## LESOTHO METEOROLOGICAL SERVICES

(LEKALA LA TSA BOLEPI)



### **Ten-Day Agrometeorological Bulletin**

 $21^{st}-28^{th}\ February\ 2005$ 



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...dedicated to the agricultural community
... aimed at harmonizing agricultural activities with weather and climate

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# Highlights

- ☐ Good rains in the Eastern parts of the country
- □ Warm temperatures recorded
- □ Crops mostly at flowering to grainfilling stages
- □ Rains expected in the next dekad

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#### **WEATHER SUMMARY**

21st - 28th February 2005

The last dekad of February was dominated by a surface trough which resulted in few thundershowers at most places, especially on the 24<sup>th</sup> and 25<sup>th</sup>. This occurred due the deepening of the trough and the passage of the frontal system. Temperatures were generally warm.

#### RAINFALL SITUATION

21st - 28th February 2005

The third dekad of February was dry in some parts of the country. The dekadal rainfall figures range from the lowest value of 6.6mm and the highest value of 81.1mm recorded at Maseru Airport and Qacha's Nek respectively (table 1). Thaba-Tseka with 44% and Semonkong with 62% of normal rainfall are the only high-lying areas to experience below normal dekadal rainfall. Qacha's Nek with 296% of the normal dekadal rainfall had the highest rainfall. Butha-Buthe and Mohale's Hoek are the exceptions in the low-lying areas with 90% and 83% of their normal dekadal rainfall respectively, and the rest of the low-lying areas experienced below 45% of their respective normal rainfall.

#### **Cumulative rainfall**

Cumulative rainfall (1<sup>st</sup> September 2004 to 28<sup>th</sup> February 2005) is near normal to normal throughout the country. It ranges from 377.9mm at Mafeteng to 828.2mm at Ox-Bow. All the stations have above 80% of their respective normal cumulative rainfall. Thaba-Tseka, Quthing, Maseru Airport and Mafeteng have experienced accumulated rainfall below 500mm.

The cumulative rainfall departure from normal map (fig. 1) reflects that the districts of Mafeteng, Quthing, Butha-Buthe and Thaba-Tseka have managed to have less cumulative rainfall as compared to their respective normal rainfalls.

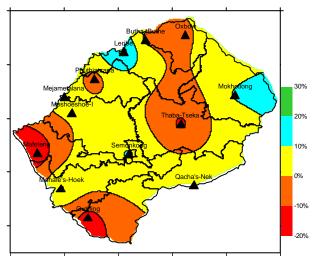


Fig.1: Cumulative rainfall departure from normal since  $1^{st}$  September 2004 to  $2\ 8^{th}$  February 2005

#### **TEMPERATURE**

21st - 28th February 2005

The third dekad of February was generally warm from the low This is evident maximum prevailed. temperatures that and the low temperature deviations from normal. The temperature deviations range from -0.5°C at Mafeteng to 1.8°C at Butha-Buthe (table 1). The high-lying areas had temperatures ranging from  $10.0^{\circ}$ C to  $6.0^{\circ}$ C on the  $23^{\text{rd}}$  and the  $24^{\text{th}}$ . The highest maximum temperature of the dekad of 28.5°C was recorded at Maseru Airport.

#### **CROP STAGE AND CONDITION**

21st - 28th February 2005

The warm temperatures experienced during the dekad benefited the crops as the rates of evapotranspiration were low.

Summer crops (maize & sorghum) are mostly in the flowering and grainfilling stages over the low-lying areas. Their conditions are reported to be good in the North and the Northwestern districts. The Western to Southern low-lying areas of Mafeteng, Mohale's Hoek and Quthing, crops are not in good conditions due erratic rains experienced in those areas. The crops are generally good in the foothills. There are some places in the low-lying areas where the crops are at the late vegetative stage.

In the high-lying areas, crops are mostly at the grainfilling stage and are in good conditions with the exception of areas that were affected by hailstorms.

The Senqu River Valley was confronted by frequent dry spells and as a result, the conditions of the crops (maize and sorghum) are unsatifactory.

Summer wheat in the high-lying areas is at the harvesting stage in most places.

