AGROMETEOROLOGICAL



UPDATE



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HIGHLIGHTS

- Much reduced rainfall was recorded in the dekad...
- North Lowveld vegetation struggles to improve....
- > Planting and weeding are the main field activities....
- Reduced rains are expected in the coming dekad.....
- Warmer than average temperatures expected.....
- > Slight decline 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 received in most part so the country. This drying effect is due to the current positioning of the upper high over our region coupled with Mozambique Channel depression, which has since deepened.

PROGNOSIS - NEXT TEN DAYS

The current positioning of the upper high over our region is expected to persist during the outlook period; thus increasing the probability of dry spells in some parts of the country.

RAINFALL AND TEMPERATURES

RAINFALL

Much reduced rainfall was received in most part so the country (figure 1). Spatial distribution of these rains shows that most parts of the Lowveld and the Lubombo plateau received below 20mm totals for the dekad (ten-days).

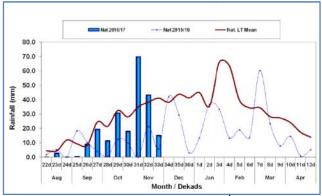
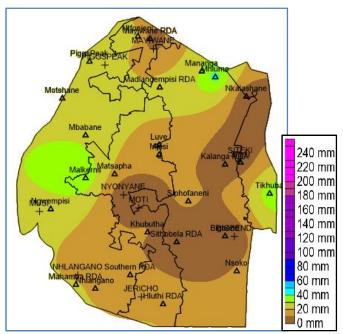


Figure 1: Rainfall distribution as 3rd dekad of November 2016



Figure 2:Rrain-bearing clouds over the Lubombo plateua



Map 3: Spatial rainfall distribution for third dekad November 2016

The agro-ecological region distribution of the rainfall indicates (Table 1) that all the regions recorded below average.

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

| | HV | MV | LV | LP |
|---------|-----|-----|-----|-----|
| 2015/16 | 4 | 10 | 8 | 2 |
| Average | 53 | 45 | 32 | 35 |
| 2016/17 | 16 | 11 | 14 | 20 |
| Anomaly | -37 | -34 | -19 | -15 |

TEMPERATURES

Warmer day temperatures (25°C to 30°C) were recorded over most parts of the country with an exception for few areas in the upper and lower Lowveld where hot (above 30°C) temperatures were recorded (**Figure 2**) and mostly mild minimum temperatures (**Figure 3**).

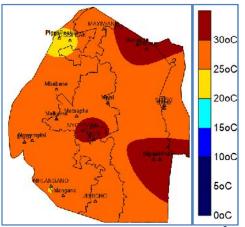


Figure 2: Maximum Temperatures (°C) for 3rd Dekad November 2016

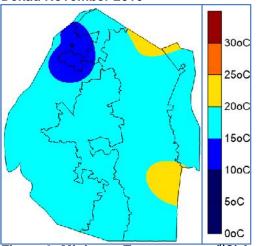


Figure 3: Minimum Temperatures (°C) for 3rd Dekad November 2016

CROP PRODUCTION

MAIZE CROP STAGE AND CONDITION

Most of the maize crop is currently at early vegetative-to-late-vegetative stages (Picture 1). The condition of the crop is good in most places, save for a few in the northern Lowveld and some parts of the Lubombo Plateau where some of the crop is wilting (Picture 2).

Intercropping of the maize crop with melons or pumpkins was observed in a number of fields.



Picture 1: Inter-cropped Maize in mid vegetative stages along Lobamba - Zulwini area in the Middleveld.



Figure 4: Wilting maize crop along Nkalashane - Lomahasha area

OTHER CROPS

Cotton, dry beans, peanuts and groundnuts were amongst the few crops found to have been planted in some parts of the country.



Figure 5: Dry beans in Maphungwane in the Lubombo region

CURRENT FARMING ACTIVITY

Farmers continue to be busy with planting and weeding in most parts of the country.

LIVESTOCK AND PASTURES

A continued improvement in livestock conditions especially cattle was noticed in most parts, save for a few areas in the Lowveld, where pastures are slow in regeneration.



Figure 6: Cattle grazing at Mambane in the plateau

WATER (BULK) AVAILABILITY

Water reservoirs continue to improve in most parts of the country, even though at a slow pace. Rivers are having a healthy flows at moment, but the situation may change due to the predicted drying effect.

MEDIUM-TERM OUTLOOK

RAINFALL

Reduced rainfall is expected to persist even to the coming dekad, with few episodes of wetting.

TEMPERATURE

Hot temperatures are expected to also persist with cool-to-mild nights..

SOIL MOISTURE

Moisture is expected to continue declining in the next dekad due to the dry outlook.

WIND SPEED

Winds will be light to moderate breeze speeds..

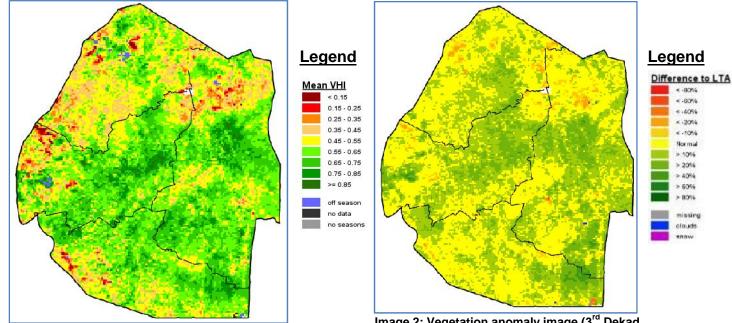


Image 1: Mean Vegetation Health Index image (3rd Dekad November 2016) Source: FAO-GIEWS

Image 2: Vegetation anomaly image (3rd Dekad November 2016)

Source: FAO-GIEWS

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

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