

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

11 – 20 February 2008



Issue No.14/2007-08

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

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Highlights

- ❑ Low dekadal rainfall recorded.
- ❑ Cumulative rainfall normal to above normal.
- ❑ Crops at flowering to grain filling stages.
- ❑ Warm conditions with isolated rain expected.

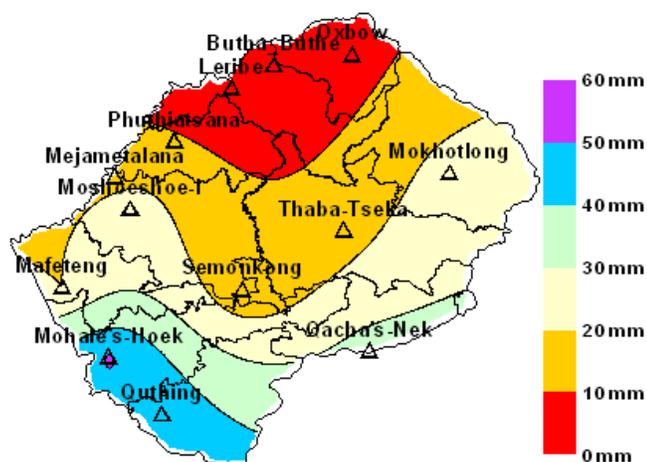
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WEATHER SUMMARY

Despite widespread rain showers and thundershowers, which occurred on the first day of the dekad especially in the south, the second dekad of February 2008 experienced suppressed rainfall. The interior surface trough remained shallow and inactive and was mostly confined to the west. Tropical cyclones and disturbances that developed in South West Indian Ocean towards the end of January continued to develop unabated.

RAINFALL SITUATION



Map 1: February 2008, 2nd Dekad Rainfall

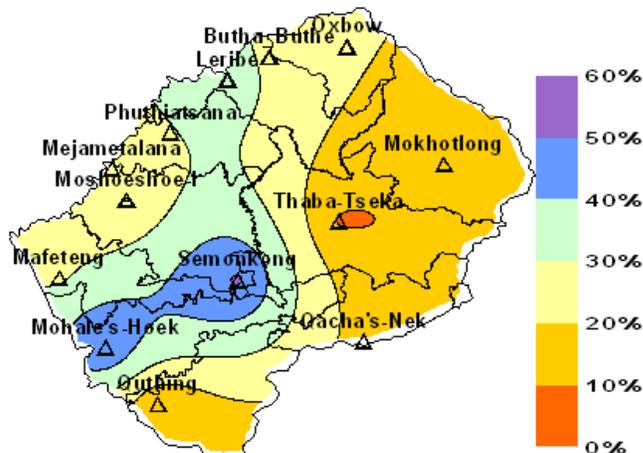
The second dekad of February 2008 was very dry countrywide. There was only a sole day (11th), which had significant rainfall that was concentrated more in the southern parts of the country. Qacha's Nek recorded about 27mm of rainfall on the 17th. Otherwise the rest of the days did not have significant rainfall. The northern lowlands had the lowest amounts of rain. But the region extending from southwest to the south of the country recorded highest rainfall amounts (Map 1, Table 1 & Fig 1).

The dekad under review became the third consecutive dekad to be dry in most parts of the country since the last dekad of January. Thus evidently, most parts of the country have experienced dry spells for a period close to a month.

Cumulative Rainfall Percentage Departure From Normal Since September 2007.

Cumulative rainfall since September 2007 ending second dekad of February 2008 remains at normal to above normal conditions countrywide. However, for the large parts of the country, the rainfall percentage departure from normal has been decreasing in the last dekad indicating a period of dry spells. Dry spells can have a serious negative impact to crops since they are at their critical stage.

Map 2 depicts that the highlands have the lowest rainfall percentage departure from normal. This indicates that the lowlands have been wetter than highlands, when compared to their respective normals.



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

TEMPERATURE

Mean temperatures were warmer than normal during the dekad under discussion except at few places (Quthing, Semonkong and Mohale's Hoek) where it was cooler than normal. High dekadal mean temperature deviations were experienced at places that had very low rainfall. This suggests that evapotranspiration was high at those areas.

CROP STAGE AND CONDITIONS

Maize and sorghum crop are at flowering to grain filling stages and in good conditions. However, there are some crops, which show signs of withering at some places. High temperatures and

less rainfall caused great loss of soil moisture resulting in water stress to some crops.

Normal dates for the onset of frost in the highlands is in March although the dates can differ from place to place. If frost can indeed occur in March, most of the crops will not have fully matured and the damage can be huge.

Summer wheat in the highlands is at vegetative stages and is in good conditions.

DEKADAL OUTLOOK

21– 29 February 2008

There is still a high likelihood of receiving isolated rain showers and thundershowers in the coming dekad. The northern and the southern parts are likely to receive scattered rain showers and thundershowers. Temperatures are expected to remain generally warm to hot.

