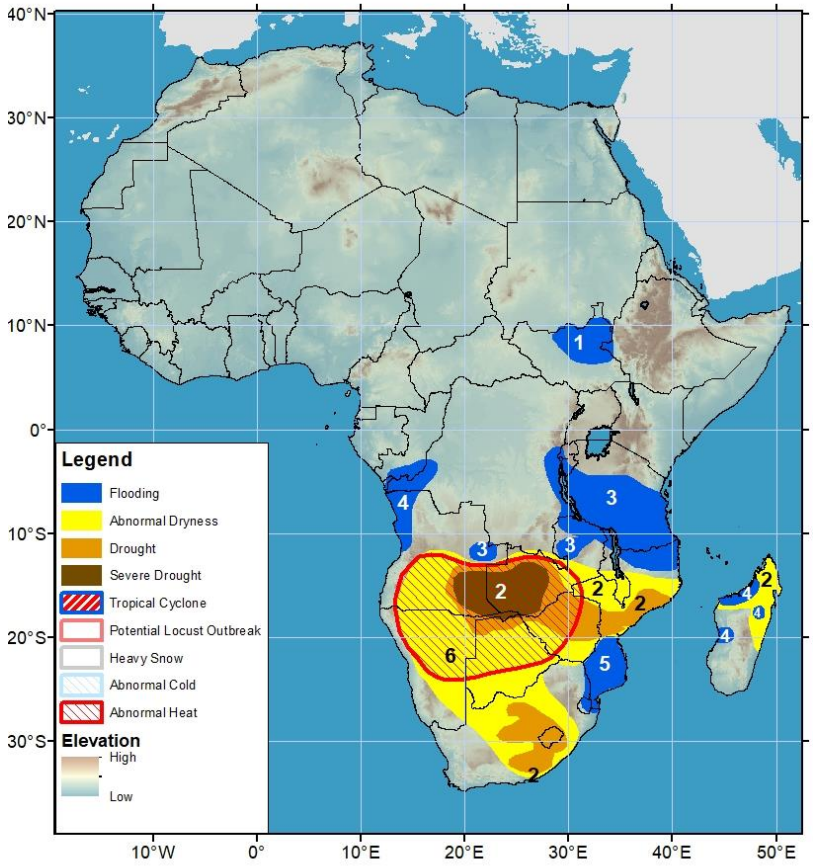
Climate Prediction Center's Africa Hazards Outlook
For USAID / FEWS-NET
21 March – 27 March 2024

- **Droughts are observed in many parts of southern Africa due to extended dry spells and poor rainfall.**
- **Flooding persist in parts of eastern Africa due to extreme rainfall over the recent weeks.**



1) **Flooding conditions continue in the Sudd wetlands in South Sudan.**
2) **Due to a delayed start in the rainfall season, followed by insufficient rainfall and extended dry spells, abnormal dryness is placed across central and eastern Angola, Namibia, Zambia, Botswana, Zimbabwe, central and southern Malawi, northern and central Mozambique, central southern parts of South Africa, and northern Madagascar, where rainfall deficits have exceeded 50 - 100 mm over the past 30 days. Over the last two months, large deficits have led to severe drought and drought in eastern Angola, western and central Zambia, northeastern Namibia, northern Botswana, much of Zimbabwe, central Mozambique, central and eastern South Africa, and Lesotho.**
3) **Floods persist in eastern DR Congo and Burundi. Heavy rainfall and thunderstorms have hit southern Tanzania most recently, which has caused flooding and landslides in Bariadi District, Simiyu Region, and Dar as Salaam City, leading to casualties and damage. Also, the overflow of the Ngerengere River caused fatalities in the Morogoro Region of Tanzania. The flood situation is maintained in eastern Angola and the northern region of Zambia due to heavy and above-average rainfall that has led to casualties and damage. A report has indicated heavy rainfall caused floods and casualties in the Gisenyi sector, Rubavu District, Western Province, Rwanda.**
4) **Due to recent heavy and above-average rainfall, floods persist in southern Congo, western DR Congo, northwestern Angola, and northern and central portions of Madagascar.**
5) **Tropical storm FILIPO made landfall very early morning on March 12th (UTC) over the northeastern coast of Inhambane Province, central-southern Mozambique. According to the report, several people and properties have been affected. Due to its southward movement, heavy rainfall, strong winds, and storm surges are forecasted over southern Mozambique, Eswatini, and northeastern South Africa.**
6) **An abnormal Heat hazard is posted over much of Southern Africa due to expected maximum temperatures running 4-10°C above average 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.
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Reduced rain received in southern Africa

