

*Deyr rains perform poorly in early October in southern and central Somalia*

**KEY MESSAGES**

- The *Deyr* (October to December) season is delayed over southern and central Somalia, with rainfall totals less than 80 percent of average across many areas. In southeastern Ethiopia, rainfall has been average to slightly above average, but concentrated within 1-2 days of rainfall.
- During the coming two weeks, GFS forecasts suggest increases in rainfall are likely in southern and central Somalia. However, given seasonal performance to date, should rainfall between now and the end of October perform more poorly than is currently forecast, overall seasonal performance is likely to be very poor and a source of high concern.
- Elsewhere in the region, persistently heavy rainfall in western Ethiopia and much of Sudan has been favorable for cropping throughout the season, although below-average seasonal rainfall in parts of Sudan, and Fall Armyworm in both countries are a concern. In western areas of East Africa, seasonal rainfall is expected to intensify over much of Uganda, Rwanda, Burundi, northeastern DRC, and parts of northwestern Tanzania and western Kenya during the coming weeks.

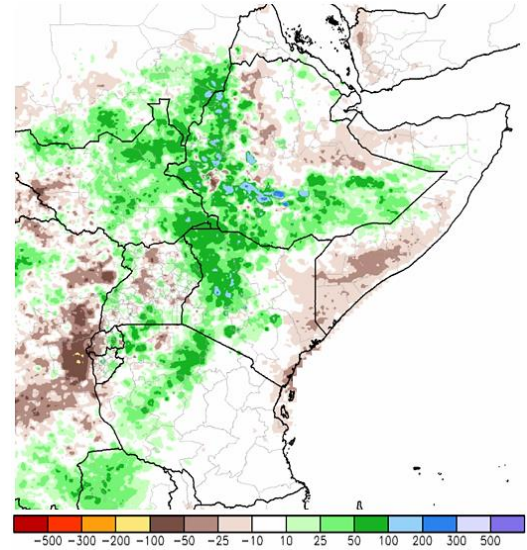
**SEASONAL PROGRESS**

Since late September, end-of-season rainfall has been persistently above average over the western highlands in Ethiopia, much of southern Sudan, South Sudan, and northwestern Kenya (Figure 1). However, the onset of *Deyr* seasonal rainfall is delayed over southern and central Somalia, where the bulk of *Deyr* rainfall typically occurs in October. Rainfall in these areas has been below average by 10-50 mm, and is less than 80 percent of average in most areas since early October. In southeastern Ethiopia, rainfall has been slightly above average, but concentrated in 1-2 days of rain. The seasonal rains are yet to start in northeastern areas of Kenya, but they typically experience their onset by late October into early November.

Meanwhile, much of northern Uganda, western Rwanda, Burundi, and eastern DRC were drier than normal during the past 2-3 weeks, although the seasons have begun and rainfall has been generally sufficient for cropping.

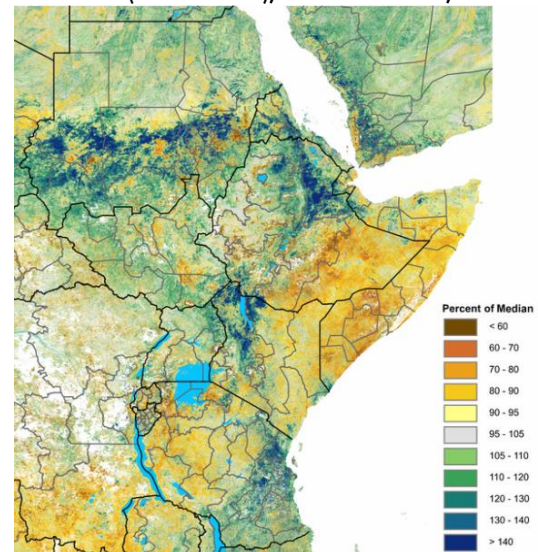
Vegetation conditions are above average over large areas of Sudan, western South Sudan, northern Ethiopia, northeastern Uganda, and western Kenya, according to NDVI (Figure 2). However, below-average conditions have prevailed in southern Somalia, southeastern Ethiopia, much of eastern DRC, and much of western Tanzania. These below-average conditions are particularly concerning in Somalia, current rainfall deficits and poor vegetation conditions could be indicative of a poor start of season.

**Figure 1.** ARC2 seasonal rainfall estimate anomalies, difference from normal (1983-2009), October 1 – 19, 2017



Source: [NOAA/NWS/CPC](http://noaa.gov)

**Figure 2.** eMODIS/NDVI percent-of-normal, anomalies (2007-2016), October 1 - 10, 2017



Source: [USGS/FEWS NET](http://usgs.gov)

Please see [http://www.cpc.ncep.noaa.gov/products/african\\_desk/cpc\\_intl/](http://www.cpc.ncep.noaa.gov/products/african_desk/cpc_intl/) and <http://earlywarning.usgs.gov/?l=en> for more information on remote sensing.

Harvest prospects in most agricultural areas of Sudan are normal following mostly above-average seasonal rainfall, although below-average rains in Kassala, northern Gadaref, and parts of North Kordofan and North Darfur are likely to result in below-average harvests in those areas. Cropping conditions have been mostly favorable in Ethiopia's *Meher*-dependant areas and in South Sudan, although FAW is a concern in both and conflict in South Sudan is likely inhibiting agricultural activities. In Kenya, the extension of seasonal rains has contributed to improvements in cropping prospects, but are also constraining some harvest and drying activities for maize.

