

LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

21 – 30 November 2007



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*...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

Rainfall and Temperature
Summaries
Page 3

Glossary
Page 4

Highlights

- ❑ High rainfall received.
- ❑ Decrease in mean temperatures experienced in most places.
- ❑ Crops at germination.
- ❑ Wet conditions expected.

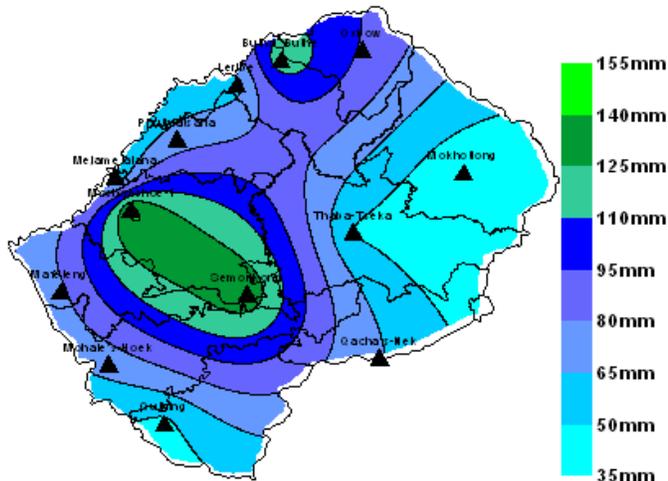
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WEATHER SUMMARY

The surface low-pressure system and the interior trough dominated the last ten days. As a result, there was moisture influx into the subcontinent giving generally scattered to widespread rain and thundershowers with some few exceptions where there was a circulation of dry air.

RAINFALL SITUATION



Map 1: November 2007, 3rd Dekad rainfall

The last dekad of November 2007 became the only dekad in November 2007 to be completely wet countrywide. All areas of the country recorded above normal dekad rainfall. Both spatial and temporal distributions of rainfall improved during the dekad under review (see Map 1, Table 1 and Fig 1). Moshoeshoe 1 and Semonkong experienced heavy downpours of rainfall exceeding 90mm and 70mm respectively during the last two days of the dekad, while Butha-Buthe recorded more than 60mm of rainfall in the first two days of the dekad.

Moshoeshoe 1 (143.6mm) and Semonkong (136.4mm) recorded the highest dekad rainfall. Mokhotlong (38.3mm) and Quthing (48.7mm) experienced the lowest dekad rainfall.

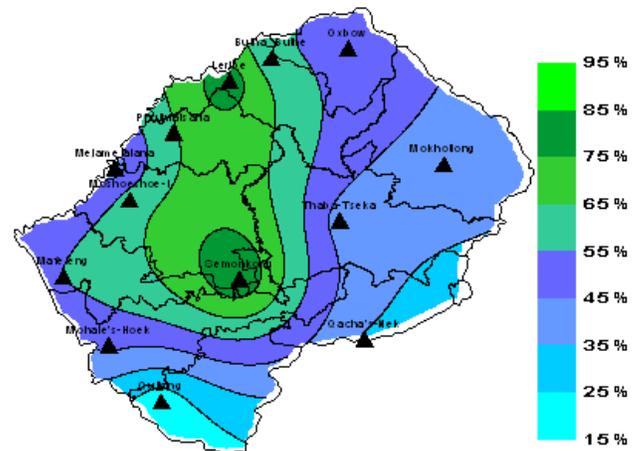
Cumulative Rainfall Percentage Departure From Normal Since September 2007.

Accumulated rainfall since the beginning of September 2007 to the last dekad of November

2007 has always been normal to above normal countrywide since October. Although the rainfall percentage departure decreased during the previous two successive dekads due to dry spells that prevailed, it has improved again. Rainfall percentage departure from normal at Moshoeshoe 1 has improved to 60% above normal from the value of 4% below normal during the previous dekad.

Butha-Buthe (359.3mm) and Leribe (343.7mm) in the north of the country have highest amounts of accumulated rainfall since September, and Semonkong (334.7mm) comes next. On the other hand Quthing (240.8mm), Mokhotlong (242.1mm) and Thaba-Tseka (243.3mm) have the lowest accumulated rainfall.

