# SOMALIA DROUGHT UPDATE

22 April 2021

| Drought Severity | | | |
|---|---|---|---|
| **DROUGHT CONDITION** | **IMPROVING** | **STABLE** | **WORSENING** |
| **MILD** *Going into drought, short term dryness slowing planting, growth of crops. Also coming out of a drought – water deficits, partial loss of crops and pasture* | | Juba and Shabelle riverine areas | |
| **MODERATE** *Some damage to crops, and pastures; some water shortages developing or imminent* | | | Bay, Bakool, Hiraan, Middle Shabelle, Lower Shabelle and Banadir Coastal areas |
| **SEVERE** *Dried up water sources, severe and widespread water shortage, depleting pasture, limited crop planting and germination, deteriorating livestock body condition, livestock abortion, deaths and culling, pasture losses is likely; water shortages common and water trucking imminent* | | Coastal areas | Awdal, Wooqoyi Galbeed, Sanaag, Togdheer, Sool, Bari, Nuugal, Mudug, Galgaduud, Gedo, Middle Juba and Lower Juba |

## Key messages

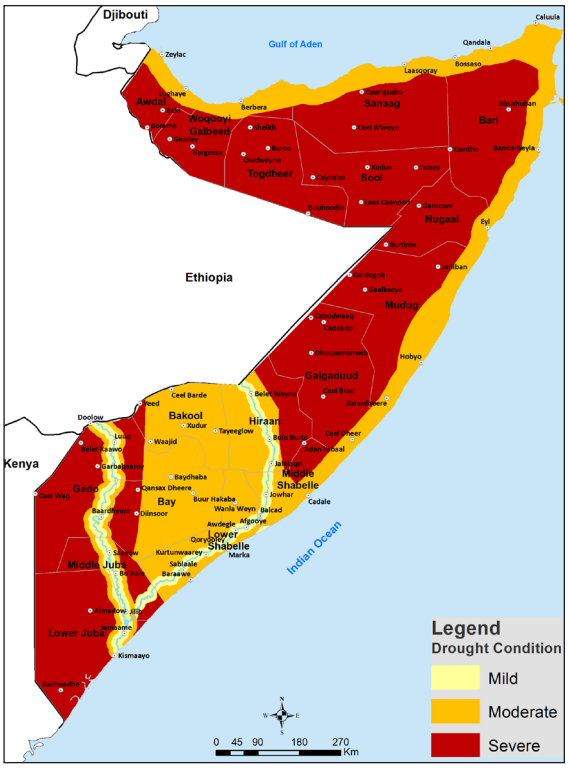
- Below average 2020 Oct-Dec Deyr rains, followed by a harsh and warmer than normal Jan-Mar Jilaal season, and a delayed start of the current Gu season with a poor distribution has led to worsening of drought conditions across the country in March and April
- More than 80 percent of the country is currently experiencing moderate to severe drought conditions
- Worst affected areas include larger parts of Somaliland and Puntland, central regions and Gedo region
- Currently, water levels in the Juba river are within the normal range, while water levels along Shabelle river are slightly below average. The levels in both rivers are expected to increase following the start of Gu rains in the Ethiopian highlands and within Somalia
- Preliminary rainfall forecast for the coming months of May and June indicates depressed amounts of rainfall and this may worsen the drought situation
- If Gu season rainfall continues to perform poorly, this could lead to a worsening of the current humanitarian situation in Somalia, especially in rural areas.

## Drought Severity Analysis

FAO SWALIM's Combined Drought Index (CDI) has been used to measure the magnitude and severity of drought in Somalia and it is based on remotely-sensed data on vegetation cover, temperature and rainfall. CDI analyses were complemented with field reports, including water prices, livestock and crop conditions to generate a drought severity map for the month of April 2021 (Map 1). The CDI graphs presented in Figures 1 to 4 show analysis from January to March 2021. Each value in the graphs represents the persistence of dry conditions (average) in the preceding six months.

The graphs demonstrate a downward trend of the index implying that the situation has deteriorated from the previous months. The analysis also shows that Somalia has been experiencing cyclic droughts every five to six years: 2000/2001, 2004/2005, 2010/2011, 2016/2017 and currently in 2020/2021. Map 2 shows the anomaly of vegetation conditions during the second dekad of April 2021 (11 -20 April). Below normal conditions are seen in the drought stricken areas.

According to field reports, deterioration and depletion of pasture and browse, acute and widespread water shortages, poor livestock body conditions and abnormal livestock migration to distant grazing areas have been observed in northern, central and parts of southern Somalia.




