

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

11th – 20th December 2003



Issue No.8/2003-04

Vol.3

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

Contents

Weather Summary

Page 1

Rainfall Situation

Page 1

Temperature

Page 1

Vegetation Condition

Page 1

Crop Stage and Condition

Page 2

Dekadal Outlook

Page 2

Seasonal Outlook

Page 2

Rainfall and Temperature Summaries

Page 3

Glossary

Page 4

Highlights

- ❑ Drought conditions still persistent.
- ❑ High day temperatures increased evaporation rate.
- ❑ Moisture stress experienced throughout the country.
- ❑ Harvesting of wheat has commenced.
- ❑ Rainfall improvement expected in the next dekad.

The Director
Lesotho Meteorological Services
Agrometeorological Section
P.O. Box 14515
Maseru 100, Lesotho

TEL: (+266) 22324374/22324425
FAX: (+266) 22325057/22350325
E-mail: agromet@lesmet.org.ls
<http://www.lesmet.org.ls>

WEATHER SUMMARY
11th – 20th December 2003

The second dekad of December was dry and very hot, especially the last half of the dekad. These conditions were due to a high pressure system, which has been dominant over the western parts of the sub-region. It was blocking moisture from the tropics to reach the southern parts of the central interior.

RAINFALL SITUATION
11th – 20th December 2003

The second dekad of December was very dry compared to the previous dekad (1st dekad of December). No rainfall was received in all the stations with the exception of Butha-Buthe, Phuthiatsana and Oxbow, which recorded 0.4mm, 1.4mm and 6.6mm respectively. The lack of rainfall impacted negatively on the cultivation of summer crops over the lowlands. As compared to the normal, all the stations recorded far below normal dekad rainfall (see table 1 & fig3).

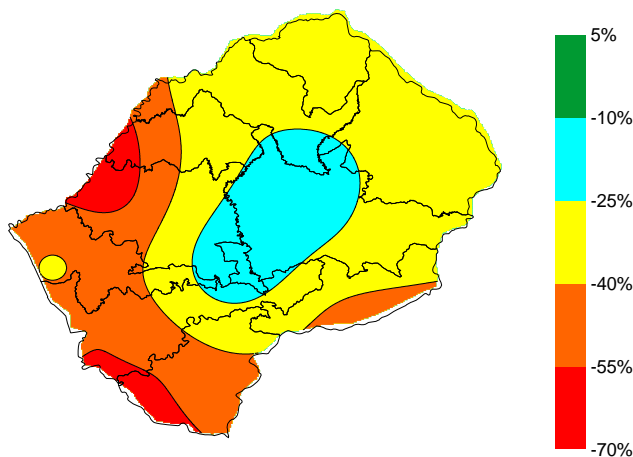


Fig.1: Cumulative rainfall departure from normal since 1st Sept to 2nd dekad Dec 03.

Cumulative rainfall since 1st September to 20th December 2003 is below normal (see fig 6). The central part of the country is the only region that experienced near normal cumulative rainfall. This is evidenced by the small percentage rainfall departure from normal (see fig 1).

TEMPERATURE
11th – 20th December 2003

The country experienced above normal temperatures. The deviation from normal ranges from 0.6°C to 3.7°C. Maximum temperatures were very high during some days as temperatures of above 30°C were recorded for majority of the stations. These high day temperatures increase the loss of water by evaporation from the soil. As a result growth and development of plants was hampered.

CROP STAGE AND CONDITION
11th – 20th December 2003

The escalating dry spells and strong winds have caused a serious water stress on plants/crops. The highlands and the foothills crop conditions are better compared to the ones over the lowlands even though the crops are experiencing moisture stress. Over the lowland areas, planting has been hampered by these dry spells, and there is no hope of further planting as it is now too late. The crops (Maize, Sorghum, Wheat) over the highlands and foothills are at emergence to vegetative stages.

Harvesting of wheat has commenced in some areas.

DEKADAL OUTLOOK
01st – 10th January 2004

Rainfall situation is expected to improve slightly during this last dekad of December as compared to the previous dekad, whereby light isolated thundershowers can be expected. Temperatures are also anticipated to drop slightly as compared to the previous one. However, it will still be warm.

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)					TEMPERATURE (°C)					
		Actual	Normal	Rain	Total From Sep 03 to		%Dept. from	Minimum	Maximum	Dekadal	Dekadal	
STATION	ALT.				2nd Dec03							
NAME	(M)	R/Fall	R/Fall	Days	Actual	Normal	Normal	Lowest(Day)	Highest (Day)	Mean	Normal	Deviation
Butha-Buthe	1770	0.4	36.6	1	168.6	256.5	-34	12.2(11)	33.5(20)	22.5	19.5	3.0
Mafeteng	1610	0.0	24.3	0	132.8	209.6	-37	10.0(15)	32.0(17)	21.5	19.9	1.6
Maseru Airport	1530	0.0	22.9	0	74.4	228.0	-67	13.0(15)	35.4(20)	23.6	20.5	3.1
Mohale's hoek	1600	0.0	28.3	0	107.1	234.7	-54	11.0(15)	34.0(20)	22.6	20.4	2.2
Mokhotlong	2200	0.0	26.6	0	146.7	210.7	-30	8.6(15)	N/A	19.2	16.3	2.9
Ox-Bow	2600	6.6	51.6	2	295.6	437.5	-32	2.6(15)	24.5(17)	13.6	11.5	2.1
Phuthiatsana	1750	1.4	30.3	1	131.8	243.2	-46	12.4(12)	34.3(20)	22.8	20.1	2.7
Qacha's Nek	1970	0.0	40.6	0	136.7	262.2	-48	8.6(15)	32.6(17)	20.5	17.6	2.9
Quthing	1740	0.0	26.1	0	99.8	239.7	-58	13.0(12)	33.8(17)	23.1	19.4	3.7
Semonkong	2458	0.0	22.9	0	199.0	225.2	-12	2.3(15)	28.9(17)	15.7	15.1	0.6
Moshoeshoe I	1628	0.0	34.0	0	94.6	248.6	-62	12.0(13,15)	34.4(20)	23.2	N/A	N/A
Thaba Tseka	2160	0	23.6	0	170.5	212.5	-20	8.8(15)	30.0(17)	18.9	17.1	1.8
Leribe	1740	0.0	25.4	0	162.7	220.3	-26	11.0(12)	33.2(20)	22.8	19.9	3.0

