



# Food Security Early Warning System Agromet Update



## 2012/2013 Agricultural Season

Issue 04 Month: February

Season: 2012-2013

08-03-2013

### Highlights

- Prolonged dry spell in southern areas compromises production potential in several countries
- Armyworm outbreak contained in most parts of the region, with new outbreaks reported in Lesotho and South Africa

### Regional Summary

A dry spell in the southern half of the SADC region has affected several countries (Figure 1, brown colours). Areas where the rainfall deficits were most pronounced include southern Angola, Botswana, southern Mozambique, Namibia, northern South Africa, southern Zambia, and southern and central Zimbabwe. In many of these areas, rainfall was less than 30 percent of average rainfall over the 3 week period of analysis from 12 February to 4 March 2013. Many of the affected areas have been experiencing dry conditions for longer periods, over 40 days in many cases. Cropland, rangeland and pasture are likely to have been affected, particularly in those areas where the dryness stretches as far back as January, including areas that did not benefit from the heavy rains which fell in January in many other parts of the region. As a consequence of

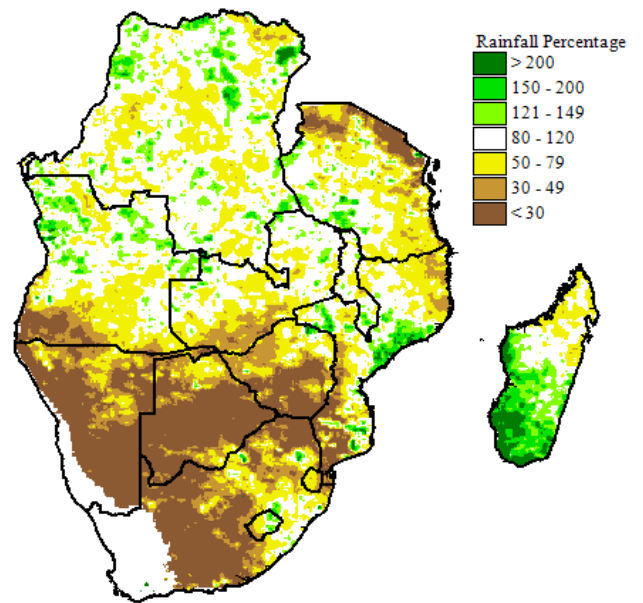


Figure 1. Rainfall anomaly for 12 Feb – 4 March 2013

the low rains in these areas, modeled soil moisture levels have decreased significantly, to wilting levels in some areas. Satellite-based vegetation images also show well below average vegetation conditions in many south-western parts of the region (Figure 2, brown colours), with negative implications for crops and pastures in those areas. Maize crops in parts of Zimbabwe, Zambia, South Africa and Botswana were observed to be highly moisture stressed, and significant rainfall is required to avoid widespread permanent wilting. However, crops in some areas are reported to have already reached permanent wilting point. The dry spell occurred when many crops were in the flowering stage, a time when yields can be significantly reduced by moisture stress. This dry spell is most likely going to affect national production in several countries, although the extent of impact in each country is yet to be determined.

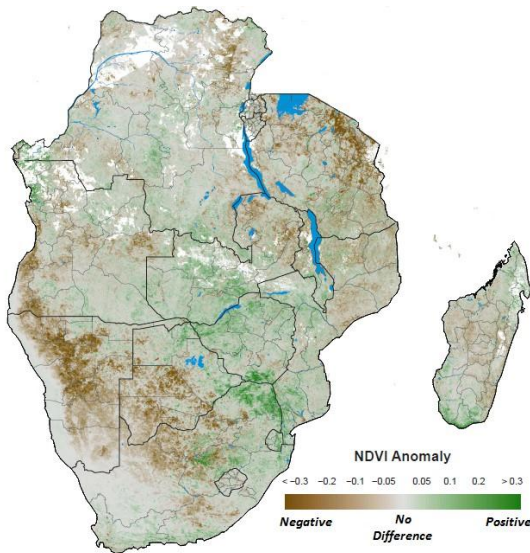


Figure 2. Vegetation index anomaly for 26 February to 5 Mar 2013.

Source: USGS/FEWSNET

Armyworm outbreaks that were reported earlier in the season in several countries in the region have largely been contained. These countries include Botswana, Malawi, Tanzania, Zambia and Zimbabwe. However, recent reports indicate outbreaks occurring in South Africa and Lesotho. Efforts are currently underway to contain the outbreak in Lesotho.

