

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

10th – 20th April 2007



Issue No.20/2006-07

Vol.4

*...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

Crop Stage and Condition

Page 1

Dekadal Outlook

Page 2

Seasonal Outlook

Page 2

Rainfall and Temperature
Summaries

Page 3

Glossary

Page 4

Highlights

Last Dekad Review

- ❑ Wet weather conditions prevailed countrywide.
- ❑ Warm weather conditions occurred.
- ❑ Low cereal production estimates are projected.

Next Dekad Preview

- ❑ Isolated to scattered rain and thundershowers expected mainly in the southern and western areas.

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

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

WEATHER SUMMARY

11th - 20th April 2007

In the previous dekad, cold fronts frequently passed. The passage of the cold fronts pulled tropical moisture from the north and as a result scattered to widespread thundershowers were observed with more activities in the west and in the south. Cool to cold conditions were also experienced due to the passage of the fronts.

RAINFALL SITUATION

The country experienced normal to above normal rainfall during the second dekad of April 2007 with the exception of Mafeteng. Spatial as well as temporal distributions of rainfall were good. The rain days range from the lowest value of four days in some parts of the lowlands to as high as eight days in the highlands.

This makes the dekad under review the first dekad that the entire country receives normal to above normal dekadal rainfall in a dekad in this calendar year. However, the amounts of dekadal normal rainfall are declining from high summer amounts to low winter amounts; and as such, the normal dekadal rainfall were low compared to preceding dekads (since January 2007). The highest dekadal rainfall was experienced in the south (Quthing 52.9mm) and the southwest (Mohale's Hoek, 43.6mm). On the contrary, low dekadal rainfall amount was recorded at Mokhotlong and Mafeteng with 11.3mm and 16.1mm respectively (see *table 1* and *fig 2*).

Cumulative percentage rainfall departure from Normal

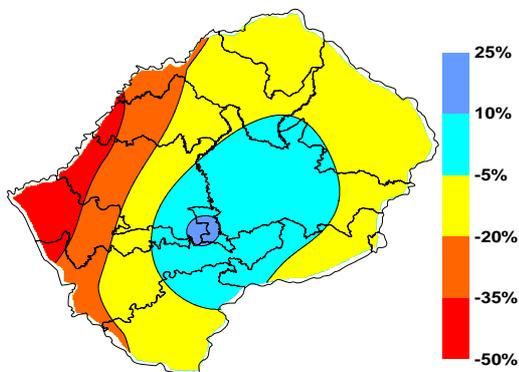


Fig.1: Cumulative rainfall departure from normal since 1st Sept 2006 to 20th April 2007.

Cumulative rainfall since September 2006 up to present is normal at few places and below normal at most places. The large deficit in cumulative rainfall is in the western parts of the lowlands areas (Berea, Maseru, Mafeteng and Mohale's Hoek). The highlands of Semonkong and Thaba-Tseka are the only areas that have positive actual cumulative rainfall percentage departure from normal (see *fig 1* & *table 1*). Due to the drought that prevailed during the previous three months, actual cumulative rainfall percentage departures from normal (of all areas of the country) decreased drastically from the value they were before then.

TEMPERATURE

Above normal mean dekadal temperatures were recorded countrywide with the exception of Qacha's Nek. Qacha's Nek like in the previous dekad became the only area to have below normal Mean temperature during the dekad under review.

Daily lowest minimum temperatures are gradually dropping to lower than 10°C at nights: this occurs every year as we transit into winter period. The lowest daily temperature of -0.6°C was experienced at Ox-Bow on the 16th.

CROP STAGE AND CONDITION

Current estimates show that the country is likely to have significantly low cereals production. The low productions come as a result of drought conditions that the country experienced during the critical periods of crops development (January – March). Crop failure was also enhanced by frost that occurred during the second dekad of March 2007.

Presently crops are at poor conditions and no significant improvements can be expected.

VEGETATION

The vegetation cover is still at bad state and not expected to improve until next summer. The poor vegetation cover may reflect bad rangelands. Presently livestock condition is not bad, but their conditions are expected to deteriorate with time.

WATER SITUATION

The rainfall that the country experienced recently has not significantly improved water situation in most areas of the country. However, the current improvements in river levels were as a result of surface water run-off.

The water availability in the capital Maseru is still not stable. In the coming season of spring (August – October), water availability is likely to be stressed.

DEKADAL OUTLOOK

21st – 30th April 2007

During this transition period frontal systems are expected to be active and also the surface interior trough is expected to deepen while advecting moist air southwards over the country resulting

in rain showers and thundershowers. Therefore the period is expected to experience isolated to scattered thundershowers and rain showers especially in the west and in the south.

SEASONAL OUTLOOK (April – June 2007)

There is a high likelihood of below average rainfall during this season. However, the El-Nino conditions that were prevailing since the second half of 2006 into this year have now dissipated. Temperatures are expected to be above average. The high likelihood of below normal winter precipitation and above average mean temperatures implies that winter is expected to be dry and it would therefore be risky to engage in expensive agricultural activities.