During mid-March, moderate to locally heavy rain fell across central and northern Angola, central Zambia, southern Mozambique, Eswatini, and parts of northern Madagascar. The heaviest rainfall occurred in southern Mozambique, where Tropical Storm Filipo made landfall on 12 March and caused fatalities and infrastructure damages, according to report. Also, in Malawi, reports have indicated high water levels for the Shire River in the southern part of the country due to runoff to Lake Malawi from Tanzania and parts of Mozambique, increasing likelihood for flooding in the region. In contrast, reduced rain amounts, with little to no rainfall was observed over the remainders of the sub region (**Figure 1**). Over the past 90 days, well below-average rain, with deficits between 100-500 mm have been observed over a wide portion of central and eastern southern Africa from eastern Angola, Zambia, Zimbabwe, northeastern Namibia, northern Botswana, western and central Mozambique, southern Malawi, central and eastern South Africa. The lack of rainfall has depleted soil moisture and has already negatively impacted agriculture and livestock, resulting in moderate to severe drought in many areas of the sub region.

During the next week, drier conditions, with suppressed rainfall are forecast across southern Angola, southern Zambia, northern Namibia, northern Botswana, much of Zimbabwe, and central/western Mozambique. Meanwhile, abnormally-hot conditions, with well above average maximum temperatures are expected across western and northern southern Africa.

7-Day Satellite Estimated Total Rainfall (mm)
Valid: 12 March 2024 – 18 March 2024

