



FOOD SECURITY EARLY WARNING SYSTEM

Agromet-Update

2006/2007 Agricultural Season



Issue 07 Dekad: 01 Month: February Season: 2006-2007 Release date: 19-02-2007

Highlights

- ❑ Favourable rains continue across the northern half of the SADC region
- ❑ Flooding affects several countries in the region.
- ❑ Southern half of the region remains dry

The persistent rainfall patterns that have been established in the region over the last few dekads continued to be observed in dekad 1 of February, with heavier rains being received in the northern half of the region and Madagascar, and lighter rains being received in the southern half of the region (figure 1). Particularly heavy rains were received this dekad in Madagascar, northern Malawi, northern Mozambique, southern Tanzania, and eastern Zambia. In several areas, these heavy rains led to flooding. Flooding has recently been reported in Madagascar, Zambia, and central Mozambique. In contrast to the heavy rains in the north, the southern half of the region has mainly been quite dry. In particular, southern Mozambique and southern Zimbabwe were quite dry this dekad, with much lower than normal rains being received. Lesotho and Swaziland received some relief in terms of some good rains this dekad after prolonged dryness, although western Lesotho continued to be relatively dry.

Figure 1. Rainfall Performance for 1 to 10 February 2007

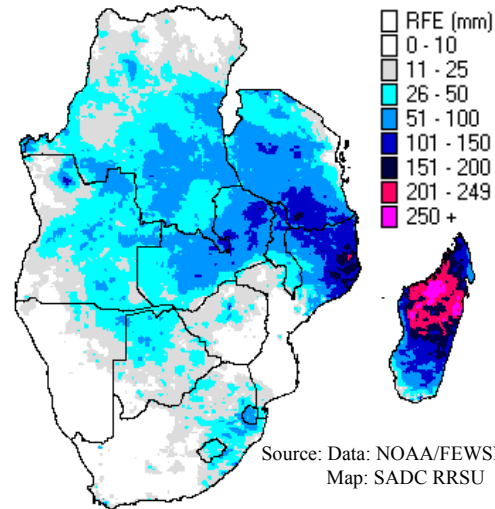
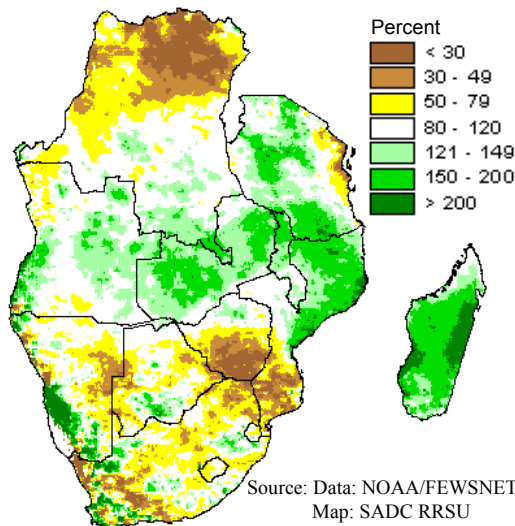


Figure 2. Rainfall for 1 Jan 2007 to 10 Feb 2007 as Percentage of Normal



Cumulative Rainfall for 1 Jan 2007 to 10 Feb 2007 as Percentage of Normal

This dekad the *Agromet Update* focuses on medium term rainfall performance, looking at the total rainfall amounts that have been received in the 41-day period from 1 January 2007 up to 10 February 2007, in terms of how they compare to normal conditions (Figure 2). The yellow and brown colours in Figure 2 are those areas that have received below normal rains, areas in white are those areas where the rainfall has been approximately normal, and the green colours indicate areas where rainfall has been above normal. Figure 2 clearly indicates that over the period January 1 to February 10, southern Mozambique, northern RSA and southern Zimbabwe have experienced significant dryness, with some areas receiving less than one third of the rainfall that they normally receive. This is having negative repercussions on the crops in these areas. Many parts of South Africa have also had below normal rains during the last 40 days, although some light rains were received during the last dekad. In contrast, many of the areas in Zambia, Malawi, and Mozambique, that have already been alluded to as experiencing flooding problems, have been receiving above normal rains since the beginning of January. Short-term forecasts indicate significant chances for heavy rains in the near future, which could exacerbate flooding problems.