Semonkong (85%) has become the area with the highest rainfall percentage departure from normal, and is followed by Leribe (81%). Quthing and Qacha's Nek have the lowest departures of 18% and 34% respectively (see Map 2 and Table 1).



Map 2: Rainfall % Dep. from Normal (Sept - Nov 3rd Dek 2007)

TEMPERATURE

Mean dekadal temperatures were below normal during the last dekad of November 2007. The only area that became an exception with slightly above normal dekadal mean temperature was Mokhotlong with 0.4°C above normal (see Table 1). Lowest dekadal mean temperature deviation from normal was -1.7°C and -1.6°C at Moshoeshoe 1 and Maseru Airport respectively.

The highest daily maximum temperature of the dekad was 28.6°C on the 21st at Maseru Airport while the lowest daily minimum temperature of 3°C was recorded at Semonkong on the 28th (see Table 1).

CROP STAGE AND CONDITIONS

Land preparation and sowing continued during the dekad under review, and that could mark the end of land preparation for summer cropping at most places in the country. Any summer crops that can be planted in December faces a high risk of frost attack in autumn.

Summer crops (maize and sorghum) are mostly at germinating to early vegetative stages. These crops are at good conditions and they are on time. However, there are some crops that are yet to germinate. Winter wheat stages vary from

watery ripe kernels to kernels hard. However, the wheat is not yet ready for harvest. Conditions of the wheat range from fair to good. Due to characteristics of the rainfall that the country is experiencing (heavy downpours and sometimes hailstorms) put the wheat at risk of being threshed while still in the fields. That indicates that wheat should be harvested as soon as it is fully ripe.

DEKADAL OUTLOOK

1 – 10 December 2007

Generally wet weather conditions are expected for the coming ten days. Good moisture influx and well-positioned interior trough are likely to result in, mainly isolated to scattered rain and thundershowers with a possibility of hail towards the end of the dekad.

Table 1

Rainfall and Temperature Summaries												
		Rainfall (mm)						Temperature (°C)				
		21 - 30 Nov 2007			Total From Sept06 to 3rd Dek Nov 07			21 - 30 Nov 2007				
STATION	ALT.	Actual	Normal	Rain	Cummulative		% 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	121.4	35.4	5	359.3	228.8	57	8.2 (28)	26.5 (21)	17.0	18.3	-1.4
Leribe	1740	59.1	29.0	5	343.7	189.5	81	8.0 (28)	27.8 (21)	17.1	18.6	-1.5
Mafeteng	1610	77.0	26.6	3	261.0	168.0	55	7.0 (28)	27.5 (21)	16.7	18.2	-1.5
Maseru Airport	1530	47.4	28.8	5	248.4	177.2	40	9.4 (28)	28.6 (21)	17.8	19.4	-1.6
Mohale's hoek	1600	71.0	29.7	4	258.3	175.5	47	6.5 (28)	28.0 (21)	17.3	18.8	-1.5
Mokhotlong	2200	38.3	26.5	4	242.1	171.0	42	5.6 (29)	26.6 (27)	15.5	15.1	0.4
Moshoeshoe I	1628	143.6	22.9	5	303.6	189.6	60	8.3 (27)	27.0 (21)	17.1	18.8	-1.7
Qacha's Nek	1970	66.4	29.2	7	256.1	191.1	34	5.6 (28)	26.1 (21)	15.7	16.1	-0.4
Quthing	1740	46.3	30.3	3	240.8	203.8	18	8.0 (28)	26.8 (21)	17.3	18.3	-1.0
Semonkong	2458	136.4	27.9	5	334.7	181.2	85	3.0 (28)	24.0 (25)	12.2	13.6	-1.4
ThabaTseka	2160	48.7	29.4	5	243.3	173.4	40	4.1 (28)	24.6 (21)	14.1	15.2	-1.1

