

# LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



## Ten-Day Agrometeorological Bulletin

21 – 31 March 2008



Issue No.18/2007-08

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

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## Highlights

- ❑ Dry conditions persisted during the dekad.
- ❑ Cumulative rainfall remains good.
- ❑ Warm conditions with scattered rain expected.

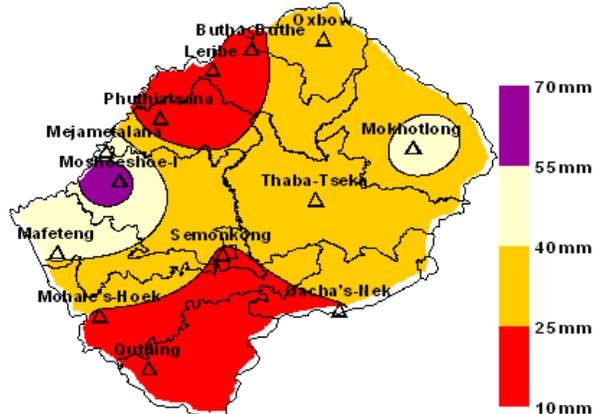
Lesotho Meteorological Services  
Agrometeorological Section  
P.O. Box 14515  
Maseru 100, Lesotho

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

### WEATHER SUMMARY

On the 21<sup>st</sup> a weak cold front passed far off the south coast inducing moist tropical air to be fed into the subcontinent. At the same time the Indian Ocean Anticyclone was advecting cool moist air from the east. The two air masses converged over our. As a result widespread rain was experienced on the 21<sup>st</sup>. To the far east of the subcontinent just south of Madagascar a deep extra tropical depression also developed and it denied areas in the south-east including our area moisture and leaving dry conditions except for the afternoon convergence over our area which resulted in isolated thundershowers.

### RAINFALL SITUATION



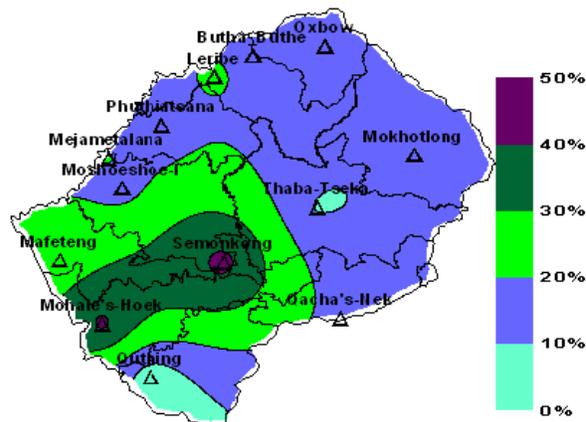
Map 1: March 2008, 3rd Dekad Rainfall

The last dekad of March 2008 recorded below normal rainfall in most parts of the country. It was only at areas surrounding Maseru, Mafeteng, Thaba-Tseka and Mokhotlong that rainfall was above normal. Moreover, bulk of the rain came during the first day (21<sup>st</sup>) of the dekad and the remaining days were quite dry. Moshoeshe 1 (62.9mm) recorded highest dekad rainfall, and Phuthiatsana (13.4mm) recorded lowest dekad rainfall (see Map 1, Table 1 & Fig 1).

#### Cumulative Rainfall Percentage Departure from Normal since September 2007.

Cumulative rainfall since the first dekad of September 2007 to the last dekad of March 2008 remains normal to above normal (see Map 2, Table 1 & Fig 2). Parts of the country that include

Mafeteng, Mohale’s Hoek and Semonkong have highest cumulative rainfall percentage departure from normal which stays at above normal presently. Even though cumulative rainfall leads to conclusion that seasonal rainfall has been good, dry spells that prevailed mainly in February had damaging effect to crops at some places.



Map 2: Rainfall % Dep. from Normal (Sept 07-Mar 08)

### TEMPERATURE

Dekadal mean temperatures were below normal at some places and above normal at some. Daily mean temperatures are decreasing from summer high temperatures to the low values for winter. The dekad under review did not record very low daily minimum temperatures like its predecessor. Thus it became slightly warmer than the previous dekad

### CROP STAGE AND CONDITIONS

Maize and sorghum crop are at various stages of ripening. Their conditions range from fair to good. At the current stage, cereal crops need low rainfall amounts and therefore dry spells would not have serious implications to them.

### DEKADAL OUTLOOK

1– 10 April 2008

There is still a high likelihood of receiving isolated rain showers and thundershowers in the coming dekad. However scattered thundershowers and rain showers are anticipated especially in the west, south and in the east on Sunday 06<sup>th</sup> and Monday 07<sup>th</sup> as a cold front that is expected to pass over southern parts will induce interior surface trough and advection of tropical moist air into our area.

