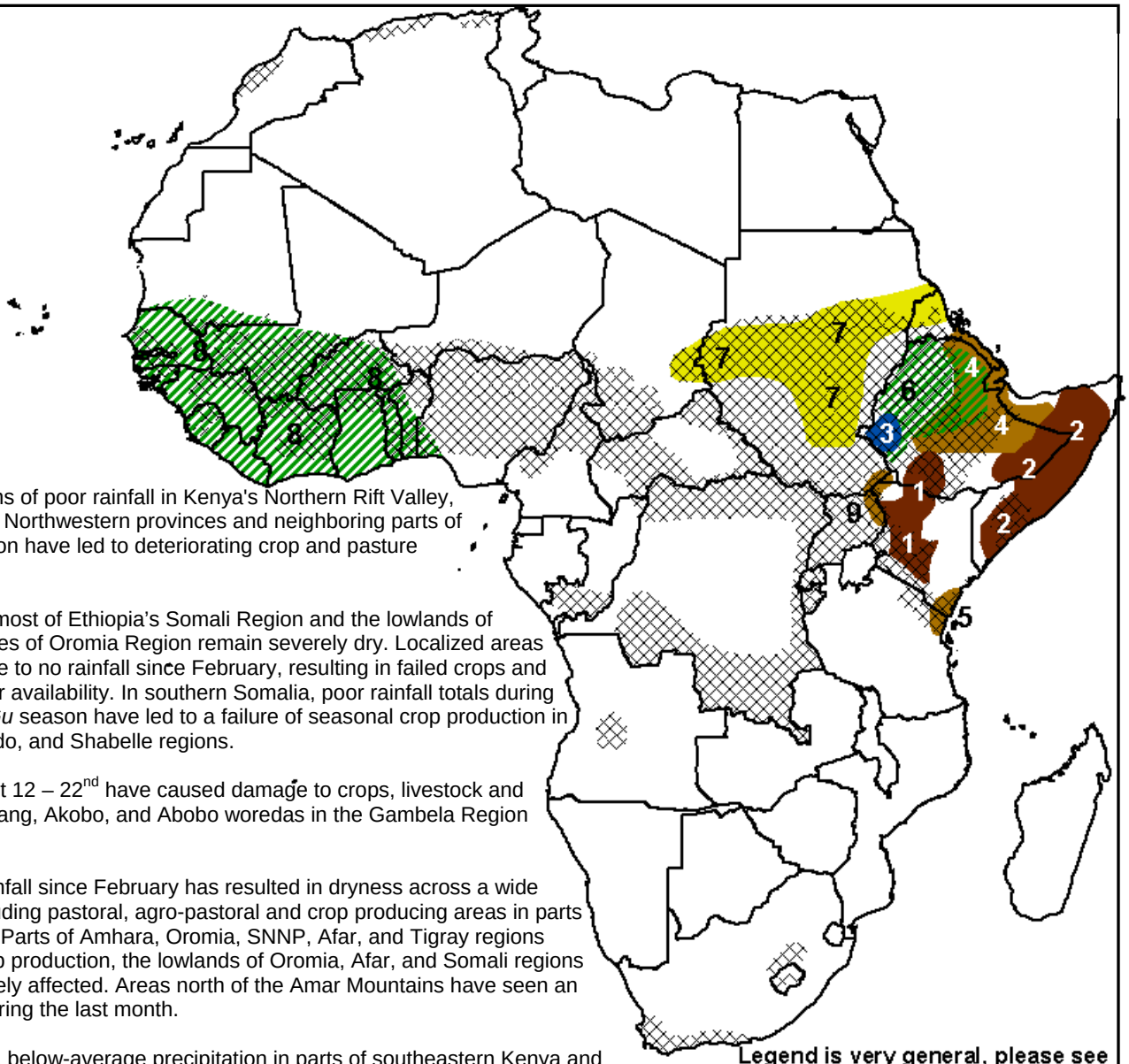
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa August 28 – September 3, 2008

- **Above-average precipitation across western Africa has resulted in localized flooding and flood-related damage to bridges, roads, railways, and other infrastructure. The above-average rainfall trend may continue through September.**
- **Beneficial rains occurred in eastern Africa during the August 21 – 27 observation period. Rains brought improvement to negative rainfall anomalies in southern Sudan.**



1) Successive seasons of poor rainfall in Kenya's Northern Rift Valley, Central, Eastern, and Northwestern provinces and neighboring parts of Ethiopia's SNNP region have led to deteriorating crop and pasture conditions.

2) Much of Somalia, most of Ethiopia's Somali Region and the lowlands of Borena and Guji zones of Oromia Region remain severely dry. Localized areas have experienced little to no rainfall since February, resulting in failed crops and low pasture and water availability. In southern Somalia, poor rainfall totals during the May-June 2008 *Gu* season have led to a failure of seasonal crop production in Somalia's Jubba, Gedo, and Shabelle regions.

3) Floods from August 12 – 22nd have caused damage to crops, livestock and infrastructure in the Itang, Akobo, and Abobo woredas in the Gambela Region of Ethiopia.

4) Below-average rainfall since February has resulted in dryness across a wide area of Ethiopia, including pastoral, agro-pastoral and crop producing areas in parts of northern Somalia. Parts of Amhara, Oromia, SNNP, Afar, and Tigray regions report decreased crop production, the lowlands of Oromia, Afar, and Somali regions being the most severely affected. Areas north of the Amar Mountains have seen an increase in rainfall during the last month.

