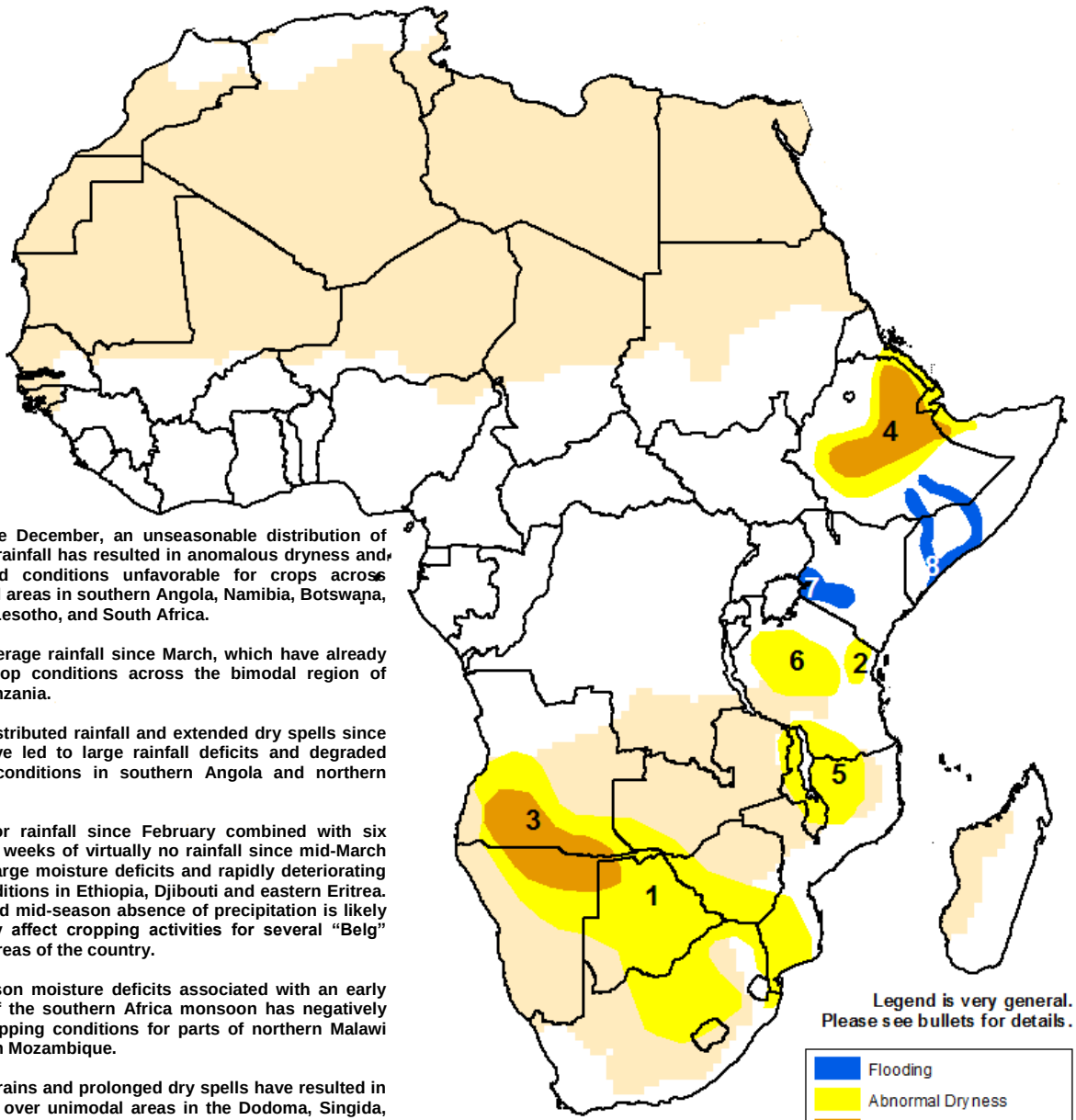
Climate Prediction Center's Africa Hazards Outlook
May 14 – May 20, 2015

- **The first substantial rains in many weeks across rift valley regions of Ethiopia this past week may benefit grazing activities and water resources.**
- **Rainfall becomes more seasonably well distributed across portions of West Africa.**



1) Since late December, an unseasonable distribution of monsoonal rainfall has resulted in anomalous dryness and poor ground conditions unfavorable for crops across several local areas in southern Angola, Namibia, Botswana, Zimbabwe, Lesotho, and South Africa.

2) Below-average rainfall since March, which have already impacted crop conditions across the bimodal region of northern Tanzania.

3) Poorly distributed rainfall and extended dry spells since January have led to large rainfall deficits and degraded vegetation conditions in southern Angola and northern Namibia.

4) Very poor rainfall since February combined with six consecutive weeks of virtually no rainfall since mid-March has led to large moisture deficits and rapidly deteriorating ground conditions in Ethiopia, Djibouti and eastern Eritrea. The extended mid-season absence of precipitation is likely to adversely affect cropping activities for several "Belg" producing areas of the country.

5) Late season moisture deficits associated with an early cessation of the southern Africa monsoon has negatively affected cropping conditions for parts of northern Malawi and northern Mozambique.

6) Untimely rains and prolonged dry spells have resulted in failed crops over unimodal areas in the Dodoma, Singida, Shinyanga, Tabora, and Kigoma provinces of central Tanzania.

7) Persistent wetness and torrential amounts of rainfall triggered flooding for areas near Lake Victoria in Western Kenya and Nairobi. Enhanced rainfall is forecast in the region during the next seven days.

