



Food Security Early Warning System Agromet Update



2010/2011 Agricultural Season

Issue 05 Month: January Season: 2010-2011 Release date: 15-02-2011

Highlights

- High rainfall continues in the southern half of the region, low rainfall in the north
- Forecast likelihood of normal to above normal in most areas except north-eastern areas
- Short season *Vuli* rains fail in northern Tanzania, unimodal season rains not performing well
- Floods and waterlogging in Lesotho and parts of South Africa
- High rainfall raises flood threats in Limpopo basin

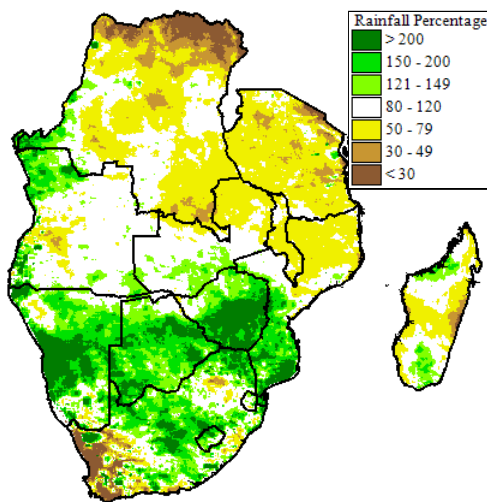


Figure 1. Rainfall as percent of average for 1-31 January 2011

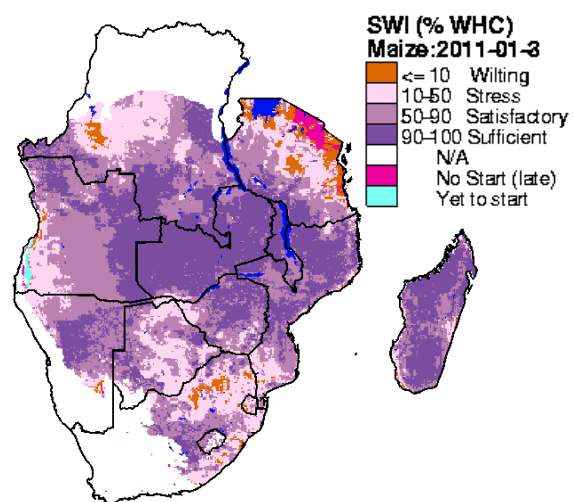


Figure 2. Soil Water index by 31 January 2011

Above normal rains were received in the southern half of the region during the month of January (Figure 1, green colours), with normal rainfall in the central parts (white colours) and below-normal rain in the northern parts of the region (yellow and brown colours). This rainfall pattern resulted in very low soil moisture in some of the northern areas, in particular Tanzania, as indicated by the brown and pink/light purple areas in Figure 2, which subsequently resulted in crop failure in the bimodal areas in northern

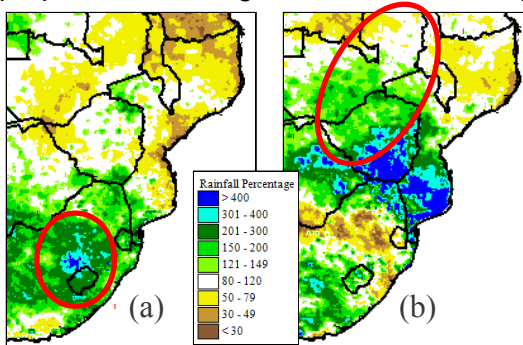


Figure 3. Percent of average rainfall for 11 Dec 2010 to 7 Jan 2011 (a), and 8 to 22 Jan 2011 (b)

Tanzania, and a poor start of season in the unimodal areas in central Tanzania. The high rains in the southern half of the region resulted in high levels of soil moisture in many parts of the region, as indicated by the dark purple colours in Figure 2. In many of these areas, these high moisture levels have facilitated good crop development, but in other areas, excessive moisture has resulted in waterlogging and flooding in low lying areas. Figure 3(a) shows the heavy rains that fell in central South Africa and Lesotho between early December and early January, in some areas over 300% of normal, resulting in flooding and waterlogging. This was followed by high rainfall in most parts of the Limpopo River Basin, particularly between early and mid January, resulting in high

river levels and flood warnings being issued in several areas. These areas of high rainfall are shown by the dark blue colours in Figure 3(b), indicating areas where over 400% of normal rainfall was received. Flooding in most parts of the Limpopo has not yet been reported, as the rainfall abated, but several areas in central and southern Mozambique are still in high flood alert.

Seasonal Rainfall Summary

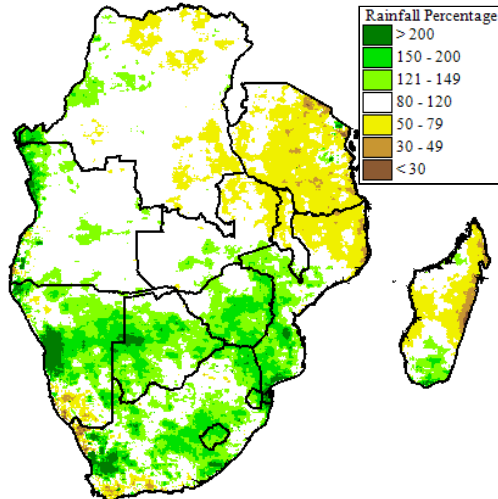


Figure 4. Rainfall as percent of average for 1 October 2010 to 31 January 2011

Rainfall for the October 2010 to January 2011 period was generally above normal over many of the southern areas (Figure 2, green colours) while below normal rainfall has been received over the north-eastern areas and northern and central Madagascar (yellow and brown colours, Figure 3). Much of the rainfall in the southern half was received in December 2010 and January 2011. Sustained high rainfall in the Zambezi basin on the background of already high river levels due to the flooding last year has elevated the flood risk in central-eastern parts of the region, particularly in central Mozambique, as well as in northern Namibia. Sustained low rainfall in the northern areas has resulted in failure of the Vuli rains – the short season rains in Tanzania. The main growing season in the unimodal areas is also reportedly not performing well due to low rainfall.

