

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

11th – 20th October 2004



Issue No.2/2004-05

Vol.3

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

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Highlights

- ❑ Good rains received over the entire country.
- ❑ Quite an extensive part of the country has not received adequate cumulative rains.
- ❑ Drop in temperatures experienced countrywide.
- ❑ Slight crop damage due to frost experienced but crops are reported to be recovering.
- ❑ Planting has not commenced in the lowlands.

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WEATHER SUMMARY

The dekad was dominated by a deep surface trough which was supported in the upper level by upper air trough. This trough developed over the western parts of sub region and progressed eastwards very slowly. As a result, cloudy and cool weather conditions with widespread showers and thundershowers occurred.

RAINFALL SITUATION

Rainfall Distribution

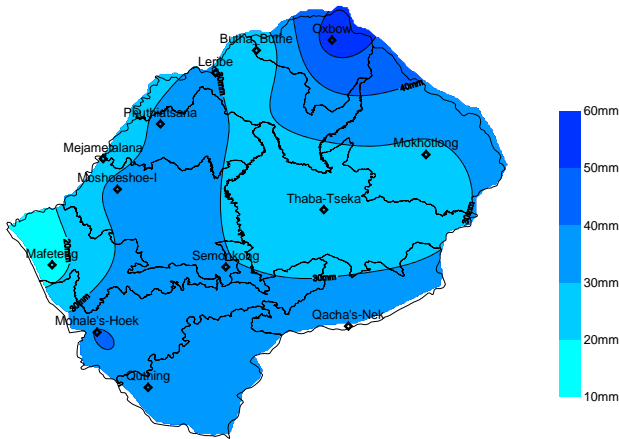


Fig.1: Actual Dekadal Rainfall for the 2nd Dekad of October 2004

Relatively good rains were received over the entire country as opposed to the previous dekad. Some of the northern to north eastern regions and most of the central lowlands to the extreme southern tip registered rainfall in excess of 30mm. Otherwise the remaining part of the country received rainfall within the range of 14 to 27.5mm (see table 1 and fig1) . The lowest rainfall of 14.5mm was registered at Mafeteng. However, on a whole spatial and temporal rainfall distribution was rather satisfactory.

Cumulative Percentage Rainfall Departure From Normal

Cumulative rainfall from 1stSeptember to 20th October 04 shows normal to slightly above normal rainfall with some stations still lagging behind as they are below the normal (see fig 4).

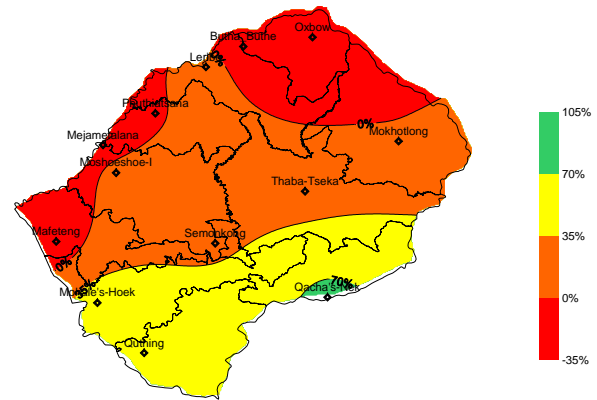


Fig.2: Cumulative rainfall departure from normal since 1st Sept to 20th Oct 04.

Quite an extensive part of the country has not received adequate cumulative rainfall since 1st September to 20th October 04 (see fig.2 - rust and reddish shading). However, the southern to south eastern parts have received fairly good cumulative rainfall (yellowish and greenish shading).

TEMPERATURE

Normal to slightly above normal temperatures were registered. Nevertheless, on the 11th and 14th there was a general drop in temperature countrywide and in some highlying areas negative temperatures were experienced (see table 1) with some areas temperatures dropping below 8°C. These temperatures have negative effects to crops as they are not optimal to support germination.

CROP STAGE AND CONDITION

Maize and sorghum are at emergence stage over some areas in the highlands where planting started in late August to early September. There has been some slight crop damage as a result of the frost that occurred on the 11th and 14th in Semonkong and Mokhotlong. However, good rains that occurred recently have helped in recovery of such crops. In general, planting is still in progress at most areas in the highlands. Planting of summer wheat has commenced in Mokhotlong.

Planting in the lowlands has not commenced.

DEKADAL OUTLOOK**21st – 31st October 2004**

The third dekad of October is still expected to be generally wet. Surface troughs are still expected to persist over the sub region but they will be

shallow. As a result , rainfall situation is anticipated to be slightly lower than in the previous dekad.

