



**STATEMENT FROM THE NINETEENTH SOUTHERN AFRICA
REGIONAL CLIMATE OUTLOOK FORUM (SARCOF-19),
KINSHASA, DEMOCRATIC REPUBLIC OF CONGO,
26 – 28 AUGUST 2016**

SUMMARY

The bulk of the southern tier states of continental Southern African Development Community (SADC) is likely to receive normal to below-normal rainfall for the period October to December (OND) 2015 and the January to March (JFM) 2016. However, most Democratic Republic of Congo (DRC) northern Angola, Tanzania, north-eastern Zambia, northern Malawi, northern Mozambique, the Islands States of Mauritius, Seychelles and eastern-most Madagascar are more likely to receive normal to above-normal rainfall. Northernmost of Tanzania and Madagascar are more likely to receive above-normal to normal rainfall.

THE NINETEENTH SOUTHERN AFRICA REGIONAL CLIMATE OUTLOOK FORUM

The Nineteenth Southern Africa Regional Climate Outlook Forum was held in Kinshasa, DRC from 26 to 28 August 2015 to present a consensus outlook for the 2015/2016 rainfall season over the SADC region. Climate scientists from the SADC National Meteorological and/or Hydrological Services (NMHSs), the SADC Climate Services Centre (CSC) formulated this outlook. Additional products from other global climate prediction centres namely, European Centre for Medium Range Weather Forecast (ECMWF), International Research Institute for Climate and Society (IRI), UK Met Office and Bureau of Meteorology, Australia (BoM) were considered in formulation of the consensus seasonal climate outlook. This outlook covers the major rainfall season in SADC countries, i.e. from October 2015 to March 2016. The outlooks are presented in overlapping three-monthly periods as follows: October-November-December (OND); November-December-January (NDJ); December-January-February (DJF); and January-February-March (JFM)

This Outlook is relevant only to seasonal (overlapping three-monthly) 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, other climate prediction schemes and expert interpretation, the climate scientists determined likelihoods of above-normal, normal and below-normal rainfall for each area (Figures 1 to 4) for overlapping three-monthly periods i.e. October-November-December (OND), November-December-January (NDJ); December-January-February (DJF);

and January- February-March (JFM). Above-normal rainfall is defined as lying within the wettest third of recorded (30 year, that is, 1971-2000 and 1981-2010 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 climate scientists took into account oceanic and atmospheric factors that influence our climate over SADC region. A persistent strong El Niño is also favoured during the bulk of the rainfall season. It is important to note that El Niño is not the only factors that drive global climate patterns.

OUTLOOK

The period, October to March, is the main rainfall season over most of southern Africa. Owing to the differences and evolution patterns in the predominant rainfall-bearing systems, the rainfall season has been subdivided into four overlapping three-month periods (i.e. OND, NDJ, DJF and JFM as defined above), based on the homogenous seasonal rainfall zone.

SPONSORSHIP

The Nineteenth Southern Africa Climate Outlook Forum was hosted by the Democratic Republic of Congo's Agence Nationale de Météorologie et de Télédétection par Satellite (METTELSAT). Support was provided by Government of the Democratic Republic of Congo, SADC, African Development Bank and other partners.

