

Climate Prediction Center's Africa Hazards Outlook January 8 – January 14, 2015

• Large scale, heavy rainfall continues to alleviate many anomalously dry areas, but also elevates the potential for flooding in southeastern Africa.

1) Although good rains were observed over the, Greater Horn of Africa during late November and early December, the delayed onset of the October-December rainy season combined with an erratic distribution of rains during the season had already negatively impacted ground conditions in northern Kenya and southern Somalia. 2) Insufficient rains since the beginning of October have led to dryness and delayed planting throughout eastern Zambia, northern Mozambique, Malawi and southern Tanzania. Heavy rains are expected during early January to help continue to relieve early season moisture deficits. 3) While much of South Africa has received adequate rains since the beginning of the Southern African monsoon, the eastern parts of the country have accumulated below-average rains, affecting agricultural conditions in the region. Suppressed accumulated below-average rains forecast next week are expected to worsen ground conditions. Legend is very general. Please see bullets for details. 4) Significantly heavy rains since mid to late December have triggered localized flooding and the displacement of hundreds of people in the Mashonaland West, Central, and East provinces of Flooding Abnormal Dryness northern Zimbabwe. Above-average rains are Drought forecast in the north which is likely to worsen saturated ground conditions, and may lead to Severe Drought additional flooding and downstream river inundation. Tropical Cyclone 5) While many local areas in western Madagascar Potential Locust Outbreak received a favorable increase in rainfall recently, Heavy Snow large seasonal moisture deficits and unfavorable ground conditions remain in the Toliary province of Abnormal Cold the country. Below-average rains are expected in the Abnormal Heat region for the upcoming outlook period. Seasonally Dry

Significantly heavy rains continue in southern Africa.

In the last seven days, ample amounts of precipitation were received throughout southern Africa, with the core of the heaviest accumulations (>100mm) focused over much of southern Zambia, northern Zimbabwe and western Mozambique for the second consecutive week (**Figure 1**). In southwestern Africa, however, seasonal rainfall was much weaker in early January, as little to no precipitation were received across much of southern Angola and the Caprivi Strip region of northern Namibia according to satellite rainfall estimates. In South Africa, weekly rainfall remained mostly seasonable.

Since late December, the character of the southern Africa monsoon has shifted considerably, as several regions of southeastern Africa continue to experience a significant increase in rains and available ground moisture. This increase has helped both alleviate and completely offset seasonal moisture deficits associated with a poor/delayed start of the monsoon during November and December. During the last 30 days, analysis of rainfall anomaly tendency shows the greatest positive changes (>100mm) have occurred throughout southern Zambia, Zimbabwe, Malawi, Mozambique and western Madagascar (**Figure 2**). It is these areas that are now experiencing approximately 150 percent of their normal precipitation for the season. However, a recent dryness trend is noted in southern Angola and northern Namibia.

Although the recent increase in rainfall in southeastern Africa is expected to benefit ground conditions for cropping activity, the highest positive precipitation anomalies are also collocated over river basins which may lead to negative hydrological impacts for the remainder of January. For several local areas in Zimbabwe, the enhanced rainfall over the last 30 days neutralized seasonal moisture deficits, but occurred over a short time interval. According to satellite rainfall estimates, nearly 500mm of rains were received in northern Zimbabwe since the 11th of December, 2014. These torrential rains not only reportedly triggered flooding in central Zimbabwe during the last week, but are also expected to elevate the risk for downstream inundation along the Zambezi, Save, Buzi, Pungwe, and Limpopo Rivers in Mozambique. Analysis of basin excess rainfall for the 3rd dekad of December over southern Africa reflects the sustained potential for flooding (**Figure 3**).

During the next week, significantly heavy rainfall accumulations (>75mm) are again forecast for parts of Mozambique, Zimbabwe, Malawi, Zambia, southern Tanzania. In addition, a moderate to high potential for tropical cyclone development is expected over the Mozambique Channel during the upcoming outlook period. Even if a cyclone does not develop in the region, heavy rainfall is likely and may trigger localized flooding for coastal areas in Mozambique and parts of northern Madagascar. Elsewhere, below-average rains are expected for parts of southern Angola, Botswana, and South Africa.



Figure 1: 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.