





Climate Prediction Center's Africa Hazards Outlook For USAID / FEWS-NET 10 November – 16 November, 2022

- Abnormal dryness is once again expanding through East Africa.
- Heavy rain in South Africa has flooding potential.



- 1) The Niger River and the Senegal River have been slow to drain to safe levels after the monsoon seasons prolonged enhanced rains inundated those basins.
- 2) Heavier than normal monsoonal rains have left soils saturated and rivers full in southern Chad.
- 3) 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 in the past weeks.
- 4) Erratic and inadequate rains during the summer season resulted in drought across central Ethiopia.
- 5) Dry and erratic conditions since the beginning of the October-December season over East Africa have resulted in abnormal dryness over central and eastern Kenya as well as central and southern parts of Somalia.
- 6) Forecasted heavy and above-average rain coupled with a fast start to the rainy season thus far may lead to flooding in central South Africa and Lesotho.

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, <u>wassila.thiaw@noaa.gov</u>. Questions about the USAID FEWS NET activity may be directed to Dr. James Verdin, Program Manager, FEWS NET/USAID, <u>jverdin@usaid.gov</u>

Inadequate rainfall continues across East Africa.

Light to locally moderate rainfall was scattered across southwestern Ethiopia, far-southern Somalia, and Kenya. 7-day totals were 5-50mm and less than 25mm in southern Somalia (Figure 1). Light to moderate rains also covered southern South Sudan and Uganda. Little rain was observed in central Somalia, southern Ethiopia, and much of Tanzania. Negative 7-day rainfall anomalies were ubiquitous across East Africa with deficits of 10-50mm. Suppressed rain is observed thus far since the typical start of the season in early October. This has guickly resulted in widespread seasonal deficits (Figure 2). Analysis of 30-day anomalies shows below-average rainfall over areas including southern Ethiopia, southern/central Somalia, and most parts of Kenya, where 25-100mm and locally larger moisture deficits are present since 1 October. Similar deficits are beginning to spread into northeastern and northwestern parts of Tanzania as well. Conditions on the ground are already quite dry. For example, the NDVI anomaly shows negative index values over southern Ethiopia and Somalia, central, northern, and eastern parts of Kenva. Other drought indicators such as SPI and EDDI support the presence of adversely dry conditions.

During the outlook period, suppressed rain is expected to continue in Somalia, eastern Kenya, and eastern Tanzania. This will further enhance seasonal deficits for these areas. However, rainfall is forecast to increase in Ethiopia where 25-75mm of rain is expected in many areas. Heavy rain (>100mm) is likely in eastern DRC, Rwanda and Burundi.

The rainy season is beginning with enhanced rains in Southern Africa

During the past few weeks, rains in Southern Africa have rapidly increased in coverage and intensity. Total 7-day rainfall exceeded 25mm for large swaths of the sub region according to satellite estimates. Larger totals (50-100mm or more) were observed in central and southern South Africa, Botswana, localized parts of Zimbabwe, as well as northern and central Angola. Central Madagascar also received similar totals. Meanwhile, parts of Namibia, southwest Angola, Malawi, and northern Mozambique were largely dry. The rains resulted in positive 7-day anomalies for most of the sub region. Only northern portions of Angola and Zambia were drier than average. A somewhat dry pattern during the first few weeks of the monsoon season has quickly shifted. 30-day rainfall is now wetter than average for the majority of Namibia, Botswana, Zimbabwe, and South Africa after early deficits. Rainfall performance still lags to the north however, where 30-day deficits of as much as 100mm are present (Figure 2). Central Madagascar has been wetter than average, although the northern tip of the island have been drier.

The trend continues during the outlook period with more above-average rainfall in South Africa, Botswana, and Zimbabwe. The heaviest rain (>75mm) in South Africa may cause flooding on already saturated ground. Drier conditions will dominate western Angola. Madagascar will be split between wet conditions in the west and dry in the East.







Flooding continues over the Sudd wetlands of South Sudan.



Figure 3: Hazards, focused over eastern Africa

Flooding have been observed along the Senegal River and the Niger Rive in Nigeria and Niger As well as in southern Chad.

Figure 4: Hazards, focused over West Africa