# LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



### **Ten-Day Agrometeorological Bulletin**

11<sup>th</sup> – 20<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**

- □ Good rains in the western parts of the country.
- □ Near normal temperatures recoided
- □ Crops mostly at flowering to grainfilling.
- Rains expected for the last dekad of February.

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#### WEATHER SUMMARY

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

During the second dekad of February the rainfall situation improved, especially during the last half whereby the trough which has been dominant over the central interior deepend. This resulted in an influx of moist air from the tropics, which caused isolated to scattered rain showers over most parts of the country.

#### **RAINFALL SITUATION**

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

The second dekad of February (11<sup>th</sup> - 20<sup>th</sup>) was wet compared to the previous dekad. Most stations recorded over 5 rainy days with the maximum of 8 rainy days (table 1). The dekadal rainfall values are low over the southern and eastern parts of the country with stations like Qacha's Nek and Quthing recording dekadal values of 21.7mm and 29.9mm respectively. The western parts of the country experienced high dekadal falls of 105.9mm, 90.4mm and 89.8mm recorded at Moshoeshoe I, Phuthiatsana and Mejametalana respectively. Other parts of the country recorded mostly 34mm to 80mm of dekadal rainfall. As compared to the normal, all the stations recorded near normal to above normal with the exception of Qacha's Nek with below normal dekadal rainfall (Table 1 and Fig. 2). The percentage departure from the normal ranges from -48% at Oacha's Nek to +166% recorded at Phuthiatsana.

#### **Cumulative rainfall**

Cumulative rainfall (1<sup>st</sup> September 2004 to 20<sup>th</sup> February 2005) ranges from 370.7mm recorded at Mafeteng station to the maximum of 801.9mm recorded at Oxbow (Table 1 and Fig. 3). Stations like Maseru Airport, Mokhotlong and Quthing recorded cumulative rainfall of less than 500mm while the remainder of the stations registered accumulated falls in the excess of 500mm. Just like in the previous dekad, it is only Leribe station which registered above normal cumulative rainfall. All the other stations received near normal cumulative rainfall.

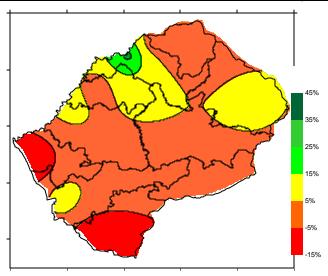


Fig.1: Cumulative rainfall departure from normal since 1<sup>st</sup> September 2004 to 20<sup>th</sup> February 2005

#### **TEMPERATURE**

 $11^{th}-20^{th}\; February\; 2005$ 

The mean dekadal temperatures for the second dekad of February were near normal with the bias to above normal (Table 1). The deviation from normal dekadal temperatures ranges from -0.5°C to 1.9°C. Table 1 also shows that the most parts of the country recoreded the lowest minimum temperatures between the 16<sup>th</sup> and 17<sup>th</sup> February while the highest maximum temperatures for the dekad were experienced on the 11<sup>th</sup> February 2005 in most areas.

#### **CROP STAGE AND CONDITION**

 $11^{th}-20^{th}\; February\; 2005$ 

Summer crops (maize & sorghum) are mostly in the flowering and grainfilling stages over the lowlands. There are some places where the crops are at the late vegetative stage. Their conditions are reported to be good in Leribe, Butha Buthe and Berea districts while in the lowlands of Mafeteng, Quthing and Mohale's Hoek crops are not in good conditions due arratic rains experienced in those areas. In some places over the lowlands, plants have not fully recovered from the hailstorms that were experienced in January and early February.

Over the high-lying areas, crops are mostly at the grainfilling stage with good conditions with the exception of the areas that were affected by hailstorms.

The conditions of the summer crops (maize & crops) over the Senqu River Valley is bad due to the low amounts of rainfall and frequent dryspells experienced in those areas.

