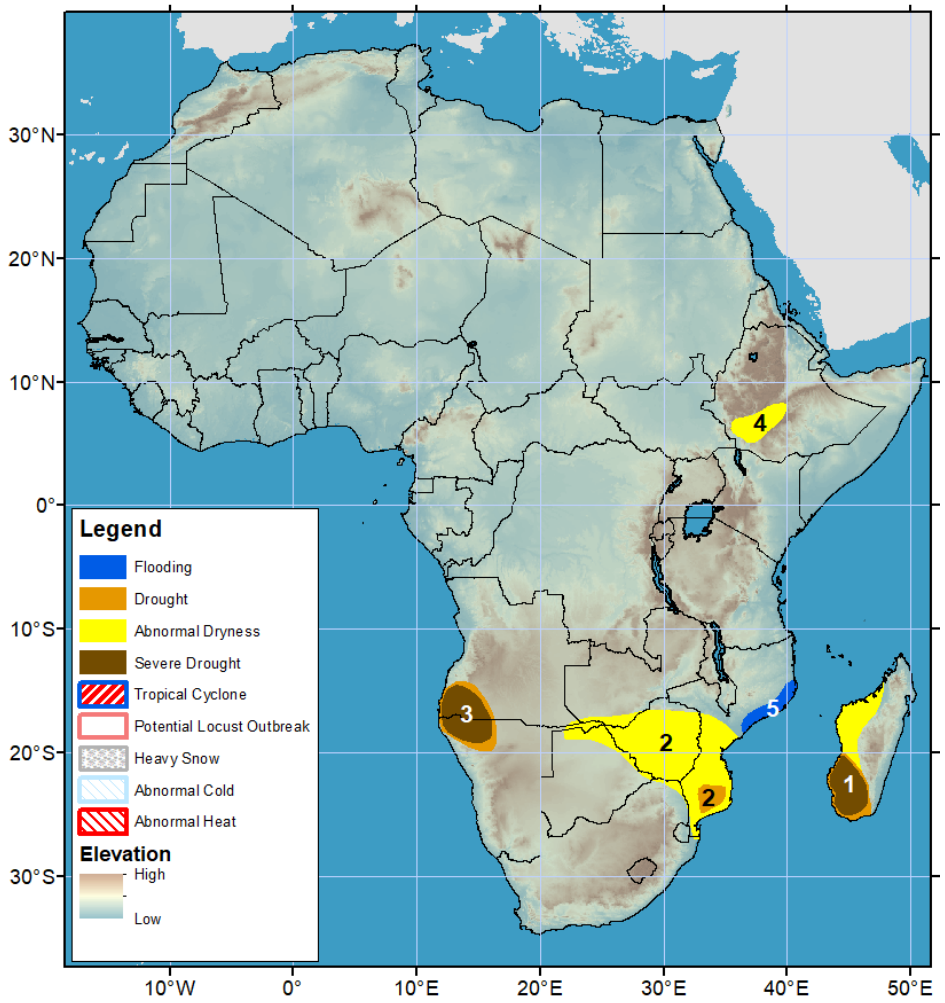
Climate Prediction Center's Africa Hazards Outlook
17 – 23 March 2022

- **Poor rain since mid-February has led to abnormal dryness over parts of southwestern Ethiopia.**
- **Tropical Cyclone Gombe caused fatalities and many people affected over northern Mozambique.**



1) While some areas in Madagascar received increased rain over the past recent weeks, the southwest continued to register long-term large moisture deficits, which have already negatively impacted vegetation conditions. The continued poor conditions have led to severe drought. Forecasts indicated reduced rain over the south during the outlook period.

2) Below-average rainfall since January has led to large seasonal moisture deficits, which have already negatively impacted vegetation conditions and resulted in drought over portions of southern Mozambique. Insufficient rainfall since February has also spread and resulted in abnormal dryness across Zimbabwe and parts of Zambia, Botswana, and Namibia.

