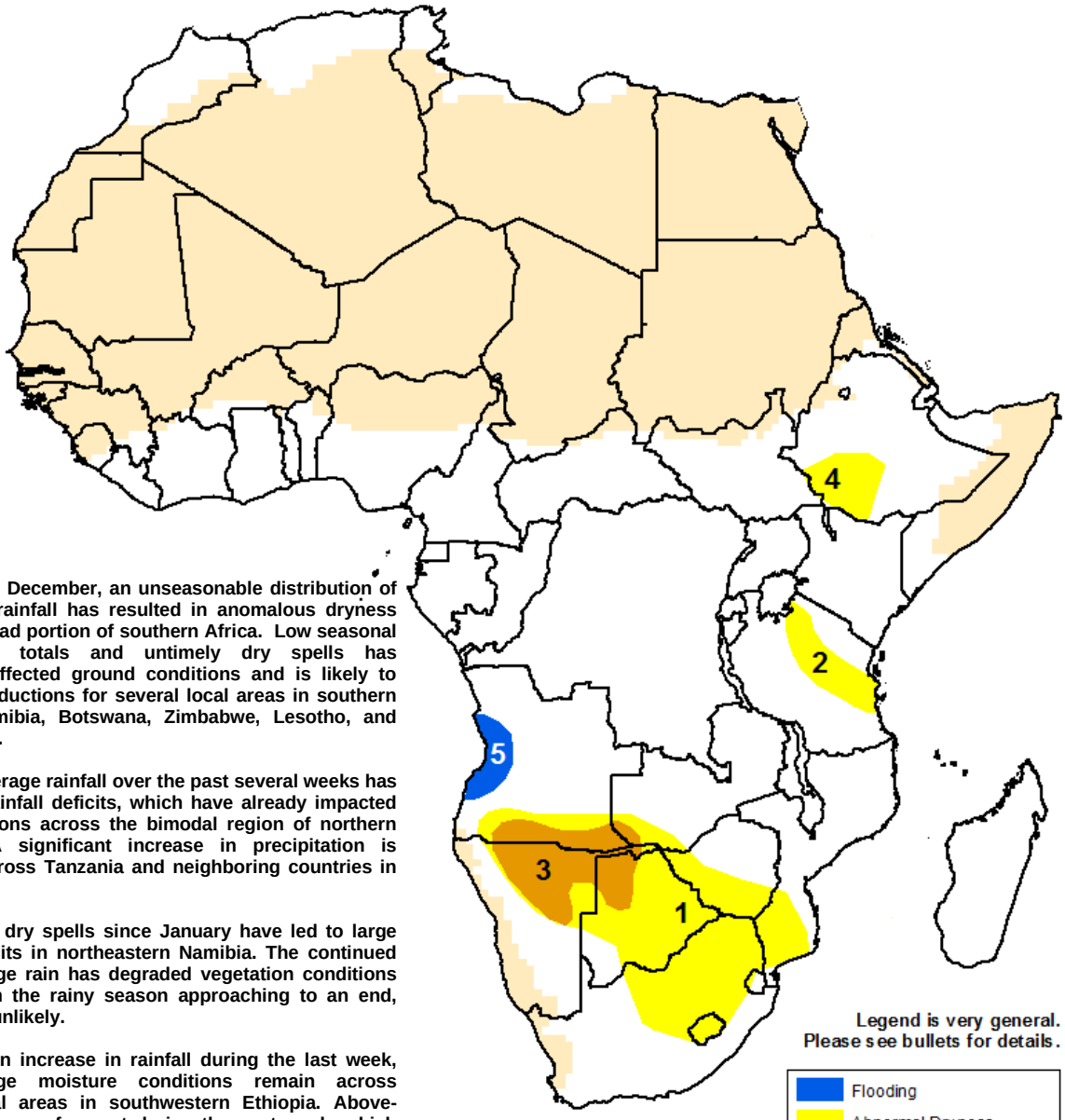
Climate Prediction Center's Africa Hazards Outlook
March 26 – April 1, 2015

- **Several anomalously dry areas expected to receive above-average rainfall during the next week.**
- **Much of Ethiopia received a large increase in seasonal rains during mid-March.**



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. A significant increase in precipitation is expected across Tanzania and neighboring countries in late March.

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) Despite an increase in rainfall during the last week, below-average moisture conditions remain across several local areas in southwestern Ethiopia. Above-average rains are forecast during the next week, which should help to reduce moisture deficits.

5) Heavy and above-average rains triggered flooding, causing many fatalities in Lobito area of the Benguela province of western Angola during the past week. Heavy rains forecast to continue into late March, which may exacerbate the ground conditions or lead to new flooding in the area.

A poor monsoon felt across southern Africa countries.

