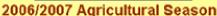


# FOOD SECURITY EARLY WARNING SYSTEM

# Agromet-Update





Issue 09 Dekad: 01 Month: March

Season: 2006-2007

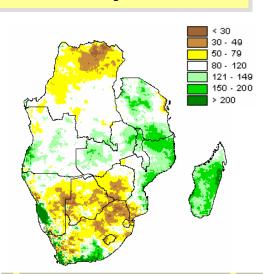
Release date: 16-03-2007

### **Highlights**

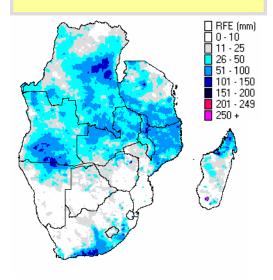
- Light to moderate rains reduce flooding pressures in northern half of the region
- Poor rains continue in the southern half of the region, poor yields expected.

During the first 10 days of March 2007, light to moderate rains fell across most parts of the northern half of the SADC region, while little to no rain fell in the southern half of the region (Figure 1). The reduced rains in the north helped to ease the flooding that has had very negative impacts across many northern parts of the region, including northern and central Mozambique, Zambia, Malawi and Tanzania, as well as Madagascar, during this rainfall season. The moderate rains in these parts has been beneficial to crop development in many of these areas. Malawi, Zambia and Tanzania are expecting good harvests due to the consistent good rains this season. In contrast, the poor rains and extended dry spell in the southern half of the region has resulted in severe crop water stress and crop failure in some areas. The countries most affected are most of South Africa, Botswana, Lesotho, southern half of Mozambique, Namibia (except north-eastern parts), Swaziland, and Zambia.

Fig.2. Rainfall for 1 Jan to 10 Mar 2007 as Percentage of Normal







The situation depicted by the rainfall totals for 1 to 10 March 2007 is a short section of a longer term trend that is evident when analyzing the rainfall since the beginning of the year. Figure 2 shows the total rainfall for 1 January to 10 March expressed as a percentage of the long term average for the same period. The areas in yellow are those areas that received between 50 to 80% of the rainfall they would normally receive during this time period, while the areas in brown are those that received less than half the rainfall that they normally get. The map clearly indicates the poor rainfall that has been received in Botswana, Lesotho, southern Mozambique, Namibia, most of South Africa, Swaziland, and central/southern Zimbabwe. These areas have been affected by dryness and poor rainfall since the beginning of 2007, in some cases the dryness starting even earlier than January 2007. The consequences of this dryness is that in some areas, including parts of Lesotho, southern Mozambique, parts of South Africa, Swaziland, and southern Zimbabwe, crops are in bad condition, ranging from mild stress through to permanently wilted. Crop failure is expected in a number of areas. In other areas, the poor rainfall is likely to affect water supply and water rationing is a possibility.

This 10-Day Agromet Update is a product of the Regional Remote Sensing Unit (RRSU) in the SADC FANR, in collaboration with the USAID FEWSNET Project. Ground information used is obtained from the National Early Warning Systems in the SADC Member States



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Food Security Early Warning System

#### Agromet Update: March 01-10 2007

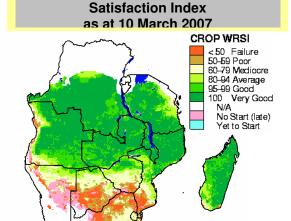


Fig.3. Water Requirements

# **TANZANIA**

Light to moderate rains were received in the northern half of the country, while moderate to high rainfall was recorded in the southern half. This served to support the continued good development of the crop. Crops are expected to be in fair/good condition in most areas.

#### **MOZAMBIQUE**

Good rains fell in the north during the dekad, while little to no rains were received in the central and southern provinces of Mozambique. This is a trend which has been consistent during the season. Southern Mozambique has been affected by a prolonged dry spell and very poor crop yields are expected in these areas.

## **LESOTHO**

Little to no rainfall was received over most parts of the country during the dekad. This is a trend that has been persistent since January, and the result is that crops have faced serious water stress. Permanent wilting has been observed resulting in crop failure in some areas. In other areas, wilting has been observed, with yellowing of crops due to water stress. Because of the poor rainfall and the wilting, low crop yields are expected in Lesotho this year. From a hydrological perspective, the flows in the major rivers are very low and national reports suggest that water usage restrictions may be implemented.

#### **MALAWI**

During this dekad, reduced rainfall was received over the southern half of Malawi, while more rainfall was received in the northern half. In general, very good rains have been falling in Malawi since the beginning of the season. Due to the good rains, combined with the adequate availability of inputs, an excellent harvest is this year. A total tonnage of over 3.14 million metric tonnes of maize is expected, according the latest official crop estimates, Crop stage is currently reported to be ranging from late maturity to drying stages.

The water requirements satisfaction index (WRSI) helps to interpret how rainfall patterns have affected crop conditions and crop outputs. Figure 3 shows potential crop water condition as it is likely to be at the end of the season, based on the way in which crops are affected by cumulative soil water availability. The areas in green are those areas where the crop received all the water it required and suffered little to no water deficits. Cream and brown colours indicate those areas where so much water deficit was experienced so as to make the crop mediocre and poor respectively. In red areas, such little water was received that it likely led to outright crop failure. Using this indicator, the region is cleanly divided into two distinct sub-regions, with the crops in the northern half having sufficient water to have good yield potential, while those in the southern half performed poorly. This indicator also highlights the areas worst affected by the dry spell as being southern Mozambique, southern half of Botswana, South Africa, Lesotho, and southern Zimbabwe. However, areas marked as having mediocre condition may also be badly affected. Under this classification, almost the entire southern half of the region was affected by the dryness that occurred, and reduced crop yields are expected.

#### **BOTSWANA**

Little rainfall was received in Botswana during the dekad. Overall, Botswana has received below normal rainfall since January in most areas. This will not bode well for pastures, as the rainfall season is drawing to an end and not much further rainfall is expected.

### **SOUTH AFRICA**

Little to no rainfall was recorded this dekad over most parts of South Africa, including the highly productive "maize triangle" in central South Africa, just north of Lesotho. These low rains are seriously compromising the harvests expected by South Africa, as they have been persisting since January. As a result of the poor rains observed up to February, the most recent official crop estimates have suggested a 28% reduction in yields from the previous season, although the total production is expected to increase by 17% from last year, mainly due to a 62% increase in planted area from the previous season. However if the poor rains continue, there are chances that the production could decrease even further.

# **ZIMBABWE**

Low rainfall was received in Zimbabwe, with light to moderate rainfall in the north, and little to no rainfall in the central and southern parts. This has been a consistent trend for much of the season, resulting in a fair to good crop in the north and poor crop condition in the south. The persistent dry conditions in the southern half of the country have had a negative effect, with crop failure being recorded in some areas. Crops in some of the central parts of the country were observed to be starting to wilt as of the 3<sup>rd</sup> dekad of February, and the dryness in the dekad 1 of March is likely to worsen this.

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