OCTOBER-NOVEMBER-DECEMBER 2015

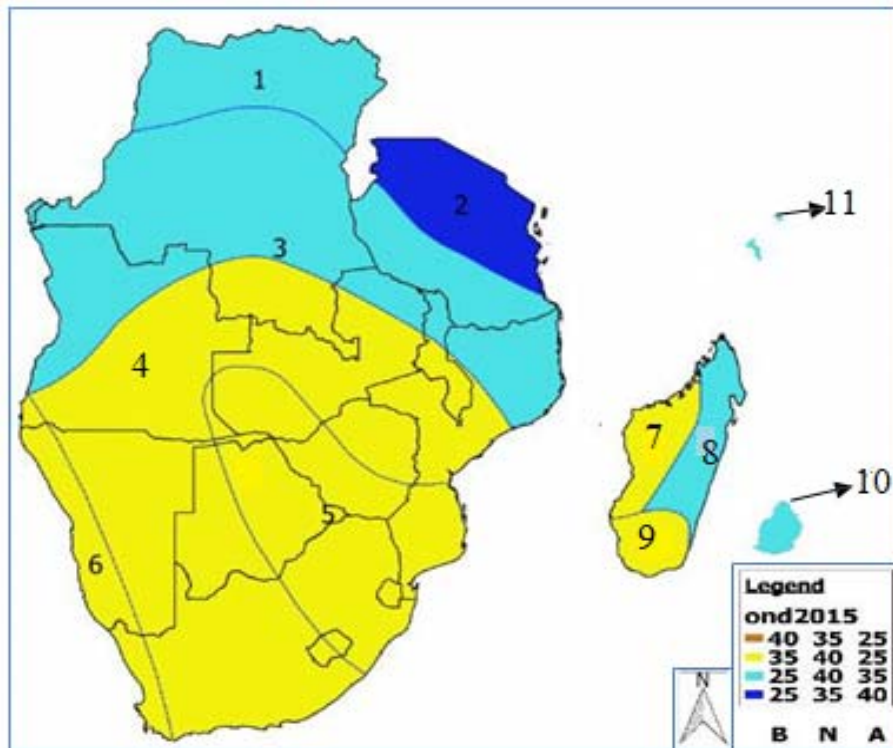


Fig 1: Rainfall forecast for Oct-December 2015

Zone 1: Northern Democratic Republic of Congo (DRC).
Increased chances of normal to above-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 South Africa, western parts of Lesotho.
Increased chances of normal to below-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 South Africa, Swaziland and southern Mozambique.
Increased chances of normal to below-normal rainfall

Zone 6: South-westernmost Angola and western coastal areas of Namibia and South Africa.
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 normal to above-normal rainfall

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

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

Zone 11: Seychelles.
Increased chances of normal to above-normal rainfall

NOVEMBER-DECEMBER 2015-JANUARY 2016

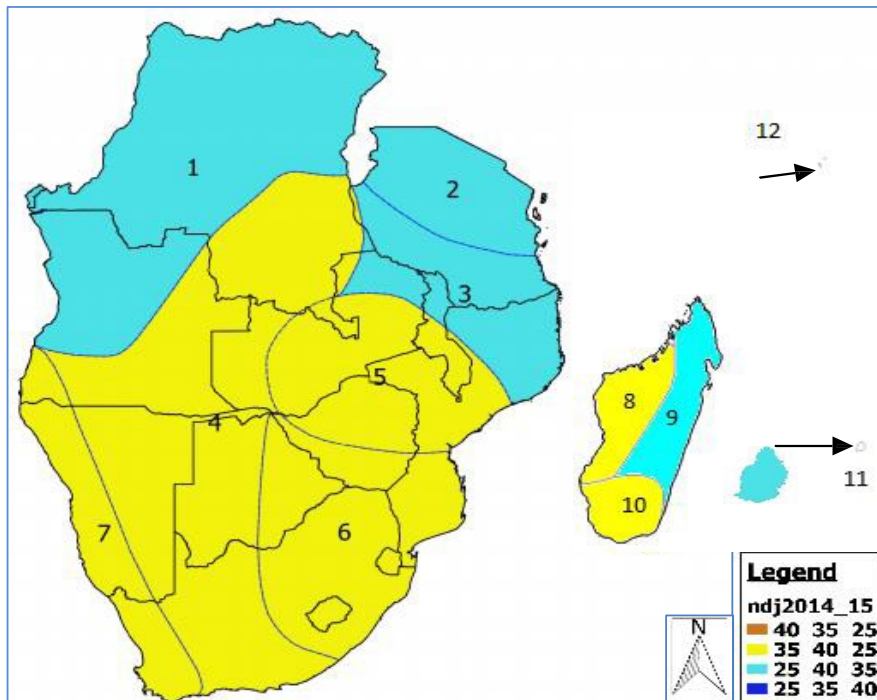


Fig 2: Rainfall forecast for November-December 2015-January 2016

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

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

Zone 3: Northern Mozambique, bulk of Tanzania, northern Malawi, eastern Zambia and extreme south-east of DRC.
Increased chances of normal to above-normal rainfall

Zone 4: Southern DRC, bulk of Angola, most of Namibia, western half of Botswana, most of central and western parts of South Africa.
Increased chances of normal to below-normal rainfall

Zone 5: Southern Zambia, extreme south of DRC, southern Malawi, northern half of Zimbabwe and central parts of Mozambique.
Increased chances of normal to below-normal rainfall

Zone 6: Southern half of Zimbabwe, eastern half of Botswana, north and central South Africa, Lesotho, Swaziland and southern Mozambique.
Increased chances of normal to below-normal rainfall

Zone 7: South-westernmost Angola, western fringes of Namibia and South Africa.
Increased chances of normal to below-normal rainfall

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

Zone 9: Eastern Madagascar.
Increased chances of normal to above-normal rainfall

Zone 10: Southernmost Madagascar.
Increased chances of normal to below-normal rainfall