*Map 1: Drought severity map for Apr 2021*

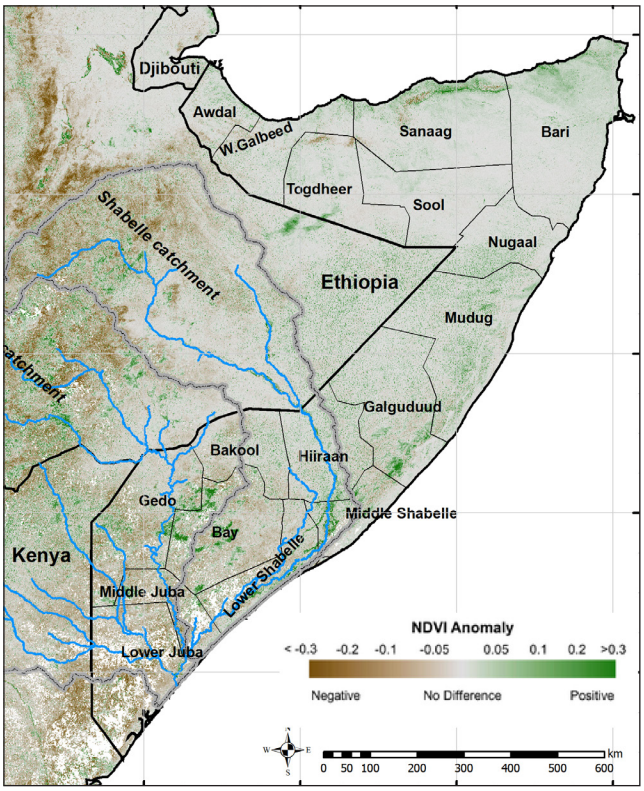
Most surface and shallow water sources are reported to have dried across the country. This has led to earlier than normal and widespread water trucking as the primary source of water in most pastoral areas, which is expensive.

In southern regions, the performance of Jilaal was mixed, with below average conditions in most areas. In Gedo, Hiraan and Juba regions, extreme temperature during the Jilaal have led to rapid depletion of pasture, browse and water resources, forcing livestock to migrate towards tsetse fly infested riverine areas.

Abortion and death among small ruminants due to drought were reported in the worst affected regions: W. Galbeed, Sanaag, Mudug, Gal-gadud, Hiran and Gedo regions.

Gu season crop planting is also being adversely affected by the delayed and poor start of the rains.

The drought conditions are updated on a monthly basis and the maps can be accessed online via https://cdi.faoswalim.org/




