



# FOOD SECURITY EARLY WARNING SYSTEM

## Agromet-Update

### 2006/2007 Agricultural Season



Issue 03 Dekad: 01 Month: December Season: 2006-2007 Release date: 18-12-2006

#### Highlights

- ❑ Heavy rainfall experienced in Madagascar
- ❑ Low rains in southern half of SADC region
- ❑ Tanzania continues to experience good rainfall
- ❑ El Nino likely to continue.

For the second consecutive dekad, rainfall has been very low in the southern half of the SADC region. An analysis of satellite-based rainfall estimates suggests that good rains were concentrated in the northern half of the sub-region covering Angola, DRC, Tanzania, northern Mozambique and parts of Zambia. (Figure 1). Heavy rains were observed in the entire island of Madagascar with the central parts having experienced amounts of up to 200mm in 10 days. Swaziland and parts of Kwazulu Natal in South Africa received good rainfall. The central parts of the region covering southern Zambia, Botswana, Namibia, Zimbabwe, southern Mozambique, most of South Africa and Lesotho experienced minimal rainfall during the dekad under review. As the season progresses into December, it important that the rains improve as this is a critical month that determines the planting of the crop. So far, the season is far from promising and it is hoped that the rains will improve.

Fig.1. Rainfall Performance for 1 to 10 December 2006

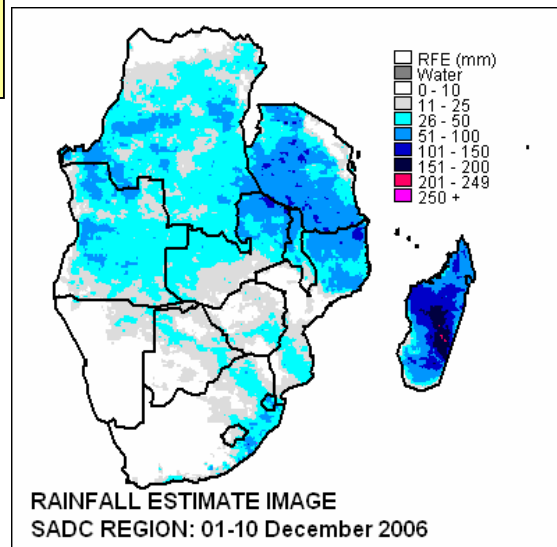
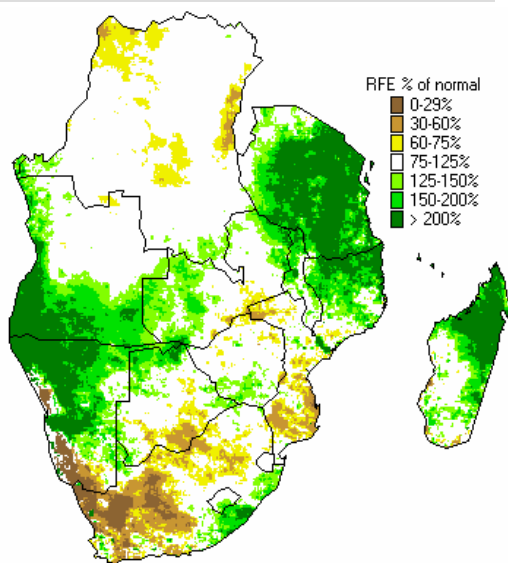


Fig. 2. Rainfall for 1 Sept to 10 December 2006 as Percentage of Normal



Comparison of rainfall received with the average always provides an indication of how well the season is performing. Quick analysis should indicate whether the season is above, below or on an average level. This helps in developing scenarios of what is likely to happen in terms agricultural production in the future. The RRSU has continuously been analyzing rainfall estimates over the entire season. The analysis indicates that some areas have been consistently receiving low rainfall, while others have been receiving high amounts. Figure 2 shows the rainfall between 1 September and 10 December 2006 expressed as a percentage of average. Green colours show areas where rainfall has been above average, while yellow and brown colours show areas where rainfall has been below normal. Areas that are highlighted as having received below normal rainfall since the beginning of the season include parts of DRC, southern Botswana, central and southern Mozambique, and parts of South Africa. However, other areas such as southern Angola, northern Botswana, northern Mozambique, Namibia, parts of South Africa, and much of Tanzania have received more than 200% of normal rainfall. These areas require closer monitoring for early warning purposes.

