



AGROMETEOROLOGICAL UPDATE



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CONTENTS

HIGHLIGHTS	1
CONTENTS	1
RAINFALL SYNOPSIS AND PROGNOSIS	1
RAINFALL AND TEMPERATURES	2
RAINFALL	2
TEMPERATURES	2
MAIZE AND OTHER CROPS.....	3
MAIZE CROP STAGE AND CONDITION..	3
OTHER CROPS	3
CURRENT FARMING ACTIVITY	3
LIVESTOCK AND PASTURES	4
WATER (BULK) AVAILABILITY.....	4
MEDIUM-TERM OUTLOOK.....	4
RAINFALL	4
TEMPERATURE.....	4
SOIL MOISTURE	4
WIND SPEED	4

HIGHLIGHTS

- **Good rains continue in most parts...**
- **Vegetation continues to improve....**
- **A few farmers are still busy with weeding....**
- **Slight reduction in rainfall forecasted.....**
- **Warm to hot temperatures anticipated.....**
- **Little improvement in soil moisture expected.....**

RAINFALL SYNOPSIS AND PROGNOSIS

➤ SYNOPSIS - PAST TEN DAYS

The Inter Tropical Convergence Zone (ITCZ) continued to have a major influence on rain bearing systems over the country. The low-pressure system over the central interior of Southern Africa brought in moist unstable air from the tropics. The Indian Ocean high and a ridging Atlantic ocean high also brought in cold moist air from the ocean, which converged with the unstable air from the continental low. These, when combined with the dominating upper air divergence over the kingdom in the reporting period, brought about widespread rainfall for most parts of the country. There was a strong upper level divergence over Swaziland on the 16th, which when acting in concert with the effect of the deep low on the Eastern-central interior of Southern Africa may have caused the wind storms which devastated crops in the Lubombo plateau.

RAINFALL AND TEMPERATURES

RAINFALL

About average rainfall was received during the second dekad of January which was similar to that of the previous season 2015/16 (Figure 1).

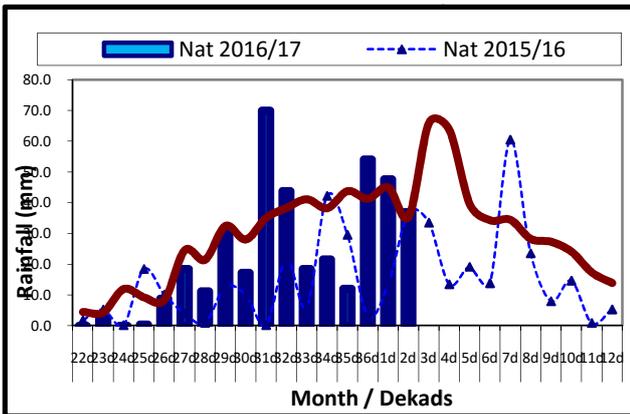
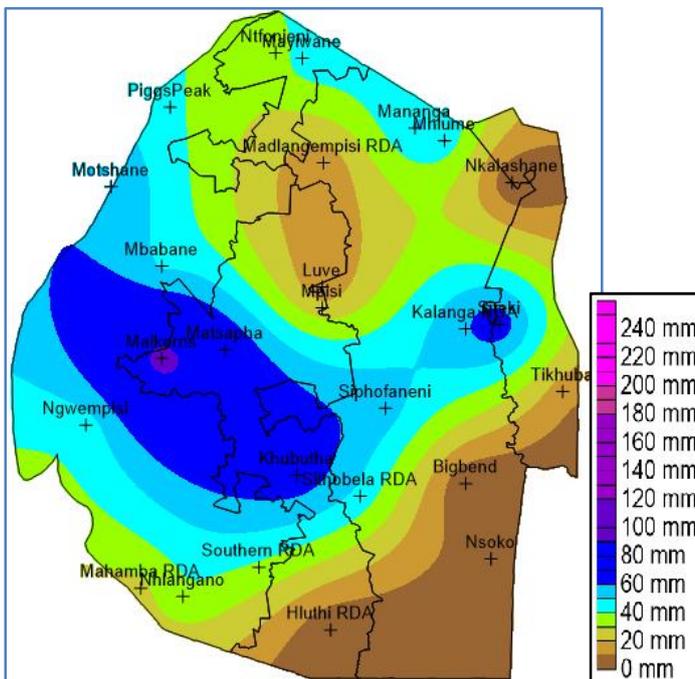


Figure 1: Rainfall distribution as second dekad of January 2017



Map 2: Spatial rainfall distribution for second dekad January 2017

Most parts of the country received rainfall between 40-70mm (**Map 1**). Almost all the agro-ecological zones received above average rainfall save for the Highveld (**Table 1**).

Table 1: Rainfall (mm) for 2nd dekad January 2017

	HV	MV	LV	LP
2015/16	42	40	37	28
Average	52	32	29	29
2016/17	26	49	31	41
Anomaly	-26	17	2	12

TEMPERATURES

Cold to warm temperatures were recorded over the country as stations recorded below to slightly above average temperatures (**Figure 2 and 3**).

