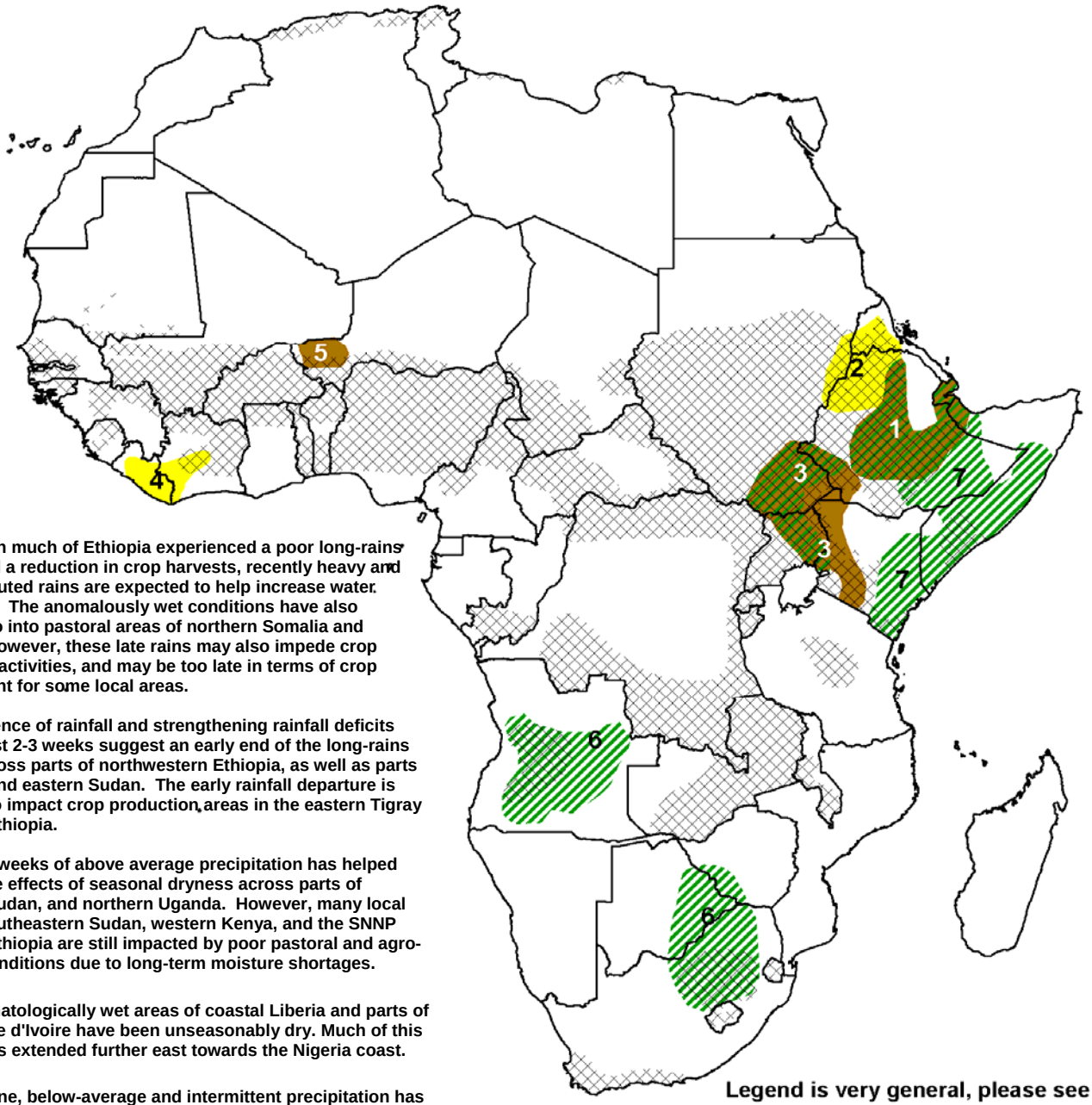
# The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
# October 22 - 28, 2009

- **In the last seven days, significantly heavy precipitation fell over many parts of southern Somalia and eastern Kenya. This surge of enhanced rainfall is expected to be beneficial for areas that have been affected by long-term drought.**
- **Many portions of Ethiopia continue to experience anomalously wet rains. Although late, the recent increase in ground moisture is expected to bring some relief after a dry long rains season.**




**1) Although much of Ethiopia experienced a poor long-rains season and a reduction in crop harvests, recently heavy and well-distributed rains are expected to help increase water availability. The anomalously wet conditions have also extended to into pastoral areas of northern Somalia and Djibouti. However, these late rains may also impede crop harvesting activities, and may be too late in terms of crop development for some local areas.**

**2) The absence of rainfall and strengthening rainfall deficits over the last 2-3 weeks suggest an early end of the long-rains season across parts of northwestern Ethiopia, as well as parts of Eritrea and eastern Sudan. The early rainfall departure is expected to impact crop production areas in the eastern Tigray region of Ethiopia.**

**3) Several weeks of above average precipitation has helped mitigate the effects of seasonal dryness across parts of southern Sudan, and northern Uganda. However, many local areas in southeastern Sudan, western Kenya, and the SNNP region of Ethiopia are still impacted by poor pastoral and agro-pastoral conditions due to long-term moisture shortages.**

**4) The climatologically wet areas of coastal Liberia and parts of central Côte d'Ivoire have been unseasonably dry. Much of this dryness has extended further east towards the Nigeria coast.**

**5) Since June, below-average and intermittent precipitation has been observed over a number of local areas in Niger. This has resulted in a reduction crop harvests in the last month.**

