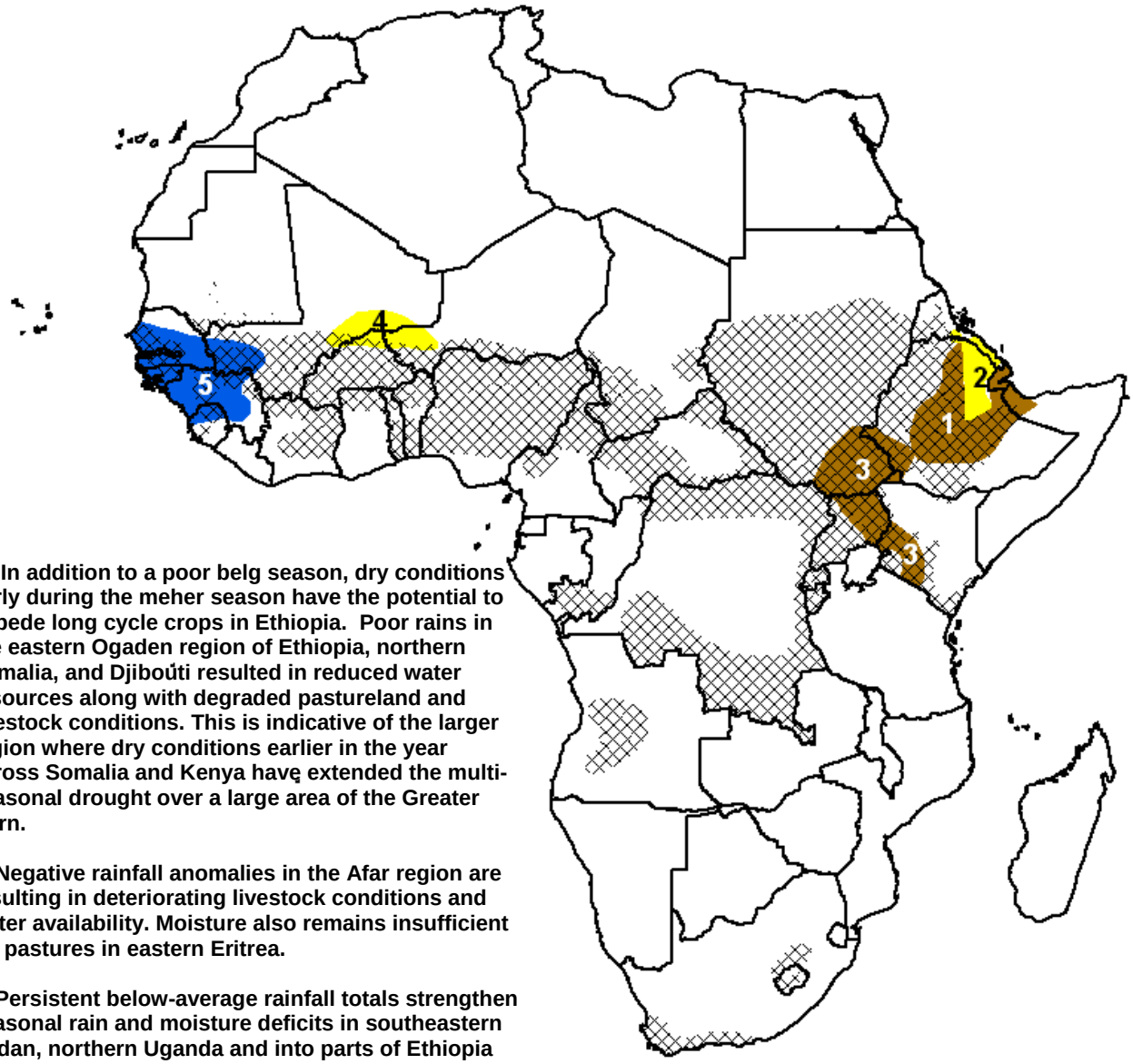
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
September 10 - 16, 2009

