

AGROMETEOROLOGICAL UPDATE



REPORTING PERIOD:
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RAINFALL SYNOPSIS AND PROGNOSIS

- **SYNOPSIS - PAST TEN DAYS**
The blocking high-pressure system eased off during the reporting period coupled with strong tropical air mass that resulted in increased convective activity during the dekad.
- **PROGNOSIS - NEXT TEN DAYS**
The influence of the tropical air mass in the form of the Inter tropical convergence zone (ITCZ) coupled with increased activity over the Mozambican channel will result in improved rainfall chances.

RAINFALL AND TEMPERATURES

RAINFALL

A significant improvement in rainfall compared to last dekad's dry spells that occurred countrywide. These rains were slightly above the longterm average (Figure 1 below) but much above that of last season.

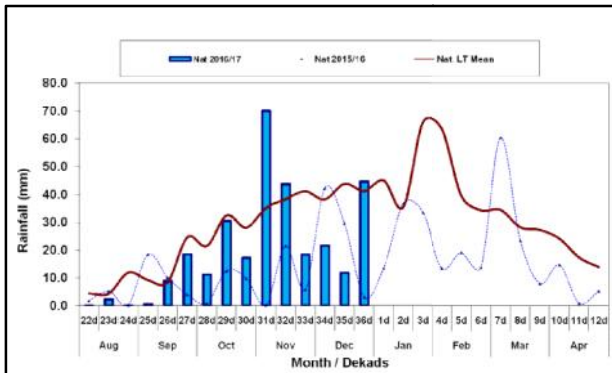
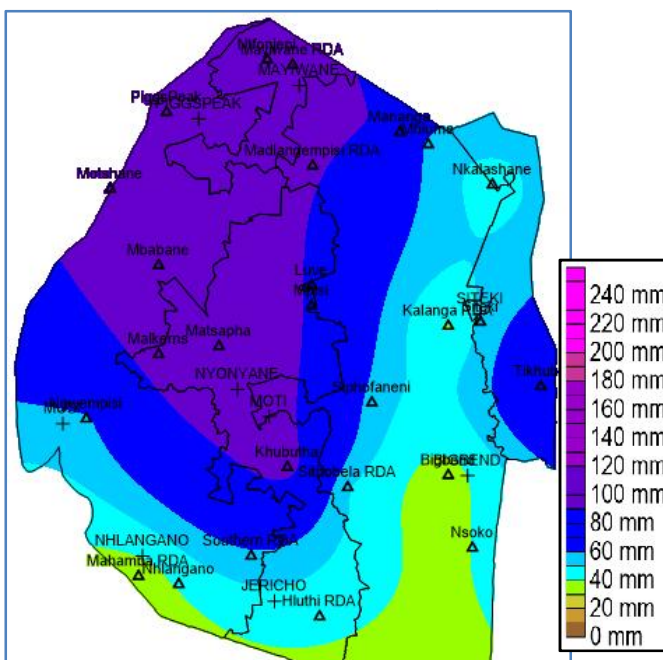


Figure 1: Rainfall distribution as 3rd dekad of December 2016



Map 2: Spatial rainfall distribution for third dekad December 2016

Areas in the Highveld and Middleveld

received the highest rainfall amounts compared to the other parts of the country. Even though the Highveld and Middleveld stations recorded the highest rainfall amounts, it was the Lowveld and Lubombo Plateau that recorded above average rainfall during the reporting period (Table 1)

Table 1: Rainfall (mm) for 3rd dekad December 2016

	HV	MV	LV	LP
2015/16	6	4	3	0
Average	59	37	30	39
2016/17	34	36	41	67
Anomaly	-25	-1	11	28

TEMPERATURES

Above average maximum temperatures were recorded in Lowveld (Figure 2) and mostly below average minimum temperatures (Figure 3).

