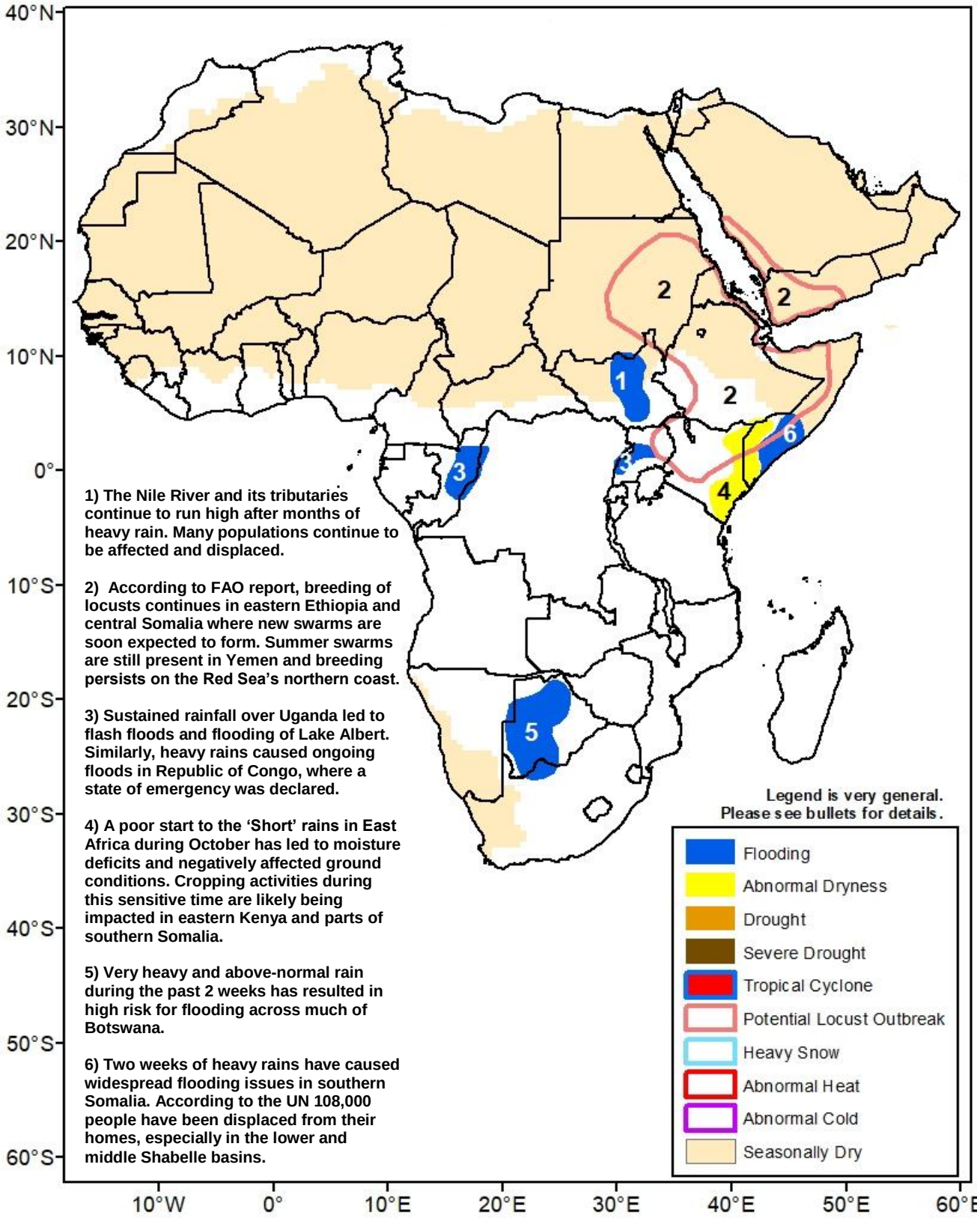
Climate Prediction Center's Africa Hazards Outlook
November 19 – November 25, 2020

- **Large portions of southern and eastern Africa received heavy and above-normal rainfall last week.**



1) The Nile River and its tributaries continue to run high after months of heavy rain. Many populations continue to be affected and displaced.

