



# Food Security Early Warning System Agromet Update



## 2012/2013 Agricultural Season

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Season: 2012-2013

28-01-2013

### Highlights

- Excessive rains in south-eastern parts of the region cause flooding and waterlogging
- Late onset, erratic rainfall and high temperatures cause crop failure and necessitate replanting in southern Zimbabwe and southern Mozambique
- Armyworm outbreak reported in Botswana, Malawi, Tanzania, Zambia and Zimbabwe

### Regional Summary

Extremely high rainfall in the first 20 days of January has led to flooding and water-logging in parts of southern and central Mozambique, Zimbabwe, northern South Africa, Malawi and Zambia. Some areas received more than 5 times the normal rainfall expected during this period (Figure 1, blue colors), and for many areas, this is the highest rainfall recorded in the entire satellite rainfall estimate (RFE) record stretching as far back as 2001 (Blue colours, Figure 2). Mozambique reports that over 29,000 Ha of various crops had been negatively affected by the excessive rains as of the second dekad of January. In many of the affected areas, a break in rainfall is required to allow the flood waters to recede and waterlogged areas to recover. The extreme rainfall has eliminated rainfall deficits from a water supply perspective in many parts of the region, though this has not benefitted the first planted crop which in many areas had already wilted. It can however benefit crops planted flood recession areas. Some areas like southern Botswana are however still experiencing overall rainfall deficits which started in the previous season and are affecting water supply.

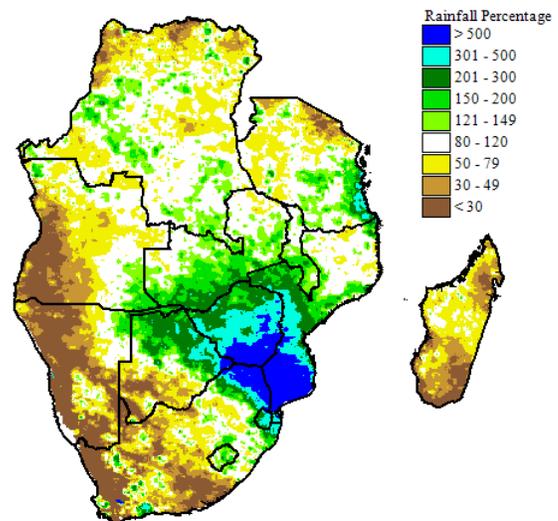


Figure 1. Rainfall anomaly for 1 to 20 January 2013

Poor, erratic rainfall combined with high temperatures in November and December also resulted in crop failure in southern Mozambique and southern Zimbabwe. Livestock has also been affected by the poor rainfall in some areas such as northern South Africa and southern Zimbabwe. Reports from Mozambique indicate that approximately 37,000 Ha of crops were lost in the southern provinces of the country due to the dry conditions. In Zimbabwe, crops were reported to have reached permanent wilting point in some of the southern areas, but in many parts of the country, reports indicate that crops were affected by an erratic onset and experienced poor germination as a result. This may negatively affect the overall crop production at the end of the season. In both Mozambique and Zimbabwe, replanting was undertaken in areas where permanent wilting occurred. Replanting is a common occurrence in southern Mozambique, sometimes happening several times, and there are still chances that the crop can still perform well if good rains occur until late into the season, as has happened in the past. However, it is also likely that the replanted crop may have been negatively affected by the

extreme rainfall, and further replanting may be required. The heavy rains that fell in January will also give good opportunity for those areas with appropriate soils to have sufficient soil moisture for long periods supporting crops.

Despite the negative impacts of inclement weather in many countries, crop conditions are reported to be doing well, including in areas such as Malawi, parts of central and northern Mozambique, the main maize-production areas of South Africa, and most parts of Zambia.

Armyworm outbreaks have been reported in several countries in the region, namely Botswana, Malawi, Tanzania, Zambia and Zimbabwe. The severity of the outbreaks differs among the different countries, according to a regional FAO update report. The report indicates that in Botswana, the armyworm was detected in several parts of the country, at an extent last experienced in 1991. In Malawi, the report indicates that several districts have been affected, with an estimated 620 Ha affected for 1719 farmers. Government has issued pesticides and equipment to the affected areas. The extent of the infestation is as yet unknown, according to the report. Tanzania had outbreaks in several areas in central and northern parts of the country, and farmers have managed to control the outbreaks up to present. The regional armyworm outbreak was first reported in Zambia and spread to 7 out of the 10 provinces of the country. It is reported to have been effectively controlled by now, and estimates indicate that approximately 97,000 Ha of farmland were at risk of damage. Government has supplied seeds for replanting for some affected farmers. In Zimbabwe, all 10 provinces of the country were reportedly affected, with more than 11,000 Ha being affected in the four worst-affected provinces. The FAO report indicates that there is a high likelihood that the infestation could reach the northern provinces of South Africa.

**Rainfall Forecast Update**

A forecast update issued by the Southern African Regional Climate Outlook Forum (SARCOF) suggests a continuation of enhanced chances of normal to above-normal rainfall for most of the region for the February-April 2013 period. In the short term, forecasts from major climate centres suggest a reduction in rainfall activity through the end of January into early February over most of the areas affected by extreme rainfall in south-Eastern parts of the region, which will help in the recession of floods and recovery of water-logged crops.

