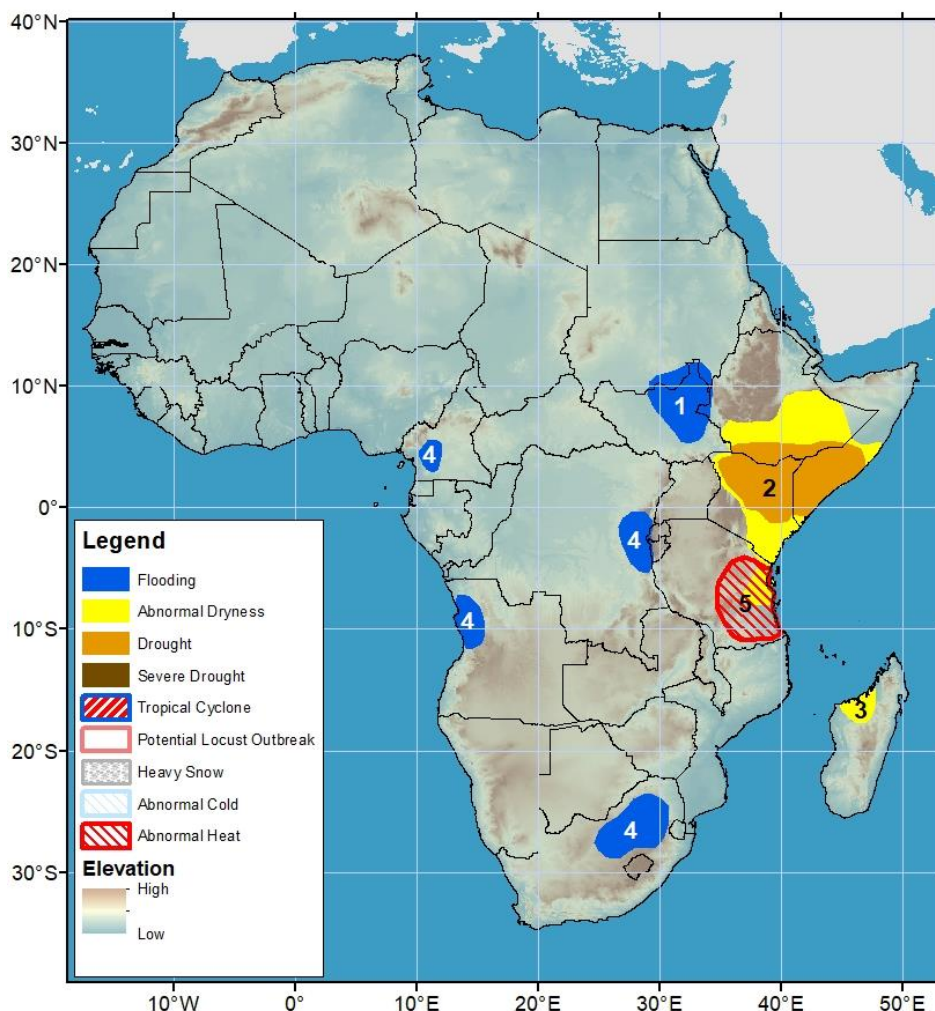


Climate Prediction Center's Africa Hazards Outlook For USAID / FEWS-NET 15 – 21 December 2022

- Dryness and drought has persisted in Eastern Africa despite a slight increase in rain during this past week.
- Potential flooding is high in most areas in Southern Africa as heavy rain is to return during the next week.



- 1) Heavy seasonal rainfall has resulted in flooding, fatalities, and many people affected over the Nile River basin in Sudan and Sudd Wetland areas of South Sudan.
- 2) Dry and erratic conditions since the beginning of the October-December season over Eastern Africa have resulted in abnormal dryness over central and eastern Kenya, southern Ethiopia, and northeastern Tanzania. Drought has developed in southern Ethiopia, southern Somalia, and northern Kenya.
- 3) Below-average rain over the past six weeks has resulted in moderate to large thirty-day moisture deficits, which have led to abnormal dryness in western Madagascar. Near to below-average rain is expected in the region during the next week.
- 4) The past few weeks' enhanced rain has overly saturated the soil, which has resulted in flooding and/or landslides, causing fatalities, destroyed infrastructures, and many people affected in Yaoundé in Cameroon, the North Kivu and South Kivu Provinces in eastern DRC, Luanda Province in Angola, and Johannesburg area in South Africa. The forecast heavy rain during the next week is likely to exacerbate conditions on the ground.
- 5) An abnormal heat hazard is posted in eastern Tanzania, where maximum temperature is expected to rise up to 6°C above average and exceed 39°C for at least three consecutive days during the next week.

