

N WET-SPELLS IN NAMIBIA DURING THE MONTH OF APRIL WITH SPECIAL REFERENCE TO THE WET SPELL OF MID-APRIL 2003

(Sepiso Mwangala, April 2003)

Abstract

For the greater part of Namibia, the month of April is a transition period between the rainy season (October/November to March/April) and the dry season. While rainfall events are normally very low during April, occasional significant falls do occur following the advection of moist air and instability in the lower atmosphere over the country.

Wet spells are an inherent property of climate, and depending upon their durations and the rainfall associated with them, they can have distinct advantages as well as disadvantages. For instance, in agriculture, wet spells of relatively short duration, typically not exceeding 3 days and with light to moderate rainfall, can be very conducive to crop growth. However, if the spells are long, crop damage can easily set forth as a result of water logging in the soil or even flooding.

In this note, historical occurrences of wet spells at seven stations (Katima Mulilo, Rundu, Grootfontein, Windhoek, Gobabis, Mariental/Hardap and Keetmanshoop) in the month of April are examined for the period 1961 to 2002. A wet spell is defined as the number of consecutive days with at least 1 mm of rainfall. Individual station daily rainfall records were accordingly examined for occurrences of wet-spells of varying lengths from 1 day to 7 days or more.

Although actual ground truth data was quite scanty at the time of preparing this note (22 April 2003), this year's wet spell, which mainly affected the central parts of the country in the middle of April, was indeed quite a rare event. It seems to have been most intense in the Khomas region with Windhoek experiencing a wet spell of 5 days during which 116.2 millimetres of rainfall was accumulated. In Windhoek area, April wet spells of 5 days or more have less than 1% likelihood of occurrence. Further, given that the entire month of April in Windhoek normally gets just about 35.1 millimetres, this was indeed a very heavy rainfall event. Rundu and Grootfontein with only 1 light rainy day each (5.5 and 2.2 millimetres respectively) were not affected. In the south Hardap dam (near Mariental) and Keetmanshoop experienced insignificant falls. No report could be obtained from Gobabis.

For the Windhoek area in particular, even disregarding the other 25 days of April 2003, this April's 5-day rainfall total of 116.2 mm has been exceeded only four times since rainfall records began in about 1892; these four years being 1899, 1925, 1943 and 1950. The 116.2 mm actually accounts for a staggering 41% of the total seasonal rainfall received since the beginning of the season in October 2002! This contrast is sharply amplified in the seasonal rainfall progressive chart given below.