Summer wheat in the high-lying areas is at the harvesting stage in most places and the rains that were experienced in most places had a slight negative impact on their drying.

#### **DEKADAL OUTLOOK**

21st - 28th February 2005

The interior trough is still anticipated to dominate during this forecast period, however the rainfall situation will generally remain the same as compared to the previous dekad. Temperatures will remain warm throughout this period.

Table 1

Rainfall and Temperature Summaries												
	Rainfall (mm)						Temperature (°C)					
		11 - 20 Feb 2005			Total From Sept 04 to 2nd Dek Feb 05			11 - 20 Feb 2005				
STATION	ALT.	Actual	Normal	Rain			%Dept. from	Minimum	Maximum	Dekada l	Dekadal	
NAME	(M)	R/Fall	R/Fall	Days	Actual	Normal	Normal	Lowest(Day)	Highest (Day)	Mean	Normal	Deviation
Butha-Buthe	1770	66.1	42.3	5	555.9	564	-1	13.4(17)	30(11)	19.7	19.4	0.3
Leribe	1740	68.1	42.3	7	630.1	492.3	28	14.2(16)	30.5(11)	19.7	19.8	-0.1
Mafeteng	1610	34.9	38.6	5	370.7	434.5	-15	13.2(16)	30.6(11)	19.9	20.0	-0.1
Maseru Airport	1530	89.8	36.1	7	492.3	445	11	13.5(16)	32.4(11)	20.3	20.8	-0.5
Mohale's hoek	1600	47	38.4	5	517.0	456.3	13	13(16)	33(11)	21.0	20.6	0.4
Mokhotlong	2200	39.9	30.4	6	465.8	434.7	7	8.2(17)	29.2(11)	17.6	16.9	0.7
Moshoeshoe I	1628	105.9	40.5	7	519.4	489.1	6	13.5(16)	31.5(11)	20.1	20.1	0.0
Ox-Bow	2600	57.9	49.2	7	801.9	803.3	0	2.8(17)	22.5(11)	13.1	12.1	1.0
Phuthiatsana	1750	90.4	34.0	7	500.5	506.9	-1	13.5(16)	31.5(11)	20.4	20.4	0.0
Qacha's Nek	1970	21.7	42.1	8	543.8	549.1	-1	12.4(12)	28.9(13)	19.3	17.4	1.9
Quthing	1740	29.9	38.3	6	440.0	500.7	-12	14.7(19)	32.4(11)	N/A	20.2	N/A

Fig.2

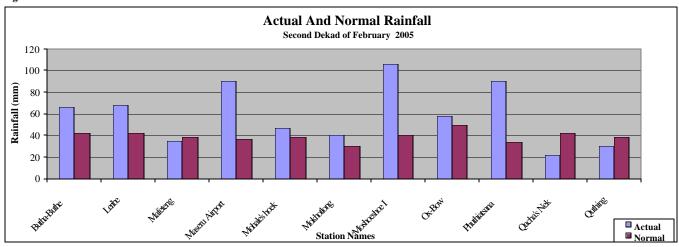
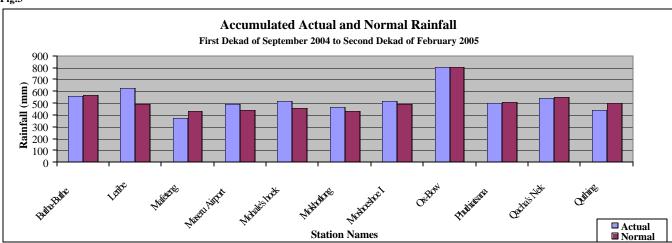


Fig.3



### **GLOSSARY**

Dekad: Ten day period

Normal: Average figure over a specific time period.

% Rainfall Departure from Normal: (Actual Rainfall – Normal Rainfall)/ Normal Rainfall x 100

This Bulletin is issued during the Summer Cropping Season (October - April).

#### And it is

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