

# LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



## Ten-Day Agrometeorological Bulletin

11 – 20 January 2008



Issue No.11/2007-08

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

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## Highlights

- ❑ Good rainfall recorded at most places
- ❑ Cumulative rainfall normal to above normal
- ❑ Close monitoring needed at Mokhotlong
- ❑ Weeding still in progress
- ❑ Warm conditions with rain at some places at times expected

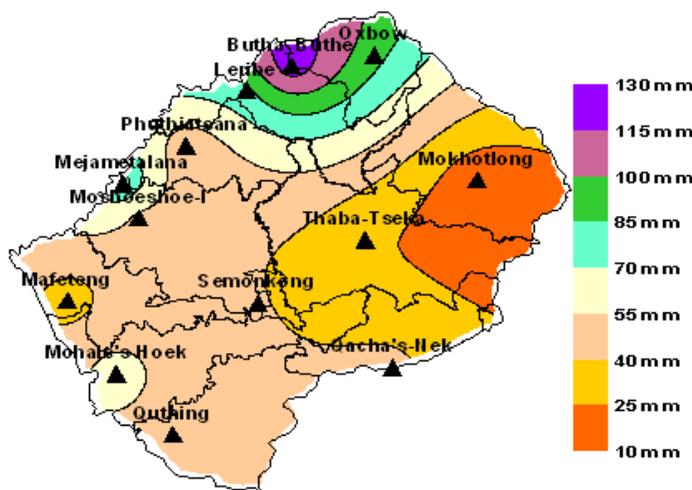
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**WEATHER SUMMARY**

The last ten days received scattered to widespread and significant amount of rainfall as tropical moist air from the north associated with the deepening and oscillating interior surface trough continued to pour into the interior of the subcontinent. The moisture advection into the interior was further enhanced by the passage of weak cold fronts over the southern interior.

**RAINFALL SITUATION**



Map 1: January 2008, 2nd Dekad Rainfall

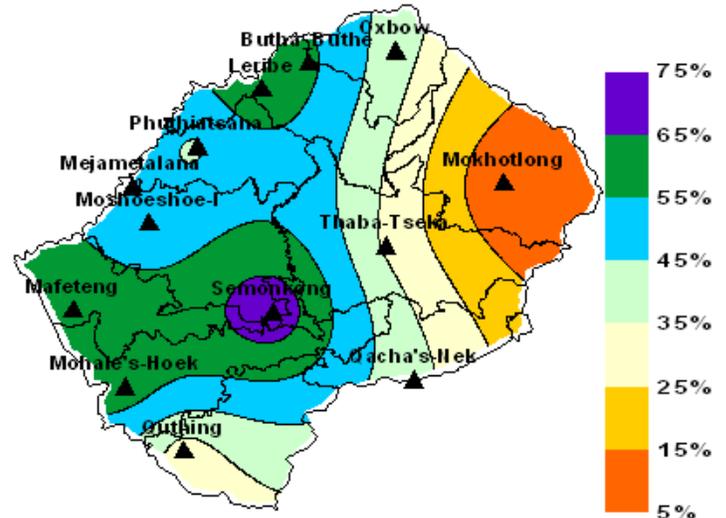
The second dekad of January 2008 recorded normal to above normal rainfall except in Mokhotlong where dekad rainfall was below normal. The highest dekad rainfall of 124.9mm was received at Butha-Buthe while the lowest dekad rainfall of 13mm was received at Mokhotlong (see Map 1, Fig 2 & Table 1). Map 1 which shows the spatial distribution of the dekad rainfall reflects that the highest intensity of the rainfall was over the northern parts of the country. Contrary to other parts of the country, Butha-Buthe recorded over 30mm of rainfall in 24 hours for three consecutive days (17<sup>th</sup>-19<sup>th</sup>).

**Cumulative Rainfall Percentage Departure From Normal Since September 2007.**

Rainfall percentage departure from normal for the period starting from September 2007 ending second

dekad of January 2008 remains at normal to above normal countrywide (Map 2, Table 1 and Fig 3). Rainfall performance has been consistently satisfactory at normal to above normal for the most part of the season. However, rainfall percentage departure from normal at Mokhotlong keeps on decreasing as shown in the Fig 1.

