LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

11 – 20 November 2007



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

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Highlights

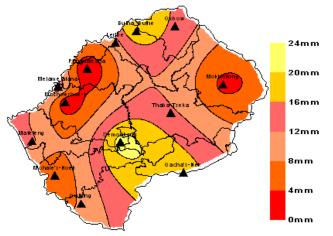
- **Low rainfall received.**
- □ Increase in mean temperatures experienced in most places.
- **Land cultivation still in progress.**
- **Adequate rains forecasted.**

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WEATHER SUMMARY

The surface interior trough remained relatively shallow resulting in little moisture influx from the tropics into the subcontinent with dry air circulating most of the period. As a result, light isolated rain and thundershowers were observed at most places.

RAINFALL SITUATION



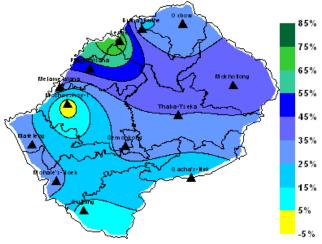
Map 1: November 2007, 2nd Dekad Rainfall

Dry weather conditions that prevailed in the first dekad of November 2007 continued unabated into the second dekad. Dekadal rainfall was poor and below normal countrywide except for Semonkong, which successively recorded normal dekadal rainfall during the last two dekads.

The highest dekadal rainfall was 22.3mm (Semonkong) while the lowest dekadal rainfall was nil at Phuthiatsana (see Map 1, Table 1 & Fig 1). Most number of rain days was four days at Leribe and Butha-Buthe (see Table 1).

Cumulative Rainfall Percentage Departure From Normal Since September 2007.

The two previous successive dekads were dry and thus the rainfall percentage departure from normal since September 2007 is gradually decreasing. Rainfall percentage departures from normal at Moshoeshoe 1 remains at normal but at Quthing and Qacha's Nek the departures have reduced from above normal, to the normal category. These two The highest rainfall percentage departure from normal is at Leribe (77%). Most of the areas from the west to the south of the country have the lowest rainfall percentage departure from normal (see Map 1, Table 1 & Fig 2).



Map 2: Rainfall % Dep. from Normal (Sept. - Nov 2nd Dek, 2007)

TEMPERATURE

The second dekad of November was relatively warmer than normal. Dekadal mean temperatures were above normal countrywide during the dekad under review. The highest dekadal mean temperature deviation from normal was at Mokhotlong (2.2° C) while the lowest deviation was at Semonkong (0.5° C).

The highest daily maximum temperature of the dekad was recorded at Maseru Airport (31.2°C) on the 14^{th} while the lowest minimum daily temperature of the dekad was observed at Qacha's Nek (0.1°C) on the 11^{th} (see Table 1).

CROP STAGE AND CONDITIONS

Land preparation and sowing continued during the dekad under review. And still these activities are expected to continue for the next few weeks especially in the lowlands.

Most summer crops are at germinating stage. Most of the winter wheat has recovered from earlier drought and its conditions are fare to good. Wheat stages vary from one field to another, but generally stages range from watery ripe kernels to a mealy ripe stage.

DEKADAL OUTLOOK

21 – 30 November 2007

Unlike the previous dekad, the last coming ten days are expected to experience mostly scattered to widespread rain showers and thundershowers. Intense thunderstorms associated with hailstorms and strong winds are anticipated at times. Temperatures are expected to be generally cooler than in the last dekad.

| Table 1 | | | | | | | | | | | | |
|--|--|---------------|------------|--------|--------------|--------------------|----------------|------------------|----------------|------------|---------|---------------|
| | | | | | Rainfa | ll and Teny | perature Summa | aries | | | | |
| | | Rainfall (mm) | | | | | | Temperature (°C) | | | | |
| 8 | | 11 - 20 | NOv 200 | 7 | Total From | Sept07 to 2 | 2nd Dek Nov 07 | 11 - 20 NOv 2007 | | | | |
| STATION | ALT. | Actual | Normal | Rain | Շատո | ulative | %Dept. from | Minimum | Maximum | Dekadal | Dekadal | |
| NAME | (M) | R/Fall | R/Fall | Days | Actual | Normal | Normal | Lowest(Day) | Highest (Day) | Mean | Normal | Deviation |
| Butha-Buthe | 1770 | 20.3 | 45.1 | 4 | 237.9 | 193.4 | 23 | 5.5 (11) | 28.8 (14) | 18.3 | 17.6 | 0.7 |
| Lenbe | 1740 | 10.6 | 34.5 | 4 | 284.6 | 160.5 | 77 | 5.7 (11) | 29.8 (14) | 18.9 | 17.9 | 1.0 |
| Mafeteng | 1610 | 12.7 | 30.8 | 1 | 184.0 | 141.4 | 30 | 5.5 (11) | 30.5 (14) | 19.5 | 18.1 | 1.4 |
| Maseru Airport | 1530 | 15.5 | 28.0 | 3 | 201.0 | 148.4 | 35 | 6.7 (11) | 31.2 (14) | 19.9 | 18.8 | 1.1 |
| Mohale's hoek | 1600 | 4.5 | 26.3 | 2 | 187.3 | 145.8 | 28 | 6.0 (11) | 31.0 (14) | 19.9 | 18.8 | 1.1 |
| Mokhotlong | 2200 | 2.7 | 25.7 | 1 | 203.8 | 144.5 | 41 | 4.2 (11) | 27.7(15) | 16.9 | 14.7 | 2.2 |
| Moshoeshoe I | 1628 | 0.8 | 31.7 | 2 | 160.0 | 166.7 | -4 | 6.5 (11) | 30.8 (14) | 19.9 | 18.9 | 1.0 |
| Phuthiatsana | 1750 | 0.0 | 30.3 | 0 | 258.1 | 172.1 | 50 | 6.9 (12) | 30.3 (14) | 19.5 | 18.4 | 1.1 |
| Qacha's Nek | 1970 | 18.4 | 26.1 | 3 | 189.7 | 161.9 | 17 | 0.1 (11) | 29.0 (14) | 17.8 | 15.9 | 1.9 |
| Quthing | 1740 | 8.5 | 30.1 | 2 | 194.5 | 173.5 | 12 | 8.0 (11) | 30.3 (14) | 20.1 | 18.1 | 2.0 |
| Semonkong | 2458 | 22.3 | 20.8 | 2 | 198.3 | 153.3 | 29 | 0.5 (11) | 24.7 (14) | 13.9 | 13.4 | 0.5 |
| ThabaTseka | 2160 | 12.7 | 22.2 | 3 | 194.6 | 144 | 35 | 4.4 (11) | 26.1 (14) | 16.3 | 14.9 | 1.4 |
| ñg. l | | | | | | | | • | | | | |
| (uuu) 30.0 20.0 10.0 0.0 Buttos Buttos | V ¹ | | | | | | | | | | | |
| Fig. 2 | | | | | | | | | | | | |
| Accumulated Actual and Normal Rainfall First Dekad of September 2007 to Second Dekad of November 2007 | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| BillerBills | 10th | 49 9 | and Hester | A Roll | letales teat | koliolois Stati | ion Names | Castis Let | Chillips State | House they | | tual ormal |

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

NDVI: Normalized Difference Vegetation Index – simply implies how good or bad the vegetation is for the specific period.

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.