Table 1

		Rainfall and Temperature Summaries						TEMPERATURE (°C)				
		Rainfall (mm)			Total From 1st Sept. 04 to 20th Oct. 04			11 -20th Oct 2004				
STATION NAME	ALT. (M)	Actual	Rain	Normal	Cum.Act & Nor. Rainfall		%Dept. from	Minimum	Maximum	Dekadal	Dekadal	Deviation
		R/Fall	Days	R/Fall	Actual	Normal	Normal	Lowest(Day)	Highest (Day)	Mean	Normal	
Butha-Buthe	1770	21.4	5	22.9	47.1	67.7	-30	6.2(14)	27.6(17)	16.7	16.2	0.5
Leribe	1740	30.9	6	22.1	73.8	62.1	19	8.0(14)	27.5(16)	17	16.9	0.1
Mafeteng	1610	14.5	6	18.4	40.6	56.5	-28	4.1(11)	27.5(19)	17.3	16.4	0.9
Maseru Airport	1530	22.4	5	22.7	53.2	73.5	-28	7.5(11)	28.8(18)	18.3	16.0	2.3
Mohale's hoek	1600	40.7	4	26.9	113.0	71.3	58	4.0(11)	28.0(16)	16.7	16.9	-0.2
Mokhotlong	2200	27.3	4	17.3	61.7	58.6	5	2.6(11)	24.5(16)	13.8	13.6	0.2
Ox-Bow	2600	55.6	9	45.3	102.0	133.6	-24	-1.0(14)	19.5(16)	10.0	8.9	1.1
Phuthiatsana	1750	31.4	6	23.3	65.0	69.3	-6	8.0(11,14)	29.2(16)	17.7	16.9	0.8
Qacha's Nek	1970	37.0	6	22.9	123.0	68.0	81	6.2(11)	26.7(16)	15.8	14.9	0.9
Quthing	1740	38.3	5	24.6	105.0	76.0	38	7.1(11)	28.0(16)	17.3	16.1	1.2
Semonkong	2458	30.5	7	24.2	88.6	69.9	27	-2.4(11)	22.6(16)	11.6	10.2	1.4
Moshoeshoe I	1628	34.8	5	20.6	77.2	92.2	-16	-1.0(14)	28.4(16)	17.7	N/A	N/A
Thaba-Tseka	2160	21.3	5	21.4	83.5	69.9	19	2.9(11)	24.6(16)	13.9	14.0	-0.1

Fig.3

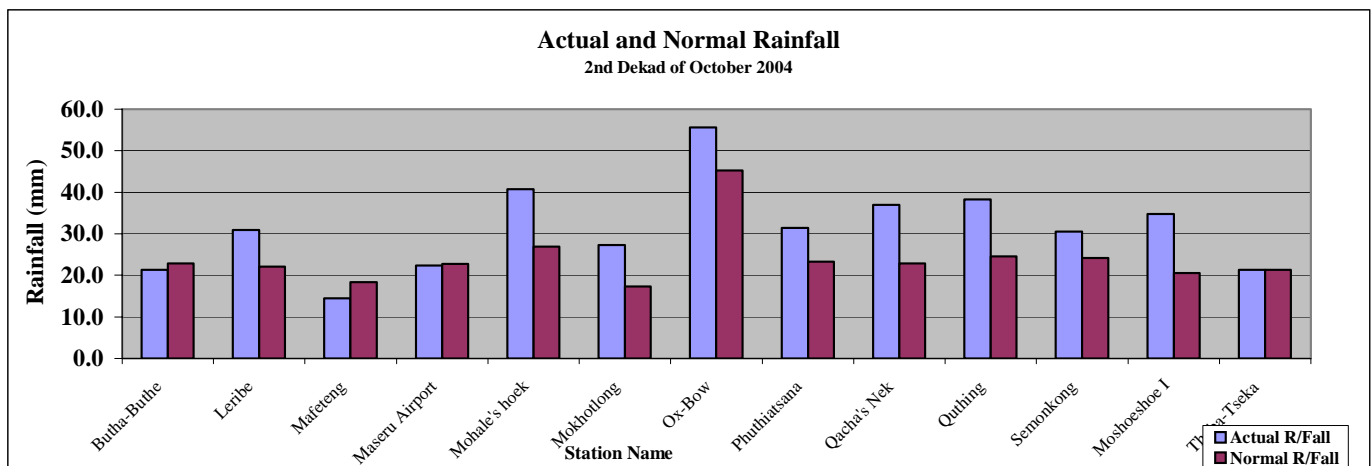
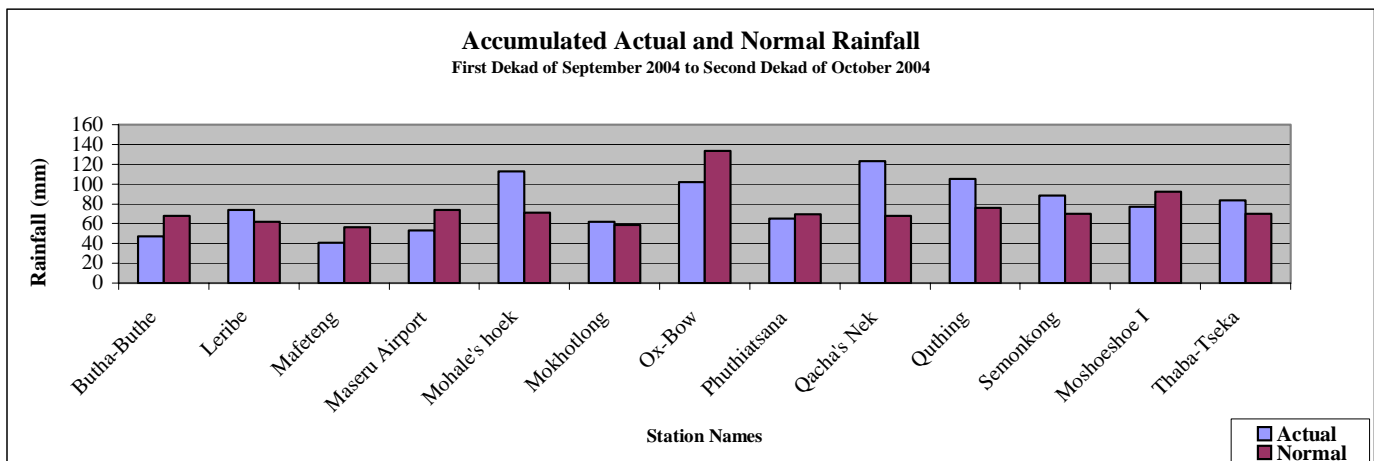


Fig.4



Glossary

Dekad : Ten day period

Normal: Average figure over a specific time period.

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

NDVI: Normalized Difference Vegetation Index – simply implies how good or bad the vegetation is for the specific period.

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.