The graph depicts that since the second dekad of October 2007, dekadal rainfall at Mokhotlong has always been below normal. It reduced from 150% in the first dekad of October 2007 to the current value of about 5%. That shows the erratic nature of rainfall at Mokhotlong. There is therefore a need for close monitoring of conditions in this area.



Map 2: Rainfall % Departure from Normal (Sept 07-Jan 2nd Dek 08)

**TEMPERATURE**

Mean dekadal temperatures were above normal in the highlands except in Semonkong and below normal in the lowlands except in Mohale’s Hoek. The highest and lowest deviations of mean temperature from normal were at Mokhotlong and Moshoeshoe 1 with 1.2°C and -0.7°C respectively (see Table 1).

The highest daily maximum temperature of the dekad was 30°C at Mejametalana on the 14<sup>th</sup> while Semonkong recorded lowest daily minimum temperature of 7°C on the 17<sup>th</sup> (see Table 1).

### CROP STAGE AND CONDITIONS

Summer crops (Maize and sorghum) are at the stages ranging from late vegetative to flowering stages. Weeding is in progress in most parts of the country, however, the high rainfall incidences in the northern parts of the country may have prevented farmers to do weeding at some places. Crop conditions are generally good.

Harvesting of winter wheat is in progress. Conditions of the wheat range from fair to good.

### DEKADAL OUTLOOK

21- 31 January 2008

Unlike the last ten days the next coming dekad is expected to experience mostly isolated rain and thundershowers becoming scattered at times. Intense thunderstorms associated with hailstorms and strong winds are anticipated at times. Temperatures are expected to remain warm to hot.

