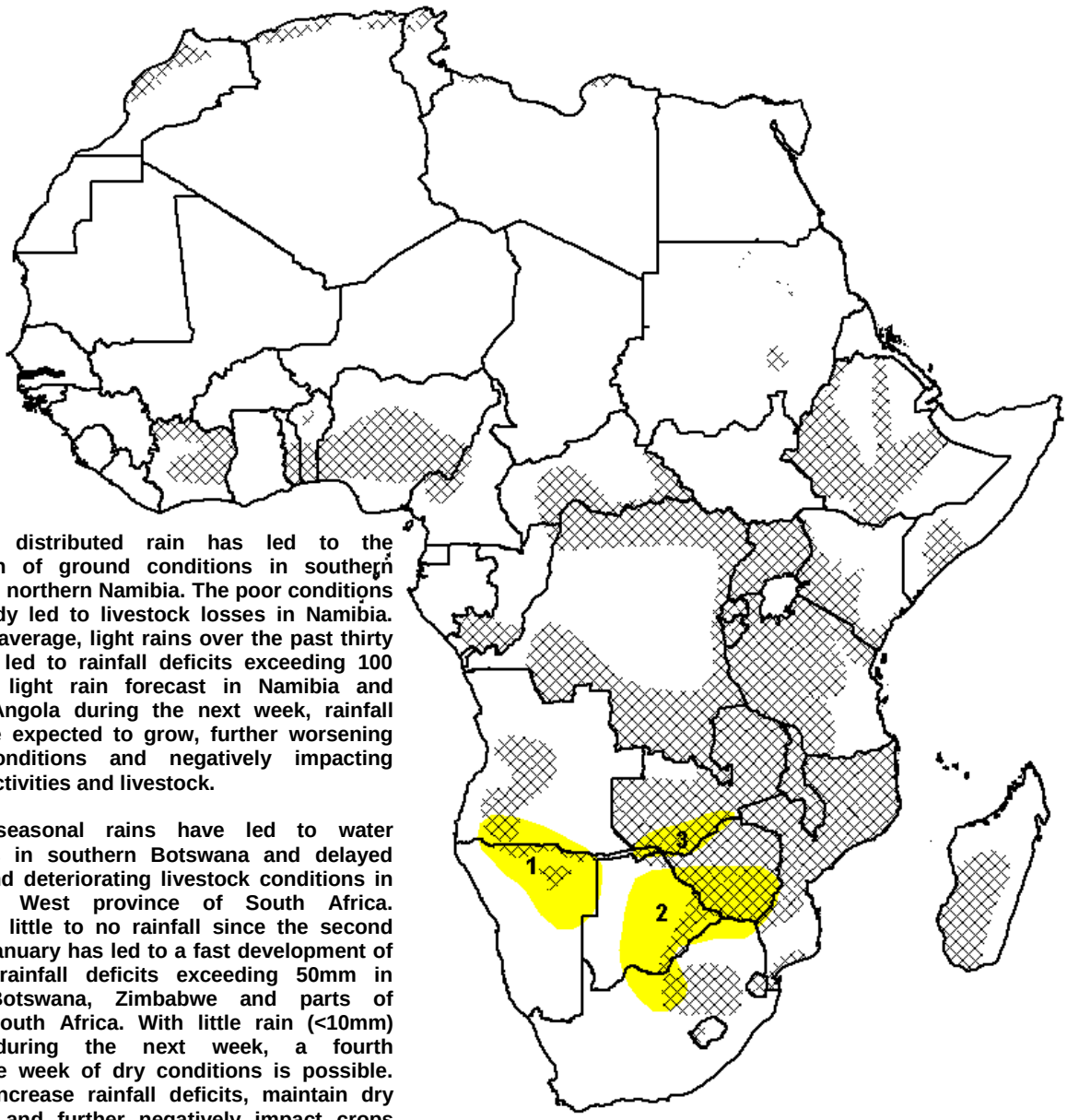
Climate Prediction Center's Africa Hazards Outlook
For USAID / FEWS-NET
March 7 – March 13, 2013

- **The rain-belt has started to shift northward across southern Africa.**
- **Enhanced rain is expected over Ethiopia during the next week.**



1) Poorly distributed rain has led to the degradation of ground conditions in southern Angola and northern Namibia. The poor conditions have already led to livestock losses in Namibia. The below-average, light rains over the past thirty days have led to rainfall deficits exceeding 100 mm. With light rain forecast in Namibia and southern Angola during the next week, rainfall deficits are expected to grow, further worsening ground conditions and negatively impacting cropping activities and livestock.

2) Poor seasonal rains have led to water restrictions in southern Botswana and delayed planting and deteriorating livestock conditions in the North West province of South Africa. Meanwhile, little to no rainfall since the second dekad of January has led to a fast development of thirty-day rainfall deficits exceeding 50mm in western Botswana, Zimbabwe and parts of northern South Africa. With little rain (<10mm) forecast during the next week, a fourth consecutive week of dry conditions is possible. This will increase rainfall deficits, maintain dry conditions and further negatively impact crops and livestock.

3) A dry spell during late January followed by an extended dryness since mid-February has resulted in stressed vegetation and permanently wilted crops over local areas of southern Zambia. Light to moderate rain is forecast during the next week. However, it may not be sufficient to fully mitigate soil moisture deficits in the region.

Light rain fell over a broad area of southern Africa.

