

# SWAZILAND



## AGROMETEOROLOGICAL UPDATE



REPORTING PERIOD:  
01 – 10 JANUARY 2009

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### HIGHLIGHTS

- Above average rainfall recorded in most parts...
- Below average temperatures recorded....
- Satellite images show good vegetation development countrywide....
- Maize crop mainly at late vegetative stages...
- More significant rains expected .....
- Below Average temperatures expected.....
- Above average soil moisture level expected....
- No livestock epidemic reported so far.....

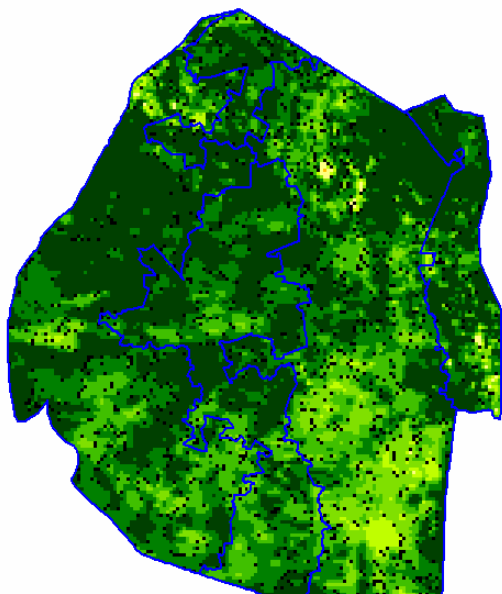


Image 1: Vegetation status as of 3<sup>rd</sup> dekad December 2008

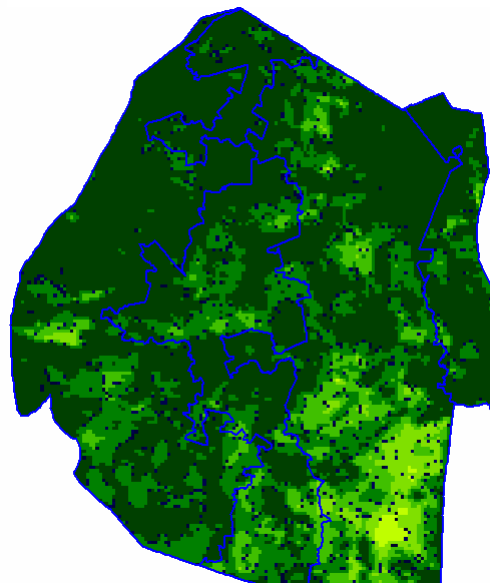


Image 2: Vegetation status as of 1<sup>st</sup> dekad January 2009

### Legend

- ☐ Clouds
- ☐ Water Bodies
- ☐ Bare Soil
- ☐ Almost Bare Soil
- ☐ Initial Vegetation
- ☐ Mode Vegetation
- ☐ Good Vegetation
- ☐ Healthy Vegetation
- ☐ Plantations

## MOISTURE AND HEAT STATUS

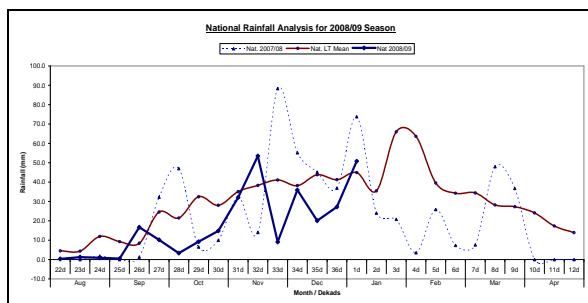
### Rainfall

The Highveld (HV), Middleveld (MV) and Lowveld (LV) received above average rains during the past dekad (ten-days) whilst the Lubombo Plateau (LP) received below average rainfall (**Table 1**). Nationally these rains were generally above average as can be seen on the blue solid line in Figure 1 below.

**Table 1: Regional Rainfall averages (mm) for 01 - 10 January 2009**

	HV	MV	LV	LP
<b>2007/08</b>	51	53	65	126
<b>Average</b>	57	40	36	46
<b>2008/09</b>	67	41	51	45
<b>Anomaly</b>	9	0	15	-1

**Figure 1: Rainfall (mm) distribution as of 1<sup>st</sup> Dekad January 2009**



### Temperatures

Below average temperatures were recorded in most parts of the Highveld and the Middleveld. The Lowveld and Lubombo Plateau recorded above average temperatures during the reporting period (**Table 2**).

