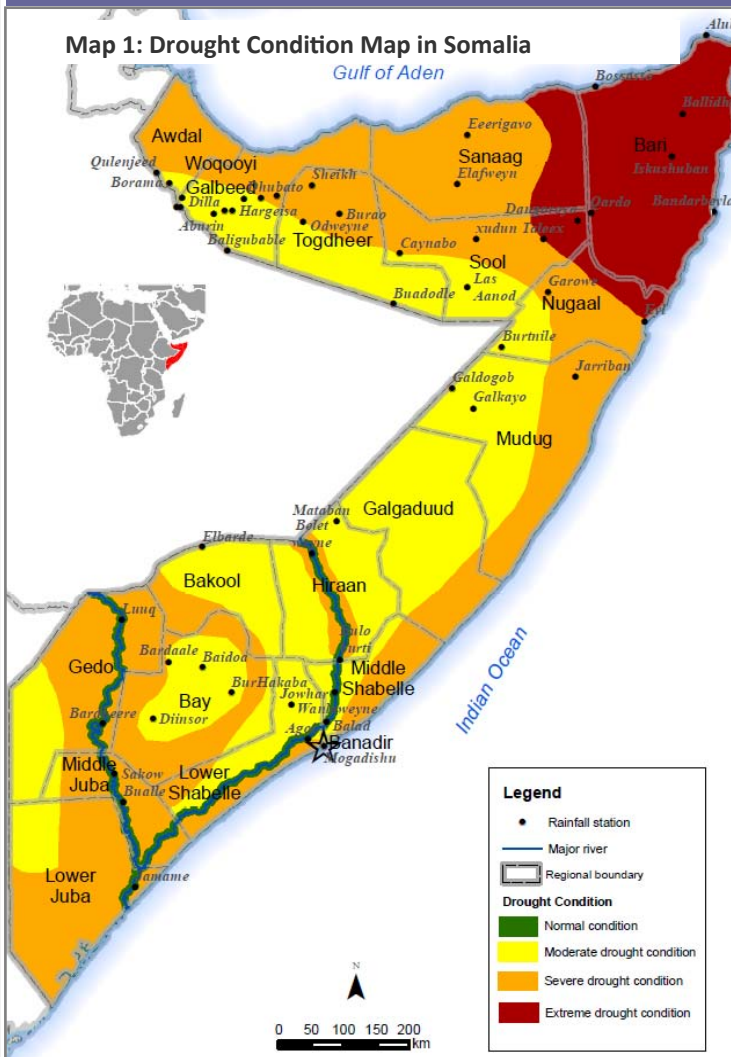


Issued: 15 November 2016

Key messages

- **Moderate** to **Extreme** drought conditions are being experienced in the country. The negative trends are not expected to reverse until the next rains, which are anticipated in April 2017.
- During the month of October 2016, most parts of Somalia recorded poor rainfall amounts, with most regions registering 25 to 50 percent of average.
- Vegetation conditions worsened and drought conditions strengthened and continued to affect pasture, water, livestock and crops, with vegetation cover (NDVI) 60 to 70 percent of average in southern regions.
- Prospects of *Deyr* cereal production is bleak, with crop failure expected in many areas.
- Juba and Shabelle river levels are currently below normal; the resulting competition for irrigation water is likely to lead to deliberate breakeage of embankments, adversely affecting downstream users.

Drought conditions



Hot and dry weather conditions persisted in most parts of Somalia in September and October 2016. High temperatures combined with lack of rainfall, caused water stress to crops, livestock and water resources. This has led to drought conditions in most parts of the country, ranging from moderate to extreme.

