# Climate Prediction Center's Africa Hazards Outlook
February 11 – February 17, 2016

- An erratic rainfall distribution and extremely poor rain totals since the start of the season has led to widespread loss of crops and other adverse conditions affecting millions of people.
- Persistent heavy rains from northern Madagascar stretching into northern Mozambique and southern Tanzania has led to high risk of flooding and mudslides to lives and property.

1) Significantly suppressed and poorly distributed seasonal rainfall since October has negatively affected many countries in southern Africa. Exacerbated by a poor rainfall seasonal performance last year, many consecutive weeks of inadequate rainfall has led to reduced water availability, permanently wilted crops, Reduced planted areas, livestock deaths, and other adverse ground conditions over many areas. Dwindling water in reservoirs is threatening to undermine power production. Severe drought is posted over portions of the Free State and North West Provinces of South Africa as wilted and damaged crops were observed on the fields recently. Severe drought has also been posted in Zimbabwe and central and southern portions of Mozambique, where persistently large rainfall deficits have already destroyed more than 40% of crops.

2) Heavy rainfall during the past several weeks has affected many people, resulting in numerous fatalities, as well as destroyed homes and infrastructure. Continuing heavy rainfall on already saturated ground is likely to cause inundation and swelling of streams and rivers in northern Mozambique and southern Tanzania along with elevated mudslide risk in Madagascar.
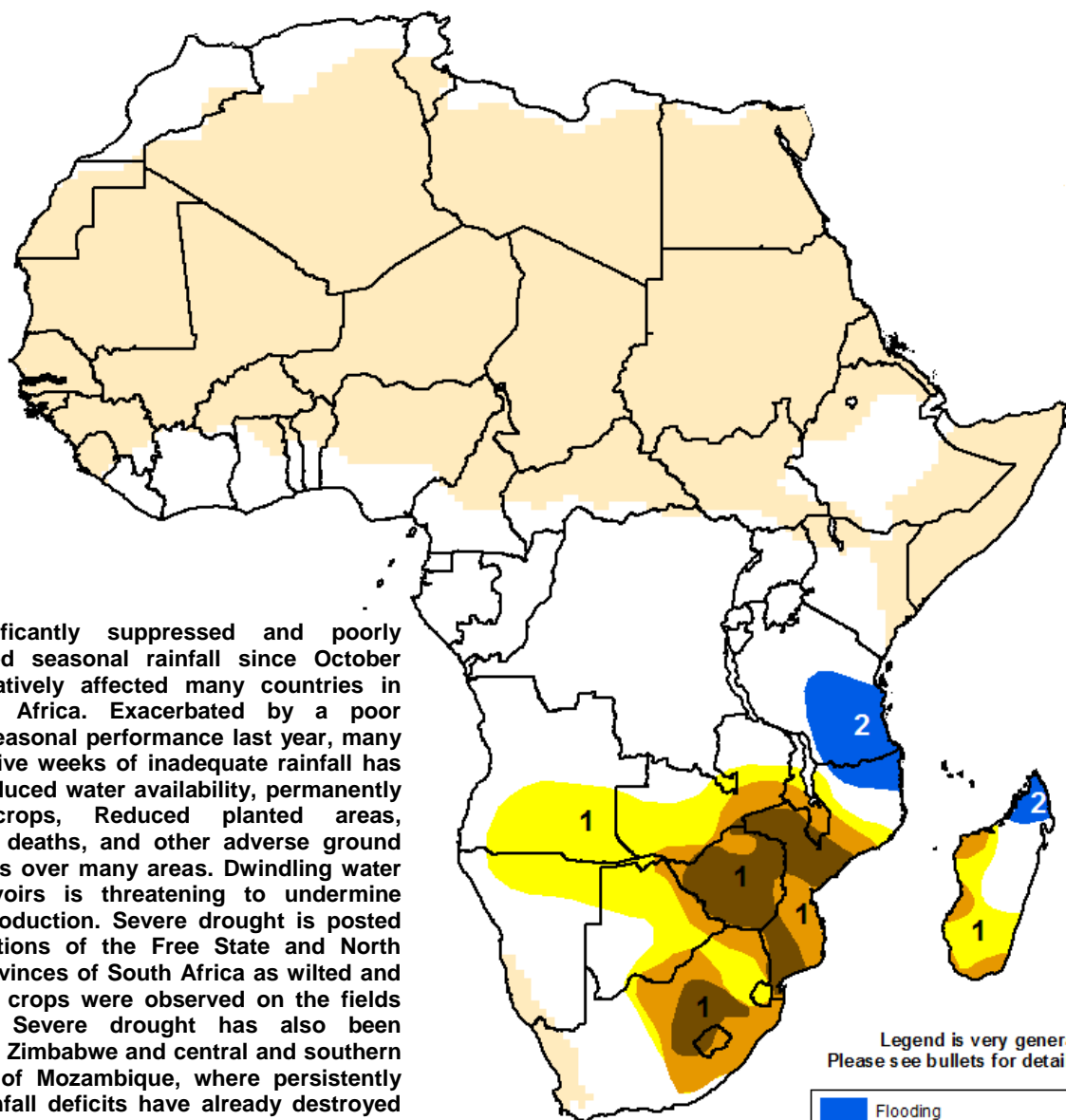
Legend is very general.
Please see bullets for details.