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)					Temperature (°C)					
		11 - 20 April 2007			Total From Sept06 to 2nd Dek April 07		11 - 20 April 2007					
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	37.5	22.1	4	628.4	763.6	-18	7.5 (16)	25.0 (11)	15.5	14.6	0.9
Leribe	1740	22.4	17.1	5	527.1	658.5	-20	6.7 (20)	25.9 (11)	15.9	14.7	1.2
Mafeteng	1610	16.1	24.0	4	339.0	612.1	-45	6.0 (12)	26.0 (17)	15.6	14.9	0.7
Maseru Airport	1530	38.8	20.3	5	348.9	611.9	-43	8.6 (20)	27.0 (11)	16.8	15.4	1.4
Mohale's hoek	1600	43.6	24.6	5	492.6	630.9	-22	6.3 (12)	26.5 (11)	16.2	15.3	0.9
Mokhotlong	2200	11.5	11.3	4	501.0	558.0	-10	3.7 (16)	22.4 (11)	12.9	12.0	0.9
Moshoeshe I	1628	35.2	18.0	5	445.8	669.6	-33	8.5 (20)	26.7 (11)	16.4	15.4	1.0
Oxbov	2600	32.2	32.6	7	955.6	1060.7	-10	-0.6 (20)	16.2 (17)	8.0	7.2	0.8
Phuthiatsana	1750	21.3	21.5	4	464.5	679.1	-32	9.3 (20)	26.0 (11,16)	16.7	15.6	1.1
Qacha's Nek	1970	36.6	12.4	8	628.2	706.5	-11	4.4 (13)	24.1 (11)	14.2	16.6	-2.4
Quthing	1740	52.9	24.5	5	563.8	698.0	-19	9.4 (12)	25.5 (11)	15.9	15.0	0.9
Semonkong	2458	26.6	13.5	6	651.4	571.0	14	2.2 (12)	20.6 (11)	11.3	10.1	1.2
ThabaTseka	2160	27.3	10.1	8	585.3	560.0	5	5.5 (13)	21.5 (11)	12.7	12.0	0.7

Fig.3

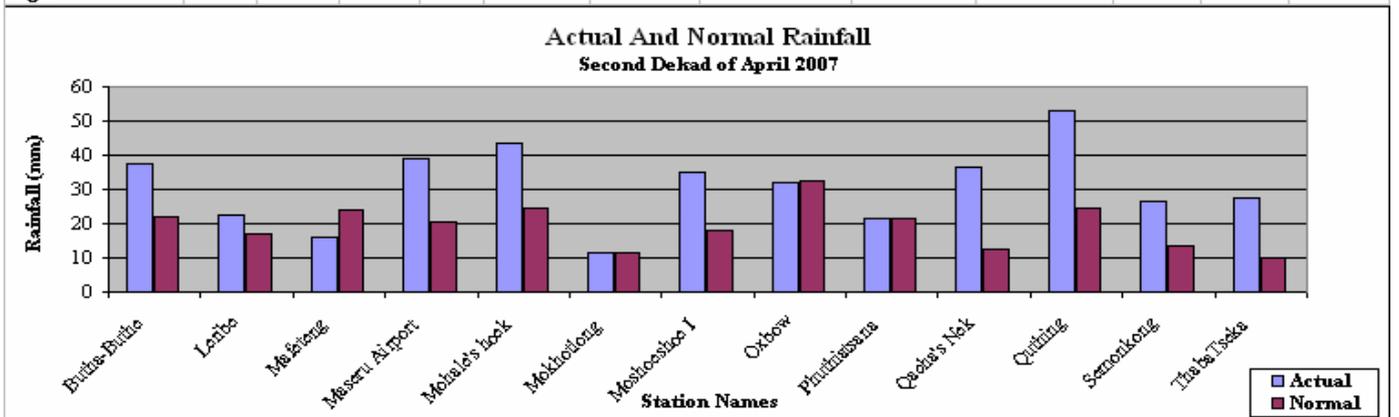
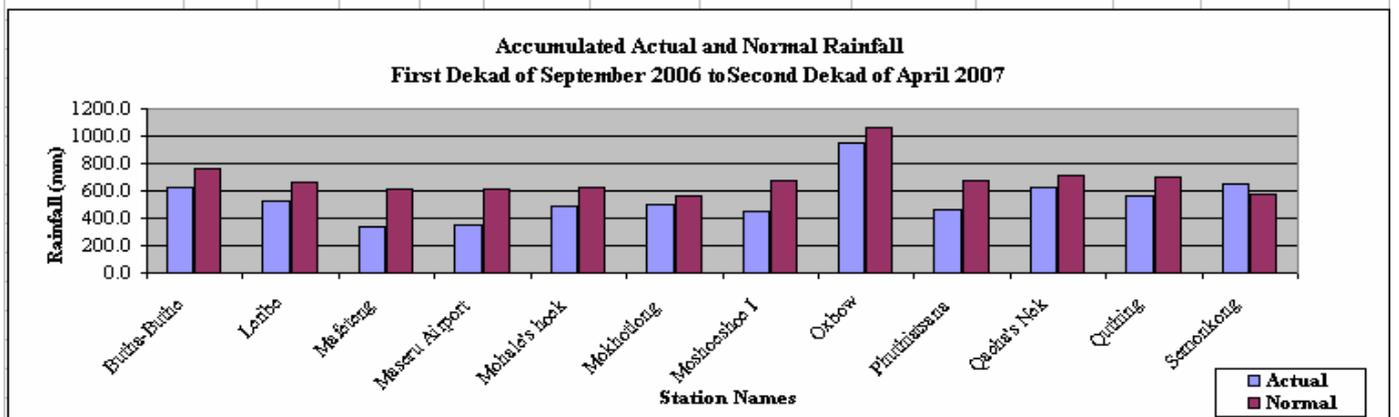


Fig.4



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.