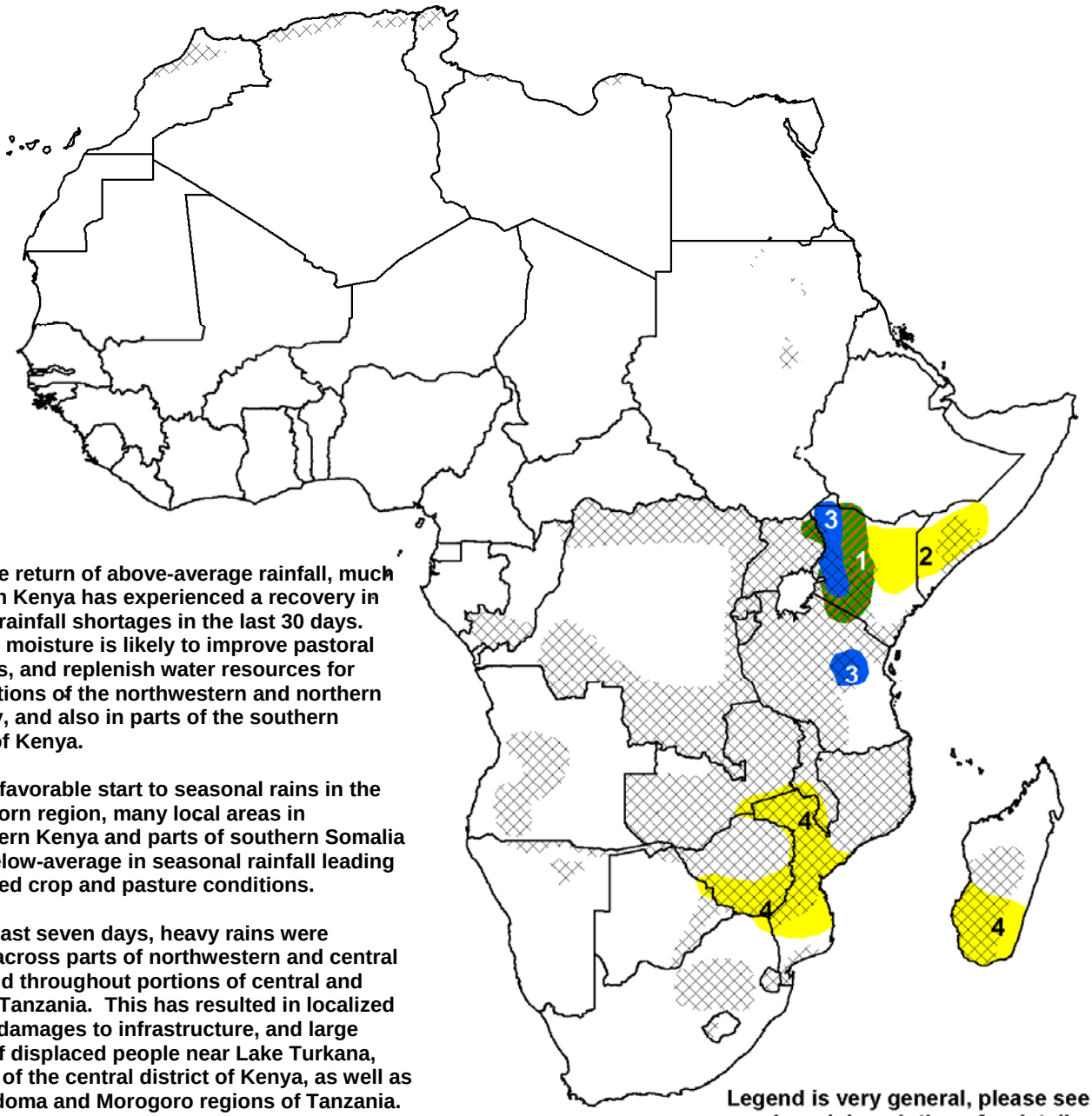
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
January 7, 2009 – January 13, 2010

- **Unseasonably heavy rainfall resulted in localized flooding and damages to infrastructure across portions of western Kenya and central Tanzania in the last seven days.**
- **A regional drying trend in southern Africa continues to affect parts of central Mozambique and southern Malawi. Portions of southern Zimbabwe and the Caprivi Strip also observe a weakening in early season moisture surpluses.**



1) With the return of above-average rainfall, much of western Kenya has experienced a recovery in seasonal rainfall shortages in the last 30 days. Abundant moisture is likely to improve pastoral conditions, and replenish water resources for many portions of the northwestern and northern Rift Valley, and also in parts of the southern districts of Kenya.

2) After a favorable start to seasonal rains in the Greater Horn region, many local areas in northeastern Kenya and parts of southern Somalia remain below-average in seasonal rainfall leading to degraded crop and pasture conditions.

3) In the last seven days, heavy rains were received across parts of northwestern and central Kenya, and throughout portions of central and southern Tanzania. This has resulted in localized flooding, damages to infrastructure, and large number of displaced people near Lake Turkana, and parts of the central district of Kenya, as well as in the Dodoma and Morogoro regions of Tanzania. Prolonged inundation in these areas may increase the risk for Malaria and other water-borne disease outbreaks.

4) Three weeks of little to no rainfall strengthened seasonal moisture deficits across central Mozambique, southern Malawi, southern Madagascar and southern Zimbabwe.