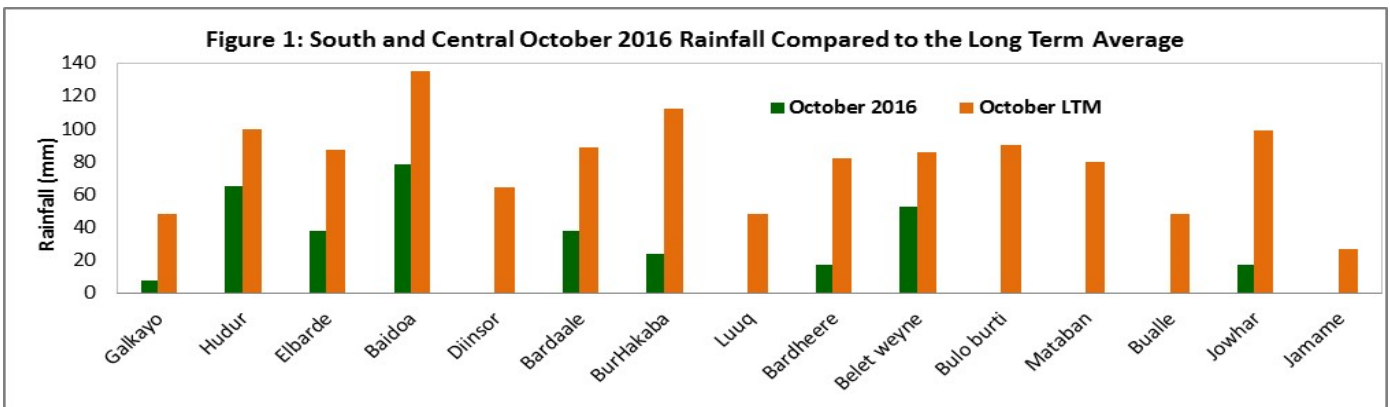
In this bulletin the following definition is adapted. "Drought is an extended period of time during which fresh water availability, particularly rainfall and soil moisture are below average, and temperatures and winds are high", which specifies the natural phenomena, the hydro-meteorological drought. Hence, the main factors causing drought are rainfall deficit, excess temperature and deficit in soil moisture. The drought condition map (Map 1) has been produced based on observed rainfall and satellite (rainfall and vegetation) data sets as well as field reports.

Drought Conditions Classification

Moderate drought conditions	Some damage to crops, and pastures; some water shortages developing or imminent
Severe drought conditions	Crop or pasture losses is likely; water shortages common and water trucking imminent
Extreme drought conditions	Major crop/pasture and livestock losses; widespread water shortages and water trucking

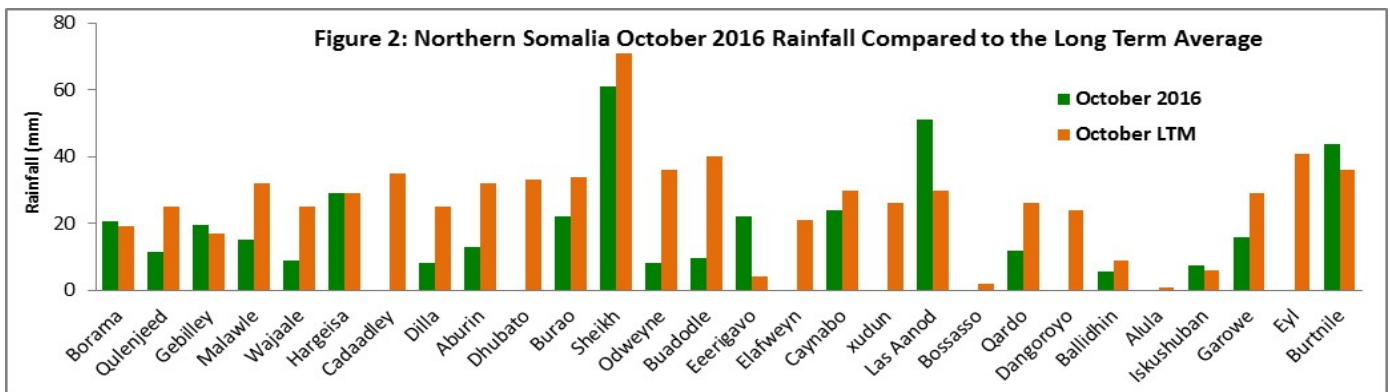
South and Central Regions: The Deyr rainy season kicked off in mid October in the southern and central Somali regions. In general the rainfall performance in this area was poor with many stations recording 0 to 30% of normal rainfall in October. Some places recorded little or no rains at all especially along the Juba valley which includes Gedo, Middle and Lower Juba regions. The Shabelle valley and the central regions also registered depressed rains with less than five rainy days on average. The Bay and Bakool sorghum belt recorded relatively higher amounts of rains. However, these rains were below average. Figure 1 shows observed rainfall in October 2016 compared to the long term average of the same month which indicates that all stations recorded below average rains.

