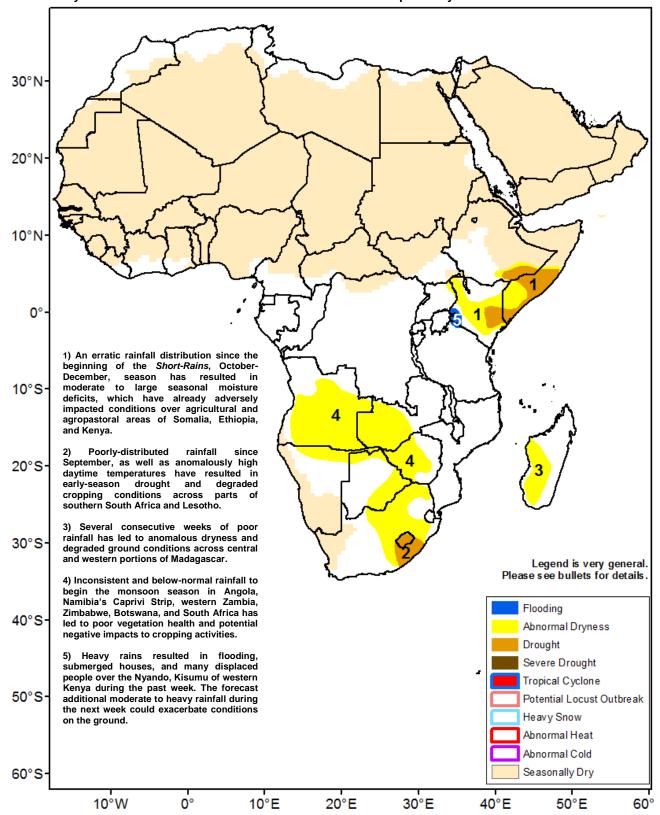


Climate Prediction Center's Africa Hazards Outlook December 13 – 19, 2018

- Insufficient rainfall since the start of the season has led to drought over parts of Somalia, Ethiopia, and Kenya.
- Unevenly-distributed rainfall has continued and resulted in widespread dryness over southern Africa.



An erratic October-December season has resulted in drought over eastern Africa.

The Short-Rains, October-December, rainfall season has been erratic over the Horn of Africa. Many areas experienced a delayed onset to the seasonal rainfall during October. In November, while some areas, including the Mandera Triangle and parts of southern Somalia, saw increased and aboveaverage rainfall, the remainders of the region continued to receive belowaverage rainfall. Since the beginning of December, near-average rainfall was recorded throughout most areas; however the accumulated amounts were not sufficient to fully erode seasonal deficits. An analysis of rainfall anomaly since the beginning of October to present indicated widespread negative anomalies ranging between 50-200 mm across eastern equatorial Africa (Figure 1). The largest (> 100 mm) deficits were registered over southernmost Somalia and east-central Kenya.

Based on ground reports, the deficient rainfall has already adversely impacted ground conditions over many areas of the Greater Horn of Africa. Crop production could decrease by at least 30 percent below-average over producing areas of Somalia and Kenya. Below-average pasture and reduced water availability has resulted in earlier-than-normal livestock migration in pastoral areas of northern and central Somalia and southern Ethiopia. As the season is quickly approaching to an end, the chance for recovery remains slim and further degradation is likely.

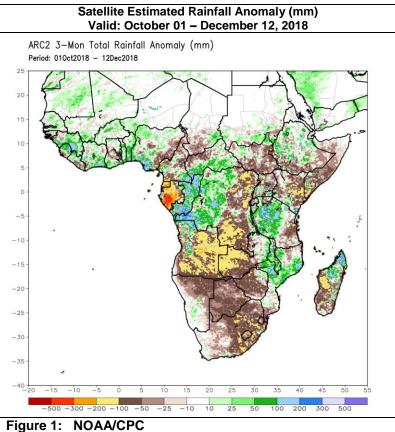
During the next outlook period, near-average rainfall is expected over eastern Africa. Light rainfall could continue over southernmost Somalia and northern Kenya. Moderate to locally heavy rainfall is forecast over southern Kenya and northern Tanzania. Suppressed rainfall is expected elsewhere

Widespread but unevenly-distributed rainfall was observed over southern Africa during the past week.

From December 6-12, an uneven distribution of rainfall continued over southern Africa. Over Angola, following enhanced rainfall during the week prior, reduced rainfall was received over much of the country and neighboring western Zambia, northern Namibia, and northern Botswana, while enhanced, moderate to heavy rainfall was recorded throughout eastern Zambia, Zimbabwe, western and southern Mozambique, northern South Africa, and northern Madagascar (Figure 2). Farther south, light to locally moderate rainfall was registered over northeastern Namibia, Botswana, north-central South Africa, and southern Madagascar, whereas little to no rainfall was observed elsewhere. This resulted in below-average weekly rainfall totals over Angola, Zambia, Malawi, northern Mozambique, northern Namibia, northern Botswana, central portions of South Africa, and southern Madagascar. The continuation of poorly-distributed rainfall, both in space and time, contributed to maintaining seasonal rainfall deficits throughout the region.

Seasonal rainfall anomalies since October to date indicated widespread deficits from Angola, western Zambia, western Zimbabwe, northern Namibia, Botswana, eastern and northern South Africa, to western Madagascar. The largest (> 100 mm) deficits were recorded over central Angola, western Zambia, west-central Madagascar, and localized areas of eastern South Africa. The lack of rainfall, combined with abnormally high surface temperatures, has already degraded crop conditions over areas of eastern South Africa and Lesotho, according to reports. Recent remote sensing products also depicted worsening vegetation conditions throughout a wide area of southern Africa.

During the next outlook period, a wet weather pattern, with heavy rainfall, is forecast to shift to northeastern southern Africa. This includes southern DRC, eastern Zambia, Malawi, Tanzania, northern Mozambique, and southcentral Madagascar. Light to moderate rainfall is expected over eastern South Africa, while little to no rainfall is forecast across southern Angola, Namibia, Botswana, southern Zimbabwe, northern South Africa, and southern Mozambique. The forecast suppressed rainfall over southwestern and central southern Africa could further increase moisture deficits and ultimately negatively impact cropping activities over many local areas.



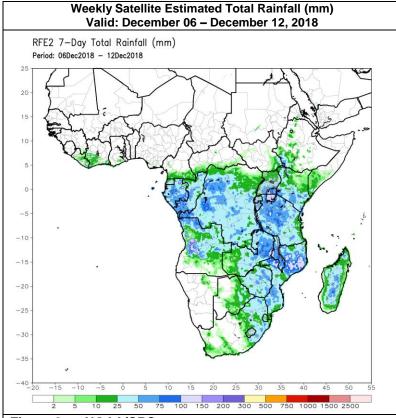


Figure 2: NOAA/CPC

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.