

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

11 – 20 March 2008



Issue No.17/2007-08

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

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Highlights

- ❑ Wet conditions prevailed during the dekad
- ❑ Cumulative normal to above normal
- ❑ Crops at grain filling stages
- ❑ Rainfall expected

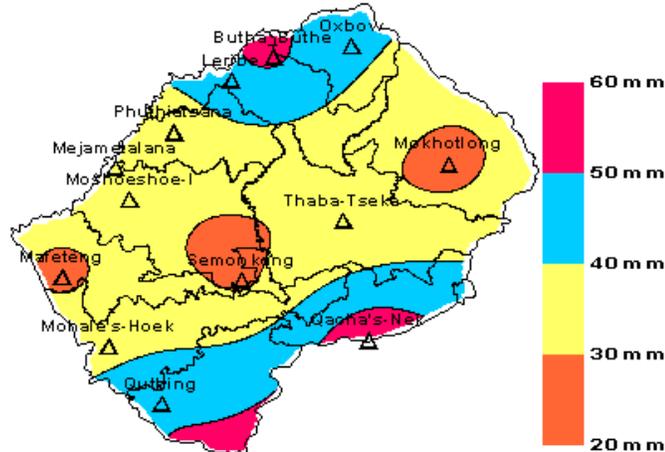
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WEATHER SUMMARY

Scattered rain showers and thundershowers were observed during the period under review. Moist tropical air from the north induced by the passage of weak cold fronts over the southern tip was fed into the subcontinent. Low level convergence coupled with advection of moisture from the east by the Indian Ocean Anticyclone further enhanced rainfall activities over the country.

RAINFALL SITUATION

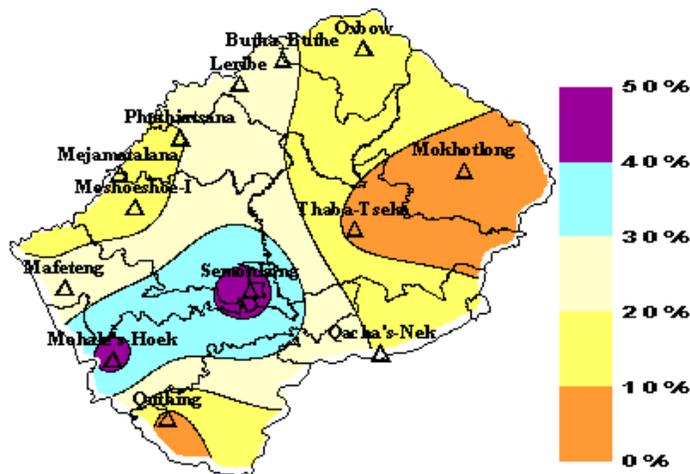


Map 1: March 2008, 2nd Dekad Rainfall

Second dekad of March 2008 recorded normal to above normal rainfall. That was the first time in more than a month that good dekadal rains were received countrywide. The highest dekadal rainfall was recorded at Qacha's Nek with 58.9mm, and Mokhotlong with 26.8mm experienced lowest dekadal rainfall. Qacha's Nek (24.9mm) and Mohale's Hoek (24.5mm) recorded highest rainfall in 24 hours on the 14th. Rain days range from four days to eight.

Cumulative Rainfall Percentage Departure from Normal since September 2007.

Cumulative rainfall since the first dekad of September 2007 to second dekad of March 2008 remains normal to above normal (see Map 2 & Table 1). The highest and lowest cumulative rainfall is 811.6mm and 547.0mm at Butha-Buthe and Thaba-Tseka respectively.



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

Fig 1 shows time series for rainfall percentage from normal since 2nd dekad of October 2007 to the dekad under review. The graph shows that generally the departure from normal has been decreasing since January 2008, implying that rainfall was below normal at most places at that period.

TEMPERATURE

Dekadal mean temperatures were below normal during the dekad under review. The lowest mean temperature deviation was -2.6°C while the highest was -1.7°C. The lowest daily minimum temperature was -1.7°C at Semonkong on the 17th and the grass minimum temperatures have been below 0°C in the highlands in some days during the dekad.

CROP STAGE AND CONDITIONS

Maize and sorghum crop are at grain filling stages and in good conditions. However, some crops were affected by the dry weather that prevailed during previous dekads.

Low temperatures in the highlands may have led to frost occurrences at some areas. Conditions in all the high-lying areas therefore need close monitoring.

DEKADAL OUTLOOK

21- 31 March 2008

Scattered to widespread rain showers and thundershowers are anticipated in the first half of the dekad. Otherwise the remaining days are

likely to receive isolated rain showers and thundershowers. Temperatures are expected to be cooler.