**6) This month, early season wetness has the potential to lead to favorable ground conditions and increased water availability for a number this anomalously positive rainfall does not imply a beneficial season at present.**

**7) In the last week, significantly heavy rainfall fell across many parts of eastern Ethiopia, central and southern Somalia, as well as eastern Kenya. This precipitation is expected to help alleviate many areas impacted by long-term drought. With favorable rainfall expected to continue, land preparation and planting are currently underway for many cropping areas.**

**Heavy rains hit across Somalia and Kenya..**

Widespread amounts of heavy precipitation were received across much of East Africa in the last seven days. The heaviest rains were concentrated across parts of southern Somalia and eastern Kenya. Satellite rainfall estimates indicate seven day rainfall accumulations in excess of 100mm across the northeastern and coastal provinces of Kenya (**Figure 1**). Locally, the Garissa and Tana River districts in Kenya received rainfall amounts greater than 150mm in the last week, as well as in the Shabelle region of Somalia.

Climatologically, a gradual increase of October-December seasonal precipitation normally occurs during this time of year in this region of East Africa. However, the magnitude of the heavy rainfall in the last week has left many of local areas in Kenya and Somalia greater than 200mm above average for the last 30 days (**Figure 2**). These positive rainfall anomalies suggest that some local areas have received at least two thirds of their October-December seasonal accumulation just in the last week.

While the extent of this wetness may appear favorable for many of these areas affected by long-term dryness, a continuation of significantly high rainfall also suggests the potential for localized flooding, particularly over northeastern Kenya, southeastern Ogaden region of Ethiopia, and the Juba River Basin of Somalia in the next seven days.

**Continued improvement for Ethiopia.**

During the last observation period, a favorable distribution of rains fell across much of Ethiopia. Rainfall totals greater than 50mm were observed across rift valley, extending into the Afar region and throughout much of the pastoral Ogaden region of the country. In addition to last week's beneficial rains, positive precipitation anomalies have strengthened throughout much of Ethiopia, which has continued to eliminate much of the long-term seasonal deficits observed since June.

Although the recent rainfall trend is unseasonably late, the increased rains and moisture is expected to help relieve pastoral areas impacted by a below-average long-rains season. Soil water index analyses reflect the anomalous wetness (**Figure 3**), with favorably high soil water concentrations extending from the Gambella region towards the northern Oromia region. However, the late abundance of rainfall over the last couple of weeks may impede harvesting activities.

**Poor crop production in Niger.**

Many local parts in Niger experienced inconsistent rainfall since June. Although many of these areas were able to overcome seasonal deficits with periods of anomalously positive rainfall, the intermittency of precipitation has led to a poor crop production in several local areas. Field reports from Niger indicate the heaviest affected areas were in the western portion of the country, coupled with below-average seasonal rainfall.

**Satellite Estimated Rainfall Totals (mm) for East Africa**
**13th October – 19th October 2009**

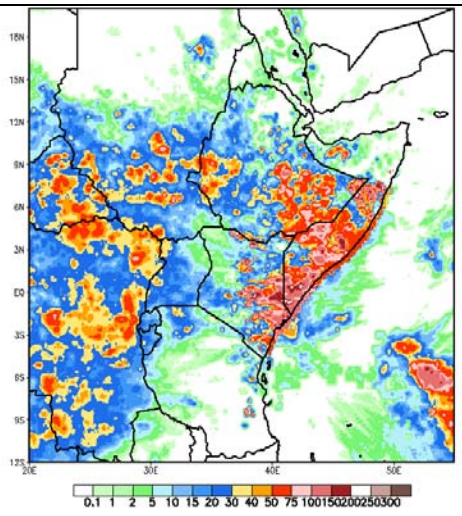



**Figure 1**
**Source: NOAA/CPC**

**Satellite Rainfall Anomaly (mm)**
**20th September – 19th October, 2009**

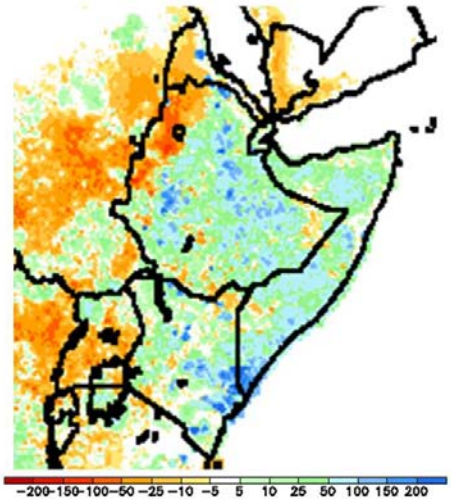



**Figure 2:**
**Source: NOAA/CPC**

**10-Day Soil Water Index (mm)**
**As of 17th October, 2009**

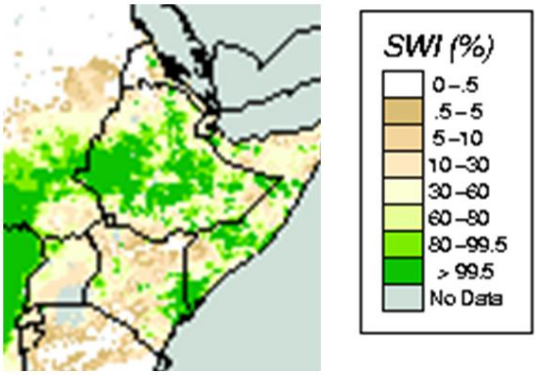



**Figure 3:**
**Source: USGS/FEWS-NET**

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