



Food Security Early Warning System Agromet Update



2017/2018 Agricultural Season

Issue 02 Month: November/December

Season: 2017-2018

20-12-2017

Highlights

- **Good rains were received in the northern half of the region.**
- **Low rainfall in the southern half of the region led to delays in planting and crop moisture stress in some areas.**
- **Vegetation conditions deteriorated in southern and eastern parts of the region.**
- **A fall armyworm outbreak has affected 20 out of 28 districts in Malawi.**

Regional Summary

Northern parts of the region received good rainfall since October, and most areas had normal to above normal cumulative rainfall totals as of mid-December 2017 (Figure 1, green colours). Areas where above normal rains were received include the north-eastern half of Angola, much of DRC, north Zambia, northern Mozambique, northern and central Madagascar, and much of Tanzania.

In contrast, most places in the southern half of the region received below average rainfall since October 2017 (yellow and brown colours, Figure 1). These areas include southern Angola, most of Botswana and Namibia, south-western and central South Africa, Lesotho, southern Mozambique, southern Zambia, Zimbabwe, and south-western Madagascar. Some bimodal areas in the north-eastern parts of Tanzania also received well below average rainfall. November was particularly dry in many of these areas, while southern Mozambique, southern Zambia, and Zimbabwe received low rainfall in the first half of December.

Despite the low rainfall in the southern half of the region, most areas had experienced an onset of rains by early December (Figure 2). In a few areas where the seasonal rains have not yet started, the delay in onset ranges from approximately 20 to 30 days (grey colours, Figure 2). Areas affected include south-western Angola, parts of southern and central Mozambique, parts of northern Namibia, and southern South Africa. A prolonged delay in the onset of rains can negatively affect crop yields by reducing the number of days available for crop development, and crops can fail to reach maturity before the end of the growing season. Most areas where the season has already started experienced a timely onset of rains, except for parts of Lesotho, South Africa, DRC and Zimbabwe, where the onset was delayed by as much as 30 to 40 days. Due to the generally timely onset, farmers in many areas have started planting, with reports of crops

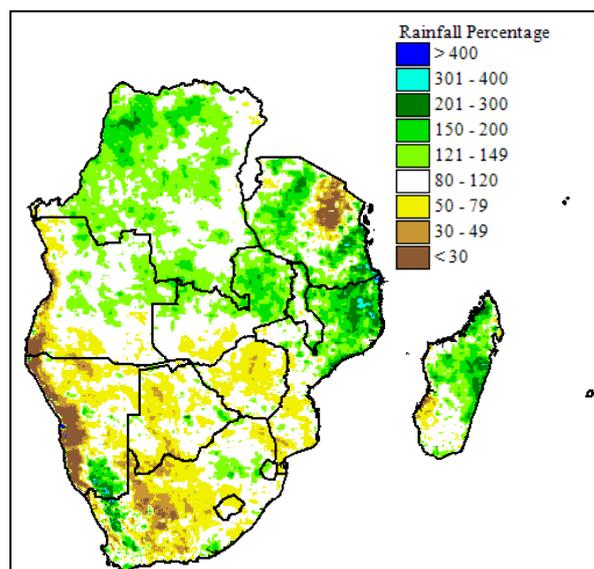


Figure 1. Rainfall for 1 Oct to 16 Dec 2017 expressed as percentage of average rainfall for the same period.

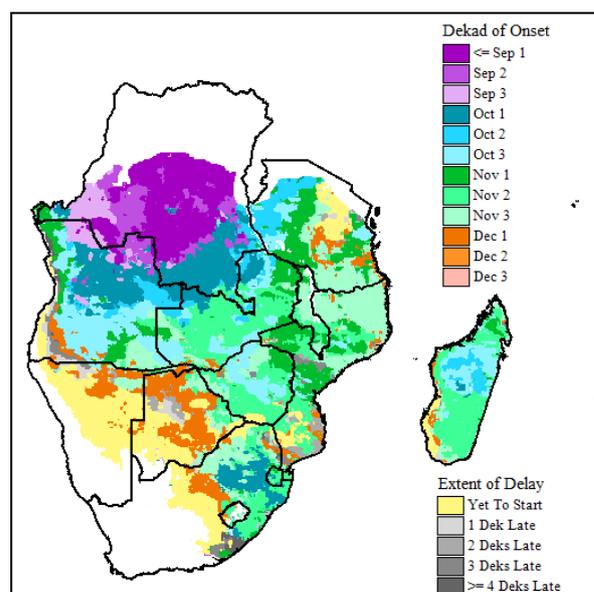


Figure 2. Onset of rains and anomaly as of 10 December 2017

Source: USGS/FEWSNET

being in the initial to early vegetative stage in some areas. However, in some of the areas that received below average rainfall in November through early December, particularly southern Mozambique, southern Zambia and Zimbabwe, crops have been affected by insufficient moisture, with reports that some farmers have not yet planted. In cases where planting has already occurred in the above-mentioned areas, some crops are reported to be experiencing moisture stress due to the prevailing dry conditions.

