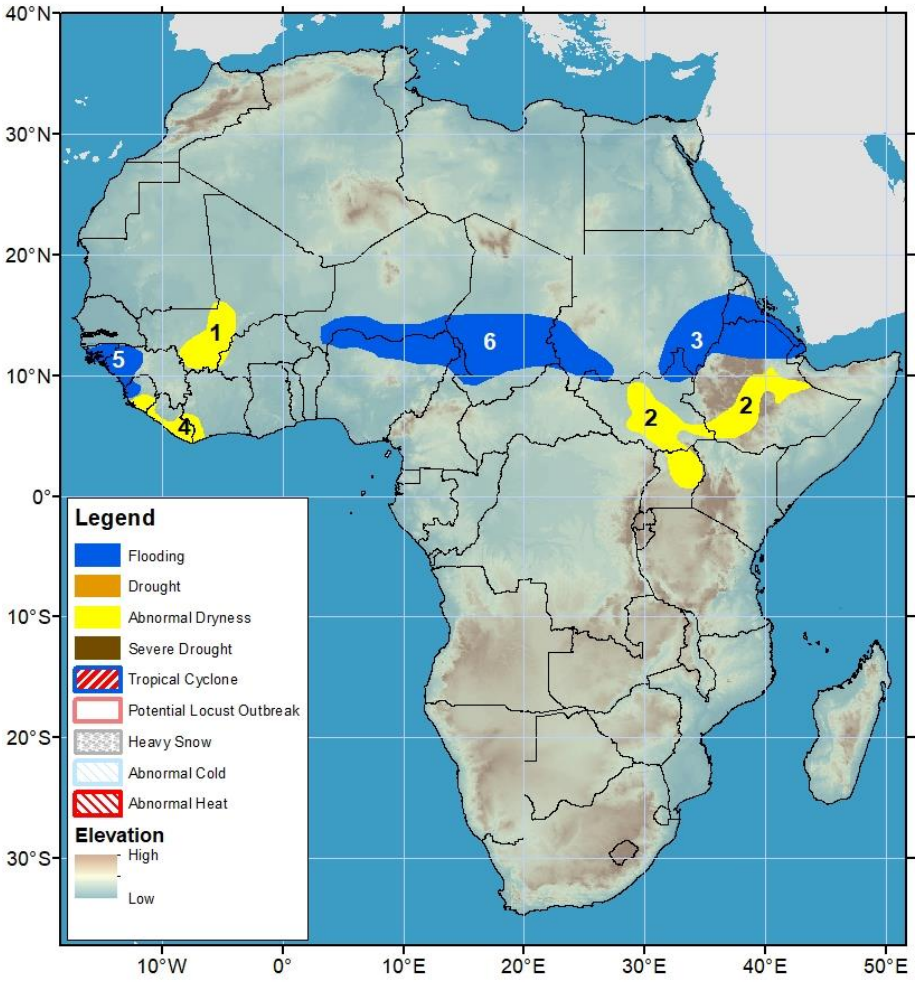
# Climate Prediction Center's Africa Hazards Outlook
# For USAID / FEWS-NET
# 18 August –24 August 2022

- **Heavy rains led to flooding across many portions of the Sahel this week.**
- **While abnormal dryness is entrenched in central Ethiopia, moisture has improved elsewhere in East Africa.**




**1) A lack of rainfall since May has resulted in moderate 90-day moisture deficits, leading to abnormal dryness over south-central Mali.**

**2) Insufficient rain since early May has resulted in growing moisture deficits and abnormal dryness in central South Sudan as well as neighboring portions of Uganda, western Kenya, and Ethiopia.**

**3) Heavy rain over past weeks has resulted in flooding, fatalities, and many people affected over the Sennar and in Sudan. Riverine and flash flooding is reported in Tigray and afar provinces in Ethiopia. The forecast, additional rain maintains high risks for flooding in the region.**

**4) An early end to the first rainy season for bimodal regions of Liberia and southwestern Cote D'Ivoire has led to abnormal dryness. These regions will likely have to wait a few weeks for the opportunity to decrease moisture deficits.**

**5) Flooding is likely across portions of southwestern Senegal, Guinea Bissau, and western Guinea that have experienced several weeks of above-average rainfall. The forecast is for continuation of enhanced rains.**

**6) Ongoing heavy and above-average rainfall has saturated soils and elevated River flows leading to flooding in several cities in southern Niger, northern Nigeria, Chad, and the Darfur region of Sudan.**

**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.**
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## Significant rains were more widespread over West Africa this week than the first week of August.

