Agrometeorological



UPDATE



REPORTING PERIOD: 11 – 20 DECEMBER 2016

ISSUE No.: 08 SEASON: 2016/17 RELEASED: 23/12/2016 **CONTENTS HIGHLIGHTS** CONTENTS1 Further reduction in rainfall recorded in the dekad... HIGHLIGHTS1 **RAINFALL SYNOPSIS AND PROGNOSIS1** RAINFALL AND TEMPERATURES2 > Vegetation continues to improve in most parts.... TEMPERATURES......2 > Farmers continue with planting and weeding activities in the MAIZE CROP STAGE AND CONDITION.3 dekad.... > Slight increase in rainfall activity expected during the outlook..... > Warm to mild temperatures expected..... > Slight improvement in soil moisture expected..... > Winds are going to be light to moderate breeze

RAINFALL SYNOPSIS AND PROGNOSIS

SYNOPSIS - PAST TEN DAYS

Rainfall continued to be further reduced in this dekad due to the continued subsidence from the upper air high-pressure system that continues to persist with its position over our region.

PROGNOSIS - NEXT TEN DAYS

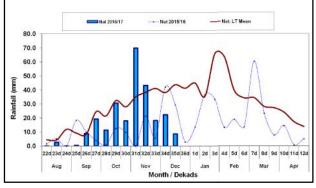
The Upper Air High Pressure system is anticipated to slightly ease off from our region during the next ten days, thus increasing chances of rainfall on the 24th, 25th, 26th and 29th December 2016.

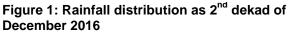
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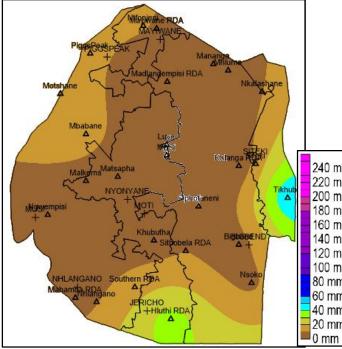
RAINFALL AND Temperatures

RAINFALL

The second dekad of December 2016 experienced an 8-9day dry spell, which continues to affect crops adversely compounded by the 3-5 day dry spell experienced in the previous dekad. The dry conditions persisted into this dekad since the last dekad of November 2016 (Figure 1).







Map 2: Spatial rainfall distribution for second dekad December 2016

All the agro-ecological regions recorded further reduced rainfall amounts with the Lubombo Plateau having a smaller deficit compared to the others (Table 1).

<u>Table 1:</u> Rainfall (mm) for 2nd dekad December 2016

	ΗV	MV	LV	LP
2015/16	33	38	18	29
Average	59	44	30	42
2016/17	4	1	3	25
Anomaly	-55	-43	-27	-17

TEMPERATURES

Mananga recorded the hottest temperatures compared to its longterm, while Bigbend and Malkerns recorded below the longterm average maximum temperatures (**Figure 2**).

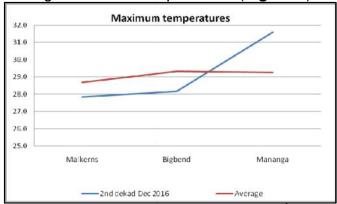
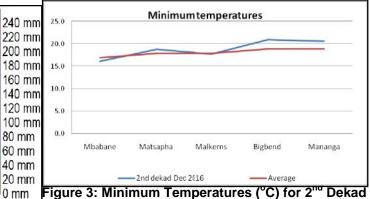


Figure 2: Maximum Temperatures (°C) for 2nd Dekad December 2016

Warmer night temperatures were experienced in most parts of the country with Mbabane and Malkerns recording almost average temperatures (**Figure 3**).



December 2016

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CROP PRODUCTION

MAIZE CROP STAGE AND CONDITION

Maize is showing some signs of water and heat stress in parts of the Lowveld, but in the Highveld the crop is still in a good state especially those that were planted early as they are almost tasseling (Picture 1).



Picture 1: Well fenced maize crop at Maphalaleni in the Highveld

OTHER CROPS

Groundnuts (Picture 2) were found planted amongst additional crops planted by farmers in the Highveld in addition to maize intercropped pumpkins and melons.



Picture 2: Sweet potato emerging at Ejubukweni in the Highveld

CURRENT FARMING ACTIVITY

Farmers continue with planting of maize and other crops, while others are busy with weeding their mid vegetative crop.

WATER (BULK) AVAILABILITY

Water in dams has since stopped increasing as some rivers are slightly declining due to the persistent dry spells. In the Highveld, the situation is not as bad as in the Lowveld concerning the water situation in rivers and dams.

MEDIUM-TERM OUTLOOK

RAINFALL

A slight easing off of the upper air high that has been the cause of the reduced rainfall in the past three dekads will result in increased chances of good rainfall in the next ten-days.

TEMPERATURE

Temperatures are expected to drop in most parts of the country to range in the 20s compared to the high 30s in the past dekad.

SOIL MOISTURE

A slight improvement in soil moisture content is expected.

WIND SPEED

Winds are expected to blow between 4 and 6m/s.

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CONTRIBUTORS, PARTNERS AND SOURCES OF INFORMATION

<u>Please Note</u>: This bulletin is issued in support of the efforts by the National Early Warning Office (NEWU) for food Security in the Ministry of Agriculture to provide Swaziland's current agronomic and meteorological developments to users, stakeholders, government authorities and international organizations during the farming season.

The NEWS is currently made-up of a core team of the National Early Warning Unit (NEWU) of Ministry of Agriculture, the Agromet Section of the National Meteorology Department and the Agricultural Statistics Unit of Central Statistics Office (CSO).