





## Climate Prediction Center's Africa Hazards Outlook For USAID / FEWS-NET 21 April – 27 April 2022

- Moisture deficits continue to strengthen over several parts of the Greater Horn of Africa.
- A state of disaster was declared after several days of heavy rains which caused flash flood in South Africa.



1) Suppressed rainfall along the rainfall season led to severe drought which impacted crop activities.

2) Widespread seasonal moisture deficits led to abnormal dryness and drought for some parts which led to deterioration of ground conditions.

3) Despite recent heavy rainfall, the long-term suppressed rainfall caused irreversible loss of crops and critical ground condition.

4) Several consecutive weeks of below-average rainfall has strengthened rainfall deficits and could further negatively impact cropping and pastoral activities across the Greater Horn of Africa.

5) More than 300mm of rains prevailed across northeastern South Africa and caused flash floods and mudslides. Several reports of fatalities and destroyed infrastructures were also reported. A continuation of rainfall during the outlook period may worsen the actual saturate water ground conditions.

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>.

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## Seasonal dryness worsens in Ethiopia, and in other parts of the Horn.

During the past seven days, the spatial distribution of rains was mainly concentrated in western and southern Ethiopia. which left many other regions in the country with insufficient rains and ground moisture deficit. According to satellite rainfall estimates, the highest weekly accumulations were received along the border between South Sudan, and Ethiopia with accumulations ranging between 50-75mm, with mostly suppressed rainfall throughout the higher elevations of Ethiopia (Figure 1). Between 10-25mm of rainfall prevailed in southern Somalia, Kenya, and northern Tanzania. Analysis of the evolution of 30-day precipitation depicted a broad-scale strengthening dryness over East Africa. A continuation of sustained seasonal dryness could further decrease the opportunity for recovery later in the season. Currently, moderate to large moisture deficits (50-100 mm) encompassed much of Kenya, southern Somalia, southern and northeastern Ethiopia, portions of eastern Uganda, and eastern South Sudan. The progression of Belg rainfall season exhibited short-term moisture stress which could elevate risk of adverse impacts on cropping activities.

During the upcoming outlook period, above normal rainfall is expected across western Ethiopia, western Kenya, Uganda, and southern South Sudan. 10-25 mm of rains is expected across eastern Ethiopia, central and southern Somalia which correspond to below normal rainfall across the region. Between 50-75 mm is expected across southern Ethiopia which correspond to its seasonable rainfall.

## A recent cumulation of moisture deficit observed across southeastern Nigeria.

During the first dekad (10 days) of April, the ITF moved further north relative to the normal position over the far western Africa, which resulted to increase rainfall over southern and central Mali and Burkina Faso. The western portion of the ITF showed near climatology location with seasonable rainfall across southern Chad and southern Sudan.

During the middle of April, widespread of moderate rains were received over Liberia, Ivory Coast, Ghana, Togo, and Benin with amounts exceeding. The northward shift favored 10-25 mm of precipitation across southern and central Mali, Burkina Faso and southern Niger. Moderate rainfall over portions of central Nigeria is expected to help mitigate early season dryness, however other southern and eastern provinces remained below-normal rainfall with moisture deficits ranging between 25-50mm since mid-March (**Figure 2**). The SPI showed poor ground moisture condition which correlate the vegetation health coverage across southeastern Nigeria.

During the next week, precipitation models suggest a return towards more seasonable rainfall during late April. Well distributed weekly rainfall amounts ranging between 25-50mm over several Gulf of Guinea countries.

## 2 Month Satellite Estimated Total Percent of Normal Rainfall (%) Valid: 1 March – 19 April 2022

RFE2 2-Mon Percent of Normal Rainfall (%) Period: 01Mar2022 - 19Apr2022



Figure 1: NOAA/CPC







Figure 3: Hazards, focused over eastern Africa



Improvement of ground moisture conditions were reported in Zambia, Mozambique, Botswana. Heavy rainfall forecasted across northeastern South Africa could trigger more flash floods and mudslides during the outlook period.

Figure 4: Hazards, focused over southern Africa