

Review of October – December 2021 Rainfall Outlook

In the last week of January 2022, experts of the SADC regional meteorological services under the guidance of the SADC Climate Service Centre (SADC-CSC) conducted a review of the regional forecast issued in September 2021 and the subsequently downscaled forecasts for each member state. The outlook for the months October, November and December 2021 (OND 2021) was compared against the performance of rainfall over the same period as a percent of normal.

The outlook for OND 2021 projected normal to above-normal rainfall for much of the country with the exception of the southwest and parts of the Erongo region where below normal to normal rainfall was forecasted, taking all climatic drivers into account. (see Fig.1 below)

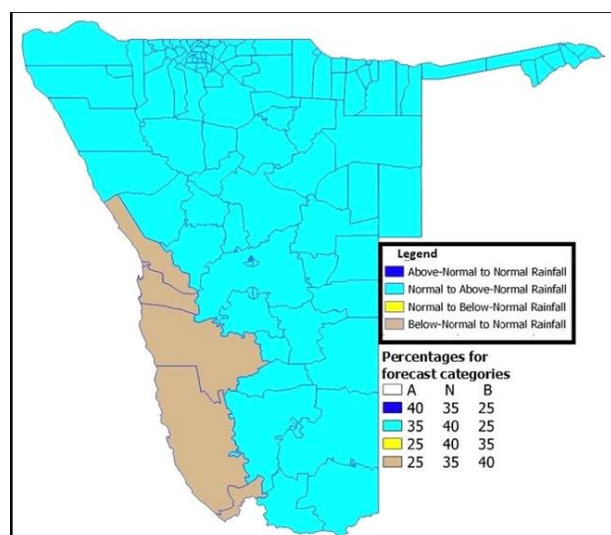


Figure 1. OND Seasonal Outlook 2021

Rainfall data from various stations were then used to analyze what actually happened and then calculate the rainfall performance as a departure from the normal of the months in review. The results showed that much of the country received below normal rainfall with the exceptions of the southeast and pockets over the Kavango, Odjozondjupa, Oshana, Ohangwena and Oshikoto regions.

An advisory note was issued in the beginning of the OND 2021 season against the implications of the forecast first issued.

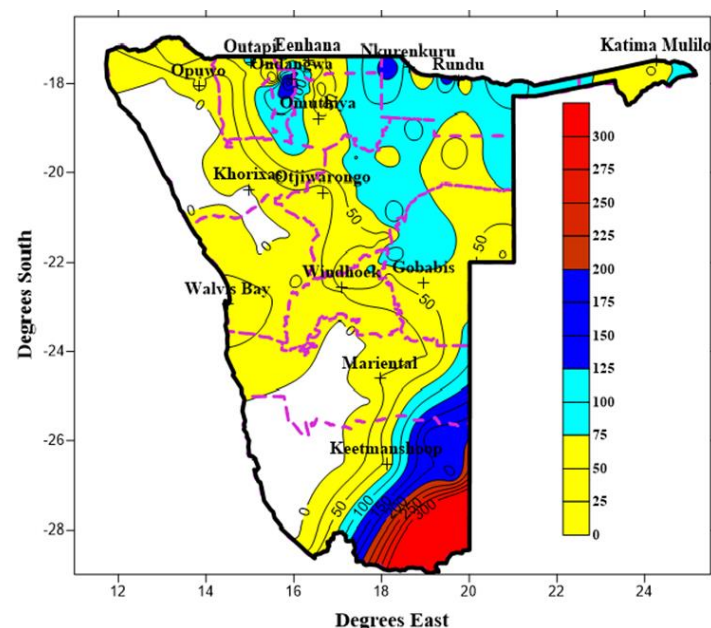


Figure 2. OND 2021 rainfall performance as a percent of normal

February – April 2022 Rainfall Outlook

After the review process of the OND 2021 period, a first ever regional review was done and we are proud to be able to update our stakeholders and general public on what to expect for the remainder of the rainfall season 2022.

METHODOLOGY

Through the use of statistical tools, climate prediction schemes and interpretation, likelihoods of above-normal, normal and below-normal rainfall over the months of February-March-April (FMA) 2022 was determined for the country. Above-normal rainfall is defined as rainfall lying within the wettest third of recorded (30 years, that is, 1981-2010 mean) rainfall amounts; below-normal is defined as within the driest third of rainfall amounts, and normal is the middle third, centered on the climatological median.

Furthermore, a few oceanic and atmospheric factors that influence the climate over the SADC region and subsequently Namibia was taken into account. The El Niño-Southern Oscillation (ENSO) currently in it's cold phase but projected to evolve into a weak La Niña phase during the period of the forecast. An increased chance of the neutral Indian Ocean Dipole (IOD) and a neutral Subtropical Indian Ocean (SIOD) by the end of the March 2022.

FMA 2022 OUTLOOK

All of the above are indicators of enhanced chances of rainfall over Namibia and gave rise to the forecast below.

During the period of interest FMA 2022, most parts of the country are likely to receive normal to above-normal rainfall with the exception of the Karas region where normal to below-normal rainfall is expected. (see Fig.3)

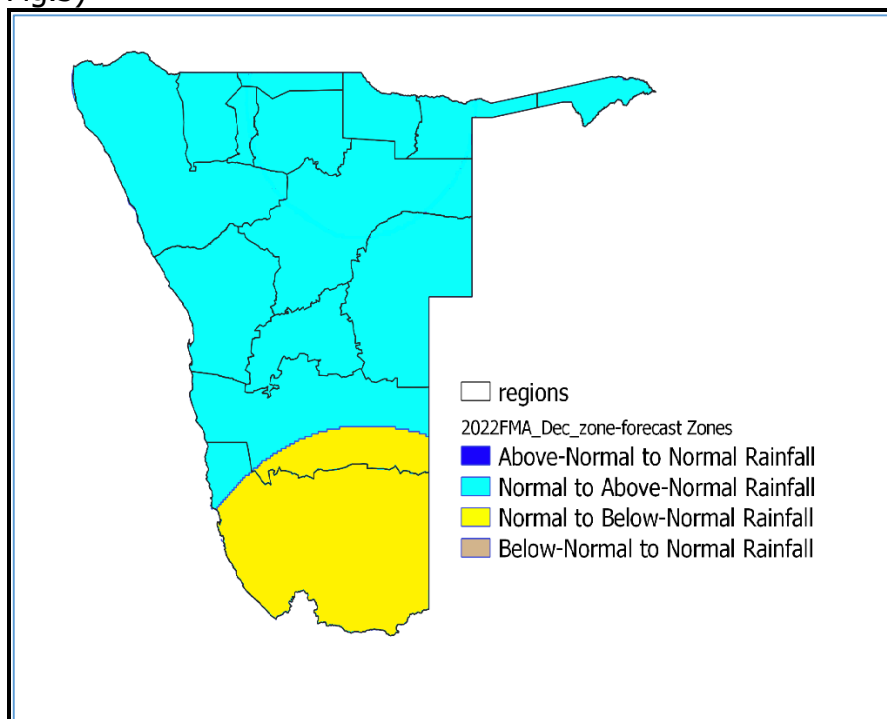


Figure 3 Rainfall forecast for February-March-April 2022

NOTE: 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 Service for interpretation of this Outlook, additional guidance and updates.