

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

11th – 20th March 2004



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

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Highlights

- ❑ Substantial rains received over some parts of the country.
- ❑ Cumulative rainfall still stands below normal to normal rainfall.
- ❑ Some crops are at risk of being caught by frost before maturity.
- ❑ Light isolated thundershowers are expected to occur in the next dekad.

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WEATHER SUMMARY
11th - 20th March 2004

The Indian high pressure system was dominant over the northern parts of the sub-region during the second dekad of March, while the southern parts of the sub-region were dominated by the low pressure system. As a result, isolated thundershowers occurred and temperatures were generally warm during the day and cool at night.

RAINFALL SITUATION
11th - 20th March 2004

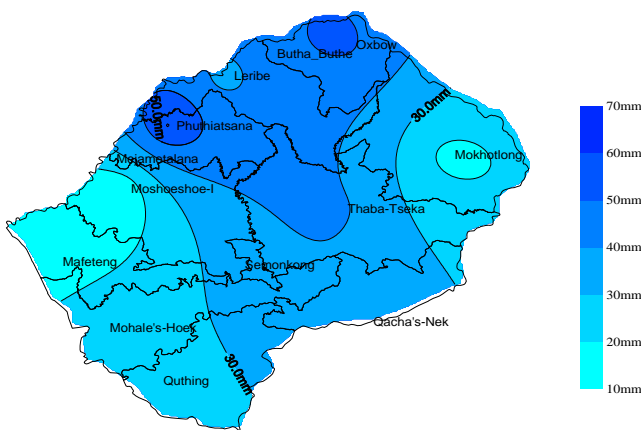


Fig.1: Actual rainfall distribution for the 2nd dekad of March 2004

Substantial rains were received over the northern and central parts of the country during the dekad under review. Oxbow, in the north, Phuthiatsana in the northwest and Thaba-Tseka in the central west registered 51.7mm, 60.6mm and 41.8mm respectively. However, Moshoeshe 1 and Mafeteng in the southwestern lowlands and Mokhotlong in the eastern highlands remained relatively dry (see fig.1 & fig.6).

Cumulative Rainfall from 1st Sept 03 to 20th March. 04

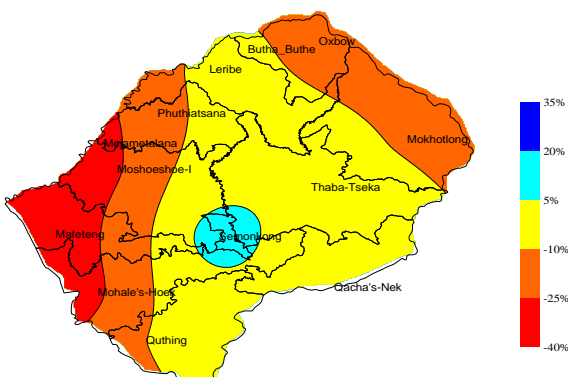


Fig.2: Cumulative rainfall departure from normal since 1st Sept 03 to 20th March 2004

Cumulative rainfall since September to 20th March stands at below normal to normal except for Semokong area where it is above normal (see table1 & fig.7). Percentage rainfall departure plot (see fig 2) still depicts the southern to southwestern region being under rainfall deficit for the current growing season. Some slight decline in rainfall can also be observed over the northern to northeastern boarder. The remainder of the country has been performing relatively better, which implies adequate soil moisture even to support winter cropping.

TEMPERATURE
11th - 20th March 2004

Slightly below normal to slightly above normal temperatures were registered (see table1). However, temperatures have generally started decreasing, as the season progresses into cold season (winter) and some stations registered below 4°C (see table 1). This in turn depresses the performance rate of the crops.

CROP STAGE AND CONDITION
11th - 20th March 2004

Improved vegetation with regard to crop (maize, sorghum) condition was observed at several places around the country. However, at some places crops were severely affected by hail storms which caused some damage to crops and some sustained permanent damage. Nevertheless, crop stage varies from flowering to grainfilling. This shows how young crops are, hence, there is high probability of most of them being in the risk of being caught by frost before maturing.

On the other hand, summer wheat is wax at maturity to full maturity with poor to good condition.



Fig 3: Maize crop condition at Thaba – Tseka on the 18th March 2004

Fig.3 above is an example of some crops in Thaba-Tseka (Highlands) district. However, some crops are still younger than the one shown above.