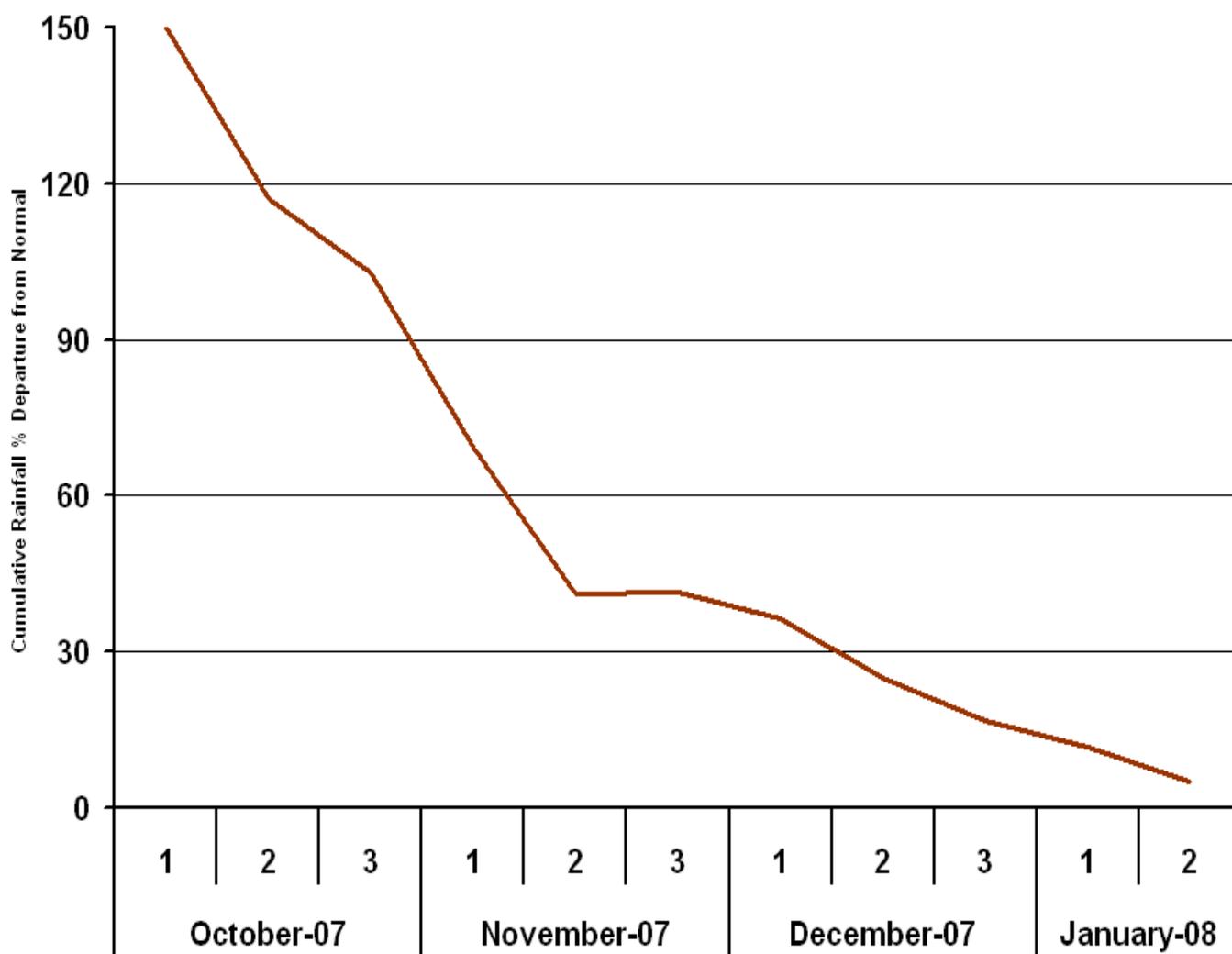


FIG 1: TREND OF CUMULATIVE RAINFALL % DEPARTURE FROM NORMAL AT MOKHOTLONG

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)					Temperature (°C)					
		11 - 20 Jan 2008			Total From Sept 07 to 2nd Dek Jan 08		11 - 20 Jan 2008					
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-Butha	1770	124.9	41.5	7	654.3	416.3	57	12.5 (20)	28.4 (14)	20.0	20.2	-0.2
Leribe	1740	81.9	38.8	8	586.5	360.4	63	12. (11,20)	29.3 (14)	20.2	20.7	-0.6
Mafeteng	1610	33.0	33.9	4	513.3	315.0	63	12.3 (17)	28.0 (13)	20.5	20.6	-0.1
Maseru Airport	1530	83.7	36.1	6	490.1	328.0	49	13.6 (20)	30.0 (14)	21.4	21.7	-0.3
Mohale's hoek	1600	62.5	33.1	4	545.0	335.9	62	11.5 (17)	28.5 (14)	21.0	20.8	0.2
Mokhotlong	2200	13.0	30.1	4	341.2	323.8	5	9.5 (12)	26.7 (13)	18.9	17.7	1.2
Moshoeshoe I	1628	51.3	37.0	6	514.2	354.7	45	13.6 (19)	27.6 (13)	20.5	21.2	-0.7
Phuthiatsana	1750	44.4	39.0	4	534.0	371.6	44	13.6 (18)	28.7 (14)	20.9	21.3	-0.4
Qacha's Nek	1970	44.3	38.4	6	547.5	394.2	39	9.9 (19)	27.4 (12)	19.0	18.4	0.6
Quthing	1740	43.5	29.4	3	482.9	371.0	30	13.6 (20)	28.4 (12)	21.2	21.2	0.0
Semonkong	2458	40.8	29.6	6	558.2	321.6	74	7.0 (17)	23.6 (14)	15.9	16.0	-0.1
ThabaTseka	2160	26.5	29.8	7	425.8	320.2	33	10.4 (12)	24.9 (14)	17.5	17.2	0.3