8) Seasonally above-average moisture conditions combined with the potential for heavy rainfall forecast across eastern Ethiopia and Somalia has elevated the risk for localized flooding along the Shebelle River basin, with a lower potential remaining along the Jubba River basin in southern Somalia.

Parts of northern Ethiopia observed substantial rainfall for the first time in 6 weeks.

A significant pattern shift resulted in widespread substantial rainfall throughout the "belg" producing regions of northern Ethiopia, as well as into Eritrea and Djibouti. For some areas this was the first substantial rain since mid-March. In Ethiopia the highest amounts of rainfall (>100mm) were received in portions of the northern Oromia province with lesser but well-distributed amounts throughout the rest of the nation (**Figure 1**). Other areas that observed heavy rainfall this past week include Uganda and coastal regions of Tanzania, Kenya, and extreme southern Somalia. These coastal regions will need to be vigilant for flooding concerns, especially if increased rainfall persists. Much needed rains in the northern Horn of Africa are too late for failed crops but may help with grazing activities and replenishment of depleted water resources.

Now that the "belg" rains are drawing to a close, analysis of satellite rainfall percentiles since mid-February illustrates the poor performance of the season as a whole. Many areas in the Afar, northern Oromia, and northern Somali provinces in Ethiopia, as well as parts of Djibouti and Somaliland Somalia have experienced rainfall accumulations in the 10th percentile or less (**Figure 2**). Such low percentiles suggest that this has been one of the worst "belg" seasons in 30 years for these areas. Recent rains have raised percentiles in the Amhara and western Oromia but only mask the issues caused by extended dry spells during the middle of the season.

For the upcoming outlook period, precipitation models indicate generally lesser rains across the Greater Horn. The Afar province in Ethiopia Along with Djibouti should once again become quite dry. Regions in southern Somalia, as well as northern and western Kenya are likely to receive less rain than in recent weeks. Rainfall throughout the southern tier of Ethiopia is likely to be below normal. The areas at risk for above-normal rainfall once again include coastal portions of Kenya and Tanzania. This could elevate the risk of flooding concerns there during the next week.

Satellite Estimated Weekly Rainfall (mm)
Valid: May 3 – May 9, 2015

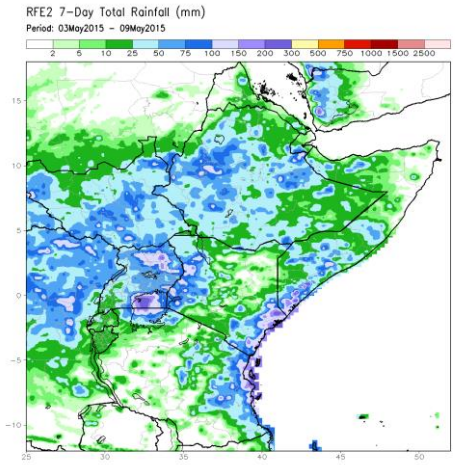


Figure 1: NOAA/CPC

90-Day Satellite Estimates Rainfall Percentile
Valid: February 10 – May 10, 2015

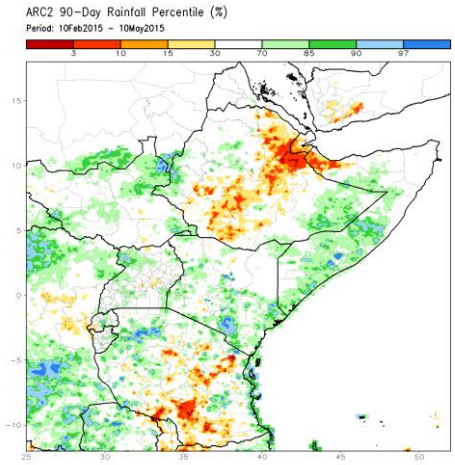


Figure 2: NOAA/CPC

Seasonal rains begin to spread farther north in Western Africa.

Rainfall became more seasonably widespread across interior portions of western Africa. Wet conditions spread northward coincident with the Inter-Tropical Front (ITCZ/ITF) that had been lagging unseasonably southward. Analysis of the seasonal progression of the ITCZ/ITF during the first dekad of May indicates it has now reached a near-normal position (**Figure 3**). Observed rainfall remained below average across northern Nigeria, Cameroon and southern Chad, while areas observing slightly below-average rainfall include northern Cote D'Ivoire, eastern Guinea, and western Central African Republic. 30-day deficits remain greatest in Nigeria and northern Cameroon. Seasonable rainfall is generally forecast across the region. Only southern Cameroon has an increased likelihood for above-average rainfall.

ITCZ/ITF Position
Valid: 1st Dekad of May, 2015

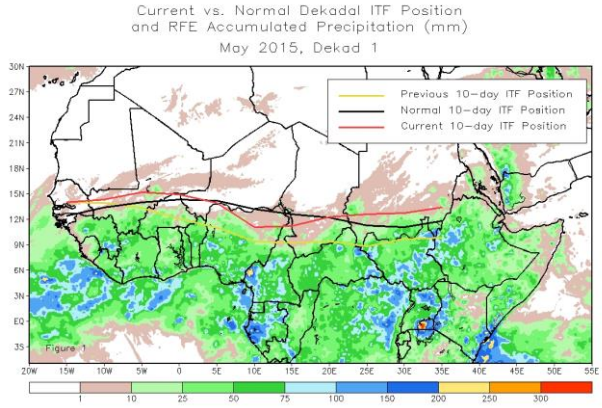


Figure 3: NOAA/CPC

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.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.