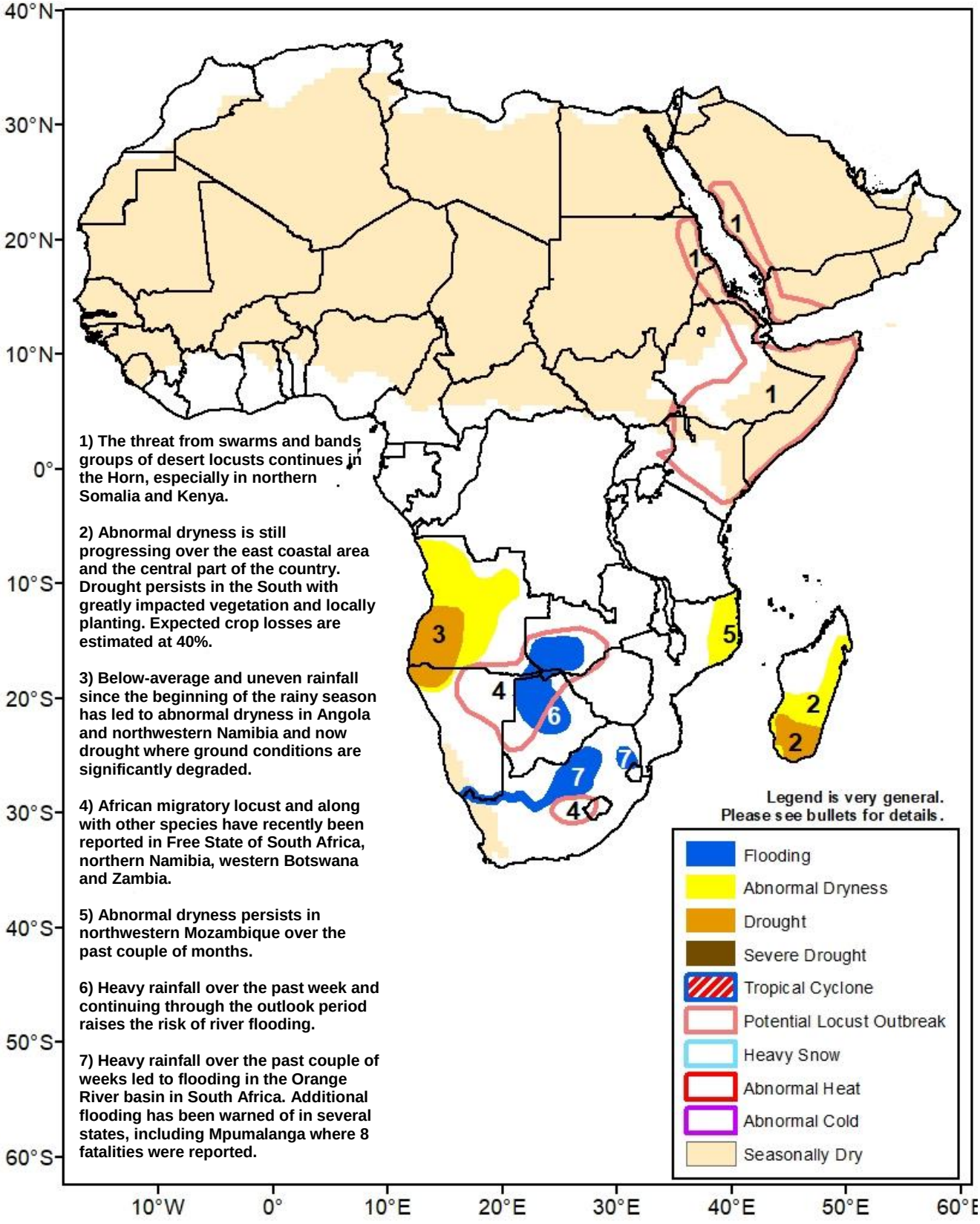
Climate Prediction Center's Africa Hazards Outlook
February 11 – February 17, 2020

- **Torrentiall flooding rains have been occurring in Botswana and South Africa.**



1) The threat from swarms and bands groups of desert locusts continues in the Horn, especially in northern Somalia and Kenya.