Zone 11: Mauritius.
Increased chances of normal to above-normal rainfall

Zone 12: Seychelles.
Increased chances of normal to above-normal rainfall

DECEMBER 2015-JANUARY-FEBRUARY 2016

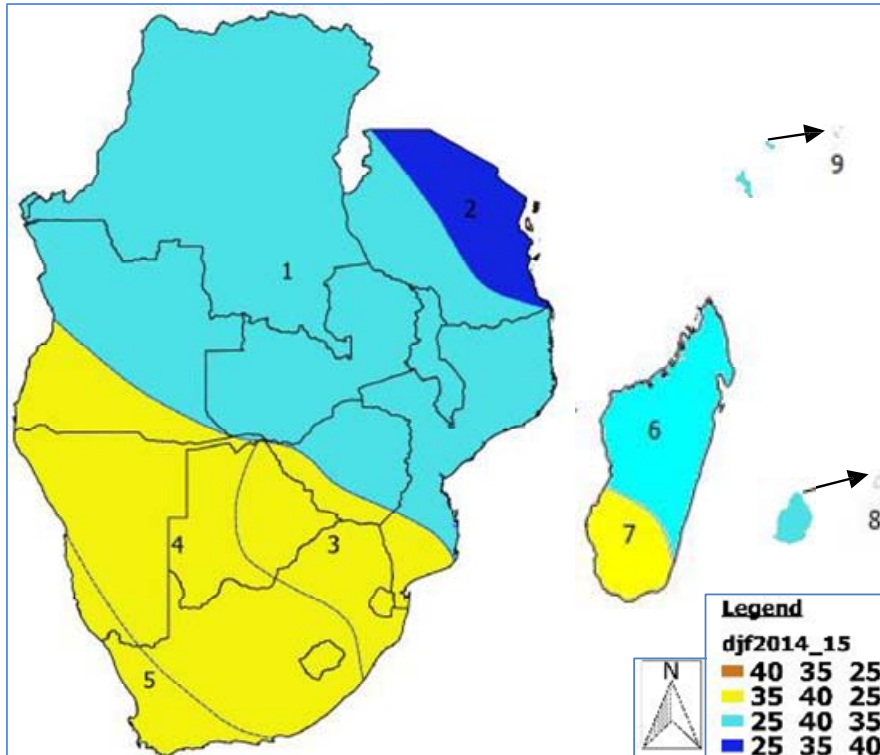


Fig 3: Rainfall forecast for December 2015-January-February 2016

Zone 1: DRC, Zambia, Malawi, bulk of Angola, most of Zimbabwe, greater part of Mozambique and western half of Tanzania.
Increased chances of normal to above-normal rainfall

Zone 2: Eastern half of Tanzania.
Increased chances of above-normal to normal rainfall

Zone 3: South-western Angola, most of Namibia, western half of Botswana, most of central and western parts of South Africa and Lesotho.

Increased chances of normal to below-normal rainfall

Zone 4: Southern third of Zimbabwe, eastern half of Botswana, north and central South Africa, eastern Lesotho, Swaziland and southern Mozambique.

Increased chances of normal to below-normal rainfall

Zone 5: South-western fringe of Namibia and south-western South Africa.

Increased chances of normal to below-normal rainfall

Zone 6: Bulk of Madagascar.

Increased chances of normal to above-normal rainfall

Zone 7: Southernmost Madagascar.

Increased chances of normal to below-normal rainfall

Zone 8: Mauritius.

Increased chances of normal to above-normal rainfall

Zone 9: Seychelles.

