**SOMALIA DROUGHT UPDATE**

25 March 2021

### Drought Severity

<table>
<thead>
<tr>
<th>Drought condition</th>
<th>Improving</th>
<th>Stable</th>
<th>Worsening</th>
<th>Description of drought conditions classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL</td>
<td></td>
<td></td>
<td>Hiraan, Middle Shabelle, Lower Shabelle and Banadir</td>
<td>Normal conditions in most of the area</td>
</tr>
<tr>
<td>MILD</td>
<td></td>
<td>Bay and Bakool</td>
<td></td>
<td>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</td>
</tr>
<tr>
<td>MODERATE</td>
<td></td>
<td></td>
<td>Awdal, Woqioy Galbeed, Sanaag and Galgaduud</td>
<td>Some damage to crops, and pastures; some water shortages developing or imminent</td>
</tr>
<tr>
<td>SEVERE</td>
<td></td>
<td></td>
<td>Togdheer, Sool, Bar, Nuugal, Mudug, Gedo, Middle Juba and Lower Juba</td>
<td>Crop or pasture losses is likely; water shortages common and water trucking imminent</td>
</tr>
</tbody>
</table>

### Key messages

- Many parts of Somalia are currently experiencing drought conditions, triggered by below average 2020 Deyr (October-December) season rainfall which was characterized by depressed rains with poor spatial and temporal distributions and harsh conditions during the typically dry Jialal (January-March) season.
- The worst affected regions include Lower Juba, Middle Juba, Gedo, Mudug, Nuugal, Bar, Togdheer and Sool which are currently experiencing severe water shortage for domestic use, water for livestock as well as agricultural production.
- Water and pasture resources are getting depleted in most of the affected pastoral areas leading to abnormal migration of livestock and communities.
- 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 decrease further as no rains are foreseen in the coming two weeks.
- Drought conditions could worsen if the 2021 Gu (April-June) season rainfall is delayed and/or performs poorly as some forecasts indicate.

### Drought Severity Analysis

Using satellite rainfall, vegetation and temperature data, the FAO SWALIM’s Combined Drought Index (CDI) has been used to measure the magnitude and severity of drought in Somalia. Results of the CDI calculations were further complemented with field reports, including water prices, and a drought severity map for the month of March 2021 has been generated (Map 2).

The CDI analysis graphs presented in Figures 1 to 4 show analysis from January 2001 to February 2021. Each value in the graphs present the average conditions and persistence of the dry conditions in the preceding six months. The six months period was chosen to reflect the combined impact of the dry conditions persistence. The graphs demonstrate clearly that after the 2020 Gu season, followed by good rains at the middle of 2020 Deyr, normal conditions were experienced all over the country. However, conditions started to deteriorate towards the end of 2020 due to poor rains in October and December.

The situation has gradually developed to drought conditions that are currently impacting northern and parts of southern regions. The rains in November 2020 which were associated with the passage of cyclone Gati brought a bit of relief, mostly to pastures, but not enough to compensate for the poor rains. Map 1 shows the anomaly of vegetation conditions during the second dekad of March 2021 (11-20 March). Below normal conditions are seen in the drought stricken areas.

![Map 1: Anomaly vegetation conditions (11-20 Mar 2021)](Map_1_Anomaly_vegetation_conditions.png)
According to field reports, water resources and pasture conditions have significantly deteriorated during the Jilaal season (January to March) triggering water trucking, increased livestock migration and increasing water prices. This trend is observed in most of the pastoral areas of Somaliland and Puntland where the authorities have confirmed the drought conditions and have pleaded for humanitarian support. Off-season cereal production along the Juba riverine areas is also affected by lower than usual soil moisture, hence the production is expected to be low in March 2021.

In Gedo and especially in Dollow district, reports indicate that there has been unusual migration of pastoralists and communities into the neighboring Ethiopia in search of greener pastures. Although the Shabelle areas seem to be stable at the moment, irrigated farms in Hiran and Shabelle regions may be affected by low river levels and high tractor hour costs, which may impede cultivation of cereals and cash crops in Jilaal season.

Dry and hot conditions are expected to continue across most parts of the country in the coming two weeks. The negative trends are therefore not expected to reverse until the start of Gu seasonal rains in April 2021.

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

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**Figure 1: Drought Analysis using CDI in Kismayo District**

**Figure 2: Drought Analysis using CDI in Doolow District**

**Figure 3: Drought Analysis using CDI in Caynabo District**

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Map 2: Drought severity map for March 2021
River Levels Situation

Observed river levels along Shabelle are currently below normal during this time of the year, while along Juba they are within normal. The levels are expected to remain low until the onset of the much awaited Gu rainy season in April. The river level graphs show comparison of the current and long term average for both the Shabelle and Juba Rivers at Belet Weyne and Luuq stations, respectively. The lower reaches of the two rivers that depend on irrigated agriculture have been affected by these low levels which are not enough to support irrigated agriculture. Many parts of the Shabelle River are reported to be dry. This now is the sixth consecutive January to March period of dry river beds along the river. The river levels are updated on a daily basis and can be found in this link: http://frrims.faowalim.org/.

Analysis by SWALIM indicates that there are about 46 open and several weak points along the Juba River mostly within Middle and Lower Juba regions; while about 115 open points have been identified along the Shabelle.
Rainfall Forecast

Forecasts for the week ending on 29 March 2021 indicates that there is no rainfall expected. The European Centre for Medium-Range Weather Forecast (ECMWF) indicates depressed rains throughout the 2021 Gu season. Maps 5 to 7 shows cumulative three months forecast for the periods of April to June (AMJ), May to July (MJJ) and June to August (JJA) respectively. According to the forecast, the southern parts will experience up to 70% below normal rains while the rest of the country may experience about 40 to 50% below normal rains. This forecast will be updated in April 2021.

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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