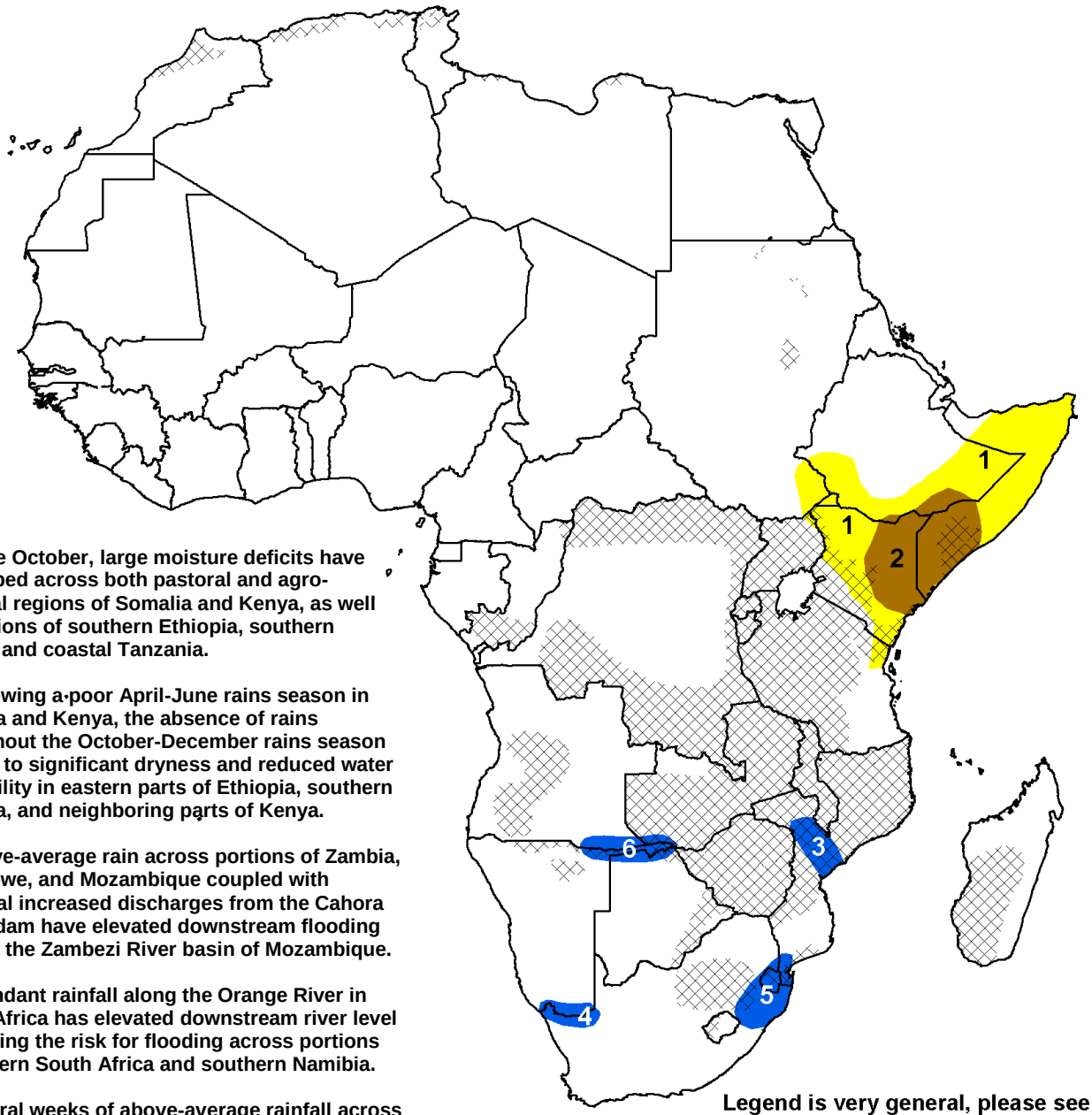
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
January 13 – January 19, 2011

- **Heavy rains over South Africa have elevated water levels along the Orange River and have caused flooding across eastern portions of the country.**



1) Since October, large moisture deficits have developed across both pastoral and agro-pastoral regions of Somalia and Kenya, as well as portions of southern Ethiopia, southern Sudan, and coastal Tanzania.

2) 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.

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) Abundant rainfall along the Orange River in South Africa has elevated downstream river level increasing the risk for flooding across portions of western South Africa and southern Namibia.

5) Several weeks of above-average rainfall across southeastern South Africa and southern Mozambique have caused flooding and fatalities in South Africa and have elevated the Incomati and Maputo rivers to near or past flood alert levels in southern Mozambique.

6) Ample precipitation during the past few weeks has saturated the ground and has led to elevated water levels in the Kavango and Zambezi rivers along the Angola/Namibia border and Caprivi Strip. With 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

Abundant rainfall prevalent over saturated areas in southern Africa.

During the past week, ample rainfall was experienced across northern portions of southern Africa and South Africa. The heaviest precipitation (> 50 mm) was observed across much of Angola, northern Namibia, northern Zimbabwe, northern Mozambique, Malawi and eastern South Africa. The highest precipitation totals (> 75 mm) were located along the northern coastline of northern Mozambique and along the Angola/Namibia border. The moderate to heavy rainfall across South Africa has provided little relief to saturated ground conditions and waterlogged crops in Lesotho and southeastern South Africa. Elsewhere, moderate rainfall (30-40 mm) returned to portions of central and southern Madagascar after several weeks of drier weather. In contrast, lighter rainfall (<20 mm) was observed across southern Mozambique, southern Zimbabwe and northern Tanzania. Rainfall across northern Tanzania in particular has been limited during the past several weeks (**Figure 1**).

