



Food Security Early Warning System Agromet Update



2017/2018 Agricultural Season

Issue 01 Month: October

Season: 2017-2018

23-11-2017

Highlights

- Onset of seasonal rains is delayed in parts of South Africa and Lesotho
- Rainfall season has started on time in northern parts of the region, and most other areas are expected to experience onset of rains in November
- Integrated pest management strategies have been recommended for countering fall armyworm outbreaks

Regional Summary

The northern parts of the region have experienced good rains since October, and most areas now have near-normal to above normal rainfall totals (Figure 1, green colours). Areas where above normal rains were received include much of Angola and DRC, north-eastern Zambia, western and eastern Tanzania, and central Madagascar. In many of these northern areas, the seasonal rains normally start in September and October.

Most southern and central parts of the region typically experience an onset of rains in November. The exception to this is the eastern parts of South Africa, and some parts of Swaziland and Lesotho, and central Madagascar, where seasonal rains typically start in October. In these early-starting south eastern areas, rains have so far been below average (Figure 1, yellow and brown colours). In contrast, good rains were received earlier than usual in central Mozambique and eastern Zimbabwe in early November.

The good rains in the northern parts of the region indicate the onset of planting rains. Figure 2 shows areas where rains were sufficient to commence planting, and the dekad in which the rains were received. In some of the areas that received good rains in early November, such as central Mozambique and eastern Zimbabwe, consistent follow up rains are still required before the end of November in order to avoid false starts which would necessitate replanting.

In eastern parts of South Africa where the October rains were below average, the onset of rains is late, 30-40 days later than normal in some areas (dark grey colours, Figure 2). Such extensive delays in the onset can compromise the season quality, as this can result in crops bring unable to reach maturity before the growing season ends, either due to the cessation of rains, or due to the onset of cold conditions that are not conducive to the growth of cereal crops.

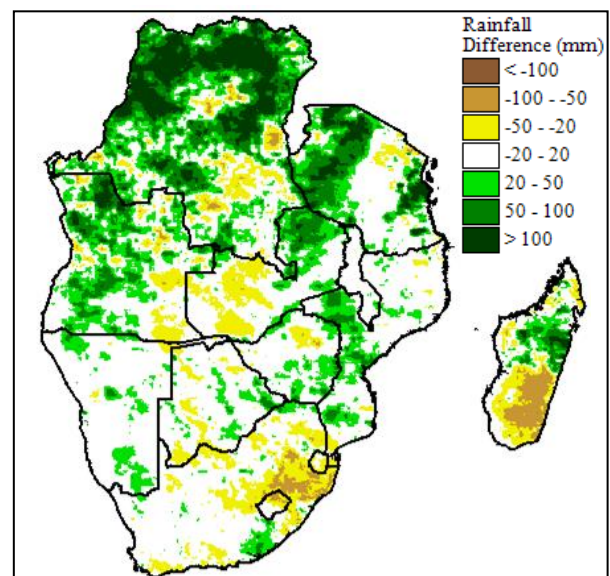


Figure 1. Rainfall for 1 Oct to 12 Nov 2017 expressed as difference from average rainfall for the same period.

Source: USGS/FEWSNET

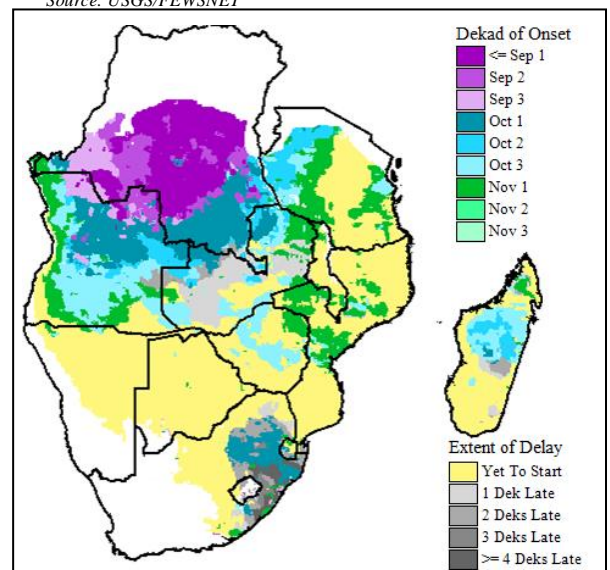


Figure 2. Onset of rains and anomaly as of 10 November 2017

Source: USGS/FEWSNET

The good rains received in the northern parts of the region, particularly in Tanzania, will help to alleviate dryness experienced in the 2016/17 season. In contrast, dry conditions in eastern South Africa may exacerbate dry conditions already existing in some areas due to poor rains received over the last few seasons. Rains in parts of southern and central Malawi prompted some farmers to start planting in early November. National reports from Malawi and South Africa indicate that as of October, farmers have been undertaking land preparation for the summer cropping season.