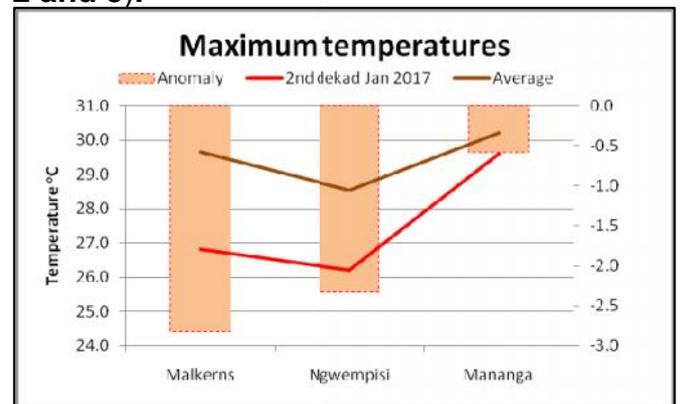


Figure 2: Maximum temperature as second dekad of January 2017

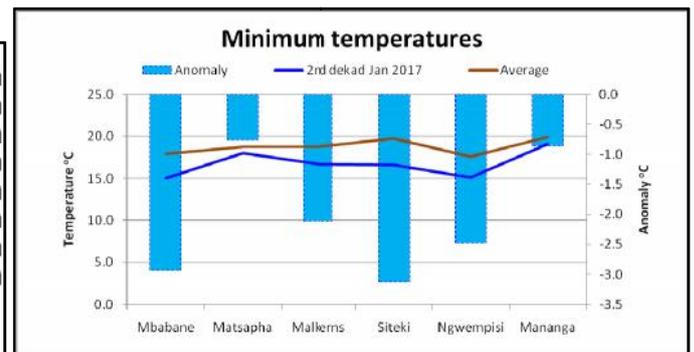


Figure 3: Minimum temperature as second dekad of January 2017

MAIZE AND OTHER CROPS

MAIZE CROP STAGE AND CONDITION

Maize, which was at grain development, has recovered from the adverse effects of the early December dry spells. About 25ha of maize that was at late vegetative stages were destroyed by strong winds over the Lubombo Plateau in Maphungwane area and is reported to not recover from the damage (**Picture 1**). These wind storms occurred on the 16th and 17th January 2017.



Picture 1: Fallen maize crop due to strong wind at Maphungwane (courtesy: Mr. Mango, Maphungwane extension)

OTHER CROPS

Groundnuts have formed pods and are in good condition (**Picture 2**)

Mango fruits are cracking probably because of the increased rainfall (**Picture 3**).



Picture 2: Beans in good condition in the Lubombo Plateau (courtesy: Mr. Mango, Maphungwane extension)



Picture 3: Mangoes cracking due to increased rainfall at Maphungwane (courtesy: Mr. Mango, Maphungwane extension officer)

CURRENT FARMING ACTIVITY

Most farmers are busy with weeding their fields.

LIVESTOCK AND PASTURES

Livestock is observed to be in good condition and vegetation continue to improve due to continued significant rainfall (**Image 2**).

WATER (BULK) AVAILABILITY

Bulk water continues to improve in most major reservoir dams, rivers and small streams in the country. Maguga dam remains unchanged since December when compared to the other reservoirs with a slight increase..

MEDIUM-TERM OUTLOOK

RAINFALL

Reduced rainfall expected in most parts of the country in the outlook period.

TEMPERATURE

Warm temperatures expected in most parts of the Highveld and Middleveld, but slightly hot conditions expected in the Lowveld.

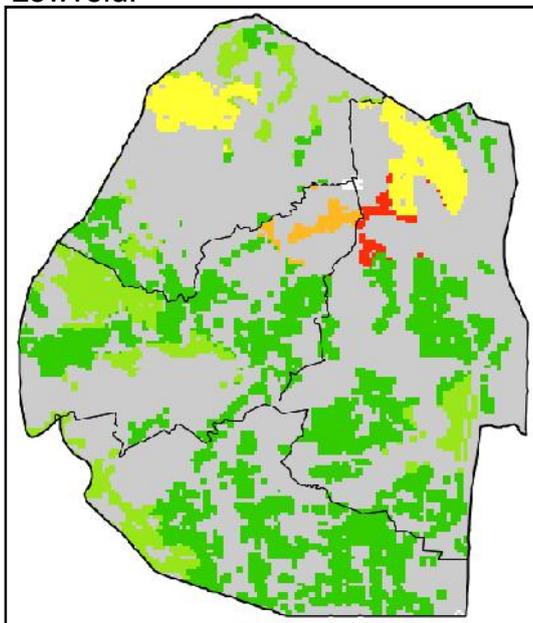


Image 1: Agricultural Stress Index image (2nd Dekad January 2017) Source: FAO-GIEWS

SOIL MOISTURE

Slight improvement in soil moisture anticipated.

WIND SPEED

Wind speeds will be mostly that of a gentle breeze.

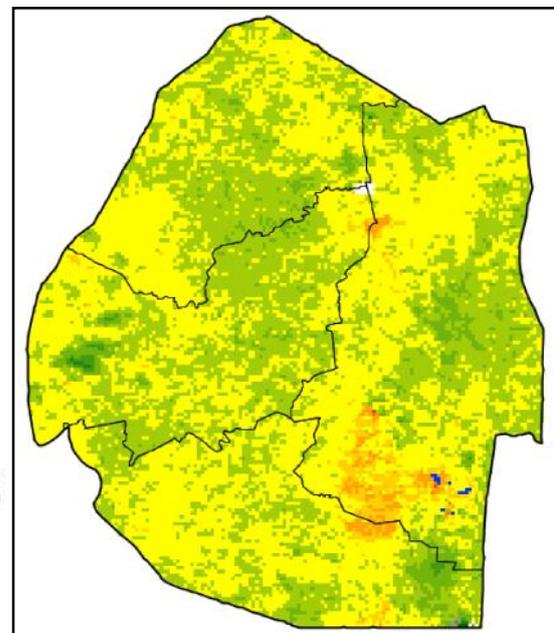


Image 2: Vegetation anomaly image (2nd Dekad January 2017) Source: FAO-GIEWS

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Please Note: 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 Unit of the National Meteorology Department and the Agricultural Statistics Unit of Central Statistics Office (CSO).