

# LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



## Ten-Day Agrometeorological Bulletin

1<sup>st</sup> – 10<sup>th</sup> February 2005



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

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### Highlights

- ❑ Below normal rains throughout the country.
- ❑ High temperatures prevailed during the dekad.
- ❑ Crops mostly at late vegetative to flowering.
- ❑ Improved rainfall situation in the second dekad of February.

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**WEATHER SUMMARY**

1<sup>st</sup> – 10<sup>th</sup> February 2005

The first dekad of February was dominated by the trough to the west of the interior and the Indian Ocean High Pressure system in the northeast. The two systems resulted in isolated thundershowers and some high temperatures.

**RAINFALL SITUATION**

The first ten days of February were dry over the entire country. This was depicted by the number of rainy days which were mostly below 4 days (table 1). The dekadal rainfall values ranges from 3.3mm recorded at Quthing to 36.8mm recorded at Moshoeshoe I station. Other stations with low rainfall includes Butha- Buthe and Mohale’s Hoek registering less than 10mm of dekadal rainfall. At areas surrounding the stations with dekadal low rainfall, summer crops (maize and sorghum) which are mostly at late vegetative to flowering stages were deeply water stressed. On the other hand, relatively high dekadal rainfall amounts were recorded at Phuthiatsana and Semonkong (Fig. 2 and table 1). As compared to the normal, all the stations recorded below normal rainfall with the exception of Moshoeshoe I with near normal rainfall.

**Cumulative rainfall**

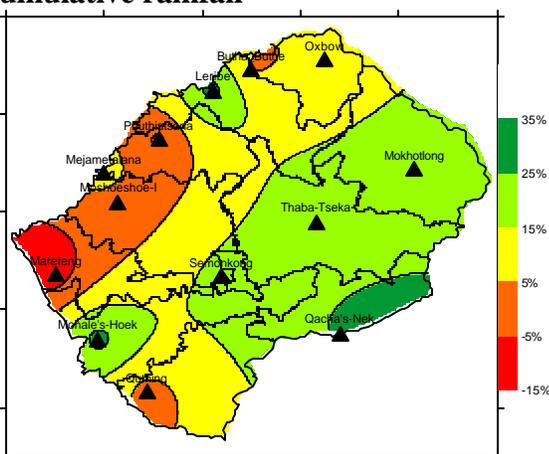


Fig.1: Cumulative rainfall departure from normal since 1<sup>st</sup> September 2004 to 10<sup>th</sup> February 2005.

Cumulative rainfall (1<sup>st</sup> September 2004 to 10<sup>th</sup> February 2005) ranges from 335.8mm recorded at Mafeteng station to the maximum of 744mm recorded at Oxbow (Table 1 and Fig. 3). As compared to the normal, all the stations recorded near normal cumulative rainfall with the bias to below normal except Leribe station with above normal cumulative rainfall.

**TEMPERATURE**

The country experienced near normal to above normal dekadal temperatures with the deviation from normal ranging from 0.8°C to 2.1°C (Table 1). High daily temperatures were experienced from the 2<sup>nd</sup> to 4<sup>th</sup> February with majority of the stations over the lowlands recording over 30°C in that period. Low temperatures are evident over the high-lying areas with the dekadal mean temperatures of less than 20°C.

**CROP STAGE AND CONDITION**

Due to low amounts of rainfall experienced in the dekad in review, the crops (maize and sorghum) have experienced soil moisture stress in some areas in the south and eastern parts of the country. This has affected the crops negatively at this critical time (late vegetative to grain-filling) of the plant development stage. However, at some places in the western parts of the country crops are generally reported to be in good conditions.

Summer wheat in the high-lying areas is in good conditions and its harvesting has started.

**DEKADAL OUTLOOK**

11<sup>th</sup> – 20<sup>th</sup> February 2005

The second dekad of February is expected to be dominated by the High Pressure system in the east, some isolated thundershowers are therefore expected. The second half of the dekad is expected to be dominated by trough over the interior and as a result, improved rainfall situations are expected. Temperatures are expected to be high through-out the dekad.

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)						Temperature (°C)				
		1 - 10 Feb 2005			Total From Sept 04 to 1st Dek Feb 05			1 - 10 Feb 2005				
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	5.2	47.4	1	489.8	521.7	-6	12.5(9)	29.5(4)	21.045	20.0	1.0
Leribe	1740	18.1	39.1	3	562.0	450.0	25	12.6(9)	30.2(4)	21.5	20.5	1.0
Mafeteng	1610	14.3	30.3	3	335.8	395.9	-15	10.4(5)	30.0(3)	21.4	20.7	0.7
Maseru Airport	1530	18.5	33.8	3	402.5	408.9	-2	13.5(9)	31.1(4)	22.4	21.4	1.0
Mohale's hoek	1600	5.6	34.1	2	470.0	417.9	12	12.0(5)	32.0(3)	22.4	21.2	1.2
Mokhotlong	2200	10.5	32.3	2	425.9	404.3	5	9.5(9)	28.8(3)	19.3	17.4	1.9
Moshoeshoe I	1628	36.8	38.3	2	413.5	448.6	-8	11.5(9)	31.5(4)	22.1	21.3	0.8
Ox-Bow	2600	22.5	57.0	2	744.0	754.1	-1	5.8(3,9)	23.0(4)	13.9	12.5	1.4
Phuthiatsana	1750	31.7	43.1	3	410.1	472.9	-13	13.7(9)	30.8(4)	22.1	20.6	1.5
Oacha's Nek	1970	12.7	50.8	4	522.1	507	3	8.8(4)	30.5(3)	19.5	18.2	1.3
Outhing	1740	3.3	40.1	2	410.1	462.4	-11	14.7(1)	30.9(3)	23.0	20.9	2.1
Semonkong	2458	24.3	33.2	2	445.9	401.0	11	5.0(5)	26.2(2)	16.8	16.0	0.8

