### LESOTHO METEOROLOGICAL SERVICES

(LEKALA LA TSA BOLEPI)



## **Ten-Day Agrometeorological Bulletin**

21st -31st March 2007



Issue No.18/2006-07 Vol.4

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

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# Highlights

- □ Below normal rainfall received.
- □ Temperatures were above normal.
- □ Relatively poor cumulative rains received.
- Crops are under poor conditions
- □ Temperatures expected to remain warm.
- □ Suppressed rainfall expected.

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#### **WEATHER SUMMARY**

The interior trough became fairly active in the last ten days and that was coupled with low-level moisture induced by the Indian Ocean Anticyclone. As a result isolated to scattered thundershowers were observed. However, most areas suppressed rainfall.

#### **RAINFALL SITUATION**

Dry conditions that persisted over the country since the beginning of January continued into this dekad under review. The rainfall received was below normal in most parts of the country. It was only Quthing and Semonkong, which registered rainfall above normal where 48.2mm and 32.0mm were recorded respectively. These poor rainfalls simply indicate that this season has been dominated by dry spells.

# **Cumulative percentage rainfall departure** from Normal

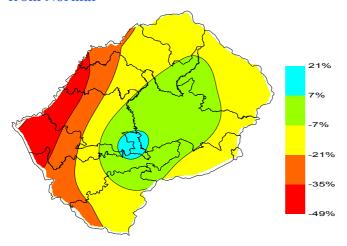


Fig.1: Cumulative rainfall departure from normal since 1st Sept to 31st March 2007.

Poor actual cumulative rainfall was registered during this dekad except in the central parts of the country. The percentage of normal rainfall map above depicts that the country received below normal rainfall, except Semonkong and Thaba-Tseka, which registered cumulative rainfall above normal with percentage departures of 14% and 3% respectively.

#### **TEMPERATURE**

Temperatures have started showing gradual drop from the high summer values indicating that winter season is approaching. However, the mean temperatures were slightly above normal during this dekad. This is witnessed in table 1 where the whole country registered only positive temperature deviations. The lowest daily minimum temperature of the dekad was recorded at Oxbow with  $-2.0^{\circ}$ C on the  $31^{st}$ . And the highest dekadal temperature of  $30.6^{\circ}$ C was registered at Maseru Airport on the  $22^{nd}$ .

#### **CROP STAGE AND CONDITION**

Summer crops have gone under water stress since the beginning of January. As a result they are currently in poor conditions. Furthermore, due to the prevailing dry conditions and high temperatures, some crops dried out completely especially in the southern parts of the country.

#### DEKADAL OUTLOOK

1st - 10th April 2007

The rain bearing systems are expected to retreat to north during the transition period not much activities are expected. However during this period both the polar systems (cold fronts) and the tropical systems may become active and their interaction at times results in scattered to widespread rain over our area.

But with the current trend the first ten days are expected to receive suppressed rainfall. Temperatures are expected to drop and at times it will become cold due to passage of polar systems south of our area.

#### Seasonal Outlook (March – May 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 and into this year are now slowly shifting into neutral phase. Temperatures will be above average.

Table 1

				Rai	nfall and Ten	perature Sun	nmaries					
	Rainfall (mm)						Temperature (°C)					
		21 - 31 Mar 2007			Total From Sept06 to 3rd Dek Mar 07			21 - 31 Mar 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	15.2	42.7	3	577.4	712.7	-19	6.5 (21)	29.5 (22)	18.5	16.8	1.7
Leribe	1740	17.5	33.7	5	485.3	615.3	-21	5.5 (25)	30.5 (22)	18.2	17.2	1.0
Mafeteng	1610	15.5	31.7	2	312.4	562.4	-44	7.0 (21)	30.5 (22)	18.8	16.6	2.2
Maseru Airport	1530	7.3	36.7	3	291.3	567.9	-49	7.6 (21)	30.6 (22)	19.7	18	1.7
Mohale's hoek	1600	24.3	29.6	4	432.6	581.6	-26	7.0 (21)	30.5 (22)	18.6	17.2	1.4
Mokhotlong	2200	11.0	22.4	3	481.8	531.1	-9	4.0 (22)	25.0 (21)	15.1	14.6	0.5
Moshoeshoe I	1628	8.7	39.7	5	396.4	635.4	-38	8.4 (21)	29.5 (22)	19.2	17.6	1.6
Oxbow	2600	35.1	51.2	7	905.5	993.4	-9	-2.0 (31)	20.4 (22)	10.3	9.6	0.7
Phuthiatsana	1750	1.9	32.6	3	417.3	629.1	-34	8.0 (21)	29.6 (21)	19.7	17.8	1.9
Qacha's Nek	1970	15.3	30.5	4	565.9	674.3	-16	7.9 (25)	27.1 (22)	17.0	15.6	1.4
Quthing	1740	48.2	34.6	3	499.4	645.9	-23	10.0 (21)	29.7 (22)	19.2	17.3	1.9
Semonkong	2458	32.0	31.1	5	612.8	537	14	0.0 (25)	24.2 (22)	13.4	12.6	0.8
ThabaTseka	2160	17.1	19.1	6	553.9	535.4	3	6.4 (31)	24.3 (22)	15.2	14.3	0.9

Fig.3

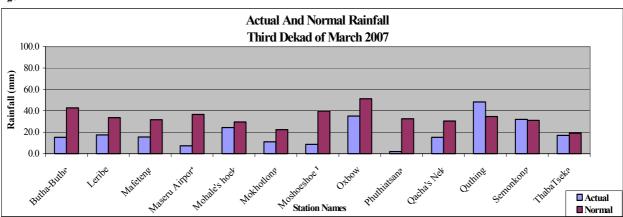
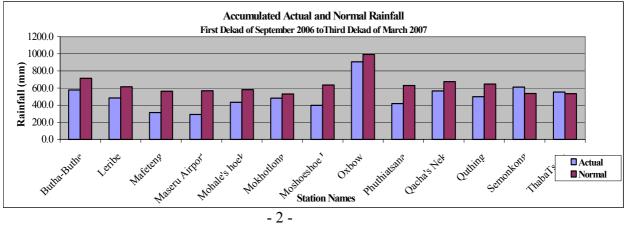


Fig.4



### **Glossary**

Dekad: Ten day period

Normal: Average figure over a specific time period.

% Rainfall Departure from Normal: (Actual Rainfall – Normal Rainfall)/ Normal Rainfall x 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.