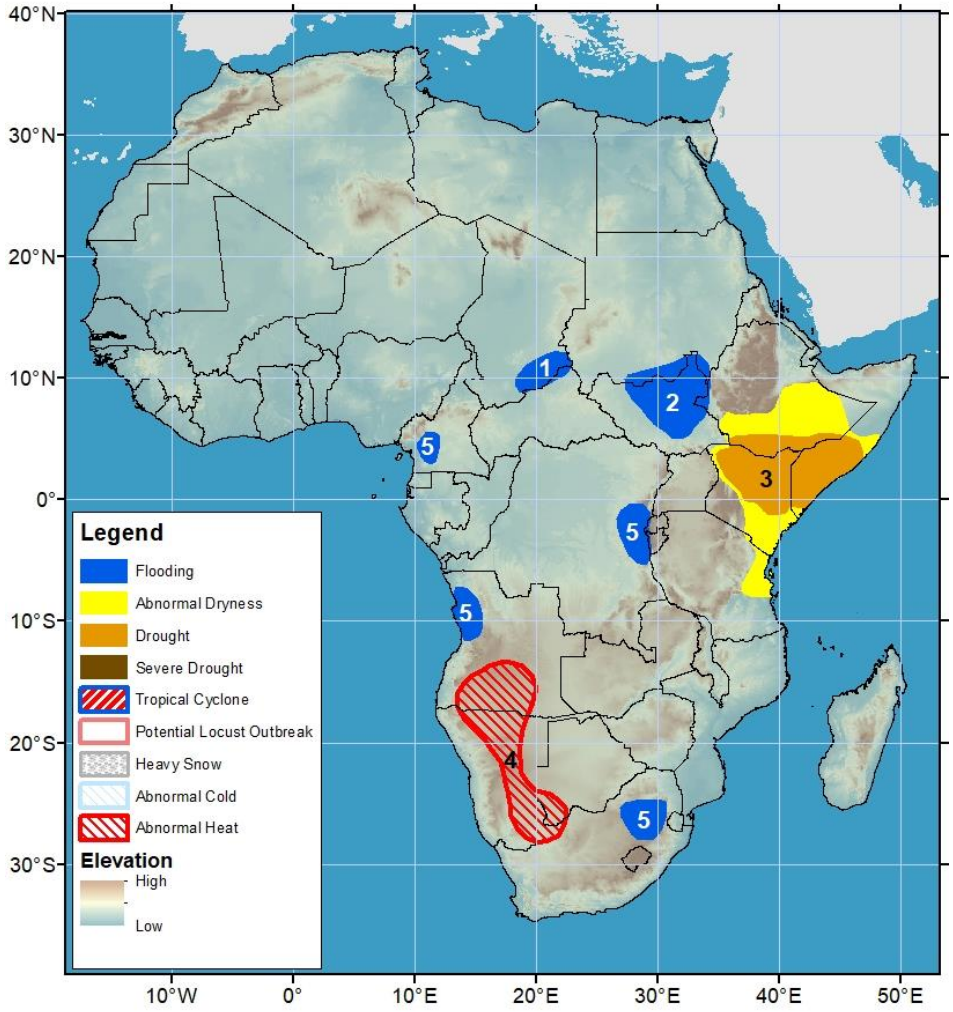
Climate Prediction Center's Africa Hazards Outlook
For USAID / FEWS-NET
8 – 14 December 2022

- **This past two weeks' below-average rain has maintained abnormal dryness and drought in Eastern Africa.**
- **Flooding are likely to continue in some parts of Southern Africa as enhanced rain is forecast.**



1) Heavier than normal monsoonal rains have left soils saturated in parts of southern Chad.

2) Heavy seasonal rainfall has resulted in flooding, fatalities, and many people affected over the Nile river basin in Sudan and the Sudd Wetland areas of South Sudan. Fifteen states and more than 225 thousand people have been affected by flooding this season.

3) 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.

4) Maximum temperature is expected to rise up to 6°C above average and exceed 35°C for at least three consecutive days during the next week in southern Angola and northern Namibia, where an abnormal heat hazard is posted.

5) 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.

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.

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Insufficient rainfall continues in Eastern Africa.

During early December, Eastern Africa continued to receive insufficient rain, with a few areas receiving light to locally moderate rain only. These areas included western Ethiopia, parts of South Sudan, portions of Uganda, central Kenya, western Tanzania, and localized locations in southern Somalia, where weekly rainfall totals ranged between 10-50 mm (**Figure 1**). Suppressed rain, however, prevailed over the remainders of the sub-region. This past week's rain amounts were below-average in most areas, which contributed to maintain widespread thirty-day rainfall deficits across southern Ethiopia, the northern two-thirds of Kenya, and southern Somalia, where deficits ranged between 50-200 mm. Seasonally, drier-than-average conditions, with large and more expansive moisture deficits have dominated Eastern Africa, except for western Ethiopia, and southeastern Sudan, where surpluses were recorded. Consequently, vegetation conditions have already been deteriorated throughout the dry portions of the sub-region, particularly Kenya. Hence, abnormal dryness and drought are posted across southern Ethiopia, Kenya, southern Somalia, and northeastern Tanzania.

