

# FOOD SECURITY EARLY WARNING SYSTEM

### <u>Agromet-Update</u>

2005/2006 Agricultural Season



Issue 08 Dekad: 01 Month: February Season: 2005-2006 Release date: 17-02-2006

### <u>Highlights</u>

- High rainfall received in most parts of the region...
- Poor rainfall continues in the Uni-modal areas of Tanzania as the 'Vuli' short rainy season fails...
- Vegetation condition poor in parts of the SADC region...
- Crops reported to be experiencing water stress in Swaziland...

The rainfall performance continued to be satisfactory in most parts of the SADC region (figure 1). However, the situation in Tanzania continues to be of grave concern as persistent dry conditions continue subjecting crops to severe stress in both uni-modal and bi-modal rainfall regimes. However, Madagascar experienced good rainfall during the dekad under review, while Western Zambia, parts of northern Botswana, the Limpopo basin covering Mozambique, South Africa and Zimbabwe received rainfall above 100mm. The areas that received more than 100mm are however not high maize production areas. The provinces of Cabo Delgado, Niassa and Nampula received very low rainfall during the dekad under review.

Fig.1. Rainfall Performance for Dekad 1 of February 2006

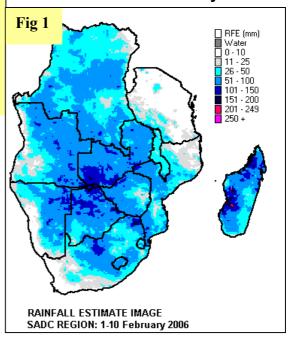
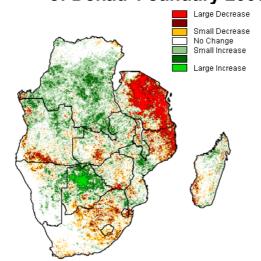


Fig.2. Vegetation Condition as of Dekad 1 January 2006



## Implications of Poor Vegetation Performance

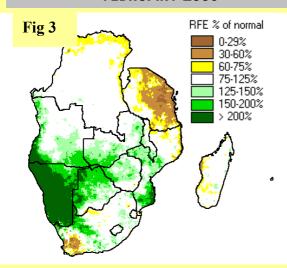
Inormalised Difference Vegetation Index (NDVI) provides information indicating the state of vegetation in general encompassing natural vegetation and crops. The greener the image appears, the better the vegetation and crops may be. Figure 2 shows a smoothed image indicating that there has been deterioration of vegetation in many parts of the region (red colour). Significant decreases have taken place in Tanzania, Northern Mozambique, parts of Zambia, southern Angola, parts of South Africa, Swaziland and Lesotho. Taking general vegetation as a proxy for crops, it is likely that crops in these areas are also not performing well. The Tanzanian Government has already declared a disaster and requested humanitarian assistance in line with NDVI indication. Photographs from Swaziland also indicate a failed crop in the LowVeld and parts of Zambia are also experiencing poor crops.

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### PERCENTAGE RAINFALL RECEIVED SINCE 1st SEPTEMBER 2005 AS OF DEKAD 1 OF FEBRUARY 2006



**LESOTHO** The country continues to receive good rainfall during the season with substantial amounts during the dekad being reviewed. Generally the crops doing well although there are reports of moisture deficits in Mafeteng and Mohale's Hoek.

### Crop Failure at Sithobela in the LowVeld of Swaziland as of Dekad 1 February 2006



The months of January and February mark the peak of the rainfall season. Sufficient rainfall should have been received. The performance of rainfall thus far provides a clue of the probable end result of the season. Most of the devastating prolonged dry spells occur in January and February and so far isolated cases in Zambia, Zimbabwe, Mozambique, Malawi have been reported. The percentage rainfall received image (figure 3) shows that so far most areas in the sub-region have received well above 75% of rainfall except in Tanzania.

**TANZANIA** The country continued to experience poor rainfall. Most of the country has received under 60% of normal rainfall. Dry spells have prolonged affecting crop performance leading to a drought. The drought conditions have adversely affected mainly the central and lake regions of Dodoma, Tabora, Singida, Shinyanga, Mwanza, Mara and parts of Kagera region. The drought has also affected the pasture condition leading to poor condition of livestock. Reports indicate that there is a possible armyworm attack which may exacerbate the food insecurity situation in the country.

**ZIMBABWE** The country has continued to receive good rainfall with above normal rainfall received in most parts of the country (figure 1). The climatic conditions have been favourable for a good harvest but reports of high prices of input may affect agricultural production, especially for resource-poor farmers. The high rainfall experienced may also cause leaching of vital nitrogen required for vegetative development thereby reducing the potential productivity of crops.

**MALAWI** The crop situation was favourable in the country until the recent dry spells that may affect the yields. The dry spells started at end of January 2006. Reports indicate that the dry spells are already affecting crops at vegetative and flowering stages which are showing signs of wilting. Areas that are significantly affected are in central and northern parts of the country. Crop production in the affected areas will significantly be affected if dry spells continue up to the end of February 2006.

#### **SWAZILAND**

The country has generally been receiving insufficient rainfall to meet the evaporative demand in the last 3 dekads and this has led to low moisture affecting crops. The pastures have been doing well as they are more resilient than food crops. The photograph above depicts the condition of crops in Sithobela in the Lowveld. Given the time left to the end of the season, its unlikey that this crop will recover.

**MOZAMBIQUE** The country has been receiving sufficient rainfall during the season. However, the dekad under review had poor rainfall especially in the north with some areas having received under 75% of normal rainfall. The situation is likely to improve and hence, may not have any negative impact on crop production.