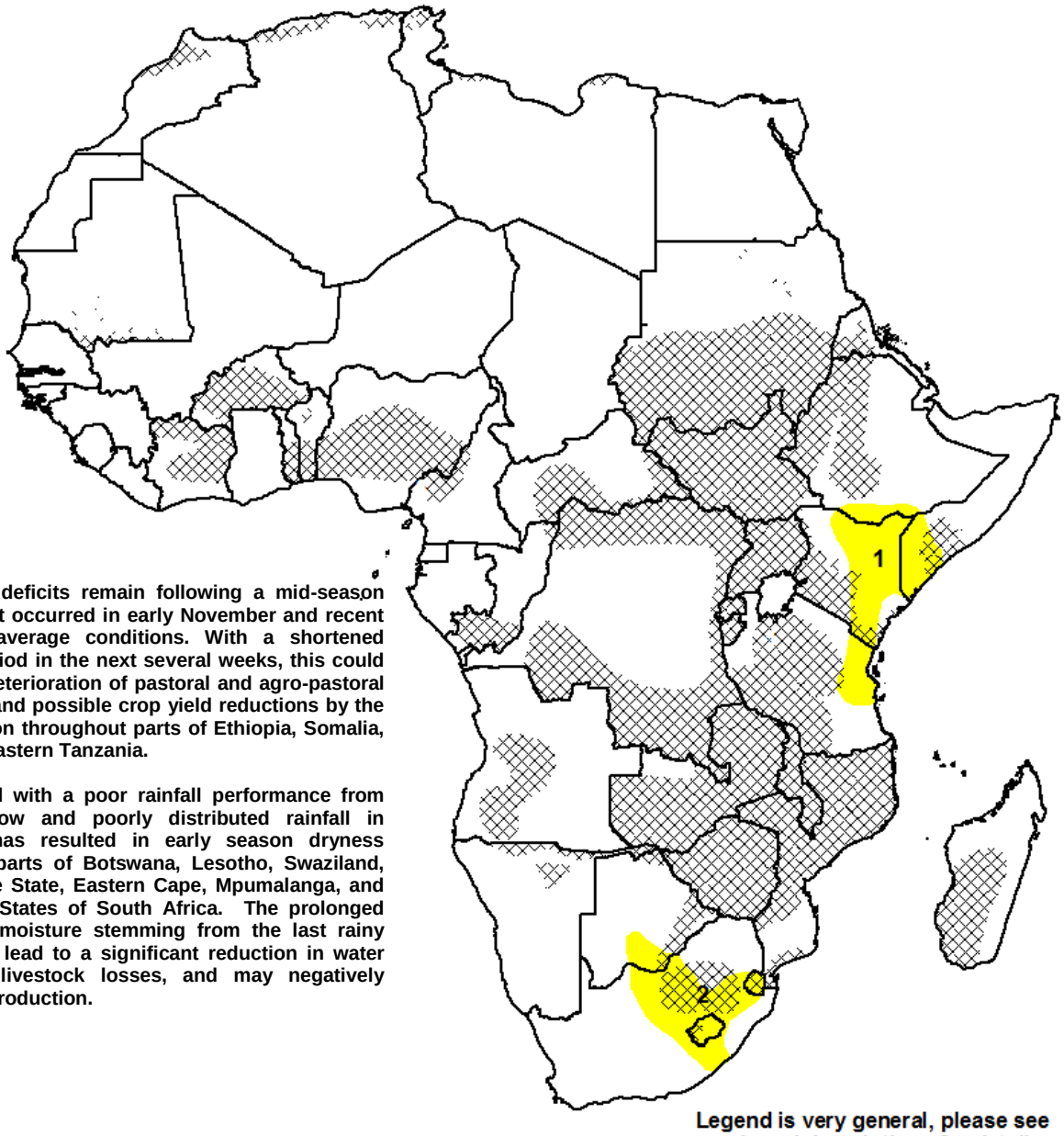
Climate Prediction Center's Africa Hazards Outlook
For USAID / FEWS-NET
December 6 – December 12, 2012

- **A delayed start to the southern Africa monsoon season continues across eastern Southern Africa.**
- **Dry conditions persisted across portions of northern, eastern and southern Kenya.**



1) Moisture deficits remain following a mid-season dry spell that occurred in early November and recent drier than average conditions. With a shortened recovery period in the next several weeks, this could result in a deterioration of pastoral and agro-pastoral conditions, and possible crop yield reductions by the end of season throughout parts of Ethiopia, Somalia, Kenya and eastern Tanzania.

2) Combined with a poor rainfall performance from last year, low and poorly distributed rainfall in November has resulted in early season dryness throughout parts of Botswana, Lesotho, Swaziland, and the Free State, Eastern Cape, Mpumalanga, and North West States of South Africa. The prolonged absence of moisture stemming from the last rainy season may lead to a significant reduction in water availability, livestock losses, and may negatively affect crop production.

Delayed start of season continues across Zimbabwe, Malawi and Mozambique.