For next week, light to locally moderate rain is forecast over Eastern Africa, with heavy and above-average rain possible in central Kenya. If the forecast rain materializes, it could help erode short-term moisture deficits partially in some areas.

7-Day Satellite Estimated Total Rainfall (mm)
Valid: 30 November – 06 December 2022

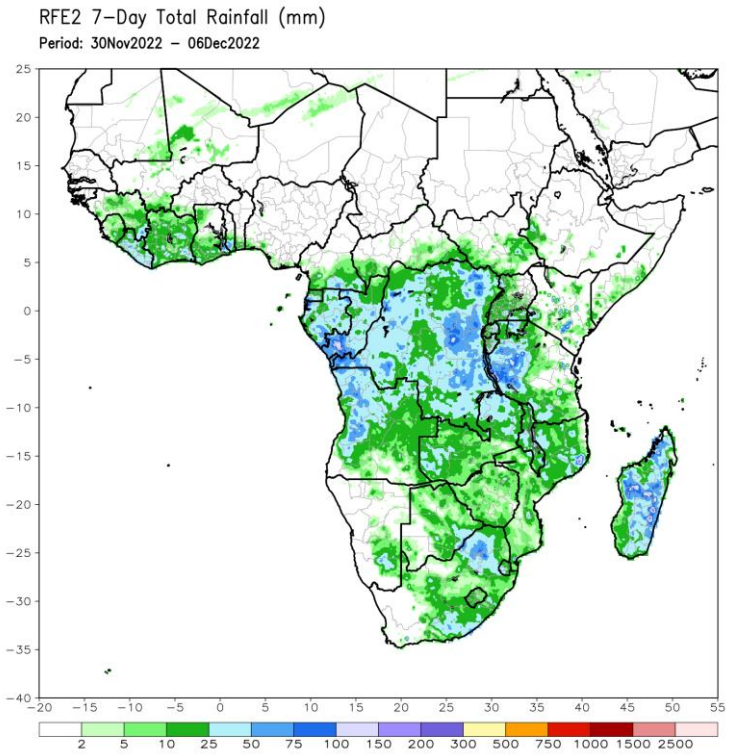


Figure 1: NOAA/CPC

Favorable rainfall performance observed in most areas in Southern Africa

Since the beginning of the Southern African monsoon, the central and eastern sectors of the sub-region have experienced a favorable rainfall distribution, with cumulative surpluses ranging between 50-200 mm. These sectors encompassed parts of Namibia, Botswana. Zimbabwe, South Africa, Lesotho, southern Mozambique, and southwestern Madagascar (**Figure 2**). During this past week, moderate to locally heavy rain fell in western Angola, parts of South Africa, eastern Zambia, parts of Zimbabwe, parts of Mozambique, and central Madagascar, which helped to maintain or even amplify moisture surpluses in some areas. This past weeks' abundant and above-average rain has resulted in flooding, which have led to fatalities and many people affected in the Luanda Province in Angola and the Johannesburg suburb in South Africa, based on reports. Conversely, the northern parts of Southern Africa, including Angola, portions of Zambia, northern Mozambique, and northern Madagascar have received below-average seasonal rain, with moisture deficits up to 200 mm in some local areas. However, despite some degradation in vegetation conditions in localized locations, healthy conditions were depicted in most areas in southern Africa.

During the next week, rainfall forecasts suggested that heavy and above-average rain are likely in western Angola and central South Africa, which maintain flooding potentials. Also excessive heat is possible in parts of Angola, Namibia, and Botswana.

3-Month Satellite Estimated Rainfall Anomaly (mm)
Valid: 01 October – 06 December 2022