During the last 7 days, moderate to heavy rain was widespread over most of the Sahel, Togo, Benin, and Nigeria. Southwestern Nigeria, central Benin, and many other localized parts of the region received more than 100mm of rainfall (**Figure 1**). Little to light rains (less than 25mm) were observed in central and western Senegal, as well as Liberia, southern Cote D'Ivoire, and southern Ghana. Floods were reported in many cities in the Sahel, with tens of thousands of people affected. Over the past 30 days, prolonged wet periods were observed in far-western Africa as well as Chad and surrounding areas leading to large surpluses greater than 100mm. Conversely, rainfall deficits are 50-200mm in Mali. Across Sierra Leone, Liberia, Cote D'Ivoire, and Nigeria, deficits (25-100mm) are prevalent. An early cessation to the first half of the rainy season for Gulf of Guinea regions means that moisture deficits are likely set in place for the next few weeks.

During the outlook period, heavy and above-average rain is forecast along the Sahel where continued rainfall could trigger flooding over already-saturated soils. River discharge forecasts predict high discharge of at least 1-in-5yr return period in the Komadugu and Sokoto rivers in Nigeria in coming weeks. Otherwise, rain is likely to be suppressed across southern Benin, southern Nigeria, and Cameroon.

**7-Day Satellite Estimated Total Rainfall (mm)**
**Valid: 10 August – 16 August 2022**

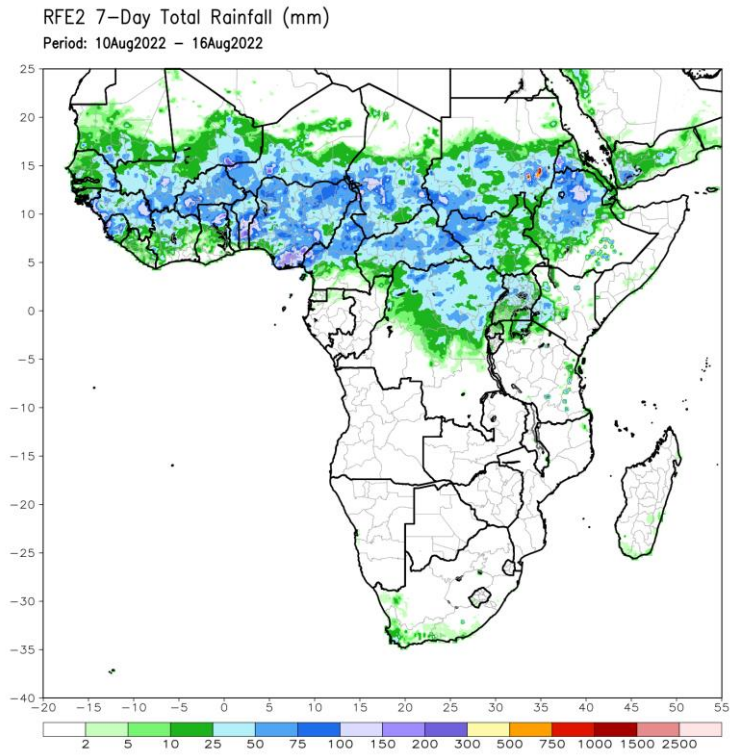



**Figure 1: NOAA/CPC**

## A broad portion of East Africa received heavy and above average rainfall.

Parts of Sudan, northwestern South Sudan, northern Ethiopia as well as parts of Eritrea and Djibouti all received very heavy rains during the past 7 days. Totals of 100-200mm were widespread (**Figure 1**). Riverine and flash flooding remains a concern for these areas that have long been wetter than normal. Many flooding related fatalities have been reported in Sudan during recent weeks. After several weeks of dry conditions, western Kenya and Uganda received increased rains during the past two weeks. The rains have been enough to eliminate most of the 30-day moisture deficits in those areas. Rainfall totals still lag on the seasonal time scale and if dry conditions return quickly, positive impacts for cropping may be limited. Better rains recently have slowly been eroding long-term deficits in South Sudan, and In fact, many regions are well-wetter than average for the past 30 days. (**Figure 2**).

