



AGROMETEOROLOGICAL UPDATE



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HIGHLIGHTS

- **Much reduced rainfall recorded in the dekad...**
- **Steady progress in vegetation, though the upper Lowveld is struggling....**
- **Planting and weeding continue to be major activities in the dekad....**
- **Slight improvement in expected rainfall but to remain below average.....**
- **Warm to hotter than average 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

Much reduced rainfall was recorded when compared to the longterm average countrywide, because of the subsidence from the upper air high-pressure system that continues to persist with its position over our region.

➤ PROGNOSIS - NEXT TEN DAYS

It is expected that there could be some light easing off by the Upper Air High Pressure system, which may result in some sporadic rainfall activity during the next ten days.

RAINFALL AND TEMPERATURES

RAINFALL

Much reduced rainfall when compared to the longterm average were received countrywide. This is as a result of the subsidence from the upper air high pressure system that continue to persist with its position over our region. Spatial distribution of these rains shows that most of the Lowveld received the lowest rainfall amounts between 0 -10mm.

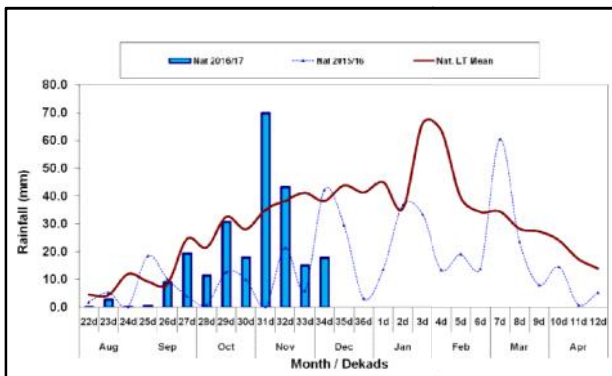


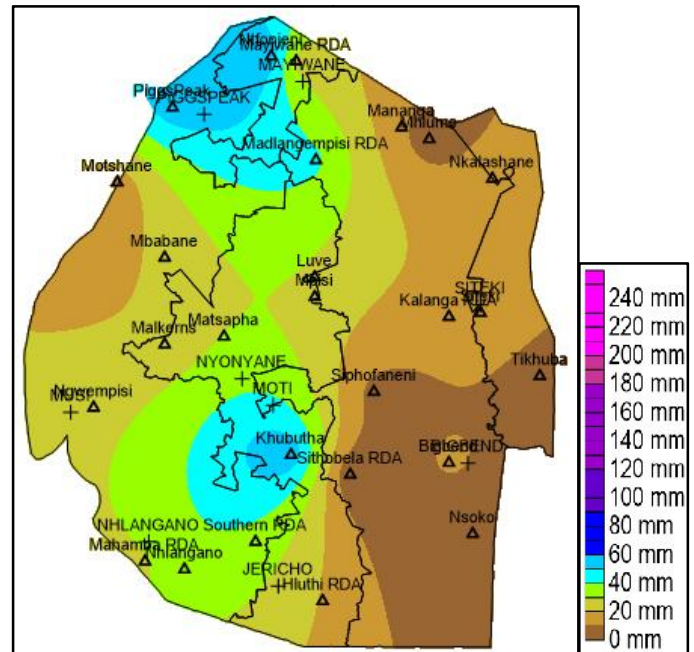
Figure 1: Rainfall distribution as 1st dekad of December 2016

Table 1: Rainfall performance since August 2016 to date

Season	August-November	% of Average	Current-LT	Curr-Last
2015_16	132.8	45%	-165.1	
2016_17	237.1	80%	-60.8	104.3
Longterm	297.9			

Accumulated rainfall countrywide, shows that the rains received so far are still below the longterm average total for this period by 60.8mm compared to a deficit of 165.1mm during the same period last season.

The current rains are 80% of the longterm average rainfall normally recorded during the same period and its 104.3mm more than that of last at the same period.