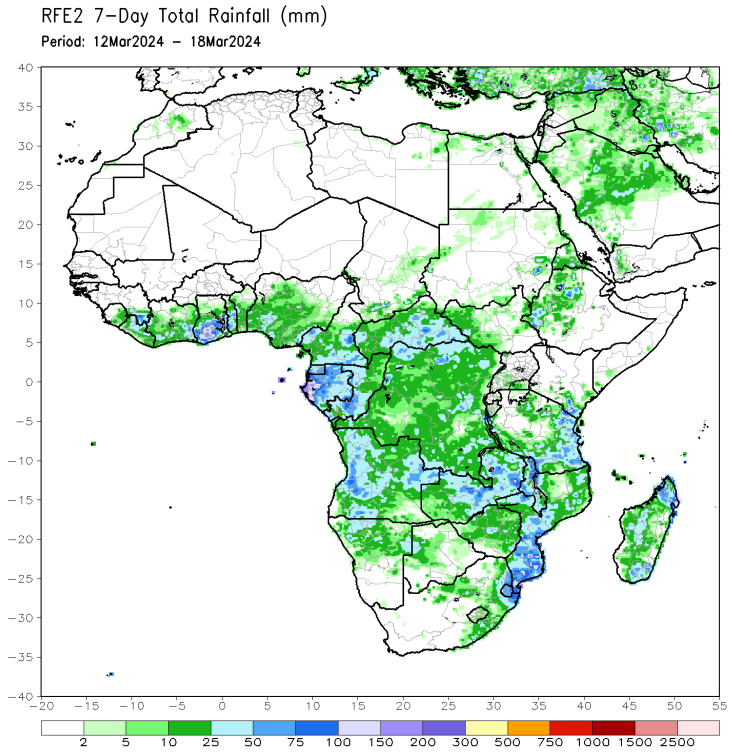


Figure 1: NOAA/CPC

Wet conditions observed in eastern Africa

Since the beginning of January, the accumulated rain was above-average over most places in eastern Africa. Rainfall surpluses in excess of 50 mm were observed over western and central Ethiopia, eastern Uganda, southwestern and eastern Kenya, and much of Tanzania (**Figure 2**). In Ethiopia, the observed positive rainfall anomalies may indicate a timely start and favorable *Belg*, March-May, rainfall season, which should help and benefit cropping activities over many local areas in the country. In contrast, cumulative rainfall was below-average over parts of South Sudan, eastern highlands of Ethiopia, Rwanda, Burundi, and neighboring part of western Tanzania. During the past week, scattered moderate rain was received in western and central Ethiopia and coastal eastern Tanzania, whereas little to no rainfall was observed elsewhere.

During the next week, rainfall forecasts suggest that little to light (< 25 mm) and below-average rainfall is likely over southern Ethiopia, while marginally above-average rainfall is predicted over northeastern Ethiopia. Conversely, moderate to heavy and above-average rainfall is expected in Rwanda, Burundi, and Tanzania, increasing the risks for flooding over many previously-flooded and flood-prone areas.

3-Month Satellite Estimated Total Rainfall Anomaly (mm)
Valid: 01 January 2024 – 18 March 2024

