## **SWAZILAND**



## AGROMETEOROLOGICAL UPDATE

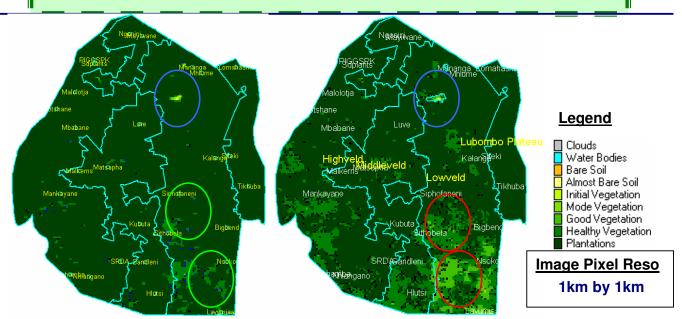


REPORTING PERIOD: 11 – 20 March 2006

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## **HIGHLIGHTS**

- > Much-above-average rains in most parts of the country...
- Mild temperatures recorded in the Highveld and Lubombo...
- Vegetation is still in a very good state...
- > Majority of maize crop maturing to drying stages...
- ➤ Much-above-average rains expected......
- Mild temperatures to be recorded.....
- > An increase soil moisture levels expected....
- > Maize yields show an increase in production...



<u>Image 1:</u> Vegetation status as of 1<sup>st</sup> dekad March 2006

<u>Image 2:</u> Vegetation status as of 2<sup>nd</sup> dekad March 2006

Compiled and Issued by:

Swaziland Meteorological Service, Ministry of Public Works and Transport.

## **MOISTURE AND HEAT STATUS**

#### Rainfall

Much-above-average rains continue to fall in most parts of the country (Table1) with an exception of the Lubombo Plateau, where below-average rains were recorded during this dekad.

The above-average rains are good for the late planted maize crop which is at late vegetative to tasseling stages, but detrimental for the already dry crops as it promotes cob internal germination.

Table 1: Rainfall analysis for the 11-20

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<u> March 2000 periou</u>					
Station	2 <sup>nd</sup> dek March	Avg	Diff	Percent	
Mbabane	77.8	31.9	45.9	144%	
Mankayane	30.6	19.4	11.2	58%	
Motshane	76.9	31.9	45.0	141%	
SD_Plants	107	23.3	83.7	359%	
Nhlangano	20.8	18.7	2.1	11%	
Ngwempisi	27.1	23	4.1	18%	
Malkerns	109.3	22.9	86.4	377%	
Luve	99.4	21	78.4	373%	
Bigbend	34	15	19.0	127%	
Mananga	89.7	20.7	69.0	333%	
Lavumisa	100	15	85.0	567%	
Siphofaneni	134.1	16	118.1	738%	
Tikhuba	19	29	-10.0	-34%	
Madlangempi	40	23	17.0	74%	
Sandleni	36	18.7	17.3	93%	
Nsoko	35	15	20.0	133%	

#### **Temperature**

Mild-to-Warm temperatures were recorded in most parts of the country, especially in the Highveld and Lubombo Plateau (*Table 1*) while the Lowveld and Middleveld recorded warmer temperatures.

<u>Table 2: Temperature data analysis for 11 - 20 March 2006</u>

		2 <sup>nd</sup> dek		
Station	Element	March	Average	Depart
Mbabane	Max	25.8	27.43	-1.6
	Min	15.7	16.37	-0.6
Nhlangano	Max	26.1	27.50	-1.4
	Min	16.5	16.33	0.2
Matsapha	Max	28.1	28.47	-0.3
	Min	18.7	17.33	1.4
Malkerns	Max	27.9	27.53	0.3
	Min	17.4	16.07	1.3
Siteki	Max	27.2	28.20	-1.0
	Min	17.7	18.00	-0.3
Bigbend	Max	31.9	28.87	3.0
	Min	20.8	18.23	2.5

## **CROP STATUS**

#### **Maize Crop Stage and Condition**

The early planted crop is mainly drying to already dry stages in most parts of the country (*Picture 1*). The condition of most of these crops is good provided the persistent rains don't result in internal germination.

Late planted crops range from late vegetative to cob formation stages and is in a good condition too. A few crops were found to be failing due to suffocation from weeds thus stunted and no yield expected (*Picture 2*)

#### **Other Crops**

Cotton was found to be in early to late vegetative stages, thus it still needs the rains to continue for it to be successful.

#### **Current Farming Activity**

Most farmers are waiting for the crop to mature fully, thus there is no farming activity currently taking place.

## MAIZE PRODUCTION FORECAST

The 2005/06 maize yield forecast is still inclined towards a slight increase compared to that of last season (*Table 3*). The country's maize production forecast will be issued once the area planted to maize is available from the Central Statistics Unit (CSO)

<u>Table 3:</u> WRSI and yield forecasts as of 11 - 20 March 2006

Eco_Zone	Current WRSI	Yield (t/ha)	Harvest WRSI	Yield (t/ha)
Highveld	93	1.875	94	1.9229
Middleveld	90	1.4978	90	1.4978
Lowveld	60	0.683	60	0.683
Lubombo	97	1.6383	99	1.7152
National	85	1.4235	86	1.4547

### **VEGETATION AND LIVESTOCK**

Vegetation continues to be in a very good state in all parts of the country. An insignificant decline from that of last dekad is noted in lower Lowveld areas of the country. This is partly attributed to the consistent cloud cover over these areas and possibly high solar radiation energy levels when skies are clear. Comparison of this dekad's satellite vegetation image to that of last dekad is shown by green and red circles (red - for decline in vegetation and green - for improvement in vegetation) on the images (Image 1 and 2). The blue circle shows Mnjoli dam, which has since increased its water levels remarkably.

Livestock especially cattle were found to be doing very well countrywide as pastures are in good vegetative state. Water for livestock drinking is also sufficient as most earth dams, rivers and to a certain extent streams have had remarkable increases in their water levels.

# Outlook for 25 March – 04 April 2006

#### Rainfall

Much-above-average rains are expected to fall during the forecast period.

#### **Temperature**

Mild temperatures will also be recorded during the outlook period.

#### **Soil Moisture**

A significant increase in soil moisture levels is expected in this outlook period.



<u>Picture 1:</u> Dry Cobs at Ebuhleni in the Hhohho region



<u>Picture 2:</u> Weed infested crops at Empofu also in the Hhohho region

## Vote of thanks to our:

## CONTRIBUTORS, PARTNERS AND SOURCES OF INFORMATION

<u>Please Note</u>: 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 a core group which includes 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).