

*Hotter-than-normal temperatures and seasonal dryness persist, except in southern Tanzania*

**KEY MESSAGES**

- Abnormally drier and hotter-than-normal conditions continue to persist in most of East Africa. Cropping conditions are poor in southeastern South Sudan and Kenya’s marginal agricultural zones, while water and pasture conditions are declining in many pastoral areas, particularly in the eastern Horn.
- Although northern Tanzania has accumulated below-average rainfall since January, southern regions continued to receive heavy rains, resulting in well above-average total rainfall since January and elevating current flood risk.
- The February 17-23, 2019, forecast is indicative of light to moderate rainfall in the Ethiopian highlands and parts of northeastern Kenya and moderate to heavy rainfall in coastal and western Tanzania, Rwanda, Burundi, and southern Uganda. The rest of region is likely to remain typically dry but significantly hotter-than-normal.

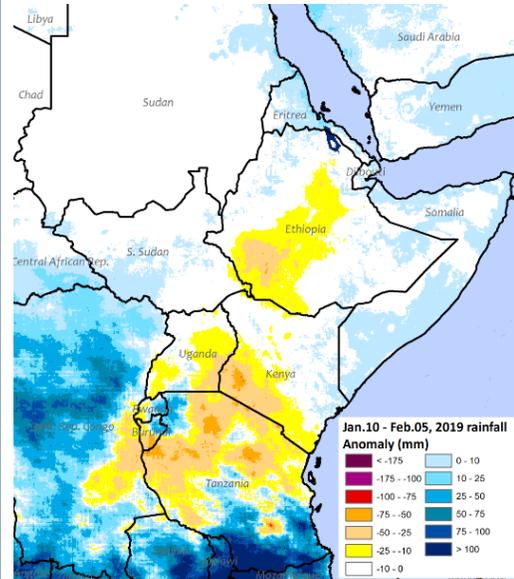
**SEASONAL PROGRESS**

In January, much of East Africa remained uncharacteristically hotter than normal, and several areas are drier than normal as well. With little to no rainfall since January 10, current deficits are equivalent to 10 to 50 mm below-average in southwestern Ethiopia, southwestern and eastern Uganda, western Burundi and Rwanda, and southern Kenya (Figure 1). This is rapidly eroding recent gains in vegetation from late November to December rainfall, particularly in the Horn.

Meanwhile, *Msimu* (October–May) seasonal rainfall has continued in Tanzania with moderate to localized very heavy rainfall amounts. However, when compared to the long-term average, total cumulative rainfall has been 10 to 50 mm below average since January 10 across most of the country, with localized pockets of 50-75 mm deficits. Only the south and northwestern corner of Tanzania continued to accumulate well above-average total rainfall ( $\geq 25$ -50mm). As a result, flood risk in the border regions of Tanzania, Zambia, and Malawi has increased. Despite these anomalies, the temporal distribution and cumulative amounts of *Msimu* seasonal rainfall has been generally favorable for cropping and rangeland conditions across Tanzania.

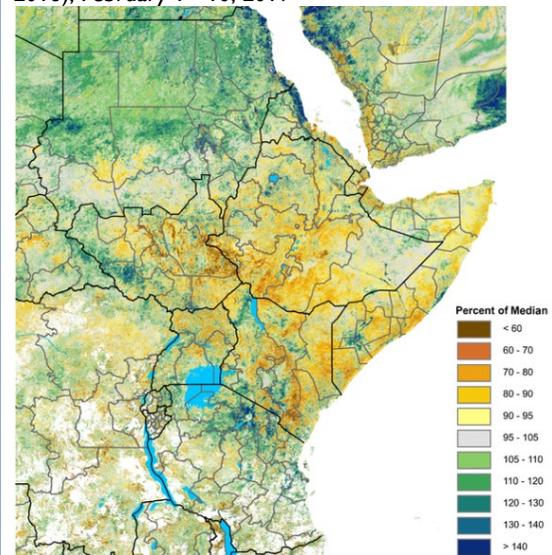
Given above-average temperatures, vegetation conditions have deteriorated significantly in many areas, especially over eastern and central South Sudan and neighboring southwestern/southern Ethiopia. Karamoja sub-region in Uganda is also experiencing poor vegetation conditions; however, conditions are relatively less severe in Karamoja in comparison to neighboring southeastern