5) Since last October, below-average precipitation in parts of southeastern Kenya and northeastern Tanzania has resulted in poor soil conditions and crop development along the coast.

6) Much of western Ethiopia has experienced abundant and well-distributed rainfall since late March.

7) Rainfall has been slightly below-average since mid-July across Sudan, northern Eritrea, and eastern Chad. Satellite derived crop models indicate relatively poorer crop conditions in northern Sudan compared to elsewhere.

8) Above-average rainfall since the beginning of July has resulted in increased water resources and favorable crop conditions across much of western Africa. However, localized flooding has caused damage to bridges, roads, railways, and other infrastructure and agriculture in Benin, Togo, Mali, Mauritania, Niger, Sierra Leone, Liberia, and Guinea Bissau.

9) Poor March-September rainfall has led to a failed crop season for localized areas of northeastern Uganda and parts of Kenya and Sudan.

Flooding in western Ethiopia has localized impacts

During the period of August 12th - 22nd western Ethiopia experienced an abundance of rain that led to localized flooding throughout the Gambela Region. Multiple woredas reported damage to crops, livestock, and infrastructure. According to World Food Programme field monitors, Itang, Akobo, Abobo, and Gambela woredas were most affected by flooding. These woredas are all flood-prone areas though the causes for flooding are different for each. The flooding in Itang was caused by the overflow of the Baro River. Floods in the other districts were caused by flash-floods from the neighboring highlands of Oromia. (**Figure 1**)

Negative rainfall anomalies continue to grow in Sudan, spread into Chad and Eritrea

Over the past month, rainfall has become light across Sudan and in parts of Eritrea and Chad. Though some areas continue to see sufficient rainfall for agriculture, many are beginning to show signs of crop stress. In northern Sudan, rainfall totals have been below-normal, with the start of seasonal rains in areas southwest and east of Khartoum at least two dekads late. The Darfur Region continues to experience below-average rainfall, and in localized southern parts of Sudan, rainfall deficits continue. These conditions have the potential to adversely impact crop production.

Given that seasonal rainfall is now approaching its northern-most extent in these areas, time for improvement is limited. Within the next couple of weeks, rainfall will begin to withdraw, from north to south, across the region. If rainfall does not improve over the next one to two weeks in the northern-most areas, moisture deficits may not improve.

Precipitation remains plentiful in the western Sahel and the Gulf of Guinea regions

An area spanning from Mauritania and Senegal to Sierra Leone to Togo has experienced abundant and generally well distributed rainfall. This has benefited crops, pastures, and well-distributed drinking water supplies throughout the region.

Despite the many benefits of abundant rains (**Figure 2**) there have also been reports of infrastructure damage and increased incidence of water-borne disease in western Africa. According to the World Health Organization, flooding has caused damage to roads, bridges, railways, and other vital infrastructure in Mauritania, Mali, Niger, Burkina Faso, Togo, and Benin. There are reports from Senegal about outbreaks of cholera.

Satellite Rainfall Estimate of East Africa
August 20 – 26th, 2008

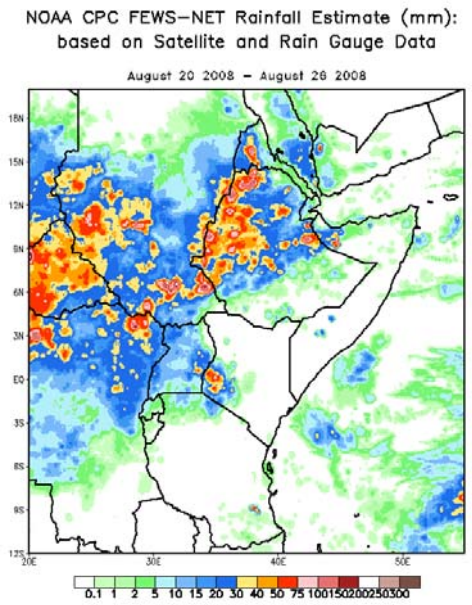


Figure 1: The above image depicts the excessive rains in western Ethiopia during a 7-day period.

Source: NOAA/CPC

Basin Excess Rainfall Map
August Dekad 2, 2008

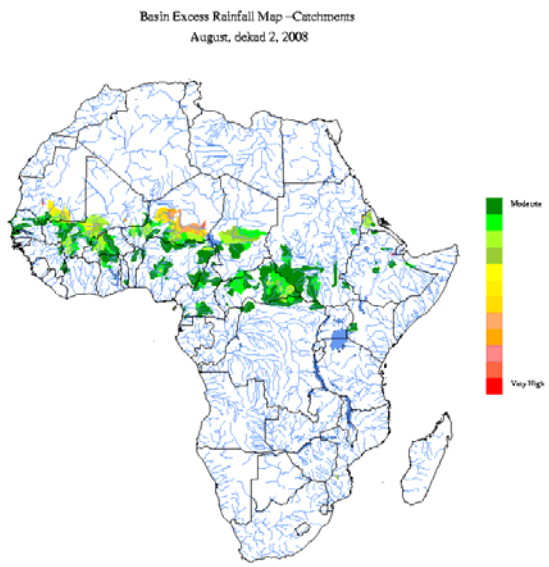


Figure 2: The above image displays areas of excess rains during the second dekad of August. Green represents moderately excessive totals and red represent highly excessive totals.

Source: USGS