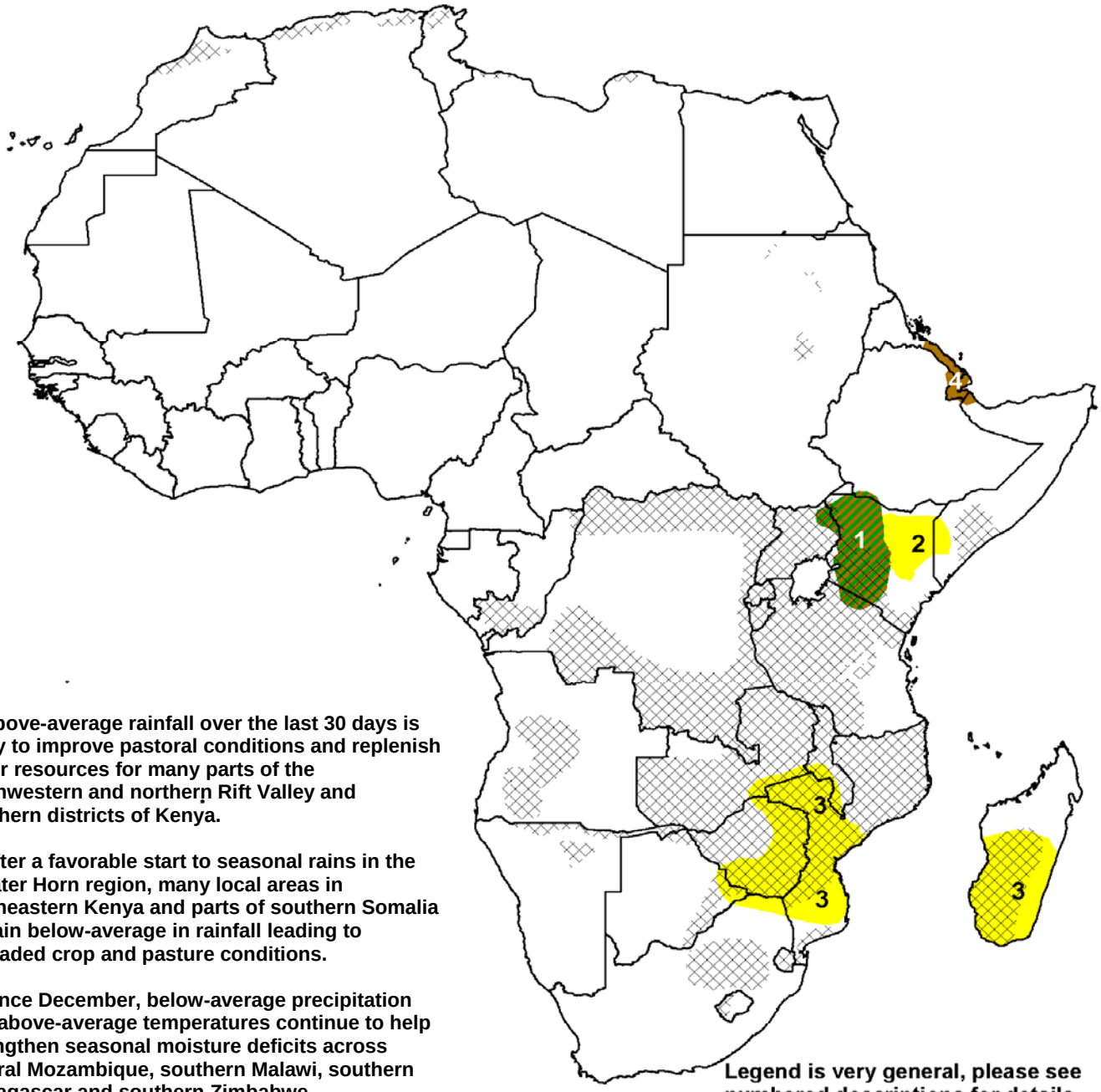
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
January 21 - January 27, 2010

- **Poorly distributed rains and above average temperatures across portions of Mozambique, Zimbabwe, Zambia and southern Malawi is expected to degrade ground moisture and impede germinating crops in southern Africa.**



1) Above-average rainfall over the last 30 days is likely to improve pastoral conditions and replenish water resources for many parts of the northwestern and northern Rift Valley and southern districts of Kenya.

2) After a favorable start to seasonal rains in the Greater Horn region, many local areas in northeastern Kenya and parts of southern Somalia remain below-average in rainfall leading to degraded crop and pasture conditions.

3) Since December, below-average precipitation and above-average temperatures continue to help strengthen seasonal moisture deficits across central Mozambique, southern Malawi, southern Madagascar and southern Zimbabwe.

4) Combined with a poor July-September seasonal rains, little to no rainfall observed over coastal Eritrea, Djibouti and Ethiopia since November is expected to lead to degraded pastoral conditions, depleted water resources, and losses to livestock.

Rainfall shortage may have long-term implications to crops in southern Africa.

During the last observation period, little to fair amounts of precipitation was observed in southern Africa. In Mozambique, seven day rainfall amounts between 5-10 mm were received in the central Mozambique, with lesser amounts observed in the south, and across the border into southern Zimbabwe.

Further west, moderate to high precipitation amounts over the last seven days continue to provide ample ground moisture in portions of the Caprivi Strip region, as well as many local parts of southern Angola and northern Namibia (**Figure 1**). Seasonally wet rainfall totals were also observed in portions of northern Mozambique, and in northern Malawi and Zambia.

