FOOD SECURITY EARLY WARNING SYSTEM

Agromet-Update

2006/2007 Agricultural Season

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Highlights

- Very light to moderate rains received in most areas between 11 and 31 March.
- Heavy rains received in parts of Botswana, Mozambique and Zimbabwe, replenishing supplies there.

As the rainfall season starts to draw to a close across many parts of southern Africa, rains were light to moderate across many areas between 11 and 31 March (Figure 1). March dekad two (11-20) was dry, and very little rain fell in most areas south of Tanzania. More significant rains were received in central Tanzania and northern Zambia and heavy rains were received in northern Mozambique due to the passage of tropical cyclone Indlala. Rainfall was more widespread during the third dekad of March (21 -31), and many areas in the southern half of the region that had been dry for a while received good rains that will help to replenish water supplies, especially in eastern parts of Botswana, southern Mozambique, and southern Zimbabwe. Rainfall was more scattered in the northern parts of the region. However, heavy rains fell in parts of the Zambezi basin, including the Caprivi area near the Angola/Zambia/Namibia border, as well as the lower Zambezi near Mozambique/Malawi border. These areas have been previously affected by flooding this season.

Fig.1. Rainfall Performance for 11 to 31 March 2007

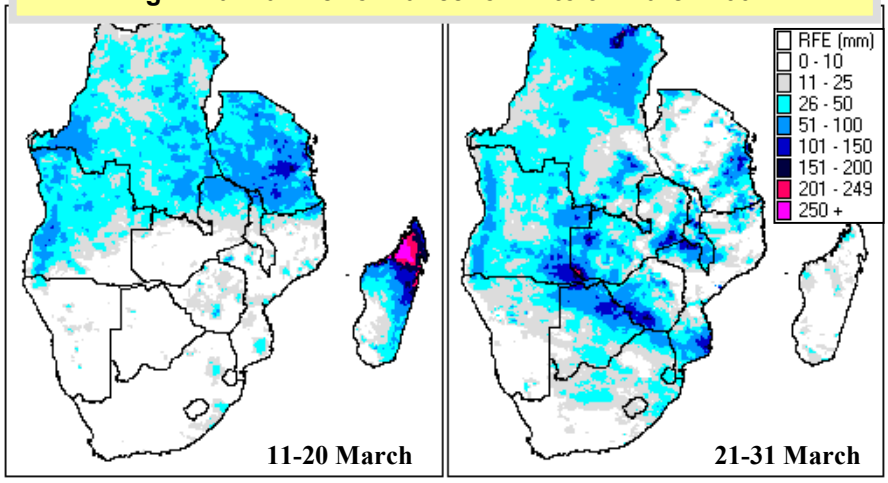
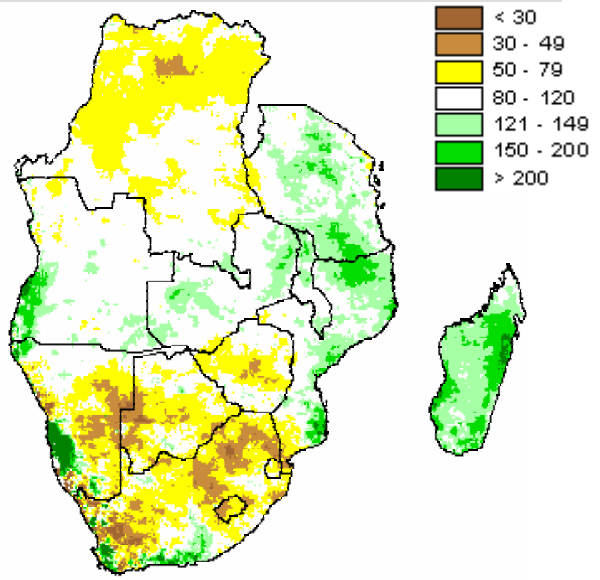


Fig.2. Rainfall for 1 Jan to 31 Mar 2007 as Percentage of Normal



Cumulative rainfall analysis for 1 January to 31 March (Figure 2) based on satellite rainfall estimates suggests that normal to above-normal rainfall has been received in many of the northern parts of the region, while in the southern half of the region, rainfall has been mainly below normal over the 3-month period. The areas that have been worst affected by poor rainfall in a cumulative way between January and March include much of Botswana, Lesotho, eastern Namibia, South Africa, and Swaziland. Although southern Mozambique and southern Zimbabwe appear not to have been badly affected by low rainfall (according to the white colours in Figure 2 that indicate near-normal rainfall amounts), this is in fact due to the heavy rains that were received in the third dekad of March (Figure 1). In some of these areas, more rainfall was received in dekad 3 of March alone, than between 1 January and 20 March. This recent development will be good for pasture in the said areas, but in most cases was too late to resuscitate the crop in southern Mozambique and southern Zimbabwe. In contrast, Malawi, northern Mozambique, Tanzania, Zambia, and parts of northern Zimbabwe, show good accumulations of rainfall, conducive to good crop development. In some of these areas however, excess rainfall has been detrimental to crop growth.