During the past week, rains were heavy and above-average across western southern Africa while remaining light and below-average in eastern southern Africa. The heaviest precipitation (>50mm) fell across Angola, Zambia, Madagascar, South Africa and northern Namibia. Recent heavy rains in Angola have resulted in an above-average start to the rainy season. In contrast, light to moderate rains (5-30mm) were observed in Zimbabwe, Mozambique, Tanzania and northern South Africa (**Figure 1**). The lack of rains during the previous week has continued a delayed start to the rainy season across eastern southern Africa. NDVI anomalies for the last dekad of November in central South Africa, Zimbabwe, Malawi and Mozambique suggest deteriorating ground conditions.

The contrasting nature of the start of the southern African rainy season is evident in thirty-day rainfall anomalies. While above-average rains (10-50mm above-average) have occurred in western southern Africa, below-average rains (50-100mm) have fallen in central/eastern South Africa, Zimbabwe, Mozambique and Malawi (**Figure 2**). Many areas in central Mozambique and eastern Zimbabwe have observed less than 5 rain days during the past thirty days. Combined with a poor end of the previous monsoon season, the delayed start to the current season could lead to a reduction in water availability, livestock losses and negatively affect crop production.

For the next seven days, rains are forecast to be heavy (>40mm) across Zimbabwe and central Mozambique, reducing early season rainfall deficits. Heavy rains are also expected in Angola, western Zambia and eastern South Africa. In contrast, below-average rains are forecast for northern Mozambique and eastern Tanzania, likely increasing early season dryness.

Dry conditions remain in Kenya, Somalia and Tanzania.

Heavy rains (>40mm), during the past week, were localized around Nairobi, coastal Kenya, southern Somalia and coastal Tanzania. However, rains were below-average and light across dry portions of southern Somalia, northern/southern Kenya and northern Tanzania. Poorly distributed rains, dating back to November, have led to below-average seasonal rainfall. The mid-season cessation of rains, with the largest negative anomalies (>50mm) in northern/southeastern Kenya and southern Somalia, has led to deteriorating vegetative conditions, as seen by negative NDVI anomalies during the third dekad of November (**Figure 3**). However, pastoral conditions, while dry, are adequate. With less than a month left in the current short-rains season, there is little time remaining for additional rains to reverse the impact of the current mid to late season dryness in northern Kenya and southern Somalia. For the next week, isolated heavy rain showers (>50mm) are possible across central Kenya while most areas are forecast to receive light rains (<20mm), maintaining current dry conditions.

Satellite Estimated Rainfall (mm)
Valid: November 28th – December 4th, 2012

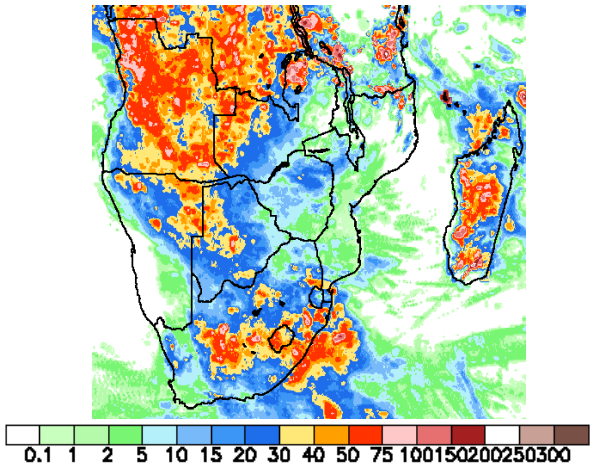


Figure 1: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm)
Valid: November 5th – December 4th, 2012

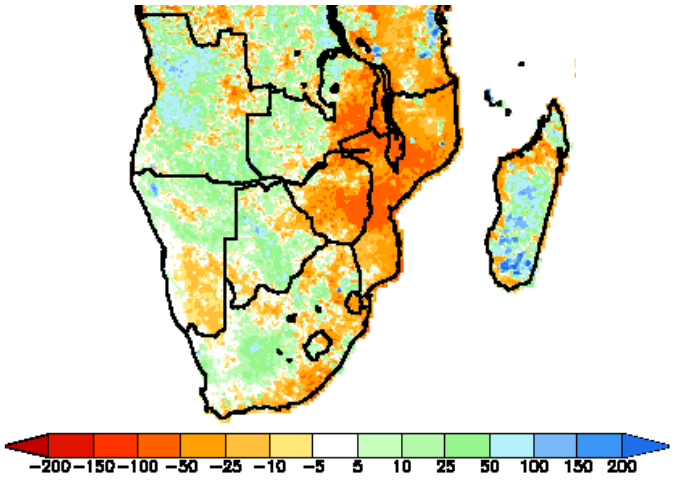


Figure 2: NOAA/CPC

NDVI Anomaly
Valid: As of the 3rd dekad of November, 2012

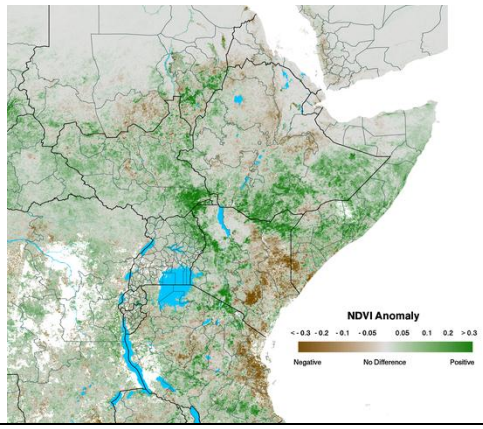


Figure 3: USGS/EROS

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.