*Map 2: Anomaly vegetation conditions (11-20 Apr 2021)*

*Figure 1: Drought Analysis using CDI in Kismayo District, Lower Juba Region*

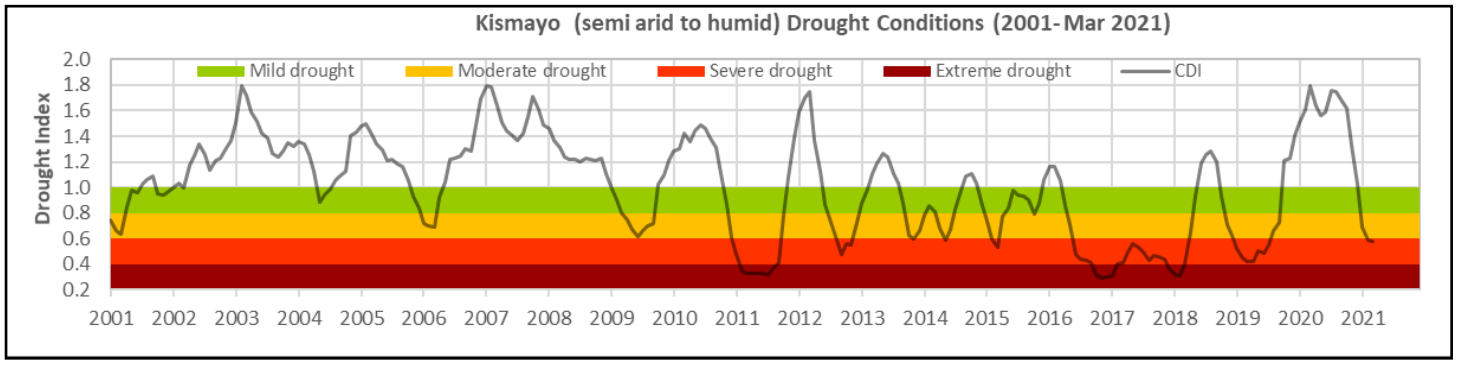



*Figure 2: Drought Analysis using CDI in Doolow District, Gedo Region*

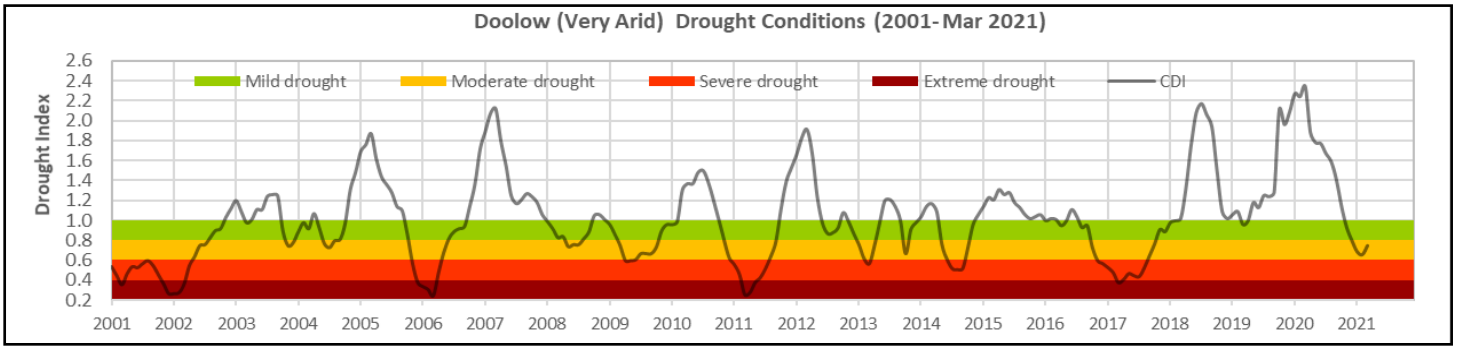



*Figure 3: Drought Analysis using CDI in Xudun District, Sool Region*

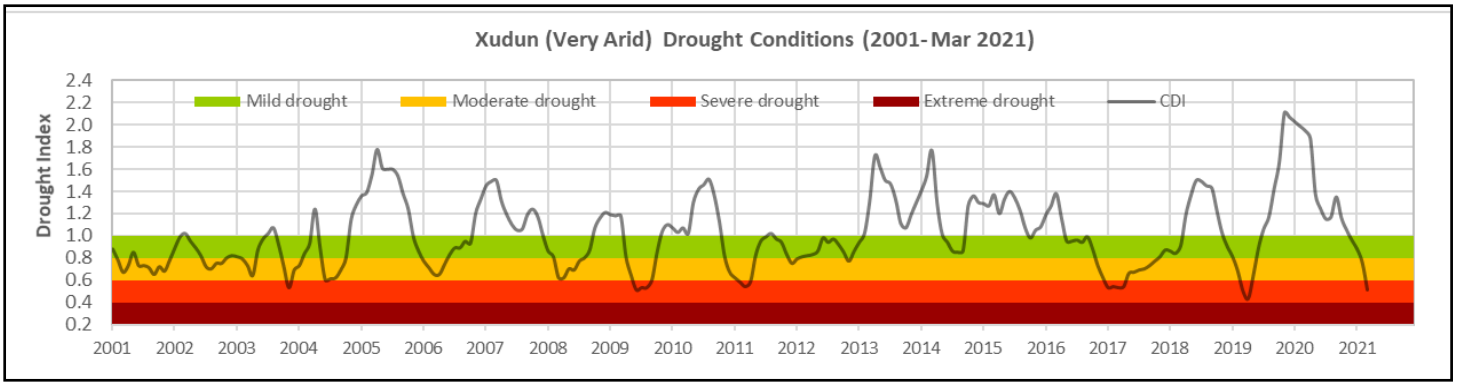
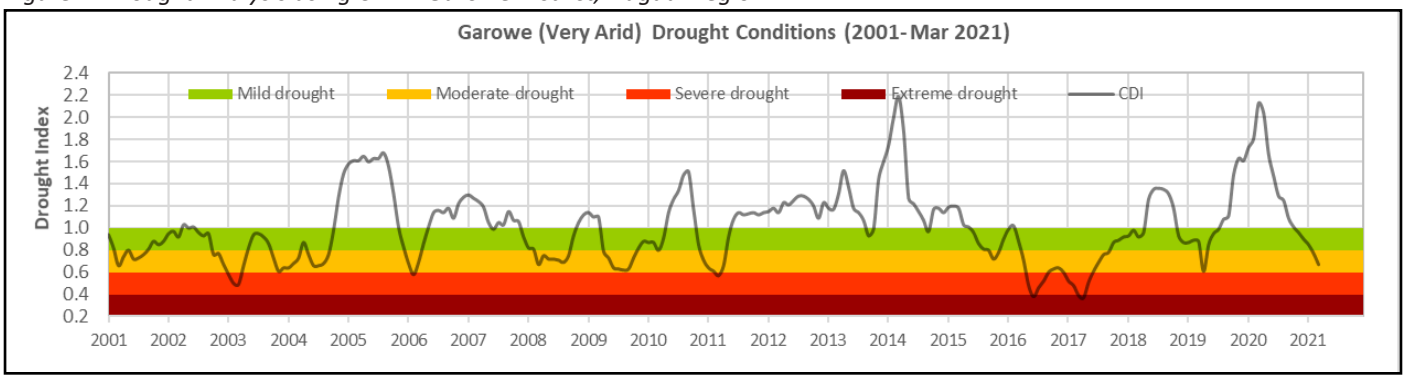


