Climate Prediction Center’s Africa Hazards Outlook
February 25 – March 3, 2020

- Tropical Cyclone Guambe dropped copious rainfall over central and southern Mozambique.

1) The threat from swarms and bands of desert locusts continues in the Horn, especially Kenya and central Ethiopia.

2) Abnormal dryness is in place over the east coastal area of Madagascar. Drought persists in the South with greatly impacted vegetation and planting delays. Expected crop losses are estimated at 40%.

3) Significantly below-average and uneven rainfall since the beginning of the rainy season has led to abnormal dryness in Angola and northwestern Namibia and drought where ground conditions are significantly degraded.

4) African migratory locust and along with other species have recently been reported in Free State of South Africa, northern Namibia, western Botswana and Zambia.

5) Abnormal dryness persists in northwestern Mozambique over the past couple of months.

6) Torrential rains as a result of Tropical Cyclone Guambe over already saturated soil have led to high risk of flooding in central/southern Mozambique.

Legend is very general. Please see bullets for details.
Less coverage of heavy, above-average rain was observed over southern Africa this week.

The region’s heaviest rainfall during the past week was observed in association with Tropical Cyclone Guambe. Forming as it moved along and away from land, it nonetheless dropped more than 100mm over central and southern Mozambique. This likely resulted in some flooding. Other areas receiving heavy rainfall (>100mm) according to satellite estimates included several local parts of Madagascar (Figure 1). More moderate amounts (25-75mm) were observed in Malawi, many parts of Zambia, northeastern Zimbabwe, southwestern Botswana, Tanzania, and DRC. Areas including southwestern Angola, western/southern Namibia, parts of South Africa, and southern Madagascar received very little rain. The pattern led to widespread negative rainfall anomalies of 25-50mm or more in these areas, among others many others.

The southern Africa rainfall pattern had remained consistent throughout the monsoon season, as the 30-day and 90-day rainfall anomaly fields stayed similar. Some evolution has begun recently, at least within short-term moisture patterns. After recent increases in heavy rains, analysis of 30-day rainfall anomalies indicates a reduction in deficits for parts of central and southern Madagascar. (Figure 2). Those regions now exhibit 30-day rainfall surpluses. In northern Mozambique, a brief wet period reduced short-term deficits, before this past week’s return to dryer conditions reversed the trend. However, on longer time scales, significant moisture deficits remain. 90-day analysis still reveals significant deficits in these areas of both countries. Deleterious ground impacts remain as evidenced by poor NDVI and VHI values there.

In Angola, 30-day rainfall deficits greater than 100mm remain entrenched, and the coverage of observed precipitation less than 50% of normal during the past 90 days continues to grow. The adverse ground impacts from the prolonged moisture deficits are readily apparent in analysis of NDVI anomalies and VHI in western Angola. Conversely, huge moisture surpluses (100-300mm) over the recent 30-day period are found in southern and central Mozambique, southeastern Zimbabwe, northeastern Namibia, Botswana, and eastern South Africa.

During the outlook period, above-normal rainfall is favored over an area including southern Tanzania, Zambia, Malawi, northern Mozambique and Zimbabwe, Botswana, and parts of eastern South Africa. The heaviest rainfall totals should exceed 75mm over Malawi, northern Mozambique, Zambia, and northern Zimbabwe. Suppressed rains are favored in southwestern Angola and Namibia.

Onset of ‘Belg’ rains in central Ethiopia

Light and locally moderate rain was observed across the rift valley region of Ethiopia, possibly the onset of ‘Belg’ rains. Elsewhere, rains were present in southern Uganda, southwestern Kenya and northern Tanzania. During the outlook period, seasonal rains (10-25mm+) are expected to continue in central Ethiopia. Moderate or light rain should continue across Tanzania and southern Kenya.

The desert locust outbreak in the Horn of Africa is still present and will most likely continue through at least March. Adults are present in the Red Sea area of Yemen. Immature swarms are still present in Kenya and central Ethiopia, but the outbreak may have peaked due to successful ongoing mitigation efforts.

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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