2) Abnormal dryness is still progressing over the east coastal area and the central part of the country. Drought persists in the South with greatly impacted vegetation and locally planting. Expected crop losses are estimated at 40%.

3) Below-average and uneven rainfall since the beginning of the rainy season has led to abnormal dryness in Angola and northwestern Namibia and now drought where ground conditions are significantly degraded.

4) African migratory locust and along with other species have recently been reported in Free State of South Africa, northern Namibia, western Botswana and Zambia.

5) Abnormal dryness persists in northwestern Mozambique over the past couple of months.

6) Heavy rainfall over the past week and continuing through the outlook period raises the risk of river flooding.

7) Heavy rainfall over the past couple of weeks led to flooding in the Orange River basin in South Africa. Additional flooding has been warned of in several states, including Mpumalanga where 8 fatalities were reported.

Abnormally heavy, flooding rains occurred in Botswana and eastern portions of South Africa.

The past week's heaviest rain was located in Botswana, Madagascar, and eastern South Africa. In Botswana, a large area of very heavy rainfall totaling 100-200mm was observed according to satellite rainfall estimates (**Figure 1**). Similar totals were observed in local areas of South Africa. In fact, there were reports of 8 fatalities in devastating floods in Mpumalanga State. Other river and flash flooding has been reported in additional wet areas of South Africa and Botswana. Areas observing moderate rainfall (25-75mm) include Zambia, Malawi, Southeastern DRC, and Tanzania. Despite the widespread rains in Madagascar, significant weekly deficits are recorded in northern portions of the country. Improved rains and positive weekly anomalies are recorded in southern portions of the country. Weekly deficits are also significant in already-dry areas that include Angola, Namibia and northern Mozambique.

The southern Africa rainfall pattern has changed little thus far throughout the season, as the 30-day and 90-day rainfall anomaly fields remain similar. Negative 30-day rainfall anomalies of 100mm or more persist in many parts of Madagascar, northwestern Mozambique, western/central Angola, as well as far-northwestern Namibia (**Figure 2**). The most significant 90-day deficits are found in these same areas. Some smaller deficits are seen in the maize triangle region of South Africa, but these have recently improved. Huge surpluses (100-300mm) over the recent 30-day period are found in southern/central Mozambique, eastern Zimbabwe, Namibia, and Botswana. The adverse ground impacts from prolonged moisture deficits are readily apparent in analysis of NDVI anomalies in parts of the region, with especially poor conditions located in southern Madagascar and southwestern Angola. Analysis of evapotranspiration also points to these as areas of particular concern for drought. Rapid assessments from Madagascar indicate that farmers delayed crop planting and expect significant losses.

During the outlook period, heavy and above-normal rainfall is forecast over Zambia, Malawi, northern parts of Mozambique, southern DRC and Tanzania. Very heavy rainfall (100-300mm) is also likely across a large portion of Madagascar. Meanwhile, dry conditions are expected to persist in western Angola. Less rain is likely this week over Botswana and South Africa.

Desert locust remains a significant concern across the horn of Africa.

As we await the onset of the Belg rains during the coming month, scattered shower activity was observed in central Ethiopia. Rains increased in southern Kenya and bimodal Tanzania, where 10-50mm of rainfall was observed according to satellite rainfall estimates. Scattered light rains were also observed in Uganda. Heavier rainfall could continue across Tanzania and southern Kenya for the outlook period. Central Ethiopia may again receive light rain.

The unprecedented desert locust outbreak in the Horn of Africa is still present and will most likely continue through at least March. Adults are present in the Red Sea area of Yemen. Immature swarms are also widespread in Kenya where the outbreak may have peaked. Mitigation is underway to prevent breeding in the near future.

