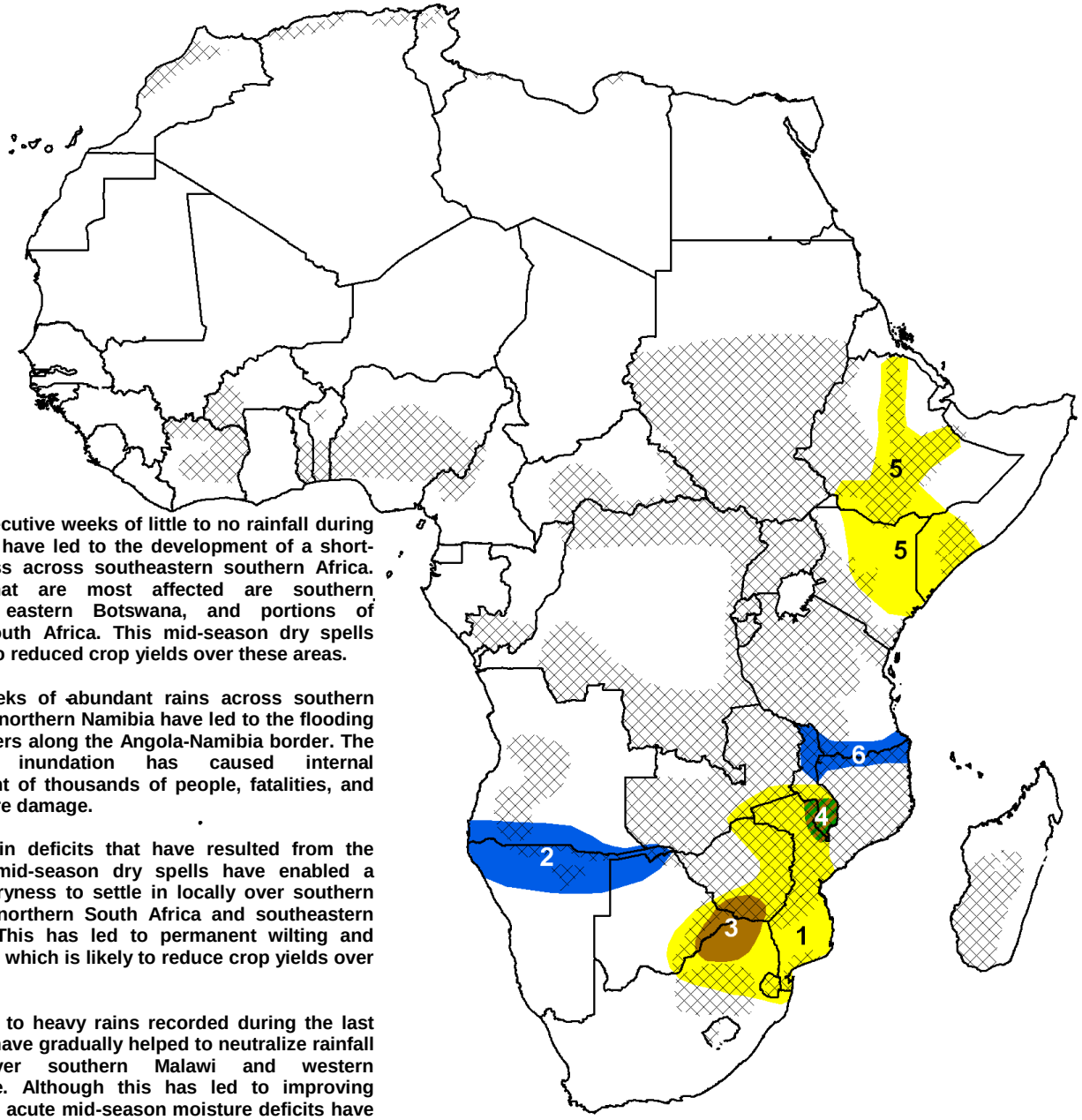
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
April 14 – April 20, 2011

- **Heavy rains begin to subside in the Angola-Namibia border in western, while continuous heavy downpour increases risks for flash flooding in the Tanzania-Mozambique border in eastern southern Africa**
- **Delayed and erratic start to the March-May rains season enhances dryness in the Greater Horn of Africa**



1) Six consecutive weeks of little to no rainfall during mid-season have led to the development of a short-term dryness across southeastern southern Africa. Regions that are most affected are southern Zimbabwe, eastern Botswana, and portions of northern South Africa. This mid-season dry spells could lead to reduced crop yields over these areas.

2) Nine weeks of abundant rains across southern Angola and northern Namibia have led to the flooding of major rivers along the Angola-Namibia border. The large-scale inundation has caused internal displacement of thousands of people, fatalities, and infrastructure damage.

3) Acute rain deficits that have resulted from the prolonged mid-season dry spells have enabled a long-term dryness to settle in locally over southern Zimbabwe, northern South Africa and southeastern Botswana. This has led to permanent wilting and failed crops, which is likely to reduce crop yields over these areas.

4) Moderate to heavy rains recorded during the last thirty days have gradually helped to neutralize rainfall deficits over southern Malawi and western Mozambique. Although this has led to improving drought, the acute mid-season moisture deficits have already adversely impacted crops.

5) The slow start to the March-May rains season in Ethiopia has already negatively affected crops and led to the development of moderate early season rainfall deficits over cropping areas of Ethiopia. The early-season dryness has extended further south to pastoral and agro-pastoral areas in northern Kenya.

6) Above-normal rainfall during the last 30 days has led to flooding in northern Malawi. The neighboring southern Tanzania is also expected to continue to receive heavy downpour during the next 7 days, increasing the potential for flash flooding in the region.

