Food Security Early Warning System

Agromet Update

2013/2014 Agricultural Season

Issue 02 Month: December **Season: 2013-2014** **19-12-2013**

Highlights

- **Short season (*Vuli*) in bimodal areas of northern Tanzania experiences poor rainfall performance**
- **Good rains in early December slightly help to ease 1-to-2-year dryness in southern Angola, Botswana, northern Namibia, and South Africa**
- **Onset of rains in southern Malawi, central Mozambique, eastern Zambia, and northern Zimbabwe delayed by more than 1 month**

Regional Summary

The rainfall season started off poorly in several parts of the SADC region, as low rainfall was received in October and November. In particular, at least three areas were noted as being negatively impacted by the poor rains (Figure 1). In some of the bimodal areas of northern Tanzania, erratic below normal rains have been received since the beginning of the short season *Vuli* rains (brown areas, Figure 1, area 1). This is likely to have a negative impact on the Vuli harvest.

The second area that was negatively affected by the poor rainfall covers southern Angola, much of Botswana, northern Namibia, and central South Africa (brown colours, Figure 1, area 2). This area received poor rainfall over the last 1 to 2 seasons, and some locations in this area are currently experiencing problems related to long-term hydrological drought. These problems include low water supply resulting in water rationing, water use restrictions, as well as other related problems such as poor grazing conditions, and consequently, selling off of livestock. The poor rainfall experienced in October and November has prolonged the negative impact of the low rainfall from previous seasons. Good rainfall was however received in the first dekad of December (Figure 2, blue colours) in these areas. Although the recent rainfall is not sufficient to offset the multi-season rainfall deficits, it will help in the recovery of pasture and contribute to the overall water supply situation, and will be especially helpful if the rains continue.

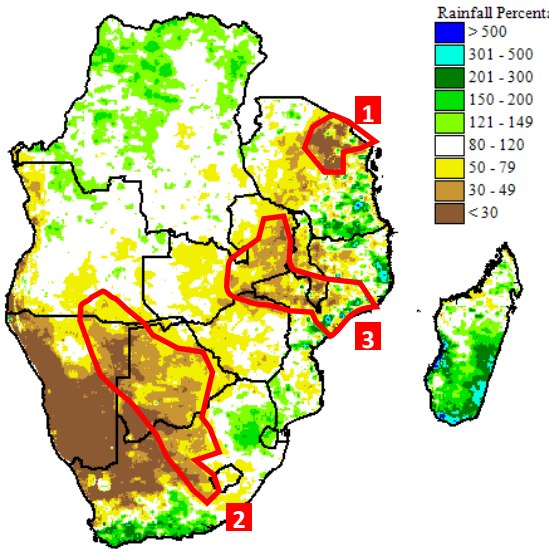

Figure 1. Rainfall for 1 Oct to 30 Nov 2013 as percent of average. *Source: USGS/FEWSNET*

