



Food Security Early Warning System Agromet Update

2016/2017 Agricultural Season



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Highlights

- **Timely rains commenced in South Africa, Swaziland and eastern Botswana, resulting in planting in some areas and slight improvement in dam levels**
- **Slow and erratic onset of rains was observed in northern parts of the region, and an improvement is expected by late November to early December**
- **Shortfalls in commercial maize seed availability and farmers' reduced purchasing power may negatively affect harvest prospects in several countries if unaddressed**

Regional Summary

The agricultural season has started well in southern areas that typically experience an onset of rains by mid-October through early November. Eastern South Africa, Swaziland and southern Madagascar received above average rains in October and early November (Figure 1, blue ovals #1 and #2). The rains have been sufficient for planting, which has started in the main maize growing areas of South Africa, Swaziland and Lesotho. Although planting has also started in Lesotho, rains there were reported to have arrived late. In contrast, northern parts of the region, including north-eastern Angola, southern/central DRC and northern Zambia, received below average early season rains (Figure 1, red oval #3). Rains were also below average in eastern Tanzania (Figure 1, red oval #4), including some of the bimodal areas.

Most parts of the SADC region typically experience an onset of rains in November, and rainfall systems in many areas are currently getting established. Rainfall in the northern areas, particularly southern DRC and northern Zambia, is however off to a slow start, with the onset of rains in some of these areas being up to 2 dekads late as of 10 November (Figure 2, red oval). In some neighbouring areas in northern and central Zambia, the season is 1 dekad late (Figure 2, light grey areas). A 1-dekad delay is not a cause for concern, but monitoring is required to ensure that the season onset does not delay to an extent that can negatively impact crop production potential. In most other areas the season is generally starting in a timely manner, with earlier than usual onsets however being noted in parts of eastern Botswana, southern Madagascar and northern Namibia, as well as a few parts of central and southern Malawi. Reports indicate that these anomalously early rains facilitated and encouraged land preparation for the agricultural season, and in a few cases, planting.

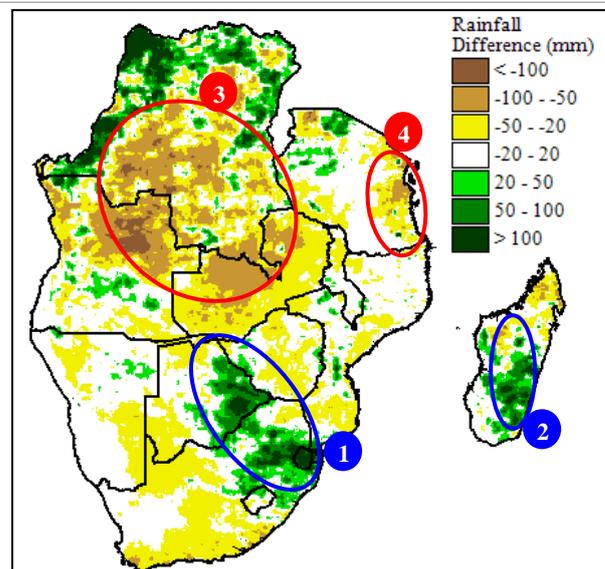


Figure 1. Rainfall for 1 Oct to 14 Nov 2016 expressed as difference from average rainfall for the same period.

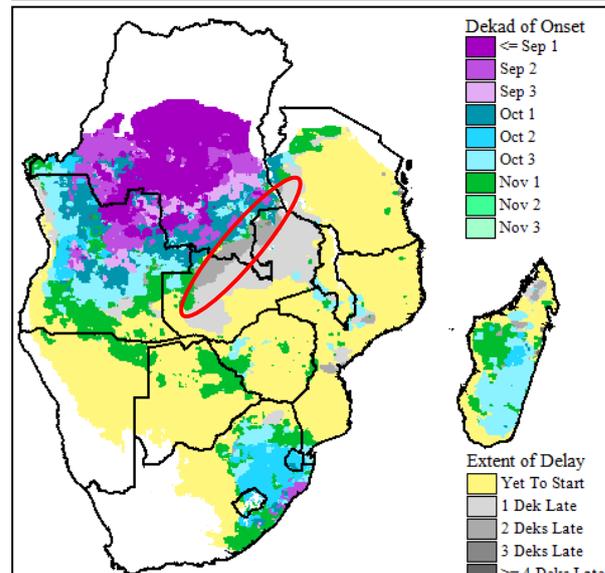


Figure 2. Onset of rains and anomaly as of 10 November 2016

Source: USGS/FEWSNET

Short term forecasts analysed by SADC Climate Service Centre (CSC) suggest the continuation of current rainfall patterns in most areas, with more rains expected in South Africa, Lesotho and eastern Botswana, as well as parts of Angola, DRC and Madagascar. Central parts of the region, including parts of Malawi, Mozambique, Zambia and Zimbabwe, are expected to experience improved rainfall activity by late November through early December. This signifies good chances of a generally timely rainfall onset, with good potential for crops reaching maturity if the rains perform well until the normal time of the end of the season.