For vegetation conditions, the latest agro-climatic products exhibited near to above-average conditions over many areas. However, poor and below-average conditions remain over areas in Uganda, western Kenya, and Ethiopia.

During the next week, heavy rain is expected to continue over northern Ethiopia, Eritrea, parts of Sudan, South Sudan and Uganda. Heavy rainfall greater than 100mm will likely exacerbate flooding over many areas of the greater Nile River basin. Seasonal deficits should continue to improve with continued rains in Uganda and western Kenya.

**30-Day Satellite Estimated Total Rainfall Anomaly (mm)**
**Valid: 18 July – 16 August 2022**

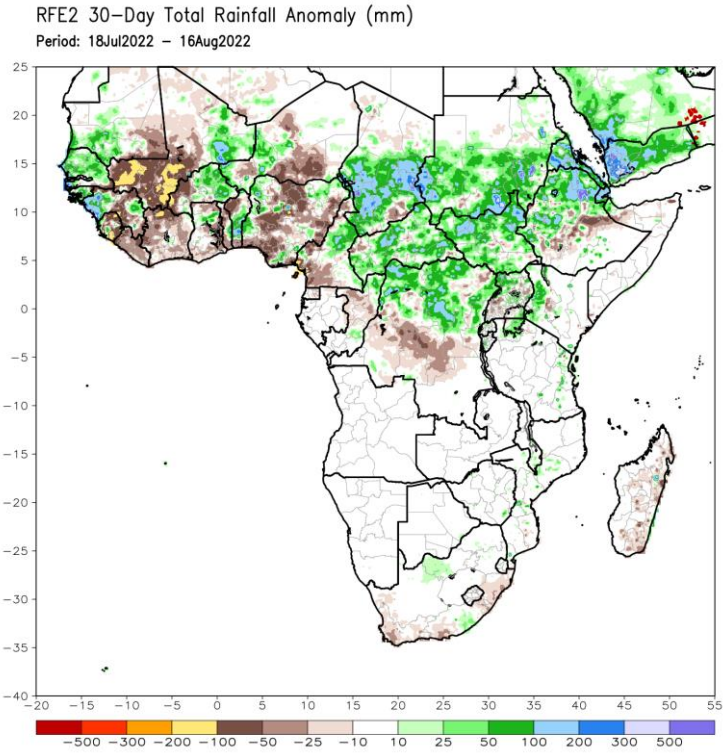
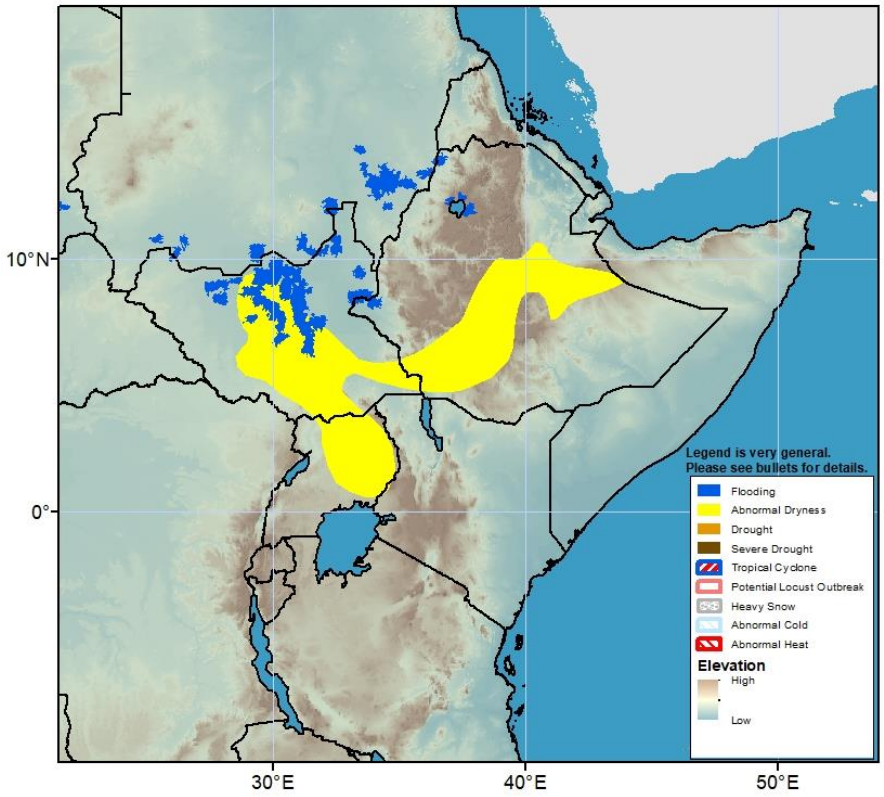