Note: The Hazards outlook map is based on current weather/climate information, short and medium-range weather forecasts (up to 1 week), sub-seasonal forecasts up to 4 weeks, and assesses the potential impact of extreme events on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed and predicted to continue during the outlook period. The boundaries of these polygons are only approximate at the spatial scale of the map. This product considers long-range seasonal climate forecasts but does not reflect current or projected food security conditions. FEWS NET is a USAID-funded activity whose purpose is to provide objective information about food security conditions. Its views are not necessarily reflective of those of USAID or the U.S. Government. The FEWS NET weather hazards outlook process and products include participation by FEWS NET field and home offices, NOAA-CPC, USGS, USDA, NASA, and several other national and regional organizations in the countries concerned.

Questions or comments about the hazard's outlooks may be directed to Dr. Wassila Thiaw, Head, International Desks/NOAA, wassila.thiaw@noaa.gov.

Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, jverdin@usaid.gov

Eastern Africa experienced a slight increase in rainfall during the past week.

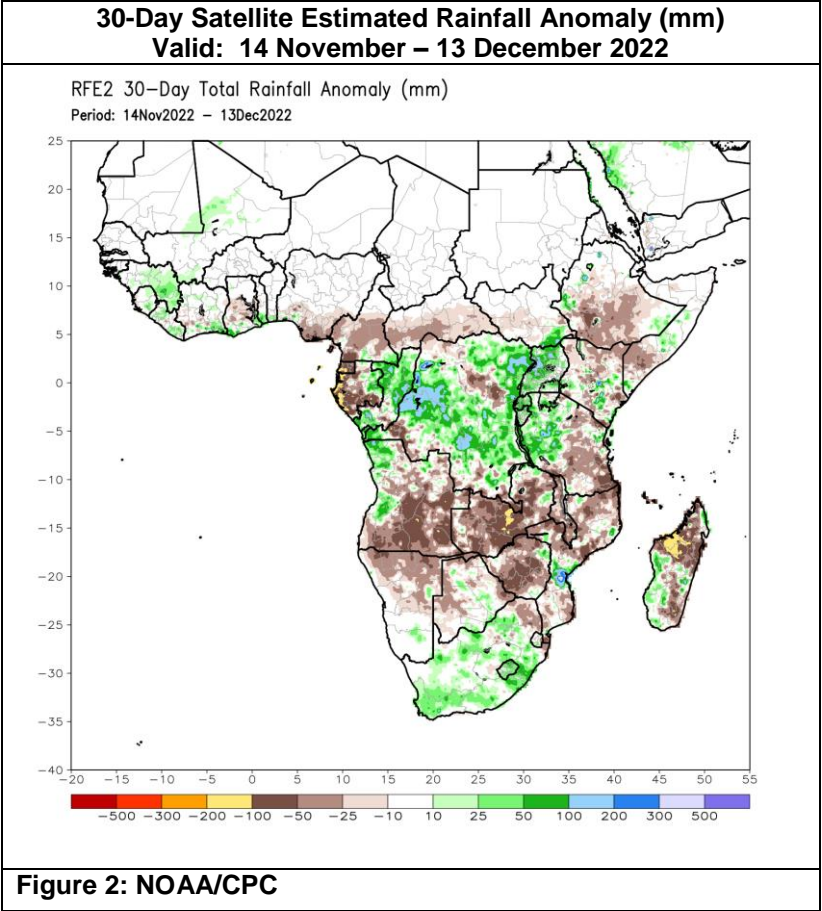
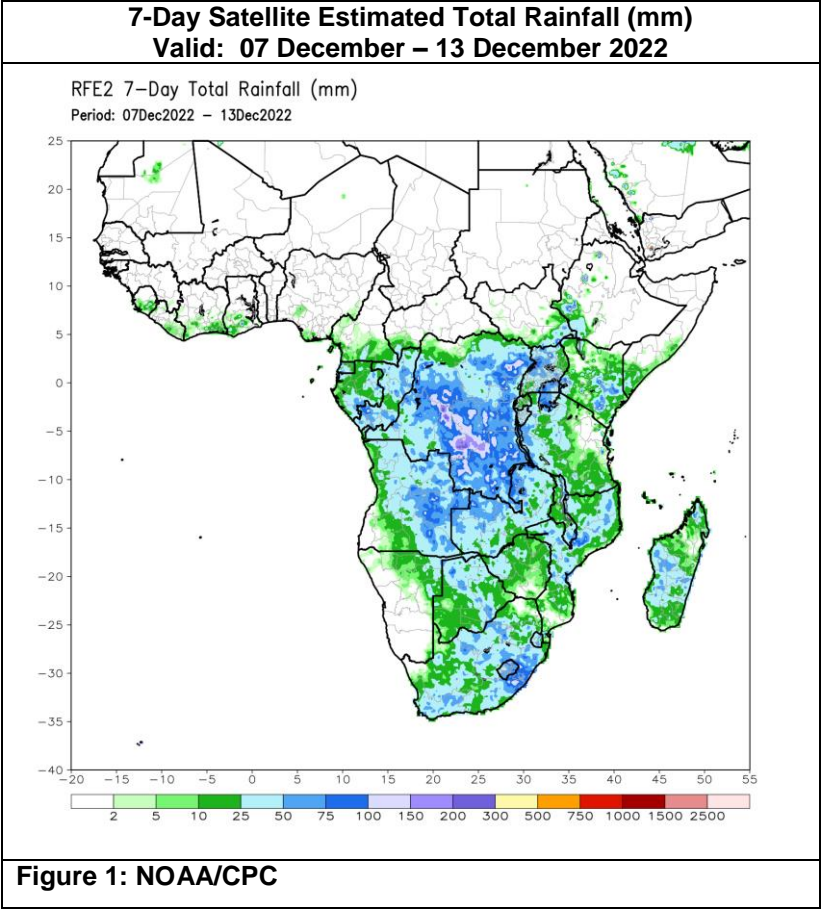
During the past week, an increase in rainfall was observed over Eastern Africa, with moderate to locally heavy rain falling in central Kenya and parts of Ethiopia, Uganda, and Somalia (**Figure 1**). Although this past week's enhanced rain contributed to slightly erode thirty-day rainfall deficits and partially alleviate drier-than-average conditions over localized areas in Kenya, dryness and drought still prevailed across the sub-region. Additionally, a satellite-derived temperature analysis indicated that high and above-average mean temperatures affected southern Ethiopia and parts of Kenya, which might have exacerbated loss of water through evapotranspiration during November. For vegetation conditions, the latest Normalized Difference vegetation Index (NDVI) anomaly showed that below average and deteriorated vegetation was present across southern Ethiopia, most areas in Kenya, and portions of Somalia.