Fig. 2

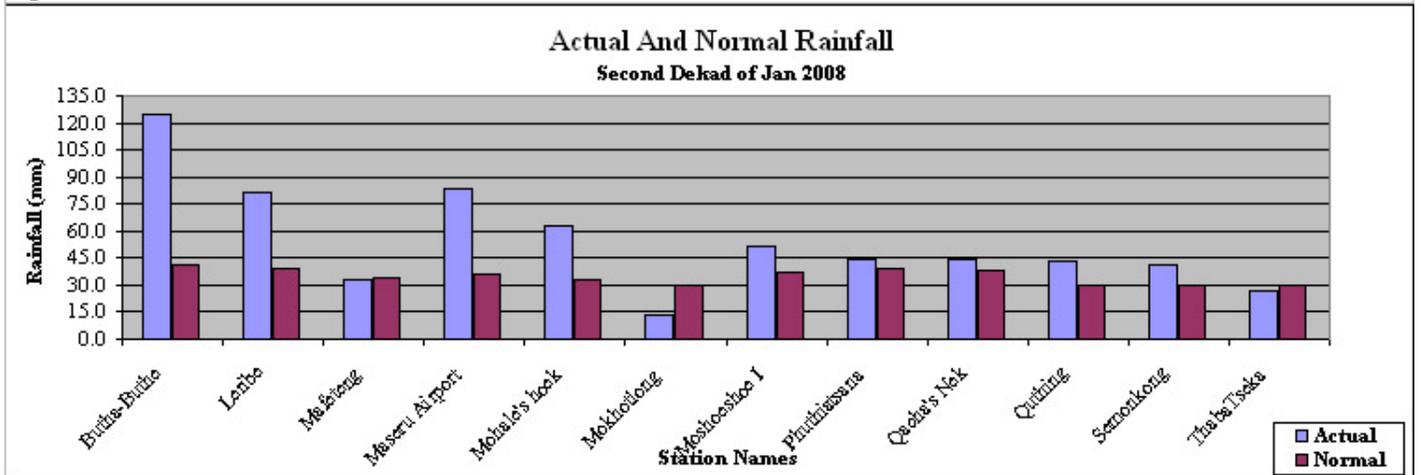
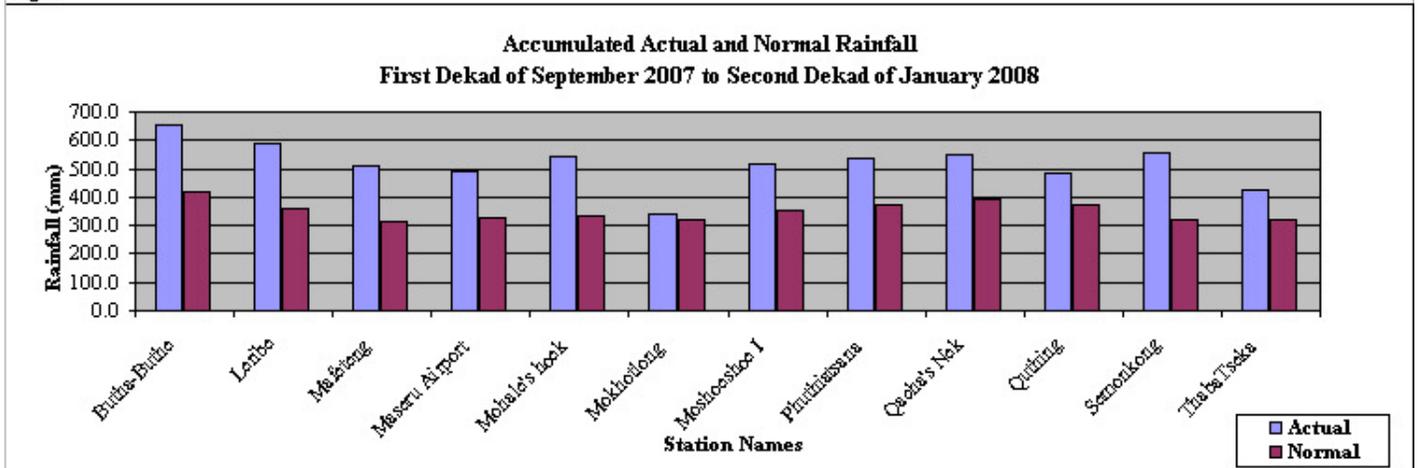


Fig. 3



## 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.