It is important that farmers be ready with land preparation completed and inputs available by the time the onset of the rains occurs, in order to maximize on the season. Concerns have been raised regarding farmers' ability to access inputs this season in drought-affected areas, as many households have experienced a significant erosion of purchasing power due to two consecutive prior seasons of drought. A recent SADC situation report also noted shortfalls in commercial maize seed availability in Lesotho, Madagascar, Malawi, Mozambique, Swaziland and Zambia. These two factors can negatively impact potential regional production for the 2016/17 season if not urgently addressed.

The torrential rains that fell recently in the southern parts of the region occurred with high intensity, and caused flash flooding that resulted in loss of life and damage to infrastructure in South Africa. The heavy rains however also helped to slightly raise critically low dam levels in parts of South Africa and Swaziland. Water restrictions remain in place in many areas though, as the water levels are still well below normal levels, and authorities are encouraging households in affected areas to continue to use water sparingly. The prevailing low dam levels resulted in restricted water availability for irrigation since last season. The good rains that have been forecast for the 2016/2017 season may help to improve water availability, but experts suggest that dam and groundwater levels may require several seasons to recover to their former levels.

Seasonal rainfall forecasts released at SARCOF in August 2016 indicated that normal to above-normal seasonal rainfall was likely in most parts of the region, especially in the southern and central areas. SADC CSC will issue a comprehensive update shortly, including an updated seasonal forecast in December. Secondary analysis also suggests the need for comprehensive and wide-ranging preparations for the season. In contrast, some northern parts of the region are likely to have normal to below-normal rainfall, and appropriate seasonal contingency planning is required. Seasonal temperature forecasts indicate the likelihood of near-normal temperatures in the southern half of the region, a situation which will favour the potential for a good agricultural season, as this lowers the chances of excessive evapotranspiration and heat stress such as were experienced and compounded the drought during the 2015/16 season.

The seasonal rainfall forecast requires localized, area-specific interpretation and application, as noted in the SADC Regional Early Warning Bulletin released in September 2016. Areas that are prone to long dry spells or low rainfall may still experience such conditions even during seasons of "normal rainfall". Such dry areas should continue to invest in planting of drought-tolerant crops and appropriate short-season varieties, implementation of conservation agriculture, and upscaling of irrigation schemes, among others. In general, the use of climate-smart agriculture is necessary for optimized agricultural productivity.

Vegetation conditions continue to be well below average in most of the southern half of the region (brown colours, Figure 3). This is primarily due to the poor rains that were received last season and resulted in reduced seasonal growth of vegetation, including poor pasture for livestock. An improvement in vegetation conditions was noted in parts of South Africa, Swaziland and Lesotho, due to the good rains that were received there since October. Vegetation conditions in

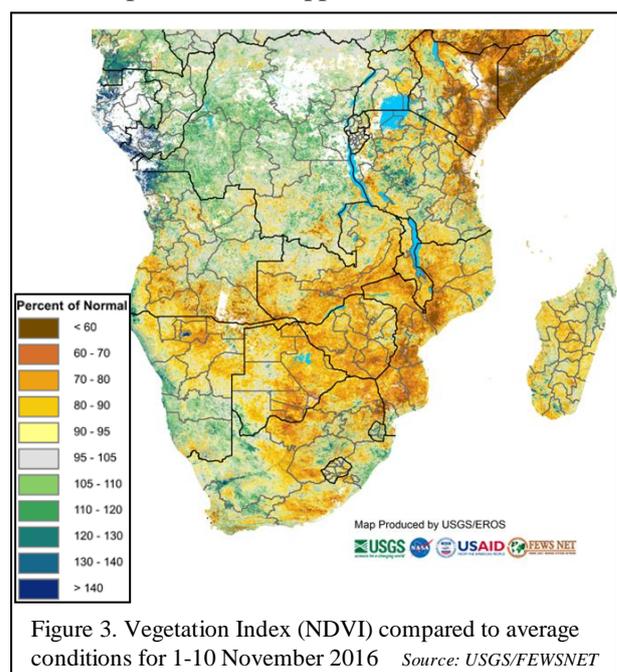


Figure 3. Vegetation Index (NDVI) compared to average conditions for 1-10 November 2016 Source: USGS/FEWS NET

other parts of the region are expected to improve with the onset of rains, which should occur this year between November and December in most areas. More than 643,000 drought-related livestock deaths were reported in 5 countries in the region last season.

Good rains are needed this season to mitigate the impacts of the poor performance of the last two seasons, which are still being felt in many parts of the region. The good rains forecast for many areas will help to reduce the severe hydrological shortfalls, and provide improved potential for crop production and livestock. However, availability of, and access to agricultural inputs for farmers need to be ensured in order to capitalize on the opportunities offered by the good season that has been forecast.