

# LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



## Ten-Day Agrometeorological Bulletin

21 – 31 October 2007



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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 received in most parts of the country.
- ❑ Decrease in mean temperatures experienced in most places.
- ❑ Land cultivation still in progress.

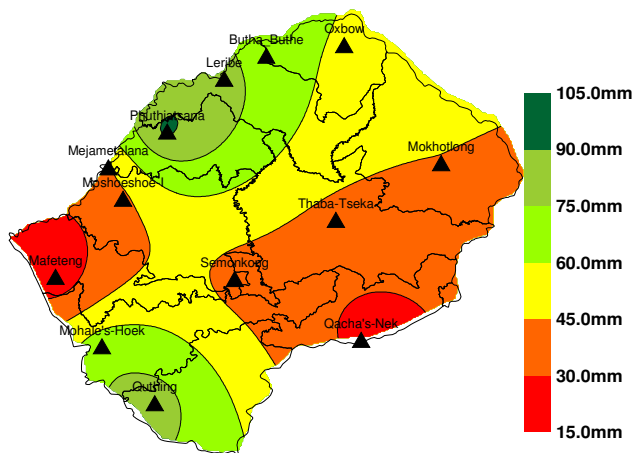
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**WEATHER SUMMARY**

The last dekad was generally wet as a result of the moisture influx from the tropics through the interior trough, which remained active and oscillatory. The combination of the moisture advection induced by the Indian Ocean Anticyclone ridge and the active surface interior trough, which was supported by upper-air trough resulted in scattered thundershowers with hail storms and strong destructive winds over the south.

**RAINFALL SITUATION**



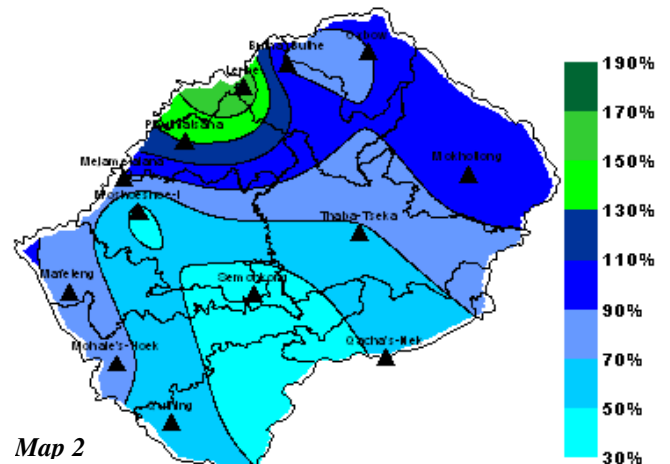
Map 1

**Rainfall in (mm) for October 3<sup>rd</sup> dekad 2007**

The third dekad of October was generally wet. Most places received above normal rain with the exception of Mafeteng and Qacha’s Nek, which received below normal rainfall. (see Map 1, Table 1 & Fig. 1). The highest and the lowest dekad rainfall was recorded at Phuthiatsana (92.6mm) and Mafeteng (18.9mm) respectively. The last three consecutive dekad had good rainfall countrywide. There were notable hail and thunderstorms during the dekad under review. The temporal distribution of rainfall improved during the last dekad of October with the number of rain days varying from 4 to 8 days.

**Cumulative Percentage Rainfall Departure From Normal**

Cumulative rainfall since the first dekad of September is still above normal across the whole country. Rainfall activity was similar to the previous dekad. The region extending from Maseru to southeastern parts of the country experienced a decrease in cumulative rainfall percentage departure from normal. (see Map 2, Table 1 & Fig. 2). Otherwise, the rest of the country had an increased cumulative rainfall percentage departure.



Map 2

**% Departure of Rainfall (Sept 1st Dek - Oct 3rd Dek, 07)**

**TEMPERATURE**

Mean temperatures were mostly below normal in most parts of the country because of the cloudiness that prevailed during the period. Only Mokhotlong and Qacha’s Nek had slightly above normal dekadal mean temperatures. The highest daily maximum temperature of the dekad was recorded at Mohale’s Hoek (26.0°C) on the 29<sup>th</sup> while the lowest minimum daily temperature of the dekad was observed at Semonkong (0.5°C) on the 25<sup>th</sup>.

**CROP STAGE AND CONDITIONS**

The soil has sufficient moisture due to recent rains. Farmers are using the accumulated moisture to cultivate land for summer cropping. However, land cultivation for summer cropping is still in its early stage. Land preparation and sowing are done simultaneously as always.