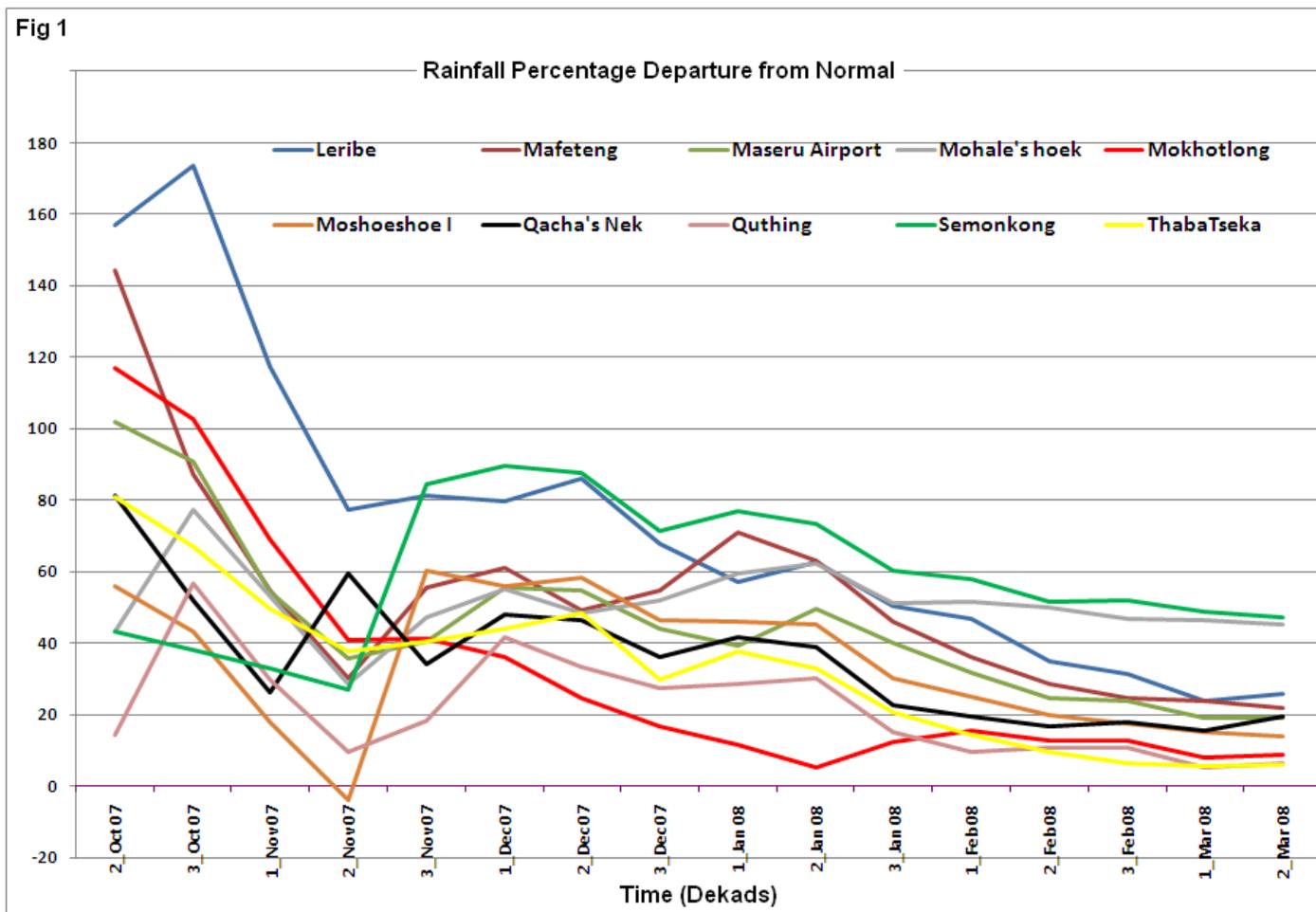


Fig 1: Rainfall percentage departure from normal since 2nd dekad of October 2007 to 2nd dekad of March 2008.

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)					Temperature (°C)					
		11 - 20 Mar 2008			Total From Sept 07 to 2nd Dek Mar 08		11 - 20 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	52.0	41.0	4	811.6	670.0	21	6.5 (19, 20)	26.5 (11)	15.9	18.1	-2.2
Leribe	1740	47.6	29.9	7	730.4	581.6	26	7.4 (19, 20)	27.7 (11)	16.6	18.2	-1.7
Mafeteng	1610	28.5	31.5	4	646.5	530.7	22	6.0 (17)	25.0 (11)	15.8	18.0	-2.2
Maseru Airport	1530	35.4	28.9	6	632.9	531.2	19	6.1 (16)	27.0 (11)	16.6	19.2	-2.6
Mohale's hoek	1600	37.0	29.2	5	802.3	552.0	45	4.5 (17)	*	*	18.7	*
Mokhotlong	2200	26.8	21.0	6	553.7	508.7	9	3.0 (17, 19)	25.0 (12)	13.7	15.6	-1.9
Moshoeshoe I	1628	33.5	34.5	5	678.8	595.7	14	7.6 (17)	26.6 (11)	16.3	19.0	-2.7
Phuthiatsana	1750	32.6	35.5	4	712.9	596.5	20	7.6 (19)	27.5 (13)	17.1	18.9	-1.8
Qacha's Nek	1970	58.9	28.8	8	768.3	643.8	19	1.1 (17)	25.6 (11)	14.7	16.6	-1.9
Quthing	1740	48.7	38.6	6	650.5	611.3	6	4.5 (16)	24.6 (13)	15.9	18.6	-2.7
Semonkong	2458	27.7	24.8	4	744.3	505.9	47	-1.7(17)	21.0 (11)	11.1	13.7	-2.6
ThabaTseka	2160	30.0	25.8	4	547.2	516.3	6	1.5 (16)	23.7 (12)	12.8	15.4	-2.6

