Climate Prediction Center's Africa Hazards Outlook
For USAID / FEWS-NET
July 14 – July 20, 2011

- **Ethiopia and central Sudan receive below-average rainfall, increasing thirty-day rainfall deficits.**
- **Rains increase across recently dry portions of western Niger and eastern Burkina Faso.**

1) The uneven spatial and temporal distribution of rainfall during the past five weeks has led to strengthening rainfall deficits and developing dryness in the Darfur region of Sudan despite the on-time, seasonal northward advancement of the Intertropical Front across eastern Africa. Localized heavy rain that is forecast for the next week across portions of Darfur should help increase ground moisture.

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

- July Cropped Areas
- Favorable
- Somewhat Favorable
- Flooding
- Short-term Dryness
- Drought
- Improving Drought

Below-average rains fell over much of eastern Africa.

During the past seven days, rainfall across eastern Africa was generally below-average over most locations. The heaviest rainfall (> 50 mm) occurred across western Sudan and the Tigray, Amhara, and Benishangul-Gumaz departments of Ethiopia. Elsewhere, in central and southern Sudan and western Ethiopia, moderate, yet below-average, rain (10-30 mm) was recorded. In addition, the weekly precipitation was below-average over most of central Sudan and northern/central Ethiopia. The lack of rainfall helped increase thirty-day rainfall deficits over much of central and southwestern Sudan, and the Tigray, Amhara and the Afar regions of Ethiopia. Moderate, thirty-day rainfall deficits (25-100 mm) are present across southern Darfur in Sudan and along the Ethiopia/Sudan border in northwestern Ethiopia. However, rainfall already received in past weeks across northwestern Ethiopia should be enough for cropping activities. Lower thirty-day rainfall deficits (10-50 mm deficits) also exist over the Afar region of Ethiopia which is indicative of a slow start to the rains season over the region (**Figure 1**). Further south, below-average Hagaa rains over southern Somalia have further exacerbated dry conditions.

The below-average precipitation during the beginning of July has affected vegetation growth over portions of eastern Africa according to analysis of the Normalized Difference Vegetation Index (NDVI) anomalies. While rainfall has been plentiful over much of Ethiopia which has led to an increase in vegetation growth, the lack of rainfall over central and western portions of Sudan has led to an increase in localized dryness as shown by negative NDVI anomaly values (**Figure 2**). Rains have been slow to develop across central and western Sudan even though the Intertropical Front (ITF) has progressed northward at a pace similar to climatology.

An increase in rainfall is forecast over drier portions of western Sudan during the next week while heavy rain (> 50 mm) is expected across western Ethiopia. However, light to moderate rain (5-20 mm) is forecast over central and southern Sudan likely increasing rainfall deficits.

Satellite Estimated Rainfall Anomaly (mm)
Valid: June 12th – July 11th, 2011

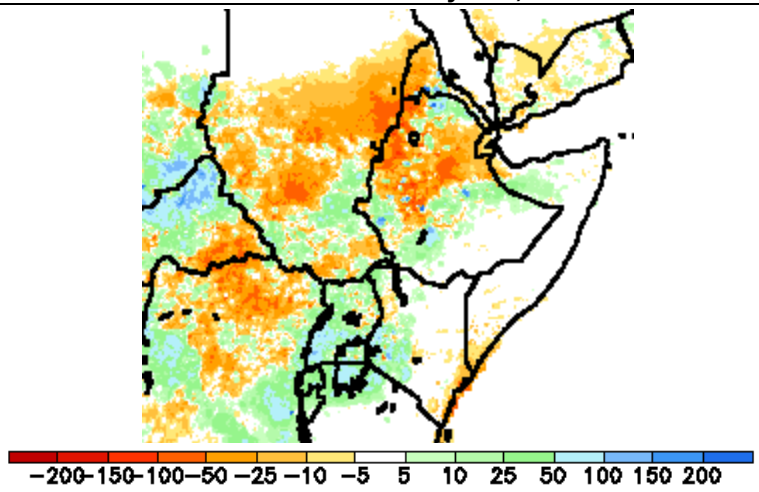

Figure 1: NOAA/CPC

Normalized Difference Vegetation Index (NDVI) Anomaly
Valid: July 1st – July 10th, 2011

