Climate Prediction Center's Africa Hazards Outlook
For USAID / FEWS-NET
June 16 – June 22, 2011

- **The Gulf of Guinea region has experienced a reduction of rainfall, while western Ethiopia has observed an increase in seasonal rainfall during the last observation period.**

1) Below-average rainfall that was associated with a slow northward progression of the Intertropical Front during April and May has resulted in moderate moisture deficits in the Jonglei region of southeastern Sudan. The retreat of the Intertropical Front relative to its position during the previous ten days has led to uneven distribution of rainfall and has sustained dryness in the region during the last ten days. The dryness has already been reported to negatively affect pastoral and agropastoral activities in the region.

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

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

Reduced rainfall has been observed in the Gulf of Guinea during the last observation period.

During the last seven days, rainfall across the Gulf of Guinea region was characterized by a reduction of weekly totals relative to that during the previous week. The anomalous position of the Intertropical Front (ITF), which lagged behind the climatological mean position during this time of the year, has contributed to the suppression of rainfall in the region during the past week. As a result, deep convective activities remained across the coastal regions of West Africa, with the heaviest (> 50mm) rainfall observed in Liberia and southern Cote d'Ivoire and Ghana (**Figure 1**). Meanwhile, localized heavy rains were recorded in Guinea, Burkina Faso, Ghana, and Nigeria during the past week. In Nigeria, this marked a significant break from two consecutive weeks of heavy rains in the southern portions of the country. The reduced rainfall that was observed in Nigeria has strengthened the thirty-day rainfall deficits in many local areas of the central and northern parts of the country. The persistence of moisture deficits could negatively affect agricultural activities in the region during this time of the season.

The Water Requirement Satisfaction Index (WRSI) during the first dekad of June shows overall favorable cropping conditions across West Africa. However, degraded conditions were observed in local areas of southern Mali, Burkina Faso, and northern Nigeria as a result of an erratic distribution of rainfall since the beginning of the season (**Figure 2**). In northern Nigeria, the reduction in seasonal rainfall that was observed during the past week has further depleted moisture conditions in the region despite two consecutive weeks of seasonal rainfall across the southern and central portions of the country.

During the upcoming seven days, model forecast suggests a high probability for heavy (> 50mm) rainfall in the western and coastal regions of the Gulf of Guinea. Heavy rainfall is expected in southern Nigeria and over local areas of Nigeria during the next week. The northward progression to the rain belt is expected to help relieve the dryness and benefit cropping activities in the region during the next seven days.

Timely onset and steady June-September rainfall season in Ethiopia.

During the past week, an increase in rainfall was observed in Ethiopia relative to that during the previous week. This marked the timely onset to and steady distribution of rainfall during the June-September rainfall season since the beginning of the month. Heavy (> 50mm) rains were observed in western and central Ethiopia (**Figure 3**), resulting in seasonably rainfall anomalies across much of the country. In Sudan, however, localized heavy rains were recorded in the south central portions of the country, with light (< 10mm) rains observed in the Jonglei region of southeastern Sudan. The reduction in rainfall was associated with the retreat of the ITF during the first dekad of June and has sustained moisture deficits in the region. While forecast calls for the continuation of seasonal rainfall in western Ethiopia, seasonal rains are expected to return in southwestern and southern Sudan during the next seven days. However, light to moderate (10-30mm) rains are forecast and could worsen water shortages in the dryness-stricken Jonglei region of Sudan.

Satellite Estimated Rainfall (mm)
Valid: June 7th – June 13th, 2011

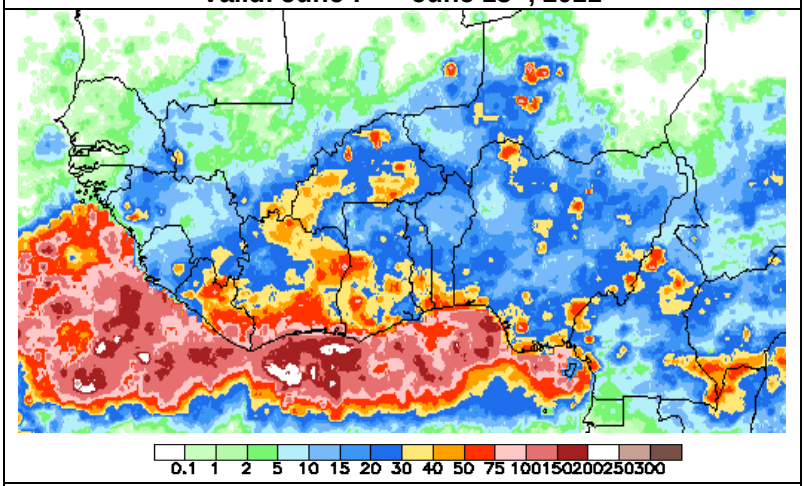

Figure 1: NOAA/CPC

Water Requirement Satisfaction Index
Valid: As of 1st Dekad of June, 2011

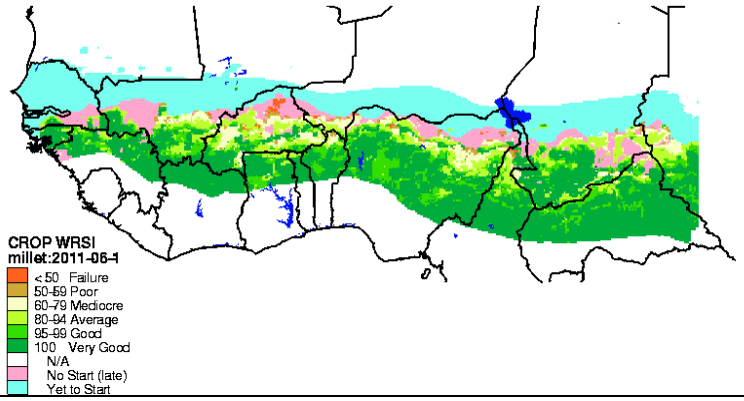

Figure 2: USGS/EROS

Satellite Estimated Rainfall (mm)
Valid: June 7th – June 13th, 2011

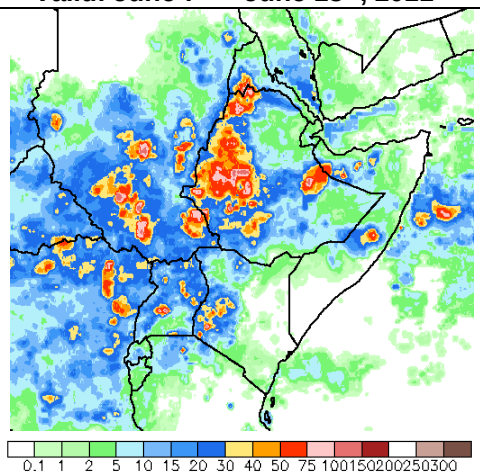

Figure 3: NOAA/CPC

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.