Fig.4: Maize crops swept away by hail storms at Ha Phaila and Ha Sephooko (Thaba-Tseka). Photo taken on the 19th March 2004

Fig.4 above is an example of some crops that sustained permanent damage due to hail storms in the Thaba-Tseka district.



Fig.5: Sorghum crops at Sehong-hong (Thaba-Tseka) on the 16th March 2004

Fig.5 above shows sorghum vegetation at grain forming stage. The crop stage is still at a very young stage, and stands the risk of being stricken by frost before maturity.

<p>DEKADAL OUTLOOK 21st - 31st March 2004</p>
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The low pressure system, which is situated over the southern parts of the region, is still expected to dominate throughout this forecast period. On the other hand, the Indian high pressure system is still expected to dominate the north eastern parts of the Sub-region and frontal systems are also expected to continue passing more frequently over the southern coast of the Sub-region. As a result light isolated thundershowers are expected to occur during this forecast period. Temperatures are anticipated to drop slightly as compared to the previous dekad.

Table 1

Rainfall and Temperature Summaries												
Rainfall (mm)								TEMPERATURE (°C)				
Total From Sept. 03 to 2nd Dek dek Mar 2004												
STATION	ALT.	Actual	Normal	Rain	Cum. Actual	Cum.Normal	%Dept. from	Minimum	Maximum	Dekadal	Dekadal	
NAME	(M)	R/Fall	R/Fall	Days	Rainfall	Normal	Normal	Lowest(Day)	Highest (Day)	Mean	Normal	Deviation
Butha-Buthe	1770	47.4	36.8	5	569.5	607.2	-6	9.9(13,16)	26.8(20)	17.2	17.4	-0.2
Leribe	1740	35.8	30.6	2	490.1	531.7	-7	9.0(13)	-	17.4	17.8	-0.4
Mafeteng	1610	13.2	35.2	4	339.8	508.5	-33	8.4(13)	26.5(19)	17.5	17.5	0
Maseru Airport	1530	24.1	26.7	4	354.2	513.1	-31	8.9(13)	27.5((18)	18.5	18.3	0.2
Mohale's hoek	1600	29.0	34.1	2	387.7	553.9	-30	8.0(13)	27.9(18)	18.1	18.6	-0.5
Mokhotlong	2200	17.3	25.6	4	431.8	487.8	-11	6.3(16)	24.4(11)	15.6	14.4	1.2
Ox-Bow	2600	51.7	52.0	7	776.2	918.8	-16	2.8(16)	18.4(20)	11.1	10.3	0.8
Phuthiatsana	1750	60.6	35.4	6	471.3	571.3	-18	8.4(13)	25.9(20)	18.2	17.8	0.4
Qacha's Nek	1970	38.4	31.0	4	576.9	622.9	-7	7.4(12)	25.1(19)	15.9	16.5	-0.6
Quthing	1740	24.3	37.7	4	475.5	534.2	-11	8.9(13)	26.7(18)	17.9	17.5	0.4
Semonkong	2458	33.8	28.6	5	561.3	503.5	11	3.6(15)	22.0(18)	13.0	13.7	-0.7
Moshoeshoe I	1628	11.9	40.3	4	401.1	561.4	-29	10.0(15)	26.5(18)	18.0	N/A	N/A
Thaba-Tseka	2160	41.8	29.3	3	471.0	469.3	0	7.2(13)	23.9(18)	14.4	14.7	-0.3

