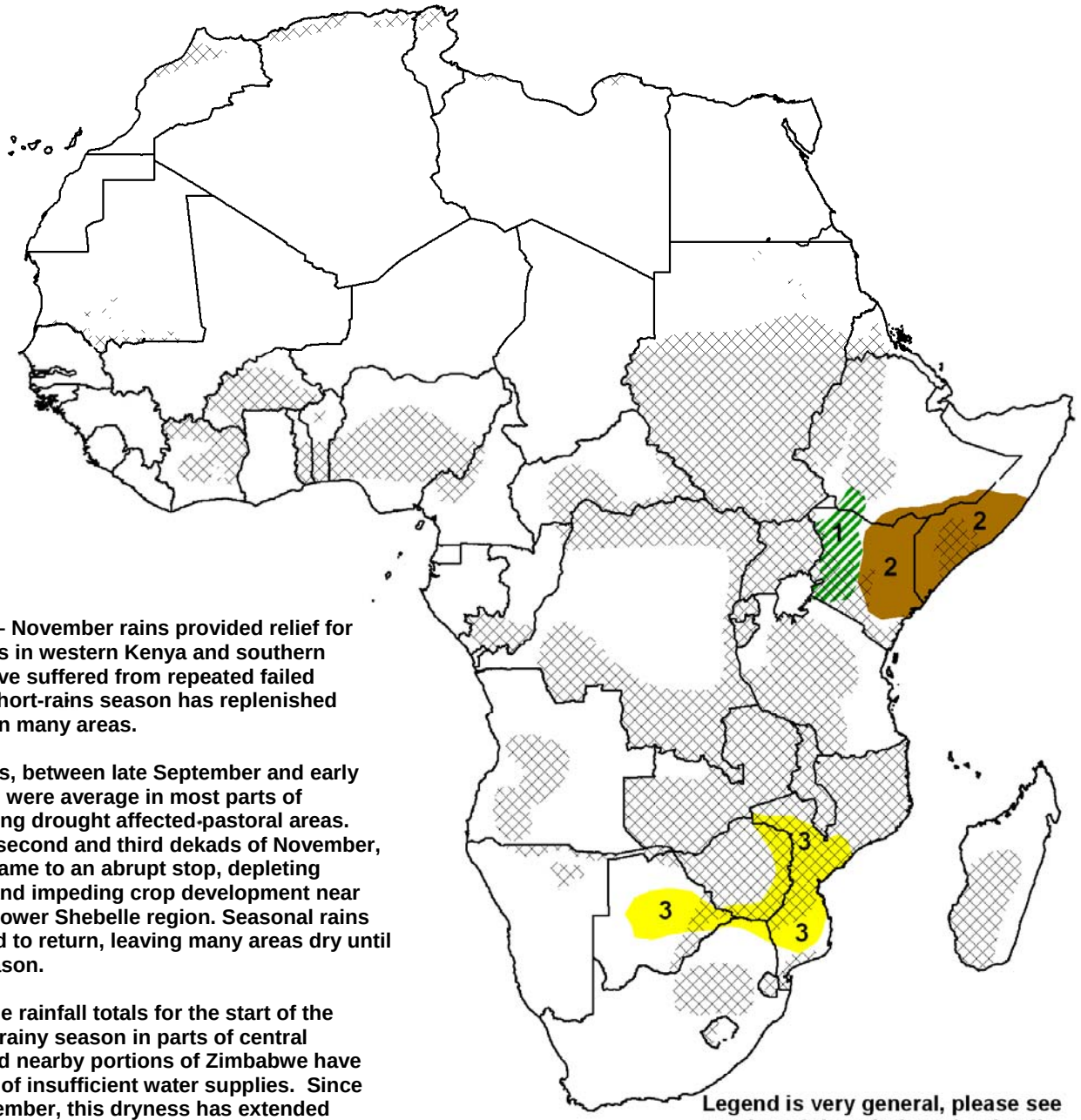
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
December 18 – 24, 2008

- **A delay in southern African rainfall continues to impact parts of central Mozambique and eastern Zimbabwe. As rainfall deficits strengthen, early-season cropping activities may be impeded and reduced water availability may be expected.**

- **Lack of October to December rainfall continues to exacerbate crop, pastoral and agro-pastoral conditions across the Shabelle and southern regions of Somalia, as well as, parts of eastern Kenya. There may be impending concerns of limited water availability as conditions are likely to persist.**



1) The October – November rains provided relief for many local areas in western Kenya and southern Ethiopia that have suffered from repeated failed seasons. The short-rains season has replenished water supplies in many areas.

2) The *Deyr* rains, between late September and early November 2008, were average in most parts of Somalia, including drought affected-pastoral areas. However in the second and third dekads of November, the *Deyr* rains came to an abrupt stop, depleting pastoral areas and impeding crop development near the middle and lower Shebelle region. Seasonal rains are not expected to return, leaving many areas dry until next start of season.

3) Below-average rainfall totals for the start of the October to May rainy season in parts of central Mozambique and nearby portions of Zimbabwe have led to concerns of insufficient water supplies. Since the start of December, this dryness has extended further south and west, affecting early season cropping activities along the higher elevations of eastern Zimbabwe and in parts of central and eastern Botswana. A number of local areas in Botswana are experiencing deteriorating crop conditions.

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

- December Cropped Areas
- Favorable
- Somewhat Favorable
- Flooding
- Short-term Dryness
- Drought
- Severe Drought

Southern African Dryness increasing; affecting parts in Mozambique, Zimbabwe, and into Botswana.