#### **DEKADAL OUTLOOK**

1st - 10th March 2005

The sub-region is still expected to be under the influence of a surface trough, as a result, tropical moist air is expected to continue flowing into the central interior. Therefore thundershowers are anticipated to continue during this forecast period and temperatures will remain warm. There is still a possibility of hailstorm and strong winds.

| Table               |       |               |                               |           |                        |                      |   |                 |               |                   |          |                      |
|---------------------|-------|---------------|-------------------------------|-----------|------------------------|----------------------|---|-----------------|---------------|-------------------|----------|----------------------|
|                     |       |               |                               |           | Rainf                  | fall and Temp        | erature Sumn  | naries          |               |                   |          |                      |
|                     |       | Rainfall (mm) |                               |           |                        |                      |   |                 | Temperature   | (° <b>C</b> )     |          |                      |
|                     |       |               | Total From Sept to rd Dek Feb |           |                        |                      | - Feb   |                 |               |                   |          |                      |
| STATION             | ALT.  | Actual        | Normal                        | Rain      |                        |                      | %Dept. from   | Minimum         | Maximum       | Dekadal           | Dekadal  |                      |
|                     |       |               | R/Fall                        |           | A -41                  | Namal                |   |                 |               |                   |          | Daniatian            |
| NAME<br>Dutho Dutho | (M)   | R/Fall        | K/F all                       | Days      | Actual                 | Normal               | Normal  |                 | Highest (Day) | Mean              | Normai   | Deviation            |
| Butha-Buthe         |       | •             |                               |           |                        |                      | -   | . ( )           | . ( )         |                   |          | ·                    |
| Leribe<br>Mafeteng  |       |               |                               |           |                        |                      | _   | . ( )           | . ( )         | •                 |          | •                    |
| Maseru Airport      |       | •             |                               |           |                        | ·                    | _   | . ( )           | . ( )         |                   |          |                      |
| Mohale's hoek       |       |               |                               |           | ·                      |                      |   | . ( )           | ( )           |                   | <u> </u> |                      |
| Mokhotlong          |       | •             |                               |           | ·                      | ·                    |   | . ( )           | ( )           |                   | <u> </u> |                      |
| Moshoeshoe I        |       | ·             | ·                             |           | ·                      | ·                    |   | . ( )           | . ( )         |                   | <u> </u> | ·                    |
| Ox-Bow              |       | <u> </u>      | · .                           |           |                        |                      | _   | ( )             |               | -                 | <u> </u> |                      |
| Phuthiatsana        |       |               |                               |           |                        | <u> </u>             | _   | . ( )           | . ( )         |                   |          |                      |
| Qacha's Nek         |       |               |                               |           |                        |                      |   | . ( )           | . ( )         |                   |          |                      |
| Quthing             |       |               |                               |           |                        |                      |   | (_)             | . ( )         |                   |          |                      |
| Semonkong           |       |               |                               |           |                        |                      |   | . ( )           | . ( , )       |                   |          |                      |
| Thaba -Tseka        |       |               |                               |           |                        |                      |   | . ( )           | . ( )         |                   |          | <u>-</u> .           |
|                     |       |               |                               |           |                        |                      |   |                 |               |                   |          |                      |
| Fig.                |       |               |                               |           |                        |                      |   |                 |               |                   |          |                      |
| Rainfall (mm)       |       |               |                               |           |                        |                      |   |                 |               |                   |          |                      |
| But But             | Lage  | Maketing N    | REEDI AMPTAL                  | Madakshad | Mitthe                 | Medredred<br>Station | Or Paris  Names  Trubitit                             | Oddie let       | Optive co     | Transfer Transfer | to Vage  | ■ Actual<br>■ Normal |
| Fig.                |       |               |                               |           |                        |                      |   |                 |               |                   |          |                      |
|                     |       |               | Fi                            | rst Dek   | Accumul<br>kad of Sept | lated Actual a       | and Normal F<br>Third Dekad                           |                 |               |                   |          |                      |
|                     |       |               |                               |           |                        |                      |   |                 |               |                   |          |                      |
| Rainfall (mm)       |       |               |                               |           |                        |                      |   |                 |               |                   |          |                      |
| Agit Bigg           | Leite | Miletit       | Magni Airth                   | Madesh    | Mediali                | e<br>Markarel        | O <sup>+</sup> Po <sup>nd</sup><br>Philiti<br>1 Names | gara Cartha nex | Chintle Soft  | ghichle<br>Trait  |          | Actual<br>Normal     |

#### **GLOSSARY**

Dekad: Ten day period

Normal: Average figure over a specific time period.

% Rainfall Departure from Normal: (Actual Rainfall – Normal Rainfall)/ Normal Rainfall x 100

This Bulletin is issued during the Summer Cropping Season (October - April).

#### And it is

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Comments and Contributions would be highly appreciated.