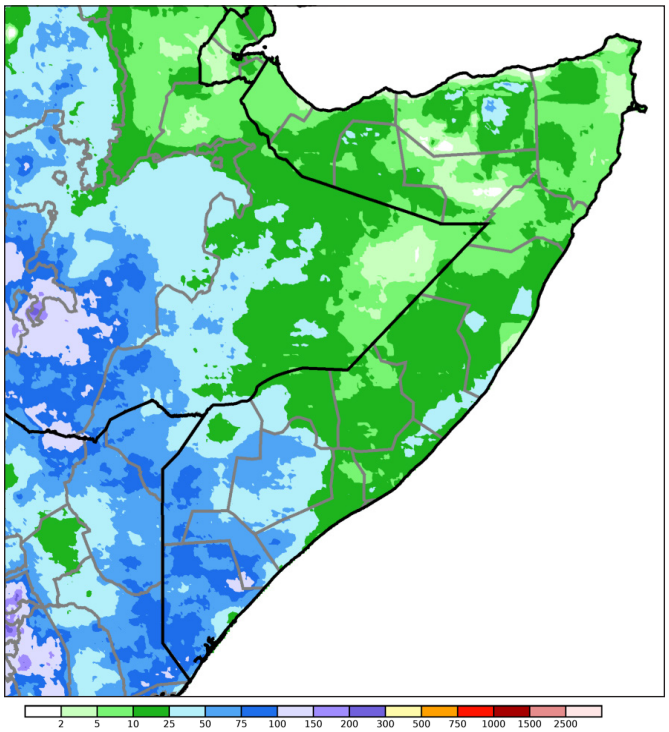
*Figure 4: Drought Analysis using CDI in Garowe District, Nugaal Region*



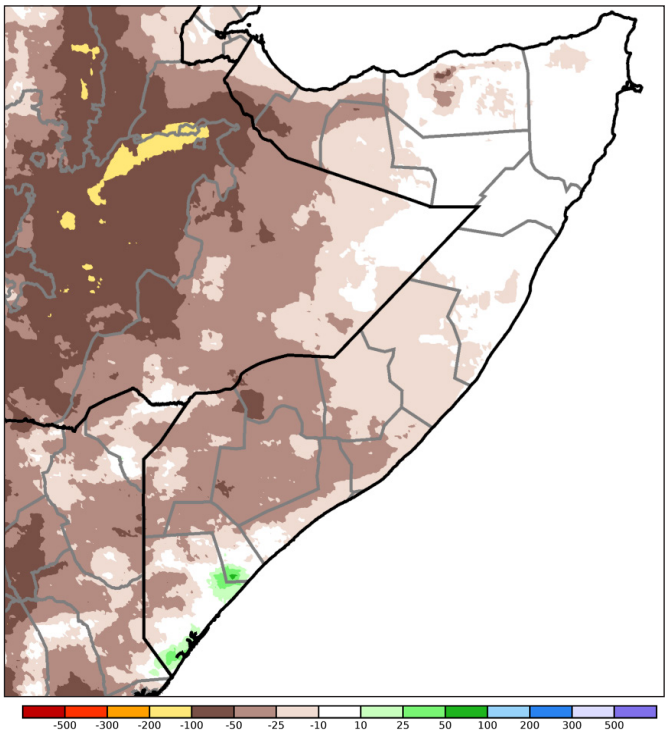

## 2021 Gu Rainfall Update

The second dekad of April (10 -20 April) recorded light to moderate rains in some parts of the country marking a start of the season. Notably, the rains were significantly good between 18 and 20 April where some stations in Somaliland recorded up to 80 mm. In Puntland only a few stations recorded rainfall with most of them receiving less than 20 mm. In Juba and Shabelle basins including Bay and Bakool good rainfall amounts of up to 50 mm were received between 18 and 20 April.

