



# AGROMETEOROLOGICAL UPDATE



REPORTING PERIOD:  
21 – 31 MARCH 2016

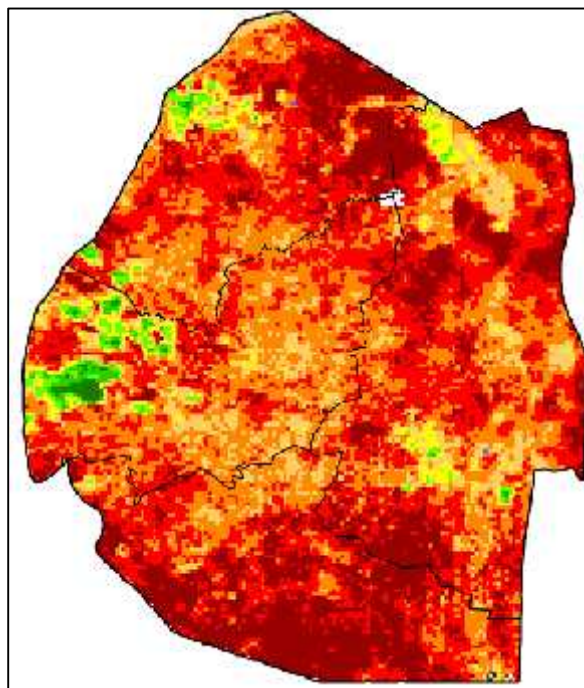
ISSUE No.: 18

SEASON: 2015/16

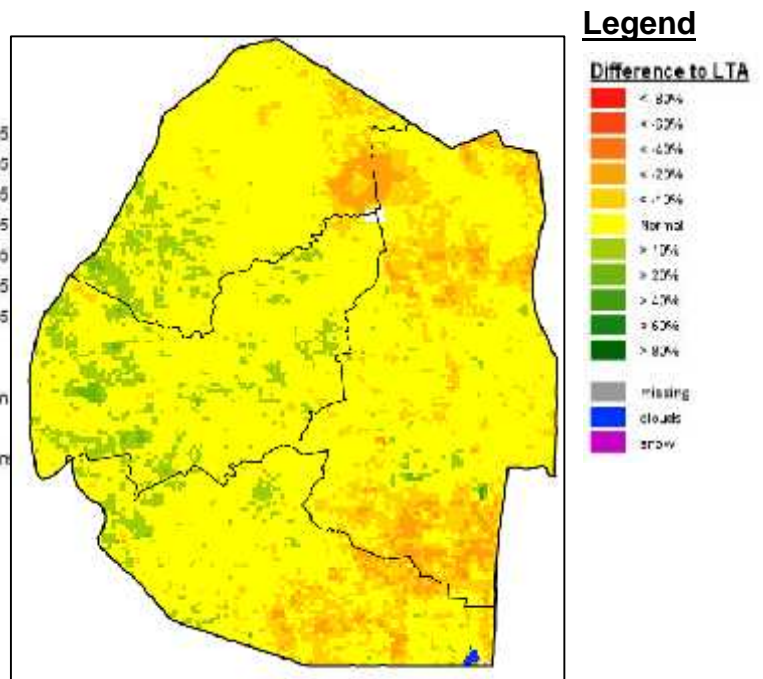
RELEASED: 05/04/2016

## HIGHLIGHTS

- Much reduced rains fell during the reporting dekad...
- Slight improvement in vegetation....
- Not much farming activity noticed in the fields....
- High chances for improved rainfall in the next dekad...
- Mild to cold temperatures forecasted in most parts.....
- Improvement in soil moisture expected.....



**Image 1:** Mean Vegetation Health Index image (3<sup>rd</sup> Dekad March 2016) Source: FAO-GIEWS



**Image 2:** Vegetation anomaly image (3<sup>rd</sup> Dekad March 2016) Source: FAO-GIEWS

## MOISTURE AND HEAT STATUS

### Rainfall

Much reduced rainfall was observed during the reporting period in most parts of the country (Figure 1 and Map 1 below). These rains were below that of the longterm and last season.