The Ethiopian highlands which contributes significantly to the river flow in Somalia also recorded below normal rains according to field reports. The poor rains coupled with high temperatures experienced in the previous months has led to a prolonged dry period subsequently leading to drought conditions ranging from moderate to Severe conditions. The southern coastal area, Parts of of Juba valley (southern rainfed agropastoral and Juba Juba pastoral-Cattle), Southern agro pastoral areas (in Hiraan) and Cowpea belt (Eldeer,Harardheer and Elbur District of Galgaduud) are currently in a severe drought conditions while the rest of the southern areas including the sorghum high potential agro pastoral and central inland regions are experiencing moderate drought conditions. With no much rainfall expected in the coming weeks, the situation could get worse.



Northern Regions: In Puntland, the situation is worse with most places recording little or no rains. This follows another failed season after the Gu 2016 season which was below average. However, a few stations recorded moderate rains which were poorly distributed in terms of space and time. The rains were erratic with less than five days of rainfall within the month. This has led to the situation getting worse, from severe to extreme drought conditions. Field reports indicate a serious problem of water availability in many locations especially in Bari region.

In Somaliland, the Deyr rains kicked off in late September and the first week of October especially in the western areas of region. However, the rains were erratic and short-lived. The northeastern parts of Somaliland, in Togdheer and Sanaag regions, recorded very little rains. Figure 2, shows that most stations received below normal rains compared to the long term average rains for October.



Vegetation Conditions

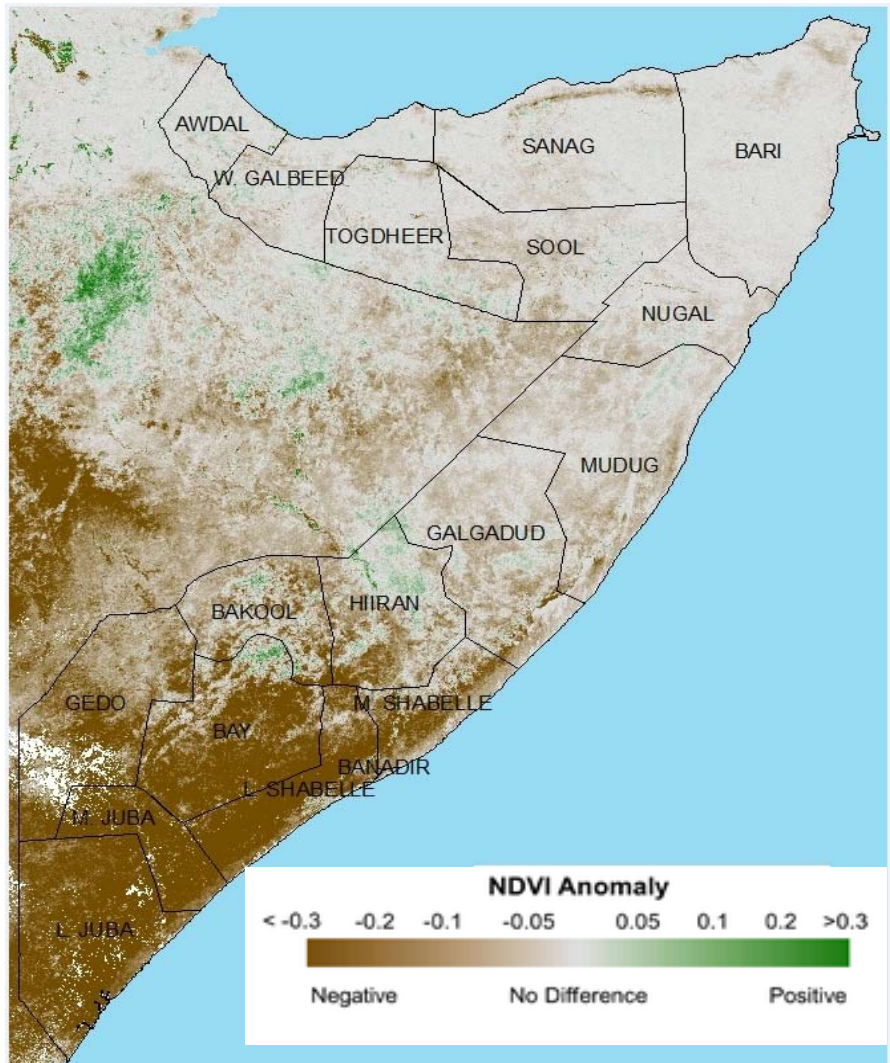
Satellite derived vegetation conditions (NDVI) data was used to assess the vegetation conditions in Somalia. The vegetation indicator Normalized Difference Vegetation Index (NDVI) provides alternative measures of the relative vegetation health. NDVI anomalies represent a subtraction of the average NDVI values (2015-2001) from current-year values for a given period, negative values portray less vigorous vegetation than average, and positive values represent areas that relatively above average.