3) Below-average rainfall since December of the past year has resulted in severe drought over southwestern Angola and northwestern Namibia. Despite this past month's increased rain, long-term rainfall deficits and deteriorated vegetation conditions persisted.

4) Below-average rainfall over the past four weeks has resulted in moderate thirty-day rainfall deficits over southwestern Ethiopia. Rainfall forecasts for the upcoming weeks indicated a continuation for drier conditions, potentially strengthening dryness over the region.

5) Tropical Cyclone Gombe made landfall over northern Mozambique during the past week. Reports indicated fatalities, infrastructure damages, and many people affected. Heavy rains are again forecast, which my exacerbate conditions on the ground during the outlook period.

Suppressed rain continued over the Horn of Africa.

During the past week, suppressed rainfall prevailed over the Greater Horn of Africa. The exception was light to moderate rains that were registered over localized areas in western Ethiopia and along the southwestern border in South Sudan (**Figure 1**). The continuation of poor rains has contributed to maintain moderate accumulated moisture deficits over the Horn of Africa. An analysis of the total rainfall since February has shown that deficient rain of up to 50 mm below average dominated over southwestern and central Ethiopia. This lack of rain has led to abnormal dryness over parts of southwest Ethiopia.

Moreover, a comparison of Normalized Difference Vegetation Index (NDVI) indicated that a further degradation in ground conditions were already detected over portions of southwestern Ethiopia lately. Vegetation conditions could be stressed further should insufficient rains continue.

During the outlook period, light to locally moderate rains are forecast over central Ethiopia; and suppressed rain is expected elsewhere. While the forecast increased rains should help erode moisture deficits and aid cropping activities over some local areas, the expected lack of moisture may strengthen dryness further over many local areas.

7-Day Satellite Estimated Total Rainfall (mm)
Valid: 09 March – 15 March 2022

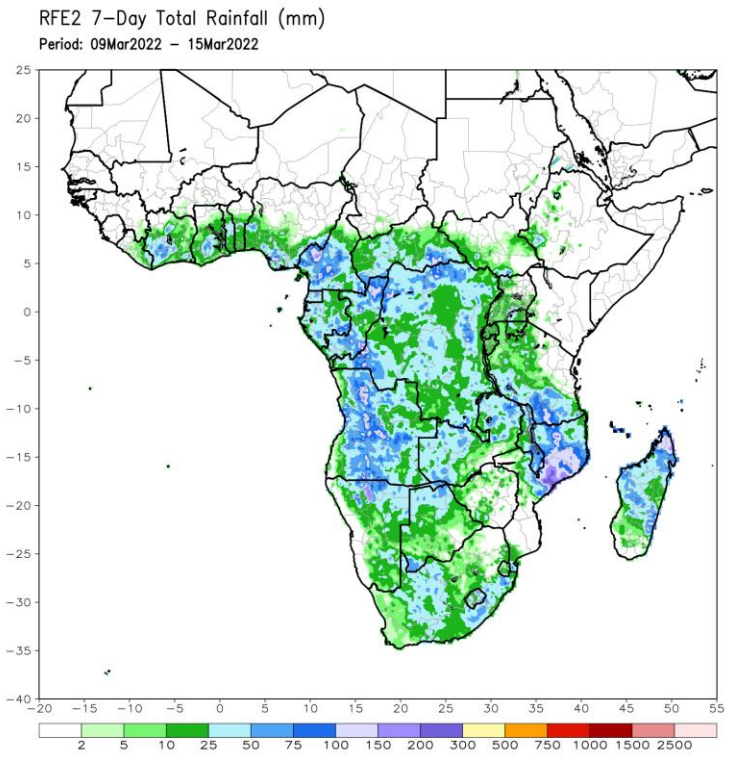


Figure 1: NOAA/CPC

Droughts impact many areas in southern Africa.