## **DEKADAL OUTLOOK**

**01 – 10 November 2007**

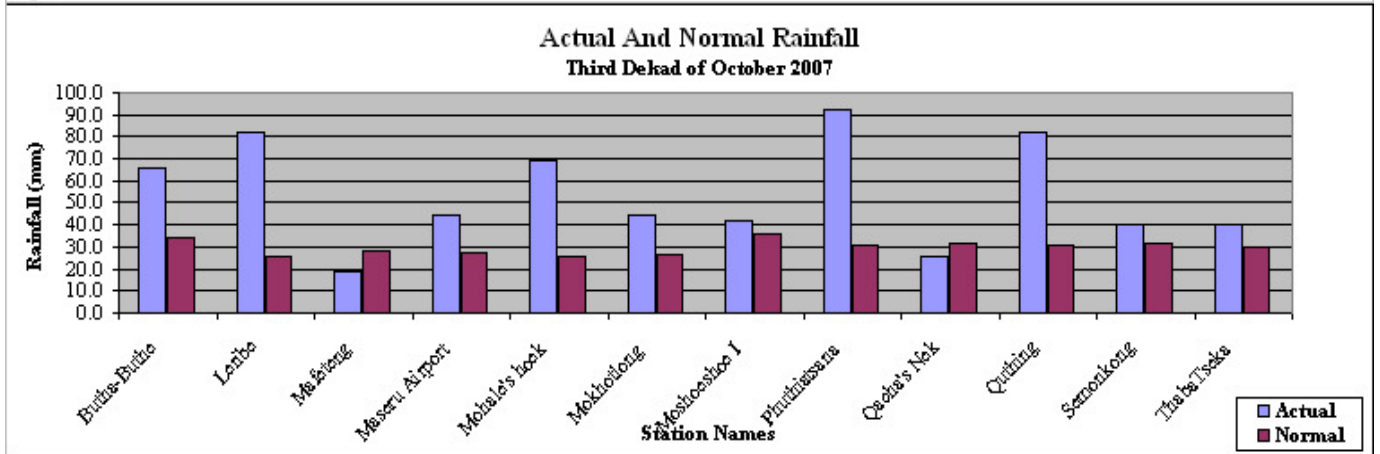
Wet and slightly warm to hot weather conditions are expected to continue into the dekad. Frequent localized hailstorms with strong and destructive

winds can be expected. There will be occasional cold spells but no snowfall is anticipated in the forecast period.

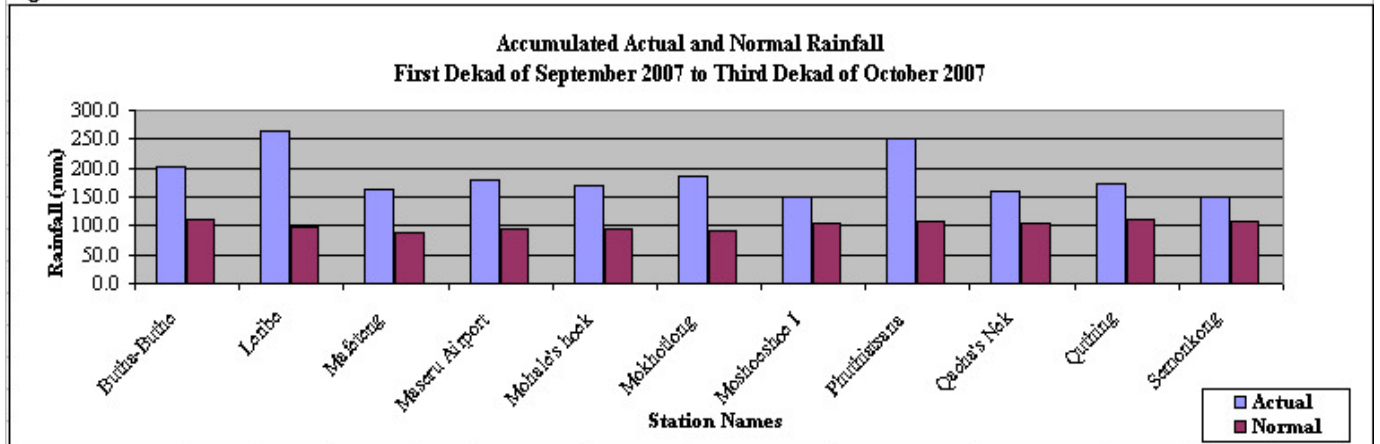
**Table 1**

Rainfall and Temperature Summaries												
		Rainfall (mm)						Temperature (°C)				
		21 - 31 Oct 2007			Total From Sept 07 to 3rd Dek Oct 07			21 - 31 Oct 2007				
STATION	ALT.	Actual	Normal	Rain	Cumulative		%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	65.5	34.2	8	201.0	109.8	83	8.0 (24)	24.2 (21)	15.5	16.6	-1.1
Lenibe	1740	81.9	25.6	7	265.6	97.1	174	7.0 (24)	24.8 (21)	15.9	17.0	-1.1
Mafeteng	1610	18.9	28.1	6	163.8	87.4	87	6.2 (25)	25.5 (30)	16.2	16.5	-0.3
Maseru Airport	1530	44.1	27.0	5	179.3	94.0	91	6.0 (25)	25.5 (21)	16.0	17.8	-1.8
Mohale's hoek	1600	69.3	25.7	7	188.6	95.0	77	5.2 (25)	26.0 (29)	16.7	17.2	-0.5
Mokhotlong	2200	44.3	26.4	4	185.2	91.3	103	5.0 (23, 24)	23.7 (21)	14.2	14.1	0.1
Moshoeshoe I	1628	42.1	35.7	6	151.2	105.8	43	6.0 (25)	25.4 (28)	15.8	17.5	-1.7
Phuthiatsana	1750	92.6	30.4	6	250.5	108.4	131	4.5 (28)	24.7 (21)	15.3	17.5	-2.2
Qacha's Nek	1970	25.6	31.4	5	160.7	105.9	52	4.4 (25)	25.0 (21)	15.2	14.9	0.3
Quthing	1740	82.3	30.7	7	173.7	110.8	57	7.2 (25)	25.7 (21)	16.7	17.0	-0.3
Semonkong	2458	40.1	31.8	4	149.1	107.9	38	0.5 (25)	21.5 (21)	11.7	12.0	-0.3
ThabaTseka	2160	39.9	29.7	4	167.5	100.3	67	3.3 (25)	22.4 (28)	13.4	13.7	-0.3

**Fig.3**



**Fig.4**



## **Glossary**

**Dekad :** Ten day period

**Normal:** Average figure over a specific time period.

**% Rainfall Departure from Normal:**  $(\text{Actual Rainfall} - \text{Normal Rainfall}) / \text{Normal Rainfall} \times 100$

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

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And it is

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Comments and Contributions would be highly appreciated.