

# LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



## Ten-Day Agrometeorological Bulletin

1 – 10 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 over the entire country.
- ❑ Cool temperatures experienced countrywide.
- ❑ Land cultivation in progress.

The Director  
Lesotho Meteorological Services  
Agrometeorological Section  
P.O. Box 14515  
Maseru 100, Lesotho

TEL: (+266) 22324374/22324425  
FAX: (+266) 22325057/22350325  
E-mail: [agrometeorology@lesmet.org.ls](mailto:agrometeorology@lesmet.org.ls)  
<http://www.lesmet.org.ls>

**WEATHER SUMMARY**

The last dekad was characterized by frequent interactions of moist tropical air mass from the north and the intrusion of cold air mass from very active cold fronts from the west into the southern interior. As a result copious amount of rain with thundershowers were received over the entire country. On most occasions over the highlands snowfall and cold weather were often accompanying the passage of the cold fronts, while in lowlands especially in the south frequent hailstorms occurred as the two air masses interacted.

**RAINFALL SITUATION**

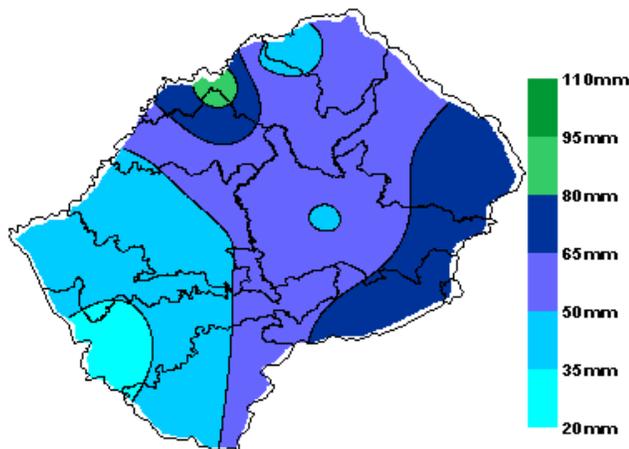


Fig 1. First Dekad of October 2007 Actual Rainfall

The first dekad of October 2007 received torrential rains countrywide. All parts of the country received above normal rainfall. Highest amounts of rainfall were received in the some parts of Leribe, eastern, and most parts of the central to northern areas. Lowest dekadadal rainfall was experienced at Mohale’s Hoek (see Fig 1 & Table 1). Temporal distribution was also good.

**Cumulative Percentage Rainfall Departure From Normal**

Cumulative rainfall since the first dekad of September 2007 to the dekad under review is above normal countrywide. Parts of Leribe and Mafeteng have the highest departures from normal with over 200% above normal (see Fig. 2 & Table 1).

It is, however, important to note that inception of the rain was during the last dekad of September while it had been dry for approximately the last 9 months. The onset of the summer rains was marked with mostly rain of long duration. Nevertheless, there were notable thunderstorms and hailstorms at some places.

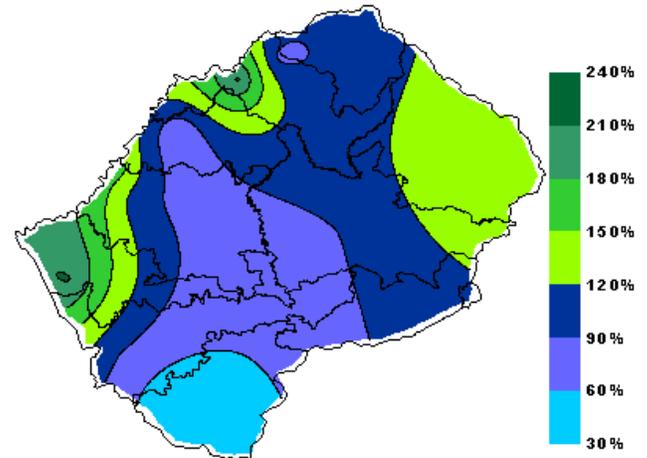


Fig. 2: % Departure from Normal of cumulative rainfall since Sept 07

**TEMPERATURE**

Below normal temperatures were observed countrywide during the first dekad of October 2007. That was due to mainly cloudy and wet conditions that prevailed during the dekad. Generally there were high and low temperatures during the middle and end of the dekad respectively.

