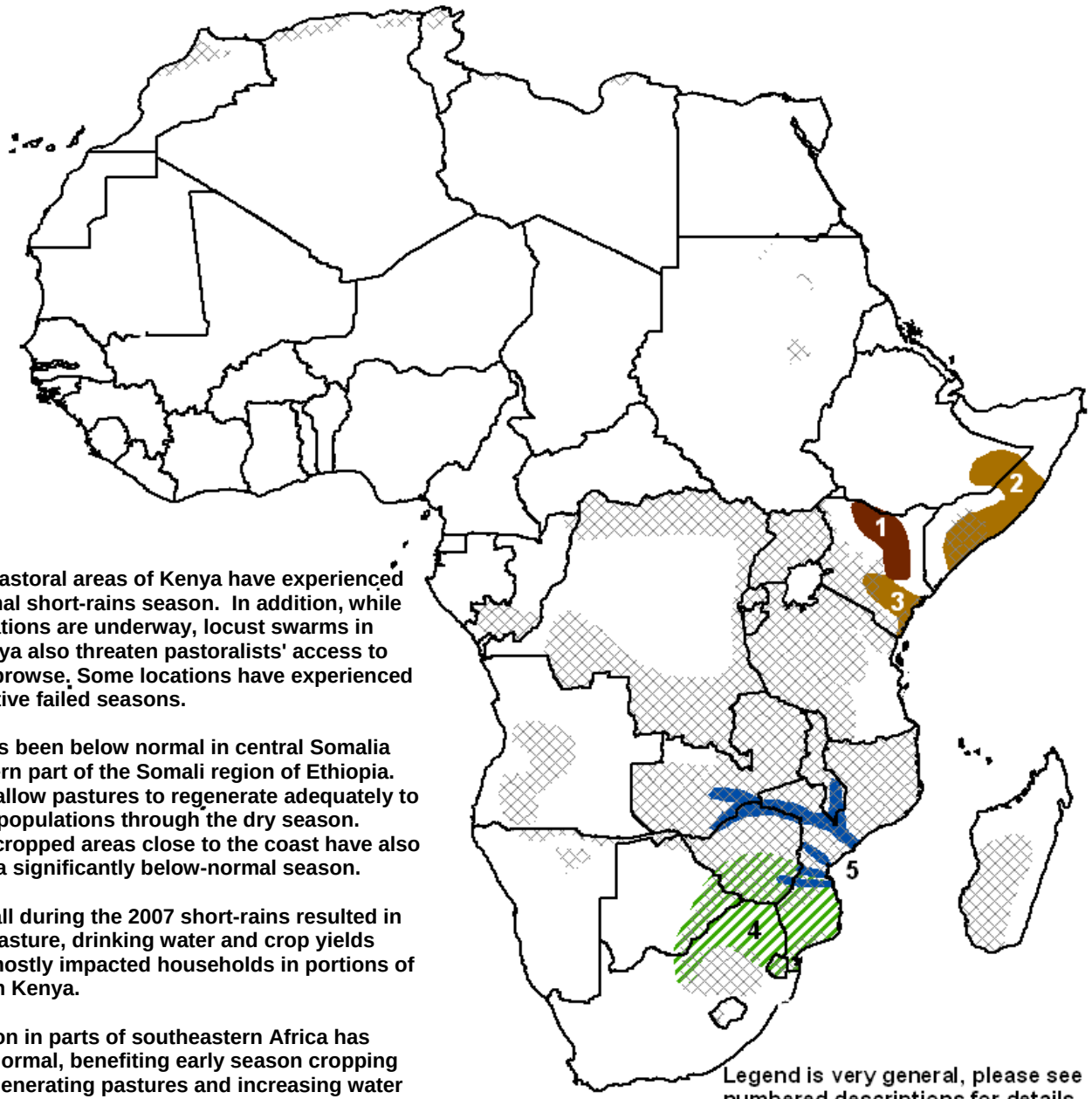
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
January 10 – 16, 2008

- **The short rains season of the Greater Horn region of Africa has nearly ended. The season has largely failed in many areas which resulted in poor crop harvests, limited pasture regeneration and reduced drinking water availability for parts of northern and south-central Kenya, southern Somalia and Ethiopia. Locust swarms are compounding the effects of the poor seasonal rainfall by further reducing pasture and damaging crops, although control efforts have largely limited the spread**

- **Above-normal rainfall has been linked to flooding over many river basins over various parts of southern Africa. Regions of key concern include the Magoye, Save, Buzi, Pungue, Zambezi and Shire Rivers. As the current precipitation pattern is not expected to shift during the upcoming Hazard Period, these river basins will remain at high risk of further flooding, destroying homes and damaging crops in localized areas of Zimbabwe, Zambia and Mozambique.**



1) Northern pastoral areas of Kenya have experienced a below-normal short-rains season. In addition, while control operations are underway, locust swarms in northern Kenya also threaten pastoralists' access to pasture and browse. Some locations have experienced two consecutive failed seasons.

2) Rainfall has been below normal in central Somalia and the eastern part of the Somali region of Ethiopia. This will not allow pastures to regenerate adequately to last pastoral populations through the dry season. Some of the cropped areas close to the coast have also experienced a significantly below-normal season.

3) Poor rainfall during the 2007 short-rains resulted in insufficient pasture, drinking water and crop yields which have mostly impacted households in portions of south-eastern Kenya.

4) Precipitation in parts of southeastern Africa has been above normal, benefiting early season cropping activities, regenerating pastures and increasing water supplies.