- **A particularly heavy rainfall event in central Burkina Faso, including Ouagadougou, caused flooding in the capital. This highlights the series of scattered flooding events that have occurred in far western Africa.**

- **Generally wet conditions were observed across far western Africa, as rainfall eased across the Ethiopian highlands.**



1) In addition to a poor belg season, dry conditions early during the meher season have the potential to impede long cycle crops in Ethiopia. Poor rains in the eastern Ogaden region of Ethiopia, northern Somalia, and Djiboûti resulted in reduced water resources along with degraded pastureland and livestock conditions. This is indicative of the larger region where dry conditions earlier in the year across Somalia and Kenya havę extended the multi-seasonal drought over a large area of the Greater Horn.

2) Negative rainfall anomalies in the Afar region are resulting in deteriorating livestock conditions and water availability. Moisture also remains insufficient for pastures in eastern Eritrea.

3) Persistent below-average rainfall totals strengthen seasonal rain and moisture deficits in southeastern Sudan, northern Uganda and into parts of Ethiopia and southwestern Kenya. Many areas throughout central and eastern Kenya, as well as northern Tanzania ended their respective seasons with substantial moisture deficits, resulting in degraded crop and pasture conditions.

4) Short-term rainfall deficits have had local impacts on mixed cropping and pastoral areas. Livestock deaths have been reported in Gao, Mali along with reports of slightly dry conditions in western Niger.

5) The last two weeks have brought heavy rainfall to Senegal, The Gambia, Guinea-Bissau, Guinea-Conakry and Sierra Leone. With additional heavy rainfall expected in the region this week, there is the possibility of localized flooding in this region

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

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

Precipitation plentiful across far Western Africa, flooding a concern

In cropping areas from Mauritania to Guinea-Conakry and Senegal to Burkina Faso, rainfall totals are above normal, with many areas over 140 percent of average. Some areas, mostly in coastal portions of Senegal and The Gambia have received approximately twice their normal rainfall since May. As a result of the heavier than average rainfall there have been some reports of isolated flooding events in these areas (**Figure 1**). The most noteworthy incident occurred September 1st in Ouagadougou when more than 250 mm of rain fell in 10 hours. Reports indicate numerous fatalities and damage to infrastructure in the city.

Satellite Estimated Rainfall
31 August - 6 September 2009

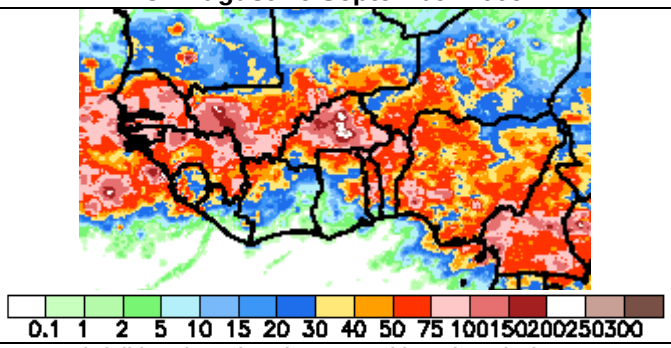


Figure 1: Heavy rainfall has inundated scattered locations in far western Africa. During the last week precipitation continued to cause flooding.
Source: NOAA/CPC

Rainfall remains in place across much of Nigeria and Chad after early season dryness, concerns remain for some areas of Niger

West Africa has had a highly variable wet season thus far. Some locations experienced an early start to the rains in May. However, in the first dekad of June, precipitation slowed significantly, and dry conditions spread from Niger to Nigeria and into much of southern Chad. By early July, many local areas in the region suffered from significant seasonal rainfall deficits. Rainfall has steadily improved since mid-July, providing consistent moisture to the region.

