



# AGROMETEOROLOGICAL UPDATE



FOR:

01 – 10 FEBRUARY 2007

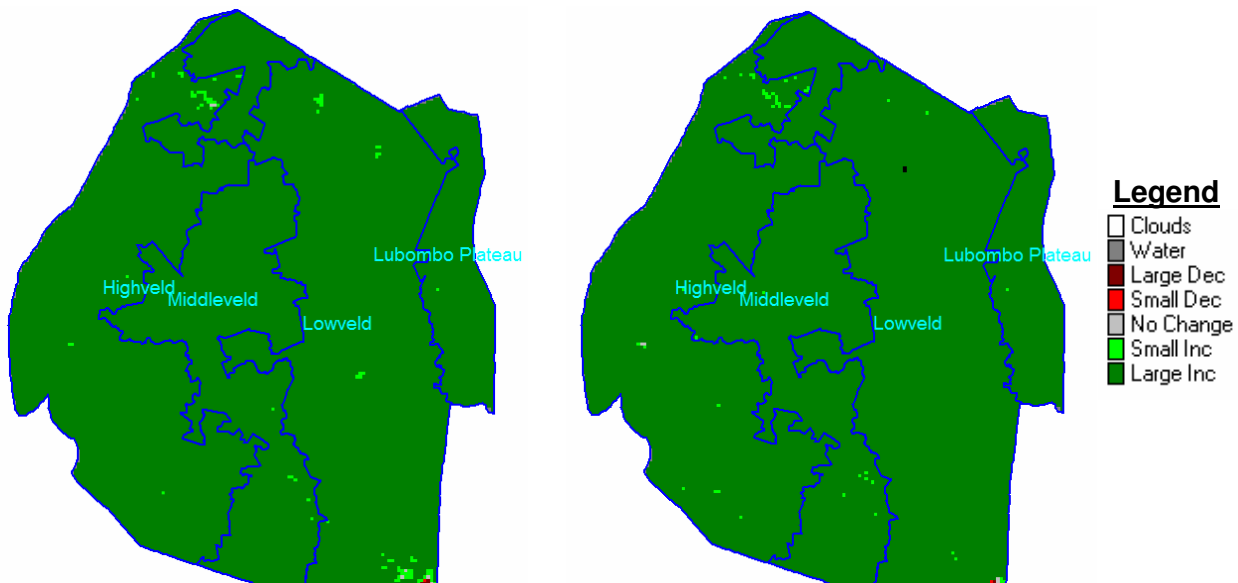
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## HIGHLIGHTS

- Improved rains received in most parts
- Warm-to-hot temperatures recorded...
- Stressed flowering maize crops have no chance of survival....
- Most maize crops at late vegetative to cobing stages
- Normal-to-above normal rains expected.....
- Mild temperatures expected.....
- An increase in soil moisture level....
- There are no major farming activities.....



**Image 1:** Seasonal Vegetation Difference image as of 3<sup>rd</sup> dekad January 2007

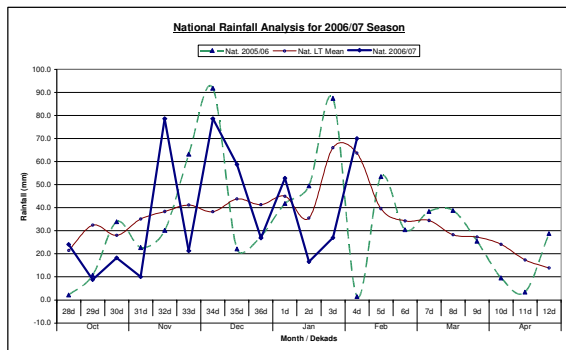
**Image 2:** Seasonal Vegetation Difference image as of 1<sup>st</sup> dekad February 2007

## MOISTURE AND HEAT STATUS

### Rainfall

Improved rainfall was recorded in most parts of the country (Graph 1), with the Highveld receiving more rains compared to the other regions.