Despite the recent passage of Tropical Cyclones that has led to wetness over some areas in eastern southern Africa such as eastern Madagascar, northern Mozambique, and Malawi, large seasonal rainfall deficits have persisted over the west, central, and east. Cumulative rainfall since January remained well below-average with long-term moisture deficits over 100 mm in southwestern Angola, northwestern Namibia, southern Mozambique, and southwestern Madagascar (**Figure 2**). In northern Namibia, crops have already experienced wilting conditions, according to local media reports. Moreover, since February, consistent suppressed rainfall has contributed to increased moisture deficits, which has led to abnormal dryness across Zimbabwe, and parts of Zambia, Botswana, and Namibia.

An analysis of the latest agroclimatic products has indicated the long-term impacts of below-average seasonal rain with below-average and unhealthy vegetation status on the land surface over southwestern Angola, northwestern Namibia, southern Mozambique, and southwestern Madagascar. Also, the recent lack of rain has started to impact the ground conditions over Zimbabwe and parts of Zambia and Botswana.

During the outlook period, heavy rains are forecast over the northern and eastern parts of southern Africa. Abundant rains are expected over Zambia, Malawi, central coastal areas in Mozambique, and central and northern Madagascar. The expected heavy moisture is likely to exacerbate conditions on the ground over many already-flooded areas. Moderate rains are forecast over central South Africa and Lesotho. In contrast, limited amounts with little to light rains are to continue over southern Mozambique, central Zimbabwe, and southern Madagascar.

3-Month Satellite Estimated Rainfall Anomaly (mm)
Valid: 01 January – 15 March 2022

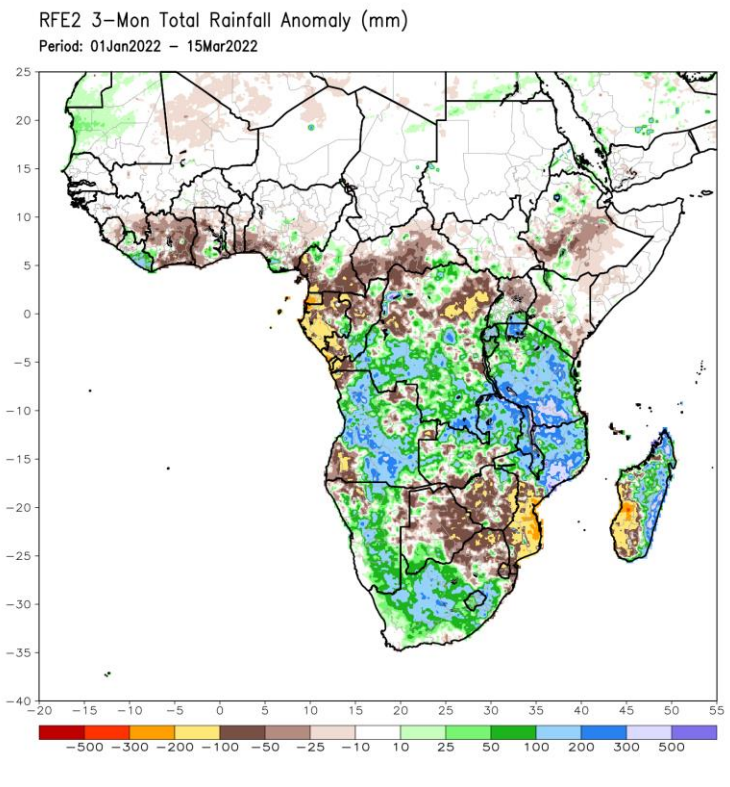


Figure 2: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.