The following is a country-by-country update on recent seasonal progress to date:

- In **Somalia**, the onset of the *Deyr* season is delayed and deficits of 10-50 mm have accumulated since the beginning of October in most of Somalia, according to Arc2 satellite-derived rainfall estimates. According to these same estimates, little or no rainfall has occurred along southern and central coastal areas of Somalia. In total, rainfall since October 1 has been less than 80 percent of what is normal for this time period. NDVI appears to reflect poor early performance of these rains, with below-average vegetation conditions most notable in southern areas such as Bay and Bakool regions.
- In southeastern **Ethiopia**, performance of the *Deyr* rains have been somewhat better than in neighboring areas of Somalia. For example, rainfall has been more widespread and reached 25 to 50 mm so far in October in some areas, and in many areas rainfall totals are near or above average. However, most of this rain occurred over 1-2 days in October and additional rainfall is needed over the coming weeks to ensure favorable seasonal performance. According to NDVI, vegetation conditions remain below average, although NDVI time series data suggests vegetation in Liben, Borena, and zones further west may be beginning to respond to recent rainfall.
- In **Kenya**, consistently above average off-season rains since September in Turkana, West Pokot, and Baringo in northwestern Kenya have contributed to improvements in availability of water and pasture for livestock. In the northern rift valley, seasonal rainfall typically declines in August, but persistently heavy rains into October in these maize-growing areas has constrained harvesting and drying of crops during this period.
- In **Uganda**, performance of the June – September rainy season in Karamoja was slightly below normal, due to late planting and below-average rainfall amounts in July/August. FAW is reported to have affected sorghum crop in Napak and Luwero districts. Together, these are resulting in slightly below average harvest prospects, although rangeland conditions are likely to remain favorable. Meanwhile, there have also been reports of flooding in parts of Amuru and Mt. Elgon regions of Uganda.
- In **Sudan**, harvests prospects are normal in most areas of Sudan, except in Kassala and the northern parts of Gedaref, North Darfur and Kordofan States, where the cumulative rainfall was below average and likely to result in significantly reduced yields. There are also recent reports of FAW in Gadaref, Blue Nile, and Sennar states, which could result in damage to crops.
- In **South Sudan**, rainfall has been near average over many areas during the past two weeks, contributing to rainfall totals over the past 90 days that are average tending to above average. NDVI suggests vegetation conditions are mostly above average, except in northwestern parts of Eastern Equatoria, northwestern parts of Jonglei, and isolated areas of northern Upper Nile.
- **Rwanda, Burundi, and eastern DRC**, have continued to receive moderate to heavy rainfall since late September, marking a timely onset of seasonal rains. However, there are areas where the ongoing seasonal rains are below average, especially over eastern DRC and neighboring western districts of Rwanda and parts of Burundi. Vegetation conditions are generally below average for much of these three countries.
- In **Yemen**, the western areas are forecast to receive moderate to heavy rainfall (20-100 mm) in the coming two weeks. Vegetation conditions in many of these areas are better than normal, according to NDVI, but are mixed or below normal in coastal areas such as Ta'izz and Al Hudaydah. However, agricultural activities are likely being constrained due to a combination of conflict and macro-economic difficulties.
- **Tanzania**, the northwestern and western regions received moderate to heavy rains (25-100mm), which were largely above average rains during this month, while the much of the country remained dry. The 1-2 week rainfall forecasts indicate the season is likely to begin in late October or early November, which is near-normal for this region. Meanwhile, current

hotter-than-normal surface temperatures season has resulted in drier-than-normal vegetation conditions across parts of northern, central into southern districts of Tanzania.

## FORECAST

In southeastern Ethiopia, southern and central Somalia, and northeastern Kenya, the short-term forecasts indicate increases in rainfall to between 20 and 80 mm are likely in many areas (Figure 3). In much of southern and central Somalia and southeastern Ethiopia, a large majority of *Deyr* rainfall typically falls during the month of October. However, given seasonal forecasts for below-average total rainfall in the Horn of Africa and that seasonal deficits have already begun to accumulate in early and mid October in Somalia, there is high concern about the possibility of overall poor seasonal performance. Moreover, [analyses](#) of previous seasons suggest there is a strong correlation between below-average rainfall in October and below-average seasonal rainfall totals in Somalia and southeastern Ethiopia. Should rainfall between now and the end of October perform more poorly than is currently forecast, seasonal performance is likely to be poor and a source of high concern.

In the rest of the region, as the Inter-Tropical Convergence Zone (ITCZ) shifts further south in the coming weeks, short-term forecasts indicate seasonal rainfall is expected to decline in northern and central Sudan. Moderate to heavy rainfall is expected to continue over the Ethiopian highlands. In western areas of East Africa, seasonal rainfall is expected to intensify over much of Uganda, Rwanda, Burundi, northeastern DRC, and parts of northwestern Tanzania and western Kenya. However, there are a few localized areas over Kenya's southeastern marginal agricultural areas and northeastern Tanzania highlands where the rains are likely to start in early to mid-November. Meanwhile much of Tanzania, will remain typically sunny and dry during this month.

**Figure 3.** 1<sup>st</sup> Week GFS-Rainfall forecast (mm), valid October 20-26, 2017