It is worth noting that the Rainfall amounts in March and April are significantly below normal and Gu rains have yet to start in some parts of northern and central regions. Maps 3 and 4 show the cumulative rainfall amount and anomaly respectively, for the months of March and April.




*Map 3: Total rainfall estimates (01 Mar – 15 Apr 2021)*




*Map 4: Rainfall anomaly (01 Mar – 15 Apr 2021)*

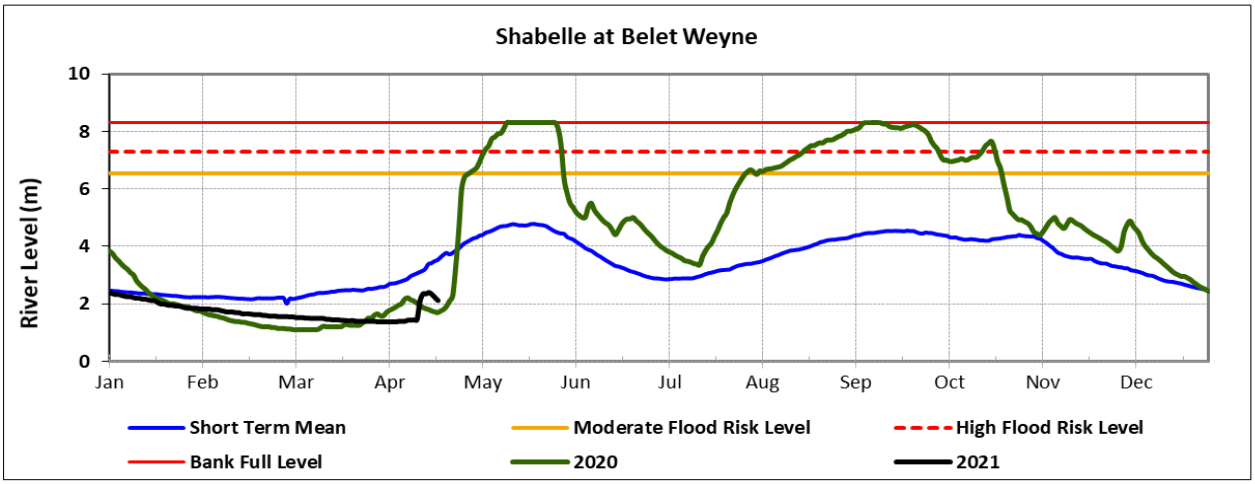
## River Levels Situation

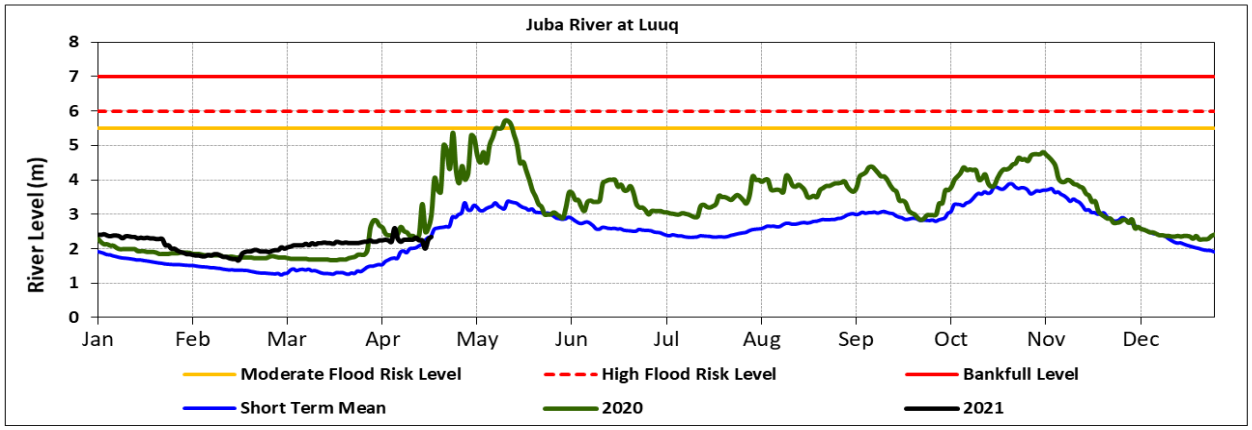
Following the start of the Gu rain season in parts of the Juba and Shabelle basins within Somalia and in the Ethiopian highlands, there has been a slight river level increase in the last few days. However, the river levels remain low but are expected to continue rising gradually given the rainfall forecast of the coming two weeks.