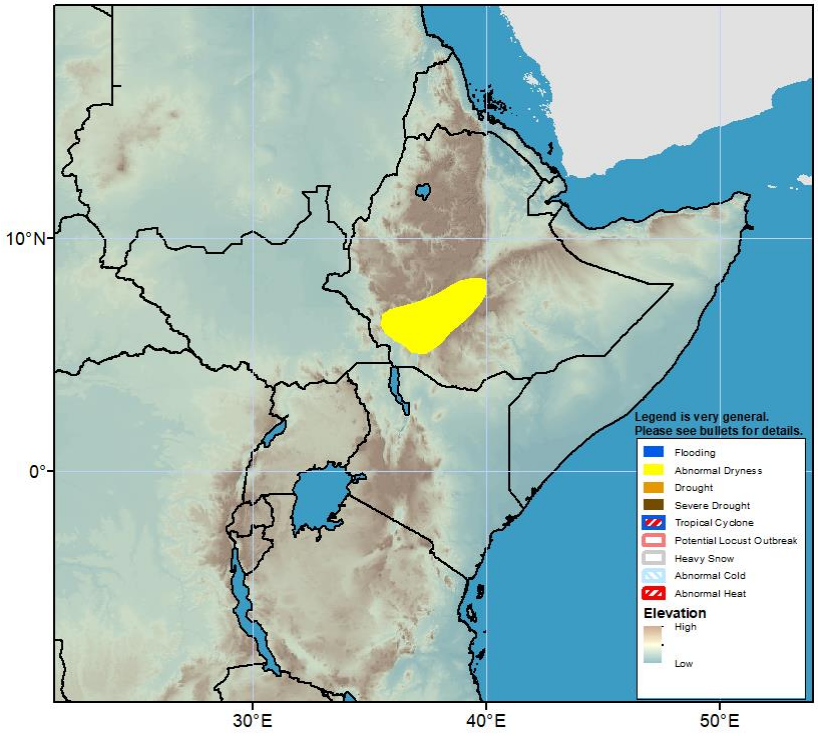
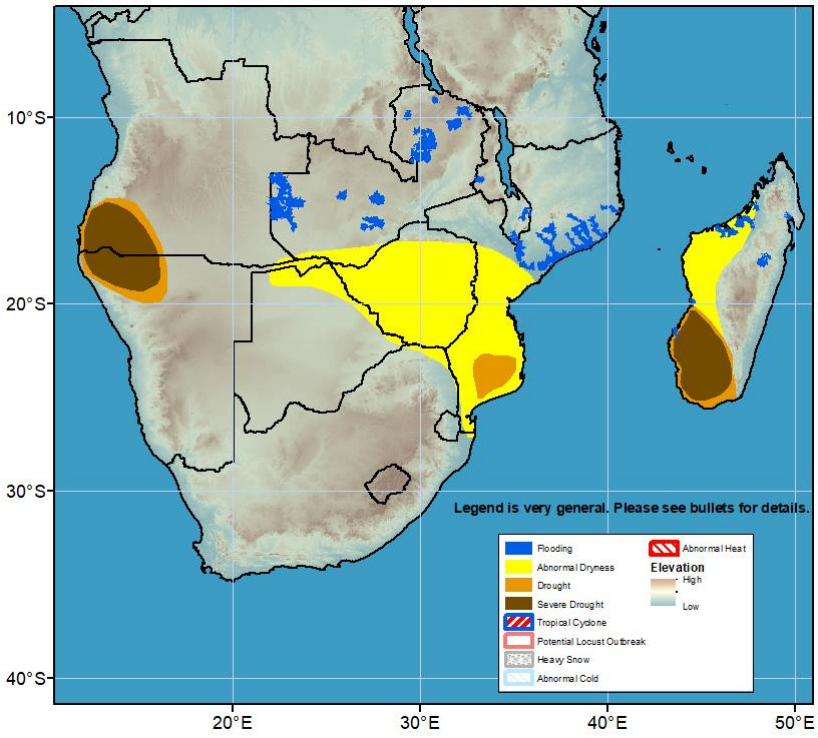


Figure 3: Hazards, focused over eastern Africa



Flooding were detected over parts of western, central, and northern Zambia. The passage of Tropical Cyclone Gombe has resulted in flooding over southern Malawi, northern Mozambique, and coastal western Madagascar.

Figure 4: Hazards, focused over southern Africa