



# Food Security Early Warning System Agromet Update



## 2012/2013 Agricultural Season

Issue 02 Month: November Season: 2012-2013 Release date: 13-12-2012

### Highlights

- November dryness causes delayed start of season in many areas
- Poor rainfall from previous season and low November rains cause below average vegetation conditions and reduced water availability
- Good early December rains help reduce moisture deficits in many areas

### Regional Summary

November was characterized by below average rainfall in much of the eastern half of the region (Figure 1a), at a time when parts of the region expect to have experienced an onset of rains. Areas that experienced these dry conditions included eastern and central South Africa, Lesotho, southern Mozambique, southern and central Mozambique, southern Malawi, and much

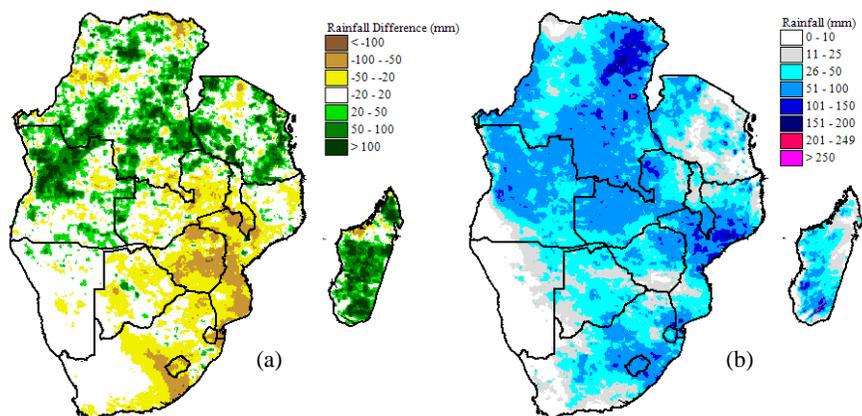


Figure 1(a). Rainfall anomaly for 1 – 30 Nov 2012 and (b) rainfall for 1 – 10 Dec 2012

of Zimbabwe. Many of these areas received less than one third of the typical rainfall they expect in November, which is also the month rainfall season is expected to begin in many places. As such, the onset of the rainfall season was delayed by 20 to 30 days in many areas. Despite the poor rains in November, the first 10 days of December were characterized by good rains in many of the areas mentioned above (Figure 1b). These rains were sufficient to assume a potential December onset of

rains in several areas, including southern Malawi, much of Mozambique, central Tanzania and parts of Zimbabwe, central South Africa and south-eastern Botswana (Figure 2, orange colours). This onset will be confirmed in the ensuing dekads, if sufficient follow-on rainfall occurs to allow chances of successful germination and crop establishment.

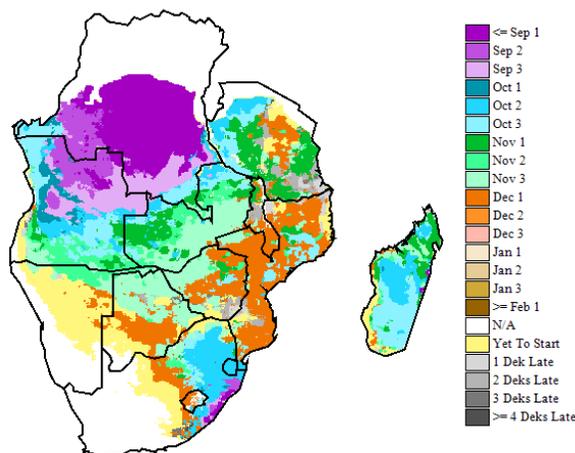


Figure 2. Start of season and delays as of 10 Dec 2012

In a few areas, the season has not yet started, and is already delayed. This is shown by grey colours in Figure 2. These areas include parts of central Malawi, southern Tanzania, and southern Zimbabwe. In many of these areas, the onset of rains

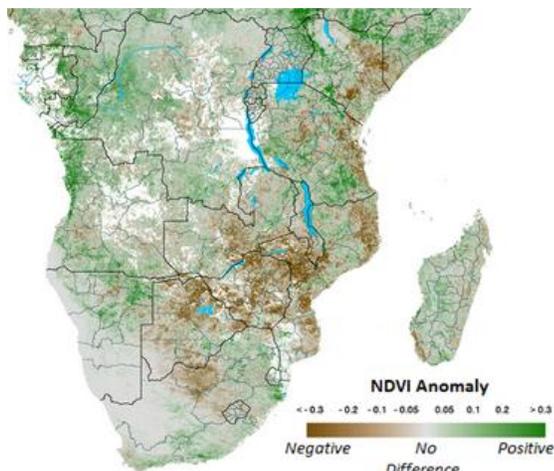


Figure 3. Vegetation index anomaly by 10 Dec 2012  
Source: USGS

is at least 2 dekads late, and continued monitoring is required to ensure that the rains are established soon.