The results from this analysis indicate that most of south and central parts of Somalia had large decrease of vegetation cover compared to the long-term average conditions.

Areas with a significant decrease in vegetation conditions include the Agropastoral livelihoods in Shebelle's, Juba, Bay and Gedo as well as Juba cattle pastoralist.

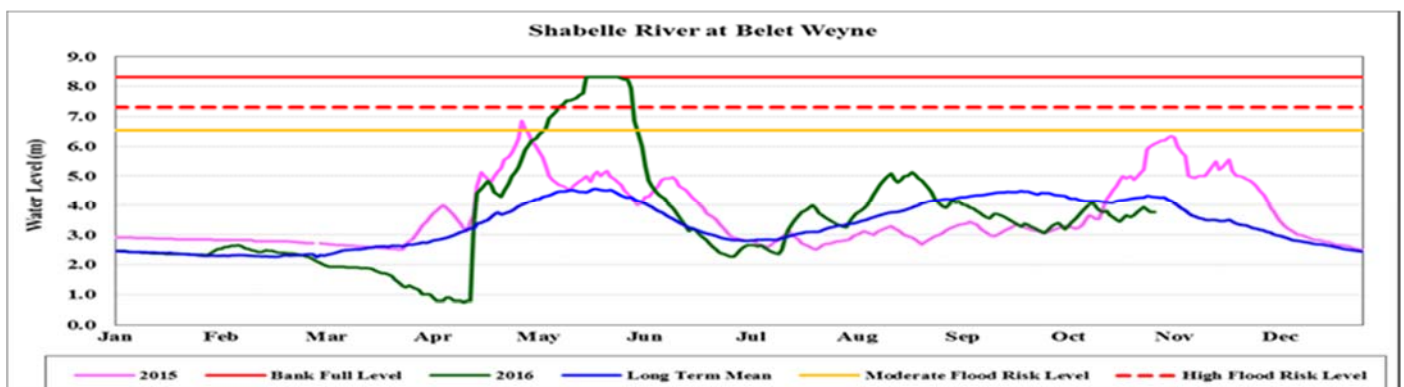
Field reports indicate poor grazing conditions in the Northern Inland Pastoral (NIP) in Sool, Sanaag, Bari and Nugal and *Addun* livelihood zone in Mudug region, which receive poor rain during the previous *Gu* season.