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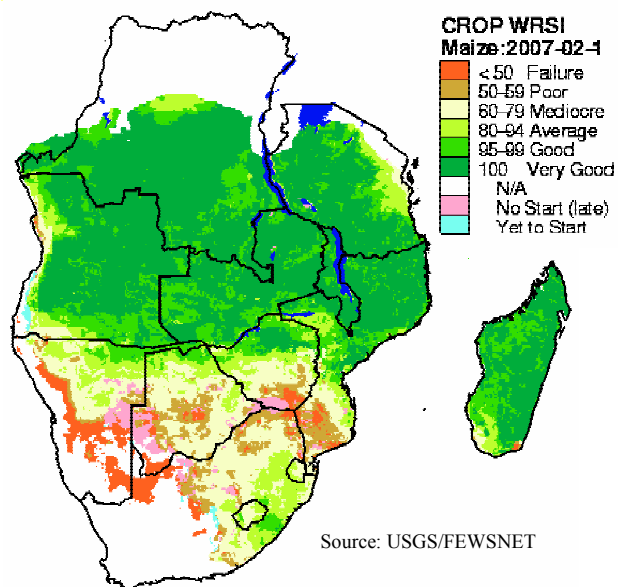
Analysis of Water Requirements for Dekad 1 of February 2007

The Water Requirements Satisfaction Index (WRSI) is an indicator which provides information on the amount of water deficit that crops experience throughout the growing season. In many cases, this index has a direct bearing on crop yield, showing areas where crop yields will be reduced because of water deficits. In Figure 3, dark green colours indicate areas where crops did not experience water deficits. Red and brown colours indicate areas where the crop experienced so much water deficit that the crop will either be a failed crop, or in very poor condition by the time of harvest. Cream colours indicate areas where the crop may be in mediocre condition because of large water deficits. Figure 3 suggests that, this year, the southern half of the region will experience yield reductions due to water deficits. Further analysis revealed that southern Mozambique and southern half of Zimbabwe have been affected, as their WRSI values are much lower than average.

MOZAMBIQUE Heavy rains were received in the northern regions of the country, with some areas receiving as much as three times their normal dekadal amounts for dekad 1 of February. In the central and southern parts, very little rainfall was received. The heavy rains received in the north, in conjunction with the high rainfall in the Zambezi basin in upstream countries, led to flooding in the Zambezi basin and in the northern region. Large hectares of crops were lost due to the flooding, which will compound the food security situations of the affected communities, many of whom also lost their homes due to the floods.

MALAWI. Rainfall was below normal to normal in most parts of the country during the first dekad of February, especially over the south and central parts of the country. This dryness resulted in some crops starting to wilt during the dekad, but recovered when there was more rainfall later in the dekad. The crops were reported to be mainly in the flowering and maturity stages, and generally in good condition. National experts estimate that if rains remain favourable through February, a good harvest should be realized. A bumper harvest is expected this year. The first round crop production estimates are putting a national production forecast of 3.15 million metric tonnes.

Fig.3. Water Requirements Satisfaction Index



BOTSWANA Rainfall has been poor over much of Botswana for most of the rainfall season. Since January, rains have been below normal in most areas, apart from a few areas in the south-western part of the country. In the first dekad of February, rainfall was quite low in most parts of the country, apart from the northern parts of the country. The poor rainfall patterns that have been realized since the start of the season have resulted in very poor crop conditions, as well as crop failure in many areas. The poor rainfall experienced in the last few dekads may also negatively impact grazing conditions.

ZIMBABWE Very little rainfall was recorded throughout the country in the first dekad of February. The most significant falls were concentrated in the central parts of the country, while it was generally dry elsewhere. Most of the crops in the northern parts of the country are reported to be at the flowering stage. The southern half of the country received negligible or no rains, within the context of agricultural crop requirements. The last issue of the *Agromet Update* indicated that crops were already starting to show signs of moisture stress. With the very low rainfall amounts received in the south so far this season, in the southern half of Zimbabwe, there is a high risk of low yields and total crop failure. Reports indicate that the dryness being experienced in the country coincided with the flowering stage in many crops, which will further compromise yields. Availability of inputs has also been a challenge.

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