

LESOTHO METEOROLOGICAL SERVICES

(LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

1st – 10th January 2006



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

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Highlights

- ❑ Above normal rains throughout the country.
- ❑ Warm and wet weather conditions observed.
- ❑ Insufficient cumulative rains received.
- ❑ Poor vegetation cover.
- ❑ The next ten days expected to be warm.

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WEATHER SUMMARY

The previous dekad (1-10th January) was generally wet and warm. During this period, the region was dominated by a trough, which caused influx of moisture from the tropics. As a result rain showers and thundershowers occurred throughout this period. The trough deepened on the 7th, resulting in hailstorms and heavy rains over the northern and eastern parts of the country. This system persisted up to the 9th resulting in widespread rains which occurred on the 8th and 9th.

RAINFALL SITUATION

The rainfall received throughout the country was above the dekadal normal rainfall and the distribution of these amounts of rainfall was widespread. Leribe registered the highest dekadal rainfall of 113.3mm and the highest daily rainfall rain during the dekad, Mafeteng which showed among the highest deficit throughout the growing period has also received normal rainfall. The heavy rainfall experienced over the entire country is expected to improve the agricultural scenario.

Cumulative percentage rainfall departure from Normal

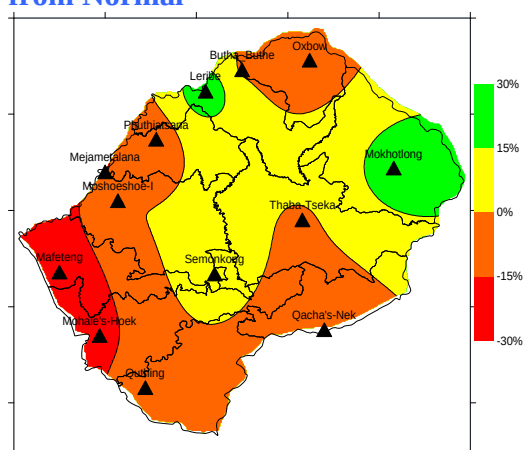


Fig.1: Cumulative rainfall departure from normal since 1st Sept to 10th January 2006.

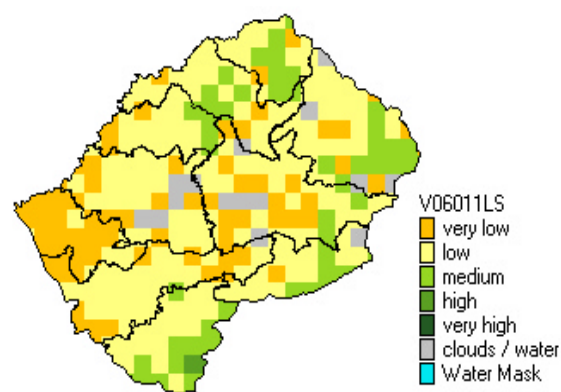
The entire country shows predominantly below normal values as depicted by negative % rainfall departure from normal, but with shrinking magnitudes compared to previous dekad. However, Leribe and Mokhotlong are the only

stations that recorded above normal cumulative rainfalls. (see table 1).

TEMPERATURE

The temperatures experienced during the first dekad of January were slightly below in the lowlands whereas in the highlands they were slightly above the normal dekadal temperatures. The highest maximum temperature of 30.5⁰C was registered on the 5th at Quthing and lowest minimum temperature of 9.6⁰C was recorded at Semonkong on the 3rd. High temperatures experienced, had a negative impact on crops as they increased the rate of evapotranspiration and this reduces the soil water content.

VEGETATION



Very poor vegetation cover (seriously) is currently witnessed from the satellite map above. Besides soil moisture insufficiency continued to affect crops in the fields as experienced over the parts of the country during this dekad. This is because during the last two dekads the NOAA NDVI satellite image depicted far high degree of greenness as compared to the one above. (That is there is a great difference; the greenness has gone done).

CROP STAGE AND CONDITION

Crops (maize and sorghum) in the southern, western and northern lowlands are at vegetative stage. At some places in the low-lying areas

weeding is in progress and the harvest is expected to be improved as compared to last year at this time. However, some fields are reported be stressed by drought in Mafeteng. Besides this, little change is expected in as far as the condition of the crops (maize and sorghum) that have wilted some of them at knee high level due to good rains experienced.

The prevailing weather conditions are expected to continue during this forecast period (11-20 January). The trough will still be dominant over the sub-region. This will result in rain showers and thundershowers, especially during the last half of the dekad. Temperatures will remain generally warm.

