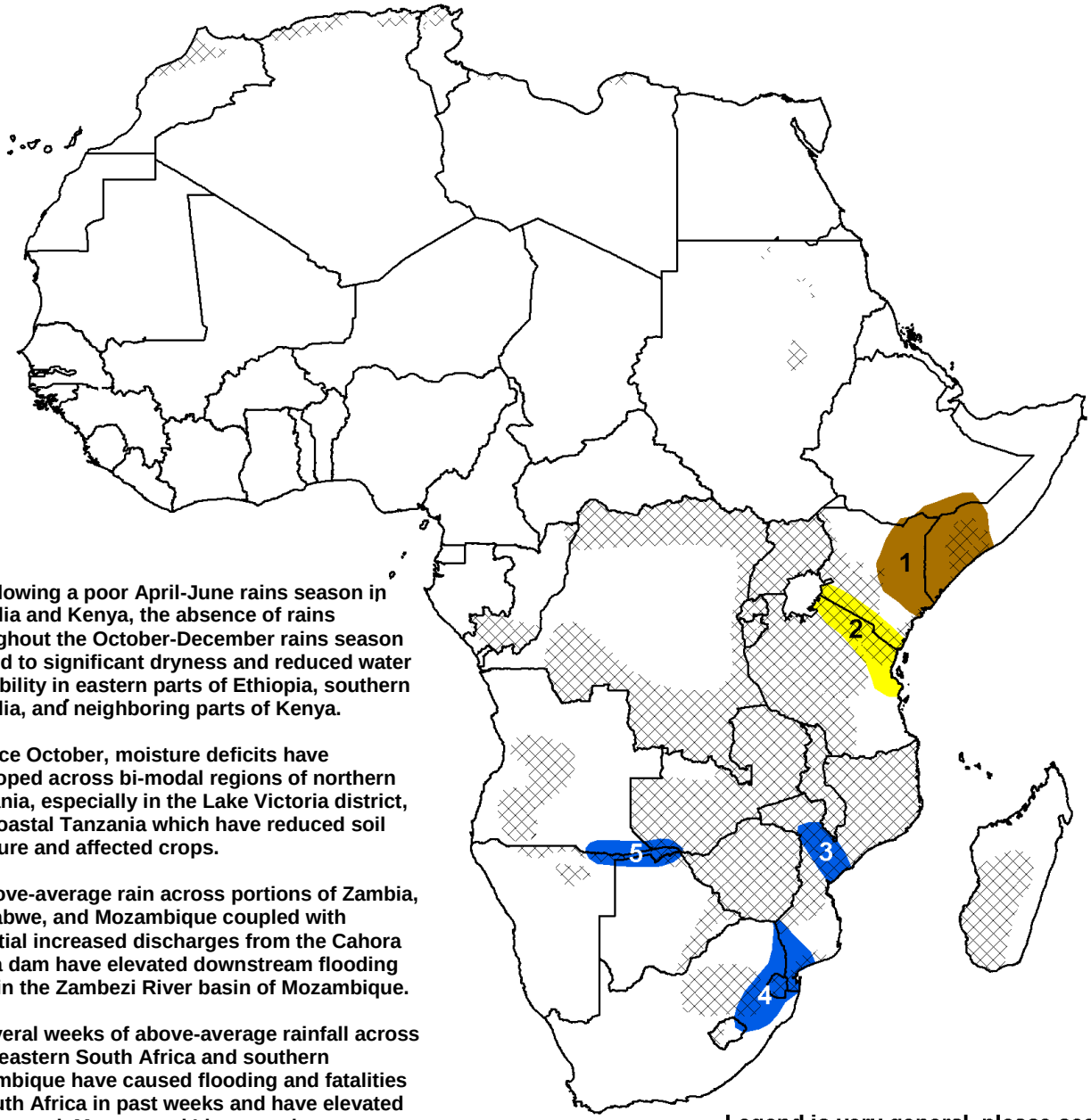
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
January 20 – January 26, 2011

- **Flood-prone and saturated areas in Mozambique continued to receive copious amounts of precipitation during the past week furthering the risk for flooding.**



1) Following a poor April-June rains season in Somalia and Kenya, the absence of rains throughout the October-December rains season has led to significant dryness and reduced water availability in eastern parts of Ethiopia, southern Somalia, and neighboring parts of Kenya.

2) Since October, moisture deficits have developed across bi-modal regions of northern Tanzania, especially in the Lake Victoria district, and coastal Tanzania which have reduced soil moisture and affected crops.

3) Above-average rain across portions of Zambia, Zimbabwe, and Mozambique coupled with potential increased discharges from the Cahora Bassa dam have elevated downstream flooding risks in the Zambezi River basin of Mozambique.

4) Several weeks of above-average rainfall across southeastern South Africa and southern Mozambique have caused flooding and fatalities in South Africa in past weeks and have elevated the Incomati, Maputo and Limpopo rivers to near or past flood alert levels in southern Mozambique. With increased dam discharges expected in the Limpopo basin, conditions downstream in the Limpopo River are expected to worsen.

5) Ample precipitation during the past few weeks has saturated the ground and has led to elevated water levels in the Okavango and Zambezi rivers along the Angola/Namibia border and Caprivi Strip. With additional heavy rain forecasted, river or flash flooding could occur.

Legend is very general, please see numbered descriptions for details.

- January Cropped Areas
- Favorable
- Somewhat Favorable
- Flooding
- Short-term Dryness
- Drought
- Improving Drought

Heavy rainfall continued over eastern southern Africa.