Although much of western Niger experienced a normal start of season, this dryness resulted in deteriorated crop conditions and acute failure of millet crops in some local areas along the Nigeria / Niger border. A recent field assessment has confirmed that the resurgence of rain across Niger has produced moderate conditions for millet and cowpea near the Nigeria border, but concerns remain for pastures which are located further north (**Figure 2**). In order to end the season with a better than mediocre millet harvest, consistent rains are needed through the end of September. After failure of the first sowing, farmers re-sowed shorter-cycle crops in mid-July with the revival of the rains that subsequently reduced moisture deficits in most areas. Some areas, such as Ouallam Department, did not replant until mid-August.

Water Requirements Satisfaction Index for Millet
6 September 2009

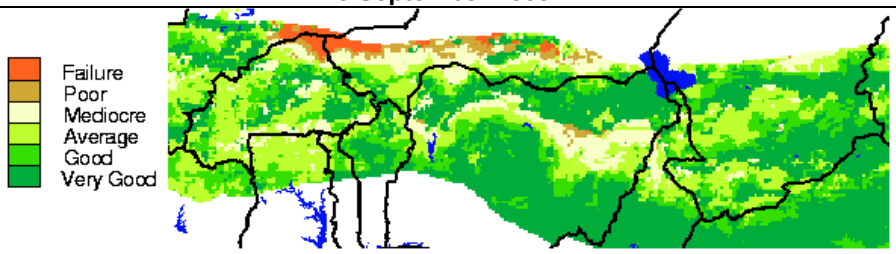


Figure 2: Improve rainfall has revived some crops, and provided better conditions for replanted crops.
Source: USGS

Ethiopia rainfall eases slightly

One of the heaviest rainfall episodes this year in Ethiopia occurred during the last few weeks. The past seven days, however have brought more moderate rainfall. Despite the recent improvement in rainfall concerns about the impact of early season dryness remain (**Figure 3**).

Satellite Estimated Rainfall Anomalies
1 June – 6 September 2009

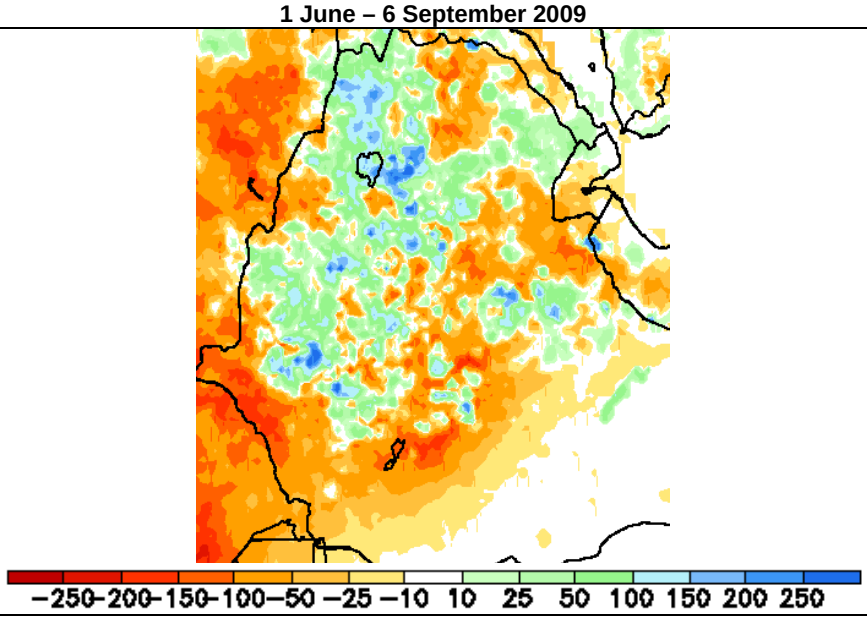


Figure 3: Recent rainfall has improved soil moisture, however many areas of Ethiopia are still reporting deficits.
Source: NOAA/CPC