## LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



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**Ten-Day Agrometeorological Bulletin** 

21<sup>st</sup>-31<sup>st</sup> March 2005



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



**Agrometeorological Section** P.O. Box 14515 Maseru 100, Lesotho

# E-mail:agrometeorology@lesmet.org.ls http://www.lesmet.org.ls

#### WEATHER SUMMARY 21<sup>st</sup> – 31<sup>st</sup> March 2005

The last dekad of March was generally dominated by the interior trough, and as a result, isolated to scattered thundershowers occurred especially during the first half of the dekad. Temperatures were generally cool.

#### **RAINFALL SITUATION**

21<sup>st</sup> - 31<sup>st</sup> March 2005

March third dekad was generally wet in most parts of the country. Near normal to above normal dekadal rainfall was experienced during the dekad, however, Mafeteng and Semonkong with 13.1mm and 13.4mm respectively had below dekadal rainfall. normal Oacha's Nek. Phuthiatsana and Thaba-Tseka had above normal dekadal rainfall of 46.2mm, 46mm and 26.1mm respectively. The distribution of the rainfall with time was good as 5 to 7 rainy days were experienced, Quthing and Mokhotlong are the only exceptions with 3 and 4 rainy days respectively (table 1, fig. 2).

#### **Cumulative rainfall**

The cumulative rainfall since the first dekad of September 2004 to the third dekad of March 2005 is near normal to above normal in all the parts of the country. Qacha's Nek and Leribe still maintains the highest actual cumulative rainfall of 751.6mm and 721.2mm respectively. Mafeteng with 465mm and Thaba-Tseka with 486.6mm have the lowest cumulative rainfall (table 1, fig.2).

Qacha's Nek has experienced above normal actual cumulative rainfall since the inception of the current cropping season. This is shown by *graph 1* above. It is however, noted that the  $3^{rd}$  dekad of January and the  $1^{st}$  dekad of February 2005 (dekads 15 and 16 on the graph) had very minimal rainfall.



Mokhotlong too has experienced a relatively satisfactory actual cumulative rainafall since the beginning of the season, as reflected by *graph 2* below. Mokhotlong was dry during the  $f^{t}$  dekad of February (dekad 16 on the graph).





Cumulative rainfall percentage departure from normal map (fig. 1 below) maintains the rainfall deficit patern since the last two dekads of March and partly the third dekad of February 2005.

The Western tip of Mafeteng and the Southern part have received relatively of Quthing less accumulated rainfall as compared to the expected accumulated normal rainfall since September of 2004. Quthing has the lowest percentage departure from normal of -19%, Mafeteng and Thaba-Tseka follow with -17% and -9% respectively. Leribe with +17%has the highest cumulative rainfall percentage departure from normal.



Fig.1: Cumulative rainfall percentage departure from normal since 1<sup>st</sup> September 2004 to 31<sup>st</sup> March 2005

#### **TEMPERATURE**

 $21^{st} - 31^{st}$  March 2005

Temperatures were generally cool during the dekad under review. The highest daily maximum temperatures were mainly recorded on the last day of the month. Quthing had the highest daily maximum temperature of the dekad on the 21st day of the month. It was 28.9°C. The lowest daily minimum temperature of 3°C was experienced at Semonkong on the  $23^{rd}$ . The minimum temperatures in the high-lying areas were mostly below 10°C during the dekad. Temperature deviations range -0.7°C at Semonkong and 1.0°C at Quthing.

#### **CROP STAGE AND CONDITION** 21<sup>st</sup> - 31<sup>st</sup> March 2005

The onset of frost in most parts of the high-lying areas is in the first week of April and for the lowlying areas, it can be expected in the second week of May. This is valid unless early frost is experienced in the low-lying areas. It is therefore important that crops in these areas mature before they are destroyed.

The cereals crops (maize, sorghum) have matured in most parts of the country. Nevertheless, there are some few places that have cereal crops nearing maturity. The conditions of the cereal crops range from bad (those that were affected by hailsorms) to good.

Erratic rains that crops in the high-lying areas especially at Qacha's Nek have experienced, are reported to have hampered with the growth developments of the crops. These rains were bad in a critical time (3<sup>rd</sup> dekad of January and 1<sup>st</sup> dekad of February) of the plant development stages, the flowering and grainfilling stages. See graphs 1 and 2 above.

Most parts of the Senqu River Valley and the western tip of Mafeteng had a series of dry spells during the early times of the season, and during the dekads when the crops were in the flowering and tasseling stages. This has made the cereal crops be in an unsatisfactory conditions.

## **DEKADAL OUTLOOK**

1<sup>st</sup> - 10<sup>th</sup> March 2005

Scattered rains and thundershowers are still expected to continue falling during this dekad. This is because the interior trough will still be dominating the central interior. The frontal systems are also expected to traverse over the sub-region during the dekad. Temperatures will be generally cool in this forecast period.

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### 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.