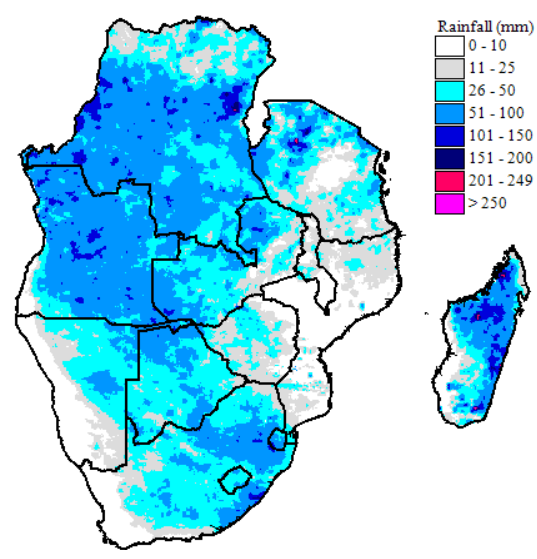

Figure 2. Rainfall for 1 to 10 Dec 2013 . *Source: NOAA/FEWSNET*

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Also impacted by low rainfall this season is the area covering southern Malawi, central Mozambique, eastern Zambia and northern Zimbabwe (Figure 1, area 3). Rainfall in this area has been limited, resulting in a continuing delay in the effective onset of rains. In many of these areas, the season is now approximately 30 days late, and in some areas, as late as 40 days or more. Onset delays of such a long duration reduce the window of opportunity for crops to grow and successfully reach full maturity before the cessation of rains at the end of the season, or before the onset of mid-season dry spells, which are a common occurrence in some of these areas. Given the late start, good and consistent rains through the end of the season will be required in this area to ensure good harvests. Early maturing varieties and crops will also be more likely to reach maturity. On a positive note, the most recent rainfall information available from satellite rainfall estimates suggests that significant rains were finally received in this area between 13 and 15 December 2013. Short term forecasts from NOAA NCEP indicate that rainfall is likely to continue in this area in the 3rd and 4th week of December, which bodes well for the area, as a continuation of these rains over the next 20 days will allow crops planted with the recent rains to be successfully established.

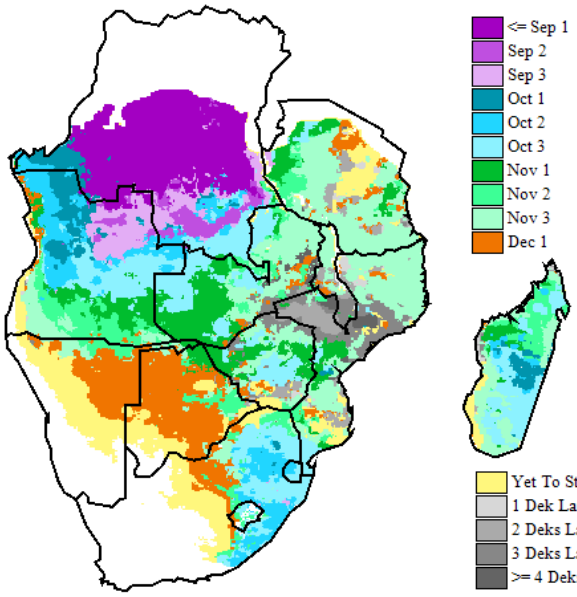

Figure 3. Onset of rains and anomaly as of 10 December 2013 *Source: USGS/FEWSNET*

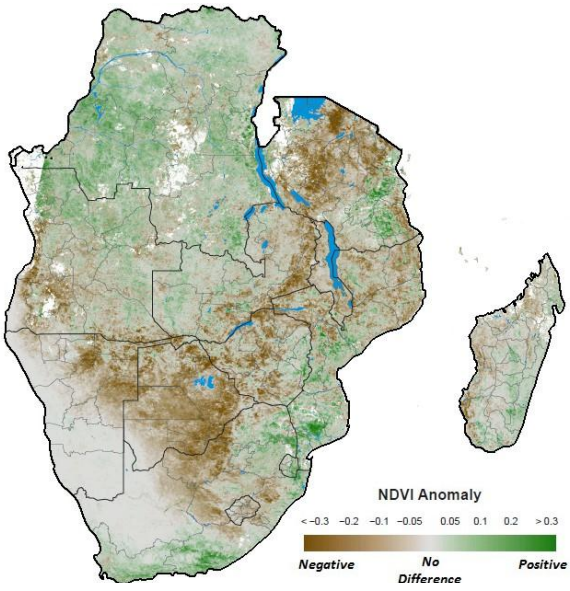

Figure 4. Vegetation Index (NDVI) compared to average conditions for 26 Nov-5 Dec 2013 *Source: USGS/FEWSNET*

Most parts of the region have by now experienced an onset of rains (Figure 3). Apart from areas 1-3 in Figure 1, rains generally started on time in most places. Areas which have not yet experienced an onset include parts of southern Mozambique and southern Zimbabwe, which normally experience an effective onset in December. Due to the low rainfall so far received this season and the poor rainfall in previous seasons, vegetation conditions are below normal in many parts of the region, according to satellite imagery (brown colours, Figure 4). Despite the poor seasonal progress observed in several areas mentioned above, it is worth noting that there is still ample time left in the season for good production if the remainder of the season performs well.