Fig.3

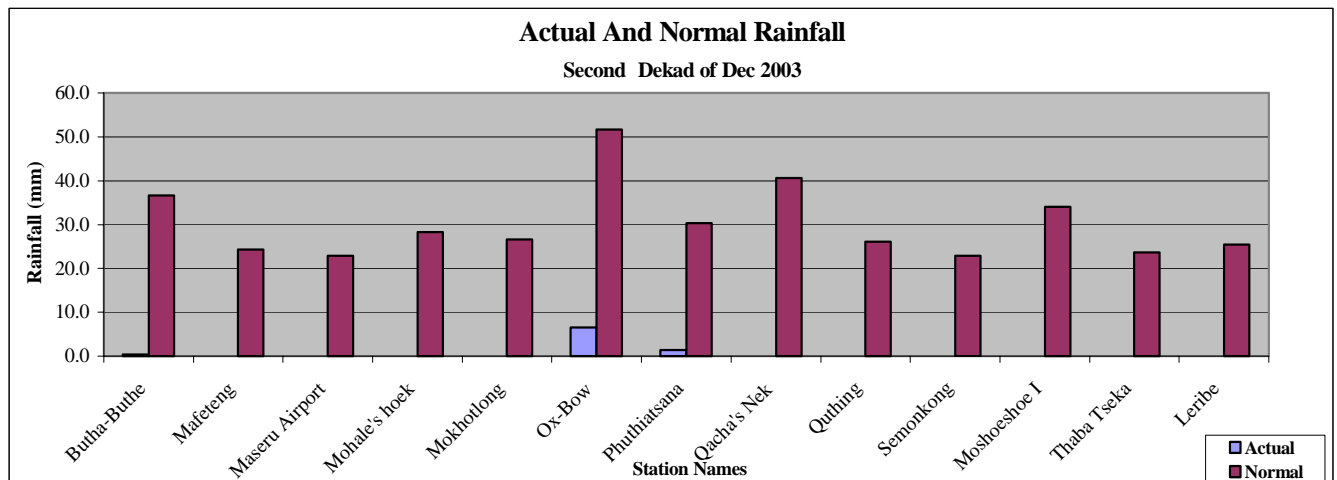
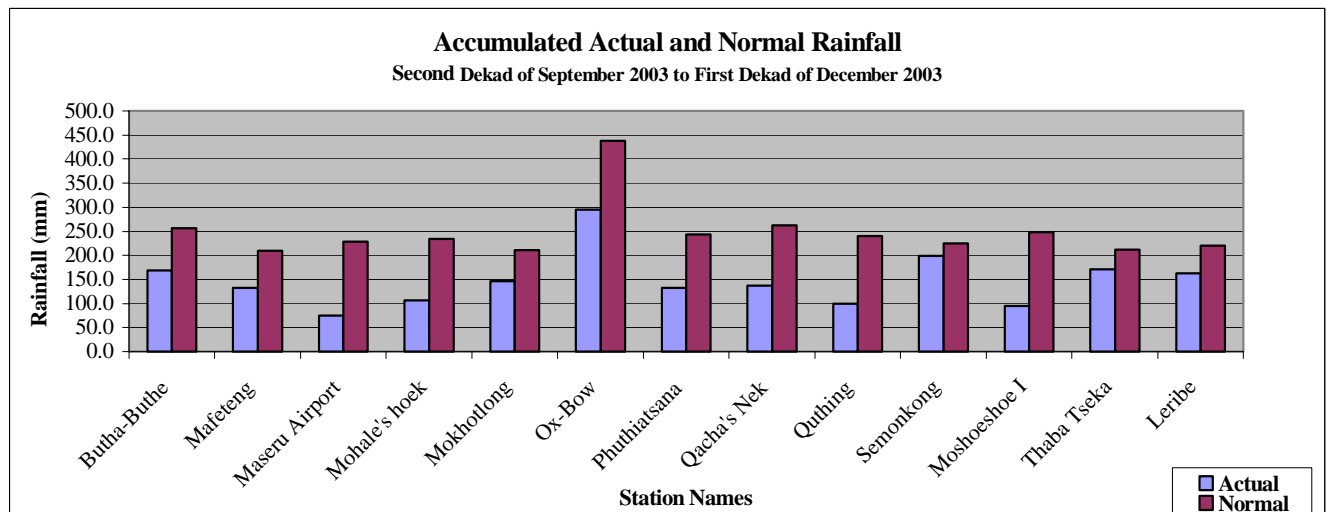


Fig.4



Glossary

Dekad : Ten day period

Normal: Average figure over a specific time period.

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

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

And it is

Produced by the

Lesotho Meteorological Services as a contribution to the

National Early Warning Unit for Food Security.

The Unit is coordinated by the Disaster Management Authority in the

Prime Minister's Office.

Comments and Contributions would be highly appreciated.