

# STATEMENT FROM THE SIXTEENTH SOUTHERN AFRICA REGIONAL CLIMATE OUTLOOK FORUM (SARCOF-16), HARARE, ZIMBABWE, 23 – 24 AUGUST 2012.

## SUMMARY

Most of Southern African Development Community (SADC) is likely to receive normal to above-normal rainfall for the period October to December (OND) 2012. However, the south-eastern, northernmost parts of the contiguous SADC, southernmost Madagascar are expected to receive normal to below-normal total rainfall. The north-eastern parts of continental SADC and Mauritius are expected to receive above normal rains (Figure 1).

For the period January to March (JFM) 2013, the bulk of SADC is expected to receive normal to above-normal rainfall. However, the northern and the south-eastern parts of conterminous SADC region are expected to receive normal to below-normal rainfall (Figure 2).

# THE SIXTEENTH SOUTHERN AFRICA REGIONAL CLIMATE OUTLOOK FORUM

The Sixteenth Southern Africa Regional Climate Outlook Forum was held in Harare, Zimbabwe from 23-24 August 2012 to present a consensus outlook for the 2012/2013 rainfall season over the SADC region. Climate scientists from the SADC National Meteorological and/or Hydrological Services (NMHSs), the SADC Climate Services Centre (CSC) and Intergovernmental Authority on Development (IGAD) Climate Prediction and Applications Centre (ICPAC) formulated this outlook. Additional products were received from other global climate prediction centres, United Kingdom Met Office and other sister climate centres. This outlook covers the major rainfall season from October 2012 to March 2013.

This Outlook is relevant only to seasonal time-scales and relatively large areas and may not fully account for all factors that influence regional and national climate variability, such as local and month-to-month variations (intra-seasonal).

Users are strongly advised to contact the National Meteorological and Hydrological Services for interpretation of this Outlook, additional guidance and updates.

# **METHODOLOGY**

Using statistical and other climate prediction schemes, the climate scientists determined likelihoods of above-normal, normal and below-normal rainfall for each area (Figures 1 and 2).

Above-normal rainfall is defined as lying within the wettest third of recorded (30 year, that is, 1971 -2000 mean) rainfall amounts; below-normal is defined as within the driest third of rainfall amounts and normal is the middle third, centred on the climatological median. The scientists also took into account that El Nino-Southern Oscillation (ENSO) is going to be in a weak, warm phase i.e. El Nino, phase which is projected to persist into early 2013.

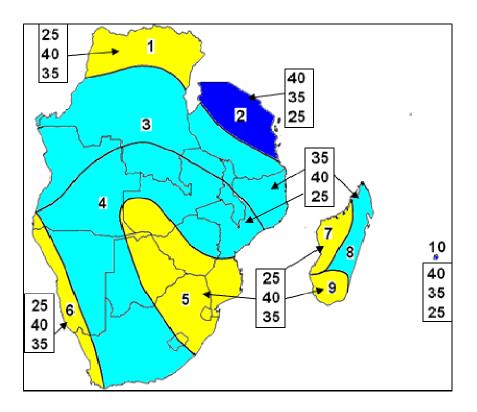
## **OUTLOOK**

October to March is the main rainfall season over most of southern Africa. Owing to the differences in the predominant rainfall-bearing systems, the rainy season has been divided into two three-month periods (i.e. OND and JFM).

## **SPONSORSHIP**

The sixteenth Southern Africa Climate Outlook Forum was hosted by the Meteorological Services Department of Zimbabwe. Support was provided by Government of Zimbabwe, SADC, African Development Bank, United Nations- International Strategy of Disaster Reduction, World Meteorological Organization, Food and Agricultural Organization, United States Assistance for International Development, Office of Foreign Disaster Assistance and other partners.

## **October-November-December 2012**



## Fig 1: Rainfall forecast for October-December 2012

**Zone 1:** Northern DRC. **Increased chances of normal to below-normal rainfall** 

**Zone 2:** Northern Tanzania. **Increased chances of above-normal to normal rainfall** 

**Zone 3:** Northern Mozambique, southern Tanzania, northern Malawi, northernmost Zambia, bulk of DRC and north-western half of Angola. **Increased chances of normal to above-normal rainfall** 

**Zone 4:** Central Mozambique, southern Malawi, northern half of Zimbabwe, most of Zambia, southernmost DRC, south-eastern half of Angola, bulk of Namibia, western half of Botswana, most of central and western parts of SA, western parts of Lesotho.

Increased chances of normal to above-normal rainfall

**Zone 5:** Extreme south-western Zambia, Caprivi area, south-easternmost Angola, south-western half of Zimbabwe, eastern half of Botswana, most of northern SA, Swaziland and southern Mozambique.