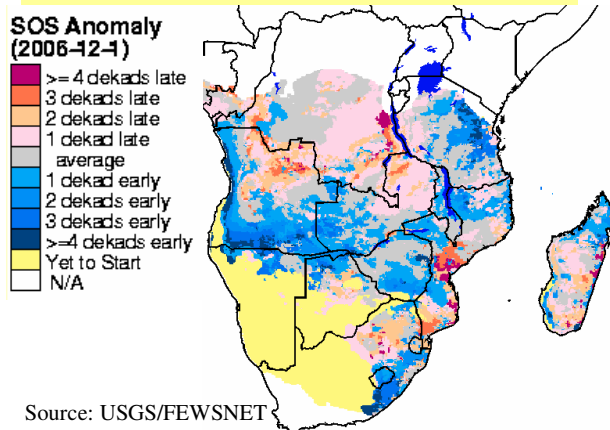
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**Fig.3. Onset of Rains  
Anomaly as at 10 December 2006**



Often times, the onset of rainfall provide some indication of how the season will perform. Figure 3 shows a start of season anomaly image. The Start of season is established when there is at least 25 mm of rainfall in one dekad followed by a total of at least 20 mm of rainfall in the next two consecutive decades. This is then compared to the long term average of onsets to determine how late or early the season. Figure 3 depicts areas that are early or late as well as commenced on average during the 2006/07 season. The blue colour indicates an early start while the purple colour indicates a delayed onset. As of 10 December 2006, the region still had areas that had not had an onset. Almost all the SADC countries have pockets of areas with a delayed onset ranging from 10 days to 1 month. The delay in the onset is raising concern, as this may coincide with the mid-season dry spells which may have serious implications on crop performance and yield.

**MOZAMBIQUE** The country received significant amounts of rainfall in the north. The southern part of the country has been affected by low rainfall and delayed onset of rains. This has negatively affected the start of the agricultural season, as little planting would be possible with the low rains. Figure 3 shows delayed onset of up to 30 days in the central and southern parts of the country. Many areas in the southern parts of the country have received less than half of the normal amounts to date. Full onset of rains is normally expected in November and December in most parts of Mozambique.

**MALAWI** The country received good rains for agricultural production in most parts during the period under review. Farmers continued with agricultural activities including land preparation, planting of crops and basal fertiliser application. The good rains continued to improve water resources, soil moisture reserves and supported seed germination, growth and development of crops. In some areas particularly over southern Malawi where crops had already germinated, farmers took advantage of a break in rainfall to start weeding their fields. Maize crops are reported to be at various stages of development ranging from germination to early vegetative stage. Reports indicate that most smallholder farmers depending on government subsidy programme for farm inputs are facing problems to access farm inputs. This problem if not solved promptly could negatively affect overall crop production in 2006/2007.

**EL NIÑO WATCH** As of mid-November sea surface temperatures (SSTs) are over 1.0C above average throughout much of the equatorial Pacific, exceeding 1.5C in the central Pacific and far eastern equatorial Pacific. Based on the latest observations and forecasts, the probability of maintaining El Niño conditions for November-December-January 2006/07 season is approximately 92%. El Niño is associated with reduced rainfall in parts of southern Africa. Although there are still chances for normal rains, there is need for close monitoring during the remainder of the season.

**TANZANIA** Moderate to heavy rains were experienced in the country during the dekad except for the north eastern coastal areas. Soil moisture during the dekad continued to favour crop growth and planting activity with a few localized areas where excessive soil moisture levels made it difficult for land preparation using farm machinery such as tractors, thereby delaying the activity. However, following improved soil moisture conditions, the general crop situation over the bimodal rainfall pattern is relatively in good condition with maize crop at vegetative stage except over a few areas such as Rombo district in the north eastern highlands where the crop was near tasseling stage.

**LESOTHO** Rainfall received during the dekad was far below normal throughout the entire country while Phuthiatsana in the north west received no rainfall. Crops (maize and sorghum) are at an emergence to early vegetative stage in most parts of the lowlands. Planting is in progress in a few low-lying areas. The high temperatures and low rainfall may cause water stress to crops and thereby affecting crop development. Weeding is in progress in most parts of the highlands and some parts of the lowlands. Harvesting of winter wheat has started in the lowlands.

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