**Table 2: Temperatures (°C) for 1<sup>st</sup> Dekad January 2009**

Station	Element	1 <sup>st</sup> dek Jan	Average	Depart
Mbabane	Max	28.4	28.83	-0.5

	Min	17.6	18.10	-0.5
Nhlangano	Max	28.8	29.13	-0.3
	Min	17.7	17.90	-0.2
Ngwempisi	Max	-	28.97	-
	Min	19.0	17.87	1.1
Matsapha	Max	29.6	29.93	-0.3
	Min	20.5	19.00	1.5
Bigbend	Max	-	30.73	-
	Min	21.8	19.93	1.9

- stands for No Record due to lack of a maximum thermometer

## CROP STATUS

### Maize Crop Stage and Condition

Most of the crop ranges from mid – to – late vegetative stages with some early planted maize now tasseling (**Picture 1**) in the Lowveld and some parts of the Middleveld and Highveld. Most of the crop is in a good state, except for some crops in the Lowveld that were hit by the prevalent dry conditions that prevailed since the beginning of the rainfall season.

With the current improved rains it is expected that most of the early-to-mid vegetative crop will do well as indications are that these rains will continue to improve.

### Other Crops

Leguminous crops like beans, cow peas and groundnuts were found to have been planted separately in some parts of the Highveld and Middleveld with a few in the Lowveld and Lubombo Plateau. Intercropped crops like melons were found in the Lowveld (**Picture 2**).

### Current Farming Activity

Weeding and crop treatment especially cotton were major activities in the reporting period.

## VEGETATION AND LIVESTOCK

Vegetation images obtained from SPOT satellite still indicate a health vegetation development in most parts of the country even in the lower Lowveld where rains were below average for most of the past dekads in the 2008/09 season.

There are no animal epidemics reported so far in most parts of the country. Cattle were found in good condition in the Lowveld (**Picture 3**)

## Outlook for 16 – 25 January 2009

### Rainfall

Much improved rains are expected during the outlook period, especially in the southern parts of the country.

### Temperature

Below average temperatures are expected especially towards the western parts of the country.

### Soil Moisture

A significant improvement in soil moisture is also expected during the outlook period.

## WATER SITUATION

There has been a slight improvement in bulk water, but due to the prolonged dry conditions, some rivers flooded for a short period and returned to almost no flow (**Picture 4**).



**Picture 1:** Tasseling maize crop in Sithobela



**Picture 2:** Intercropped melons in a field in Siphofaneni area



**Picture 3:** Cattle found browsing between Sithobela and Siphofaneni in the Lowveld

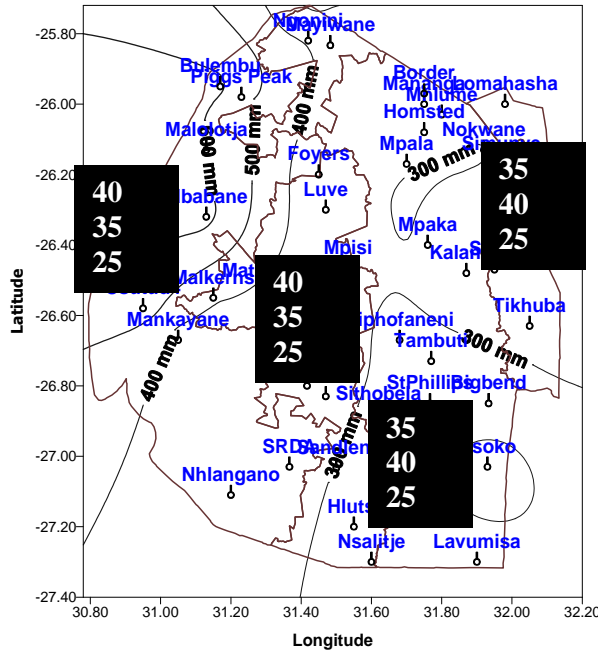


**Picture 4:** A recently flooded river but returned to no flow in a few days near Sithobela

# SWAZILAND SEASONAL RAINFALL FORECAST FOR JANUARY-FEBRUARY-MARCH (JFM) 2009

## January –February –March (JFM) 2009 Rainfall

The July predictor (SST) used currently puts most parts of the country in an **Above-Normal** category, except for the Lowveld and Lubombo Plateau zones where **Normal** rainfall is predicted. The regional breakdown of the predicted January-February-March (JFM) 2009 rainfall probabilities are as presented below:



### Highveld

**There is an increased chance of Normal rainfall** over most areas within the region during the JFM period.

### Middleveld

**There is an increased chance of Normal rainfall** over most of the region during the forecast period, JFM 2009.

### Category

Above
Normal
Below

### Lowveld

**There is a chance for Normal rainfall** over the Lowveld region during the JFM period.

### Lubombo

**There is a chance for Normal rainfall** over the Lubombo Plateau during the JFM 2009 period.

## CONTRIBUTORS, PARTNERS AND SOURCES OF INFORMATION

**Please Note:** *This bulletin is issued in support of the efforts by the National Early Warning System (NEWS) for food Security to provide Swaziland's 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 the National Early Warning Unit (NEWU) of Ministry of Agriculture and Cooperatives, the Agromet Unit of the National Meteorology Department and the Agricultural Statistics Unit of Central Statistics Office (CSO).*