# MAURITIUS CANE INDUSTRY AUTHORITY

# MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2014

7 November 2014

# SUGAR CANE CROP 2014 Status: End October 2014

#### 1. CLIMATE

#### 1.1 Rainfall (Table 1)

Rainfall recorded during the month of October 2014 over the cane areas of the island amounted to 73 mm, which represented 102% of the long term mean (72 mm) for the month. Rainfall recorded in sectors South, West and Centre was below normal with 90 mm, 11 mm and 74 mm respectively and represented 94%, 61% and 73% of their respective long-term mean. In the North and East, the 50 mm and 92 mm of rain was 22% and 24% above their respective long-term means.

The dry condition experienced in September persisted during the first half of the month of October 2014. In the North and West, crop water requirements have not been met except in areas benefiting from sufficient irrigation.

	Crop	North	East	South	West	Centre	Island
September	2013	13 (30)	49 (62)	50 (45)	1 (5)	66 (52)	38 (48)
	2014	<b>22</b> (51)	<b>74</b> (94)	<b>63</b> (57)	<b>11</b> (55)	<b>95</b> (75)	<b>55</b> (69)
	LTM	44	79	112	20	126	80
October	2013	91 (222)	192 (259)	170 (177)	45 (250)	182 (178)	149 (208)
	2014	<b>50</b> (122)*	<b>92</b> (124)	<b>90</b> (94)	<b>11</b> (61)	<b>74</b> (73)	<b>73</b> (102)
	LTM	41	74	96	18	102	72

Table 1. Rainfall in mm and as a percentage of the long term mean (LTM) for September and<br/>October during crops 2013 and 2014

\* figures in brackets are % of LTM (1971-00) [Source: Mauritius Meteorological Services]

#### 1.2 Temperature (Table 2)

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

The mean monthly maximum temperature exceeded the normal at all stations, the difference ranging from  $1.1^{\circ}$ C at Belle Rive to  $2.4^{\circ}$ C at Union Park. Above normal mean monthly minimum temperature was recorded at Pamplemousses (+1.4°C), Réduit (+0.7°C), Union Park (+ 1.6°C) and Belle Rive (+ 1.9°C). The resulting mean amplitude was above normal at Réduit, Pamplemousses and Union Park but below normal at Belle Rive.

Station	Maximum (⁰C)	Minimum (°C)	Amplitude (°C)
Pamplemousses	29.8	19.4	10.4
	(28.2) *	(18.0)	(10.2)
Réduit	26.8	17.7	9.1
	(24.9)	(17.0)	(7.9)
Belle Rive	25.1	17.4	7.7
	(24.0)	(15.5)	(8.5)
Union Park	26.0	18.3	7.7
	(23.6)	(16.7)	(6.9)

# Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-<br/>meteorological stations in October 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 October 2014 were above normal at all four stations. Recorded bright sunshine as a percentage of the normal was 126 at Belle Rive, 133 at Union Park and 113 at both Pamplemousses and Réduit,

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in<br/>October 2014

Station	October 2014	<b>Normal</b> (1981-2010)	% of Normal
Pamplemousses	299	264	113
Réduit	289	256	113
Belle Rive	271	215	126
Union Park	228	172	133

#### 2. SUCROSE ACCUMULATION (Tables 4a and 4b)

Cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analyzed for sucrose content during the third week of October 2014. The average Pol % cane (*richesse*) was calculated 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	R 575	M 1246/84	M 2593/92	M 1400/86	M 1176/77	R 579	M 1672/90	R 570
North		17.3	16.3	16.4	16.8		17.0	15.9
East		18.8	17.3	17.8	17.6	16.0		17.2
South						16.2		16.3
West	16.1		15.9	16.2		16.0		16.9
Centre				16.4		16.1		

Table 4a. Average Pol % cane (richesse) at end October 2014.

Table 4b. Comparison of Pol % can	e (richesse) at the end of September and October
2012, 2013 and 2014.	

Sectors	SE	РТЕМВЕ	R	OCTOBER		
	2012	2013	2014	2012	2013	2014
North	15.5	15.3	16.1	16.9	15.6	16.5
East	15.1	14.7	16.0	16.3	14.5	17.0
South	15.1	14.9	15.4	15.3	16.8	16.2
West	15.9	15.9	15.5	16.5	14.6	16.2
Centre	14.3	14.3	15.1	15.8	15.0	16.2
Island	15.2	14.9	15.7	16.1	15.6	16.5

The *richesse* at end-October 2014 amounted to 16.5% in the North, 17.0% in the East and 16.2% in all other three sectors. These figures were higher than those obtained at the corresponding period last year by  $0.9^{\circ}$  in the North,  $2.5^{\circ}$  in the East,  $1.6^{\circ}$  West and  $1.2^{\circ}$  in the Centre. In the South, *richesse* in October 2014 was lagging behind that of 2013 by  $0.6^{\circ}$ . Sucrose content at the end of October 2014 was higher than that of 2012 in all sectors except in the North and West.

During the month of October, *richesse* for the present crop has increased by  $0.4^{\circ}$  in the North,  $1.0^{\circ}$  in the East,  $0.8^{\circ}$  in the South,  $0.7^{\circ}$  in the West and  $1.1^{\circ}$  in the Centre.

Island-wise, the richesse of 16.5% recorded at the end of October 2014 was higher than those of the corresponding period in 2013 (15.6%) and 2012 (16.1%).

#### 3. CROP 2014

As at 25 October 2014, 21 965 ha representing about 64% of miller-planters' land had been harvested compared to 24 862 ha (72%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 61% in the North, 58% in the East, 64% in the South, 79%

in the West and 70% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. On account of the centralization of milling activities and since all the canes from the Centre are crushed at factories in the East, harvest statistics relative to extraction rate and sugar productivity have been combined for these two sectors.

