

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

01st – 10th December 2006



Issue No.7/2006-07

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

Vegetation

Page 1

Crop Stage and Condition

Page 2

Dekadal Outlook

Page 2

Rainfall and Temperature
Summaries

Page 3

Glossary

Page 4

Highlights

- ❑ Below normal rainfall throughout the country.
- ❑ High temperatures were experienced
- ❑ Cumulative rainfall is below to above normal.
- ❑ Vegetation below normal
- ❑ Weeding of crops in progress.
- ❑ Dry conditions are expected.

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

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

WEATHER SUMMARY

The surface interior trough was dominant in the interior of the subcontinent but remained shallow. At upper levels the flow was zonal and anticyclonic. As a result isolated to scattered thundershowers were experienced mainly in the northern and in the eastern parts of the country.

RAINFALL SITUATION

The rainfall registered during this dekad was far below normal throughout the entire country and Phuthiatsana received no rainfall (see table 1 and fig.3). The highest dekadal rainfall of 16.2mm was registered at Semonkong in the central highlands. These low amounts of rainfall may not be sufficient to sustain crops at these early vegetative stages and the lengthy dry spells can cause re-sowing in some fields.

Cummulative % Departure from Normal

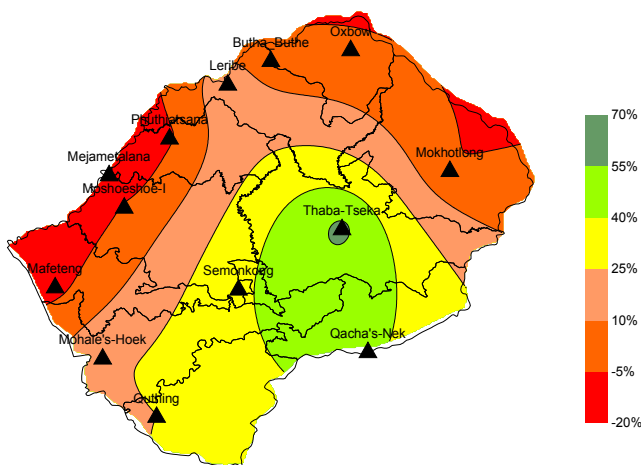


Fig.1: Cumulative rainfall departure from normal since 1st Sept to 10th December 2006.

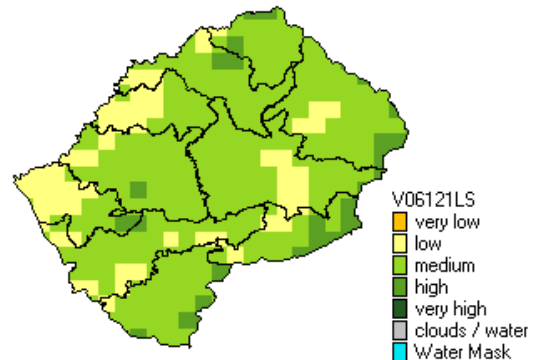
On the whole, cumulative rainfall (1st September to 10th December 2006) is below in the western lowlands and northern highlands, and the rest of the country had received improved cumulative rainfall (Table 1 & Fig 4). Leribe, Mochale's Hoek, Quthing, Semonkong and Thaba-Tseka are the only stations, which recorded above normal cumulative rainfall with the cumulative percentage departure from normal of 20%, 23%, 25%, 37% and 58% respectively. Maseru Airport has the lowest deficit of cumulative rainfall. The cumulative rainfall ranged from 165.5mm

recorded at Maseru Airport to 322.8mm at Thaba-Tseka.

TEMPERATURE

Above normal temperatures were experienced over the entire country, except Semonkong, which recorded mean temperature slightly below normal. Temperature deviations are high with Mochale's Hoek experiencing the highest deviation of 3.3°C and Semonkong had the lowest deviation of -0.1°C (Table 1). The entire country excluding Semonkong and Thaba-Tseka had the highest maximum temperatures of above 30°C on different dates of December. The high temperatures experienced, have the negative consequences on crops as they increase the rates of evapotranspiration and thus deplete the soil water content.

VEGETATION



The vegetation cover for the dekad under review is slightly better than the vegetation for the last dekad of November 2006. This is true especially in the northern lowlands. The status of present vegetation is normal to slightly below normal throughout the country.

CROP STAGE AND CONDITION

Crops (maize and sorghum) are at an emergence to early vegetative stage in most parts of the lowlands. At some few places in the low-lying areas planting is in progress. High temperatures and low rainfall can cause water stress to crops.

Weeding is in progress in most parts of the highlands and some parts of the lowlands. Harvesting of winter wheat has started in the lowlands.

the northern and northeastern parts of the country.

DEKADAL OUTLOOK

11th – 20th December 2006

The prevailing dry conditions are expected to persist for the rest of the dekad. However isolated thundershowers are still anticipated over

