LESOTHO METEOROLOGICAL SERVICES

(LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

 $21^{st} - 30^{th}$ April 2005



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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 rains in the northen parts.
- □ Cool weather conditions prevailed through the dekad countrywide.
- Sufficient soil moisture for winter cropping.
- □ Vegetation low in the Southern Lowlands and the Sengu River Valley.
- □ Harvesting of summer wheat in progress.
- □ The next ten days are expected to be dry.

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WEATHER SUMMARY

A high pressure system generally dominated the last dekad of April. However, during the first half of the dekad, a frontal system passed over the southern part of the sub-region. As a result isolated to scattered rain occurred during the first half whereas the second half was totally dry. Temperatures were generally cool throughout this period.

RAINFALL SITUATION

The northen parts of the country received high rainfall during the first half of the dekad with Phuthiatsana and Leribe registering 27.7mm and 27.5mm respectively. However, the southern regions did not register any rainfall.

Cumulative percentage rainfall departure from Normal

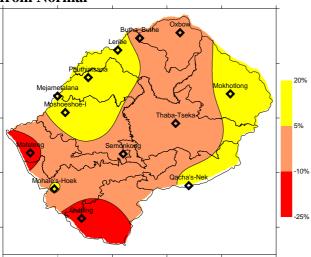


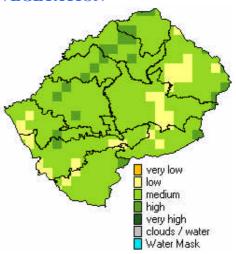
Fig.1: Cumulative rainfall departure from normal since 1st Sept to 30th April 2005

Cumulative rainfall (1st September 2004 to 30th April 2005) is normal to above normal. (Table 1 & Fig 4). Leribe in the northen parts and Moshoeshoe 1 in the central parts are 16% and 13% above the normal cumulative rainfall. This has provided adequate soil moisture for winter cropping. However, the southern parts of the country still have negative cumulative percentage departure from normal ranging from -23% in Outhing and -18% in Mafeteng.

TEMPERATURE

Below normal temperatures were experienced over the entire country. Temperature deviations were negative throughout the country with Mafeteng and Semonkong registering the highest deviations of -2.5° C and -2.3° C (Table 1). The lowest temperatures were recorded on the 21^{st} in most places while on the other hand highest temperatures were registered on the 22^{nd} .

VEGETATION



The vegetation index (NOAA NDVI satellite image) for the 3rd dekad of April 2005 depicts that the degree of greeness of the vegetation is high over the lowlands and some parts of the highlands. Some parts of the northern lowlands show very high degree of greeness. It is at its lowest in the Mokhotlong and Thaba Tseka districts.

CROP STAGE AND CONDITION

Some crops were reported to have been affected by frost at some places in Thaba Tseka, Mokhotlong, Semonkong and Mafeteng especially those that were still at early stages. However, there seem to be some gradual deterioration on maize crop resulting from exposure to low temperatures. This has caused crops to show some signs of drying up while still at developing stages hence no further development can be expected under this condition.

On the other hand, sorghum though not planted in plenty still stands a chance of reaching maturity, however, there are some crops that are still at early stages.

Summer wheat is reported to be at maturity stage and at some places harvesting is in progress.

DEKADAL OUTLOOK

 $1^{st} - 10^{th}$ May 2005

A high pressure system is still expected to persist over the central interior during this forecast period. Dry weather conditions are expected during the first half when weak frontal systems will be passing over the sub-region. Temperatures will continue to drop and as a result frost occurrence is anticipated to increase in the highlands while in the lowlands it will just be occassional light patches.

Table 1

Rainfall and Temperature Summaries												
	Rainfall (mm)						Temperature (°C)					
					Total From Sept 04 to 3rd Dek Apr 05			21 - 30 April 2005				
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	12.4	14.0	2	760.8	777.6	-2	3.0 (28)	20.0 (22)	11.8	12.9	-1.1
Leribe	1740	27.5	16.2	2	785.8	674.7	16	2.7 (21)	21.5 (22)	11.9	12.9	-1.0
Mafeteng	1610	0.0	15.0	0	517.3	627.1	-18	0.1 (21)	20.0 (30)	10.6	13.1	-2.5
Maseru Airport	1530	20.0	12.6	2	691.9	624.5	11	2.5 (21)	21.4 (22)	12.5	13.1	-0.6
Mohale's hoek	1600	0.0	13.8	0	693.9	644.7	8	1.5 (21)	20.3 (30)	11.8	13.4	-1.6
Mokhotlong	2200	16.2	7.6	2	610.6	565.6	8	-0.2 (21)	19.5 (29)	9.3	10.0	-0.7
Moshoeshoe I	1628	12.5	14.0	2	772.5	683.6	13	2.7 (21)	20.6 (22)	11.9	N/A	N/A
Ox-Bow	2600	19.0	20.4	2	1114.5	1081.1	3	-4.4 (27,29)	12.4 (30)	4.9	5.6	-0.7
Phuthiatsana	1750	27.7	13.3	2	732.4	692.4	6	3.5 (21)	21.3 (22)	12.5	13.5	-1.0
Qacha's Nek	1970	0.0	8.8	0	772.2	715.3	8	2.4 (30)	20.1 (22)	11.0	12.7	-1.7
Quthing	1740	0.0	21.9	0	557.2	719.9	-23	3.1 (21)	20.5 (29)	12.5	12.7	-0.2
Semonkong	2458	0.5	11.5	2	595.7	582.5	2	-4.6 (30)	16.0 (21)	6.6	8.9	-2.3
ThabaTseka	2160	13.2	11.4	2	543.4	571.4	-5	1.7 (30)	17.4 (21)	9.1	10.5	-1.5

Fig.3

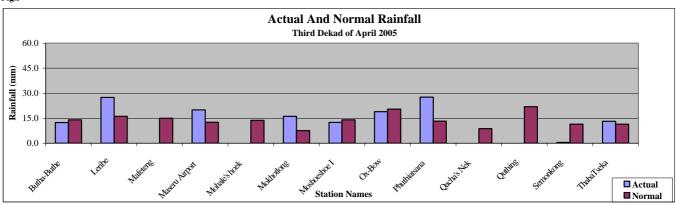
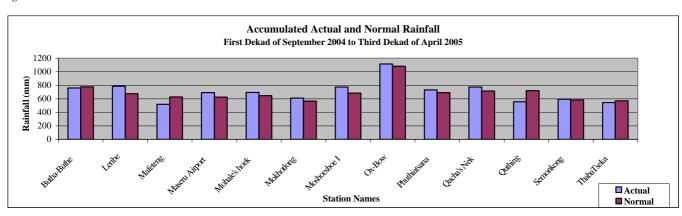


Fig.4



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

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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.