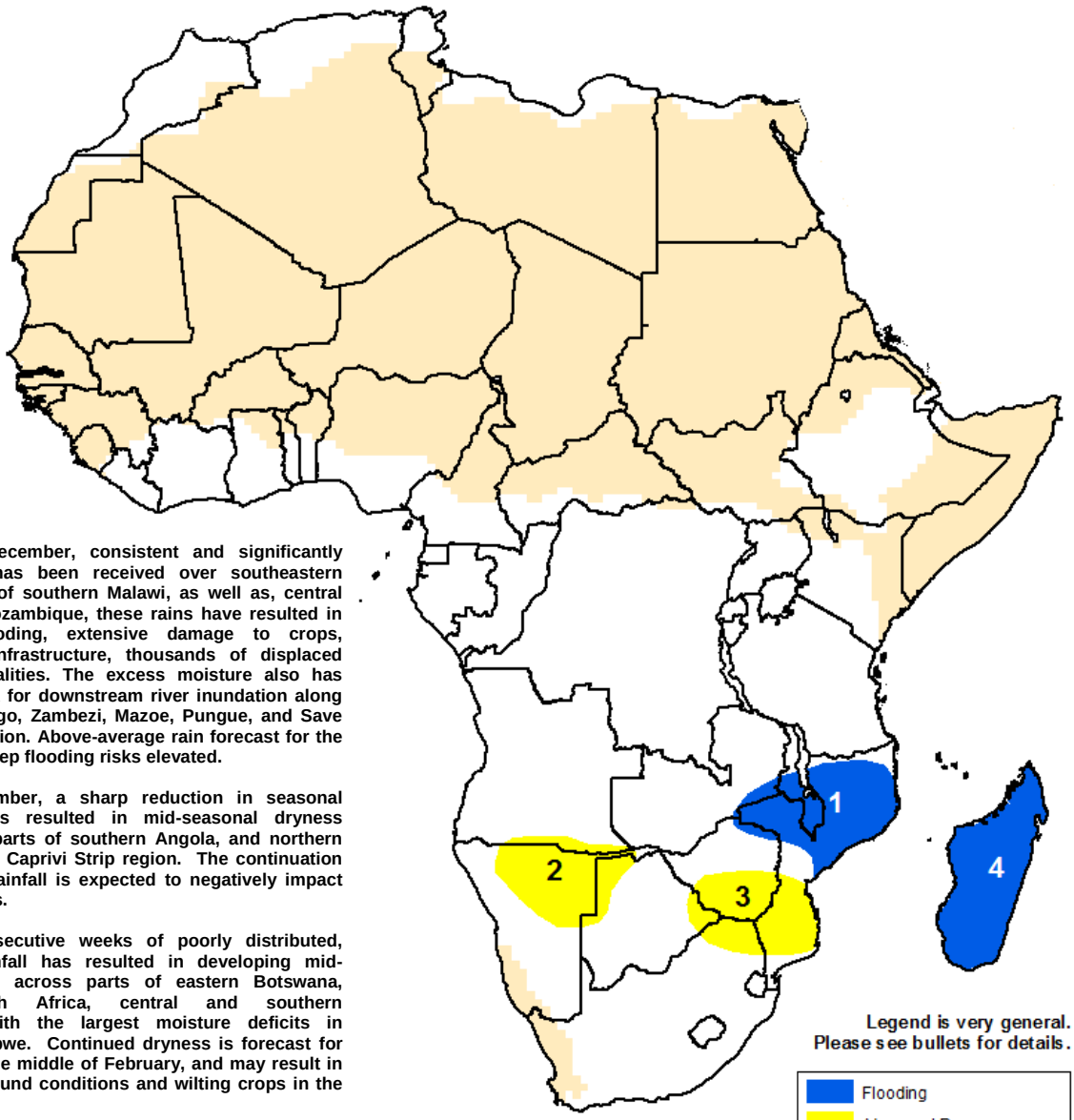
Climate Prediction Center's Africa Hazards Outlook
February 12 – February 18, 2015

- **Tropical Storm Fundi brought torrential rains to Madagascar.**
- **Below-average rains deepen rainfall deficits in Angola and Namibia.**



1) Since mid-December, consistent and significantly heavy rainfall has been received over southeastern Africa. In parts of southern Malawi, as well as, central and northern Mozambique, these rains have resulted in widespread flooding, extensive damage to crops, livestock and infrastructure, thousands of displaced people, and fatalities. The excess moisture also has elevated the risk for downstream river inundation along the Shire, Licungo, Zambezi, Mazoe, Pungue, and Save Rivers in the region. Above-average rain forecast for the next week will keep flooding risks elevated.

2) In late-December, a sharp reduction in seasonal precipitation has resulted in mid-seasonal dryness across several parts of southern Angola, and northern Namibia into the Caprivi Strip region. The continuation of suppressed rainfall is expected to negatively impact developing crops.

3) Several consecutive weeks of poorly distributed, suppressed rainfall has resulted in developing mid-season dryness across parts of eastern Botswana, northern South Africa, central and southern Mozambique, with the largest moisture deficits in southern Zimbabwe. Continued dryness is forecast for some areas in the middle of February, and may result in deteriorating ground conditions and wilting crops in the region.

4) Abundant rains over the past thirty-days as well as the impacts from tropical disturbances in the Mozambique Channel have resulted in widespread flooding across the country which has damaged crops and infrastructure, displaced tens of thousands and increased the risk for water-borne disease outbreaks, especially in the capital of Antananarivo. Heavy rains are once again forecast for the next week which will kept flooding risks elevated.