2) According to FAO report, breeding of locusts continues in eastern Ethiopia and central Somalia where new swarms are soon expected to form. Summer swarms are still present in Yemen and breeding persists on the Red Sea's northern coast.

3) Sustained rainfall over Uganda led to flash floods and flooding of Lake Albert. Similarly, heavy rains caused ongoing floods in Republic of Congo, where a state of emergency was declared.

4) A poor start to the 'Short' rains in East Africa during October has led to moisture deficits and negatively affected ground conditions. Cropping activities during this sensitive time are likely being impacted in eastern Kenya and parts of southern Somalia.

5) Very heavy and above-normal rain during the past 2 weeks has resulted in high risk for flooding across much of Botswana.

6) Two weeks of heavy rains have caused widespread flooding issues in southern Somalia. According to the UN 108,000 people have been displaced from their homes, especially in the lower and middle Shabelle basins.

The southern coast of Somalia and Bimodal regions of Tanzania received very heavy rainfall this past week.

During the last week, rains greatly increased throughout Tanzania. Many places in the country received 7-day totals greater than 100mm (**Figure 1**). Heavy rains were also observed in southern coastal Somalia. More than 100mm was observed there while interior portions of the country became dry. Rains were scattered in nature across Kenya, but many localized areas, mainly in the east and near Lake Victoria, received heavy rain. Uganda continued to receive moderate rainfall. Meanwhile, conditions dried out in southern Ethiopia and central South Sudan, where negative 7-day rainfall anomalies are present. Heavier rains in southern Somalia and eastern Kenya continued to improve seasonal moisture conditions there. Parts of those regions now display 30-day rainfall surpluses. Still, there are many other areas, including Somali region, Ethiopia, which have not seen as much improvement and show 30-day deficits of 25-100mm or more (**Figure 2**). In many cases, these deficits correspond to less than 50% of normal observed rainfall. Negative impacts are evident from analysis of NDVI in the sensitive regions of southern Somalia and eastern Kenya so abnormal dryness is drawn there. Based on the most recent Food and Agriculture Organization (FAO) update, desert locusts persist in the Horn of Africa. Conditions have improved in northern Ethiopia, but breeding continues in eastern Ethiopia. An increasing number of hopper bands are also forming in central Somalia.

During the outlook period, heavy and above-normal rain will likely continue over Tanzania, Rwanda, Burundi, and southern Uganda. 50mm to 100mm of rain is forecast. Meanwhile, a return to suppressed rain is likely in southern Ethiopia, Somalia, and Kenya.

7-Day Satellite Estimated Total Rainfall (mm)
Valid: November 10 – November 16, 2020