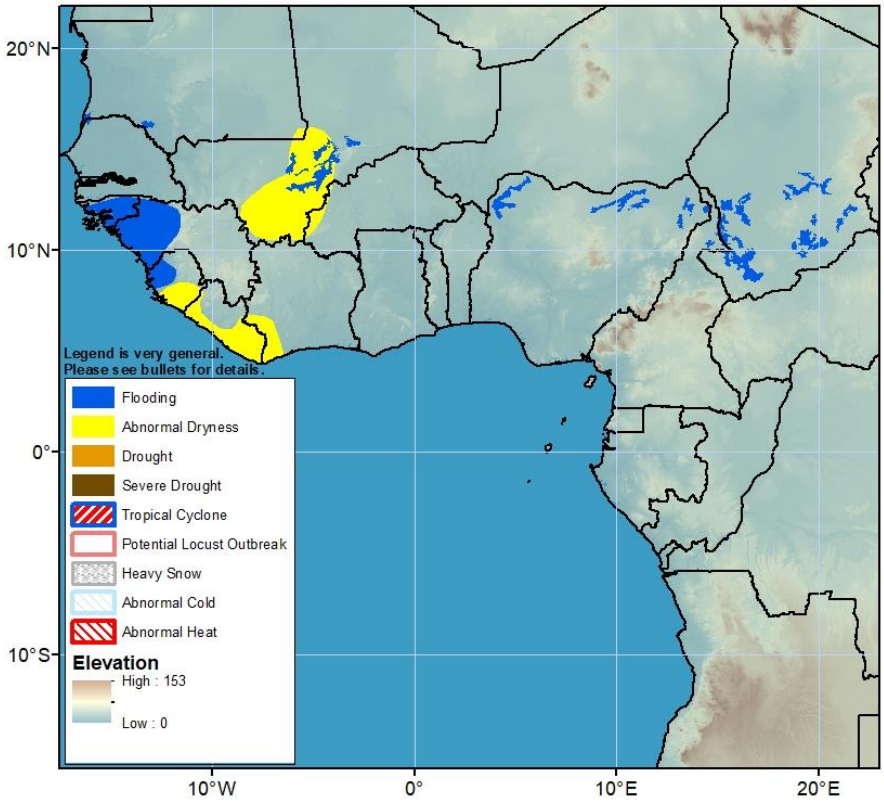



**Figure 2: NOAA/CPC**




Inundation was detected in the upper reaches of the White Nile in the Darfur region and along the tributaries of the Blue Nile in Sudan, and the Sudd Wetlands in South Sudan.

**Figure 3:** Hazards, focused over eastern Africa




Flooding is observed over the Nile River in central Mali, and observed flooding continues to worsen along the Sokoto and Komadugu Rivers in northern Nigeria Discharge levels are forecasted to rise to 1-in-5yr or 1-in-10yr return periods during the next couple of weeks. Water releases from the Tiga dam have already contributed to deadly flooding in Jigawa state, Nigeria.

**Figure 4:** Hazards, focused over West Africa