Tropical cyclone development in the Mozambique Channel brought heavy rains to Mozambique and Madagascar.

During the period, Tropical Storm Fundi formed in the Mozambique Channel and skirted the southwestern coastline of Madagascar before moving south of the region. As a result, throughout the past seven days, above-average convection was located throughout the Mozambique Channel impacting much of Madagascar and northern Mozambique. Rainfall totals exceeding 200mm were recorded in western Madagascar and the Nampula and Zambezia provinces of Mozambique. Heavy rains (>50mm) also were observed in central Mozambique, Zimbabwe, southern Tanzania, Zambia and the KwaZulu-Natal region of South Africa. In contrast, light rains were observed in Namibia, Angola, Botswana, South Africa and Tanzania (**Figure 1**).

The abundant rains in southeastern southern Africa during the past week added to already large long-term rainfall surpluses in the region. Thirty-day rainfall is above the 85th percentile across southern Malawi, northern Mozambique, southern Tanzania and southern Madagascar (**Figure 2**). A copious amount of rain since the start of 2015 has led to widespread flooding in Malawi, Mozambique, Zimbabwe, and Madagascar that has displaced over 200,000 people, damaged infrastructure and livestock, flooded crop fields and resulted in fatalities. Malawi and Mozambique have declared states of emergencies/red alerts as flooding risks remain elevated along the various rivers throughout Malawi and central/northern Mozambique. In Madagascar, torrential rain, associated with two tropical systems and an enhanced monsoon, has resulted in river/flash flooding and an increased risk for water-borne disease outbreaks, especially in the capital of Antananarivo.

For the next week, heavy (>50mm) and above-average rain is forecast for saturated areas in Zambia, northern Mozambique, Malawi and Madagascar (**Figure 3**). The rains will increase the risk for more flooding. Elsewhere, seasonal rains are expected in South Africa and below-average rains is forecast farther north in Tanzania.

Below-average rains deepen rainfall deficits in western southern Africa.

While flooding rains continued to the east, Angola, Namibia, western Zambia and Botswana observed below-average rain during the past week. The lack of rain has led to thirty-day rainfall totals below the 15th percentile in northern Namibia, northwestern Botswana, and the Caprivi Strip region. In the east, Zimbabwe, southern Mozambique and northern South Africa also have observed rains below the 30th percentile (**Figure 2**). Both locations have seen extended dry spells and erratic seasonal rains over the past thirty to sixty days which have deteriorated ground conditions. In contrast, two consecutive weeks of above-average rain have erased thirty-day rainfall deficits across previously dry areas in the KwaZulu-Natal region of South Africa. For the next week, an increase in rain is expected for dry areas in central/northern Angola, though dry conditions (<15mm) are expected farther south in southern Angola, northern Namibia, western Zambia, and Botswana. Below-average rains (5-30mm total) also are likely in dry areas in Zimbabwe and Mozambique (**Figure 3**).

Satellite Estimated Rainfall (mm)
Valid: February 4 – February 10, 2015

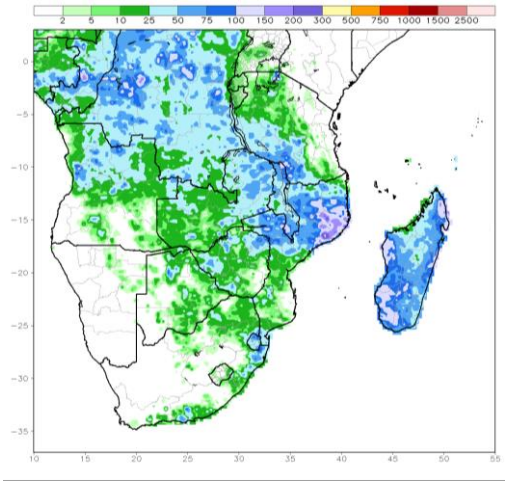


Figure 1: NOAA/CPC

30-Day Satellite Rainfall Percentile (%)
Valid: January 12 – February 10, 2015

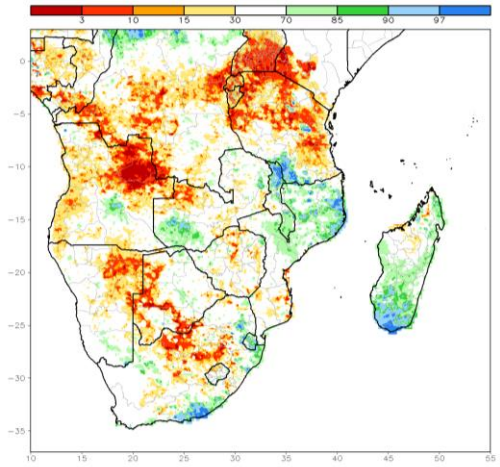


Figure 2: NOAA/CPC

GFS Model Precipitation forecast (mm)
Valid: February 11 – February 18, 2015

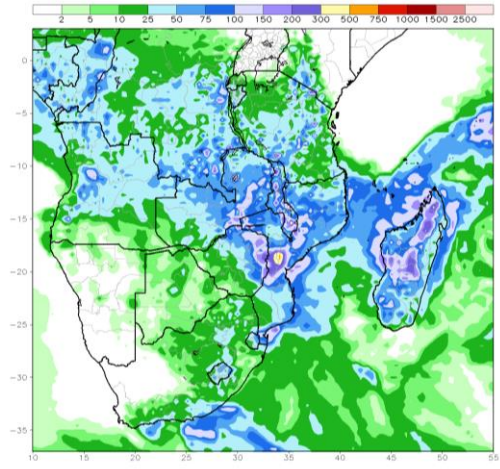


Figure 3: NOAA/CPC

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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