During the past week, light rain fell across a wide area of southern Africa. This resulted from an anomalous upper-level cyclonic circulation positioned over the region, which produced little (< 10 mm) rain throughout southern Angola, western Zambia, Botswana, southern Zimbabwe, and portions of southern Mozambique (**Figure 1**). In contrast, the rain-belt brought moderate to locally heavy rain farther north across the northern half of Angola, northern Zambia, Malawi, and portions of northern Mozambique. Local convergence also resulted in moderate rain over Namibia. To the south, interactions with a mid-latitude system brought moderate rain across eastern South Africa. Heavy rain also fell across the Comoros Islands, the west-central and extreme north parts of Madagascar. Rainfall was below-average across much of southern Africa except coastal Angola, Malawi, and local areas of eastern Zambia during the past week. The continued below-average rain has helped to maintain seasonal deficits, with negative anomalies exceeding 150 mm over the dry portions of southern Africa, including southern Angola and northwestern Namibia.

An analysis of the NDVI anomaly during late February shows worsening vegetation conditions over western southern Africa, with below-average values extending from southwestern Angola, Namibia, southern Botswana, to northwestern South Africa (**Figure 2**). This was attributed to a poor rainfall distribution since the beginning of the season and below-average rain during January and February. Farther east, below-average conditions developed over coastal areas of Tanzania as rain decreased across the region during the past few weeks. In contrast, above-average conditions spread over central Zambia, parts of eastern Botswana and northern South Africa as a response to enhanced rain during January.

During the next week, drier weather is again forecast over a wide area of southern Africa, with light (< 20 mm) rain over Namibia, Botswana, and southern Zimbabwe. This is unlikely to help to relieve ongoing dryness across the region. In contrast, heavy rain is forecast throughout Angola, southern DRC, northern Zambia, and Tanzania. This is expected to reduce deficits and replenish soil moisture over Tanzania.

Enhanced rain expected over Ethiopia.

During the past week, only small amounts of rain fell over eastern Africa. The heaviest (< 40 mm) rain fell over localized areas of southern Ethiopia (**Figure 3**). Rainfall was slightly below-average across the southern portions of Ethiopia during the past week. During the next week, more widespread light to locally moderate rain is forecast over Ethiopia. This is expected to benefit land preparation and cropping activities across the *Belg*, March – May production areas of the country. The amount and frequency of rain are expected to gradually increase over the next several weeks.

Satellite Estimated Rainfall (mm)
Valid: February 27th – March 5th, 2013

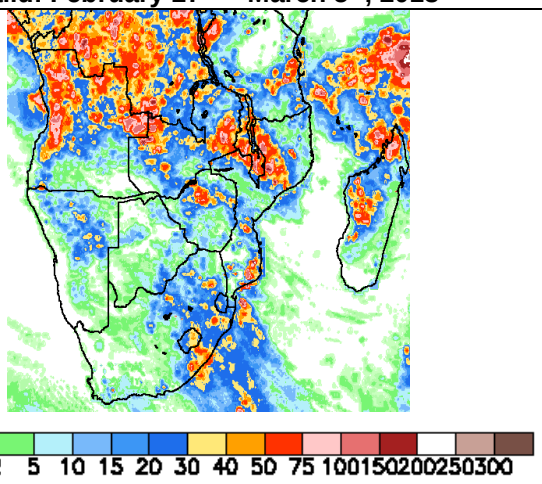


Figure 1: NOAA/CPC

Normalized Difference Vegetation Index (NDVI) Anomaly
Valid: February 21st – February 28th, 2013

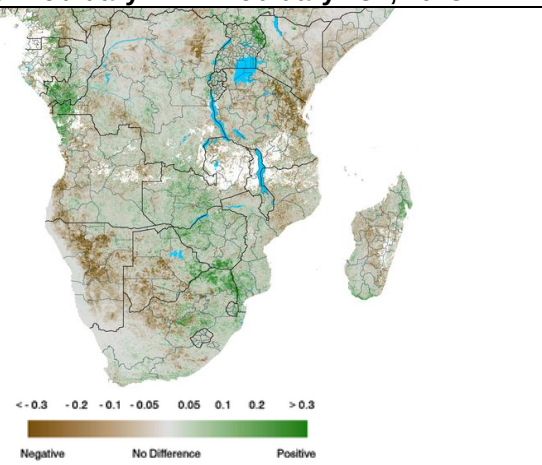


Figure 2: USGS/EROS

Satellite Estimated Rainfall (mm)
Valid: February 27th – March 5th, 2013

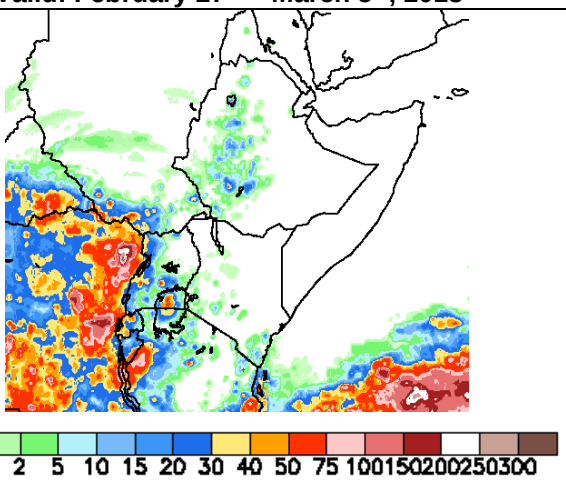


Figure 3: NOAA/CPC

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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