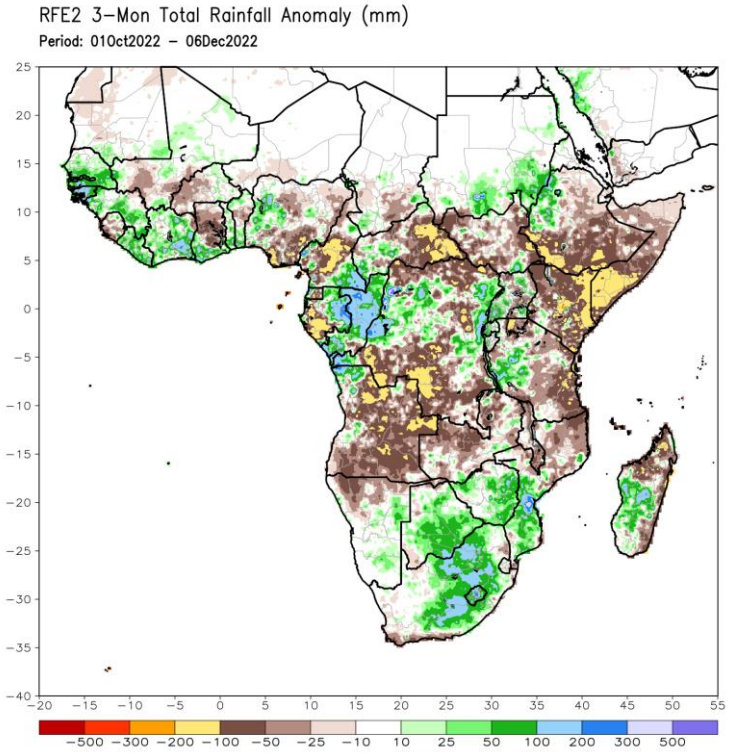
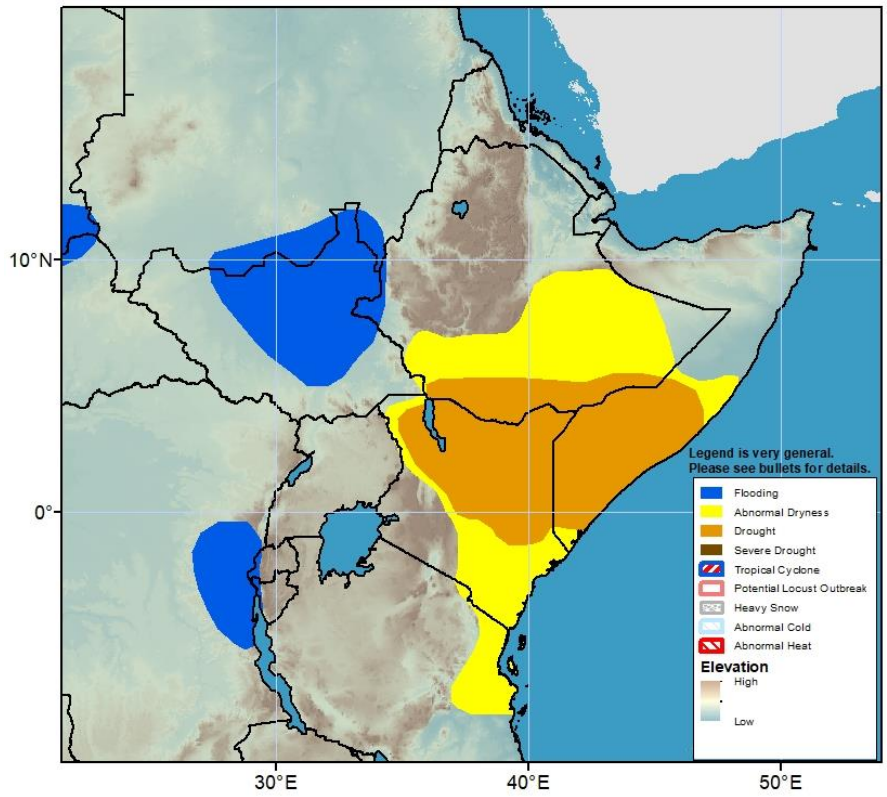
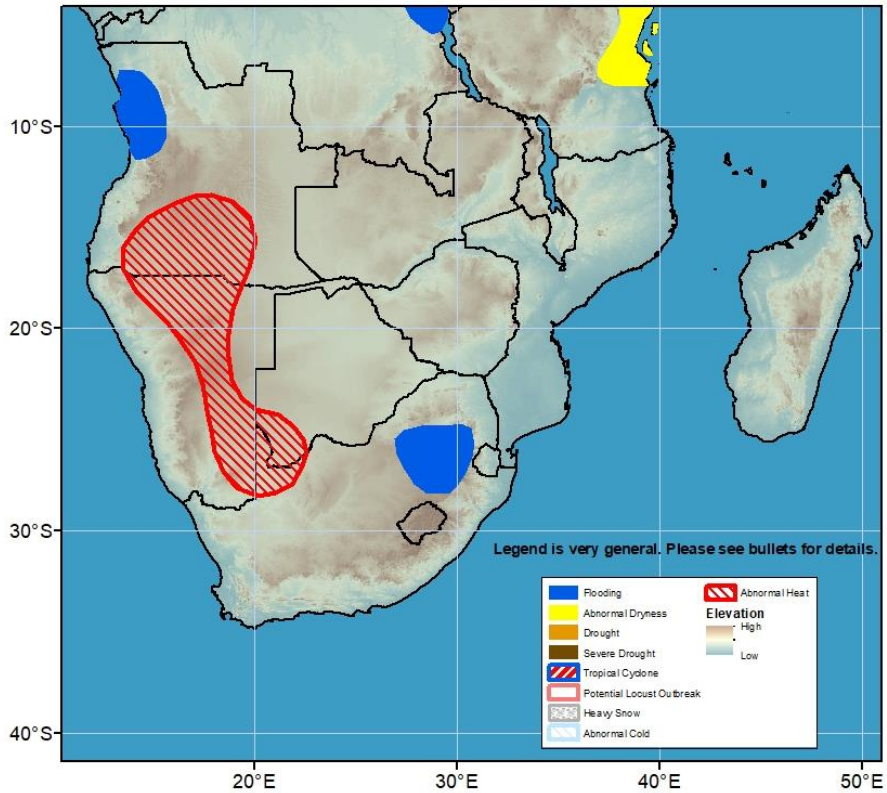


Figure 2: NOAA/CPC



Flooding continues over the Sudd Wetllands 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