



Food Security Early Warning System Agromet Update



2015/2016 Agricultural Season

Issue 02 Month: November (first half)

Season: 2015-2016

19-11-2015

Highlights

- Pre-agricultural-season rains absent in several parts of the region
- Slow and erratic onset of rains in eastern South Africa, Swaziland and Lesotho increase pressure on water resources, livestock and crop agriculture
- Heavy mid-Nov rains expected to reduce dryness in south-eastern parts of the region
- Heavy rains fall in north-western Tanzania

Regional Summary

The rainfall season is off to a slow start across many parts of the region. The south-eastern, central and north-western areas have experienced significant deficits in cumulative rainfall between October and mid-November (Figure 1, solid red oval). In most of these areas, consistent planting rains usually occur in mid-November, although they are normally preceded by light pre-season rains that encourage and facilitate land preparations by farmers in October. This season, most areas highlighted in Figure 1 did not receive these early rains, resulting in the cumulative rainfall deficits shown in yellow colours. Despite the limited pre-season rains, preparations for the 2015/2016 season are ongoing in several countries, including distribution and purchasing of inputs, as well as land-preparation. In contrast to the low rains received in the central areas, north-western and central parts of Tanzania received above normal rainfall between late October and early November. The heavy rainfall will enhance crop growth and development in some bimodal areas *if* it is not excessive. However, there have been reports of flooding in parts of northern Tanzania.

Some areas have already experienced a delay in the onset of rains. These are areas where the main seasonal rains were expected to have started by September or October, but up to present, have not yet experienced an onset of the seasonal rains. These areas include eastern South Africa, Lesotho and Swaziland (Figure 2, red oval #1) where the rains have delayed by 30 to 40 days or more in some areas. Although significant rains were received in October in some of these highlighted areas, the ensuing rains have been erratic, with little opportunity for successful crop establishment. The low rains have also heightened drought conditions, which in parts of eastern South Africa, are severe. Above normal rainfall will be needed this season to relieve the existing drought conditions. Central-western parts of the region, including

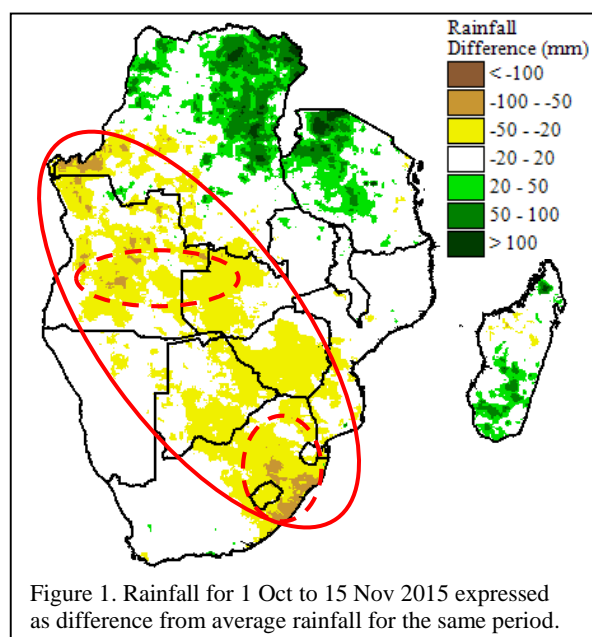


Figure 1. Rainfall for 1 Oct to 15 Nov 2015 expressed as difference from average rainfall for the same period.

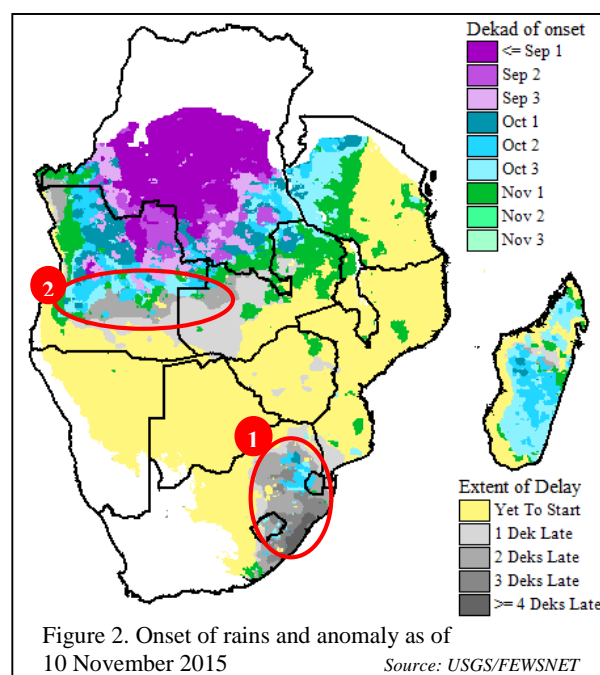
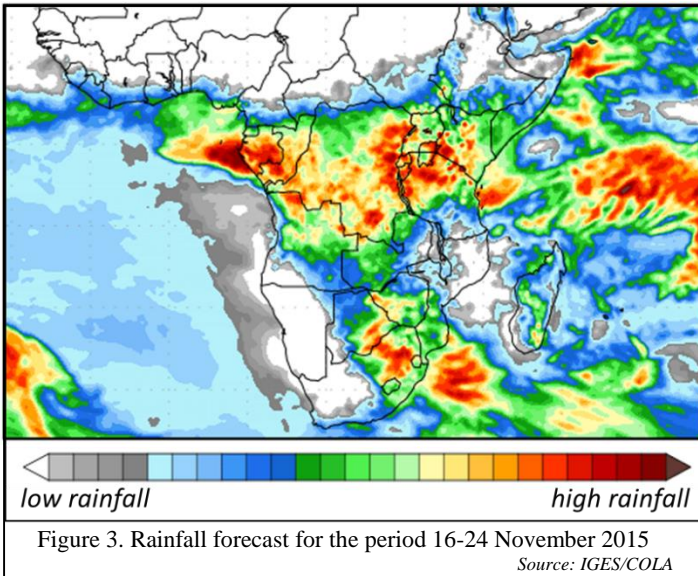


