FOOD SECURITY EARLY WARNING SYSTEM

Agromet Update

2007/2008 Agricultural Season

Issue 08 Month: January Dekad 2 Season: 2007-2008 Release date: 13-02-2008

Highlights

- Concerns that leaching may affect crops raised in several countries
- Heavy rains cause flooding in Malawi, while Cyclone Fame causes damage in Madagascar
- Rainfall in Tanzania improves

Rainfall activity during 21-31 January

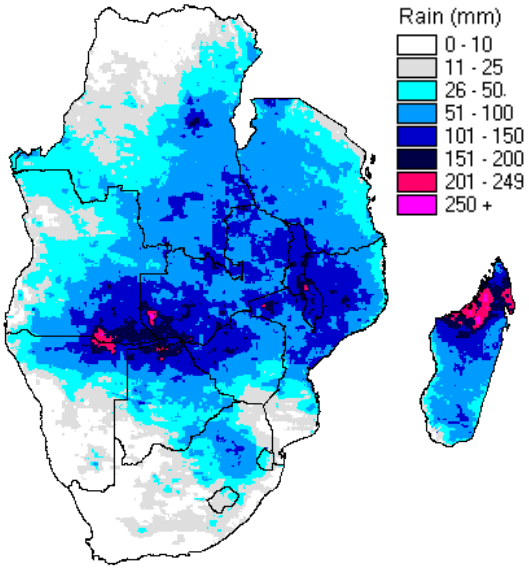

Figure 1. Rainfall for 21-31 January 2008, from rainfall estimates (data source: NOAA/FEWSNET)

Many of the central and northern parts of the region received heavy rains during the last dekad of January. Particularly heavy rains were received in northern Namibia, south-eastern Angola, northern Botswana, south-western Zambia and north-western Zimbabwe. Heavy rains were also received in northern Mozambique and in Malawi. Northern Madagascar received very heavy rains due to Cyclone Fame that made landfall on 27 January, and caused significant damage to the northern parts of Madagascar, including loss of life, and damage to infrastructure and crops. The heavy rains in the central parts of the region caused continued flooding in some areas: Mozambique, Malawi, Zambia and Zimbabwe have been affected by extensive flooding since late December. The heavy rains this dekad however came after some slight reductions were experienced in the previous dekad. Good rains were received across much of Tanzania, which brought some welcome relief after the dryness that has been experienced there over the last few months. South Africa continued receiving good rains, in the productive central parts of South Africa, while the remainder of South Africa, Lesotho, Swaziland, southern Mozambique, and southern Zimbabwe received little to to no rainfall during the dekad.

Seasonal Rainfall for 1 Oct 2007 - 31 Jan 2008

The rainfall season since October has been mostly normal to above-normal for most parts of the SADC region, particularly in the central parts of the region where continuous heavy rains have been falling since late 2007. This excludes northern Tanzania and central Madagascar, which have cumulatively received below-normal rains so far. The green colours in Figure 2 show the areas where in total, above normal rains have been received since the beginning of the season, while the yellow and brown colours indicate areas receiving below-normal rains, and the white areas show places where approximately normal rainfall has been received. The yellow colours in northern Tanzania highlight the poor rains that fell in that area over the last few months and led to a failed first-cropping-season in the bimodal crop-growing areas of that country. Rainfall analysis over central Namibia also suggests below normal rains in that part of the region. The persistent above normal rains have led to flooding especially along riverine areas in some of the region's larger river basins. In addition, there have been reports of leaching in some parts of the region due to the extensive rains, including Malawi, Zambia and Zimbabwe. In contrast however, the heavy rains have generally been good for pastures, which are being reported to be in good condition across some of the central parts of the region.

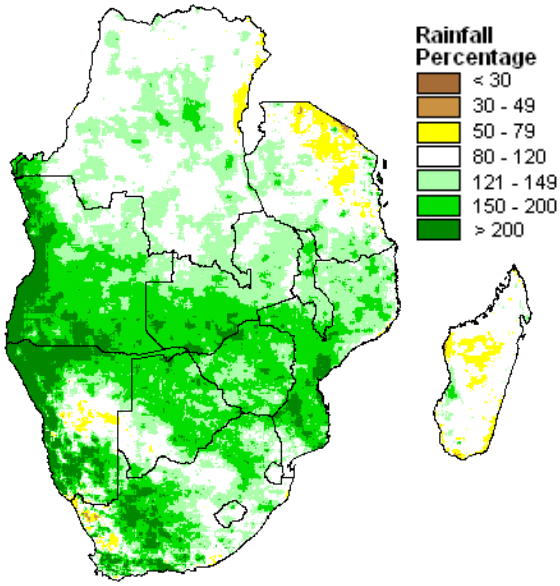

Figure 2. Seasonal Rainfall for 1 Oct 2007– 31 Jan 2008 expressed as percentage of average, from rainfall estimates (data source: NOAA/FEWSNET)