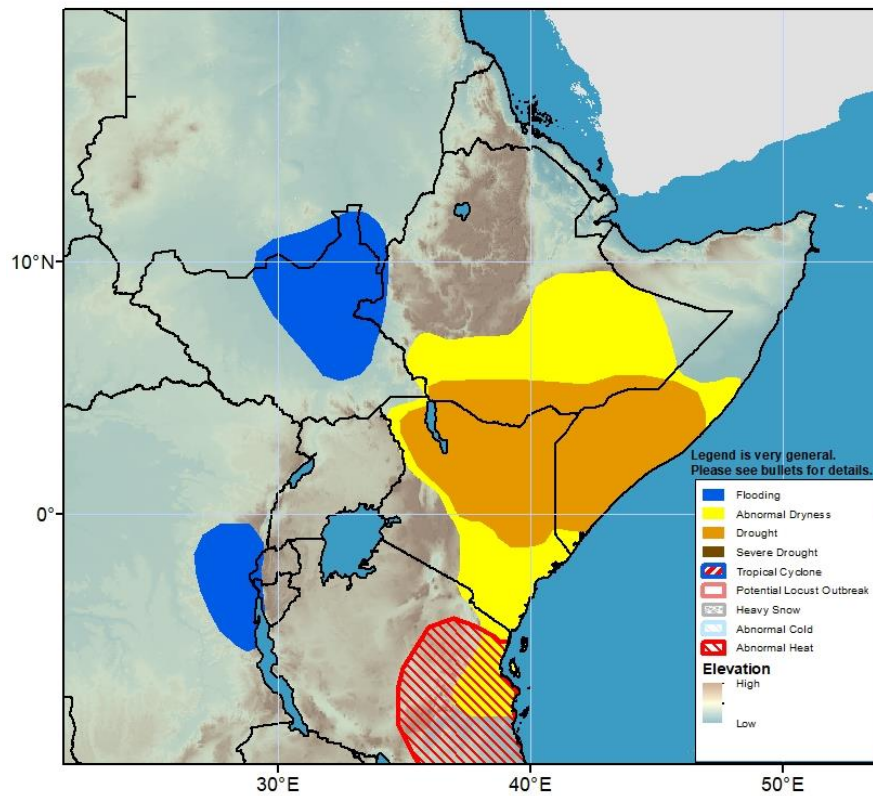
During the next week, a return to drier conditions is expected in Eastern Africa, with little to light rain in southwestern Ethiopia, southern Kenya, southern Uganda, and northern Tanzania and dry conditions forecast elsewhere. The forecast limited rain and closing rainfall season reduces the chance for recovery.

