MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2014

Status: End May 2014

1. CLIMATE

1.1 Rainfall (Table 1a and 1b, Figure 1)

Rainfall recorded over the sugar cane areas during the month of May was below normal with an island average of 132 mm, representing 80% of the long-term mean of 165 mm. Below normal rainfall was recorded in all sectors with 103 mm in the North, 150 mm in the East, 146 mm in the South, 26 mm in the West and 192 mm in the Centre.

Cumulative rainfall for the period October 2013 to May 2014 amounted to 1809 mm, which is higher than the island long-term mean of 1575 mm for this period by 15%. During the same period, a total of 1071 mm was recorded in the North, 2151 mm in the East, 2182 mm in the South, 955 mm in the West and 2161 mm in the Centre. Compared to the respective long-term mean of these sectors, cumulative rainfall represented 99% in the North, 132% in the East, 113% in the South, 117% in the West and 102% in the Centre.

	North	East	South	West	Centre	Island
2013	38	67	70	9	80	57
	(36)	(37)	(33)	(16)	(38)	(35)
2014	103	150	146	26	192	132
	(96)*	(83)	(69)	(46)	(91)	(80)
LTM	107	180	212	56	210	165

Table 1a Rainfall (mm) of May for crops 2013, 2014 and the long term mean (LTM)

* Figures in brackets are % of LTM

Table 1bCumulative rainfall (mm) from October 2013 to May 2014 for crop 2014 compared
to that of crop 2013 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2013	1000	1965	1915	671	2020	1620
	(92)	(120)	(99)	(82)	(95)	(103)
2014	1071	2151	2182	955	2161	1809
	(99)*	(132)	(113)	(117)	(102)	(115)
LTM	1084	1633	1928	814	2128	1575

*Figures in brackets are % of LTM

[Source : provisional data from Mauritius Meteorological Services]

Figure 1 Monthly rainfall (mm) for the period Oct 2013 to May 2014 for the 2014 crop compared to the corresponding period of the 2013 crop and to the long term mean (LTM).







1000

500

0

2013

2014

LTM

1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of May 2014 on MSIRI agro-meteorological stations are given below.

The mean monthly maximum temperature exceeded the normal by 0.5° C at Pamplemousses, 0.7° C at Réduit, 0.3° C at Belle Rive and 1.1° C at Union Park. Below normal mean monthly minimum temperature was recorded at Réduit (-1.0 °C) and Pamplemousses (-0.2 °C). At Belle Rive it exceeded the normal by 0.3° C whereas at Union Park it was close to the normal. The resulting mean amplitude exceeded the normal at all stations except at Belle Rive where it was similar to the normal.

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplemousses	28.6	18.6	10.0
	(28.1) *	(18.8)	(9.3)
Réduit	25.8	17.0	8.8
	(25.1)	(18.0)	(7.1)
Belle Rive	25.1	16.9	8.2
	(24.8)	(16.6)	(8.2)
Union Park	25.4	18.0	7.4
	(24.3)	(17.9)	(6.4)

 Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in May 2014

* figures in brackets are the Normal (1981-2010)

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during May 2014 were above normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 113 at Pamplemousses, 109 at Réduit, 105 at Belle Rive and 116 at Union Park.

Station	May 2014	Normal	% of Normal	
Pamplemousses	270	238	113	
Réduit	237	217	109	
Belle Rive	215	204	105	
Union Park	188	162	116	

Table 3 Sunshine duration (h) recorded on MSIRI agro-meteorological stations in May 2014

2. STALK HEIGHT

Stalk height was assessed during the last week of May 2014 in the 63 sites representative of the five sugar cane sectors of the island. These sites cover the various agro-climatic zones, the varieties under cultivation and the stages of development of the crop. Data collected were compared with those of the corresponding period in May 2013 and to the mean of the five best cane yielding crops of the last ten years in each sector (referred to as the normal).

2.1 Stalk elongation (Table 4a)

Stalk elongation during the month of May 2014 was higher than during the corresponding period in 2013 in all sectors. It amounted to 18.9 cm in the North, 11.6 cm in the East, 18.5 cm in the South, 26.6 cm in the West and 8.6 cm in the Centre. Stalk elongation in May 2014 also exceeded the normal in the North, South and West sectors. It lagged behind the normal in the other two sectors. The island stalk elongation of 16.5 cm was higher than that for the corresponding period in 2013 by 4.8 cm (41.1%) and the normal by 0.9 cm (5.7%).

	Stalk elon	gation (cm)	May 2014 as % of			
Sectors	2014	2013	Normal	2013	Normal	
North	18.9	15.2	17.4	124.3	108.9	
East	11.6	9.0	14.4	128.9	80.6	
South	18.5	12.6	14.8	146.8	125.2	
West	26.6	12.4	15.7	214.5	169.2	
Centre	8.6	7.4	9.4	116.2	91.1	
Island	16.5	11.7	15.6	141.1	105.7	

Table 4a. Stalk elongation during the month of May

2.2 Cumulative elongation (Table 4b)

Stalk elongation from end-December 2013 to end-May 2014 cumulated to 186.3 cm in the North, 188.6 cm in the East, 186.9 cm in the South, 195.3 cm in the West and 153.4 cm in the Centre. These data were higher than those of 2013 in sectors North, South and West but were inferior in the other two sectors.