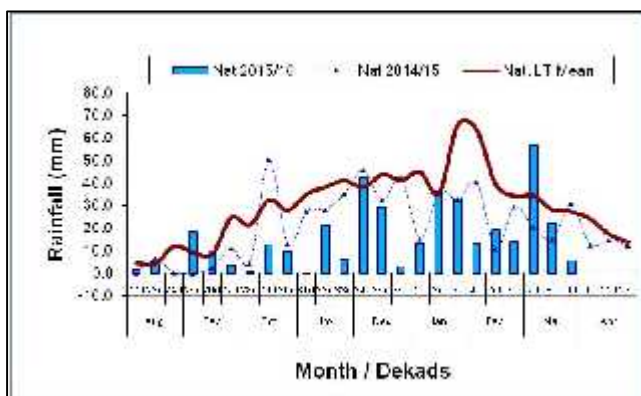


Figure 1: Observed rainfall distribution as of 3<sup>rd</sup> Dekad March 2016

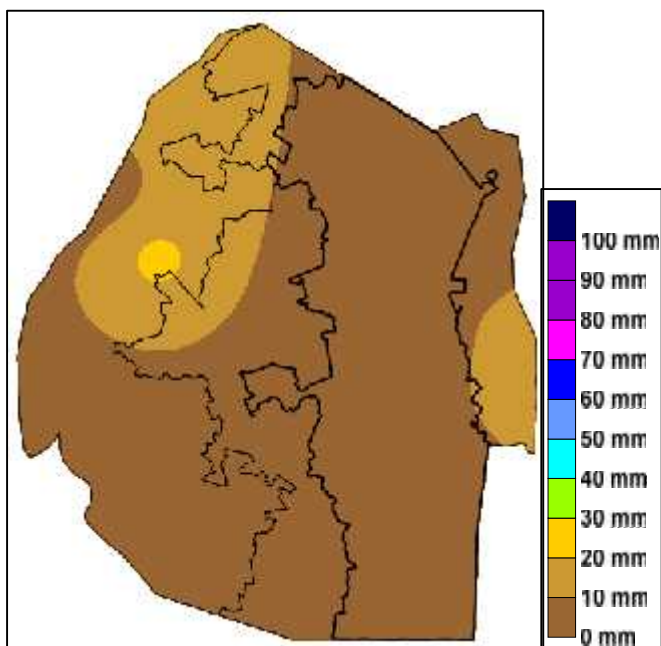


Figure 2: Anomaly rainfall distribution as of 3<sup>rd</sup> Dekad March 2016

Only a few areas in the northern Highveld recorded above 20mm, otherwise the rest

of the country received less than 10mm totals (Figure 2). All the agro-ecological zones much below average rainfall (Table 1).

Table 1: Rainfall (mm) of 3<sup>rd</sup> dekad March 2016

	HV	MV	LV	LP
2014/15	28	26	15	54
<b>Average</b>	<b>36</b>	<b>28</b>	<b>22</b>	<b>24</b>
2015/16	7	2	0	13
<b>Anomaly</b>	<b>-29</b>	<b>-26</b>	<b>-22</b>	<b>-11</b>

### Temperatures

Mild temperatures were recorded over most parts of the Highveld and Lubombo Plateau, while the Lowveld recorded hot day temperatures (Table 2 below).

Table 2: Temperatures (°C) for 3<sup>rd</sup> Dekad March 2016

Station	Element	3 <sup>rd</sup> dek Jan	Average	Depart
Mbabane	Max	NR	28.10	NR
	Min	15.7	17.70	-2.0
Piggs Peak	Max	25.9	28.53	-2.7
	Min	16.8	18.20	-1.4
Siteki	Max	NR	29.67	NR
	Min	17.7	19.53	-1.8
Mananga	Max	32.7	30.03	2.6
	Min	19.6	19.63	0.0

## CROP STATUS

### Maize Crop Stage and Condition

Most maize crops are currently ranging from maturity (Picture 1) to drying stages. The successful crop is in a good state, whereas that which was severely affected by the drought is in a bad state.



Picture 1: Maturing maize crop seen at Siteki in Lubombo Plateau

### Other Crops

Other crops ripening are sorghum, pumpkins and amongst others.

### Current Farming Activity

Most farmers are waiting for their crop to ripen and be ready for harvesting.

## MAIZE PRODUCTION FORECAST

The area planted to maize is projected to decrease drastically due to most farmers not able to plough and plant on time as the season was much delayed and never began in most places. The maize yield is also much reduced due to the poor or lack of rainfall for rain-fed maize farming, thus the production is forecasted to be significantly reduced to 33,000 metric tonnes (Table 3).

Table 3: Maize production forecast for 2015/16 season

Eco_Region	WRSI	Yield	Area (ha)*	Production (MT)
Highveld	65	1.1052	15,570	17,208
Middleveld	53	0.6416	21,200	13,602
Lowveld	32	0.2995	5,815	1,741

Lubombo Plateau	43	0.2629	3,455	908
National		0.5773	46,040	33,460

## VEGETATION AND LIVESTOCK.

There is a slight improvement in vegetation as seen on the normalized vegetation index anomaly image above, where traces of greening are detected. This is as a result of the recent first dekad of March rainfall.

## WATER SITUATION

The recent rains have lead to slight improvements in water levels in dams and rivers (Picture 2).



Picture 2: Slightly improving rivers

## Outlook for 5 – 15 April 2016

### Rainfall

There are high chances for significant rains to fall during the outlook period.

### Temperature

Mild to cold temperatures are expected to be observed during the coming dekad.

### Soil Moisture

An improvement in moisture is anticipated during the forecast period.

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