



Food Security Early Warning System Agromet Update



2010/2011 Agricultural Season

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Highlights

- Several areas affected by dry spell throughout February
- February dry spell likely to affect final harvests, particularly in southern Malawi, parts of South Africa, southern Zambia and southern Zimbabwe
- Forecast for above-normal rainfall in most parts of the region

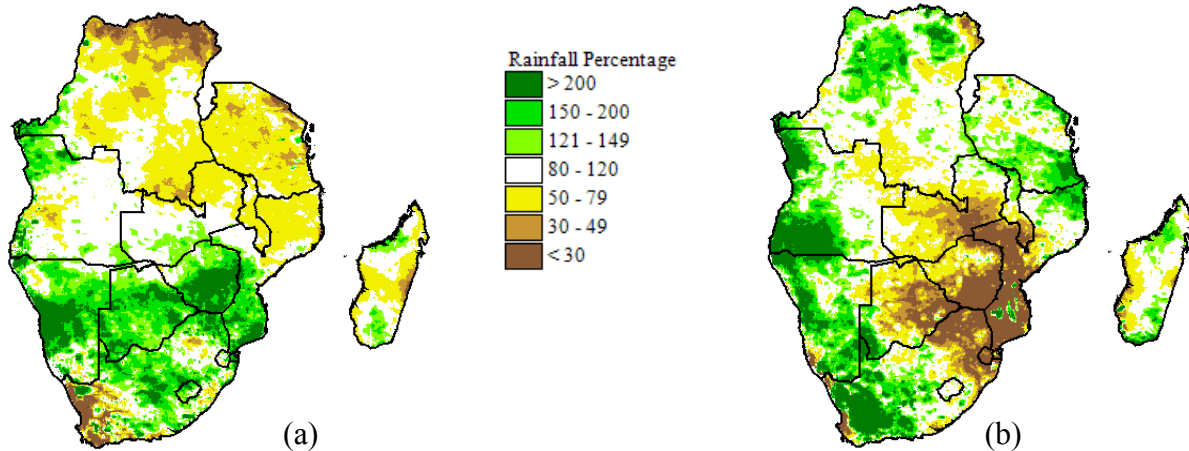


Figure 1: Rainfall as percentage of average for January 2011 (a) and February 2011 (b)

Following heavy rains in the southern half of the region in January (green colors, Figure 1a) and low rains in the north east (yellow/brown colors, Figure 1a), a dry spell affected the central parts of the region for the greater part of February (brown colour, Figure 1(b)) while above-normal rains were received in the northern parts of the region (green colours, Figure 1(b)). The dry spell resulted in crop water stress across central parts of the region,

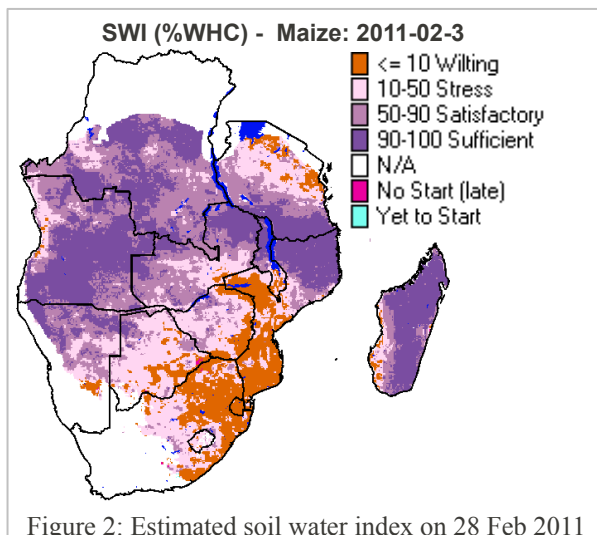


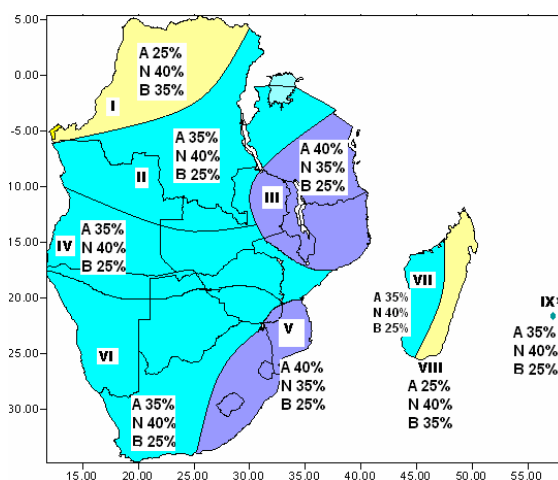
Figure 2: Estimated soil water index on 28 Feb 2011

particularly in areas including eastern Botswana, southern Malawi, central and southern Mozambique, Swaziland, northern South Africa, central and southern Zambia, and southern Zimbabwe. There were reports of crops reaching permanent wilting point in parts of the region due to the dry spell. The dry spell only ended in some areas in central Zimbabwe and western half of Zambia towards the end of February, but continued in many other areas. Figure 2 shows the soil water index for cereal crops – estimated soil water content expressed as a percent of water holding capacity, with the orange areas having a very low estimated soil water

index, and highlighting some areas which could have been negatively impacted by the February dry spell.