Map 2: Spatial rainfall distribution for first dekad December 2016

cal zones, shows that most of the zones recorded much below the longterm average (Table 1).

Table 2: Rainfall (mm) for 1st dekad December 2016

	HV	MV	LV	LP
2015/16	52	40	50	27
Average	54	39	30	30
2016/17	28	22	10	12
Anomaly	-26	-17	-20	-18

TEMPERATURES

Warmer day temperatures prevailed in the Lowveld, while below average maximum temperatures were recorded in the Highveld (Figure 2).

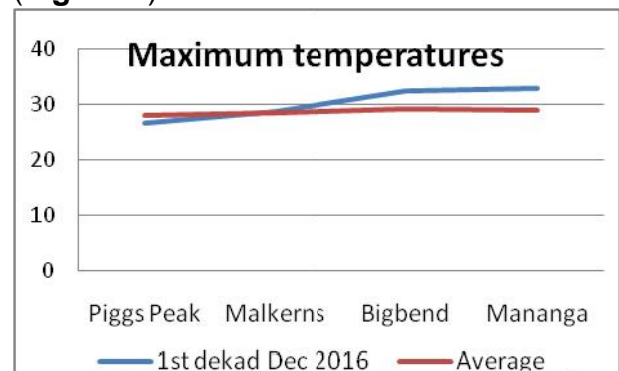


Figure 2: Maximum Temperatures (°C) for 1st Dekad

December 2016

Minimum temperatures were mostly below average minimum temperatures in the Highveld and Lubombo Plateau (**Figure 3**).

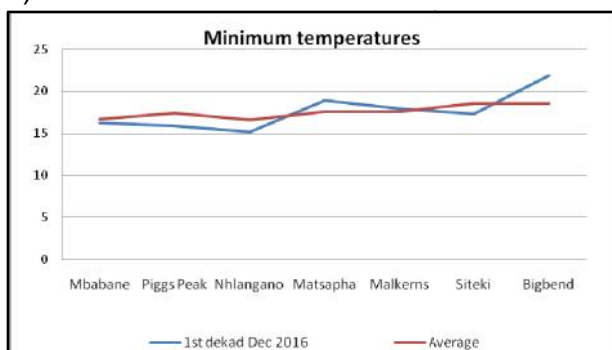


Figure 3: Minimum Temperatures (°C) for 1st Dekad December 2016

CROP PRODUCTION

MAIZE CROP STAGE AND CONDITION

Early planted maize in the Lowveld is flowering but some of it is experience water stress due to the intermittent dry spells that have been persistent in the last few dekad. In the Highveld, the early-planted crop is about to flower and in a good state (Picture 1).



Picture 1: Maize at mid vegetative stage at Mbuluzi in the Highveld

OTHER CROPS

Planted sweet potatoes were seen during field visits in Mbuluzi in the Highveld area.



Picture 2: Sweet potato emerging at Mbuluzi 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.

LIVESTOCK AND PASTURES

Grazing areas continue to improve countrywide, even though there are patches (Image 1 & 2) of poor growth in some parts of the Lowveld, especially the northern parts. This has not yet affected cattle adversely as observed during visits to the northern Lowveld.

WATER (BULK) AVAILABILITY

Major rivers and dams continue to improve, even though at a stagnate pace due to the dry spells that commenced during the third dekad of November 2016. With the updated seasonal forecast for December to February pointing towards normal to above normal rainfall it is expected that these systems will continue to improve.

MEDIUM-TERM OUTLOOK

RAINFALL

Only three days are expected to record any rainfall in some parts of the country on the 16, 20 and 24th December 2016.

TEMPERATURE

Temperatures are expected to range from 20°C to 28°C in the Highveld, while the Middleveld will range from 24°C - 31°C and the Lowveld at 26°C - 38°C.

SOIL MOISTURE

Soil moisture will be reduced in the

outlook period.