A report from the International Red Locust Control Organization (ILRCO) indicated that the November rains caused the commencement of breeding of the red locust pest in outbreak areas in Malawi, Mozambique, Tanzania and Zambia, with a high probability of successful breeding and locust swarms from February 2014. The report warned that if the anticipated locust surge is not controlled, it could affect agriculture and food security in the region. The report also indicated an outbreak of armyworms in in a small area in Malawi, which, though it was controlled, had potential for further outbreaks. The full report is available from locust@zamnet.zm

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National Agrometeorology Summaries

Angola

After experiencing poor rainfall conditions with negative impacts on agriculture last season in southern Angola, the current season was off to a slow start, with slightly below normal rains being received in the southern parts of the country, according to the satellite-based rainfall estimates (Figure 1). In addition, satellite-based vegetation imagery (NDVI) shows that southern parts of the country are currently experiencing below-average vegetation conditions (Figure 4). The first dekad of December saw good rains in most parts of the country which will likely improve pasture conditions.

Botswana

Botswana experienced well below average rainfall for the last 2 seasons, which led to reduced water supply, low harvests in some areas, and poor grazing conditions. Current satellite vegetation images also show below-average vegetation conditions in most parts of the country (Figure 4). The country received below average rains in November. This was however followed by good rains in the first dekad of December, which although still insufficient to reverse the rainfall deficits from the previous two seasons, will however assist the rejuvenation of pasture, and increase the water supply.

Lesotho

Lesotho received good rains in the month of November, marking the onset of rains in many areas. The onset had generally delayed in some of the central parts of the country. The November rains helped to reduce water deficits from the last few months that had impacted on agriculture and water resources. Due to drought experienced since the winter season, cumulative rainfall totals are reported to be below normal.

Malawi

Southern Malawi had not yet experienced an onset of rains by 10 December, making the season at least 30 days late in most areas. Recent satellite-based rainfall estimates however indicate that sufficient rainfall for planting was received from 13-15 December. The delayed onset in the south implies that good consistent rains will be required through the end of the season in order to allow for crops to successfully reach maturity. Northern Malawi had an onset of rains in the 3rd dekad of November, which is a normal time for onset in that area. A report from IRLCO indicates that an outbreak of armyworm occurred on a small area in central Malawi. Although this was controlled, IRLCO warns of a high probability of further outbreaks.

Mozambique

Rainfall has been below normal in central parts of Mozambique, in October through to early December. This has resulted in a delay in the onset of rains by up 40 days in some areas. Good rains were received between 13-15 December, and will facilitate successful planting if the rains continue. While planting rains were received as early as 3rd dekad of October in southern Mozambique, most other parts of Mozambique received sufficient rains for planting in November. A few areas in

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southern Mozambique have not yet had an onset of rains, which is not uncommon in December. Distribution of subsidized inputs to farmers was still ongoing by November.

Namibia

After very poor rainfall in the last season, many parts of Namibia, particularly northern Namibia, had poor pasture conditions and reduced water supply. The poor grazing and water supply conditions last season forced farmers to sell off some of their livestock in sale of livestock. Satellite images for vegetation indicate that vegetation conditions are currently below normal, with negative implications for pasture. Rainfall was below normal in most parts of the country for October and November, according to satellite rainfall estimates (Figure 1). Good rains in the first dekad of December in most parts of the country have however provided some relief, and hydrological reports indicate that river levels have recently increased in several areas due to the recent rains.

South Africa

Generally good rainfall has been received in the eastern half of the main maize growing regions in central South Africa. In the western half of these maize growing areas however, rainfall was below normal in October and November, and satellite-based vegetation maps indicate that vegetation conditions were also below average. In early December, good rains were received in most parts of the country. South Africa has experienced below average rainfall totals in the last two seasons in many of the main maize growing areas, and water levels are currently low in some areas.

Tanzania

Poor rainfall was received in some of the bimodal areas of northern Tanzania at the start of the bimodal short season (*Vuli* rains). This is likely to negatively affect the *Vuli* harvest. Bean crops in some areas were reported to be stunted because of the dry spells. Good rains received in the first dekad of December helped to partially relieve the dryness, although the rains came at a time when the bean crop should be drying, which may have negative impacts on the crop. Maize crops in bimodal areas were reported to be at tasselling to ripening stage. In the unimodal areas, which comprise the majority of the country, several areas received sufficient rains to start planting the *Msimu* crops.

Zambia

Below-normal rainfall has been recorded in most parts of Zambia since October, particularly in the southern and eastern parts of the country. In the some of the eastern parts of the country, the rains have not yet started, and the season is more than 40 days late in some areas. In much of the eastern parts of the country, the onset of rains was delayed by at least 20 days.

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