## LESOTHO METEOROLOGICAL SERVICES

(LEKALA LA TSA BOLEPI)



### **Ten-Day Agrometeorological Bulletin**

21st -30th April 2006



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

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## Highlights

- □ Above normal rainfall received.
- □ Above normal cumulative rains received.
- Degradation in vegetation cover.
- Temperatures expected to be cool to cold.

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#### **WEATHER SUMMARY**

The third dekad of April 2006 was mostly dominated by a weak interior trough with little or no moisture which saw the interior with mostly fine to partly cloudy conditions and a few cases of isolated rain and thundershowers. Occasional intrusion of frontal systems over the southern interior of the sub-continent led to the first snowfall occurrence on the 23<sup>rd</sup>. Significant but isolated amounts of rain were recorded on the 21<sup>st</sup> and 22<sup>nd</sup> where Moshoeshoe I received 18.5mm and Oxbow 12.8mm on the 21<sup>st</sup> and Oxbow recorded 29.2mm on the 22<sup>nd</sup>. Temperatures remained relatively cool with minimum temperatures plunging well below freezing in the highlands from the 24<sup>th</sup> to the 28<sup>th</sup> with Oxbow recording -4.5<sup>o</sup>C on the 26<sup>th</sup>.

#### **RAINFALL SITUATION**

Rainfall received during this dekad was reasonably above dekadal normal rainfall in all parts of the country. Nevertheless, Mokhotlong and Maseru Airport registered slightly below normal rainfall of 5.7mm and 6.2mm respectively (see table 1 and figure 3). Phuthiatsana registered 39.8mm as the highest amount of rainfall for this dekad, and 5.7mm was recorded at Mokhotlong as the lowest dekadal rainfall.

# **Cumulative percentage rainfall departure** from Normal

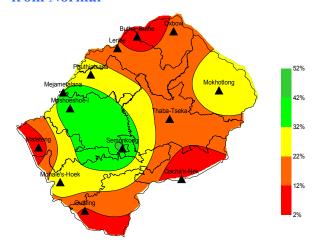


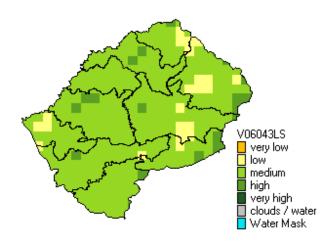
Fig.1: Cumulative rainfall departure from normal since 1st Sept to 30th April 2006.

It is illustrated from table 1 and figure 4 that cummulative rainfall is normal to above throughout the country. Qacha's Nek is the only station which registered the lowest cummulative rainfall, followed by Mafeteng and Butha-Buthe. The rest of the country registered relatively improved cummulative rainfall, of which the percentage departure from normal varies between 12% and 42%. Cummulative rainfall since September 2005 has played a very important role in that, water levels have increased under ground and surface water is also enough for agricultural activities.

#### **TEMPERATURE**

Temperatures were slightly below normal throughout the country. This is illustrated in table 1 where negative deviations registered from our respective stations. These negative temperatures indicate that we are currently in the Winter season. Apart from that these low temperatures do not favour crops at any stage of their growth, except Winter crops which can sustain these current conditions within the country. Highest temperature of 21.5°C was registered at Mohale's Hoek on the 29<sup>th</sup>.

Figure 2



The degree of greenness is dominated by medium greenness with some low patches scattered in the northern highlands and some parts of the lowlands. The degree of greennness has degrated when the above map is compared with the maps of previous dekads. This indicates that summer crops have now reached maturity stage, and are at harvesting stage. Otherwise, this degradation in greenness is due to the damage cuased by frost which was experienced towards the end of this dekad, particularly in the highlands.

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

Some crops (maize and sorghum) managed to reach maturity before the frost occurance particularly in the lowlands. But generally most crops were severly damaged by frost before they fully mature in the highlands and some parts of the lowlands. This indicates that most crops were planted late due to dry spells experienced in the beginning of the cropping season .However, due

to sufficient soil moisture, Winter crops are expected to be planted widely.