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)						Temperature (°C)				
		11 - 20 Feb 2008			Total From Sept 07 to 2nd Dek Feb 08			11 - 20 Feb 2008				
STATION	ALT.	Actual	Normal	Rain	Cummulative		%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	0.5	42.3	1	722.2	564.0	28	10.5 (13)	29.0 (17)	19.8	19.4	0.4
Leribe	1740	3.7	42.3	3	664.1	492.3	35	12.2 (12)	29.0 (20)	20.1	19.8	0.3
Mafeteng	1610	20.0	38.6	3	558.7	434.5	29	10.0 (13)	30.0 (19,20)	20.2	20	0.2
Maseru Airport	1530	15.7	36.1	4	554.4	445.0	25	12.0 (13)	29.8 (20)	20.8	20.8	0.0
Mohale's hoek	1600	50.5	38.4	6	684.0	456.3	50	10.0 (13)	29.0 (16)	19.8	20.6	-0.8
Mokhotlong	2200	23.6	30.4	5	490.6	434.7	13	8.9 (14)	25.6 (20)	17.5	16.9	0.6
Moshoeshoe I	1628	25.6	40.5	3	585.2	489.1	20	12.1 (13)	29.0 (19)	20.1	20.1	0.0
Qacha's Nek	1970	33.7	42.1	3	639.6	549.1	16	11.3 (14)	27.2 (17)	18.1	17.4	0.7
Quthing	1740	46.4	38.3	5	553.1	500.7	10	11.6 (13)	29.0 (17)	20.0	20.2	-0.2
Semonkong	2458	12.0	25.4	4	645.7	426.4	51	4.9 (13)	24.0 (16)	15.0	15.1	-0.1
ThabaTseka	2160	16.0	32.2	4	476.1	435.8	9	7.8 (13)	26.4 (20)	17.0	16.4	0.6

Fig.1

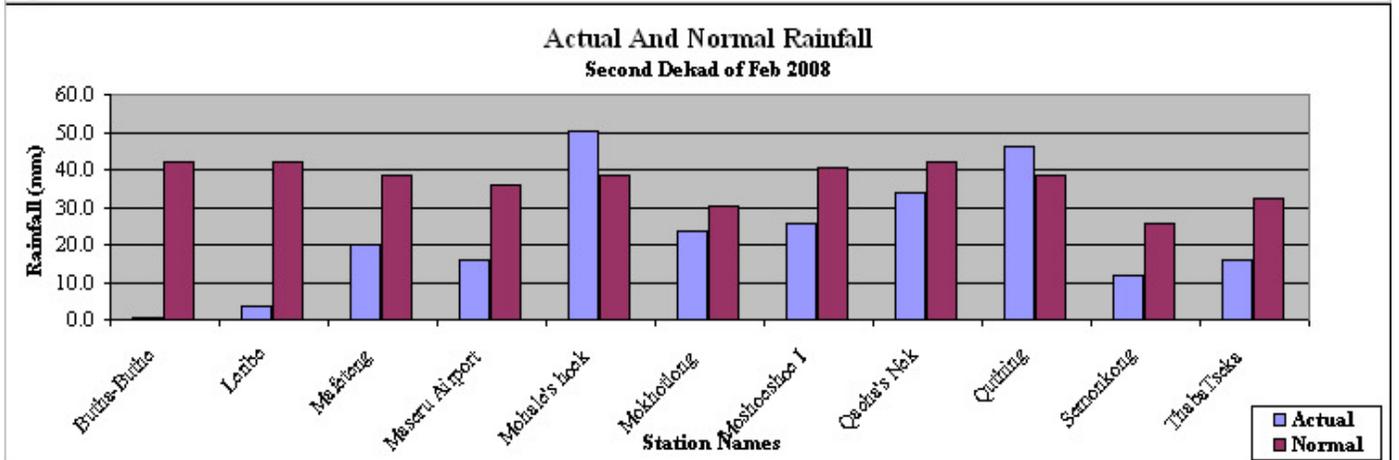
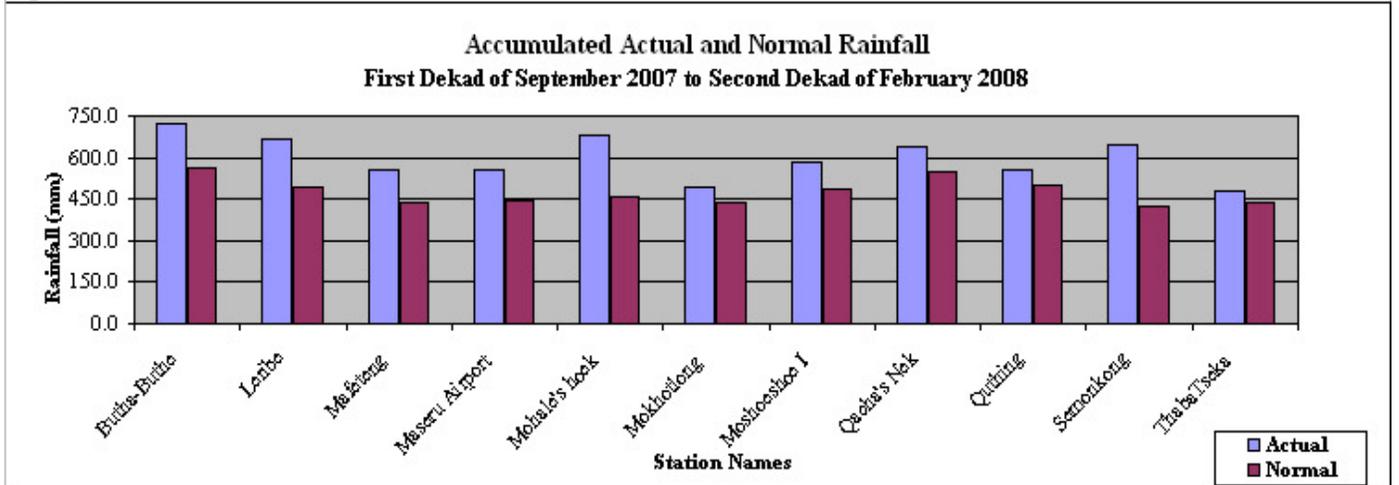


Fig.2



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.