LESOTHO METEOROLOGICAL SERVICES (LEKALA LA TSA BOLEPI)



Ten-Day Agrometeorological Bulletin

 $21^{st} - 30^{th}$ April 2004



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

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Highlights

- > Dry weather conditions prevailed during the dekad.
- > No rainfall recorded.
- Decline in rainfall accumulation, so is the soil moisture accumulation.
- Crops showing signs of drying.
- > Dry condition expected.

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WEATHER SUMMARY 21st - 30th April 2004

The last dekad of April was dry. This was due to the high pressure system that was dominant over the sub-region during the period and resulted in the subsidence of dry air over the region. Temperatures were generally mild except during the first two days of the dekad.

RAINFALL SITUATION 21st - 30th April 2004

NORMAL RAINFALL PLOT FOR 3rd DEKAD OF APRIL

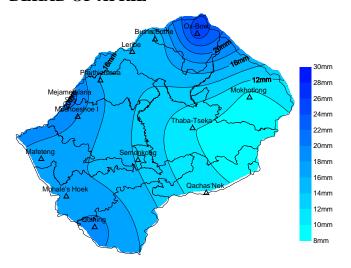


Fig.1: Normal rainfall Plot

A remarkable decrease in rainfall was experienced over the entire country during the dekad under discussion where absolutely no rainfall was registered (see fig.3).

However fig 1 shows normal rainfall pattern for the 3rd dekad of April which depicts that rainfall could still be expected during this time. The analysis indicates significant rainfall over the northern tip, the western strip and the southern extreme with rainfall amounts ranging from 19mm to 25.6mm, with the remainder of the country registering 9mm to 18mm and the northeastern sector (Mokhotlong) registering the lowest (see fig 1).

CUMULATIVE RAINFALL FROM 1^{ST} SEPT 03 TO 30^{TH} APRIL, 04

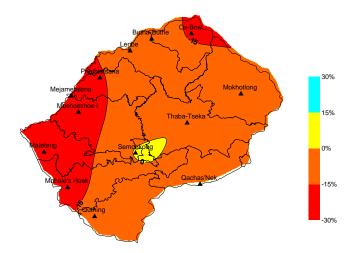


Fig.2: Cumulative rainfall departure from normal since $1^{\rm st}{\rm Sept}~03$ to $20^{\rm th}$ April 2004

Total rainfall from Sept 03 to April 30th reflects normal to below normal rainfall (see fig 4). It is evident that there is a decline in rainfall accumulation, so is the soil moisture accumulation as a result of minimal or no rainfall experienced during the last two dekads (3rd dek April inclusive). These conditions are indicated in the percentage rainfall departure analysis (fig 2) where the central and the northern tip have experienced a significant reduction.

TEMPERATURE 21st - 30th April 2004

Above normal temperatures were registered at most reporting stations, this is shown by the positive temperature deviations attained during the dekad under review. Nevertheless, still very low temperatures, which did not favour crop development, were registered.

CROP STAGE AND CONDITION

 $21^{st} - 30^{th} \ April \ 2004$

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

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

Summer wheat is reported to be at maturity stage and at some places harvesting has commenced. The crop is at poor to fair condition.

DEKADAL OUTLOOK

 $01^{st} - 10^{th}$ May 2004

The high pressure system is still to continue to cause subsidence of dry air over the central interior. It is expected to weaken towards the end of the dekad. As a result, dry weather condition is still expected to prevail during the first dekad of May, however, light isolated showers can be expected towards the end of the dekad. Day time temperatures will remain mild but they are expected to drop below zero at night. Hence frost can be expected any time during this dekad especially over the high lying areas.

Table 1

		Rainfall and Temperature Summaries										
_	Rainfall (mm)						TEMPERATURE (°C)					
		21 - 3	30 April		Total From Sept.03 to 3rd Dek April 04			21 - 30 April				
STATION	ALT.	Actual	Rain	Normal	Cum. Act. & Nor. R/f		Cum. % Dept.	Minimum	Maximum	Dekadal	Dekadal	
NAME	(M)	R/Fall	days	R/Fall	Actual	Normal	from Normal	Lowest (day)	Highest (day)	Mean	Normal	Deviation
Butha-Buthe	1770	0	0	14.0	653.4	696.7	-6	4.0(21)	23.5(25)	13.7	12.9	0.8
Leribe	1740	0	0	15.4	582.3	609.2	-4	3.5(23)	23.2(25)	13.8	12.9	0.9
Mafeteng	1610	0	0	16.9	437.4	605.1	-28	3.4(22)	23.0(25,30)	13.0	13.1	-0.1
Maseru Airpor	1530	0	0	21.4	454.9	612.4	-26	4.7(23)	24.9(25)	15.0	13.1	1.9
Mohaleshoek	1600	0	0	16.0	504.1	653.7	-23	4.8(23)	24.0(25)	14.0	13.4	0.6
Mokhotlong	2200	0	0	9.1	480.8	545.7	-12	1.5(30)	22.3(24)	12.2	10.0	2.2
Moshoeshoe I	1628	0	0	18.0	497.8	669.8	-26	4.9(25)	24.0(24)	14.3	N/A	N/A
Ox-Bow	2600	0	0	25.6	878.6	1059.0	-17	-4.5(27)	16.7(25)	6.9	5.6	1.3
Phuthiatsana	1750	0	0	15.8	543.8	658.9	-17	5.0(23)	23.0(24)	14.5	13.5	1.0
Qacha's Nek	1970	0	0	10.9	646.5	698.5	-7	5.6(30)	23.4(25)	14.0	12.7	1.3
Quthing	1740	0	0	19.0	582.6	634.3	-8	6.1(21,22)	23.6(25)	14.8	12.7	2.1
Semonkong	2458	0	0	13.8	638.2	634.3	1	-1.5(30)	19.7(25)	8.7	8.9	-0.2
Thaba-Tseka	2160	0	0	10.1	525.7	525.6	0	2.1(21)	20.9(25)	12.0	10.5	1.5

Fig.3

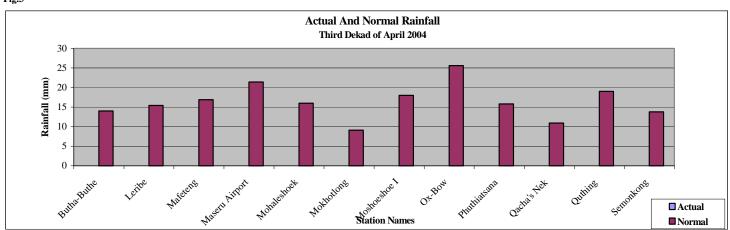
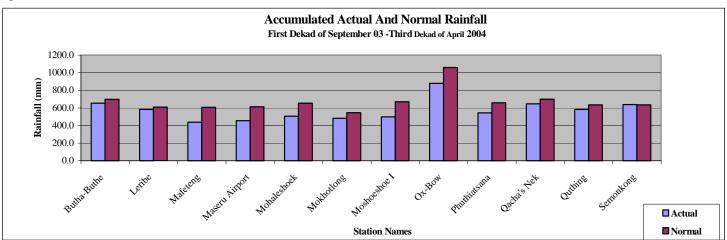


Fig.4



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.

Cum. Stands for cumulative.

Act. & Nor. R/f stands for Actual and Normal Rainfall

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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.