



SADC Climate Services Centre  
 P/ Bag 0095 ,  
 Gaborone ,  
 Botswana  
 Tel : + 267 - 3953411/13  
 Fax + 267 - 3972848 / 3181970  
 E-Mail : dmc@sadc.int  
 Web : www.sadc.int

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# OUTLOOK FROM NOVEMBER 2011 TO JANUARY 2012

## HIGHLIGHTS

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### Outlook Highlights

- Normal to above – normal rainfall is expected over Mauritius southern Madagascar and most of the continental SADC countries.
- Northern part of DRC, the extreme north-western part of Angola and the northern half of Madagascar are expected to receive normal to below-normal total rainfall

### THE STATUS OF THE ONSET PHASE OF THE RAINY SEASON

- Moderate to heavy rains have occurred in northern part of the contiguous SADC region. At this onset phase these are largely sporadic, gradually the rain spread southeastwards. Meantime, the November 2011 to January 2012 rainfall projections for SADC are mostly normal to above-normal. **However, the most wet conditions will likely happen during January 2012, consistent with SARCOF-15 Outlooks.**
- Details of the forecast are on pages 3 and 4.

### EL-NIÑO /LA NINA UPDATE`

- Persistence of negative SST anomalies in the tropical Pacific.
- Models project persistent weak La Nina-like to neutral conditions

### El Nino -Southern Oscillation

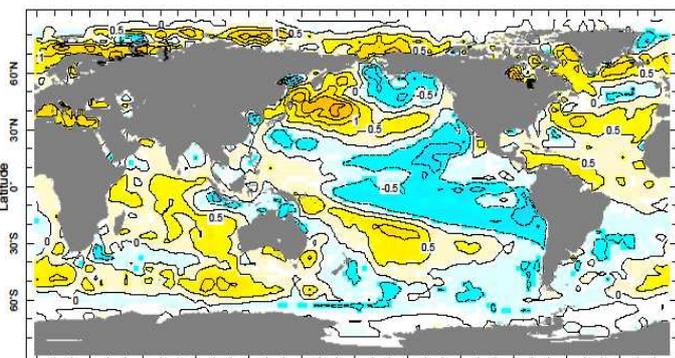
Sea-surface-temperatures (SSTs) throughout the central and eastern tropical Pacific have continued to be below-average. This reflects a persisting La Nina-like conditions.

Most dynamical and statistical forecast models, indicate likelihood of continuing below normal SSTs conditions across Pacific ocean into the peak of austral summer.

## EL-NIÑO/LA NIÑA UPDATE - ENSO-LA

SST anomalies (departures from average) over Pacific Basin reflected below average conditions in Nino regions, marking the continuation of weak cold episode (Fig. 3).

Meantime, most of dynamical and statistical model forecasts from advanced climate prediction centres as of October 2011 indicate a continuation of the weak La Nina-like to ENSO-neutral conditions in the next few months (Figs. 4a and 4b). This trend is expected through austral summer.



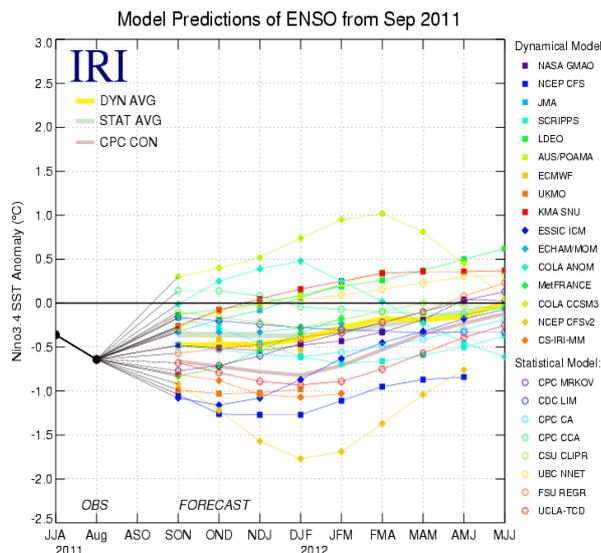
**Fig 3. Mean global oceans SST anomalies for NDJ 2011/2012 period (Source: IRI)**

There has been persistent warmer-than-normal SST conditions over the equatorial and southeast Indian Ocean. Persistence of that will be conducive to the formation of rain-bearing system that will occur on the sub continent and Island States.

