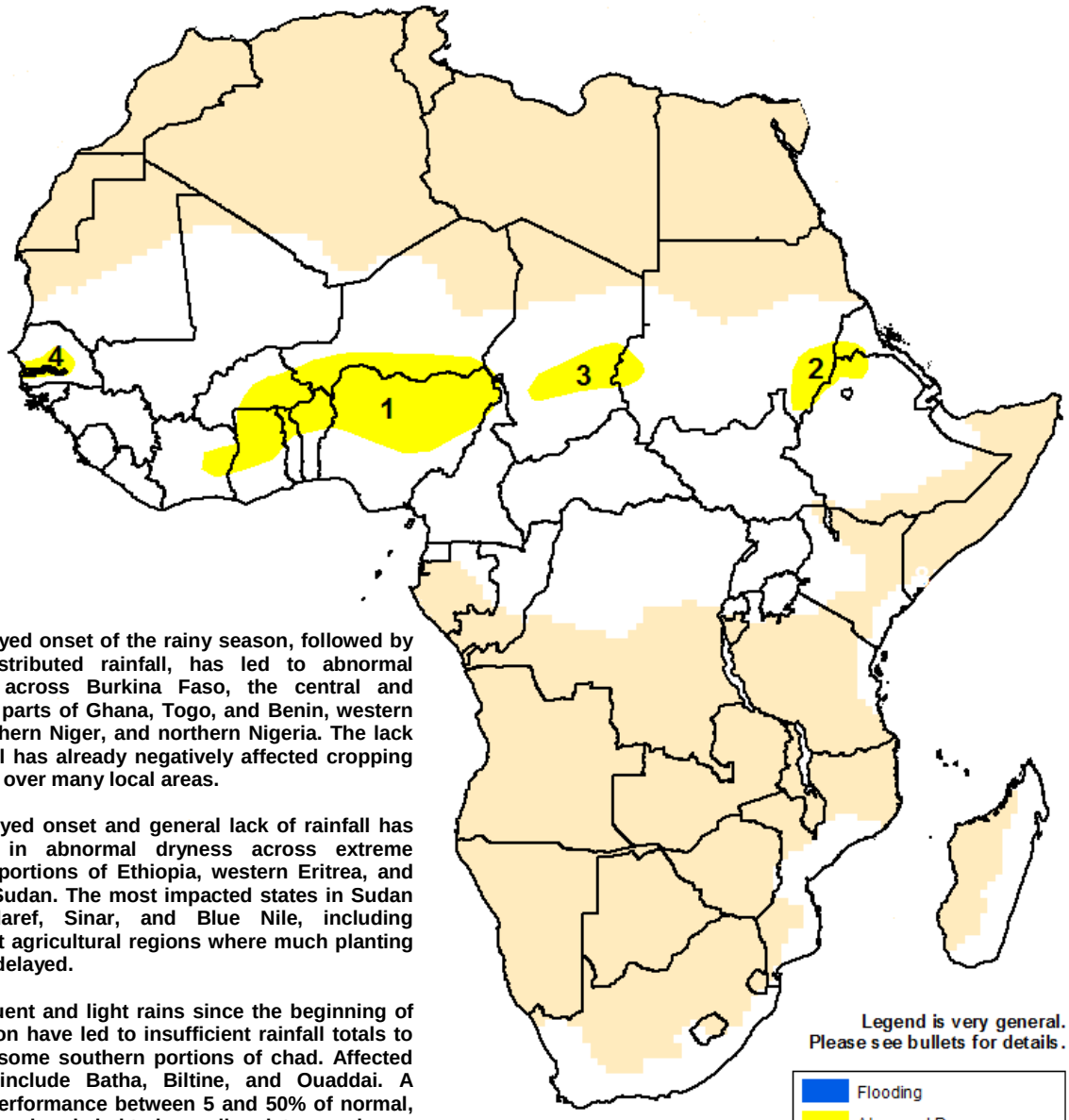
Climate Prediction Center's Africa Hazards Outlook
July 23 – 29, 2015

- **A delayed onset of rainfall is leading to abnormally dry conditions in Chad as well as Senegal and Gambia.**
- **Moisture deficits worsen further in southeast Sudan, Eritrea and northwest Ethiopia with a continued lack of rainfall.**



1) A delayed onset of the rainy season, followed by poorly-distributed rainfall, has led to abnormal dryness across Burkina Faso, the central and northern parts of Ghana, Togo, and Benin, western and southern Niger, and northern Nigeria. The lack of rainfall has already negatively affected cropping activities over many local areas.

2. A delayed onset and general lack of rainfall has resulted in abnormal dryness across extreme western portions of Ethiopia, western Eritrea, and eastern Sudan. The most impacted states in Sudan are Gadaref, Sinar, and Blue Nile, including important agricultural regions where much planting is being delayed.

3. Infrequent and light rains since the beginning of the season have led to insufficient rainfall totals to date for some southern portions of chad. Affected regions include Batha, Biltine, and Ouaddai. A rainfall performance between 5 and 50% of normal, so far, has already led to low soil moisture and poor conditions for vegetation.

4. A slightly delayed start to the season with only sporadic light rains in recent weeks has resulted in abnormal dryness for Gambia and central areas of Senegal. Dry ground conditions have reportedly led to delayed planting and negatively impacted the health of livestock.

Gulf of Guinea region recorded another week of heavy rains.

