

SWAZILAND



AGROMETEOROLOGICAL UPDATE



REPORTING PERIOD:
21 – 31 JANUARY 2008

ISSUE No.: 12

SEASON: 2007/08

RELEASED: 04/02/2008

HIGHLIGHTS

- Below average rains persist due to cyclones...
- Warm temperatures measured in most stations...
- Vegetation images show no stress but mild in the Lowveld...
- Maize pre-maturely drying in the Lowveld...
- Reduced rains to persist in the next dekad.....
- Temperatures expected to be warm-to-hot.....
- **A further decline in soil moisture level is predicted....**
- Most subsistence farmers are harvesting green mealies...

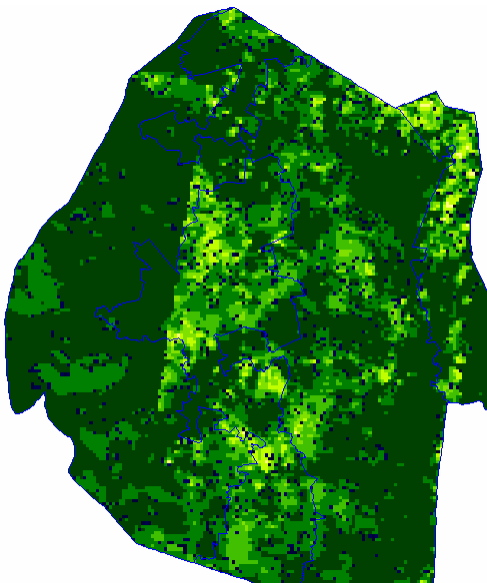


Image 1: Vegetation status as of 1st dekad January 2007

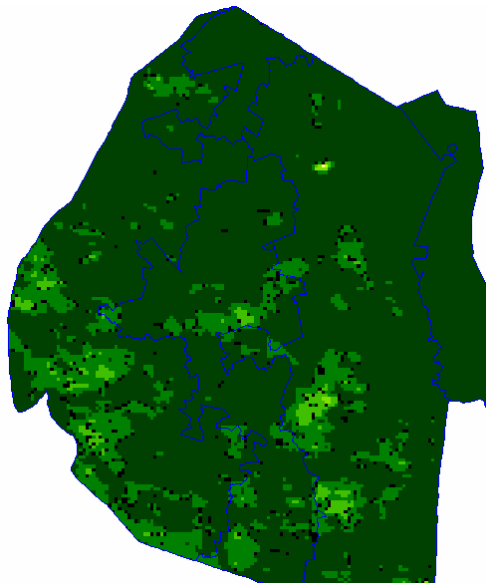


Image 2: Vegetation status as of 2nd dekad January 2008

Legend

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

MOISTURE AND HEAT STATUS

Rainfall

Below average rains continue to fall over most parts of the country and much below in the Lowveld and Lubombo Plateau (**Table 1**).

Table 1: Rainfall for 3rd Dekad January 2008

	Highveld	Middleveld	Lowveld	Lubombo
2006/07	23	14	25	33.3
Average	87	61	52	63
2007/08	25	30	17	16

The reduced rains continue to suffer maize crops that were already cobbing and grain filling in the Lowveld and Lubombo plateau whilst those in the Middleveld and Highveld don't show severe signs of water stress as yet. Compared to last season same time, the rains seem to have slightly improved in the Highveld and Middleveld otherwise the other two regions remain much below last season (**Figure 1**).

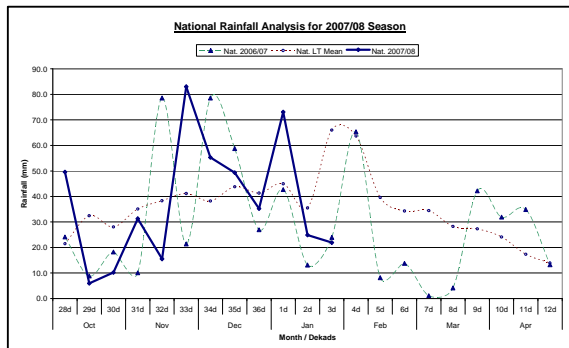


Figure 1: National rainfall distribution as of 3rd Dekad January 2008

Temperatures

Warm-to-hot temperatures continued to persist over most stations in the Lowveld, Lubombo and Middleveld (**Table 2**), except in the Highveld where mild-to-warm temperatures were recorded.

Table 2: Maximum temperatures for 21 - 31 January 2008

Station	Element	3 rd dek January	Average	Depart
Mbabane	Max	23.9	28.1	-4.2
Nhlangano	Max	24.8	28.7	-3.9
Matsapha	Max	27.7	28.1	-0.4
Malkerns	Max	27.8	28.5	-0.7
Bigbend	Max	31.8	30.2	1.6
Ngwempisi	Max	27.3	28.5	-1.2

CROP STATUS

Maize Crop Stage and Condition

Most maize crops in the Lowveld especially at late vegetative, tasseling and cobbing stages are showing signs of water stress (**Picture 1**).

This crop stress signs are as a result of poor rains and the persistent warm-to-hot temperatures which have been observed in the last two dekad. Some of these crops are likely not to recover as they had already reached a critical stage in their development.

In other parts of the country the crop is maturing with minor stress effect (**Picture 2**).

Other Crops

Some farmers' cotton crops were found flowering-to-ball formation in the Lowveld (**Picture 3**), though its area planted has markedly reduced.

Current Farming Activity

Some farmers were found to be harvesting green mealies and some weeding their late planted maize crops and a few cotton fields.

VEGETATION AND LIVESTOCK

The country's vegetation continues to be in a good state countrywide (*Image 1 & 2*). Cattle are looking good in almost all parts of the country.

Drinking water and fodder is still in abundance in most pastures, even though the rains have ceased due to the cyclonic activities over the Indian Ocean. Only a few patches of vegetation stress are showing in some areas in the Lowveld.

Water levels in earth dams and rivers remain constant.

Outlook for 04 – 15 February 2008

Rainfall

Reduced rains will persist over most parts of the country during the outlook period as a result of the continued rain activity over the Indian Ocean due to cyclones.

Temperature

Warm-to-hot temperatures are expected in most stations in the country but more-so in the Lowveld.

Soil Moisture

There will be a continued decline in soil moisture levels during the outlook period, due to the reduced rains.



Picture 1: Moisture and heat Stressed maize crops in the Lowveld.



Picture 2: Maturing maize crop at Luve in the Middleveld.



Picture 3: Flowering cotton crops at Nsalitje in the Lowveld.



Picture 4: Marula tree fruits harvested for brewing marula beer a form of income generation for rural communities in the Lowveld during January and February yearly

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).