The distribution of these rains was very good, as most of it fell over a period of about 5 rainfall days during the ten-day period (dekad).



**Graph 1: Rainfall distribution from October to present**

### Temperature

Warm-to-hot temperatures were recorded in most parts of the country, with the Lowveld recording very hot temperatures.

**Table 1: Temperature data analysis for 01 - 10 February 2007**

Station	Element	1 <sup>st</sup> dek February	Mean	Var
Nhlangano	Max	28.9	28.30	0.6
	Min	17.1	17.60	-0.5
Malkerns	Max	30.3	28.00	2.3
	Min	19.9	17.27	2.7
Siteki	Max	29.6	29.43	0.1
	Min	19.0	19.40	-0.4
Bigbend	Max	34.5	29.87	4.6
	Min	21.5	19.60	1.9
Mananga	Max	34.2	29.73	4.5
	Min	21.6	19.53	2.0

## CROP STATUS

### Maize Crop Stage and Condition

Desiccation of tassels in most parts of the country, especially in the Lowveld due to heat and water stress conditions caused by a lack of significant rainfall adversely affected the yield potential of the crop.

Most farmers have since opted to cut the dried maize stalks and replace them with short maturing crops such as legumes; beans, cowpeas, etc.

### Other Crops

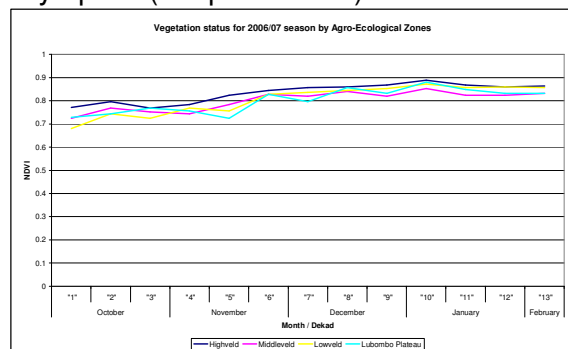
Early maturing crops such as sweet potatoes, Irish potatoes, groundnuts and ematapha were being harvested and sold during the dekad.

### Current Farming Activity

Majority of farmers are not in the fields most their the crops are at advanced development stages thus requiring less attention except for those who planted late as they were seen busy with weeding and fertilizer application.

## VEGETATION AND LIVESTOCK

Most of the country's pastures have remained good irrespective of the past few dekads' dry-spells (Image 2). This is due to the fact that trees and the common grasses are not critically sensitive to short dry-spells (Graph 2 below).



**Graph 2: Vegetation status by ecological zones**

This can be seen on the current satellite difference image based on the first image of October dekad 1, as a reference for or the start of this current season. There are no reported major livestock diseases except for the common ones experienced every season such as black-quarter in cattle.

## Outlook for 13 – 26 February 2007

### Rainfall

Much improved rains are expected during the first half of the forecast period, slightly decreasing towards the end.

### Temperature

Warm temperatures can be expected during the first half of the outlook period getting warmer in the second part.

### Soil Moisture

An insignificant decline in soil moisture is expected as a result of the slight decrease in the expected rains during the forecast period.



**Figure 1: Dry spell affected tasseling & cobbing maize crops in the Lowveld**



**Figure 2: Wind floored maize plants in the Lubombo Plateau**



**Figure 3: Vegetative peanut plants at Sitsatsaweni in Lubombo Plateau**

**Vote of thanks to our:**

**CONTRIBUTORS, PARTNERS AND SOURCES OF INFORMATION**

**Please Note:** *This bulletin is issued in support of the efforts by the National Early Warning System (NEWS) 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 the National Early Warning Unit (NEWU) of Ministry of Agriculture and Cooperatives, the Agromet Unit of the National Meteorological Services and the Agricultural Statistics Unit of Central Statistics Office (CSO).*