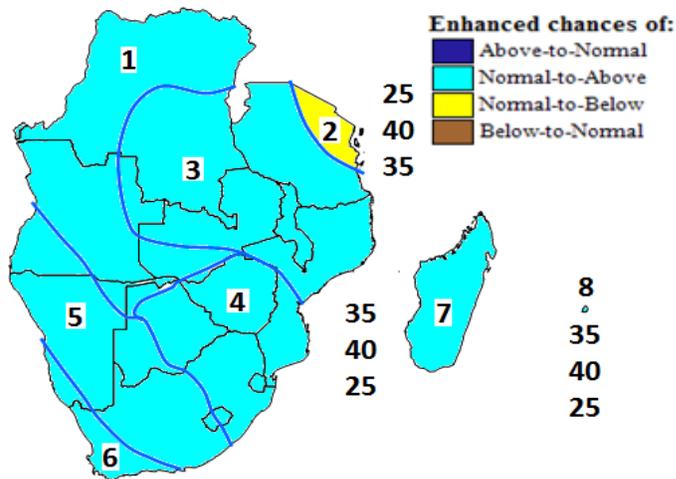


Figure 2. February to April 2013 rainfall forecast  
Source: SADC CSC

**National Agromet Summaries**

**Angola**

Satellite imagery suggests poor rainfall performance in central/western Angola from late December to mid-January. In particular, the FEWSNET satellite rainfall estimates (RFE) suggest that the rainfall in the 31 days from 21 December 2012 to 20 January 2013 was the driest period on the 12-year RFE record. Vegetation-based satellite images show below average conditions over the same area in Angola. Although not conclusive without ground information, this analysis suggests that close monitoring is required for the season, particularly given that some of the affected areas suffered from a severe drought last season.

## **Lesotho**

A significantly delayed and erratic onset of rains, high temperatures, and generally poor rainfall distribution has led to a reduced likelihood of good agricultural production in Lesotho this season. In the highlands, frost also affected crops. Delayed onsets are particularly detrimental to crops in Lesotho due to the onset of frost as winter approaches, which can negatively affect crop yields if it occurs before crops reach maturity. With planting in some areas having been delayed by over 40 days or more, there are high chances of frost damage occurring to crops.

## **Madagascar**

Southern and north-eastern Madagascar are indicated by satellite rainfall estimates to have suffered from the lowest rainfall on the 12-year RFE record over the 31 days between 21 December 2012 and 20 January 2013

## **Malawi**

Reports indicate that crops in Malawi are in good condition in most parts of the country, and Malawi is expecting a good harvest this season if rains continue through February and March. Rainfall distribution has generally been conducive to good crop development, except for a slightly delayed onset of rains, as well as excessive rains in some of the southern areas that resulted in reported flooding. The floods, which occurred in the first dekad of January, receded in mid-January after a lull in the rains. Crop stages ranged from early vegetative to flowering stage

## **Mozambique**

Southern Mozambique was affected by both excessively dry and wet conditions. A dry spell in November led to permanent wilting of much of the maize crop, and consequent replanting with the good rains that were received in December. However, excessive rains in the first 20 days of January over southern and parts of central Mozambique, which were, according to satellite rainfall estimates, more than 1000% of the normal rainfall in some areas, resulted in flooding and waterlogging in many parts of southern Mozambique. Despite these events, national reports indicate that field crops are generally in good condition. In parts of central and northern Mozambique, crops are in vegetative and flowering stage; while in the south, they were in emergence and vegetative stage, primarily because of the replanting that was necessitated by wilting.

## **South Africa**

Good rains were received in some of the main maize growing provinces. In North-West Province however, reports indicate that many farmers did not plant due to insufficient rainfall. Forage and livestock conditions were reported to have deteriorated in some of the northern provinces due to poor rainfall, although in most provinces they were reported to be in reasonable to good condition. There were also incidents of flooding reported.

## **Tanzania**

Rainfall distribution in some of the bimodal areas, located in the northern parts of the country, has been generally inadequate to support good crop development, and crops in these areas were reported to be in poor to moderate condition. In the unimodal areas in contrast, sufficient rainfall was received to allow for crop establishment. Pasture and water for livestock were reported to be good.

## **Zambia**

Maize crops are reported to be in generally good condition in most parts of Zambia, ranging from advanced vegetative to flowering stage. This is despite a late onset of rains in some areas, an

armyworm infestation (which is now under control) that led to crop loss and necessitated replanting in some areas, as well as flooding and waterlogging in riverine and low-lying areas in Southern Province respectively. Apart from a delayed onset and excessive rains in parts of the Southern Province, rainfall has generally been good throughout the season

### **Zimbabwe**

The southern half of Zimbabwe suffered an erratic onset and poor early season rains that led to extensive permanent wilting of most crops planted with the first rains in October, and necessitated replanting with good December rains that ensued. Livestock were also negatively affected by the dryness. However, January witnessed extremely high rains that led to flooding and waterlogging, which led to further crop loss in some areas. In most parts of the country, early planted crops suffered from poor germination and wilting, and good effective rains were only received in December in most areas, which is later than normal for most areas. Crops are only in emergence to vegetative stage due to the late planting, and good rains will be needed possibly through April for many crops to reach maturity.