Drier-than-average conditions observed in the northern and eastern parts of Southern Africa

Over the past 30 days, the accumulated rainfall was below average in the northern and eastern sectors of Southern Africa. The affected countries included southern Angola, Zambia, northern Namibia, western Zimbabwe, Malawi, northern Mozambique, and parts of Madagascar, where thirty-day rainfall deficits exceeded 50 mm (**Figure 2**). This past week, despite moderate to locally heavy rain over most areas in Southern Africa, rainfall totals were below average in most areas, contributing to strengthen rainfall deficits in the sub-region. For instance, near to below average rain since November has increased thirty-day moisture deficits, which have resulted in abnormal dryness in western Madagascar. Drier conditions also continued over most parts of Angola. However, wetness that has already caused flooding, destroyed infrastructures, fatalities, and many people affected persisted over many areas, including western Angola, South Africa, Lesotho, eastern Zimbabwe, central and southern Mozambique, and southwestern Madagascar. The latest vegetation products, in general, indicated that favorable conditions dominated throughout the sub-region, except for localized areas with below-average conditions in southwestern Angola, northwestern Namibia, and northern Mozambique.

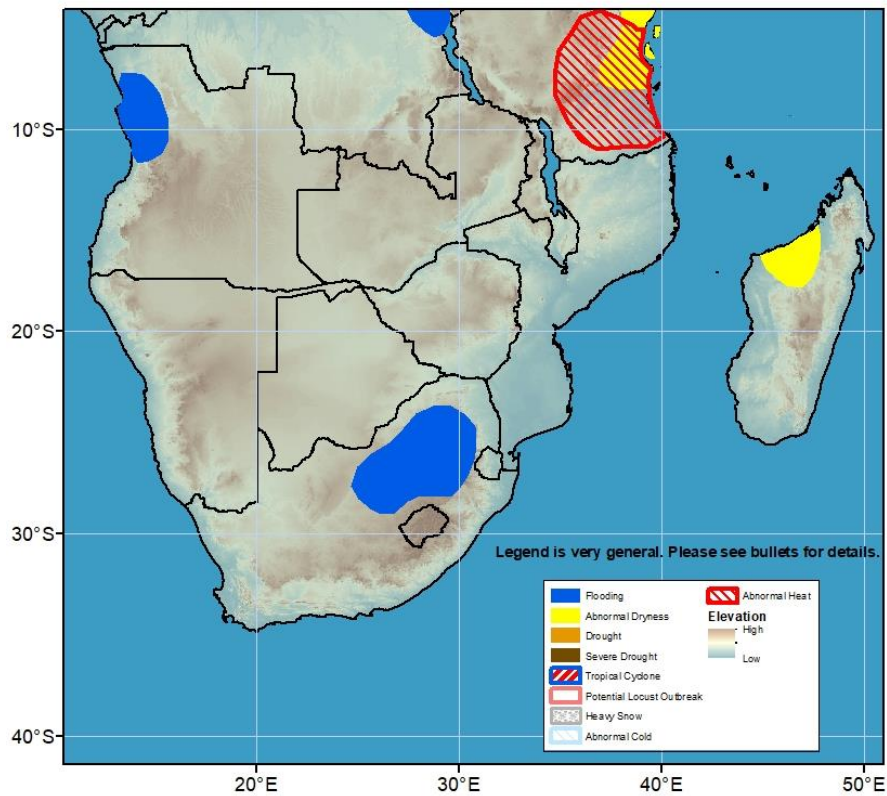
During the next week, heavy rain is forecast across northern Angola, Zambia, eastern South Africa, northern Zimbabwe, and central Madagascar. Thus, the risks for flooding remain high over many previously-flooded and flood prone areas.





Flooding continues over the Sudd Wetlands in South Sudan. Flooding, river flooding, and landslides were reported in the North Kivu and South Kivu in eastern DRC.

Figure 3: Hazards, focused over eastern Africa



Flooding and landslides have resulted in fatalities in the Luanda Province in Angola. Flash flood has led to fatalities, destroyed homes, and many people affected in the Johannesburg area in South Africa.

Figure 4: Hazards, focused over southern Africa