WIND SPEED

Winds will blow between 3 to 7m/s.

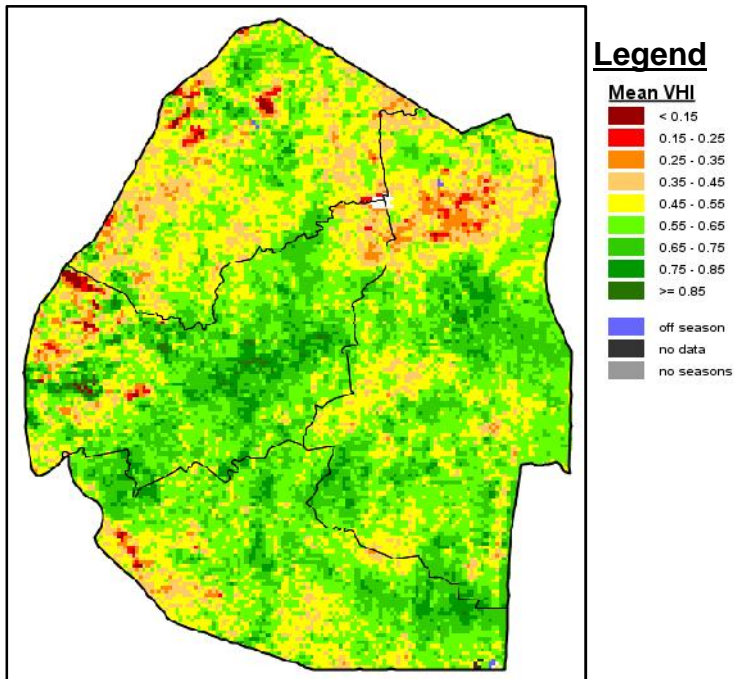


Image 1: Mean Vegetation Health Index image (1st Dekad December 2016) Source: FAO-GIEWS

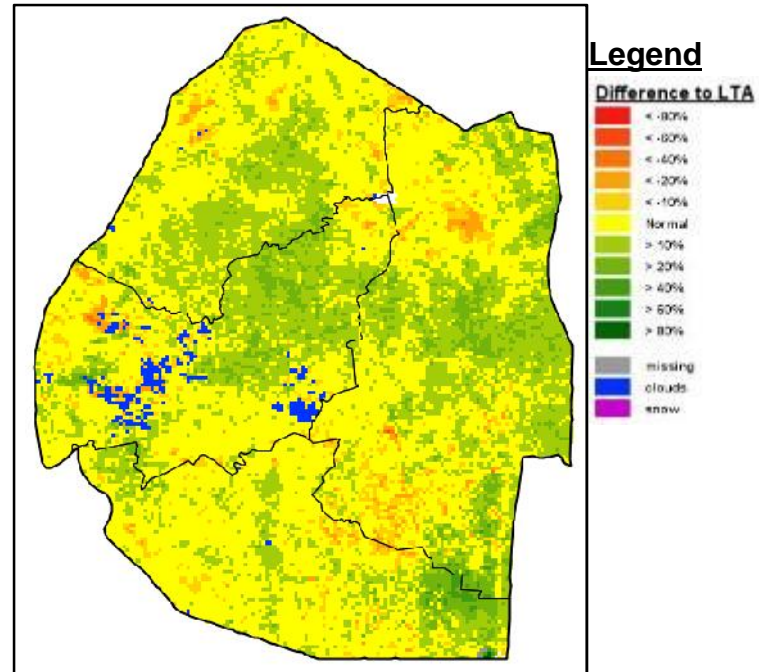


Image 2: Vegetation anomaly image (1st Dekad December 2016) Source: FAO-GIEWS

CONTRIBUTORS, PARTNERS AND SOURCES OF INFORMATION

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 Section of the National Meteorology Department and the Agricultural Statistics Unit of Central Statistics Office (CSO).