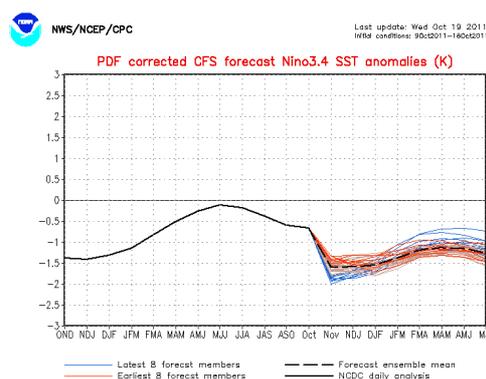
The central Pacific SSTs which are expected to tend to La Nina, during 2011/12 season, will contribute to the shifting the rainfall conditions into the normal to above normal conditions for most of the contiguous SADC region.

### THE STATUS OF THE RAINY SEASON

A rain-bearing band associated with the Inter-tropical Convergence zone (ITCZ) is currently



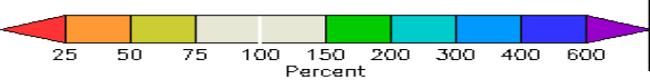
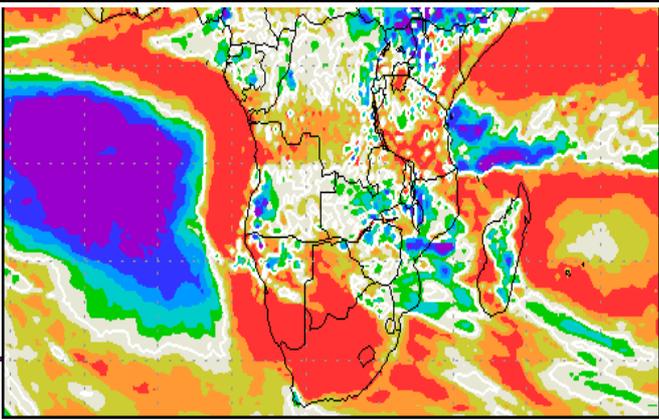
**Fig.4a: Model forecasts for El-Niño event (Source: IRI)**



**Fig.4b: Ensemble Model forecasts for El-Niño event (Source: NCEP/CPC)**

located across northernmost of conterminous SADC region. It penetrates into the central part of the southern Africa from western Angola, passing through Namibia to the north-eastern section of South Africa. This stretching of the wet zone in the central part of the SADC region suggests the usual erratic start of the rainy season.

During the beginning of 2011/12 rainy season, the percent of normal rainfall received over the region were largely below normal across the bulk of SADC countries. These suppressed rainfall conditions in parts should continue into the middle of November 2011 (Fig.5), as projected in OND2011

