

Climate Prediction Center's Africa Hazards Outlook November 29 – December 5, 2018

- Monsoonal convergence shifted south into Kenya and Tanzania last week.
- The region experiencing abnormal dryness has expanded into more areas of Angola, Zambia, and Zimbabwe



Rains were generally light and widely scattered across the horn of Africa.

After a period of widespread rainfall over Ethiopia, rains largely diminished during the past 7 days. A similar decrease was also observed in Somalia and northern Kenya. Meanwhile, rains did increase in southern Kenya and Tanzania, where totals ranged from about 10mm to locally 100mm according to satellite estimates (**Figure 1**). These amounts were still generally below climatological averages in Kenya. However, heavier rains in western Tanzania exceeded climatological averages. Rains remained in the light to moderate range in Uganda and eastern DRC, with around 25mm or less being observed.

Increased rains during mid-November gave way to a return of dry conditions that have dominated most of the OND season in Somalia and southern Ethiopia. Seasonal deficits still remain substantial, having been negligibly affected. Infrequent and poorly distributed rainfall during October and November has led to steadily deepening and expanding rainfall deficits across Kenya and neighboring parts of Uganda. Some of the largest rainfall deficits of more than 100mm are located in central and southeastern Kenya (Figure 2). Given the brevity of seasonal rainfall in the region, the persistence of anomalous dryness through late November and agropastoral areas and cause concern for water availability. 30-day deficits are present in South Sudan and northeastern DRC. The season has ended in South Sudan, but there is still plenty of time for moisture recovery in DRC.

During the next outlook period, models suggest that rainfall may increase over parts of the Horn of Africa as December begins. The pattern opens the opportunity for some late-season moisture recovery in Somalia, Kenya, and southern Ethiopia. Alternatively, below-average rainfall is favored for Uganda, Tanzania, and parts of western Kenya.

Rainfall became much more widespread across southern Africa, but totals remained low.

During the last week, rains increased in spatial coverage over Southern Africa. According to satellite rainfall estimates, an area of heavy rainfall was concentrated over central Mozambique, Malawi, and eastern Zambia where 50mm to locally as much 150mm of rain fell (**Figure 1**). Despite widespread rain showers throughout many regions of Botswana, southern and western Zimbabwe, southern Angola, eastern Zambia, and the Caprivi Strip region of Namibia, 7-day totals were only about 25mm or less. This lead to persisting weekly deficits of 10-25mm. Rainfall was near-normal in South Africa outside of the Limpopo province which only received very light rain. Madagascar received increasing rains for another week.

Over the past several weeks, repeated periods of highly suppressed seasonal rainfall throughout much of southern Africa have been observed. The inconsistency in seasonal rainfall has led to early-season abnormal dryness throughout much of South Africa and Angola, with moisture deficits (50-100mm) rapidly developing across southeastern Africa in parts of Botswana, Zimbabwe, Zambia and South Africa (**Figure 2**). The erratic rainfall has also resulted in degraded ground conditions according to remotely sensed vegetation health indices. In addition, daytime maximum temperatures were above average throughout Angola and South Africa during late October and early November, where increased evapotranspiration and moisture stress is likely adversely impacting early-season cropping activities. A poor start to the rainfall season is giving way to decreasing rainfall deficits and improved ground conditions in Madagascar.

For the next 7 days, precipitation models suggest that above-average rainfall is favored in Northern Angola, southern DRC, Zambia and northern Mozambique. Weekly totals of more than 50mm are likely. At the same time, suppressed rains are likely to continue for areas of southern Angola, northern Namibia and Botswana. Moderate and seasonable rains are expected across South Africa. In Madagascar, seasonal rainfall should continue to increase in coverage and magnitude over the country further diminishing early season deficits.







Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.