During the last observation period, an increased precipitation regime was observed in many areas in Angola, Zambia, Tanzania and Malawi. Widespread rainfall totals ranging between 30 – 50mm fell in many areas, with higher totals in excess of 75mm observed in northern Mozambique. Towards the south, however, many parts of Mozambique, Zimbabwe and Botswana have been characterized by a suppressed rainfall regime. In central and southern regions of Mozambique, precipitation amounts of less than 15 mm were observed, as other regions further west received poor rainfall amounts in parts of southern Zimbabwe and central Botswana in the last seven days (**Figure 1**). Areas east of the Kalahari Desert have seen relatively little rainfall (< 50 mm) in the last two weeks.

According to satellite-derived precipitation analyses, many of these regions in southern Africa face significant rainfall deficits, which have continued to strengthen since the start of December. In Mozambique, the provinces of Sofala and Manica continue to experience less than half of average of their seasonal rainfall totals. The severity of this dryness has extended further west into the higher elevations of eastern Zimbabwe in the last two weeks. In southern Mozambique, rainfall deficits in excess of 100 mm are evident further south, affecting the provinces of Gaza and Inhambane, as well as the Harare and Manicaland regions of Zimbabwe (**Figure 2**).

The broad scale pattern of dryness in southern Africa has grown more spatially prominent, and also continues to negatively impact early season cropping activities. Poor soil water and crop conditions have become increasingly evident across central and eastern Botswana, extending along the Zimbabwe / South Africa border and into Mozambique (**Figure 3**). If the delayed onset of seasonal rains persists, concerns of reduced crop production and limited water availability may be expected by the end of year. Precipitation forecasts in the next seven days show some relief dry regions in southern Mozambique. Rainfall totals in excess of 50 mm may be expected to provide much needed ground moisture.

Rains less likely to return to the Greater Horn before end of season.

In southern Somalia and eastern Kenya, an abrupt end to the October – December rains has resulted in increased rainfall deficits across a broad area in East Africa. In the northeastern and coast provinces of Kenya, rainfall totals since October range between 50 to 80 percent less than average. Precipitation forecasts do not indicate rains to return the region for the next 7 to 14 days. A prolonged absence of rains is expected to lead to reduced harvests for late-planted crops, as well as, potential constraints on water resources until the next rains season in the Greater Horn.

Satellite Rainfall Estimates (mm)
December 7th – December 13th, 2008

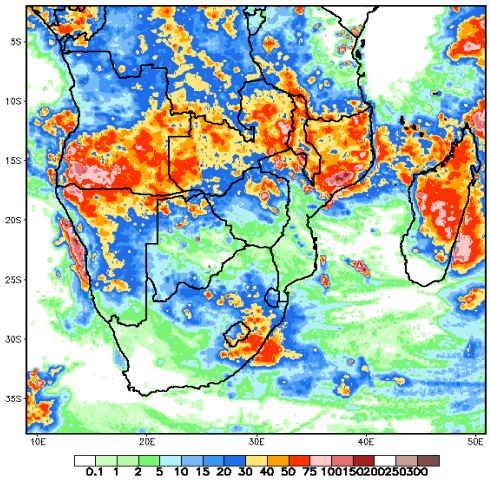


Figure 1:
Source: FEWS NET/NOAA

Satellite Rainfall Anomalies (mm)
From October 1st - December 13th, 2008

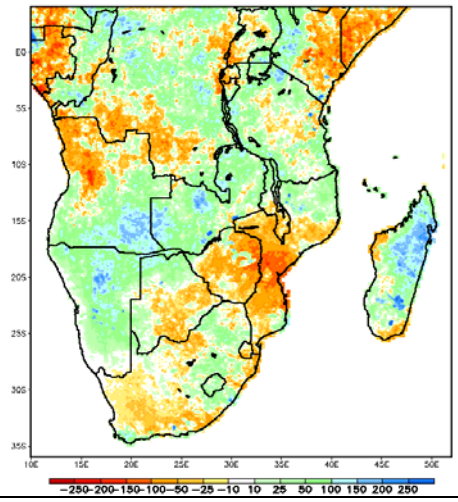


Figure 2:
Source: FEWS NET/NOAA

Crop Water Requirement Satisfaction Index (WRSI)
As of the 1st Dekad of December, 2008

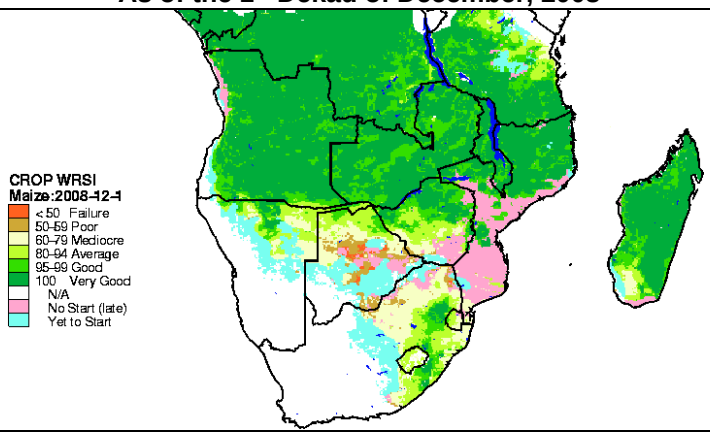


Figure 3:
Source: FEWS NET/USGS