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)						Temperature (°C)				
		21 - 31 Mar 2008			Total From Sept07 to 3rd Dek Mar 08			21 - 31 Mar 2008				
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	23.5	42.7	2	835.1	712.7	17	7.0 (24)	25.0 (28)	16.6	16.8	-0.2
Leribe	1740	15.5	33.7	3	745.9	615.3	21	*	*	16.7	17.2	*
Mafeteng	1610	42.0	31.7	4	688.5	562.4	22	8.0 (21)	27.0 (26)	17.4	16.6	0.8
Maseru Airport	1530	51.4	36.7	5	684.3	567.9	20	9.3 (24)	27.7 (29)	18.2	18	0.2
Mohale's hoek	1600	23.4	29.6	5	825.7	581.6	42	8.0 (31)	27.2 (26)	17.3	17.2	0.1
Mokhotlong	2200	41.7	22.4	6	595.4	531.1	12	5.0 (23)	23.2 (30)	13.9	14.6	-0.7
Moshoeshoe I	1628	62.9	39.7	4	741.7	635.4	17	8.8 (24)	25.7 (26)	17.5	17.6	-0.2
Phuthiatsana	1750	13.4	32.6	2	726.3	629.1	15	8.5 (24)	25.9 (25)	17.8	17.8	0.0
Qacha's Nek	1970	24.1	30.5	3	792.4	674.3	18	7.9 (25)	23.8 (27)	15.9	15.6	0.3
Quthing	1740	15.2	34.6	4	665.7	645.9	3	11.0 (23)	26.0 (28)	18.0	17.3	0.7
Semonkong	2458	23.9	31.1	3	768.2	537	43	2.6 (27)	21.8 (26)	12.2	12.6	-0.4
ThabaTseka	2160	37.5	19.1	8	584.7	535.4	9	6.0 (24)	22.0 (26)	13.6	14.3	-0.7

Fig.1

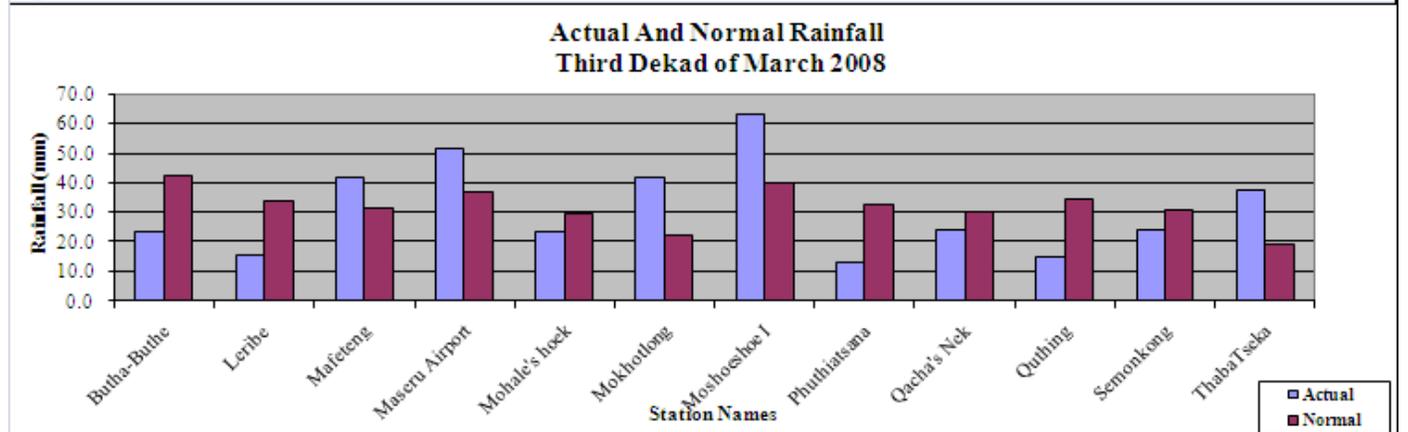
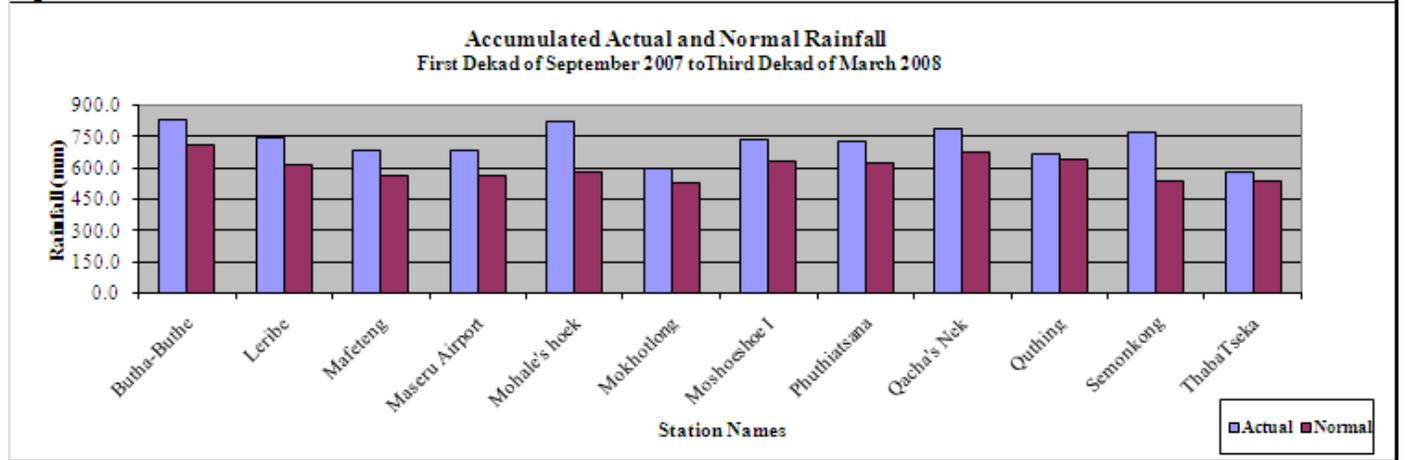


Fig.2



## **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.