Increased chances of normal to above-normal rainfall

JANUARY-FEBRUARY-MARCH 2016

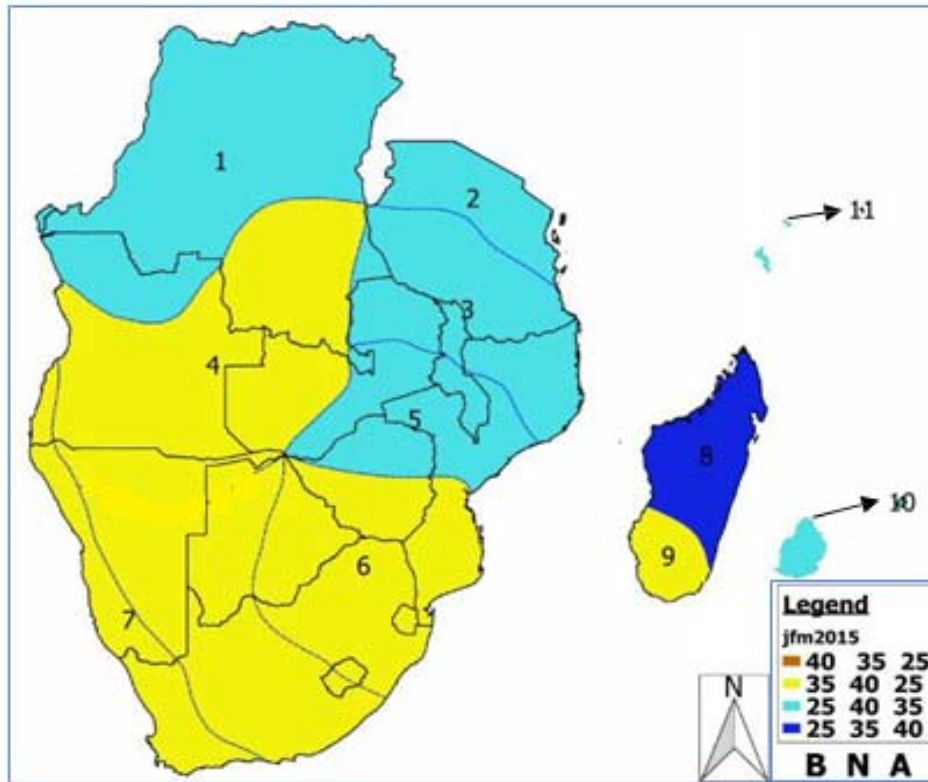


Fig 4: Rainfall forecast for January-February-March 2016

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

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

Zone 3: Northern Mozambique, bulk of Tanzania, northern Malawi, eastern Zambia, extreme south east of DRC.
Increased chances of normal to above-normal rainfall

Zone 4: Southern DRC, bulk of Angola, most of Namibia, western half of Botswana, most of central and western parts of South Africa and western parts of Lesotho.
Increased chances of normal to below-normal rainfall

Zone 5: Extreme south of DRC, southern Zambia, southern Malawi, northern half of Zimbabwe and central parts of Mozambique.
Increased chances of normal to above-normal rainfall

Zone 6: Southern half of Zimbabwe, eastern half of Botswana, north and central South Africa, eastern Lesotho, Swaziland and southern Mozambique.

Increased chances of normal to below-normal rainfall

Zone 7: South-westernmost Angola, western fringes of Namibia and South Africa.

Increased chances of normal to below-normal rainfall

Zone 8: Bulk of Madagascar.

Increased chances of above-normal to normal rainfall

Zone 9: Southernmost Madagascar.

Increased chances of normal to below-normal rainfall

Zone 10: Mauritius.

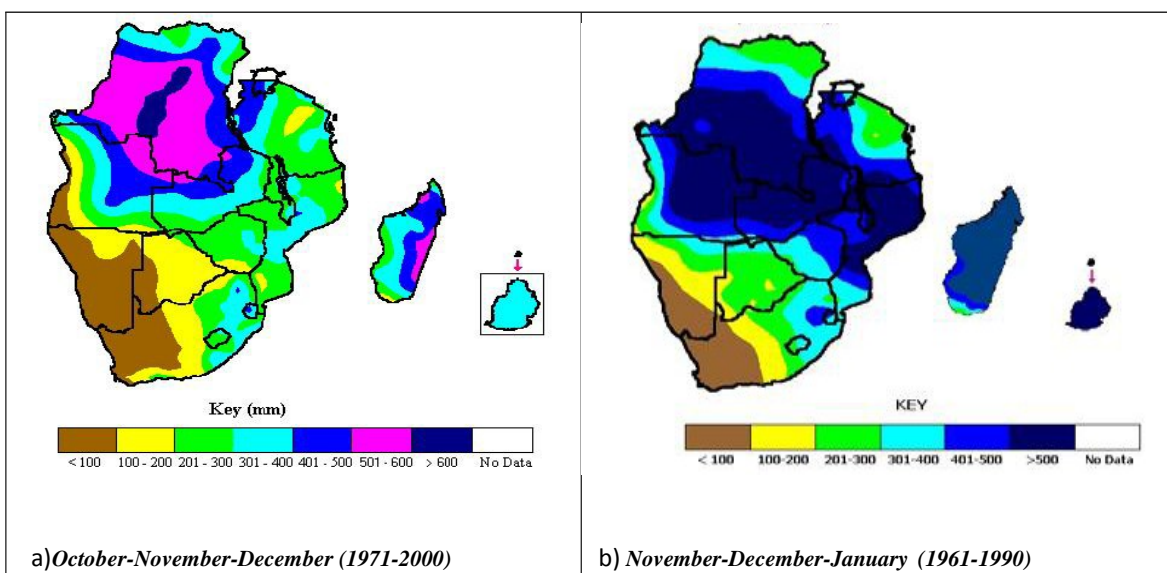
Increased chances of normal to above-normal rainfall

Zone 11: Seychelles.