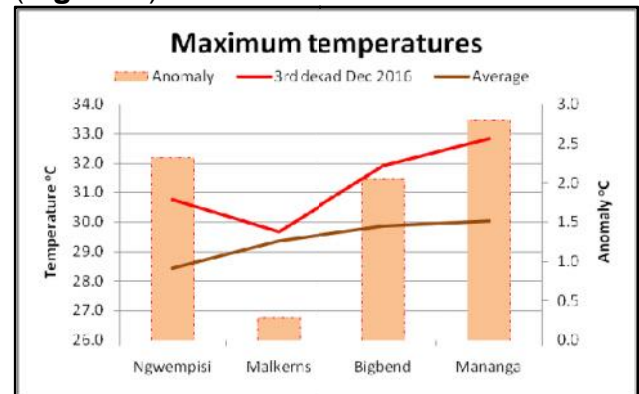


Figure 2: Maximum Temperatures (°C) for 3rd Dekad December 2016

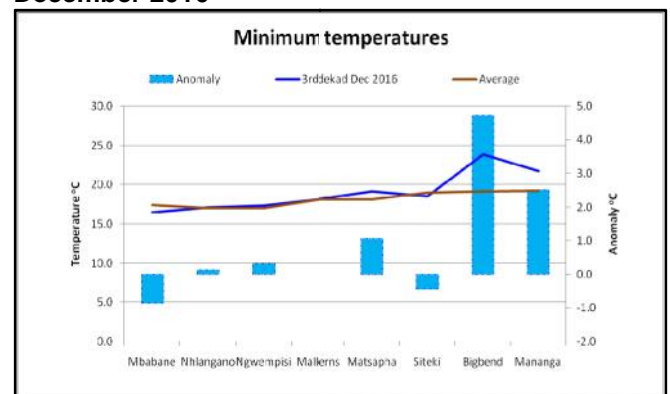


Figure 3: Minimum Temperatures (°C) for 3rd Dekad December 2016

CROP PRODUCTION

MAIZE CROP STAGE AND CONDITION

The maize crop in the Highveld, Middleveld and Lubombo Plateau is ranging from mid-to-late vegetative stages with some of it already tasseling and in a good state (Picture 1), save for a few infested with stalk borer (Picture 2). Maize crop in the Lowveld ranges from late vegetative stage to grain filling, with some adversely affected by the previous three dekads' dry spells.



Picture 1: Maize at late vegetative stage at Mambane in Lubombo Plateau



Picture 2: Stalkborer infested maize in Mambane area



Picture 3: Dry spell affected tasseling maize at Buhleni, in the Hhohho Region

OTHER CROPS

Legumes crops and tubers are at late vegetative stages and in a good state.

CURRENT FARMING ACTIVITY

Weeding continues to be the major activity some farmers are busy with, with a few still planting.

LIVESTOCK AND PASTURES

Pastures are improving in most parts of the country except for a few areas in the Lowveld where the last three dekads dry spells resulted in deteriorating veld conditions (Image 2 below). Livestock continues to improve countrywide (Picture 5).



Picture 4: An improving cattle grazing at Herefords, ka Hhohho

WATER (BULK) AVAILABILITY

The persistent dry spells experienced in the past three dekads adversely affected small streams but big rivers and major reservoirs continue to improve their capacities.

MEDIUM-TERM OUTLOOK

RAINFALL

Increased rainfall amounts expected in the coming ten days.

TEMPERATURE

Mild temperatures expected to prevail in most parts of the country.

SOIL MOISTURE

Increase in soil moisture is expected in the outlook period.

WIND SPEED

Light to moderate breeze in wind speeds are predicted during the outlook period.

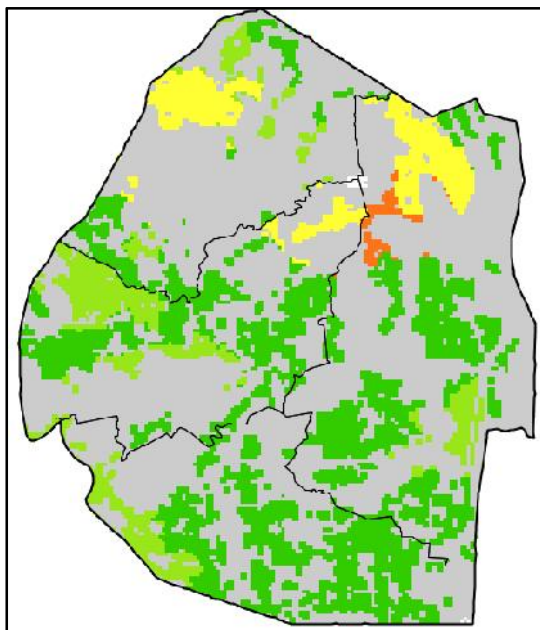


Image 1: Agricultural Stress Index image (3rd Dekad December 2016) Source: FAO-GIEWS

Legend

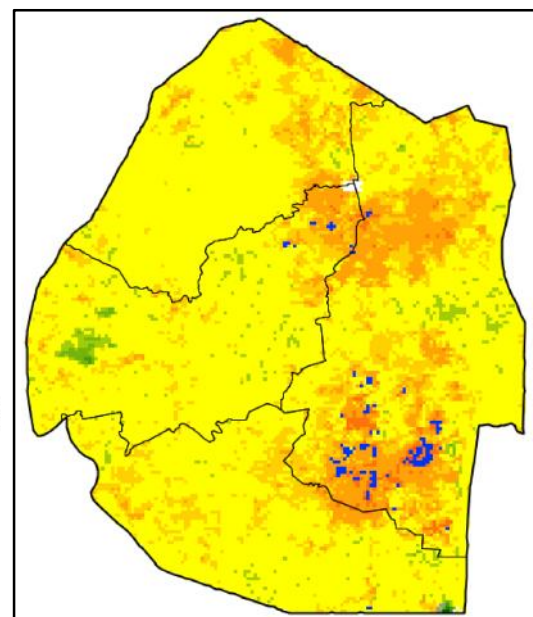
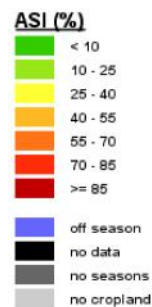
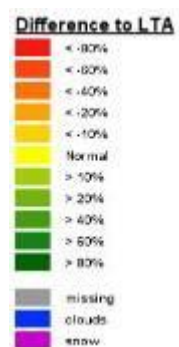


Image 2: Vegetation anomaly image (3rd Dekad December 2016) Source: FAO-GIEWS

Legend



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