A relatively unseasonable distribution of monsoonal rainfall continued across much of southern Africa during the last seven days. While portions of South Africa, Namibia, Botswana, and western Zimbabwe received a much needed increase in precipitation, several areas to the northeast experienced little to no rains (**Figure 1**). Further north, the heaviest weekly precipitation accumulations (>100mm) were observed across eastern Tanzania western Angola, which has elevated concerns for flooding in the region.

Since December, several regions in southern Africa have experienced a very uncharacteristic and poor monsoon to date. The most anomalously dry areas remain across southern Angola and Namibia where several local areas have experienced less than 50 percent of their normal rainfall (**Figure 2**). The low and inconsistent rains have already negatively impacted crop and pastoral conditions. Since January, the character of anomalous dryness has emerged into several regions further east, affecting much of Botswana, South Africa, Lesotho, southern Zimbabwe and Mozambique. Here, untimely mid-season dry spells have led to moisture stressed areas with increased concerns of reduced crop production. Additionally, the continuation of suppressed rainfall during March is expected to exacerbate the already dry conditions for several southern Africa countries. As the southern Africa monsoon is nearing its conclusion for several regions during late March / early April, this leaves little opportunity for moisture recovery moving forward.

For the upcoming outlook period, many anomalously dry areas in southwestern Africa are expected to receive average to above-average rainfall during the next seven days. Despite the potential for enhanced rains, this is not anticipated to greatly mitigate moisture deficits and crop conditions.

More rains are needed to offset early season dryness in Greater Horn.

During the past week, a much needed increase in rainfall was observed across East Africa, with the largest weekly accumulations received over Ethiopia and eastern Tanzania. The onset of moderate to locally heavy rains in mid-March followed several consecutive weeks of little to no rainfall across Ethiopia, suggestive of late onset of “belg” season precipitation. Despite the recent increase in rainfall, satellite rainfall estimates show marginal to moderate residual moisture deficits for several areas in southern Ethiopia, South Sudan, Kenya, Uganda, Rwanda and northern Tanzania since late February (**Figure 3**). Precipitation models indicate a significant increase in rainfall over the Lake Victoria region during the next week, which is expected to alleviate early season moisture deficits.

Satellite Estimated Rainfall (mm)
Valid: March 15 – March 21, 2015

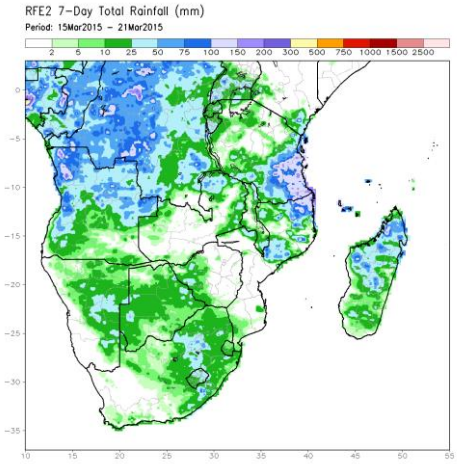


Figure 1: NOAA/CPC

90-Day Satellite-Estimated Percent of Normal Rainfall (%)
Valid: December 22, 2014 – March 21, 2015

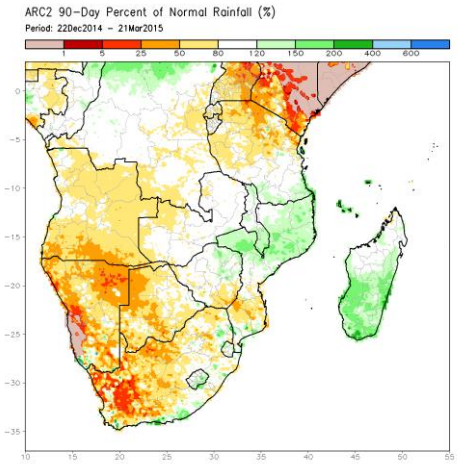


Figure 2: NOAA/CPC

30-Day Satellite-Estimated Rainfall Anomaly (mm)
Valid: February 20 – March 21, 2015

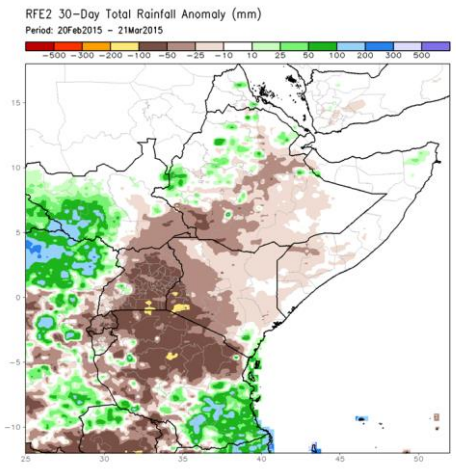


Figure 3: NOAA/CPC

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.