5) Prolonged rainfall this season caused flooding in Zimbabwe, Zambia and Mozambique since mid-December. Heavy rainfall is expected to continue and has the potential to cause increased inundation along the Pungue, Zambezi and Shire Rivers. The Magoye, Zambezi and Pungue rivers have remained above alert levels, where there is a high risk for severe flooding along the Zambezi basin for the upcoming hazard period.

Rainfall exacerbates flooding in Zimbabwe, Zambia and Mozambique, normal cropping activities to the south.

Flooding remains a chief concern in many local areas in Mozambique, Zimbabwe, Malawi and Zambia. These areas include the Save, Buzi, Pungue, Zambezi, Shire and Magoye river basins. Reports indicated that the Pungue river inundation levels have remained above the alert level, while the Save and Buzi river levels have begun to subside and fall below alert levels in Southern Mozambique. Conversely, the Messalo and Montepuez river basins of Northern Mozambique are becoming a growing concern, as these river levels have steadily been on the rise.

Over the last week, the Cahora Bassa Dam was reported to increase its discharge rates from 4,500 to 6,600 cubic meters per second to alleviate the hydrometric stress upstream of the Zambezi River in Western Mozambique. As the observed and forecasted precipitation totals continue to remain well above normal **(Figures 1 & 2)**, particularly around the Zambia and Zimbabwe border as well as parts of Eastern Zambia, Malawi and Mozambique, the entire Zambezi basin becomes the key focus of the flooding concern and will likely worsen downstream into the districts of Mutarara, Cia, Marromeu and Mopeia in Central Mozambique.

According to the National Center of Emergency Operations (CENOE), a total of 6,900 households were reported to be directly affected by the rising water levels where over 35,000 people have reached resettlement centers. No flood-related deaths have been officially reported as of yet, however, reports indicate that 31,481 hectares of crops have been lost due to the floods. Rescue and evacuation operations have been underway and accommodation camp populations have been gradually increasing. Additional efforts have also been made to circumvent water-related disease outbreak such as cholera at these sites.

Elsewhere in the South, the observed above-normal rainfall has benefited cropping conditions and pasture activities in and neighboring the Maize Triangle. Rains have been light over the past week to permit sunlight and promote conditions suitable for growth. Tropical depression "Elnus" did not make landfall over the continent, as the majority of the system's precipitation fell within Mozambique Channel. The distribution of "Elnus" rainfall has not posed any hydrological or agricultural concern.

Poor End to Poor Short-Rain season in the Horn, compounded by continued Locust Swarms.

Since the start of 2008, little to no rain has been observed across the majority of Ethopia, Kenya and Somalia. While some areas managed to have a reasonable long rainy season in 2007, many others did not. Major drought areas remain in portions northern and south-eastern Kenya, as well as southern Somalia. For south-eastern households in Kenya, two consecutively failed seasons will result in significant food deficits for 2008. Forecasts show little to no precipitation in these areas by end of week to salvage any part of the failed season.

Locust swarms continue to pose a threat along eastern Ethopian/Somalia border and in parts of Kenya **(Figure 3)**. Recent reports have asserted that locusts have migrated from Gode region of Ethiopia towards Northern Kenya. However, successful efforts have been made to cease locust migration through the dispersion of chemical pesticides.

RFE Precipitation Anomaly (mm)
Oct 1, 2007 – Jan 7, 2008

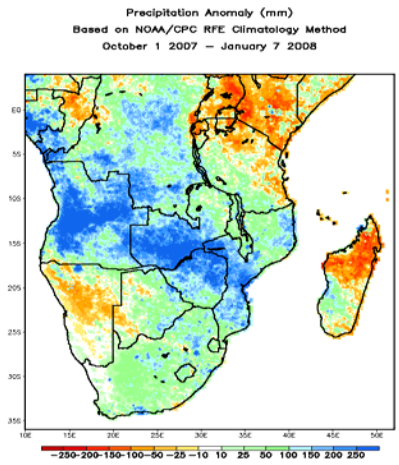


Figure 1
Source: NOAA

3-Day Total Precipitation Forecast (ETA)
January 8 – 11, 2008

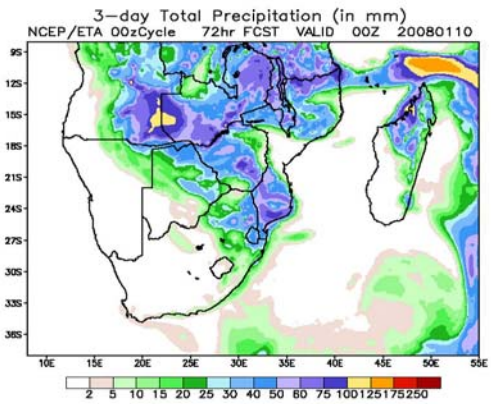


Figure 2
Source: NOAA

Infestation of Desert Locusts in East Africa
As of December 21, 2007

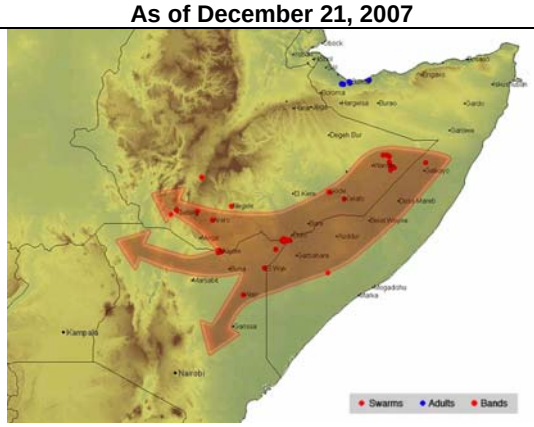


Figure 3
Source: FAO