Fig. 1

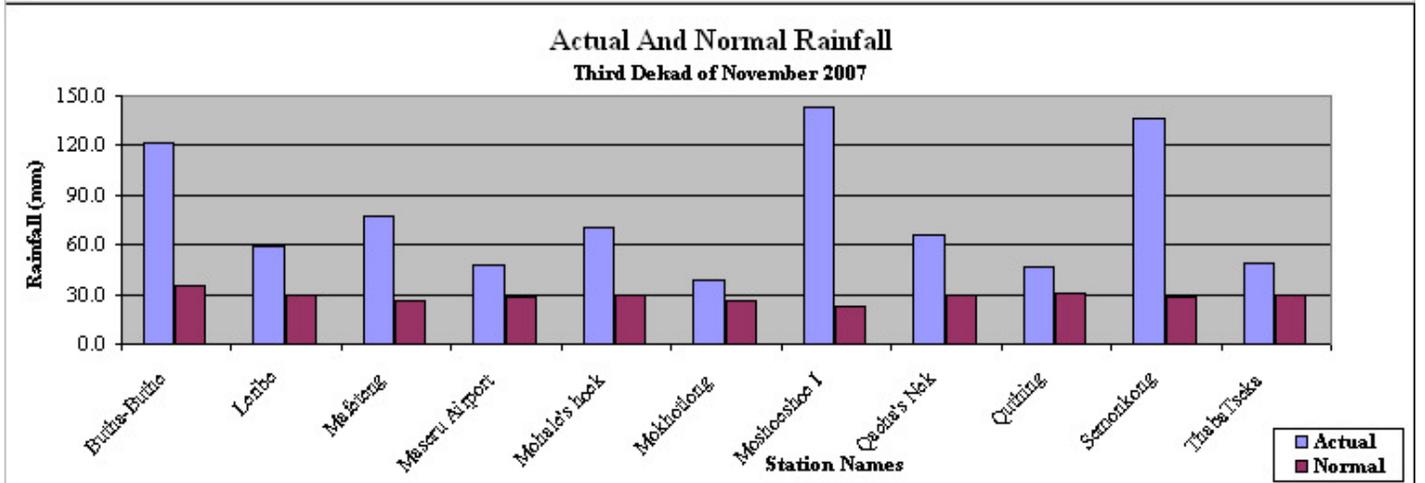
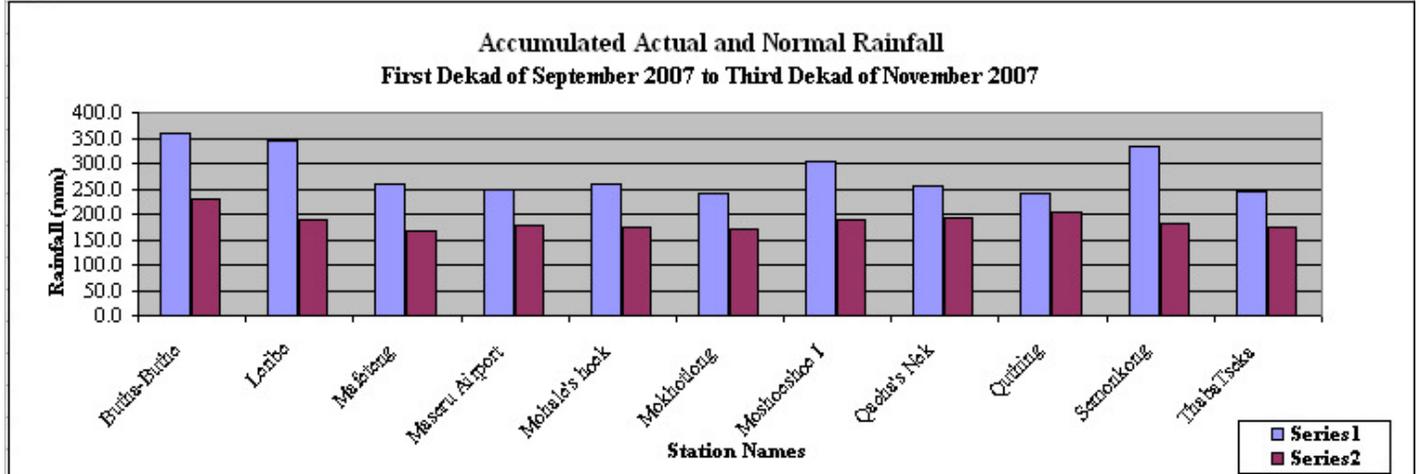


Fig. 2



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.

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And it is

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Comments and Contributions would be highly appreciated.