7-Day Satellite Estimated Total Rainfall (mm)
Valid: February 3 – February 9, 2021

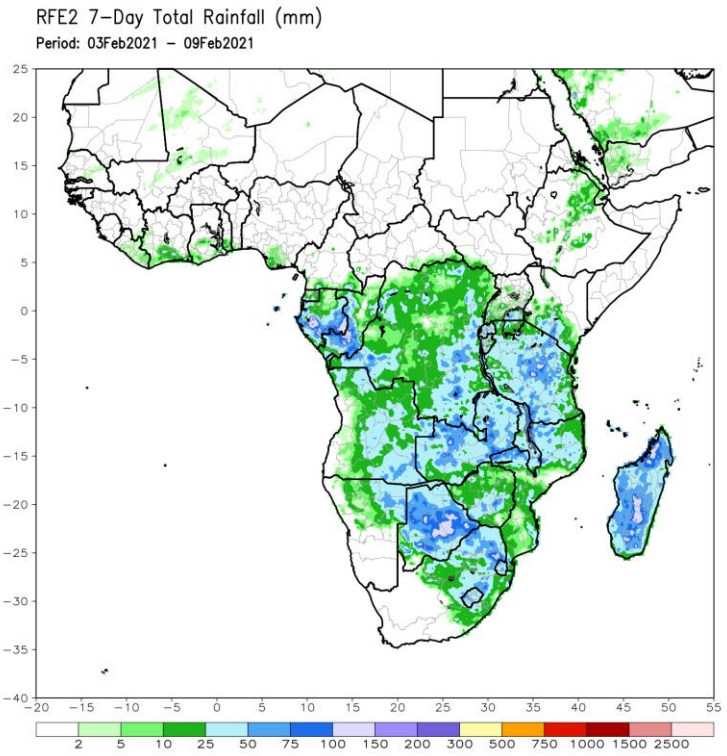


Figure 1: NOAA/CPC

30-day Satellite Estimated Rainfall Anomaly (mm)
Valid: January 11 – February 9, 2021

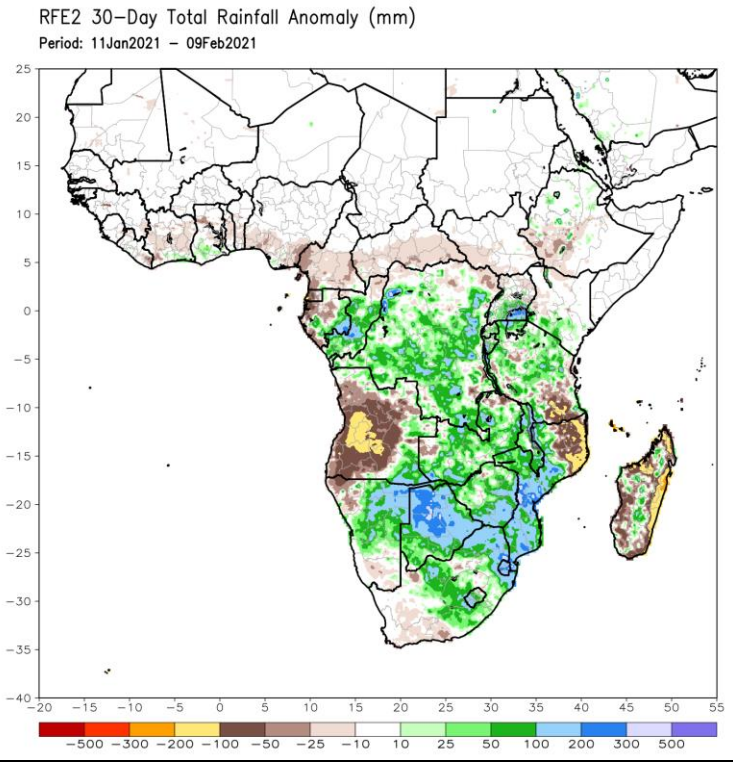


Figure 2: NOAA/CPC

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.

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