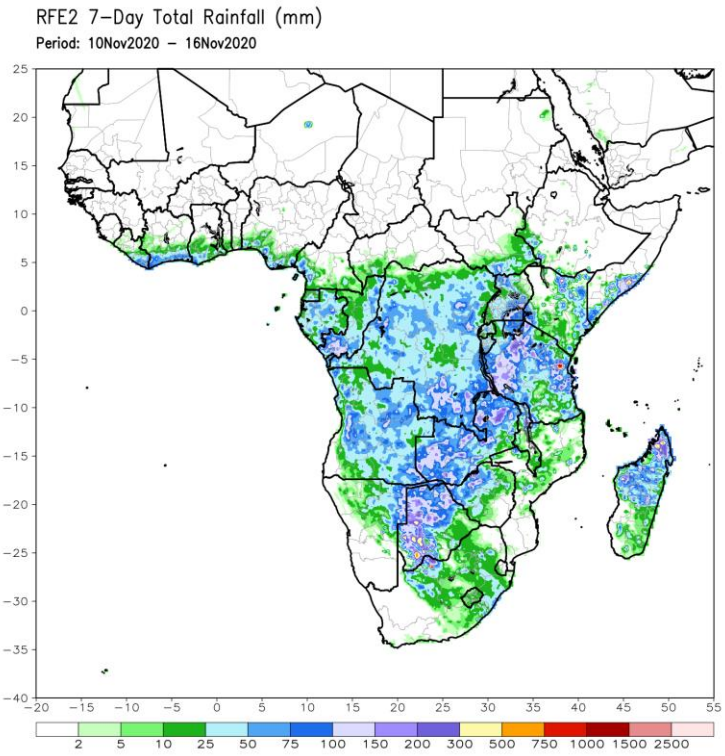


Figure 1: NOAA/CPC

Very heavy rain impacted Botswana for a second week in a row.

During the past week, very heavy and abnormal rains were observed in many parts of Botswana, northwestern Zimbabwe, and Zambia. Rainfall totals exceeded 100mm and locally 200mm according to satellite estimates (**Figure 1**). These totals are abnormal, especially in Botswana, and have resulted in large moisture surpluses for the early part of the season in these areas. Much increased and heavier rain (50mm, locally much higher) occurred in northern Madagascar. Most of Angola received 25mm or more. In southern Madagascar and central Angola, rainfall is lagging behind climatology early in the season by as much as 50-100mm (**Figure 2)**. In South Africa, moderate rains were present in the southeast and heavy rains were present in the north-central region, and early-season rainfall performance has been largely good. Another week of suppressed rain in eastern South Africa, southern Mozambique, and Eswatini increased 30-day deficits to 25-100mm. Vegetation health is struggling a bit based upon NDVI in southern Madagascar and Mozambique as expected from rainfall analysis. Vegetation indices are improving in Zambia and Botswana, but should decrease along the South Africa/Mozambique border as the mid-October rainy period fades into the past.

For next week, above-normal rainfall is likely in Angola and DRC. Widespread 50-100mm rainfall totals are expected. Meanwhile, drier conditions are expected in Zimbabwe, eastern Botswana, southern Zambia, Malawi, Mozambique, and Madagascar. This pattern will not benefit many areas which are already experiencing uneven rainfall performance to start the season.

30-day Satellite Estimated Rainfall Anomaly (mm)
Valid: October 19 – November 17, 2020

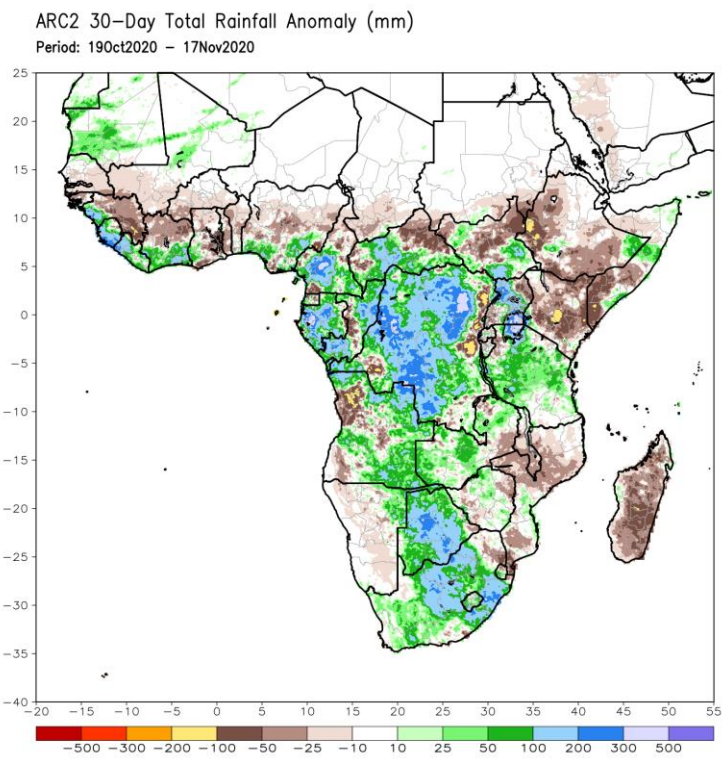


Figure 2: NOAA/CPC

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.

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