The highest daily maximum temperature of the dekad was recorded at Maseru Airport (24.3°C) on the 5<sup>th</sup> while the lowest minimum daily temperature of the dekad was observed at Semonkong (0°C) on the 10<sup>th</sup>.

**CROP STAGE AND CONDITION**

Recent rain was very good for agricultural and water resources purposes. The rain improved soil moisture and farmers are really encouraged. Land cultivation for summer cropping is in progress at most places in the country. Rangelands and livestock are expected to improve from the bad situation they were in due to preceding drought. However, draught power

may be reduced because animals are still to recover from the consequences of the drought. Winter crops growth was stagnant until the recent rains. Water resources too were seriously affected by the drought at most areas of the country in the recent months, but the situation has significantly improved currently.

### **DEKADAL OUTLOOK**

**11 – 20 October 2007**

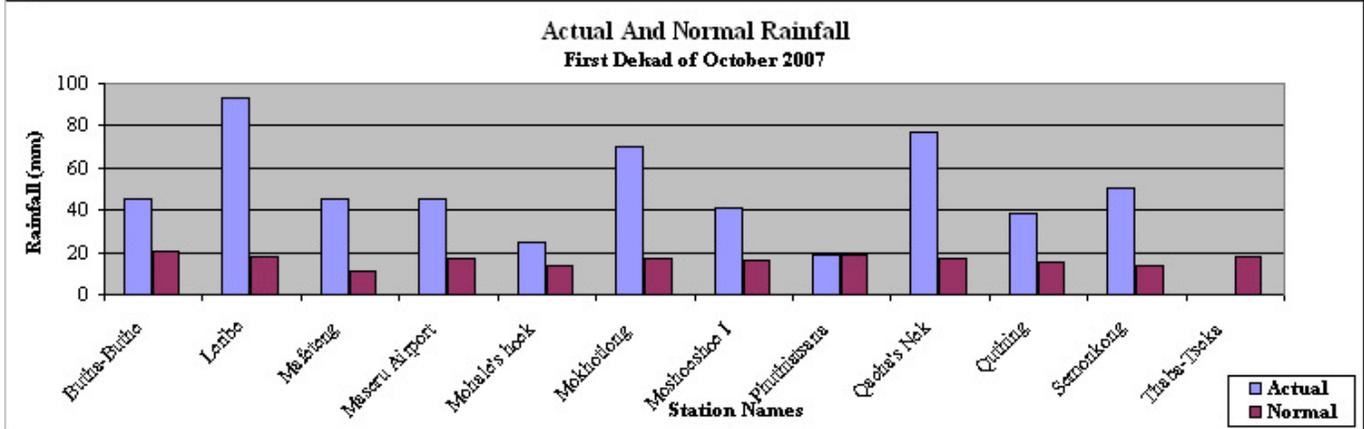
This period is expected to be mostly partly cloudy, warm to hot and wet. Isolated to scattered thundershowers are expected to continue although snowfall activities in the highlands will be less frequent. Hailstorms are expected to continue to be experienced at some places.