### *National Agromet Summaries*

#### **Angola**

After the severe drought experienced by Angola last season, an analysis of satellite imagery suggests that 2012-2013 may be another dry season for the country. Vegetation imagery shows below average vegetation conditions in some of the major maize-growing areas of central/western Angola. The same data also indicates that the vegetation conditions in those same high-production areas may be worse this season than they were last season, when a severe drought resulted in poor crop production. In addition, rainfall estimates also suggest below average rainfall for January and February 2013 in much of the country, and well-below average rainfall in the southern and western areas.

#### **Botswana**

Botswana is experiencing its second successive season of well-below average rains, particularly in the central and some of the eastern parts of the country. The low rainfall has led to reduced water levels, as well as crop moisture stress and permanent wilting across parts of the country. In some of the south-eastern areas, crop conditions were observed to be mildly stressed, and rainfall is required in many areas to avoid permanent wilting.

#### **Lesotho**

Efforts are currently underway to bring under control a recent outbreak of armyworms in Lesotho which surfaced in February. There was also an infestation of various other pests that affect maize. These are all likely to have a combined effect of reducing production. Satellite based rainfall estimates indicate that rainfall has been markedly below average in much of February, which may also negatively impact production. Good rains will be needed late into the season to enable the mostly late-planted crops to reach maturity.

#### **Madagascar**

After the extremely dry conditions experienced by southern and north-eastern Madagascar up to mid-January, the country was affected by two tropical cyclones in late January and February: Cyclone Felleng in late-January/early-February, which had destructive impacts in the eastern parts of the country; and Cyclone Haruna, which impacted southern Madagascar, mainly between 21 and 23 February. Although Felleng had negative impacts, it also brought an end to the dryness, and facilitated the onset of rains which allowed farmers in several southern regions to start their agricultural activities.

#### **Malawi**

Malawi continued to receive good rains through January and February in most areas, and crops are reported to be in good condition, according to national agrometeorological reports. Some of the early planted maize crops are already reportedly in the drying phase, while most maize crops mainly range from flowering to maturity stage. A good harvest is expected if rains continue until the end of the season.

#### **Mozambique**

Mozambique this season faced various agriculture-related challenges, ranging from a delayed onset of rains, to early crop failure and subsequent replanting in the south, to flooding in major river basins.

Despite these challenges, crops are reported to be performing well in the northern and central areas, and overall national production is expected to be good due to good crop performance in these areas.

### **Namibia**

Namibia experienced below average rainfall in most parts of the country from late January to the end of February. Some of the major crop growing areas in the north have received little rainfall since early January, and preliminary reports indicate that crops and pastures are in poor condition. Satellite imagery of vegetation also shows well below average vegetation conditions over much of Namibia, which corroborates preliminary reports of poor pasture conditions.

### **South Africa**

First round production estimates from South Africa predicted a 4.4% increase in maize production, primarily due to a 3% increase in planted area, as well as good rains that fell until January in some of the major maize growing areas. However, the prolonged dryness since January (Figure 1) may have negatively affected crops, and recent observations indicate that moisture stress has occurred in some areas. This may affect the overall national production estimate.

### **Tanzania**

The first season in the bimodal areas is now complete, and farmers are undertaking land preparation and planting for the second season. Agrometeorological reports from early February indicate that first-season bimodal crops reached harvesting stage mostly in good condition, though there was some variation in crop condition due to seasonal rainfall reductions at the end of the first season. In the unimodal areas, crops were reported to be in fair condition, ranging from advanced vegetative to ripening stage

### **Zambia**

Zambia was affected by various challenges this season which are likely to negatively affect production, according to national agrometeorological reports. These include dry spells experienced in the early part of the season, late distribution of agricultural inputs, water logging in some areas, and an early armyworm infestation in many parts of the country which led to extensive replanting. In addition to this, a more recent prolonged dry spell in the south has resulted in reports of moisture stress during the critical flowering and grain filling stages, and even permanent wilting in some areas.

### **Zimbabwe**

A prolonged dry spell that affected the southern half of Zimbabwe from late January and throughout February has resulted in severe moisture stress and permanent wilting in some areas. Many northern areas however received good rains and crops were in good condition. Some areas however experienced leaching and subsequent nutrient deficiency due to excessive rains that were received in January, combined with challenges in fertilizer acquisition by many farmers. Preliminary reports indicate that area planted to major food crops decreased by approximately 20% from last year, due to various constraints including delayed rains. All of these challenges are likely to negatively impact overall crop production this season.