Increased chances of normal to above-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 leftmost number indicates the probability of rainfall occurring in the below-normal category, the middle number is for normal and the rightmost number is for above-normal. For example in Figure 4, for Zone 6, there is a 40% probability of rainfall occurring in the normal category; a 35% probability in the below-normal category; and 25% probability in the above-normal category.



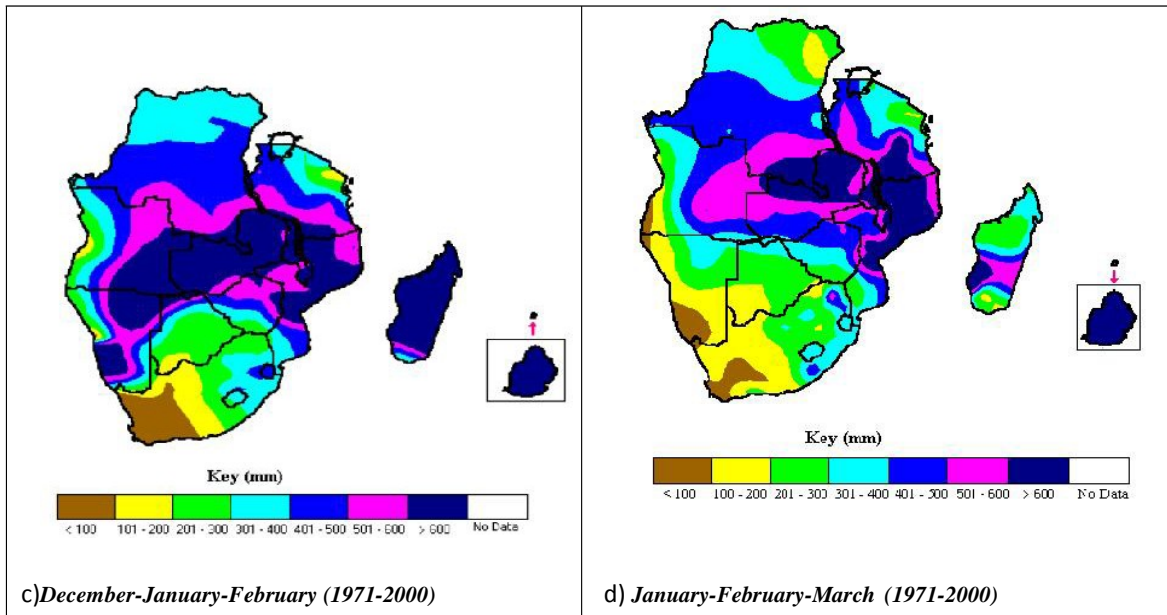


Figure 5. Long-term mean rainfall over SADC countries: (a) October-November-December (1971-2000), (b) November-December-January (1961-1990), (c) December-January-February(1971-2000) and (d) January-February-March (1971-2000)

The long-term mean October-November-December 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, Figure 5(a). The November-December-January long-term mean total rainfall shows maxima of above 500 millimetres over much of Malawi, Zambia, Angola, southern half of DRC, central and northern Mozambique as well as Mauritius, Madagascar and Seychelles, Figure 5(b). The remainder of the region receives rainfall less than 400 millimetres gradually decreasing south-westwards to southwest South Africa and Namibia where the mean rainfall is below 100 millimetres. The legend shows the amounts in millimetres. The long-term mean for December-January-February rainfall shows maxima of above 600 millimetres over much of Malawi, Zambia, Angola, southern half of DRC, central and northern Mozambique as well as Mauritius, Madagascar and Seychelles, Figure 5(c). The remainder of the region receives rainfall less than 400 millimetres gradually decreasing south-westwards to southwest South Africa and Namibia where the mean rainfall is below 100 millimetres. The January-February-March shows a significant reduction in the rainfall received in most of the southern parts of the region with the central and eastern parts remaining wet, Figure 5(d). Mauritius shows sustained rainfall pattern over the while Madagascar shows a decline of rainfall in most parts except the extreme south western parts of the country.