The river level graphs show comparison of current and short term average levels for both the Shabelle and Juba Rivers at Belet Weyne and Luuq stations, respectively.

The lower reaches of the two rivers, which feed the local farming, have been affected by low levels since January 2021 and the water currently available is not enough to support irrigated agriculture.

The river levels are updated on a daily basis and can be found in this link: http://frrims.faoswalim.org



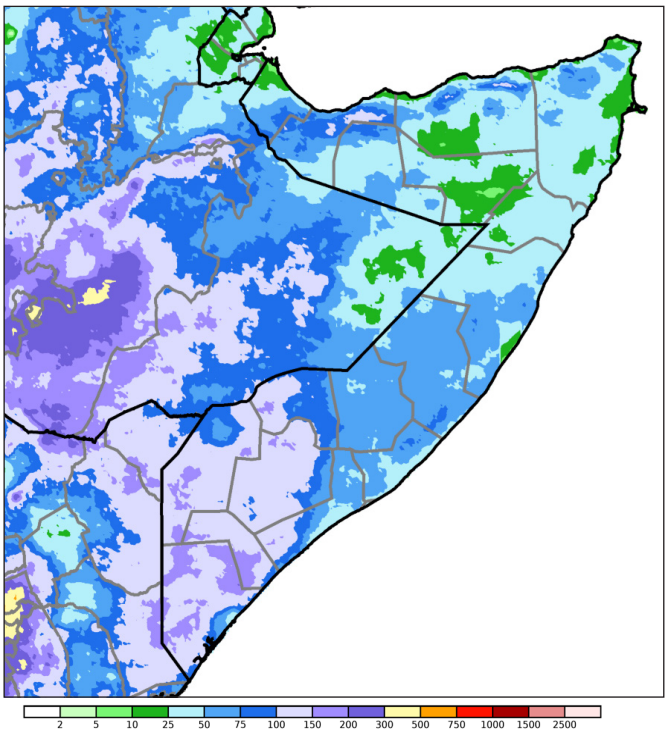




## Rainfall Forecast

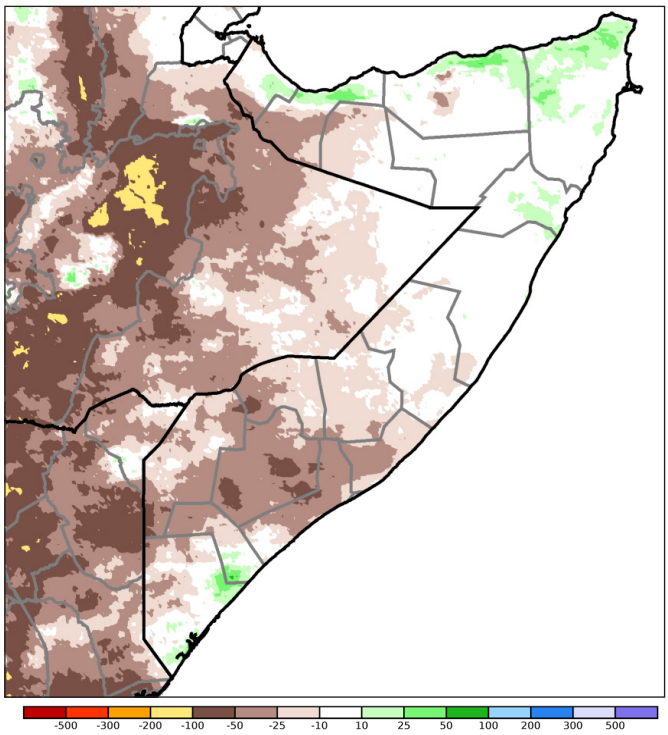
Available forecasts indicate that rainfall will likely continue through the end of April (Map 5) and will likely cover more parts of the country, including northern and central regions. However, cumulative rainfall amounts through the end of April are expected to remain below average in most parts of Somalia (Map 6).

The forecast for the month of May 2021 (Map 7) indicates cumulative rainfall amounts not exceeding 75 mm; while little or no rains are expected in the month of June (Map 8).

