



REGIONAL FOOD SECURITY PROGRAMME

Agromet-Update



Rainfall, Vegetation and Crop Monitoring

Issue Number: 13

Month: 3 Season: 2003/2004

Release date: 23-03-2004

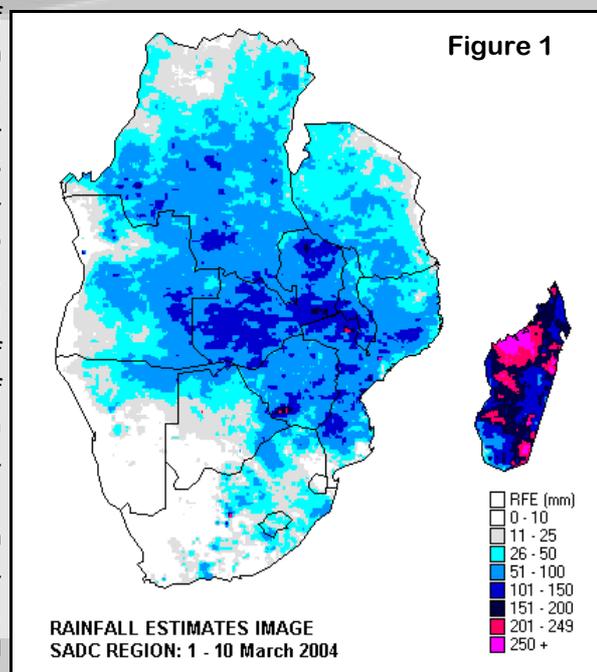
Highlights

- ♣ Moderate to heavy rains fall across most of the SADC region...
- ♣ Crop conditions improve...
- ♣ Crops at or close to maturity period in many areas...
- ♣ Late-planted crops threatened by frost in Lesotho and South Africa...

Rainfall Performance from 01-10 March 2004

Much like the previous dekad of 21-29 February, the first dekad of March 2004 had widespread rainfall across most of the sub-

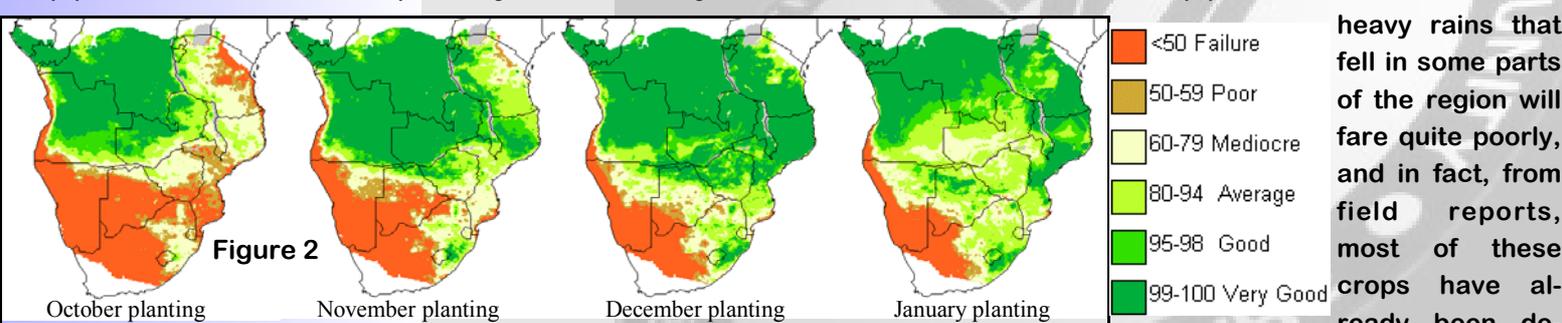
region. According to satellite-derived rainfall estimates (Figure 1). Moderate to high rainfall was experienced in most of Zambia, much of Malawi, most of Mozambique, much of Zimbabwe, eastern half of Angola, northern Namibia, northern Botswana, and southern half of D.R. Congo. In some areas, this high rainfall, on the backdrop of heavy rains that had been falling within their basins over the past few dekads, led to



flooding, and water-logging, as well as increased chances of flooding. These flooded and flood-prone areas included eastern Zambia, northern Namibia, northern Botswana, and southern Mozambique. Most areas of Tanzania, parts of Lesotho, and much of the productive maize triangle of South Africa received moderate rainfall. In contrast, little to no rain fell in Swaziland and surrounding areas of northern South Africa and southern-most Mozambique.