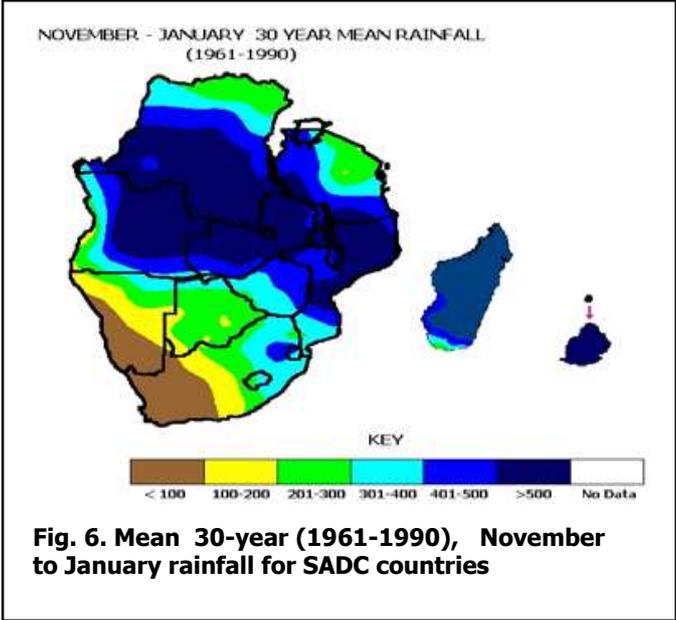


**Fig. 5. Precipitation (percent of normal ) forecast from 01 November to 08 November 2011 (Source: COLA)**

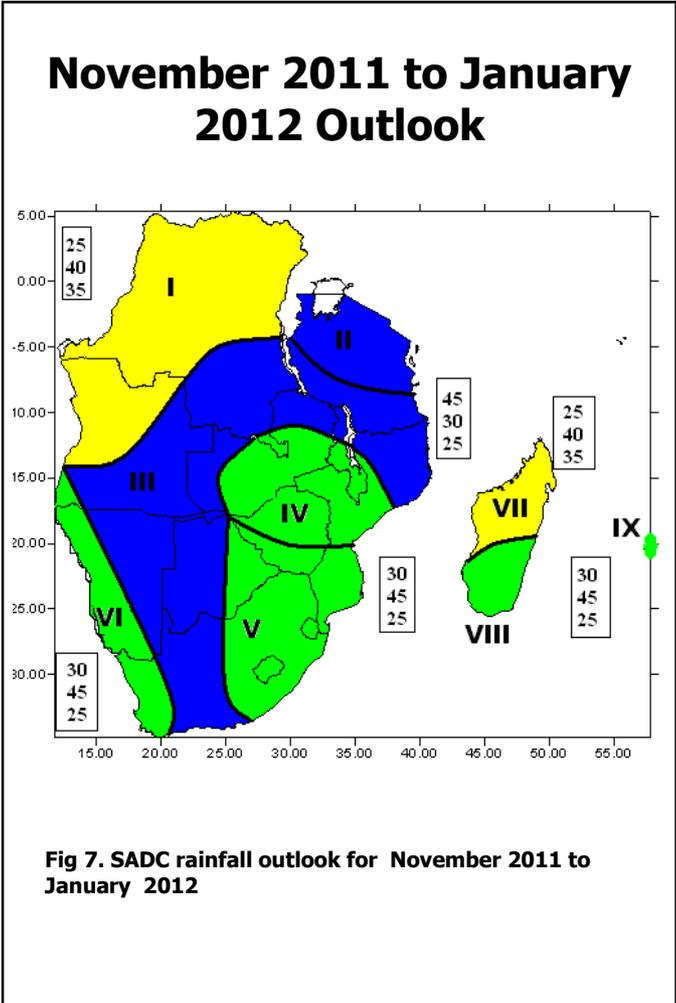
**THIRTY—YEAR MEAN RAINFALL (1961—1990) FOR NOVEMBER—JANUARY**

The thirty mean total rainfall map for November to January shows maxima of above 500 mm over much of Malawi, Zambia, Angola, southern half of DRC , central and northern Mozambique as well as Mauritius, Madagascar and Seychelles.

The remainder of the region receives rainfall less than 400 mm gradually decreasing south-westwards up to southwest South Africa and Namibia where the mean rainfall is below 100 mm (Fig. 6). Lower rains are also expected in the northernmost contiguous SADC



**Fig. 6. Mean 30-year (1961-1990), November to January rainfall for SADC countries**



**Fig 7. SADC rainfall outlook for November 2011 to January 2012**

## RAINFALL FORECAST (NOVEMBER 2011—JANUARY 2012)

### FORECAST DETAILS

**Zone I:** (Most of DRC and northwestern half of Angola).

**Increased chances of normal to below-normal rainfall**

**Zone II:** (Northern half of Tanzania).

**Increased chances of above-normal to normal rainfall**

**Zone III:** (Central South Africa, western half of Botswana, eastern Namibia, south-eastern half of Angola, extreme northern and western Zambia, most of southern DRC, northern Malawi, southern half of Tanzania and northern Mozambique).

**Increased chances of above-normal to normal rainfall**

**Zone IV:** (Central portions of Mozambique, most of northern Zimbabwe, central sections of Zambia, extreme south of DRC and south half of Malawi).

**Increased chances of normal to above normal rainfall**

**Zone V:** (Lesotho, bulk of South Africa, Swaziland, eastern Botswana, southern Zimbabwe and southern Mozambique).

**Increased chances of normal to above normal rainfall**

**Zone VI:** (western coastal areas of South Africa, western coastal area of Namibia and extreme south-western parts of Angola)

**Increased chances of normal to above normal rainfall**

**Zone 7:** (Northern half of Madagascar).

**Increased chances of normal to below-normal rainfall**

**Zone 8:** (Southern half of Madagascar).

**Increased chances of normal to above normal rainfall**

**Zone 9:** Mauritius.

**Increased chances of normal to above-normal rainfall**

**N.B. Taking into account SARCOF-15 OND2011 and JFM 2012 forecasts, the NDJ 2011/12 outlook implies there will be much wetter conditions during January 2012, preceded by dry spells in some places of the SADC region.**

### Map caption

The number for each zone indicate the probabilities of rainfall in each of the three categories: Above normal, Normal and Below normal (Fig. 7). The top number indicates the probability of rainfall occurring in the Above-normal category, the middle number for Normal and the bottom number for Below-normal. For example, in the case of Zone IV there is a 35% probability for rainfall occurring in the above-normal category; a 40% probability for rainfall in the normal category; and 25% probability for rainfall for a below-normal category. It is emphasized that boundaries between zones should be considered as transition zones.

**Note:** This update is relevant only for three monthly time scales and relatively large areas. Local to month to month variations may occur.

The users are strongly advised to contact their NMHSs and SADC Climate Services centre for interpretation of this Outlook, finer details, updates and additional guidance.

### **Acknowledgements:**

SADC NMHSs, Global climate monitoring and prediction centres and WMO.

*SADC CSC in conjunction with other partners will continue to closely monitor the status*