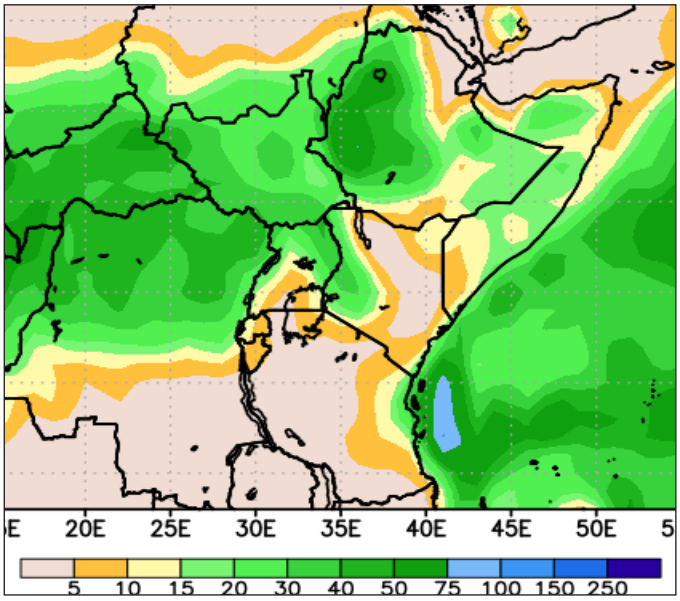
With only limited rainfall amounts expected in May and little or no rainfall in June, drought conditions are expected to have prolonged and adverse impact on livelihoods and food security outcomes.



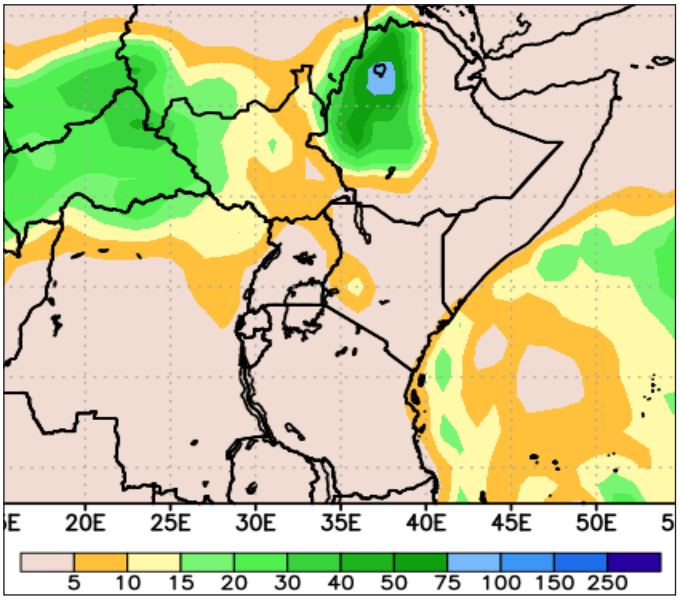

*Map 5: Rainfall estimates (01 Mar – 30 Apr 2021)*




*Map 6: Rainfall anomaly (01 Mar – 30 Apr 2021)*



*Map 7: Rainfall forecast for May 2021*



*Map 8: Rainfall forecast for June 2021*

# Drought Impacts

## Somaliland

The poor 2020 Gu/Karan rains in Somaliland resulted in poor maize and sorghum harvest from agricultural areas of Awdal, Wooqoyi Galbeed and Toghdeer regions. Further, there was severe damage to cultivated crops and pasture by locusts in agro-pastoral and pastoral areas of Tog Dheer Region. This, coupled with the harsh Jilaal (January to March) weather conditions have left most Somaliland experiencing severe drought conditions.

Rainfall triggered by Cyclone Gati in November 2020 brought only temporary relief in the coastal areas of Somaliland, boosting pasture growth and replenishment of water sources. However, this has depleted very fast due to the pressure exerted on the resources following earlier than normal and large-scale in-migration of pastoralists from inland areas to the coastal areas. The depletion of pasture in most districts has consequently led to deterioration of livestock body conditions.

Due to harsh weather conditions in the coastal areas the communities returned back to their homes in anticipation of the 2021 Gu rains.

Further, many surface water sources such as berkads are dry, while shallow wells are either dry or the water level has dropped very low. The yield for boreholes has also gone down, and quality of water in some wells become saline or brackish.

*This report on drought impact in Somaliland has been compiled by FAO and Somaliland National Disaster Preparedness and Food Reserve Authority (NADFOR)*

## Puntland

Severe drought conditions exist in Puntland following below average 2020 Deyr rains, prolonged Jilaal dry season, desert locust infestation and delayed and poor start of 2021 Gu season rainfall.

Pastoralists initially migrated from the inland regions to coastal areas in search of pasture and water after the rains associated with GATI cyclone, but are currently returning back due to depletion of pasture and water in the coastal areas and in anticipation of the start of Gu season rainfall. Livestock body condition is poor, and livestock deaths have been reported in some of the area associated with the worsening drought conditions.