Analysis of satellite images highlighting vegetation condition (Figure 3) indicate that many areas in the eastern half of the region are experiencing below average vegetation conditions (brown colours, Figure 3). Areas affected include much of Mozambique, much of Zimbabwe, southern Malawi, eastern and northern Botswana, north-eastern Namibia, central South Africa, and southern Tanzania. The poor vegetation conditions have negative implications for livestock due to poor pasture conditions, as well as cultivated areas relying on retained moisture. These poor vegetation conditions have resulted from a

combination of low rainfall in the previous season (some areas in South Africa and Botswana received less than half of their normal seasonal totals), and a poor/delayed onset of rains this season, in particular the poor November rains. The low rains of the previous and the current season have also negatively affected water availability and water supply in some areas, including parts of Botswana where stringent water conservation measures have been introduced. Water reservoirs are also reported to be at very low levels. Other countries, including Zambia, have also reported low water reservoir levels.

### Rainfall Forecast Update

The Southern African Regional Climate Outlook Forum (SARCOF) in December 2012 issued a mid-season forecast update providing a new rainfall forecast covering the period January to March 2013 (Figure 4). The forecast suggests enhanced chances of normal to above-normal rainfall for most of the SADC region except for northern Angola and much of D.R.C., where enhanced chances of normal to below-normal rainfall totals are forecast. This forecast comes in the absence of any major climatic features such as El Niño, La Niña, among others, which can result in reduced predictability in some areas. In the context of the current conditions, namely a delayed/poor onset of rains, poor vegetation conditions, and reduced water supply, the forecast presents a somewhat complex scenario, with difficult to predict outcomes. If normal rainfall occurs as suggested by the forecast, it may not be enough to offset the current deficits which have carried over from the previous season, particularly in the dryer areas with climatologically lower rainfall. However, as “normal rainfall” represents a range of rainfall values, the normal to above normal rainfall predicted may also be sufficient to significantly reduce moisture deficits and allow for a near-normal agricultural season in some areas. The forecast does not account for dry or wet spells, which can also have adverse effects on the agricultural production.

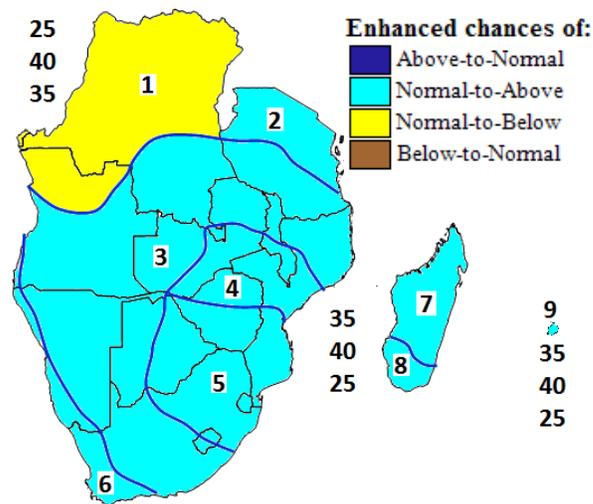


Figure 4. SADC rainfall forecast update for Jan-Mar 2013  
Source: SADC CSC

### ***Agricultural Activity***

National agrometeorological reports for the period under review were received from the following countries, and the agricultural situation is summarized below, together with information from other sources such as satellite imagery:

#### **Malawi:**

The main agricultural activity in Malawi during the month of November was land preparation, while awaiting for the main planting rains, which delayed by up to 2 dekads in some areas. In some areas where sufficient rains were received, planting commenced, particularly in early December during which planting rains were received in much of southern Malawi. In some areas where planting had already taken place, maize crops were reported to be at between germination and vegetative stage.

#### **South Africa**

Reports indicate that during November, below normal rainfall conditions were received in the central and western half of the country, while rainfall was mainly confined to the eastern half of the country. Significant rains were received in the central and western parts of the country during the first dekad of December, and excessive rains led to flooding in the eastern areas of KwaZulu Natal during early December. Information on the country's water reservoir levels indicate that the country has 81% of its full supply capacity, a decrease of 3% from the same period last year.

#### **Tanzania**

Tanzania had good rains in the first and third dekad of November, while the second dekad was dry in most parts of the country. Land preparation progressed extensively in the unimodal parts of the country, while planting in the bimodal areas was slightly impeded by the dryness experienced in dekad 2. Some of the early planted crops in the bimodal areas were reported to be near tasselling stage and in good condition. Pasture and water availability have been reported to be improving.

#### **Zambia**

Dry conditions in many parts of Zambia during the first part of November have resulted in a delayed onset of rains of up to 20 dekads in some areas, particularly in the eastern parts of the country. Good rains were received in the third dekad of November in most areas, as well as the first dekad of December. An outbreak of armyworms was reported, with several districts already being affected, and measures being already taken by government to contain the outbreak.