# **SWAZILAND**



# **AGROMETEOROLOGICAL UPDATE**



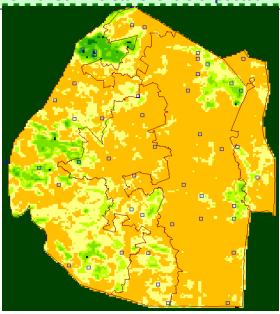
### PERIOD:

01 - 10 OCTOBER 2005

ISSUE No.: 01 SEASON: 2005/06 RELEASED: 14/10/2005

# **HIGHLIGHTS**

- Below average rainfall received in most parts during the past tendays.
- > Average temperatures recorded in most parts of the country.
- ➤ Normal to near normal rainfall predicted for the 2005/06 season.
- Vegetation Satellite Image (SPOT) show a slow start in vegetation development.
- No farming activity reported during the dekad
- Near Normal Rainfall for the next ten days
- > Slightly warmer temperatures anticipated
- Below normal soil moisture levels expected in the outlook period



Map 1: Vegetation status at the end of September 2005.

Compiled and Issued by: Agrometeorological Unit, Swaziland Meteorological Service, Ministry of Public Works and Transport.

# **MOISTURE AND HEAT STATUS**

#### Rainfall

Insignificant rains were received during the past ten days in most parts of the country, with the Lowveld recording no rains at all (Table 1). The Highveld, Middleveld and Lubombo Plateau recorded very small totals to trigger any farming activity

The distribution of the rains was not impressive as it fell within a period of a maximum three days.

<u>Table 1:</u> Rainfall analysis for 01 - 10 October 2005

Station	1 <sup>st</sup> dek October	Avg	Diff	Percent age
Mbabane	28.9	40.4	-11.5	-28%
Piggs Peak	9.5	34.0	-24.5	-72%
Nhlangano	6.0	31.6	-25.6	-81%
Ngwempisi	5.3	27.1	-21.8	-80%
Malkerns	9.1	20.3	-11.2	-55%
Matsapha	8.6	25.6	-17.0	-66%
Bigbend	0.0	22.5	-22.5	-100%
Siteki	5.1	39.3	-34.2	-87%
Tikhuba	3.0	38.1	-35.1	-92%

#### **Temperature**

Warmer temperatures were recorded in the Lowveld and Middleveld, while cool temperatures were recorded in the Highveld and Lubombo Plateau (Table 2).

<u>Table 2:</u> Temperature analysis for 01 - 10 October 2005

Station	Element	1 <sup>st</sup> dek October	Average	Depart
Mbabane	Max	26.1	26.0	0.1
	Min	10.1	14.0	-3.9
PiggsPeak	Max	25.6	26.6	-1.0
	Min	13.3	14.5	-1.2
Nhlangano	Max	24.1	25.9	-1.8
	Min	13.0	14.0	-1.0
Matsapha	Max	28.6	27.0	1.6

	Min	14.8	14.8	0.0
Malkerns	Max	27.6	25.9	1.7
	Min	14.6	13.8	0.8
Siteki	Max	25.9	26.7	-0.8
	Min	14.8	15.6	-0.8
Bigbend	Max	29.4	27.0	2.4
	Min	15.3	15.7	-0.4
Mananga	Max	30.2	27.5	2.7
	Min	18.7	15.7	3.0

#### SEASONAL FORECAST 2005/06

The seasonal forecast for 2005/06 points towards a **normal (climatology) rainfall season** in the **Highveld, Middleveld and Lubombo Plateau** from October to March, while the **Lowveld** is expected to receive **normal to below normal rainfall** in the same period (Map 2).

This forecast gives the total seasonal rainfall situation without consideration of its distribution during the season, which is key in effective planning for agricultural production. Continuos updates to this forecast will be available in the form of ten to 14 day updates to be issued every dekad of the season (October to April).

# **CROP STATUS**

#### Maize Crop Stage and Condition

There is currently no maize crop planted and no ploughing has taken place except for a few fields (Picture 1).

#### **Other Crops**

Only vegetables and sugarecane crops were witnessed during the reporting period in most parts of the country, as they rely entirely on irrigation.

#### **Current Farming Activity**

No significant field activities were observed in the past dekad (ten-days).

## **VEGETATION AND LIVESTOCK**

Vegetation development shows a normal trend as depicted by a series of vegetation (NDVI) satellite images (SPOT) from August to September 2005 (Map 1). Groundtruthing of these images shows a similar pattern with an exception of communal pastures where they are almost bare.

### Outlook for 12 – 23 October 2005

#### Rainfall

Near average rains are expected, mainly towards the end of the outlook period.

### **Temperature**

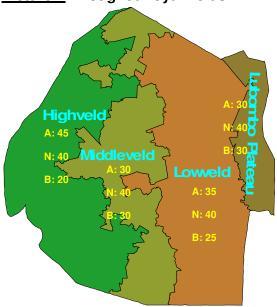
Warmer than normal temperatures are anticipated.

#### **Soil Moisture**

Below normal soil moisture levels are expected as near normal rains are expected to develop a moisture profile in the currently dry soils.



Picture 1: Ploughed royal fields



Map 2: Seasonal forecast for 2005/06 season

### Thanks to:

### CONTRIBUTORS, PARTNERS AND SOURCES OF INFORMATION

<u>Please Note</u>: This bulletin is issued in support of the efforts by the Early Warning System (NEWS) to provide current cropping and meteorological developments to users, stakeholders, government authorities and international organizations during the farming season.

The NEWS is currently made-up of a core group of National Early Warning Unit (NEWU), the Meteorology Department and Central Statistics Office (CSO).