



# REGIONAL FOOD SECURITY PROGRAMME Agromet-Update



## Rainfall, Vegetation and Crop Monitoring

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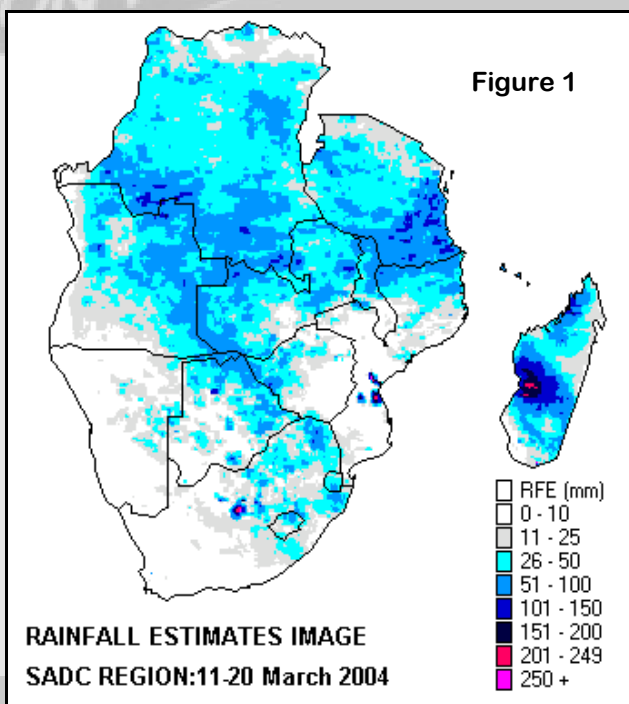
### Highlights

- Low to Moderate rains fall across most of the SADC region...
- smallholder maize production for 2003/04 season estimated at 1.5 million metric tonnes
- Record rainfall experienced in parts of Zambia...
- Hail damages maize crop in Thaba-Tseka in Lesotho

### Rainfall Performance from 11-20 March 2004

Similar to the previous dekad of 01-10 March, the second dekad of March 2004 had widespread rainfall across most of the sub-region. According to satellite-derived rainfall estimates (Figure 1). Low to Moderate rainfall was experienced in most of Angola, DRC, Tanzania and Zambia. While the northern parts of Malawi and Mozambique also experienced some rainfall. Zimbabwe was mostly dry except for the Matebeleland North province which was wet. Southern parts of Angola, most of Namibia except the Caprivi Strip, Mozambique, Central and southern Botswana either experienced little rainfall or were dry. South Africa was dry with isolated areas having experienced some rainfall especially in Limpopo province and parts of Free State, Mpumalanga and Kwazulu-Natal provinces. Lesotho and Swaziland also recorded some rainfall which caused some crop damage in Lesotho while in Swaziland, it did not have a significant impact on the crops as the growing season draws near to the end. Water in the Zambezi river due to heavy rainfall is causing flooding in the Caprivi strip creating problems for local communities.

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### Record rainfall experienced in Zambia

Since the beginning of the 2003/2004 rainy season, Zambia has been experiencing substantial amounts of rainfall. The cumulative rainfall recorded to date shows that Chipata has recorded the highest amount of about 1484mm followed by Kalabo with 1461mm, Ndola 1251mm, Mansa 1122mm and Kasama 1028mm. The above figures are the highest in the past five seasons. However, as of the 20<sup>th</sup> March 2004, most areas of the country received cumulative rainfall of more than 800mm. This amount is sufficient to support most cereal crops if the distribution is ideal.

### Hail storms damage maize at Ha Phaila and Ha Sephooko (Thaba-Tseka)

Substantial amounts of rainfall were received over the northern and central parts of the country during the dekad under review. Oxbow, in the north, Phuthiatsana in the northwest and Thaba-Tseka in the central west registered 51.7mm, 60.6mm and 41.8mm respectively. The hail storms damaged fields of maize (Figure 2). This will cause further reduction in production figures in a country that is already expecting low production as a result of poor rainfall performance during the season.



Figure 2

Hail damaged maize crop in Thaba-Tseka Lesotho, March 2004

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**Malawi**

The country experienced some dry spell during the dekad being reported. This dry spell is likely to have a severe negative impact on the final yields of the late planted maize crop that is at flowering stage particularly in Shire Valley and some isolated areas in southern Malawi. If the current dry spell continues, production of the maize that was planted between mid January and early February 2004 may not produce significant yields. However, the dry spell facilitated drying of crops that have reached maturity in some parts of the country.