Fig.2

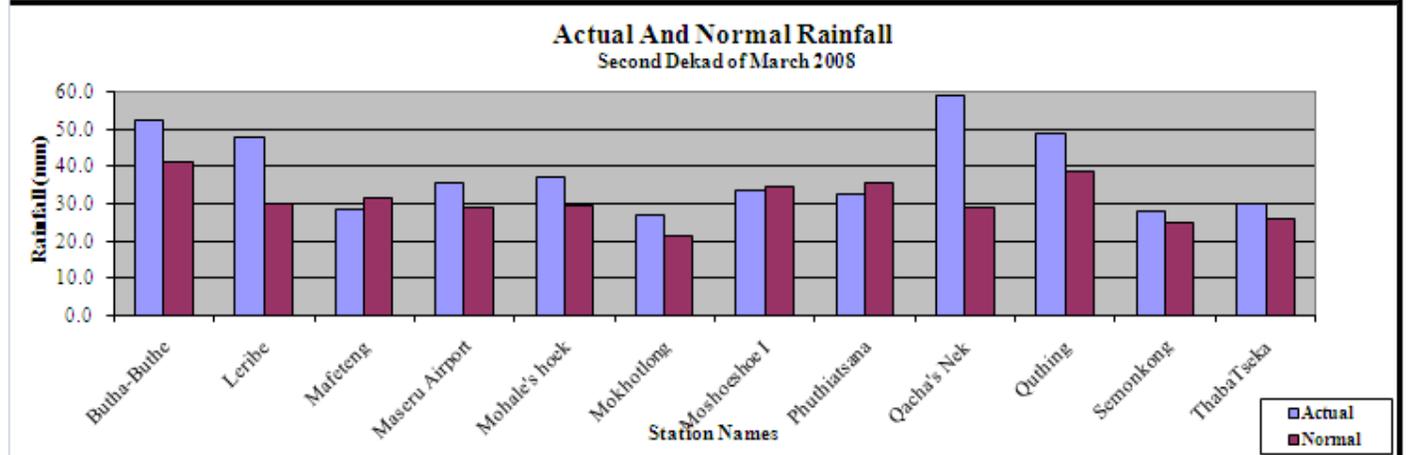
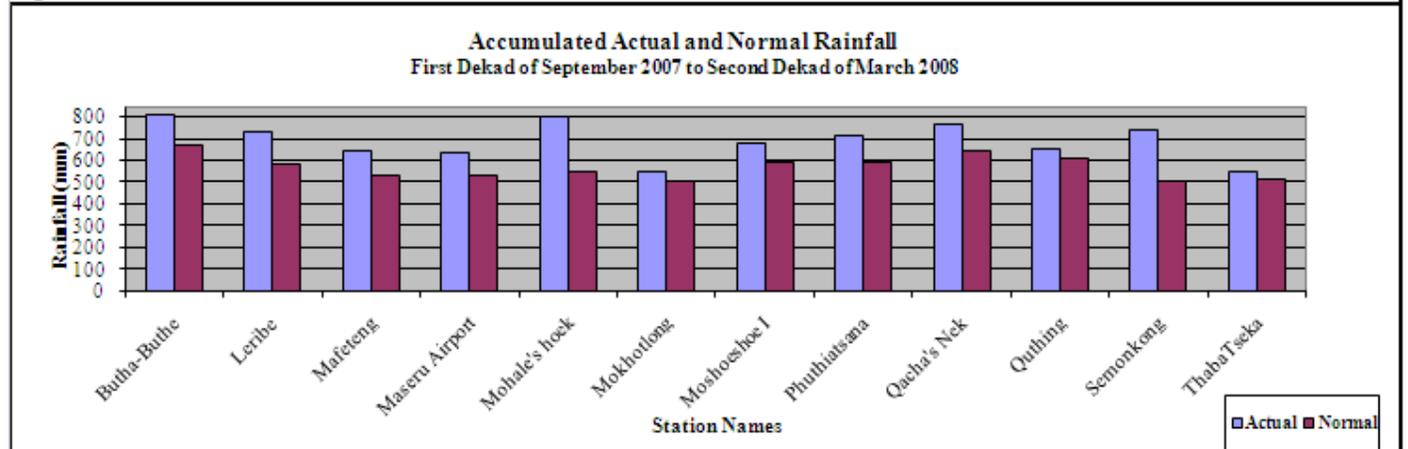


Fig.3



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.