**Figure 1.** CHIRPS-Preliminary seasonal rainfall accumulation anomalies: January 10 –February 5, 2019, compared to 1981-2010 average



Source: USGS/FEWS NET

**Figure 2.** eMODIS/NDVI percent of normal (2007-2016), February 1 - 10, 2019



Source: USGS/FEWS NET

South Sudan. Other regions that are also currently experiencing drier-than-normal conditions are parts of northern and eastern Kenya, central and southern Somalia, and western Yemen.

The latest eMODIS/Normalized Difference Vegetation Index (Figure 2) provides supporting evidence of rapidly deteriorating vegetation conditions in South Sudan, central and eastern Kenya, central-south Somalia, and southern Ethiopia. However, due to gains accrued from late November to December rainfall, some areas remain greener-than-normal. These include northeastern and coastal Tanzania, southern, northwestern, and coastal Kenya, western Rwanda and parts of Burundi and Uganda. Sudan and western Ethiopia have also maintained favorable vegetation conditions due to the lasting impact of above-average cumulative rainfall in the June to September 2018 season.

Recent and on-going field crop assessment reports are indicative of good cropping conditions across Tanzania, due to the quality of the current seasonal rains. Major concerns for significant yield short-falls are becoming more evident now as the harvest progresses in south-eastern marginal cropping areas of Kenya and in southern Somalia, due to below-average *Deyr*/short rains rainfall performance.

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

- **In Somalia**, dry and hot conditions continue to prevail, leading to rapid deterioration in rangeland resources. Little to no rainfall is forecast in the coming weeks, as is typical during the *Jilaal* (January – March) dry season. Increased livestock migration is anticipated as surface water and pasture resources are depleted, until the onset of the *Gu* rains in April.
- **In Ethiopia**, there is field and satellite-derived evidence of gradually worsening vegetation conditions in SNNP, Oromia, Somali, and Afar regions, due to below-average *Hageya/Deyr* rainfall and the on-going hotter-than-normal dry season. Pasture and surface water resources are rapidly declining in these regions. However, forecast localized light-to-moderate rains are likely to ease current dry conditions, heralding a timely onset of the *Belg* (February-May) rains over the Rift Valley and southern Oromia. The anticipated timely onset of the rains is likely to enhance soil moisture for early land preparation in southern Tigray and eastern Amhara.
- **In Kenya**, marginal agricultural and pastoral regions in the eastern lowlands and coastal and northern counties are exhibiting adverse impacts from the below-average short rains. Significantly reduced maize yields are being reported in some of these short-rains dependent areas. Meanwhile, rangeland resources are also rapidly declining, particularly in Turkana, Isiolo, Samburu, Marsabit, Mandera, Wajir and Garissa. Conditions are likely to worsen until the onset of the long rains in late March/early April. There is an increased likelihood of early onset of the long rains, which could trigger early land preparation and planting activities.
- **In Sudan**, typical dry and sunny conditions continue, with greener-than-normal vegetation conditions across the country. This is driven by the largely above-average 2018 June to September seasonal rains. However, current dry conditions are forecast to continue until the onset of the 2019 rainy season in June. Rangeland resources are expected to decline through the peak of the dry season in April/May.
- **In South Sudan**, vegetation conditions have worsened in the past month and are expected to decline further, driven by exceptionally hotter-than-normal conditions. This has triggered early livestock migrations from the northeastern regions that have resulted in resource-based conflict. Overall, cropping conditions have remained poor for the south-eastern Equatorial region, following the poor performance of the October – December rains.
- **In Uganda**, January to early-February rainfall has remained average to below average in the south and in the Lake Victoria basin. The rest of country has remained typically sunny and dry. Although parts of Karamoja have been persistently drier-than-normal, conditions remain relatively better than cross-border conditions in Kenya's Turkana county and South Sudan's southeastern Equatorial region. Conflict over available pasture and water resources is of concern due to inbound livestock migration from those pastoral communities. According to the latest seasonal forecast, there is an increased likelihood for earlier-than-normal onset of long-rains in Uganda, which may trigger early farm preparations and planting.
- **In Rwanda and Burundi**, harvesting of season A crops are ongoing or nearly completed, and average production is expected on the national level. However, localized areas in Kirundo, Bubanza, and Cibitoke provinces in Burundi are likely to realize shortfalls in production due to inadequate rainfall performance. Water scarcity and increasingly poor vegetation conditions are currently being reported due to an ongoing dry spell in parts of eastern Rwanda, but most