Fig. 2

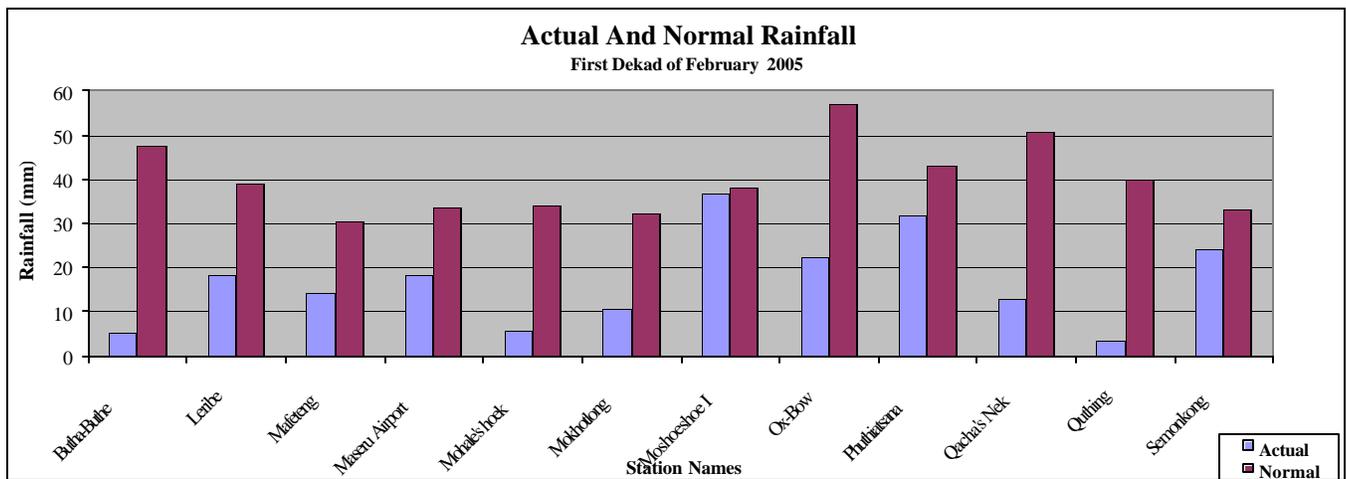
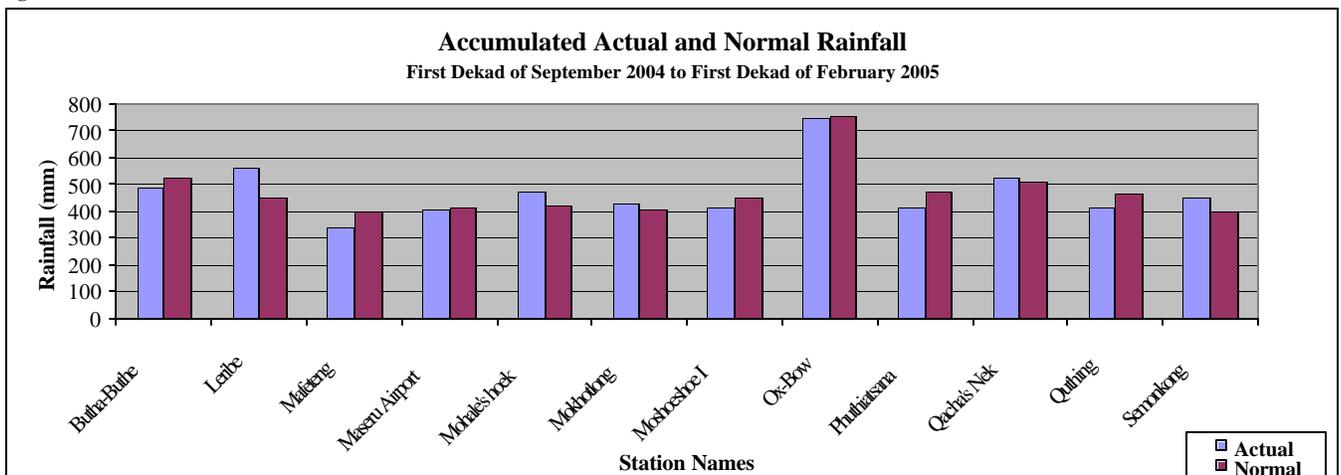


Fig. 3



## **GLOSSARY**

Dekad : Ten day period

Normal: Average figure over a specific time period.

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

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**And it is**

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**Comments and Contributions would be highly appreciated.**