	Cumulat	tive elongati end- May	on (cm) at	May 201	4 as % of	
Sectors	2014	2013	Normal	2013	Normal	
North	186.3	184.6	189.0	100.9	98.6	
East	188.6	196.2	180.4	96.1	104.5	
South	186.9	180.8	188.2	103.4	99.3	
West	195.3	180.8	183.7	108.0	106.3	
Centre	153.4	156.0	158.1	98.3	97.1	
Island	185.1	183.8	182.8	100.7	101.2	

Table 4b. Cumulative elongation at end-May

For the same period, cumulative growth was lagging behind the normal in the North, South and Centre whereas in sectors East and West, it was above normal.

Island-wise the cumulative elongation of 185.1 cm was slightly higher than that of the 2013 crop (183.8 cm) by 0.7% and the normal (182.8 cm) by 1.2%.





2.3 Total stalk height (Table 4c and Figure 2)

Total stalk height at end-May 2014 reached 210.7 cm in the North, 244.8 cm in the East, 219.4 cm in the South, 229.1 cm in the West and 205.4 cm in the Centre. Compared to the same period in 2013, cane was taller by 7.4 cm in the North, 6.8 cm in the East, 1.5 cm in the South, 20.1 cm in the West and 9.1 cm in the Centre. Total cane height at the end of May 2014 exceeded the normal by 19.3 cm in the East, 11.3 cm in the West and 2.2 cm in the Centre. In the North and South, it lagged behind the normal by 5.1 cm and 19.8 cm, respectively.

Island-wise the total cane height of 224.2 cm at end-May 2014 was higher than at end-May 2013 by 6.6 cm (3.0%) but was comparable to the normal.

	Stalk h	eight (cm) at	end-May	May 2014 as % of		
Sectors	2014	2013	Normal	2013	Normal	
North	210.7	203.3	215.8	103.6	97.6	
East	244.8	238.0	225.5	102.9	108.6	
South	219.4	217.9	239.2	100.7	91.7	
West	229.1	209.0	217.7	109.6	105.2	
Centre	205.4	196.3	203.2	104.6	101.1	
Island	224.2	217.6	224.8	103.0	99.8	

Table 4c. Stalk height at end-May

3. SUCROSE ACCUMULATION (Tables 5a and 5b)

Cane samples from miller-planters' land in all factory areas and representing the main cultivated varieties were analyzed for sucrose content during the last week of May 2014. The average pol % cane (*richesse*) was computed on the basis of area under cultivation of each variety in the different factory areas of each sector. The results are compared with those of the last two years.

Sectors	M 52/78	M 703/89	R 573	M 695/69	R 575	M 387/85	M 1246/84	M 2256/88	M 2593/92	M 1400/86	M 1176/77	M 1861/89	R 579	M 1394/86	M 1672/90	R 570
North			12.8	11.9			7.4		10.2	8.9	10.3		9.6		7.8	8.7
East		14.7	13.3	11.5		12.9	9.4	13.4	10.7	10.6	11.0		10.8			9.9
South	13.2	12.7	12.6	11.2	12.3	12.4			10.3	10.7	11.8	10.5	9.2	10.1	9.6	8.9
West			13.3		12.1				8.4	9.6	11.0		9.7			8.3
Centre	13.5	12.0	10.7			11.0				10.6	9.7		9.6			9.4

Table 5a. Average Pol % cane (richesse) at end May 2014.

Sectors		APRIL		MAY			
	2012	2013	2014	2012	2013	2014	
North	4.9	6.6	7.4	7.4	10.6	9.4	
East	8.1	8.0	8.3	10.1	11.4	11.2	
South	7.2	7.7	7.8	10.0	11.0	10.6	
West	5.7	7.1	7.5	8.3	10.5	10.5	
Centre	7.7	7.4	8.6	10.5	11.2	11.1	
Island	6.8	7.4	7.9	9.3	11.0	10.6	

Table 5b. Comparison of Pol % cane (richesse) at the end of April and May 2012, 2013 and2014.

The *richesse* derived from the end-May 2014 sampling was 9.4% in the North, 11.2% in the East, 10.6% in the South, 10.5% in the West and 11.1% in the Centre. Compared to the corresponding period in 2013, sucrose content at end-May 2014 was comparable in sectors West and Centre but inferior in the other sectors by 1.2° in the North, 0.2° in the East and 0.4° in the South. Sucrose content at end of May 2014 was also higher than that of the corresponding period in 2012 in all sectors.

From end-April 2014 up to end-May 2014, *richesse* has improved in all sectors. The highest increment of 3.0° was observed in West followed by 2.9° in the East, 2.8° in South, 2.5° in the Centre and 2.0° in the North. These increments were inferior to those obtained last year for the corresponding period. On average for the island, the increase in *richesse* was 2.7° in 2014, which was lower than the increment of 3.6° obtained in 2013 but higher than the 2.5° obtained in 2012.

Island-wise, the *richesse* of 10.6% recorded at the end of May 2014 was lower than that of the corresponding period in 2013 (11.0%) by 0.4°but higher than in 2012 (9.3%) by 1.3°.

4 CROP 2014

Weather during May 2014 has been favourable to growth resulting in a higher stalk elongation rate compared to the normal and that of May 2013. Total stalk height at end of May 2014 over the island is close to the normal but higher than that of May 2013, which augurs for a better cane productivity for the 2014 crop compared to the 2013 crop.

Sucrose accumulation in May 2014 is considered satisfactory. The crop possesses a high capacity for rapid sucrose accumulation under favourable conditions. A normal crop is anticipated subject to no adverse climatic conditions being experienced during the remaining part of the crop cycle.