**Table 1**

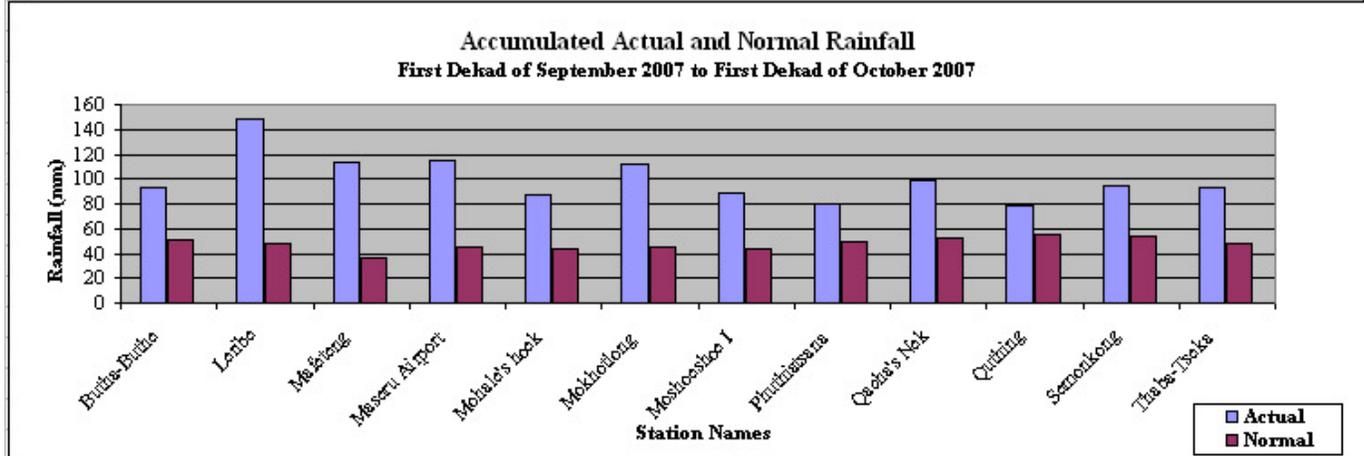
Rainfall and Temperature Summaries												
		Rainfall (mm)						Temperature (°C)				
		Total From Sept 07 to 1st Dek Oct 07						01 - 10 October 2007				
STATION	ALT.	Actual	Normal	Rain			%Dept. from	Minimum	Maximum	Dekadal	Dekadal	
NAME	(M)	R/Fall	R/Fall	Days	Actual	Normal	Normal	Lowest(Day)	Highest (Day)	Mean	Normal	Deviation
Butha-Buthe	1770	45.1	20.8	3	93.6	51.4	82	3.5(10)	23(4)	14.7	15.8	-1.1
Lenbe	1740	93.1	18.2	5	148.9	47.5	213	2.7(10)	23.5(4)	14.8	16.1	-1.3
Mafeteng	1610	45.5	10.9	3	112.9	36.2	212	4.3(9)	22.2(5)	14.0	16.0	-2.0
Maseru Airport	1530	45	17.3	6	115.3	44.7	158	4(10)	24.3(5)	15.3	16.8	-1.5
Mohale's hoek	1600	24.5	13.8	3	86.6	44.3	95	4(10)	23(4)	14.6	16.3	-1.7
Mokhotlong	2200	69.9	17.0	5	112.2	44.9	150	1.6(7)	23.2(4)	12.7	13.4	-0.7
Moshoeshoe I	1628	40.6	16.2	6	89.2	44	103	3.5(10)	23.4(4,5)	16.1	16.8	-0.7
Phuthiatsana	1750	18.6	18.9	3	79.9	50	60	*	*	14.9	16.7	-1.8
Qacha's Nek	1970	76.8	16.9	7	99.2	51.8	92	0.1(10)	24.2(5)	12.0	14.5	-2.5
Quthing	1740	38.7	15.6	4	77.9	56	39	3.5(10)	21.6(4)	14.3	15.9	-1.6
Semonkong	2458	50.3	14.1	6	94.0	54	74	0(10)	18.3(5)	10.0	11.4	-1.4
Thaba-Tseka	2160	48.1	18.3	5	93.6	48.5	93	2.1(7)	20.4(5)	11.17	13.6	-2.4

NB: \* Temperature data was missing in some days

**Fig 2**



**Fig 3**



## **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.