Table 1

		Rainfall and Temperature Summaries										
		Rainfall (mm)						Temperature (°C)				
		Total From Sept to 1st Dek Dec 06						1 - 10 December 2006				
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	16.1	39	3	261.9	267.8	-2	8.5(4)	31.9(8)	20.7	18.7	2.0
Leribe	1740	17.1	36.1	2	270.6	225.6	20	7(5)	31.6(7)	19.7	19	0.7
Mafeteng	1610	3.1	28.7	1	177.2	196.7	-10	9(5)	31(4)	20.0	18.9	1.1
Maseru Airport	1530	1.3	29.9	2	165.5	207.1	-20	8(5)	32.5(7)	20.9	19.9	1.0
Mohale's hoek	1600	14.6	35.5	3	259.8	211	23	15.2(8)	31(7)	22.9	19.6	3.3
Mokhotlong	2200	14	27.4	3	241.2	252	-4	4.5(5)	30.1(9)	16.8	15.9	0.9
Moshoeshoe I	1628	2.6	33.2	1	213.6	222.8	-4	8(5)	31.9(7)	20.7	19.7	1.0
Phuthiatsana	1750	0	30.3	0	223	239.2	-7	8.9(5)	31.9(8)	21.1	19.6	1.5
Quthing	1740	13.8	32.3	4	294.7	236.1	25	8.1(5)	30.2(7)	20.2	19.3	0.9
Semonkong	2458	16.2	32.4	3	291.8	213.6	37	0.4(5)	25.4(7)	14.2	14.3	-0.1
Thaba-Tseka	2160	7	30.9	2	322.8	204.3	58	4.5(5)	26.9(7)	16.1	15.8	0.3

Fig.2

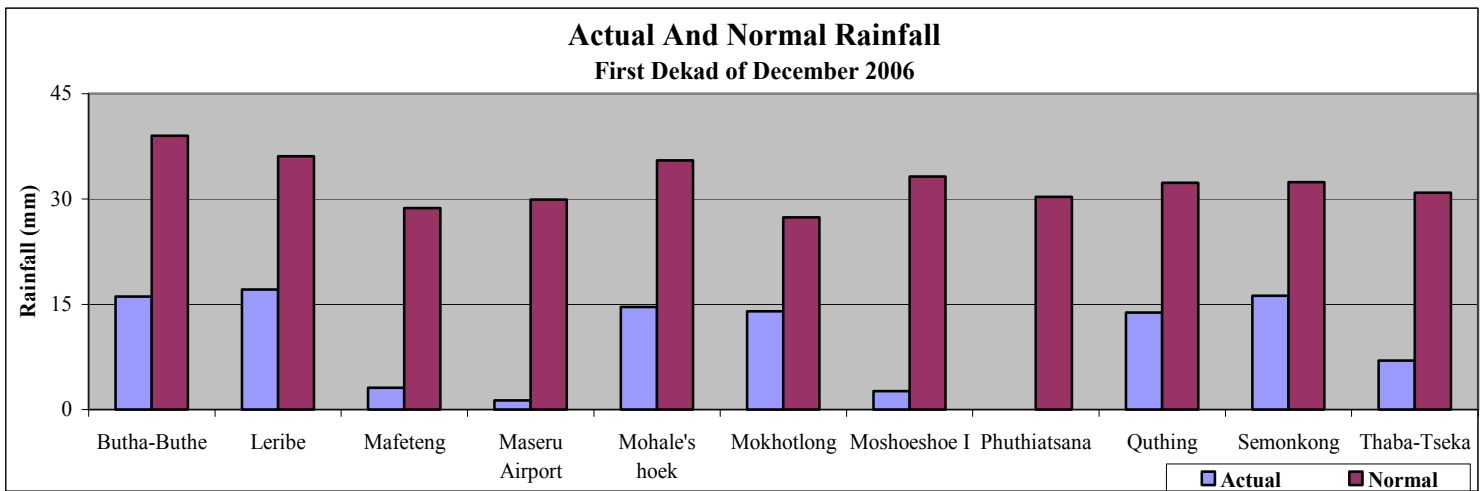
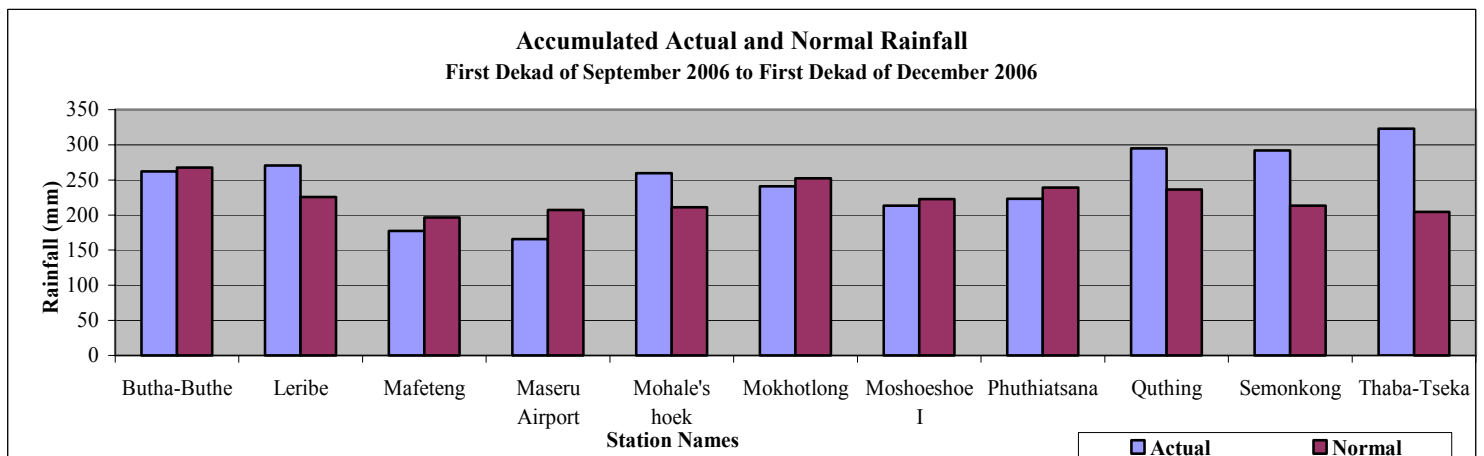


Fig.3



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.