The recent decrease of rainfall over Mozambique and Zimbabwe appears to apart of a longer trend of dryness in southern Africa. Seasonal rainfall deficits have strengthened considerably in the last 30 days, leaving many local areas in central and western Mozambique 25-50 percent of average rainfall accumulation since October (**Figure 2**). In addition to the below-average totals for the season, many of these areas have also experienced a significantly low occurrence of precipitation, with many local areas in central and southern Mozambique having received only 2-5 days of measurable rain in the last 30 days.

With temperatures regularly exceeding 40 degrees Celsius in Mozambique and Zimbabwe in the last month; this has negatively impacted available ground moisture for the development of crops in many local areas. Latest soil water analyses suggest the greatest deficits are centered in southern portions of central and southern Mozambique, as well as southern Zimbabwe and eastern portions of Botswana (**Figure 3**). High rates of decreasing soil moisture have also been observed over parts of southern Malawi and western Mozambique in the last two weeks.

Although some famers have either delayed planting or replanted crops in Mozambique, the present shortage of ground moisture and poor rains is creating an unfavorable outlook for crop development. Climatology, late January is the time of the year where rains typically reach their maximum intensity and are most distributed. It is anticipated that if rains do not regularly return by the end of the month, many local areas may face permanent wilting and possible reductions in crop production by the end of the season

Precipitation forecasts suggest some improvement to driest areas in southern Africa in the next seven days. Rainfall totals ranging between 15-30mm are expected for much of Zimbabwe, with lesser totals (<15m) expected for portions of Mozambique. Although this forecast does not suggest a major recovery to seasonal rainfall deficits, a return of daily rain shower activity is expected to help re-saturate soils, reduce temperatures, and provide relief to areas that haven't observed rain since early January.

Satellite Estimated Precipitation (mm)
Valid: January 10, 2010 – January 16, 2010

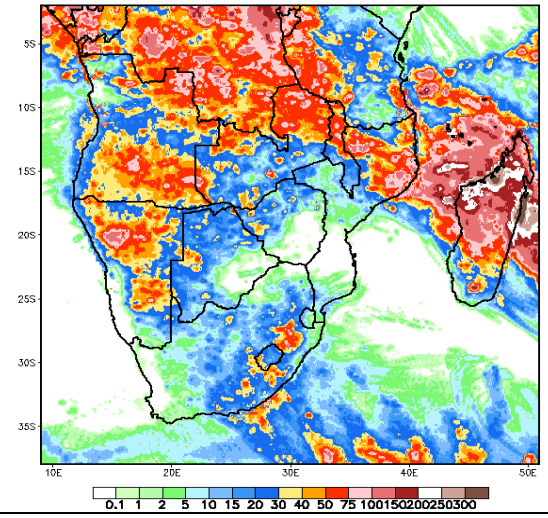


Figure 1: NOAA/CPC

Satellite Estimated Precipitation Percent of Average (%)
Valid: October 1, 2009 – January 16, 2010

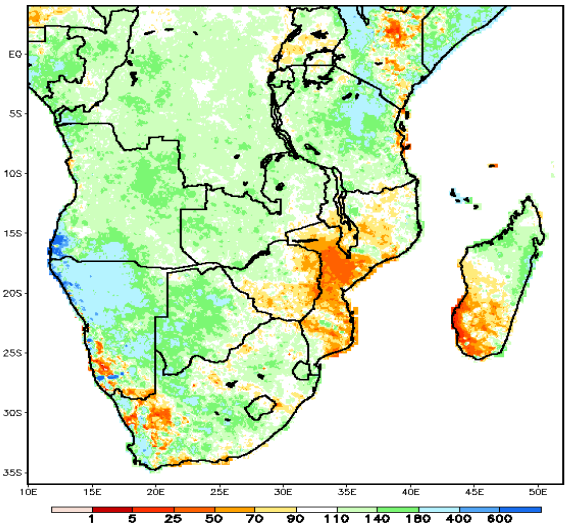


Figure 2: NOAA/CPC

Daily Soil Water Index
Valid: January 16, 2010

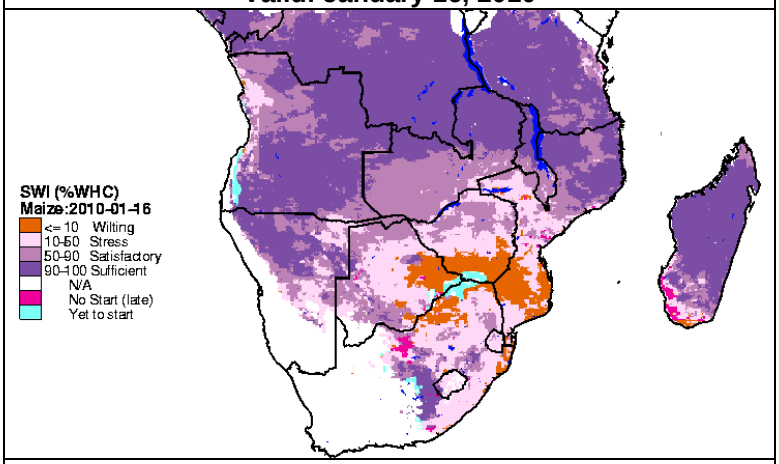


Figure 3: USGS/EROS