# LESOTHO METEOROLOGICAL SERVICES <br> (LEKALA LA TSA BOLEPI) 



Ten-Day Agrometeorological Bulletin
$1^{\text {st }}-30^{\text {th }}$ November 2004

Issue No.4/2004-05
...dedicated to the agricultural community
... aimed at harmonizing agricultural activities with weather and climate

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## Highlights

- Erratic rains registered during this period.
- High temperatures were experienced.
- Below normal wheat production expected.
- Planting in the Lowlands in progress.
- Light rains expected

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## WEATHER SUMMARY

The month of November was generally characterised by dry weather condition. This was as a result of the sequence of shallow troughs that extended from the north western to the region. These conditions resulted in mostly convective activities that merely resulted in isolated thundershowers. However, on the $22^{\text {nd }}$ relatively deep trough that extended to the upper level resulted in widespread rains. This also resulted in cool weather conditions that brought some significant drop in temperatures. But in general temperatures were warm to hot during this period.

## RAINFALL SITUATION

The country received below normal to near normal monthly rainfall with the exception of Qacha's Nek. The lowest monthly rainfall was recorded at Mafeteng, Phuthiatsana and Quthing with 20.3 mm , 39.1 mm and 48.1 mm respectively (Table 1 \& Fig 2). The insignificant rains recorded in these areas affected negatively soil water availability and growth of the summer plants. On the other hand, Semonkong, Qacha's Nek and Oxbow registered relatively high monthly rainfall amounts of $82.8 \mathrm{~mm}, 126.6 \mathrm{~mm}$ and 156.4 mm respectively (Table 1).

Cumulative percentage rainfall departure from Normal


Fig.1: Cumulative rainfall departure from normal since $1^{\text {st }}$ September to $30^{\text {th }}$ November 2004.

Cumulative rainfall since $1^{\text {st }}$ September to $30^{\text {th }}$ November ranged from 81.6 mm recorded at Mafeteng to the highest of 294.mm at Oxbow (Table 1 \& Fig 3). As compared to the normal, cumulative rainfall is mostly below normal to normal with exception of mostly the eastern parts of the country which recorded above normal cumulative rainfall (Fig $1 \&$ Table 1).

## TEMPERATURE

The month of November recorded was hot with above normal temperatures experienced at most places. The deviations from normal vary from $0.1^{\circ} \mathrm{C}$ to $2.2^{\circ} \mathrm{C}$ in the lowlands and $0.6^{\circ} \mathrm{C}$ to $2.8^{\circ} \mathrm{C}$ in the highlands (Table 1). The $2^{\text {nd }}$ dekad of November was the hottest with all the stations recording the highest maximum temperature in that dekad. All the stations in the lowlands registered temperatures above $30^{\circ} \mathrm{C}$ and over the highlands, Oxbow had the lowest maximum temperature of $22.5^{\circ} \mathrm{C}$. High temperatures recorded resulted in high evapotranspiration and thus affect negatively the soil water.

## CROP STAGE AND CONDITION

The crops in the highlands are reported to be in good state (as reported by the Crop Production officers) and the recent rains are satisfactory. In the Lowlands, the crops are at the emergence to early vegetative and majority of the arable land is still unplanted. Planting is still in progress in some parts of the low-lying areas.

The winter wheat in the Lowlands is at maturity stage with fair to good conditions. The wheat production will be below the normal production due to the small area planted caused mainly by the erratic rains in the beginning of the season.

## DEKADAL OUTLOOK <br> $1^{\text {st }}-10^{\text {th }}$ December 2004

Shallow troughs are still expected to dominate during this period. This is expected to result in isolated rain and thundershowers over this period. Temperatures are mainly expected to warm to hot.

Table 1

| Rainfall and Temperature Summaries |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rainfall (mm) |  |  |  |  |  | TEMPERATURE ( ${ }^{\circ} \mathrm{C}$ ) |  |  |  |  |
|  |  | 01-30th Nov 2004 |  |  | Total From 1st Sept. 04 to 30th Nov. 04 |  |  | 01-30th Nov 2004 |  |  |  |  |
| STATION <br> NAME | ALT.(M) | $\begin{array}{\|l\|} \hline \text { Actual } \\ \text { R/Fall } \\ \hline \end{array}$ | Rain <br> Days | $\begin{aligned} & \text { Normal } \\ & \text { R/Fall } \\ & \hline \end{aligned}$ | Cum.Act \& Nor. Rainfall |  | \%Dept. from Normal | Minimum <br> Lowest(Day) | Maximum <br> Highest (Day) | Monthly <br> Mean | Monthly <br> Normal |  |
|  |  |  |  |  | Actual | Normal |  |  |  |  |  | Deviation |
| Butha-Buthe | 1770 | 78.0 | 10 | 112.8 | 145.7 | 221.5 | -34 | 7.2(23) | 32.2(18) | 19.7 | 17.5 | 2.2 |
| Leribe | 1740 | 51.3 | 11 | 96.9 | 154.3 | 202.1 | -24 | 6.4(23) | 32.6(18) | 18.8 | 18.2 | 0.6 |
| Mafeteng | 1610 | 20.3 | 8 | 77.3 | 81.6 | 168.2 | -51 | 5.3(23) | 32.0(18) | 19.2 | 18.1 | 1.1 |
| Maseru Airport | 1530 | 63.9 | 8 | 78.9 | 139.3 | 168.0 | -17 | 8.4(23) | 34.4(18) | 19.1 | 19.0 | 0.1 |
| Mohale's hoek | 1600 | 77.0 | 10 | 79.6 | 214.3 | 171.9 | 25 | 6.5(23) | 32.8(13) | 19.1 | 18.5 | 0.6 |
| Mokhotlong | 2200 | 82.0 | 13 | 76.8 | 166.7 | 164.0 | 2 | 5.0(23) | 28.9(18) | 16.1 | 15.2 | 0.9 |
| Ox-Bow | 2600 | 156.4 | 19 | 162.5 | 294.0 | 349.8 | -16 | -1.0(1) | 22.5(18) | 12.4 | 9.6 | 2.8 |
| Phuthiatsana | 1750 | 39.1 | 8 | 88.0 | 128.4 | 183.3 | -30 | 7.1(23) | 33.1(18) | 20.7 | 19.3 | 1.4 |
| Qacha's Nek | 1970 | 126.6 | 14 | 93.5 | 282.9 | 201.2 | 41 | 5.5(23) | 28.8(12) | 17.9 | 16.1 | 1.8 |
| Quthing | 1740 | 48.1 | 12 | 90.2 | 171.3 | 200.5 | -15 | 7.4(23) | 31.2(18) | 18.9 | 18.2 | 0.7 |
| Semonkong | 2458 | 82.8 | 12 | 70.0 | 188.9 | 168.0 | 12 | 0.0(23) | 26.1(18) | 13.9 | 13.3 | 0.6 |
| Moshoeshoe I | 1628 | 68.0 | 12 | 83.2 | 168.3 | 187.0 | -10 | 7.7(23) | 32.5(18) | 20.3 | 18.8 | 1.5 |

Fig. 2


Fig. 3


## 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

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And it is
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Comments and Contributions would be highly appreciated.