In the areas where moderate to high rainfall was received, this situation is expected to continue improving maize yields across the region, especially for those areas where early-maturing varieties were planted late. Rainfall has been quite consistent over many areas since mid January, and this has helped crop development in many areas. However, perhaps one of

the greatest fears is that the rainfall season normally ends around April, and this may not give the late planted crops enough time to mature, particularly if these crops were not early maturing varieties. The importance of planting dates is best illustrated by a series of model runs for the Water Requirements Satisfaction Index (WRSI) under a variety of scenarios for different planting dates (Figure 2). This analysis shows that for most areas (apart from southern Zambia), the maize crop planted in December will probably have the best yield at the end of the season. The crop planted in October after the



heavy rains that fell in some parts of the region will fare quite poorly, and in fact, from field reports, most of these crops have already been de-

clared a write-off.

This Agromet Update bulletin is a joint product of SADC FANR (Regional Early Warning System), and USAID FEWSNET.

Financial assistance for the production of the bulletin is provided by the European Commission through FAO.



Malawi

Heavy rains

were experienced across much of Malawi. This helped increase soil moisture and improve crop conditions in areas that had been dry during February. The early planted maize crop was reported to be at maturity and drying stage, a stage which does not need much water. The late planted crop was mainly at flowering and cob formation stage, and will need rainfall at least up to the end of March in order to reach maturity. Much of the southern part of the country was subject to late planting this season because of the onset of rains which was considerably delayed in this part of the country.

Swaziland

Apart from a few areas,

most areas in Swaziland received little to no rainfall in the first dekad of March. The Lowveld, which has been receiving poor and erratic rains for most of this season, received the lowest rains in the country this dekad. In most parts of the country, the maize crop is at an advanced stage in its crop cycle. In the Lowveld however, some farmers were encouraged to plant by the January rains, and in this case, the crop is in the early stages, but there are slim chances that the crop will reach maturity before the end of its crop cycle. WRSI simulations are also suggesting very low yields for the Lowveld. Grazing has improved significantly in the recent past, and cattle are also showing signs of improvement. Due to these improvements, it is unlikely that cattle will need extra alternative fodder during the winter period, as had been previously expected.

Lesotho

Most parts of the

country received significant rains in the dekad. This led to a further improvement in the crop condition, a situation that has been consistent in Lesotho over the last few dekads due to slightly improved rainfall. While most crops are now at flowering to grain-filling, the major concern now is that those crops which are still at flowering to early grain-filling stages may in fact be affected by frost before they reach maturity. However, no frost occurrence has been reported yet.

Zimbabwe

Satellite imagery

suggests that widespread moderate to significant rainfall was received throughout the country during the first dekad of March. The heaviest rains observed were over Matabeleland South province where Gwanda, and Matobo districts received above 200mm.

Malawi

A recent crop assessment conducted by

the National Early Warning and Food Information System indicated that coarse grain production was forecast at 8% higher than normal production. The report however indicated that this figure was contingent on reliable and consistent rain falling through the end of the season. The report also cited incidents of water logging and worm in some provinces. During the first dekad of March, light to moderate rains fell across much of the productive northern areas of Namibia, thereby maintaining the good crop conditions observed during the crop assessment mission.

Tanzania

While some of the bi-modal areas

in the northern part of the country are now reportedly harvesting, as well as preparing land for the main *Masika* rains, most of the crop in the uni-modal areas is reportedly at flowering stage. This is a critical stage of the crop when it requires that its water needs be satisfied in order to attain a good yield. The moderate rains across much of the country helped maintain a forecast for average yields across most of the bimodal areas, although there are some of the central unimodal areas of the country where rather poor yields are expected.

Zambia

Widespread rainfall was received

over most of the country. In many areas, this rainfall was as much as double the normal rainfall for this time in the season. These heavy rains have mainly served to improve the crop condition in most areas. Most of the crops are reported to be at maturity stage although some of the late planted crops are reported to be still at grain filling stage. However, the good rains are expected to continue, which should allow the late-planted maize to also reach maturity. On the downside however, the heavy rains have resulted in some loss due to flooding of some crop fields in areas including the Zambezi valley and the Luangwa valley.

South Africa

The *Maize Vision* reports that since the

second part of February until the end of the dekad, much of the productive areas of South Africa, excluding parts of the Free State, received some significant rainfall, which helped to revive the late planted crop, which constitutes a significant proportion of the overall planted area. The major concern is that the late planted crop may be susceptible to frost damage, although this is unlikely before early April. In addition, it is reported that conditions are currently more favourable for diplodia ear rot. Despite these negative conditions however, the maize production estimated by the *Maize Vision* has risen somewhat to now be pegged at 7.265 million tons.

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