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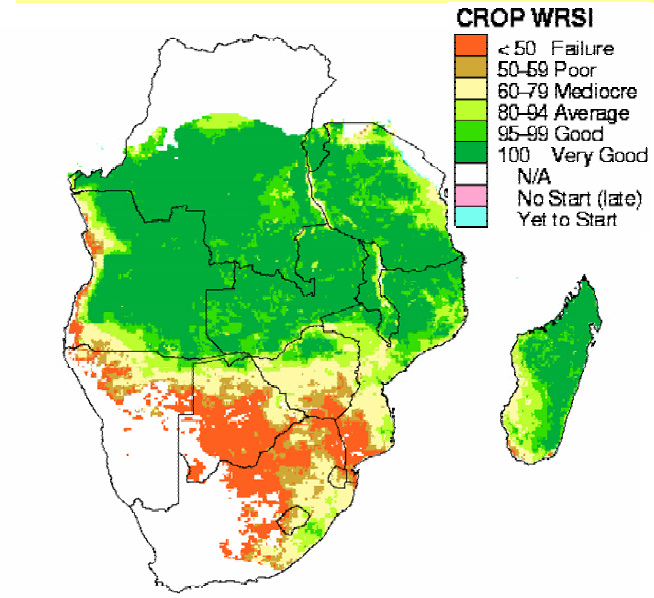
Source: USGS/FEWSNET

Fig.3. Water Requirements Satisfaction Index as at 31 March 2007



The water requirements satisfaction index as at 31 March 2007 (Figure 3) shows the likely crop conditions as they are affected by cumulative water deficits experienced by crops due to rainfall distribution throughout the season. This analysis is a natural progression from Figure 2 as it accounts not only for rainfall totals, but also distribution. Figure 3 shows that by the end of March, the region was clearly divided into two distinct zones with northern parts having good potential for high crop yields while the southern part of the region is likely to receive poor yields because of the extensive water deficits that were experienced in these areas. In particular, Botswana, Lesotho, Southern Mozambique, central northern South Africa, Swaziland, and southern Zimbabwe are the worst affected, as is shown by the red, brown and cream colors in Figure 3. Many of these areas are likely to have experienced outright crop failure. In contrast, the green color showing in the northern part of the region and in Madagascar suggests that little to no water deficit was experienced, and as a result high yields are expected in most of these northern areas.

LESOTHO

Little to no rains were received throughout the country in the last two dekads of March, and this is a pattern that has been characteristic since January. In particular, the western part, which generally has the greater concentration of cropping activity, has been more badly affected in a cumulative way, as shown by both Figure 2 and Figure 3. Country reports indicate that summer crops are in very poor condition due to the dry weather that has prevailed since January. Many crops have experienced water stress, and crops in some areas have permanently wilted with no chance of recovery, especially in the south. Harvest prospects are poor.

SWAZILAND

Little to no rains were received in the 2nd dekad of March, and light to moderate rainfall received in the third dekad. This was appropriate for much of the maize crop which is now at maturity to drying stages mainly in the Highveld. In the Lowveld and some parts of the Middleveld and Lubombo, the crop has already dried. Poor crop conditions are prevalent in most parts of the country, with the exception of some parts of the Highveld which were not as severely affected by dry spells. Poor crop yields are generally expected in most areas.

ZIMBABWE

Zimbabwe received little to no rain during the 2nd dekad, as in the first, but more significant rains were received during the 3rd dekad of March, especially in the western half of the country. This will auger well for water availability, especially in the south where little to no rainfall has been received for much of the season. The rainfall received was also good for pasture. For crops in the south though, this rainfall may have come too late to be beneficial to crops. The government recently carried out a crop assessment to evaluate the expected harvests this season.

BOTSWANA

Botswana was dry during dekad 2 of March, but received significant rains in eastern and northern parts. This will positively impact on pastures, but comes too late for any maize.

SOUTH AFRICA

Rainfall continued to be very light over South Africa between 11 and 31 March, with slightly more rainfall in the 3rd dekad. The dryness which has persisted in South Africa since January has negatively affected the crop situation, particularly in the normally highly productive Maize Triangle. The South African Crop Estimates Committee recently released a 2nd round crop production estimate in which the total maize production was revised downwards by 11% to 6.91 million MT, and there is now an expected average yield of 2.71 MT/Ha. This represents a reduction of 34% from last year's average yield. This downward revision reflects the negative impact that the dry spell continues to have on maize production.

TANZANIA

Light to moderate rains were received in most parts of the country in dekad 2 of March, with some areas receiving heavy rains. In the 3rd dekad, most areas received little to no rains, apart from the south-east that received heavy rains. The rainfall patterns across much of Tanzania so far this season has been typified by consistently heavy rains, and this has resulted in persistent excess soil moisture in many areas, and consequently waterlogging. The waterlogging has resulted in moderate to poor crop conditions across many areas, especially in the unimodal areas. As such, the reduced rains in the last dekad were beneficial for the crop. Crops in unimodal areas range between vegetative and ripeness stages. Pastures are reported to be in very good condition.

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