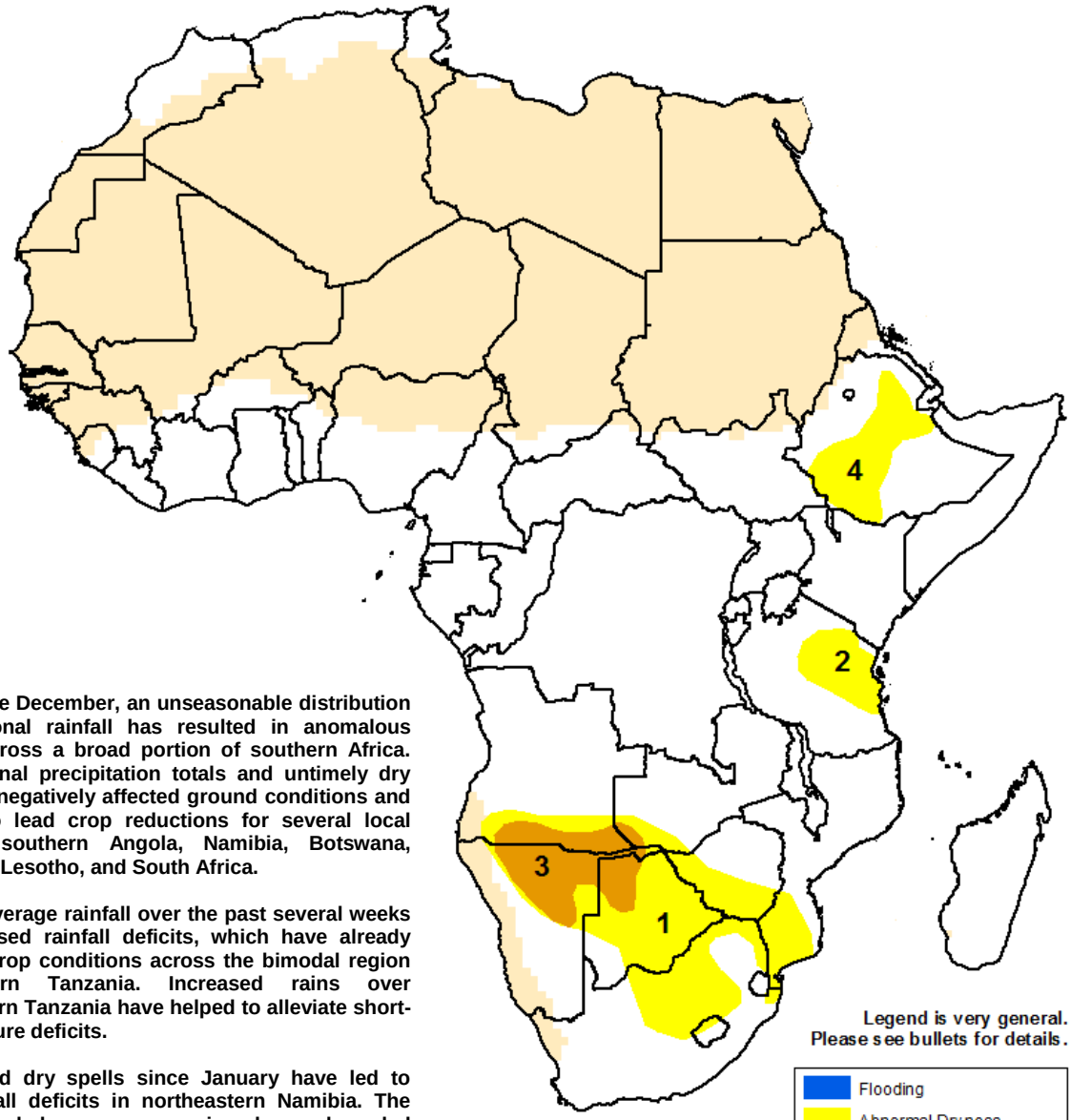
Climate Prediction Center's Africa Hazards Outlook
April 9 – April 15, 2015

- **Decreased rains received over Ethiopia have resulted in strengthening seasonal moisture deficits.**
- **Late surge of heavy rainfall continued over portions of Southern Africa.**



1) Since late December, an unseasonable distribution of monsoonal rainfall has resulted in anomalous dryness across a broad portion of southern Africa. Low seasonal precipitation totals and untimely dry spells has negatively affected ground conditions and is likely to lead crop reductions for several local areas in southern Angola, Namibia, Botswana, Zimbabwe, Lesotho, and South Africa.

2) Below-average rainfall over the past several weeks has increased rainfall deficits, which have already impacted crop conditions across the bimodal region of northern Tanzania. Increased rains over northwestern Tanzania have helped to alleviate short-term moisture deficits.

3) Extended dry spells since January have led to large rainfall deficits in northeastern Namibia. The continued below-average rain has degraded vegetation conditions further. With the rainy season approaching to an end, recovery is unlikely.

4) Below-average moisture conditions continue across several local areas of southwestern and east-central Ethiopia. Further delay of rainfall during April is likely to adversely affect cropping activities for several "Belg" producing areas.