Figure 2. Onset of rains and anomaly as of 10 November 2015

Source: USGS/FEWSNET

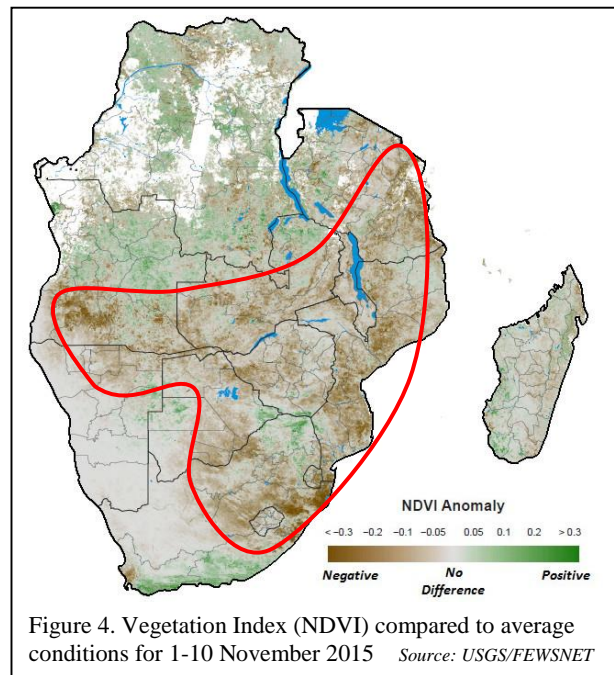


southern-central Angola and western Zambia, have also experienced a slow and erratic onset of the rains, according to satellite-based rainfall estimates (Figure 2, red oval #2), with delays in the onset of up to 20 days. The water deficits in these areas, although not as severe as in south-eastern SADC, are nonetheless critical given their impacts on hydro-electrical energy generation, currently affecting Zambia and Zimbabwe due to the low levels of the Kariba Dam. Local livelihoods are also affected.

Short term forecasts suggest the likely onset of rains in the south-eastern parts of the region by mid-November. Figure 3 shows an 8-day rainfall forecast covering the period 16-24 November. According to the forecast, moderate to high rainfall is expected in the

areas in eastern and northern South Africa, Lesotho, Swaziland, eastern Botswana, southern Mozambique and southern Zimbabwe. The anticipated rainfall will bring much-needed relief to the dry conditions in these areas

Good rains are needed this season to mitigate the impacts of the poor 2014/2015 seasonal performance, which are still being felt, and compounded by this season's slow start. Communities in drought-affected parts of several countries including Angola, Botswana, Namibia, South Africa, and Swaziland are facing challenges with water availability due to low river and dam levels. Another impact of the poor rainfall performance is the below-average vegetation conditions in most parts of the region, as shown by the satellite-based vegetation image for early November 2015 (Figure 4, brown areas show below average vegetation). The stressed state of the vegetation has negative implications for grazing conditions, particularly in marginal areas and in areas where rangeland is a major part of the landscape. The current drought has negatively impacted the livestock sector in parts of Angola, Botswana, Namibia, South Africa, Swaziland and Zimbabwe, with impacts ranging from poor livestock condition to drought-related cattle deaths in some areas. Farmers are being actively encouraged to sell their livestock assets due to the drought situation.



The rainfall patterns exhibited in the first half of the Oct-Dec 2015 rainfall period thus far have fairly closely followed the SARCOF seasonal forecast, which anticipated below-average rainfall in the south and above-average rainfall in the northern half of the region. This low rainfall in the south has further intensified existing drought conditions in several countries. Very high temperatures across much of the region have applied further pressure on the water resources and agriculture due to increased evapotranspiration from water bodies and pastures, as well as heat stress to livestock. The imminent rains forecast through late November in the south-east of the region are expected to provide much needed relief to the current drought situation there.

Given the long-term forecasts for possibly reduced rainfall this season, emphasized by the potential impacts of the ongoing El Niño event, drought-mitigating agricultural techniques have been recommended by the Agriculture and Disaster Risk Reduction departments of several Member States to their farming communities. These include planting of drought-tolerant crops and short-season varieties, implementation of conservation agriculture, upscaling of irrigation schemes and de-stocking of livestock, among others.