## LESOTHO METEOROLOGICAL SERVICES

(LEKALA LA TSA BOLEPI)



## **Ten-Day Agrometeorological Bulletin**

1 - 10 November 2007



Issue No.4/2007-08

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

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# **Highlights**

- □ Reduced rainfall received.
- □ Decrease in mean temperatures experienced in most places.
- □ Land cultivation still in progress.

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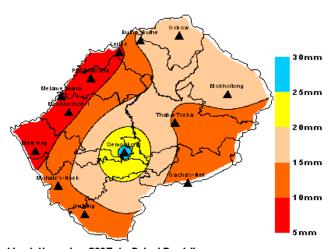
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Issue No. 04/2007-08  $1^{st} - 10^{th}$  November 2007

#### **WEATHER SUMMARY**

The last dekad was generally dry with isolated thundershowers. Dry air was in circulation over the interior of the subcontinent with the interior surface trough weak and confined to the north. Few weak cold fronts occasionally passed south of the country and brought cooler to cold conditions.

#### RAINFALL SITUATION



Map 1: November 2007, 1st Dekad Rainfall

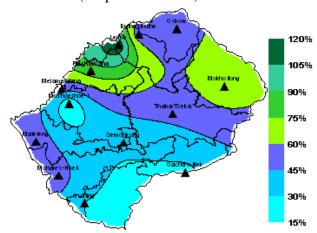
There was a suppressed rainfall activity during the first dekad of November 2007. There was below normal rainfall countrywide during dekad under review. Semonkong is the only area that had normal dekadal rainfall. This was the first dekad that the country as a whole has registered below normal dekadal rainfall since the last dekad of September. Map 1, Table 1 and Fig. 1 shows dekadal as well as normal amounts of rainfall and its temporal distribution.

The highest dekadal rainfall was 26.9mm (Semonkong) while the lowest dekadal rainfall was 6.2mm (Maseru Airport). The temporal distribution of rainfall varied from one day to six days (see Table 1).

# **Cumulative Percentage Rainfall Departure From Normal**

Although most parts of the country received below normal dekadal rainfall during the dekad under review, cumulative rainfall since the first dekad of September is still above normal in most parts of the country, and only normal at Moshoeshoe 1.

Most of the regions in the southern part of the country except for Mafeteng and Mohale's Hoek have 45% or less of a surplus in cumulative rainfall from September to the first dekad of November (Map 2 & Table 1).



Map 2: Rainfall % Dep. from Normal (Sept - Nov 1st Dek, 2007

#### **TEMPERATURE**

Dekadal mean temperatures were below normal in most parts of the country during the dekad under review. However, Mokhotlong was the only exception with above normal dekadal mean temperature.

The highest daily maximum temperature of the dekad was recorded at Mafeteng (28.0°C) on the 3<sup>rd</sup> while the lowest minimum daily temperature of the dekad was observed at Semonkong (2.2°C) on the 10<sup>th</sup> (see Table 1).

#### **CROP STAGE AND CONDITIONS**

The reduction in rainfall activities allowed farmers who had not cultivated to do so. Also because some fields were water logged because of heavy rains, the dry spell helped in recession in water. Even though some farmers had sowed in October, sowing is still active in most parts of the country. Very few summer crops are believed to be at germinating stage.

Most of the winter wheat is has recovered from earlier drought. It is generally at flowering to

early dough stage. Its conditions range from moderate to good.

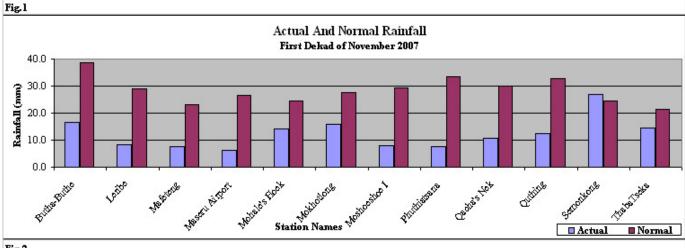
#### **DEKADAL OUTLOOK**

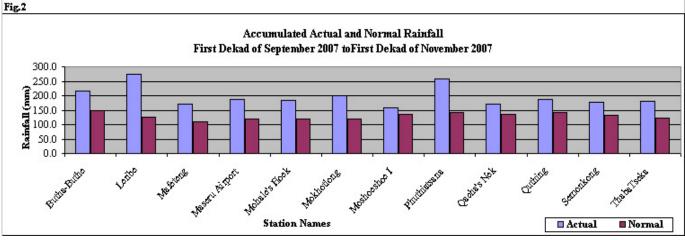
11 – 20 November 2007

Below normal dekadal rainfall is expected in this coming ten days. However, few light

thundershowers can be anticipated during the last half of the dekad at some places. Strong winds are also anticipated.

Table 1												
Rainfall and Temperature Summaries												
	Rainfall (mm)						Temperature (°C)					
		01 - 10 Nov 2007			Total From Sept 07 to 1st Dek Nov 07			01 -10 Nov 2007				
STATION	ALT.	Actual	Normal	Rain	Cumm	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	16.6	38.5	5	217.6	148.3	47	5.5 (10)	26.5 (2)	16.7	17.5	-0.8
Leribe	1740	8.4	28.9	6	274.0	126.0	117	8.4 (8)	27.0 (4)	17.0	17.8	-0.8
Mafeteng	1610	7.5	23.2	1	171.3	110.6	55	6.0 (8, 9)	28.0 (3)	16.5	17.5	-1.0
Maseru Airport	1530	6.2	26.4	3	185.5	120.4	54	8.1 (8)	27.7 (3)	17.7	18.8	-1.1
Mohale's Hoek	1600	14.2	24.5	2	182.8	119.5	53	6.5 (10)	27.0 (3)	16.8	18.2	-1.4
Mokhotlong	2200	15.9	27.5	4	201.1	118.8	69	6.1 (2)	27.2 (5)	16.1	14.9	1.2
Moshoeshoe I	1628	8.0	29.2	4	159.2	135.0	18	7.3 (8)	27.0 (4)	16.7	18.3	-1.6
Phuthiatsana	1750	7.6	33.4	1	258.1	141.8	82	8.9 (8)	26.3 (3)	17.2	18.5	-1.3
Qacha's Nek	1970	10.6	29.9	2	171.3	135.8	26	7.6 (6)	26.2 (4)	15.6	15.8	-0.2
Quthing	1740	12.3	32.6	3	186.0	143.4	30	8.4 (7)	27.4 (3)	16.9	17.8	-0.9
Semonkong	2458	26.9	24.6	4	176.0	132.5	33	2.2 (10)	22.2 (3)	11.7	13.0	-1.3
ThabaTseka	2160	14.4	21.5	5	181.9	121.8	49	6.6 (2)	24.3 (3)	14.1	14.5	-0.4





### **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

### Produced by the

Lesotho Meteorological Services as a contribution to the National Early Warning Unit for Food Security.

The Unit is coordinated by the Disaster Management Authority in the Prime Minister's Office.

Comments and Contributions would be highly appreciated.