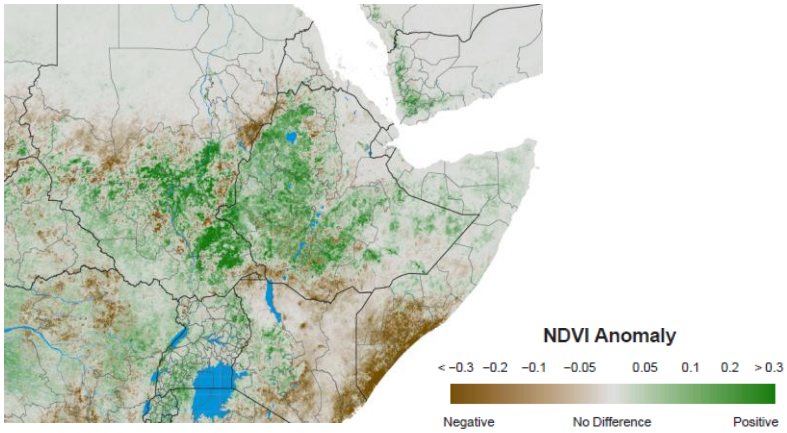

Figure 2: USGS/EROS

Above-average rain is observed in Burkina Faso and western Niger.

Widespread heavy rainfall (> 50 mm) was observed across central portions of West Africa during the past week including areas in eastern Burkina Faso and western Niger where rainfall deficits had been growing during the past several weeks. In addition, above-average weekly rain was observed across Guinea, Cote D'Ivoire, Ghana, Togo, Benin and southern Nigeria. Torrential daily rainfall in Lagos, Nigeria caused flooding and fatalities. In contrast, moderate but below-average rain was observed across central/northern Nigeria which has increased thirty-day rainfall deficits although rains have been frequent. Further west, light rains were recorded across Senegal, Guinea, Sierra Leone and Liberia increasing rainfall deficits (**Figure 3**). Forecasts for the next week indicate a second week of light, below-average rainfall (< 15 mm) across Senegal with moderate to heavy rain (> 20 mm) expected across Cote D'Ivoire, Burkina Faso, Ghana, Togo, Benin and Nigeria. Light to moderate rain (5-30 mm) is also forecast for southern Niger.

Satellite Estimated Rainfall Anomaly (mm)
Valid: July 5th – July 11th, 2011

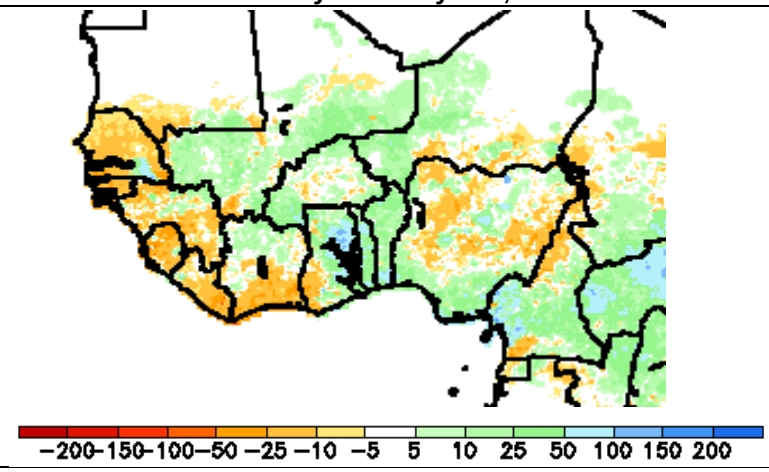

Figure 3: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

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