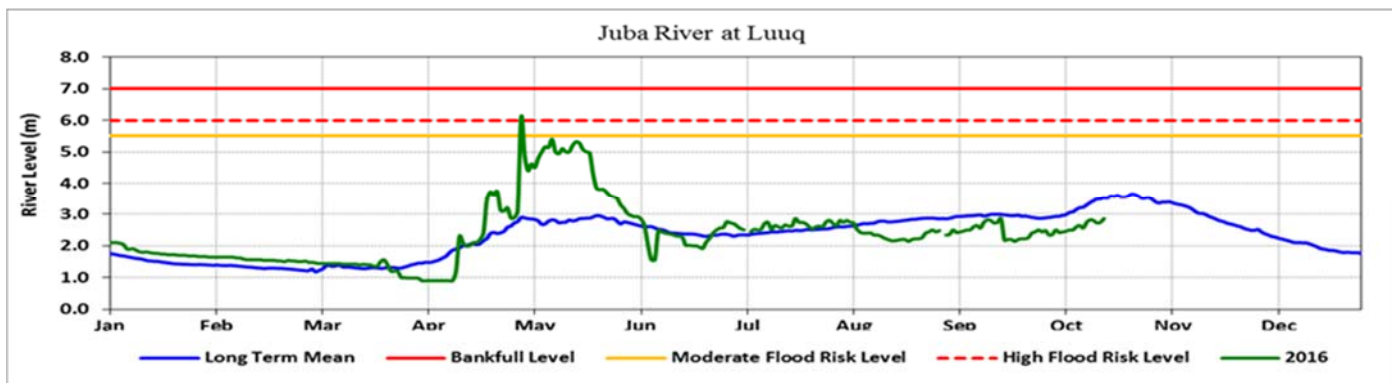
Map 2: Vegetation Conditions (NDVI), November 2016, Dekad 1



River Levels

Shabelle and Juba Rivers are currently below their normal levels for this time of year (see graphs below). Although the river levels increased slightly in September, they also declined rapidly in October due to decreased rainfall in the upper catchments of the rivers in the Ethiopian highlands. No significant rainfall is foreseen in the coming few weeks. Given the current situation and rainfall forecast, the river levels are expected to decline further. The situation is more serious along Shabelle River since there are large areas under irrigation, and the off-season (after November) cash crops might be highly affected. The resulting competition for irrigation water is likely to lead to deliberate breakage of embankments, adversely affecting downstream users.





Potential Impacts

The poor Deyr rains have significantly affected crop and pasture conditions in most parts of the country. Prospects of Deyr cereal production is bleak, with crop failure expected in many areas. Rain-fed areas are worst affected both in southern and central Somalia where crop development is very poor due to persistent moisture stress. In irrigated agricultural zones in south Somalia, the lack of rainfall may result in a non-uniform crop establishment and growth. Overall, the area under irrigated crops currently is well below average due to constrained access to irrigation as a result of significant drop down in river levels, particularly in the Shabelle region.

The continued depletion of ground water resources as the only reliable water sources has led to substantial increase in water prices in October in some markets as shown in the table below.

REGION	DISTRICT	MARKET	Percent Increase from 5-Year Average
Awdal	Zeylac	Zeilac/Lawayacado	20%
Woqooyi Galbeed	Gebiley	Togwajale	31%
Sool	Laas Caanood	Lasanod	58%
Sanaag	Ceerigaabo	Erigavo	10%
Mudug	Harardheere	Hara Dhere	14%
Hiraan	Belet Weyne	Beletwein	25%
Bakool	Ceel Barde	El Barde	18%
Bakool	Xudur	Hudur	66%
Lower Shabelle	Baraawe	Afgoi	40%
Middle Juba	Jilib	Jilib	20%
Middle Juba	Saakow	Saakow	33%
Lower Juba	Jamaame	Jamame	19%
Lower Juba	Kismaayo	Kismayo	25%

The overuse of the limited water that is currently available may also lead to deterioration of ground and surface water quality, potentially triggering water borne diseases.

This Drought Watch is a joint publication between SWALIM and FSNAU. It is available at the following website: <http://www.faoswalim.org>. Food Security and Nutrition Analysis Unit for Somalia (FSNAU) and Somalia Water and Land Information Management (SWALIM) are projects managed by FAO. The technical support and provision of the NDVI satellite images by the Joint Research Centre of the European Union is greatly appreciated.