Water shortage is experienced across most parts of Puntland. Most surface water sources have dried up, and significant deterioration in water quality has been reported in groundwater especially the increased mineral contents. Water trucking is widespread and started early.

*This report on drought impact in Puntland has been compiled by FAO, Puntland IMC, and the Humanitarian Affairs and Disaster Management Agency (HADMA) of Puntland*

## Galmudug

The Galmudug state is also facing severe drought conditions, the worst affected districts being Cadaado, Dhuusamarreeb, Cabudwaaq and Gaalkacyo. Pasture is depleted in many parts, forcing pastoralists to move within the state in search for available grazing and water.

There has been an inward migration to the state from neighboring districts, putting more pressure on the already limited pasture and water resources.

The body condition of livestock is poor due to lack of pasture and water, with some pastoralists reported to be hand feeding their animals, thus adding to the demand for local cereals.

The economic status of many communities weakened by livestock loss (as a result of both increased off-take and death) due to drought has led to a sharp increase in debt among poor households.

Many surface water sources have dried up, and a high number of boreholes are not functioning. Majority of the affected

communities are now relying on emergency supply from water trucking. Consequently, water prices have been steadily rising in all districts; currently more than double in Hobyo district. Conflicts over water resources have also been reported in parts of Mudug and Galgadud regions, causing displacement.

*This report on drought impacts in Galmudug has been compiled by FAO and the Ministry of Energy and Water Resources of Galmudug state of Somalia*

## Hirshabelle

The current drought condition in Hirshabelle is mild to moderate. In addition to effects of two failed rainy seasons, locust infestation has contributed to the shortage of food and pasture.

Since January 2021, the Shabelle river flow has significantly decreased with the lower reaches drying up. This subsequently led to reduced agricultural activities. There has also been a large migration towards the river by local communities and livestock in search of pasture and water. This has put pressure on the limited resources and related riverbank encroachment exposing the environment to degradation.

Other water sources across Hirshabelle are either dry, or have significantly low yield.

The livelihood of the communities in Hirshabelle is greatly weakened by the current drought. Attempts by the local communities to move to other areas in search for water and food have been hampered by the spread of COVID 19.

*This report on drought impacts in Hirshabelle has been compiled by FAO and the Ministry of Humanitarian Affairs and Disaster Management of the FGS*

## Southwest

Southwest state has experienced prolonged dry period since the below normal 2020 Deyr rains. This has negatively affected the community, majority of whom rely on rain-fed agriculture. The area has also suffered from locust infestation, causing extensive damage to crop and pasture.

The livestock body condition is very poor due to shortage of water and pasture. Livestock disease associated with poor feeding and lack of water due to drought conditions have been reported. Pastoralists in dry areas of Bay and Bakool regions have migrated to the riverine areas, and other locations where groundwater is available.

Most of the water sources in the region are dry, resulting to severe water shortages. Some communities in the region are relying solely on water trucking for their needs.

*This report on drought impacts in Southwest has been compiled by FAO and the Ministry of Humanitarian Affairs and Disaster Management of the FGS*

## Jubaland

Jubaland is among the states that are worst affected by drought. Severe drought conditions have been reported in many parts, the worst affected being Gedo region. This is a result of poor crop and pasture conditions following the poor 2020 Deyr season, compounded by locust infestation. Consequently, water prices are currently very high and unaffordable across Jubaland. Poor pastoralists are also selling off their livestock including the breeding stocks to buy water and food, thereby undermining their livelihoods.

Migration of people from rural to urban areas has been reported, in search for food and water. Pastoralists have also migrated with their livestock from Gedo to Middle and Lower Juba Regions where the pasture conditions are relatively better. Loss of livestock due to the ongoing drought has been reported in parts of Jubaland, especially in Gedo region.

Many water sources in Jubaland are currently dry. Juba river is flowing, but the levels are low and not able to support all the agricultural and livestock water demands. However, there are limited agricultural activities going on along the river, which has attracted communities to migrate towards the riverine areas.

*This report on drought impacts in Jubaland has been compiled by FAO and the Ministry of Humanitarian Affairs and Disaster Management of the FGS*

*This update is co- produced by the Ministry of Humanitarian Affairs and Disaster Management of the FGS (MoHADM) and FAO - Somalia Water and Land Information Management—SWALIM Project. For more information regarding this product please contact communications@mohadm.gov.so or swalim@fao.org*

*Primary data sources are; Ministry of Agriculture & Irrigation and Ministry of Energy & Water Resources of the Federal Government of Somalia, SWALIM, ECMWF, TAMSAT and NOAA/USGS. Tables, maps and graphs in this bulletin are produced from these sources.*

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