The return of suppressed rainfall leads to mid-season dryness in Ethiopia.

During the last seven days, satellite precipitation estimates depict anomalously heavy rainfall over the Lake Victoria region, with suppressed rains over much of Ethiopia. The highest weekly accumulations were received in southwestern Kenya (>100mm), with more seasonably moderate weekly totals (25-100mm) in northern Tanzania and Uganda. In Ethiopia, the highest recorded amounts fell across parts of the SNNP region, with a pronounced suppression over several belg-producing areas further north where little to no rains were received (**Figure 1**). In Somalia, continued shower activity was observed of the lower Shabelle and Jubba River basins.

An analysis of rainfall anomalies since the beginning of March indicates that moisture deficits have been strengthening and expanding over much of Ethiopia. Currently, the strongest moisture deficits (50-100mm) are located in the SNNP and northern Oromia region of the country (**Figure 2**). While rains had increased during the middle of March, suggestive of a late onset of belg seasonal rainfall, it was immediately followed by a sharp reduction in rains during late March and into early April. As a result, the erratic nature of precipitation is likely to adversely affect both agro-pastoral and pastoral areas for several local parts in the SNNP, and highland areas of the Oromia, and eastern Amhara provinces of Ethiopia.

For the upcoming outlook period, precipitation models suggest another week of suppressed rainfall for the western half of Ethiopia, with the potential for average to above-average rainfall over the pastoral regions of eastern Ethiopia. The continuation of poor mid-season rains is expected to possibly worsen already moisture stressed regions of the country. Further south, above-average rainfall remains forecast for much of southern Kenya, Uganda and northern Tanzania.

Late season heavy rainfall provides some relief to long-term anomalous dryness.

During the past couple of weeks, a significant increase in rainfall was received over several regions in southern Africa that have been experiencing a very poor monsoon since January. According to satellite estimated rainfall tendency analysis, the most positive moisture changes have occurred over much of northern Botswana, the Caprivi Strip region, western Zambia and eastern Angola (**Figure 3**). Until mid-March, several of these areas had only experienced much less than 60 percent of their normal accumulated precipitation for the season. While it remains unlikely seasonal moisture deficits will be completely eliminated as the southern Africa monsoon nears its conclusion, the recent increase in ground moisture is expected to help mitigate the long-term effects of drought conditions, particularly in northern Namibia. Precipitation forecasts suggest a continuation of above-average rainfall across southwestern Africa during early April.

Satellite Estimated Rainfall (mm)
Valid: March 29 – April 4, 2015

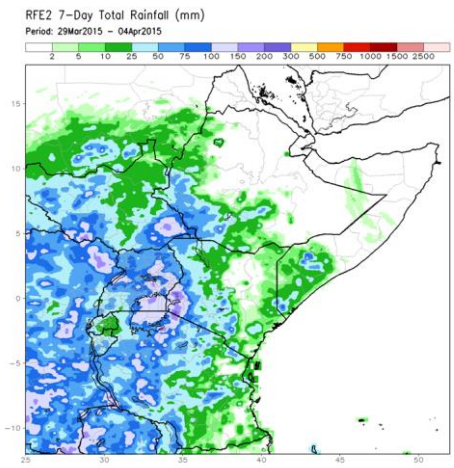


Figure 1: NOAA/CPC

Satellite-Estimated Rainfall Anomaly (mm)
Valid: March 01 – April 4, 2015

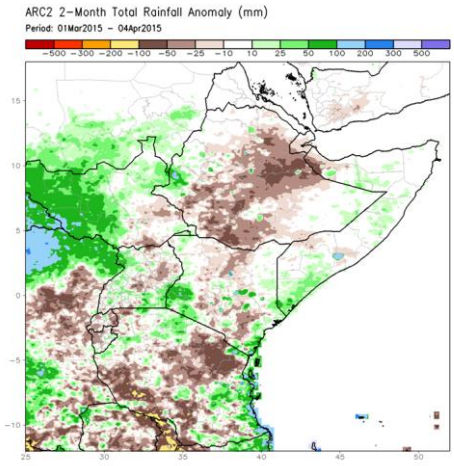


Figure 2: NOAA/CPC

Satellite-Estimated Rainfall Anomaly Difference (mm)
Valid: February 01 – March 31, 2015

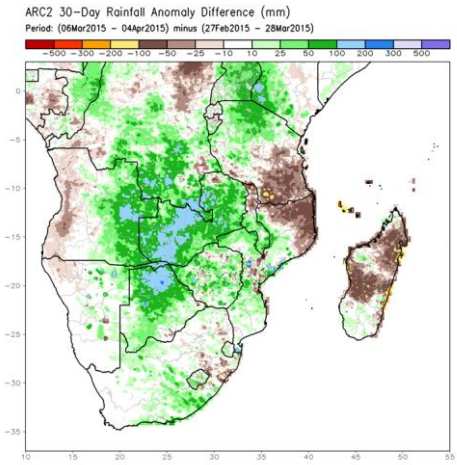


Figure 3: NOAA/CPC

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.

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