During the past week, enhanced rainfall was again observed across the westernmost countries of the Gulf of Guinea Region. Local areas in Senegal, Guinea, Sierra Leone, Liberia and western Mali picked up greater than 75mm of rainfall (**Figure 1**). Similar amounts were received in southwestern Niger. Rainfall was generally suppressed below normal for many areas of the southern and western Gulf of Guinea Region. Some parts of southern Nigeria and Benin observed little to no rainfall during the past 7 days. Despite moderate rainfall in the southern half of Chad, amounts were still generally less than climatology.

30-day rainfall anomalies since June 19th continue to show increasing moisture surpluses in the western part of the region. Positive anomalies are also expanding in size and scope across Burkina Faso and western Niger, while deficits grow in Chad. NDVI anomalies (**Figure 2**) indicate improving vegetation conditions for southern areas, including southern Nigeria, Benin, Togo and Ghana. A large belt of poor conditions remains to the north of these areas. Improving vegetation conditions from an uptick in favorable rainfall in Senegal are confined to the southeastern portion of the country. For regions in and around Gambia, conditions continue to be degraded. Inadequate rainfall from the start of the season in Chad has led to soil moisture conditions in which vegetation is really beginning to struggle as evidenced by the NDVI.

Over the course of the outlook period, rainfall should remain enhanced over Guinea, Sierra Leone, northern Cote D'Ivoire, Ghana, and into Burkina Faso. Heavy amounts of rain (>>100mm) are very possible in these areas. Just to the north, rainfall is likely to be suppressed over regions of Senegal and western Mali which already experienced a dry start to the season. The rest of the region can expect near-normal conditions.

Satellite Estimated Rainfall (mm)
Valid: July 12 – July 18, 2015

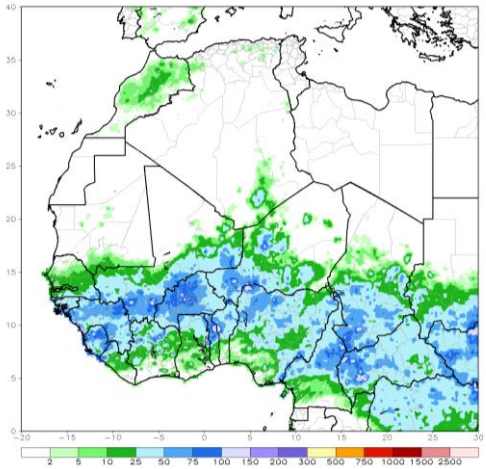


Figure 1: NOAA/CPC

Normalized Difference Vegetation Index (NDVI) 10day Mean Anomaly
Valid: July 06 – July 15, 2015

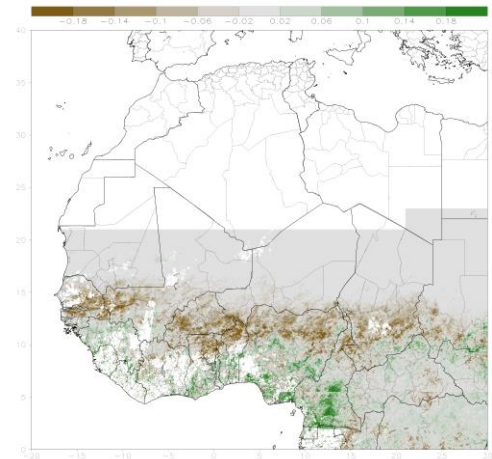


Figure 2: USGS/EROS

Rains are delayed in central Ethiopia in addition to deficits along the Sudan - Ethiopian border.

During the past week, observed rainfall was slightly greater than average in western Ethiopia and across South Sudan. A few local areas reported totals in excess of 100mm (**Figure 3**) according to satellite estimates. Rains in Ethiopia pressed farther to the east since the previous week. Even so, they remained unseasonably light in the eastern Amhara, Afar and northern Somali provinces. Because of the extremely poor "Belg" season, many of these areas of delayed rains will be quick to feel the effects of moisture deficits. Continued below-normal rainfall and a delayed onset are contributing to increasing rainfall deficits in northern Ethiopia, western Eritrea and eastern Sudan. Due to a low percentage of normal rainfall and evidence of poor conditions for vegetation, many planting activities are being adversely affected and delayed in this important agricultural region.

During the coming outlook period, heavy rains are expected for the western provinces of Ethiopia. Rainfall in north central Ethiopia should remain suppressed. This is a region to monitor closely over the next few weeks. Elsewhere in the East Africa Region, conditions should remain seasonable.

Satellite Estimated Rainfall (mm)
Valid: July 15 – July 21, 2015

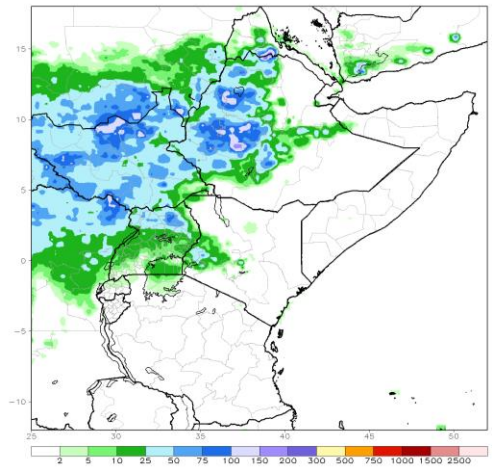


Figure 3: NOAA/CPC

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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