Rainfall Forecast and latest rainfall updates

The latest seasonal forecast update for the January to March 2008 period gives enhanced probability of above-normal to normal rainfall across the bulk of the SADC region, particularly the central and the eastern parts of the region, including most parts of Madagascar. The remainder of the region is forecast to have enhanced chances of normal to above-normal rainfall. The latest rainfall measurements that were made since the beginning of February up to the time of publishing this report indicate that reduced rains were received over the central parts of the region including many of the areas that have been affected by flooding in Malawi, Mozambique, Zambia and Zimbabwe, and this will help to provide some relief from the flooding in these areas.

Crop Water Requirements

An analysis of crop water requirements from the commencement of the season till the current time suggests that crops should generally have received enough rainfall since the beginning of the season to be expecting normal (grey colours, Figure 3) or above-normal (green colours, Figure 3) conditions. In particular, the areas in the southern half of the region are expected to have received enough rainfall with a good enough distribution to allow for above-normal seasonal performance. Figure 3 is based on an analysis of rainfall received to date, as well as an extrapolation using average rainfall from beginning of February until the end of the season. The above normal crop conditions in South Africa and eastern Botswana have been confirmed by independent reports, some of which have been based on field assessments by national officers. In some of the areas suggesting normal to above-normal crop condition though, there is a possibility that leaching and other factors such as unavailability of sufficient fertilizers to counter the leaching could have resulted in crop losses that would not be captured by the model in Figure 3.

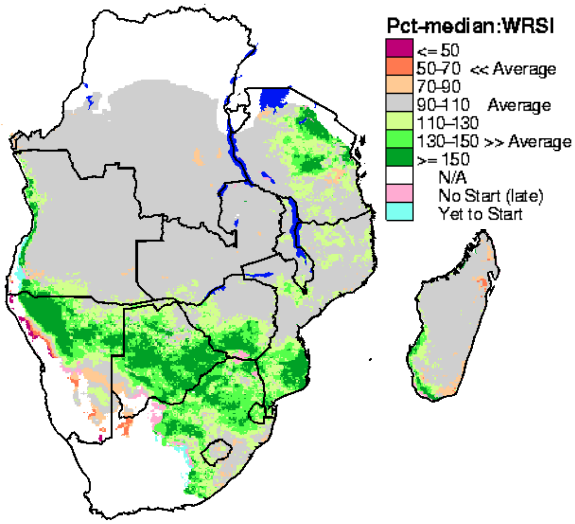

Figure 3. WRSI expressed as a percentage of normal conditions. Source: USGS/FEWSNET

Agricultural Season performance in selected countries

Lesotho

During the third dekad of January, low rainfall was recorded in most parts of Lesotho except for the north-eastern parts of the country were high rainfall was received for the first time in many dekads. The low rainfall in most parts comes after several dekads of high rainfall, so does not present a critical situation for crop conditions. Crops were reported to be in good condition, and mainly ranging from late vegetative to taselling stage. Many farmers could not carry out weeding due to the fields were too wet or waterlogged.

Malawi

Malawi received heavy, above-normal rains in most parts of the country, and these rains, coming on top of the heavy rains that have already been received in the country so far, led to exacerbated flooding in some parts of the country. 14 districts in the country were reported to have been affected by flooding, and of these, the southern-most districts were the worst affected. There have also been reports of leaching and water-logging due to the incesant rains, and a general concern that the crop yields may be affected by the adverse impacts of the excess rainfall.

Tanzania

Most parts of Tanzania received good rains during the third dekad of January. However, some of the central and north-eastern parts of the country received low rainfall. With the improved rainfall, crops were observed to be mainly in good condition in most of the unimodal areas (i.e., most parts of the country excluding the north-eastern areas, which are bimodal), and ranged between emergence and mid-vegetative stage. Over some of the bimodal areas, farmers were undertaking land-preparation for the long rains. Pasture conditions were in moderate state because of the prolonged dryness, but should probably improve with the recent rains that have fallen in most areas. This may exclude the central and north-eastern parts of the country where low rainfall was still being received.

Zambia

During dekad 3 of January, widespread heavy rainfall was reported over most parts of Zambia, and an increase in rainfall activity was observed in the northern parts of the country. In many maize-growing parts of the country, the maize crop had reached flowering to grain-filling stages. Due to the excessive rains over the last few months, leaching, waterlogging, and overgrowing of weeds has been reported in some areas, and this will negatively impact some crops.