Several areas including parts of Lesotho, South Africa, Swaziland and Zimbabwe had earlier been affected by waterlogging which resulted in leaching and a subsequent loss of yields, in affected areas. Despite some areas being affected, most areas benefitted from the abundant soil moisture supply from the heavy rains. In contrast, the rains received in February in Tanzania helped to provide improved moisture supply to crops after the below-normal rainfall that has been received in the country since earlier in the season. Meanwhile, heavy rains were received in the southern Angola/northern Namibia border areas in February (green colors, Figure 1b), raising risk of flooding in those areas, according to hydrological reports received from Namibia.

Forecast Update



The SADC Climate Services Centre (CSC) produced a forecast update for the period March to May 2011. During this period, the rainfall will be winding up in most parts of the SADC region, so it is generally characterized by lower rainfall amounts. The forecast predicts that normal to above normal rains are likely to occur over most parts of the SADC region, which suggests a continuation of the rains during the coming period.

Agricultural activities and Crop Conditions: Selected Country Reports

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

Botswana: Rainfall was below normal in most parts of the country except the south-west most areas during the month of February. The dryness was more intense in the eastern parts of the country, with possibility of crop damage in some areas. This dryness occurred after excessive rains in January had caused loss of nutrients through leaching in some areas.

Malawi: Rainfall in Malawi has been generally good in the northern and central parts of Malawi, but in the southern parts, a dry spell affected the crop throughout the month of February, intensifying during the second half of February. This dryness resulted in permanent wilting of the crop before reaching maturity. The impact of the dry spell was most severe on the late planted crop. In contrast, crops were reported to be doing well in the northern and central parts of Malawi.

Mauritius: Rainfall was slightly above normal in during the month of February, and 13% below normal for the October-February accumulation. The sugar cane crop development was good in February, although the cumulative growth remains substantially below normal after a long dry spell that affected the crop earlier during the season in late 2010.

Mozambique: Little to no rainfall was received in southern and central Mozambique during the month. This resulted in moisture deficits in some areas, which predominantly affected the late planted crop. National reports indicate that by mid-February, the maize crop in the south had reached maturity, while in the centre, it was in the ripening/maturation phase. As such, many crops may have avoided the brunt of the February dry spell. However, it is likely that February dryness may diminish moisture in places where a second season is possible. In contrast, significant rains were received in the northern parts of the country during the month, which will contribute to better crop conditions. In some areas in the south and central where crops were lost due to flooding in January, the recession agriculture could still yield a good harvest. Altogether, approximately 21000 ha of crops are reported to have been lost to flooding.

South Africa: Rainfall in February performed poorly, particularly in the northern and eastern parts of the country. National reports indicate that this may have a negative impact on the maize and soya bean yield estimates, particularly for the late planted maize crop. This will have a minimal impact on the early planted maize crop, which was at an advanced stage when the dry spell started. The national average yield for maize is currently estimated at 4,63 t/ha, 0.86% lower than yield for the previous season. National reports also indicated that the expected commercial maize crop is 11.044 million tons, 13.82% less than last season's crop. The reduction in maize production is mainly due to the reduced area planted.

Tanzania: Rainfall has been erratic in the northern and central parts of Tanzania during the month of February. This resulted in reduced moisture availability, particularly for pasture and crops, in the northern and central parts, and subsequent crop moisture stress in some areas. There have been reports that maize crops in parts of central Tanzania have permanently wilted, and other crops such as sweet potato (an alternative food/cash crop) were also affected by the dryness. In contrast, sufficient rains were received in the southern parts of the country. Reports indicated that land preparations for the long season *Masika* rains in the bimodal areas located in northern Tanzania were underway, after the failed short season *Vuli* rains.

Zambia: National reports indicate that maize is in good condition in most areas, especially where planting was done early. In most parts of the country, maize is reported to be in the maturity stages, and green maize is reported to be reaching markets in some districts. The February dry spell caused permanent wilting in some parts of the Southern Province. Termites are reported to have affected the maize crop in the central parts of the country.

Zimbabwe: Moderate amounts of rainfall were received in the central and western parts of the country during the month. However, in the southern half, the eastern-most and northern-most parts of the country, little to no rainfall was received. This resulted in significant soil moisture stress, in parts of the country, with reports of permanent wilting occurring in some of the southern areas.