AGROMETEOROLOGICAL UPDATE





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HIGHLIGHTS

- Reasonable rain fell in some parts...
- A slight improvement in vegetation....
- > Very few ploughing observed....
- Slight improvement in rainfall expected.....
- > Cool to warm temperatures.....
- No improvement in soil moisture expected.....

RAINFALL SYNOPSIS AND PROGNOSIS

> SYNOPSIS - PAST TEN DAYS

Reasonable rainfall began falling during the second dekad (ten-days) of September 2016 signaling a cessation of the prolonged drought coupled with the dry winter period. The start of the rainfall season cannot be yet confirmed with the recently received rainfall amounts, but the signs are towards a better season compared to the previous 2015/16 season.

PROGNOSIS - NEXT TEN DAYS

Rainfall is expected to be insignificant during the first few days of the outlook period (17 - 20 October 2016) and much improved towards the end of the ten days (23 - 25 October 2015). The other days (21, 22, 26 and 27 October 2016) will remain dry.

RAINFALL AND TEMPERATURES

RAINFALL

Below average rainfall was received during the first dekad of October 2016 (**Figure 1 and Map 1**) below.

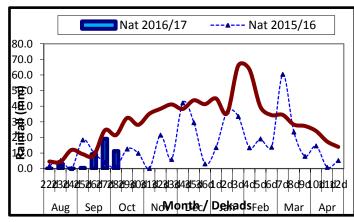
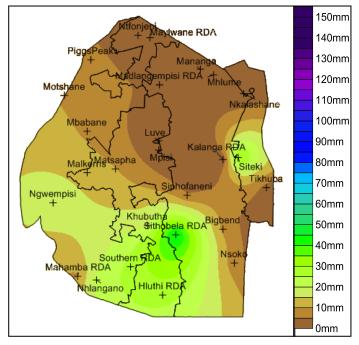


Figure 1: Rainfall distribution as first dekad of October 2016



Map 2: Spatial rainfall distribution for first dekad October 2016

Most of the rainfall was received in the

southern parts of the country and some parts of the Lubombo plateau.

All the agro-ecological zones received amounts below average, however above that of previous season 2015/16 (**Table 1**) below.

Table 1: Rainfall (mm) for 1st dekad October 2016

| | HV | MV | LV | LP |
|---------|-----|-----|----------|----|
| 2015/16 | 3 | 1 | 0 | 0 |
| Average | 26 | 23 | 14 | 22 |
| 2016/17 | 12 | 6 | 9 | 18 |
| Anomaly | -14 | -17 | 6 | -4 |

TEMPERATURES

Cool temperatures were experienced throughout the country as all stations recorded below average temperatures during the start of the 2016/17 farming season (**Table 2 below**).

<u>Table 2: Temperatures (°C) for 1st Dekad</u> October 2016

| | | 1 st dek | | |
|------------|---------|---------------------|---------|--------|
| Station | Element | Oct | Average | Depart |
| Mbabane | Max | NR | 26.00 | NR |
| | Min | 9.8 | 14.03 | -4.27 |
| Piggs Peak | Max | 20.2 | 26.57 | -6.42 |
| | Min | 10.4 | 14.47 | -4.08 |
| Nhlangano | Max | NR | 25.93 | NR |
| | Min | 7.4 | 13.97 | -6.62 |
| Malkerns | Max | 21.6 | 27.03 | -5.44 |
| | Min | 11.7 | 14.77 | -3.03 |
| Matsapha | Max | 25.6 | 27.03 | -1.41 |
| | Min | 12.8 | 14.77 | -2.01 |
| Siteki | Max | NR | 26.73 | NR |
| | Min | 10.9 | 15.57 | -4.64 |
| Bigbend | Max | 26.5 | 27.03 | -0.53 |
| | Min | 14.5 | 15.73 | -1.23 |
| Mananga | Max | 26.2 | 27.47 | -1.26 |
| | Min | 14.6 | 15.67 | -1.03 |

MAIZE AND OTHER CROPS

Maize Crop Stage and Condition

Maize fields are still to be ploughed

(Picture 1).



Picture 1: Un-ploughed fields in Luve area

OTHER CROPS

No other crops observed to be planted yet.

CURRENT FARMING ACTIVITY

Very few farmers engaged in land preparation in readiness to plant maize (**Picture 2**).



Picture 2: A private tractor owner looking for clientele along Dvokolwako area

Most farmers busy with procurement of farming inputs such as; seeds, fertilizer and tractor service. Farmers have registered for tractor hours in Rural Development Areas (RDAs) and a few have already been serviced (**Table 2**).

<u>Table 2:</u> Rainfall (mm) for 1st dekad October 2016

| | Madlangempis | Mayiwane | Motshane |
|------------|--------------|----------|----------|
| | i RDA | RDA | RDA |
| Total | 759 | 831 | 4500 |
| tractor | | | |
| hours | | | |
| registered | | | |
| Tractor | 13 | 37 | 0 |
| hours | | | |
| serviced | | | |
| Number of | 10 | 10 | 25 |
| Governme | | | |
| nt | | | |
| serviceabl | | | |
| e tractors | | | |
| Number of | 2 | 8 | 0 |
| private | | | |
| tractors | | | |

LIVESTOCK AND PASTURES

Grazing areas continue to be poor in most parts of the Lowveld and farmers continue to import bales from the Republic of South Africa, which has led to one consignment of bales resulting in cattle deaths due to poisonous bales. The recent rains have not yet improved the situation (Picture 3)



Picture 3: Bare soil in a pasture area close to Madlangempisi

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WATER (BULK) AVAILABILITY

Bulk water shortages continue in most major reservoir dams in the country with Hawane dam that feeds the Capital city Mbabane at almost dry with only 1% of its dam water remaining (**Picture 4**). Maguga dam is also a shadow of its full capacity days at 16% capacity.



Picture 4: Hawane dam state as of 11 October 2016

MEDIUM-TERM OUTLOOK

RAINFALL

A slight improvement in most parts of the country, especially in the southwestern parts of the Highveld and Middleveld.

TEMPERATURE

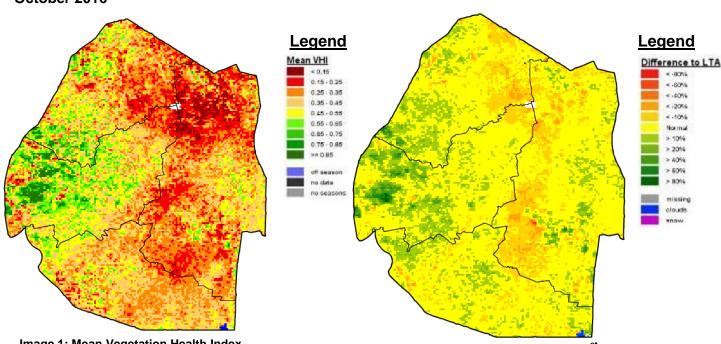
Temperatures will continue to be mild in most parts of the Highveld and Middleveld. The Lowveld will experience warm to hot conditions in most parts

SOIL MOISTURE

Soil moisture will not show a substantial improvement during the outlook period.

WIND SPEED

Wind speeds will be mostly that of a gentle breeze with no gust conditions expected.



<u>Image 1:</u> Mean Vegetation Health Index image (1st Dekad October 2016) *Source: FAO-GIEWS*

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

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).