DEKADAL OUTLOOK

11th – 20th January 2006

Table 1

Summaries		Rainfall and Temperature										
		Rainfall (mm)						Temperature (°C)				
		1 - 10 Jan 2006			Total From Sept05 to 1st Dek Jan 06			1 - 10 Jan 2006				
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	107.1	34.1	7	365.8	375	-2	14.0 (9)	28.6 (6)	19.8	20.3	-0.5
Leribe	1740	113.3	31.3	6	410.7	322	28	14.2 (9)	29.3 (8)	20.0	20.7	-0.7
Mafeteng	1610	47.4	27.7	3	202.5	281	-28	8.5 (1)	28.5 (5)	19.6	20.5	-0.9
Maseru Airport	1530	62.5	28.7	6	245.3	292	-16	14.6 (2)	29.5 (5)	21.5	21.8	-0.3
Mohale's hoek	1600	64.0	31.7	6	238.3	303	-21	13.0 (9)	30.0 (5)	20.8	19.9	0.9
Mokhotlong	2200	64.3	34	7	364.9	294	24	13.0 (9)	27.7 (6)	18.2	17.6	0.6
Moshoeshoe I	1628	49.7	28	7	319.2	318	0	15.0 (4,5)	29.5 (6)	21.0	21.4	-0.4
Ox-Bow	2600	131.3	52.7	8	500.5	568	-12		21.4 (7)		12.6	
Phuthiatsana	1750	78.5	31	6	290.9	333	-13	15.3 (2)	29.4 (6)	20.9	21.3	-0.4
Qacha's Nek	1970	66.5	43.7	5	305.7	356	-14	10.4 (9)	27.9 (6)	18.5	18.4	0.1
Quthing	1740	65.8	32.4	7	323.7	342	-5	13.9 (9)	30.5 (5)	21.6	21.1	0.5
Semonkong	2458	73.6	24.6	8	316.4	292	8	9.6 (3)	24.8 (6)	16.7	15.8	0.9
ThabaTseka	2160	57.5	27.3	7	283.1	290	-3	10.0 (9)	27.5 (7)	17.6	17.1	0.5

Fig.1

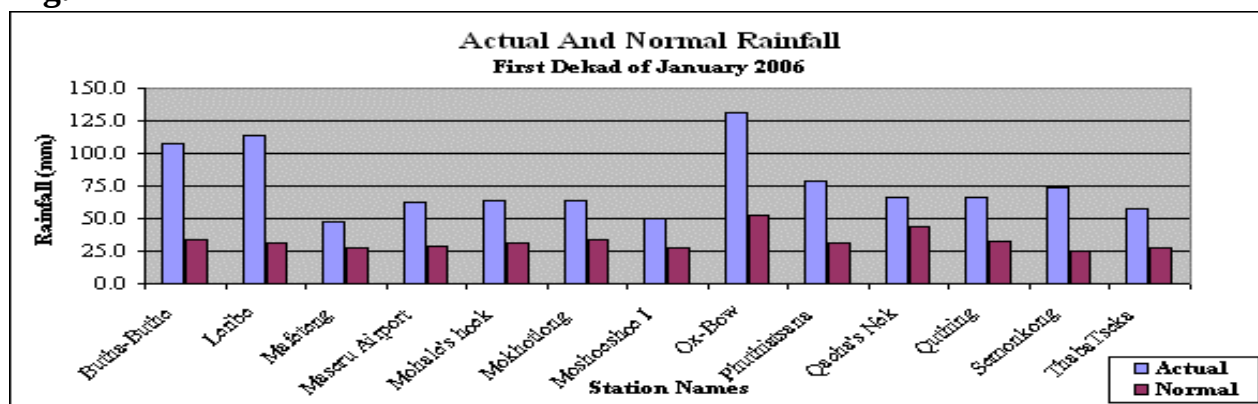
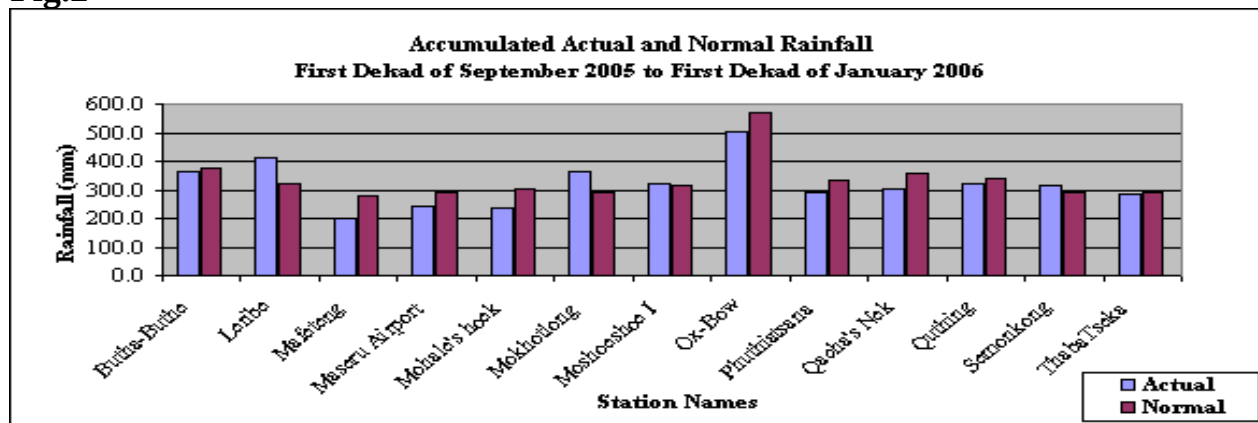


Fig.2



Glossary

Dekad : Ten day period

Normal: Average figure over a specific time period.

% Rainfall Departure from Normal: $(\text{Actual Rainfall} - \text{Normal Rainfall}) / \text{Normal Rainfall} \times 100$

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And it is

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Comments and Contributions would be highly appreciated.