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

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

Heavy rains start to subside in western, while lack of rainfall persists in eastern southern Africa

Reduction in precipitation continued in western continental southern Africa during the past week (**Figure 1**). Moderate to heavy (20-50mm) rains were observed over southwestern Angola and northern Namibia, providing a slight relief to the large-scale flooding that has affected southern Angola and central northern Namibia since the last two months. Heavy rains also fell locally in central Botswana, southern Zambia, eastern Zimbabwe, and central parts of South Africa. In southeastern Africa, northern Malawi received another week of abundant rains, which led to flash flooding in Karonga in the northern district. Also, Tanzania, including both the bimodal to the north and unimodal areas to the south continued to receive good amounts of rains, which is indicative of the onset of the *Masika* and continuation of *Msimu* rains season, respectively. Portions of northern and coastal central Mozambique also received copious amounts of rains due to the development of a rain-producing system over the Mozambique Channel during the past week. In contrast, southern Mozambique, parts of northern South Africa, and Zimbabwe received little to no rainfall (0-10mm) during the past seven days. As the end of southern Africa rains season is approaching, rainfall deficits are likely to continue over these regions.

The number of rain days anomaly in the last thirty days shows positive anomalies between 10 and 15 rain days over southern Angola and northwestern and central Namibia (**Figure 2**). Positive anomalies in excess of 5 rain days were also observed over Botswana, eastern South Africa, eastern Zambia, Malawi, western and northeastern Mozambique, southern Tanzania, and western Madagascar. Conversely, negative anomalies ranging from -6 to -2 rain days were observed over northwestern Angola, western/southern South Africa, southern Mozambique, eastern Zimbabwe, and southern parts of Madagascar.

For the next seven days, precipitation forecast calls for reduced precipitation (0-20mm) over southern Africa, with the exception of moderate to heavy rainfall over northwestern Angola and southeastern Tanzania. The heavy rains forecasted over southern Tanzania are likely to increase the chance for flash flooding in the region.

Late and erratic start to the March-May rains in Ethiopia

During the past week, moderate to heavy (20-50mm) rainfall was observed over southwestern Ethiopia (**Figure 3**). Light to moderate (10-30 mm) rains were also recorded locally in many areas of the central and northern parts of the country. Despite the return of rains after two weeks of rainfall suppression, the poor distribution of rainfall hampers the elimination of early season rainfall deficits, which exceed 50mm over many cropping areas of Ethiopia. The short-term dryness that has developed in the regions has already been reported to having negatively affected early-planted crops, transitional crops, and land preparation in many local areas of Ethiopia. The continuation to the delay and erratic distribution to the March-May season could lead to reduced crop yields for the March-May rains season in Ethiopia. Model precipitation forecasts suggest moderate to heavy (30-50mm) rainfall over southwestern and northeastern Ethiopia for the next seven days.

Satellite Estimated Precipitation (mm)
Valid: April 5th – April 11th, 2011

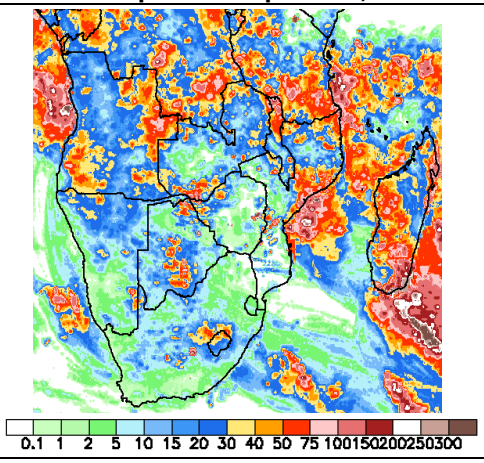


Figure 1: NOAA/CPC

30-Day Number of Rain Days Anomaly
Valid: As of April 11th, 2011

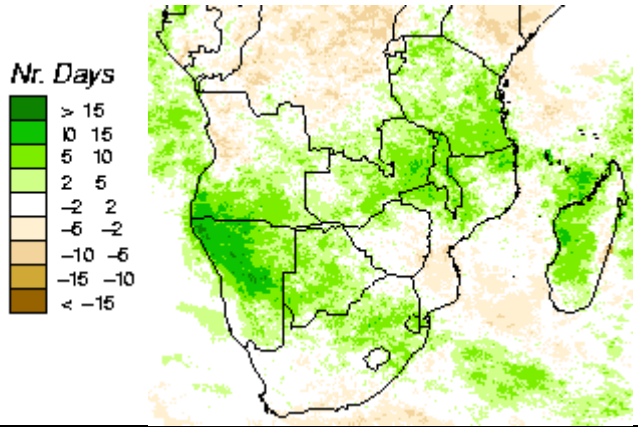


Figure 2: USGS/EROS

Satellite Estimated Precipitation (mm)
Valid: April 5th – April 11th, 2011

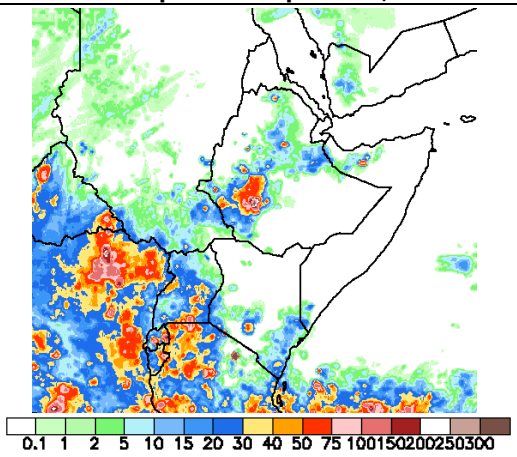


Figure 3: NOAA/CPC

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.