The high rainfall received last season in the central parts of the region encouraged good re-growth of vegetation, and satellite imagery indicates that vegetation conditions are currently well above average for this time of year in the central areas (blue and dark green colours, Figure 3). This also reflects on pasture and rangeland conditions, particularly in areas where these are the predominant vegetation types. Areas where above average vegetation conditions prevail include parts of Botswana and Namibia, where livestock production is a principal agricultural activity. In contrast, some western parts of South Africa which have had poor rainfall in the last few seasons, show well below-average vegetation conditions. A national report from South Africa indicated that grazing and livestock in parts of the country are in poor condition, and drought conditions prevail in some areas.

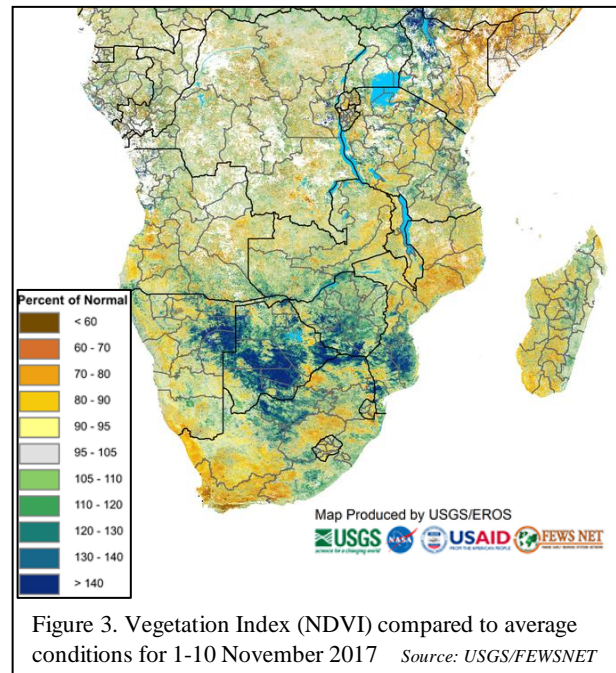


Figure 3. Vegetation Index (NDVI) compared to average conditions for 1-10 November 2017 Source: USGS/FEWSNET

With regards to winter cereal crops, reports from the GEOGLAM Early Warning Crop Monitor (<https://cropmonitor.org/>) suggest that crop conditions for winter wheat in Zambia, Zimbabwe and parts of South Africa have been favourable throughout the winter season. However, winter wheat harvest expectations are significantly lower than average in western South Africa, due to the low winter rains that were received there, while winter wheat in parts of Zimbabwe was attacked by quelea birds.

In October and November 2017, the International Red Locust Control Organization for Central and Southern Africa (IRLCO-CSA) reported on pests that were affecting agricultural productivity in the region. The report indicated that red locust swarms were sighted in August in parts of Malawi, and swarms were expected to have persisted through October. Parts of Zambia were reported to have medium to high populations of red locusts, and breeding was expected to have started in parts of Zambia and Mozambique, after moderate to significant rains were received. Low populations of red locusts were reported in Tanzania. Quelea birds were reported to have attacked winter wheat in Zimbabwe. Fall armyworm (FAW) outbreaks were also reported in Malawi, Zambia and Zimbabwe, where the pest was affecting crops grown under irrigation and maize grown using residual moisture.

After the outbreak of FAW in most parts of the region last season, entomologists have warned that the pest is likely to recur seasonally, as it is not feasible to eradicate it. Stakeholders are encouraged to manage the FAW using integrated pest management strategies. Management measures that are recommended by FAW experts include the use of pheromone traps for early warning regarding the presence of FAW moths; regular scouting and monitoring of farmers' field every few days, starting soon after crop emergence, to identify FAW incidence early; correct and effective usage of synthetic pesticides to avoid (a) human health risks, (b) development of FAW resistance and (c) killing of FAW's natural enemies; biological control options such as the use of pesticides derived from plants and parasites that are noxious to FAW; use of host plant resistance such as breeding of maize varieties that are resistant to FAW; and cultural control practices such as planting at the optimal time and conservation agriculture. A number of FAW training and coordination workshops were held in the region and across Africa in 2017, and training materials are being developed by various stakeholders.

The SADC seasonal rainfall forecast released at the Southern African Regional Climate Outlook Forum (SARCOF) in August predicted that most parts of the region are likely receive normal to below normal rainfall in the first half of the season, while normal to above normal rainfall is most likely in the second half of the season, in most areas. The most likely rainfall outcome according to the forecast is for “normal” seasonal rainfall totals. The potential impacts of these most likely outcomes need to be considered in the context of area-specific, typical rainfall amounts, rain bearing systems, pre-existing soil moisture levels and water availability, grazing conditions, and current food security status in the different areas where the forecast is being applied. Users requiring higher accuracy forecasts available at national level should contact the respective national meteorological agencies for downscaled national seasonal forecasts, as well as updates to those forecasts. The forecast for normal to below normal rainfall in the first half of the season and normal to above-normal rainfall in the second half suggests, at a regional level, chances of good crop production outcomes if planting is timely, and if appropriate climate-smart agriculture techniques are utilized. A late onset may occur in some areas, as below normal rains in the first half of the season are generally associated with delayed onsets in parts of the region.