### 3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end of October 2014 was 83.1 TCH and exceeded the 75.9 TCH recorded in 2013 by 7.2 TCH (9.5%). Sector-wise, the best cane productivity to-date was recorded in the West with 89.7 TCH, followed by the South (85.6 TCH), the East (83.6 TCH), the North (76.9 TCH) and the Centre (76.3 TCH). These figures were superior to those obtained during the same period in 2013 by 6.2 TCH in the North, 8.0 TCH in the East, 6.8 TCH in the South, 5.0 TCH in the West and 8.9 TCH in the Centre.

Sectors	End Se	otember	End October		
	2013	2014	2013	2014	
North	71.3	78.5	70.7	76.9	
East	76.1	82.5	75.6	83.6	
South	78.6	86.0	78.8	85.6	
West	83.0	90.1	84.7	89.7	
Centre	66.8	76.5	67.4	76.3	
Island	75.9	83.4	75.9	83.1	

Table 5a. Cane productivity (TCH) as at end September and October for the 2013 and<br/>2014 crops

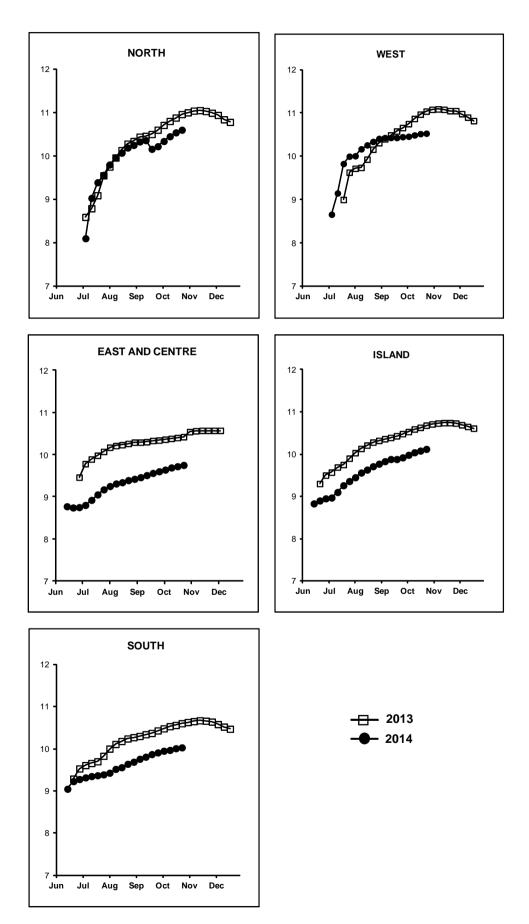
# 3.2 Extraction (Table 5b, Figure 1)

As at the end of October 2014, the recorded island extraction rate of 10.12% was lower than that of the corresponding period in 2013 (10.68%) by  $0.56^{\circ}$ . Sector-wise, extraction rates recorded to-date reached 10.60% in the North, 9.75% in the East-Centre, 10.03% in the South and 10.53% in the West. Compared to the corresponding period last year, cumulative extraction rate was again lagging behind in all the sectors by  $0.36^{\circ}$  in the North,  $0.67^{\circ}$  in the East-Centre,  $0.57^{\circ}$  in the South and  $0.51^{\circ}$  in the West.

Table 5b. Cumulative extraction rate (%) as at end September and October for the 2013 and2014 crops

	End Se	ptember	End October		
Sectors	2013	2014	2013	2014	
North	10.60	10.22	10.96	10.60	
East /Centre	10.34	9.60	10.42	9.75	
South	10.43	9.91	10.60	10.03	
West	10.66	10.45	11.04	10.53	
Island	10.48	9.92	10.68	10.12	

From end September 2014 to end October 2014, extraction has improved by  $0.38^{\circ}$  in the North,  $0.15^{\circ}$  in the East-Centre,  $0.12^{\circ}$  in the South and  $0.08^{\circ}$  in the West. The average island increase for the same period of the present crop reached  $0.20^{\circ}$  which was equivalent to the same increment obtained in 2013.



# Figure 1. Evolution of extraction rate (%) for the 2013 and 2014 crops

#### 3.3 Sugar productivity (Table 5c)

The island sugar productivity of 8.41 TSH recorded at the end of October 2014 was higher than at the corresponding period in 2013 (8.11 TSH) by 0.30 tonne (3.7 %). Sector-wise sugar productivity amounted to 8.15 TSH in the North, 8.01 TSH in the East-Centre, 8.59 TSH in the South and 9.45 TSH in the West. These figures exceeded those of the corresponding period in 2013 by 0.40 TSH in the North, 0.30 TSH in the East-Centre, 0.24 TSH in the South and 0.10 TSH in the West.

	End Se	ptember	End October		
Sectors	2013	2014	2013	2014	
North	7.56	8.02	7.75	8.15	
East / Centre	7.68	7.81	7.71	8.01	
South	8.20	8.52	8.35	8.59	
West	8.85	9.42	9.35	9.45	
Island	7.95	8.27	8.11	8.41	

Table 5c. Sugar productivity (TSH) as at end September and October for the 2013 and 2014 crops

# 4. 2014 CROP PRODUCTIVITY

Weather during the month of October has generally favoured ripening on account of the dry conditions coupled with above normal temperature amplitude and solar radiation. Although there is a very slight decrease in cane productivity (from 83.4 TCH in September to 83.1 TCH in October), it is interesting to note the increase in extraction rate from 9.92% to 10.12%. Thus, sugar productivity has increased by 0.14 TSH during the month of October and it is encouraging to note that sugar productivity is still better than that of last year with nearly 64% of the area harvested. The production level for 2014 remains dependent on the forthcoming weather conditions.