According to preliminary crop production estimates released in early March 2004 by National Statistics Office (NSO), summer smallholder maize production for 2003/04 season is estimated at 1.5 million metric tonnes which is 24% below last season's total maize production. However, it should be noted that this preliminary maize production estimate has not included winter and estate production.

**Lesotho**

Improved crop (maize, sorghum) condition was observed at several places around the country although not to improve yields significantly. However, at some places crops were severely affected by hail storms which caused some damage to crops and some sustained permanent damage. Nevertheless, crop stages vary from flowering to grain filling. As the winter approaches, there is a danger that crops not fully mature have a high probability being caught by frost before maturing. The country is likely to have a reduced production putting more people at risk of food insecurity with respect to the main staple food crop. On the other hand, summer the wheat crop has reached the waxy stage at maturity to full maturity with poor to good condition.

**Swaziland**

The country received some significant rainfall although the impact on the crop performance will be very little. The lowveld has continued to receive little rainfall and the crop is not performing very well. Reports indicate that where maize has matured, harvesting has started taking place. This could be attributed to low food availability such that communities may even be artificially drying the maize to prepare maize meal for consumption. Local staff estimate production 83,270 tons using the WRSI methodology which takes into account moisture stress experienced by crop during the growing season.

Ecological Zone	WRSI	Yield (t/ha)	Area Planted (ha)	Production (tons)
Highveld	97	2.0822	17236	35,889
Middleveld	93	1.5672	23642	37,052
Lowveld	55	0.6093	11064	6,741
Lubombo	91	1.4191	2528	3,587
Total			54470	83,269

**Botswana**

The country experienced some dry conditions in the central and southern parts. The central and southern parts have been dry for two consecutive dekads which not good for both pastures and crops. The moisture accumulated during the last dekad of February 2004 in which a substantial amount of rainfall was experienced could now be depleted after 20 days of no rainfall. Of major concern in the country is the livestock industry which is heavily dependent on rainfall for its good pastures.

**Tanzania**

Agricultural activities during the dekad centered on land preparation ready for Masika around Lake Victoria basin, transplanting rice in various areas, while weeding activities were progressing well in unimodal areas. Relative maize stage for the maize crop vary from region to region from vegetative to maturity. The crop attained ripeness phase in Rukwa region, Urambo, Tabora, Sikonge, Manyoni and Chunya districts, while the rest of unimodal areas reported predominantly flowering stages except over high ground areas in Njombe, Mufindi, Tukuyu and Mbeya districts that reported vegetative stages. Vegetative phase was also observed in several districts in Tanga region for the maize planted during the January – February off-season rains.

**Zambia**

The dekad was characterized by light rainfall with adequate sunshine hours for crop development. However, the eastern part of Central province which was relatively dry is experiencing crop failure in some parts due to late planting. Crops that were planted early are not affected. The Western and Eastern provinces have continued experiencing floods due to heavy rainfall. Although not having reached full maturity, the early planted crops in Lukulu, Kalabo and Mongu are being harvested due to floods. The floods have washed away some crops and infrastructure. Apart from the mentioned areas above, the other areas most affected are the Luangwa Valley of the Eastern province (Mambwe, and parts of Petauke, Katete and Nyimba districts). The 2003/04 growing season is almost coming to an end especially in the southern half of the country as can be noticed by the withdrawal of the ITCZ. The end of season is normally the first week of April.

**Zimbabwe**

Harvesting of the early-planted maize crop has commenced in most southern provinces. The early-planted maize crop is at soft-hard dough stage in Mashonaland Central province whilst the late planted crop, which forms the bulk of the crop, is at early reproductive stage. In Matabeleland South province the crop planted in December/January is expected to give a better yield in all districts. There were significant crop write-offs especially in Kezi, Gwanda and Insiza districts. In Matabeleland North province there are reports of water logging and leaching with crops showing nitrogen deficiencies. Early crop in Lupane district has reached harvest to maturity stages. In Mashonaland West province there is high prevalence of cob rot due to excessive rains. Witch weed is going to reduce yield in Kariba district. Generally, across all provinces, the late-planted crop is benefiting from wet spells being experienced.

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