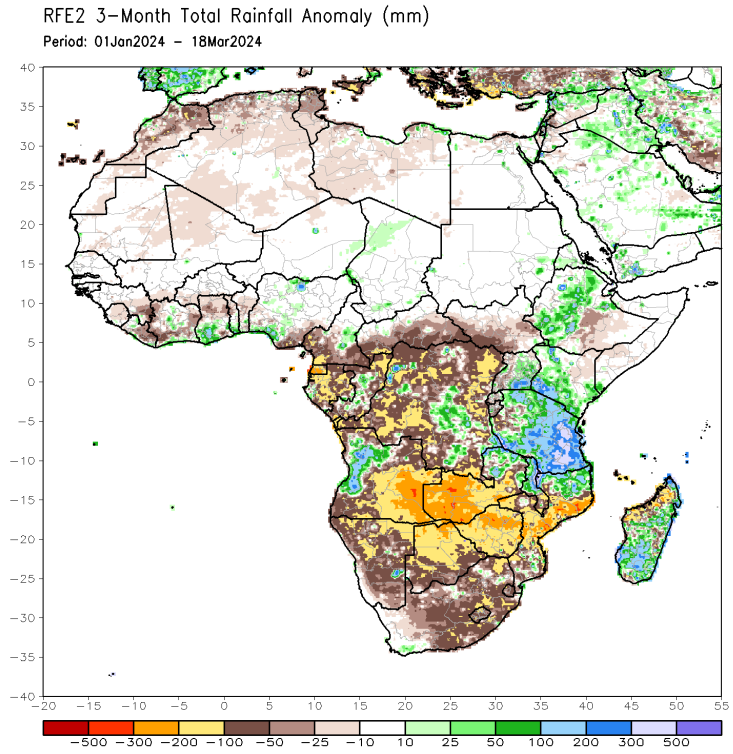
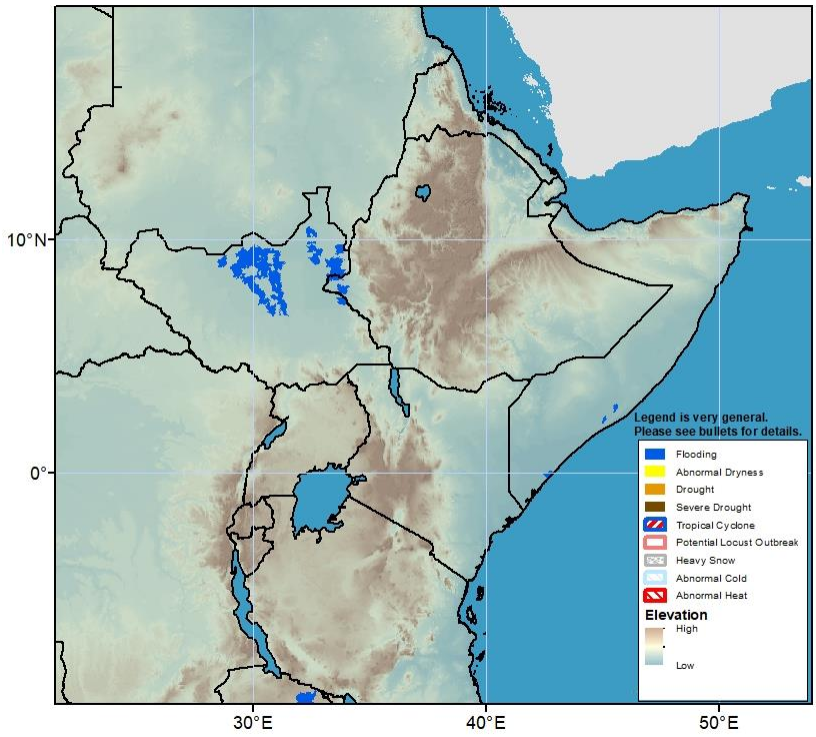
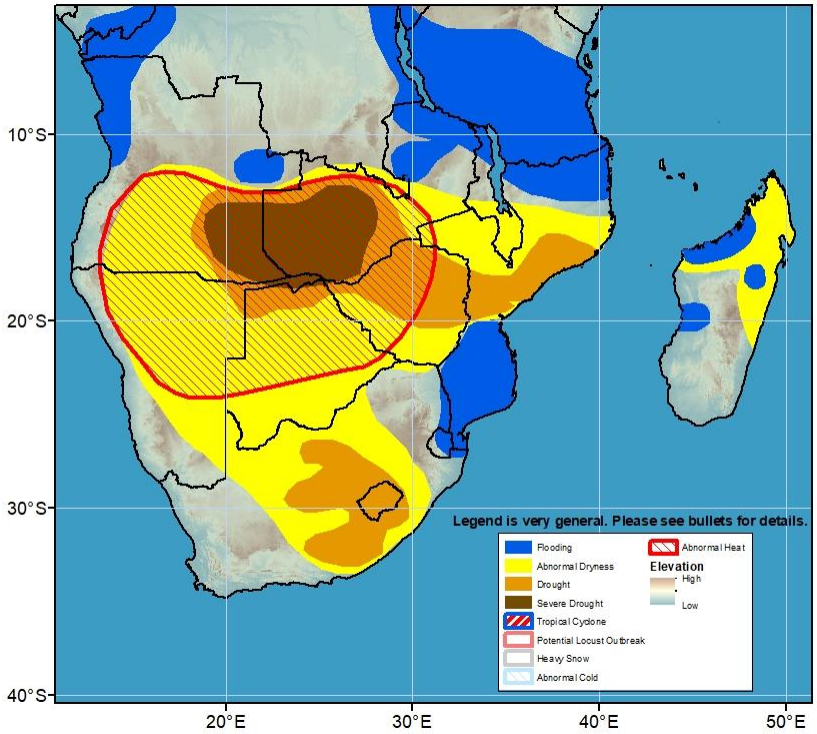


Figure 2: NOAA/CPC



Marginal improvements in Inundated areas in the Akobo and Pibor catchments in South Sudan. Flooding is lingering downstream of the Juba and Shabelle Rivers in southern Somalia.
(Please note that the flood risk shape files are sourced from NOAA VIIRS).

Figure 3: Hazards, focused over Eastern Africa



Flooding conditions remain unchanged in northeastern Zambia. Flooding also remains in the headwaters of the Zambezi River in eastern Angola. Flooding conditions remained unchanged in northern Madagascar.
(Please note that the flood risk shape files are sourced from NOAA VIIRS).

Figure 4: Hazards, focused over Southern Africa