#### **DEKADAL OUTLOOK**

1st - 10th May 2006

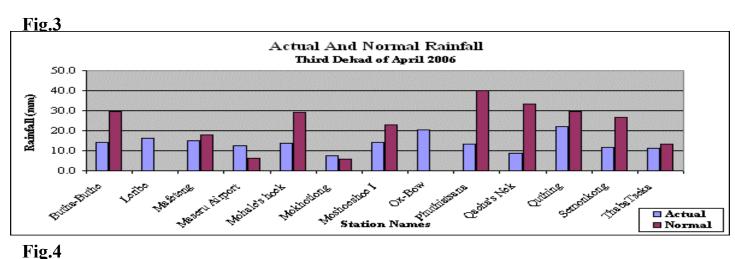
Cool to cold conditions are anticipated during this period with wet and cold conditions in the beginning of the dekad. The rest of the dekad is expected to be somehow dryer with isolated rain, otherwise it will remain cool. Wind is expected to be mostly light to moderate westerly.

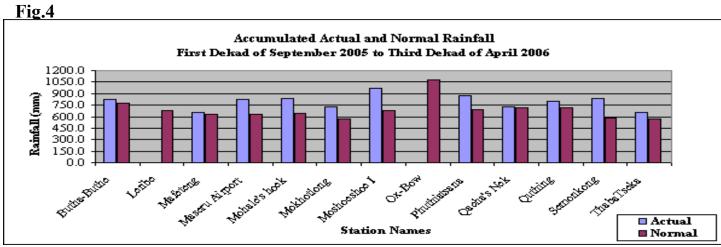
#### Seasonal Outlook May - July 2006

Rainfall situation is still expected to be on average for the period May – July 2006 and temperatures will also be on average however, they will drop significantly after the passage of cold fronts.

Table 1

Summaries		Rainfall and Temperature										
Summaries		Rainfall (mm)						Temperature (°C)				
		21 - 30 April 2006			Total From Sept05 to 2ndt Dek April 06			21 - 30 April 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	14.0	29.7	4	829.2	777.6	7	2.5(27)	20.0(21,22)	11.7	13.2	-1.5
Leribe	1740	16.2				674.7		-	-		13.4	-13.4
Mafeteng	1610	15.0	17.8	5	651.2	627.1	4	1(24)	19.2(29)	10.9	13.5	-2.6
Maseru Airport	1530	12.6	6.2	2	825.3	624.5	32	2.6(24)	20.5(30)	12.4	14.1	-1.7
Mohale's hoek	1600	13.8	29.3	3	841.0	644.7	30	1.5(24)	21.5(29)	12.0	14.0	N/A
Mokhotlong	2200	7.6	5.7	2	732.3	565.6	29	0.6(27)	19.6(28)	10.0	10.7	-0.7
Moshoeshoe I	1628	14.0	22.9	3	972.3	683.6	42	2.6(24)	19.5(30)	12.0	14.2	-2.2
Ox-Bow	2600	20.4				1081.1		-	-		5.9	-5.9
Phuthiatsana	1750	13.3	39.8	4	877.8	692.4	27	2.4(24)	-		14.2	N/A
Qacha's Nek	1970	8.8	33.3	3	728.9	715.3	2	2.6(26)	20.3(28)	11.4	15.6	-4.2
Quthing	1740	21.9	29.5	3	795.6	719.9	11	4(24)	19.5(29)	12.2	13.7	-1.5
Semonkong	2458	11.5	26.8	4	834.1	582.5	43	-3.2(26)	16.0(21)	7.2	8.9	-1.7
ThabaTseka	2160	11.4	13.3	3	660.2	571.4	16	1.4(26)	17.9(28)	9.6	11.0	-1.4





### **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

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The Unit is coordinated by the Disaster Management Authority in the Prime Minister's Office.

Comments and Contributions would be highly appreciated.