Increased chances of below-normal to normal rainfall

**Zone 6:** South-westernmost Angola and western coastal areas of Namibia and SA. **Increased chances of normal to below-normal rainfall** 

**Zone 7:** Western Madagascar. **Increased chances of normal to below-normal rainfall** 

**Zone 8:** Eastern Madagascar. **Increased chances of above-normal to normal rainfall** 

**Zone 9:** Southern Madagascar **Increased chances of below-normal to normal rainfall** 

Zone 10: Mauritius. Increased chances of above-normal to normal rainfall

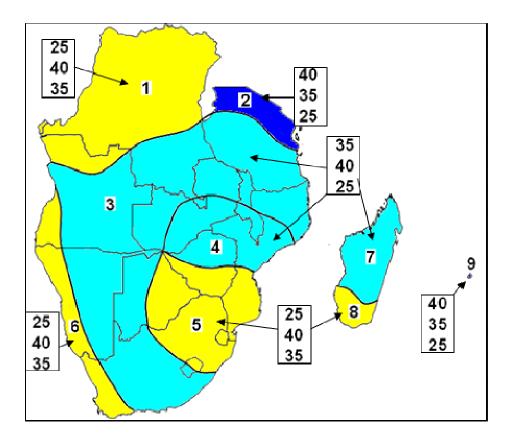


Fig 2: Rainfall forecast for January-March 2013

**Zone 1:** Bulk of DRC and northernmost Angola. **Increased chances of below-normal to normal rainfall** 

**Zone 2:** Northernmost Tanzania. **Increased chances of above-normal to normal rainfall** 

**Zone 3:** Northern Mozambique, bulk of Tanzania, northern Malawi, northern and western Zambia, southern DRC, bulk of Angola, most of Namibia, western half of Botswana, most of central and western parts of SA and western parts of Lesotho.

Increased chances of normal to above-normal rainfall

**Zone 4:** Southern Zambia, southern Malawi, northern half of Zimbabwe and central parts of Mozambique.

Increased chances of normal to above-normal rainfall

**Zone 5:** Southern half of Zimbabwe, eastern half of Botswana, north and central SA, eastern Lesotho, Swaziland and southern Mozambique. **Increased chances of normal to below-normal rainfall** 

**Zone 6:** South-westernmost Angola, western fringes of Namibia and SA. **Increased chances of normal to below-normal rainfall** 

**Zone 7:** Bulk of Madagascar. **Increased chances of above-normal to normal rainfall** 

**Zone 8:** Southernmost Madagascar. **Increased chances of normal to below-normal rainfall** 

**Zone 9:** Mauritius. **Increased chances of above-normal to normal rainfall** 

## FIGURE CAPTION

It is emphasized that boundaries between zones should be considered as transition areas. Forecast information is provided only for countries that comprise the Southern Africa Development Community (SADC) region. The numbers for each zone indicate the probabilities of rainfall in each of the three categories, below-normal, normal and above-normal. The top number indicates the probability of rainfall occurring in the above-normal category, the middle number is for normal and the bottom number is for below-normal. For example in Figure 2, for Zone 9, there is a 40% probability of rainfall occurring in the above-normal category; a 35% probability in the normal category; and 25% probability in the below-normal category.

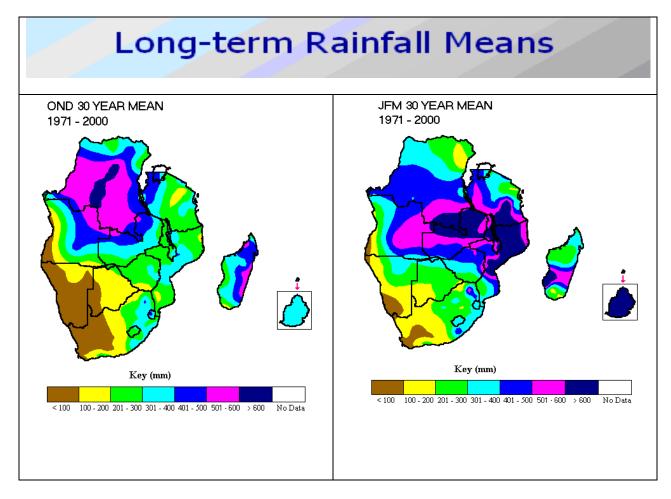


Figure 3 (a) and (b) show the 30-year (1971-2000) mean rainfall over SADC countries

Rainfall increases from southwest to northeast over contiguous SADC in either case. Over Madagascar the rains increase from west to east, while the rains are more uniformly distributed in Mauritius. The legend shows the amounts in millimetres.