A late season increase in rains helps to mitigate moisture shortages across Kenya.

During the last observation period, heavy and well-distributed precipitation was observed across the western half of Kenya, southern Ethiopia and across many portions of Tanzania. Substantial rainfall totals between 50-75 mm were received from Lake Abaya in southern Ethiopia extending southwards towards Malawi, with locally heavier amounts in excess of 100mm near Lake Turkana and Rift Valley in Kenya, as well as near the Dodoma and Morogoro regions of Tanzania (**Figure 1**).

Locally, this torrential rainfall resulted in destructive flooding and damages to infrastructure for many local areas in the Rift Valley and parts of the central districts in Kenya. The extent of these floods has led to a number of fatalities, losses to livestock, and hundreds of displaced people across the Rongai, Marigat and Mogotio and Nakuru districts of Kenya. Further south, similar conditions were reported in the Dodoma and Morogoro regions of central Tanzania due last weeks rains.

Last weeks heavy rains appears to be apart of a larger trend of increased rainfall across East Africa. Currently, the western half of Kenya largely remains above-average in precipitation since December, with some localized deficits near the Lake Victoria. Despite the hiatus in Kenyan rains during November, above-average precipitation and moisture (**Figure 2**) is expected to improve pastoral conditions across much of western Kenya, and also benefit both early and late planted crops for the short-rain areas in southeastern Kenya.

Precipitation forecasts suggest a continuation of rainfall across Ethiopia, Kenya and Tanzania in the next seven days. Precipitation amounts in excess of 50 mm are expected over much of Tanzania and southern Kenya, which may exacerbate flooding conditions throughout some local areas.

Satellite Estimated Precipitation (mm)
Valid: December 27 2009 - January 2, 2010

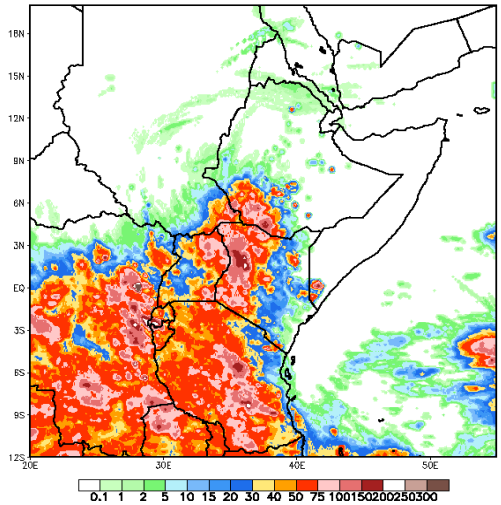


Figure 1: NOAA/CPC

Moisture Index
As of: January 2, 2010

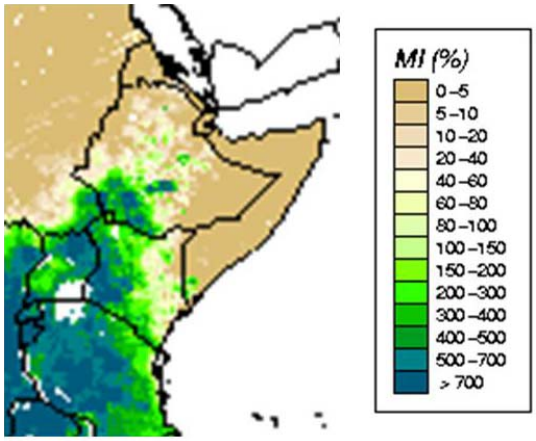


Figure 2: USGS/EROS

Drying trend continues throughout portions of southern Africa.

In the last seven days, favorable amounts of rain were received throughout Zambia, Angola, Botswana, Namibia and South Africa. However, marginal and poorly distributed rains were observed across many parts central and southern Mozambique, southern Zimbabwe, and the Caprivi Strip region for the second consecutive week.

The lack of precipitation continues to strengthen seasonal deficits already in place across southern Africa. Many local areas in central and southern Mozambique have received nearly half of their seasonal rainfall totals over the last 3 months (**Figure 3**). This dryness has also shown signs of extending westward into many parts of southern Zimbabwe and along the southern Zambia and Mozambique/Zimbabwe border, as seasonal rainfall anomalies have now shifted from above to below average in the last week.

Satellite Estimated Precipitation Anomaly (mm)
Valid: October 1 2009 - January 2, 2010

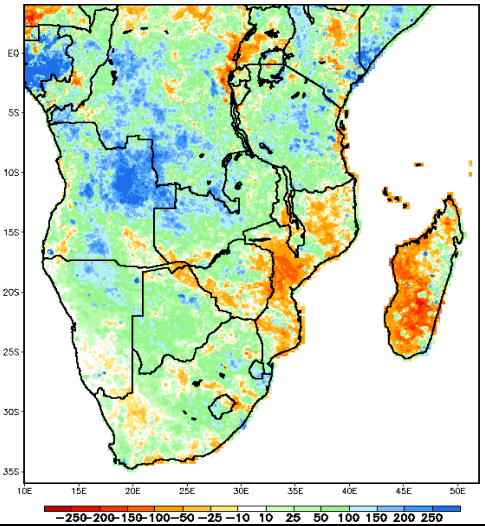


Figure 3: NOAA/CPC