Legend:
- Flooding
- Abnormal Dryness
- Drought
- Severe Drought
- Tropical Cyclone
- Potential Locust Outbreak
- Heavy Snow
- Abnormal Cold
- Abnormal Heat
- Seasonally Dry

The driest conditions in decades continue to impact large portions of the region, while heavy rains impact others.

During the last observation period, heavy flooding rains persisted over many of the same areas. Below-average rains remained in many parts of Zimbabwe, central Mozambique, and Zambia. Significant portions of Mozambique and southern Zimbabwe did not record any rain according to satellite estimates (**Figure 1**). According to satellite information, the large weekly rainfall accumulations (>200mm) were registered in southern Tanzania and northern Mozambique. Northern Madagascar also received very heavy rainfall; locally in excess of 300mm. Moderate to heavy rainfall was also received across northern Zimbabwe, Zambia, central Tanzania, and southern DRC. South Africa received moderate rains, primarily between 10-25mm.

A wetter pattern in January helped to relieve seasonal moisture deficits for parts of Angola and Namibia which had experienced a poor start to the rainy season. A recent return to drier than normal conditions has proven the period to be just a temporary wet spell. Even so, vegetation conditions still appear better than they did earlier in the season in these areas.

However, the largest precipitation deficits remain concentrated over southern Zambia, central and western Mozambique, southern Malawi, and large portions of Zimbabwe. Many local areas in eastern Zimbabwe and Mozambique are still experiencing well less than half of their normal rainfall since the beginning of January (**Figure 2**). Because it is this region where monsoonal rainfall is climatologically higher and most frequent compared to other regions in southern Africa in January, the absence of rainfall in the southeast has led to an alarmingly rapid strengthening of moisture deficits. The harshness of the dry conditions has already severely affected cropping activities across the region. Similarly rapid increases in moisture deficits in southern Madagascar have already affected many hundreds of thousands of people with drought conditions.

Furthermore, the erratic distribution in rainfall since the beginning of the season has resulted in wilted and damaged maize crops over large portions of central South Africa, in particular Free State and North West Provinces. The continuation of infrequent and low rainfall accumulations will only exacerbate these conditions over an expanded area.

During the next outlook period, models suggest that the monsoonal convergence over southeastern Africa will shift slightly northward. As a result, suppressed conditions should expand more northward across Madagascar. Rainfall is likely to remain above average for portions of southern Tanzania, neighboring areas of Mozambique, and northern Malawi (**Figure 3**). This may lead to continued flooding in the area. Western Angola is also likely to see above-normal precipitation this week. Many other parts of the southern African region, including Mozambique, Zimbabwe, Namibia, southern Angola and Zambia are expected to receive suppressed rainfall.

Satellite-Estimated Rainfall (mm)
Valid: February 03, 2015 – February 09, 2016

Figure 1:   NOAA/CPC

Satellite Estimated Percent of Normal Rainfall Anomaly (%)
Valid: January 01, 2015 – February 08, 2016

Figure 2:   NOAA/CPC

Southern Africa Precipitation Forecast (mm)
Valid: February 11 – February 17, 2016

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.