The last seven days have seen a continuation of abundant rainfall over a large portion of southern Africa. Zambia, Malawi, Mozambique, Zimbabwe, eastern Angola, southern Tanzania and Madagascar received greater than 50 mm of precipitation. The highest rainfall totals (> 100 mm) were located over Zimbabwe, northern Madagascar and southern Mozambique. The heavy rains over southern Mozambique occurred in areas already at a risk for flooding as river levels have been elevated due to above-average precipitation in previous weeks. Moderate rain (30-50 mm) fell over isolated portions of South Africa which did not provide relief to recent waterlogged crops around Lesotho. In contrast, rainfall was below-normal over much of the Maize Triangle in South Africa as well as northern Namibia where rainfall has been heavy in previous weeks. The reduction in rainfall in South Africa has helped reduce water levels along the Orange River which reached flooding levels during the past week. Further north, bi-modal areas in northern Tanzania around the Lake Victoria district received below-average precipitation (**Figure 1**).

Since the beginning of October, most of southern Africa has seen above-average precipitation. In particular, areas along the Namibia/Angola border, and western and southern Mozambique have received greater than 180% of their normal precipitation. The copious amounts of rain have led to saturated ground conditions as well as elevated water levels along rivers in these locations. In the Caprivi Strip region of Namibia, both the Okavango and Zambezi rivers are at their highest levels at this date in decades. Additional rainfall over this saturated area will further increase flooding risks. To the east, the Zambezi River basin also has received above-average seasonal precipitation which has already and could continue to cause flooding in downstream areas in Mozambique. In southern Mozambique, recent heavy rains which have created large rainfall surpluses in the region have elevated rivers past alert levels along the Limpopo, Incomati and Maputo Rivers (**Figure 2**). Increased discharges from the Massingir Dam in the Limpopo Basin could worsen conditions downstream in southern Mozambique.

Due to the abundant rainfall observed in southern Africa, the Water Requirements Satisfaction index (WRSI) shows good to very good conditions for crops over much of southern Africa. However, poor WRSI values do exist over localized areas in eastern Botswana even though seasonal rainfall is at or close to normal (**Figure 3**).

For the next week, heavy rainfall is expected over already saturated areas in southern Africa. The heaviest precipitation (> 50 mm) is forecast over Zambia, Zimbabwe, western Mozambique, Namibia, eastern Angola and localized areas in South Africa and Madagascar. The abundant rainfall over areas with already elevated river levels could continue the risk for flash and river flooding into the next week.

Satellite Estimated Precipitation (mm)
Valid: January 10th – January 16th, 2011

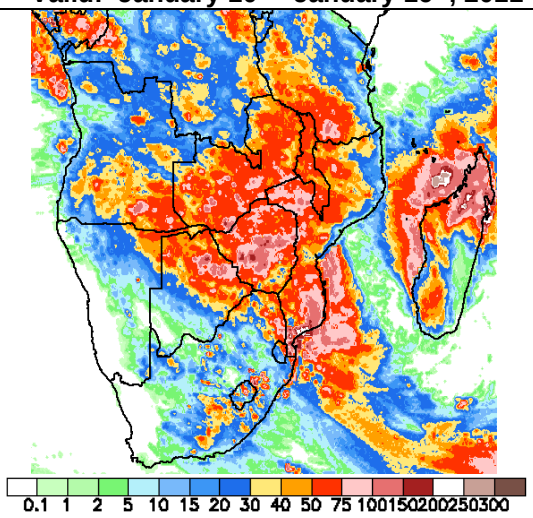


Figure 1: NOAA/CPC

Satellite Estimated Precipitation Anomaly (%)
Valid: October 1st, 2010 – January 16th, 2011

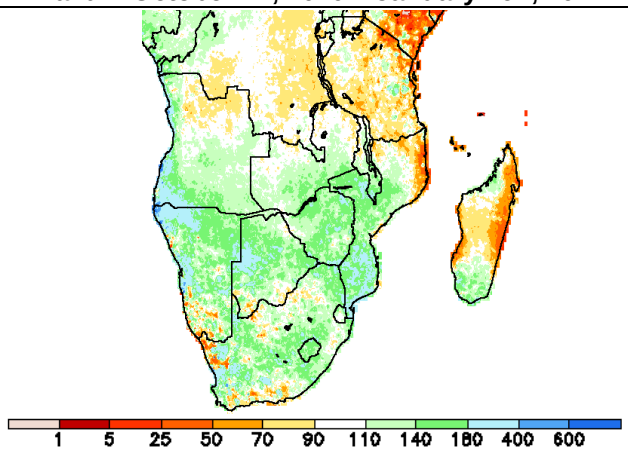


Figure 2: NOAA/CPC

Water Requirements Satisfaction Index (WRSI)
Valid: As of 1st Dekad of January, 2011

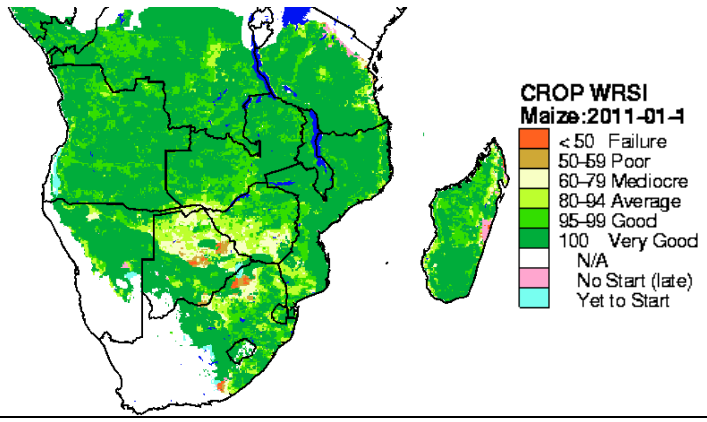


Figure 3: USGS/EROS

Note: The hazards assessment 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.