall (CHIRPS Preliminary) in mm, October 1-December 31, 2021



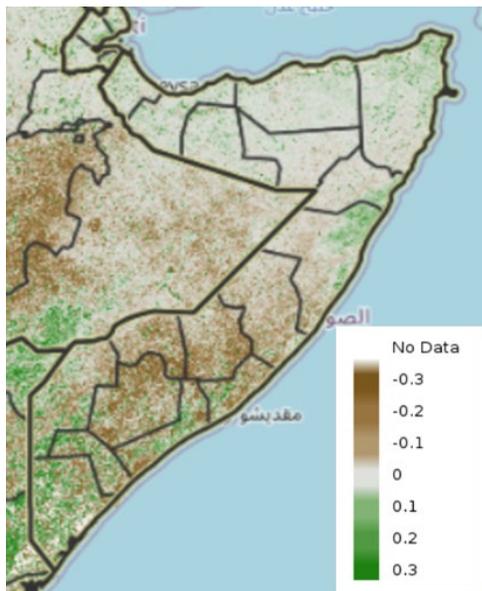
Source: *Climate Hazards Center, UC Santa Barbara*

**Figure 2.** Estimated rainfall anomaly (CHIRPS Preliminary) in mm compared to the 1981-2018 average, October 1-December 31, 2021



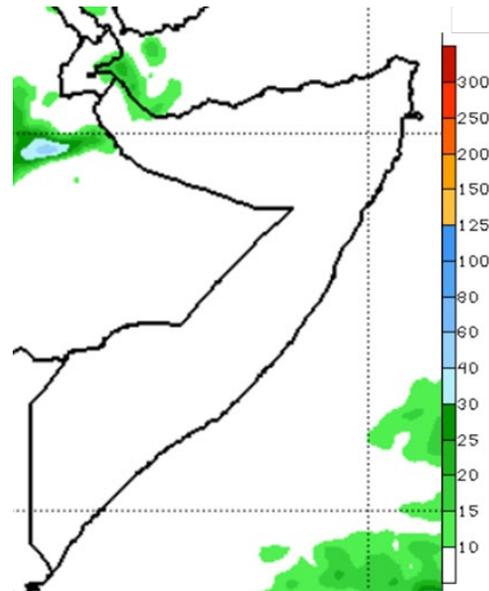
Source: *Climate Hazards Center, UC Santa Barbara*

**Figure 3.** eMODIS Normalized Difference Vegetation Index (NDVI) anomaly from 2003-2017 median, December 21-31, 2021



Source: *FEWS NET and USGS*

**Figure 4.** Global Forecast System (GFS) rainfall forecast in mm for January 4-10, 2022



Source: *NOAA/CPC*

*FEWS NET: Somalia Seasonal Monitor: Severe drought intensifies due to the failure of the 2021 deyr rains in much of Somalia, January 5, 2022*