Fig.6

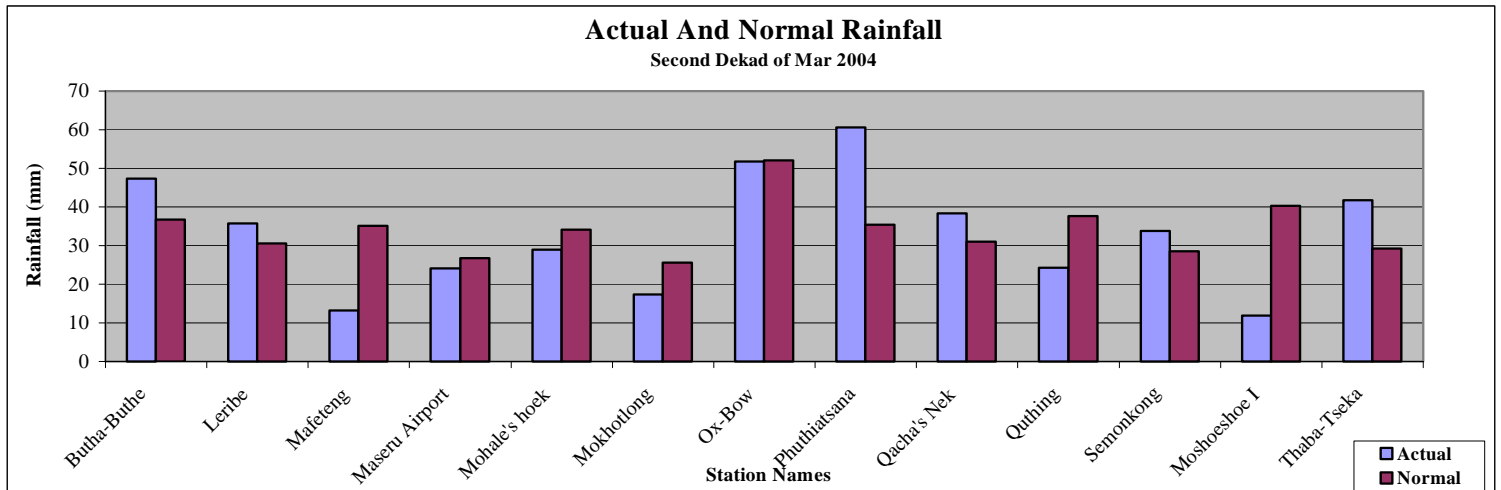
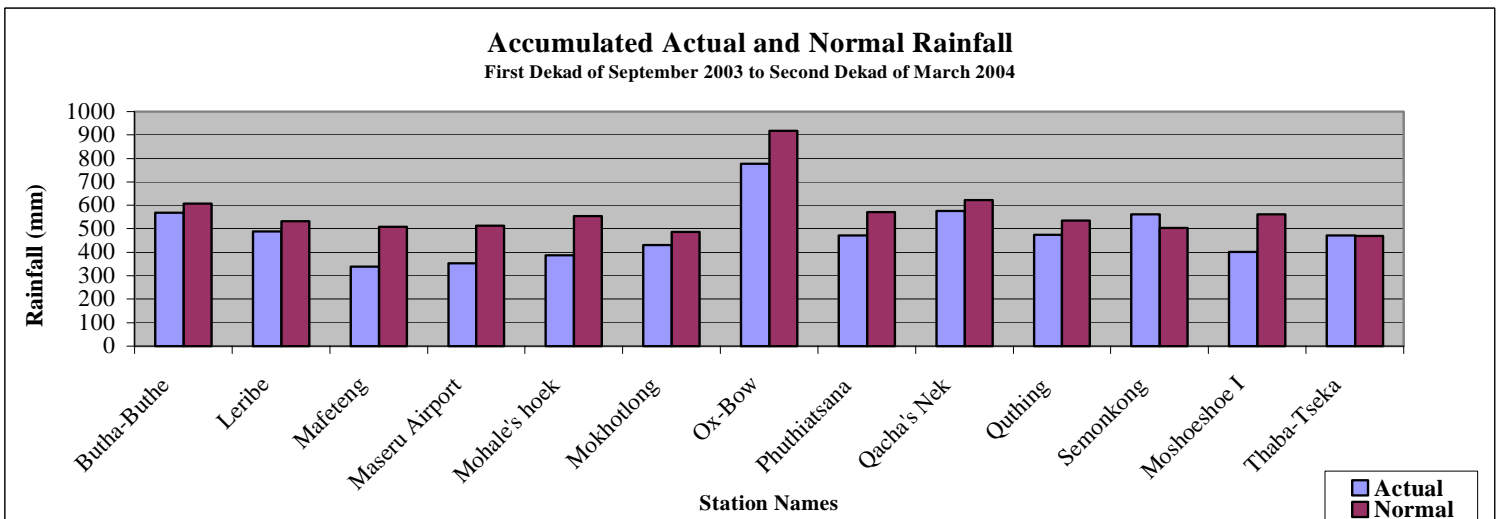


Fig.7



Glossary

Dekad : Ten day period

Normal: Average figure over a specific time period.

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

Cum. Stands for cumulative.

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.