crops have already been harvested or have passed the stage of high rainfall needs. The rainfall forecast indicates widespread moderate rains that could ease the dry spells in both countries.

- **In Tanzania**, cropping conditions across unimodal cropping zones remain favorable despite below-average rainfall performance over the past month. Meanwhile, the southern and southeastern coastal districts of the country have continued to experience persistent, well above-average rainfall, and face heightened flood risk. However, the seasonal rains are forecast to subside in most areas for the next two weeks, apart from western and coastal Tanzania.
- **In Yemen**, dry and extremely hotter-than-normal conditions have persisted across the country for the past month. Vegetation conditions remain near-normal, however, and localized rains are forecast over its western highlands regions. The rest of the country is expected to remain generally sunny and significantly hotter-than-normal.

## FORECAST

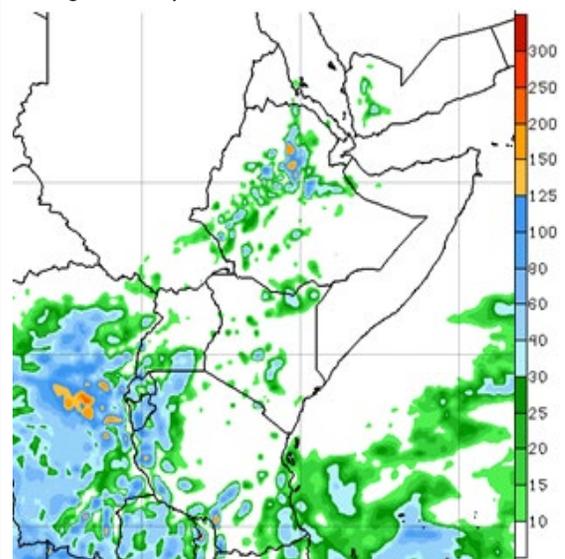
The rainfall outlook for the next one to two weeks depicts an increased likelihood for light to moderate rains across northern to western Ethiopia, signaling a likely timely onset of its *Belg* seasonal rains. Similarly, localized areas of northeastern and southeastern Kenya are forecast to receive moderate amounts rainfall, which is expected to bring much needed relief from current dry and hotter-than-normal conditions.

In Tanzania, the rains are expected to subside slightly, declining to below-average amounts in northern and central regions. However, the eastern coastal regions and western sector of the country are expected to remain wet, with moderate to localized very heavy storms. Similar rainfall amounts are forecast for much of Rwanda, Burundi and parts of southern Uganda. These rains are generally associated with active tropical cyclone development off the southwestern Indian Ocean.

The rest of East Africa is expected to remain seasonally dry, but with persistent hotter-than-normal land surface temperatures.

It is worthwhile to note that the IGAD Climate Prediction and Applications Centre (ICPAC) and its national, regional and international partners are expected to issue a seasonal consensus rainfall and temperatures forecast for the March – May 2019 this week. It will highlight expected climatic and agro-climatic conditions across the region in support of multi-sectoral decision-making, following the poor performance of October – December rains and the precarious situation of the most vulnerable pastoral and marginal agricultural populations of regions. Refer to ICPAC's website for updates on the *Gu/long-rains* forecast this week at [www.icpac.net](http://www.icpac.net).

**Figure 3.** Week 2 GFS rainfall forecast in mm, valid through February 17-23, 2019



Source: USGS/FEWS NET