Satellite Estimated Precipitation (mm)
Valid: January 4th – January 10th, 2011

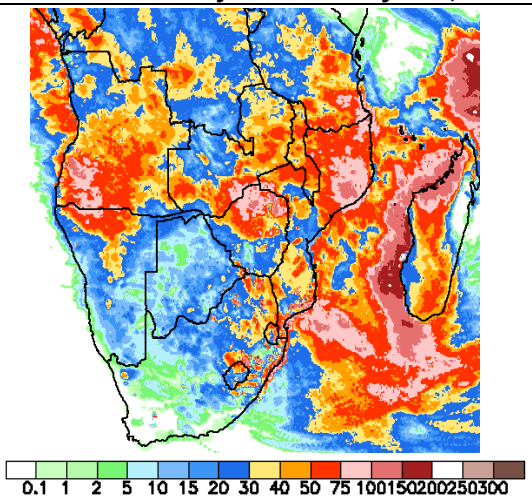


Figure 1: NOAA/CPC

Over the past thirty days, rainfall across western and southern portions of southern Africa has been > 100 mm above-normal. The abundant rainfall across Angola and northern Namibia has caused saturated ground conditions and raised river levels in the Caprivi Strip region to high levels. More rainfall could cause river or flash flooding. Further south, recent heavy rains across South Africa have elevated downstream Orange River water levels. Water levels of the Orange River along the border between South Africa and Namibia are expected to peak past flood level during the next seven days flooding low lying areas and potentially damaging irrigation areas. Positive rainfall anomalies (around 50 mm) along the Zambezi River Basin during the past thirty days (**Figure 2**) have also helped lead to flooding in downstream areas in Mozambique. While recent water discharge levels from the Cahora Bassa Dam have been decreased, if heavy rainfall continues as forecast the discharge rates might again be raised increasing the chance for flooding.

Satellite Estimated Precipitation Anomaly (mm)
Valid: December 12th, 2010 – January 10th, 2011

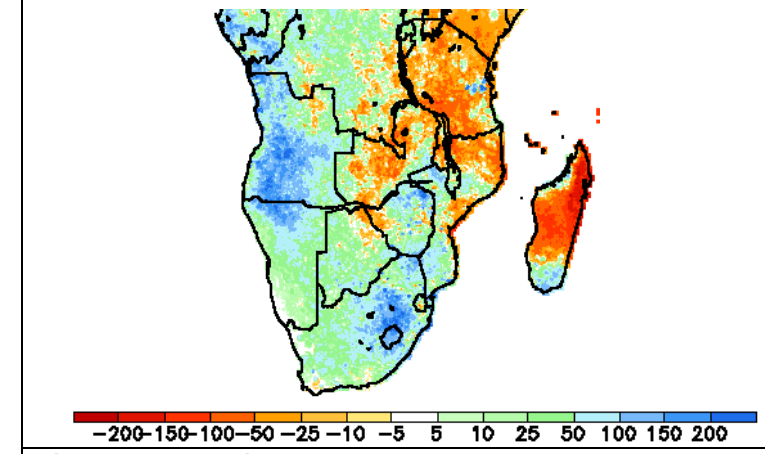


Figure 2: NOAA/CPC

An analysis of flood prone areas across southern Africa during the first dekad of January also had indicated a moderate risk for flooding in already saturated locations in southeastern South Africa and southern Mozambique (**Figure 3**). Heavy rains during the past couple of weeks in the Eastern Cape and KwaZulu-Natal provinces have led to flooding and fatalities while river levels in southern Mozambique have reached alert levels.

Basin Excess Rainfall Map - Catchments
Valid: As of 1st Dekad of January, 2011

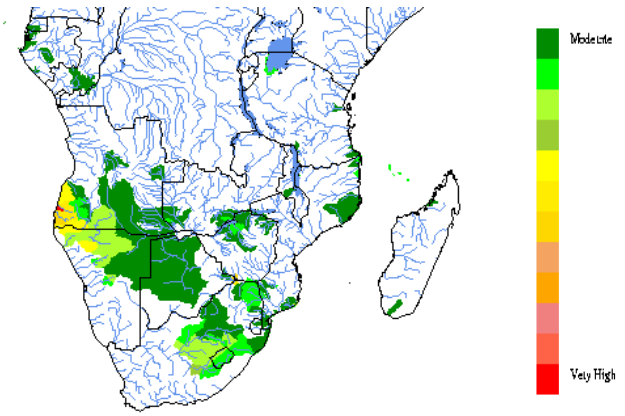


Figure 3: USGS/EROS

Models predict a relief to the wet conditions over western portions of southern Africa during the next week. The heaviest rainfall (> 50 mm) is expected over the eastern half of southern Africa including Tanzania, Mozambique, Zimbabwe and Zambia. The high rainfall totals along the Zambezi River Basin during the next week could elevate flooding risks. Models also indicate a low risk for tropical activity impacting northern Madagascar during the observation period.

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.

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