Rainfall Forecast Update

The SADC Climate Services Centre (CSC) recently issued an update of the rainfall forecast for February to April 2011. The forecast suggests an increased likelihood of normal to above-normal rains in most parts of the SADC region (light blue colours, Figure 5). The forecast predicts greater chances of above normal to normal rainfall in south-western parts of the region (dark blue colours), which suggests even higher chances of above-normal rainfall. The exception to this pattern is the north-eastern parts of the region, in particular including northern Tanzania, where normal to below-normal rains are expected (yellow colours). Meanwhile, La Nina conditions continue in the Pacific Ocean, and most models predict their continuation up to around June 2011. La Nina is generally associated with a tendency for above-normal rains in most parts of the SADC region.

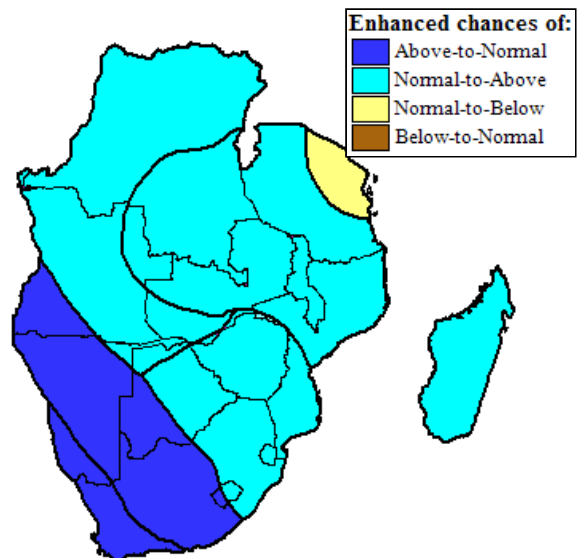


Figure 5. Rainfall forecast for February to April 2011. *Source: SADC CSC*

Agricultural activities and Crop Conditions: Selected Country Reports

Agrometeorological conditions are summarized below, for those countries from which national reports were obtained.

Lesotho: Above normal rainfall was received in Lesotho throughout the month of January. These high rains, occurring since December 2010, have led to waterlogging, particularly in the western lowlands, and has hampered field activities such as weeding. Crops are reported to be in the vegetative to flowering stages, in a fair to poor condition, particularly due to the waterlogging.

Malawi: Rainfall in Malawi has been generally normal to below normal in most parts of Malawi during this rainfall season. However, apart from the late start in some areas, the rainfall distribution has been good, and this good distribution continued into January. Good rains fell in most areas in the second dekad, but low rainfall was received in the third dekad, and field reports indicate that crops survived on residual soil moisture. Reports further indicate that crops are in good condition between vegetative to cob-formation stage, and yields are expected to be better than last year if the good rains continue into early March.

Mozambique: Due to high rainfall in Mozambique and upstream countries, flooding has occurred in many riverine areas, and over 20,000 ha of crops were destroyed, particularly in the southern and central provinces. Many of the rivers, particularly the Zambezi, Pungue, Buzi and Save are above alert level, although all these except the Zambezi are trending towards decreasing river levels. Despite the flooding that has occurred, extensive areas (particularly in the south) are also benefiting from the high rains, and areas in the north are also receiving sufficient rainfall for cropping needs. National analysts are thus expecting better harvests than last year overall.

South Africa: Heavy rainfall amounts in central parts of South Africa resulted in flooding and waterlogging occurring in January. The flooding caused loss of lives and destruction of infrastructure and crops. National reports indicate that at least 40 people have lost their lives as a result of flooding and adverse weather. Waterlogging was observed in several provinces. In addition, some stock dams burst as a result of the heavy rains. National reports indicate that about R1 billion was lost in agricultural production, and another about R1 billion was lost in damage to farm infrastructure, due to the floods. Estimated planted area for maize was 2.5 million ha, 8.3% lower than the previous season.

Tanzania: Rainfall has been low in most parts of Tanzania, resulting in a poor outcome of the first season *Vuli* rains in the bimodal areas which are located in the northern parts of the country. There have been reports of replanting occurring in some of these bimodal areas, while in others, reports indicated that land preparation for the *Masika* long rains season had started. In the unimodal areas, which comprise the greater part of the country, field activities reported during the month included land preparation, planting, and weeding. Crops in the unimodal areas were reportedly being affected by the prolonged dryness.

Zambia: High rainfall was received in Zambia during the month of January, particularly in the western half of the country. This resulted in some flooding being reported in Lusaka province, as well as field reports indicating that wet spells had hampered field activities such as weeding in mid-January. The maize crop was reported to have reached flowering stage by end of January, and was in good condition. Planting of cassava, legumes and sweet potatoes was reported to be underway by mid-January

Zimbabwe: Reports from Zimbabwe suggest that the crop ranged from fair to good conditions in most areas, with the crop at vegetative stage. Early-planted cereals are at the reproductive stage. There were reports of an armyworm outbreak in parts of Mashonaland Central, Mashonaland East and Midlands provinces, where control measures have been put in place. Livestock condition ranges from fair to good and grazing conditions is generally good. No reports of flooding, waterlogging or dry spells have been received. The rainfall over much of Zimbabwe has been fairly well distributed and suitable for crop production, although abnormally high rainfall amounts were received in some of the central parts of the country during January, and threats of flooding were experienced in the northern parts of the country after the Kariba spill gates were opened.