As a result of the dry spell, vegetation conditions have deteriorated in many areas. The satellite vegetation index image (Figure 3) shows that many parts of the region had below average vegetation conditions (yellow and brown colours, Figure 3) by the first dekad of December. Reports from Namibia indicate that the poor rainfall has led to a deterioration of grazing conditions in several parts of the country. As a consequence, livestock are reported to be in poor to fair body condition in parts of the country, although livestock in other areas were reported to be in fair to good condition.

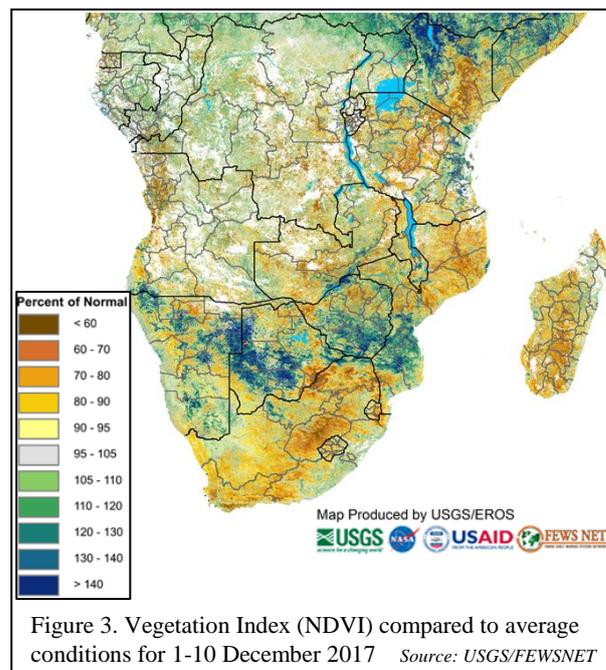


Figure 3. Vegetation Index (NDVI) compared to average conditions for 1-10 December 2017 Source: USGS/FEWSNET

SADC Climate Services Centre, in conjunction with national meteorological agencies from the region, in December issued an updated seasonal rainfall forecast for the Jan-to-Mar, Feb-to-Apr, and Mar-to-May 2017 periods for the SADC region. The forecast update maintained a higher likelihood for normal rainfall in all parts of the region, with a potential tendency for above normal rainfall in most areas. Among countries that updated their forecasts for January to March, Botswana and Zimbabwe reduced their expectations for above normal rainfall. Botswana's revised forecast predicts normal to above normal rainfall in most areas except for eastern Botswana where normal rainfall is expected, while Zimbabwe expects normal rainfall throughout the country for the January-March period. Users are advised to contact their respective national meteorological agencies for forecast updates and interpretation.

Given the poor rains that have been received in the southern half of the region to date, well distributed rains will be required for the remainder of the season in order to avert negative climatic impacts on agriculture. A continuation of good rains in the northern half as forecast will raise the potential for good production in those areas. The latest forecasts, which are generally presenting reduced chances for above normal rainfall in some southern parts of the region, imply the need for farming methods that promote conservation of soil moisture and reduce the risk of severe crop moisture stress due to dry spells that can potentially occur, especially in the climatologically drier areas. These methods include mulching and minimum tillage, amongst others. Interventions to promote the availability of functional irrigation equipment where possible are also important, as they can reduce the potential impact of dry spells in areas where they normally occur.

A fall armyworm (FAW) outbreak occurred in Malawi in December, affecting 20 out of 28 districts in the country, and close to 140,000 farming households. These districts have been declared as disaster areas by the President of Malawi. The presence of the FAW was also reported for the first time in Madagascar in October 2017. This brings to 13 the number of countries in the SADC region where the FAW presence has been reported since 2016 – Mauritius and Lesotho are the only countries in the region where the pest has not been observed and reported. Crop pest experts from Africa and around the world have held several meetings in the region to provide situational updates and facilitate preparedness and coordination among stakeholders. The experts have recommended that the FAW needs to be managed using integrated pest management (IPM) strategies, as an effective, safe and sustainable response to the food security threat posed by the pest.