AGROMETEOROLOGICAL



Update



REPORTING PERIOD: 21 – 31 OCTOBER 2016

ISSUE No.: 03 SEASON: 2016/17 RELEASED: 04/11/2016 **HIGHLIGHTS CONTENTS** HIGHLIGHTS1 > Slightly reduced rainfall was CONTENTS1 **RAINFALL SYNOPSIS AND PROGNOSIS1** recorded in the past ten-days... RAINFALL AND TEMPERATURES1 > Warmer temperatures recorded.... TEMPERATURES1 Agricultural stress index normal MAIZE CROP STAGE AND CONDITION.. 1 as the season starts OTHER CROPS1 > Increased land preparation in CURRENT FARMING ACTIVITY1 most parts of the Highveld LIVESTOCK AND PASTURES1 WATER (BULK) AVAILABILITY......1 Good rains forecasted for the MEDIUM-TERM OUTLOOK1 coming ten-days..... > Warm to hot temperatures TEMPERATURE......1 expected..... > Slight improvement in soil moisture in the next ten days.....

RAINFALL SYNOPSIS AND PROGNOSIS

SYNOPSIS - PAST TEN DAYS

Reduced rainfall was recorded during the reporting period due to frontal systems coupled with the downward migration of the rain bearing weather systems from the northern hemisphere summer.

PROGNOSIS - NEXT TEN DAYS

Good rains (above 10mm / day) are expected to fall during the 6th and 12th November 2016 countrywide, with the other 8 days either dry or receiving relatively low amounts of rainfall (less than 5mm per day).

RAINFALL AND TEMPERATURES

RAINFALL

Reduced rainfall was observed during the reporting period, which is still below the longterm average but above that of last season (**Figure 1**) below.

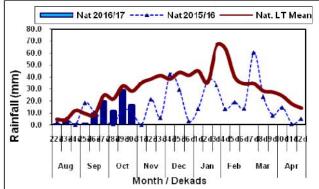
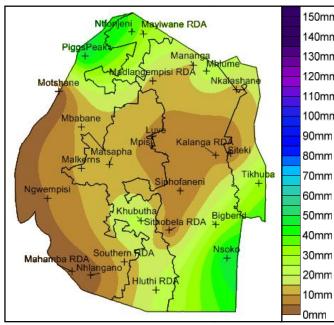


Figure 1: Rainfall distribution as third dekad of October 2016



Map 2: Spatial rainfall distribution for third dekad October 2016

The spatial distribution of the recorded rainfall during the dekad was mostly in the north-western parts and south eastern most of the country (**Map 1**).

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

	HV	MV	LV	LP
2015/16	6	12	11	2
Average	38	30	20	35
2016/17	15	16	15	18
Anomaly	-23	-14	-5	-17

TEMPERATURES

Warmer temperatures prevailed over most parts of the country with only Siteki recording below average minimum temperatures (**Table 2 below**).

Table 2: Temperatures (°C) for 3rd Dekad October 2016

	Station	Elemen t	3 rd dek Oct	Averag e	Depart			
	Mbabane	Max	NR	25.90	NR			
1		Min	16.8	14.73	2.10			
	Piggs Peak	Max	28.1	26.43	1.67			
0mm		Min	16.7	15.53	1.14			
0mm	Nhlangan o	Max	NR	26.00	NR			
0mm		Min	16.1	14.70	1.38			
0mm	Matsapha	Max	30.9	26.87	3.98			
0mm		Min	19.2	15.67	3.53			
0mm	Malkerns	Max	29.6	26.87	2.72			
mm		Min	17.5	15.67	1.82			
mm	Siteki	Max	NR	26.50	NR			
mm		Min	14.4	16.43	-2.00			
mm	Mananga	Max	33.6	27.23	6.33			
mm		Min	20.7	16.57	4.18			
mm								

CROP PRODUCTION

MAIZE CROP STAGE AND CONDITION

A significant number of fields have been prepared in most parts of the Highveld and Middleveld with a few already planted and at germination stage. The condition of the germinating crop is good as observed in Mahlangatja area during the reporting period.

OTHER CROPS

No other crops have been reportedly planted as yet.

CURRENT FARMING ACTIVITY

Most farmers in the Highveld and the Middleveld are busy with land preparation and planting..

CROPPING AREA CONDITION

Most of the cropping areas as obtained from FAO, show signs of a normal start as depicted in the Agricultural Stress Index (Map 2 below).

LIVESTOCK AND PASTURES

Grazing areas in the Highveld and Middleveld show a huge improvement from the winter period conditions. Most communal grazing areas are greening due to recently recorded rainfall during the month of September 2016.

WATER (BULK) AVAILABILITY

Low river and dam levels were observed in some of the major rivers in the country.



Figure 3: State of Maguga dam during the reporting period

MEDIUM-TERM OUTLOOK

RAINFALL

Significant rainfall is expected on the 6th and 12th November 2016, with the entire outlook period experiencing about average rainfall.

TEMPERATURE

Hot temperatures can be expected in the Lowveld with mild to warm temperatures in the Highveld and some parts of the Middleveld.

SOIL MOISTURE

Due to the significant rainfall expected during the outlook period, an increase in soil moisture is expected..

WIND SPEED

Wind speed will average mostly from 1m/s to 5m/s in some days during the outlook period.

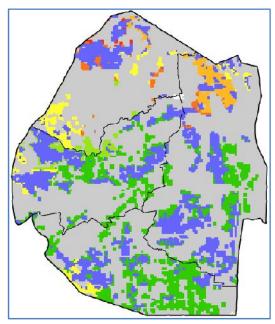


Figure 4: Agricultural Stress Index (ASI) as of 31st October 2016

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).



Figure 5: ploughed field at Mahlangatja