

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2019

15 November 2019

SUGAR CANE CROP 2019

Status: End October 2019

1. CLIMATE

1.1 Rainfall (Table 1)

Rainfall recorded over the sugar cane areas of the island during October 2019 averaged 92 mm and represented 105% of the long-term mean (LTM, 87 mm) for the month. Rainfall was close to the LTM in the East but above the long-term mean in the other sectors with 58 mm in the North, 134 mm in the South, 25 mm in the West. It was slightly below the LTM in the Centre with 85 mm.

October is known to be a dry month but not for 2019 where most of the rainfall occurred during the first half on the month.

Table 1. Rainfall (mm) and percentage of the long term mean (LTM) for September and October during crops 2018 and 2019

	Crop	North	East	South	West	Centre	Island
September	2018	37 (65)	102 (78)	103 (67)	31 (119)	149 (127)	86 (77)
	2019	37 (67)	101 (78)	134 (87)	16 (62)	129 (110)	93 (83)
	LTM	57	130	154	26	117	111
October	2018	39 (93)	68 (67)	54 (44)	41 (186)	71 (73)	55 (63)
	2019	58 (138)*	97 (96)	134 (110)	25 (114)	85 (88)	92 (105)
	LTM	42	101	122	22	97	87

* figures in brackets are % of LTM (1981-10, based on 23 weather stations over Mauritius)

[Source: raw provisional data from Mauritius Meteorological Services]

1.2 Air Temperature (Table 2)

Data on maximum and minimum temperatures as well as temperature amplitude recorded during the month of October 2019 on MSIRI agro-meteorological stations are given below.

Table 2. Air temperatures recorded on MSIRI agro-meteorological stations in October 2019

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Oct 2019	DevN*	Oct 2019	DevN	Oct 2019	DevN
Ferret	28.1	-0.1	19.8	+1.8	8.3	-1.9
Réduit	25.1	+0.2	17.7	+0.7	7.4	-0.5
Belle Rive	25.2	+1.2	17.0	+1.5	8.2	-0.3
Union Park	25.4	+1.8	17.9	+1.2	7.5	+0.6

* Deviation from the Normal (1981-2010)

Mean maximum temperature during October 2019 was above normal at Belle Rive and Union Park but close to normal at the other two stations. Mean minimum temperature exceeded the normal by more than 0.7°C at all stations. The resulting mean amplitude was below normal at all stations except at Union Park.

1.3 Sunshine duration (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during October 2019 exceeded the normal at Belle Rive and Union Park, but was comparable to the normal at the other two stations. Recorded bright sunshine as a percentage of the normal amounted to 100% at Ferret, 96% at Réduit, 114% at Belle Rive and 111% at Union Park.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in October 2019

Station	October 2019	Normal	% of Normal
Ferret	263	264	100
Réduit	247	256	96
Belle Rive	245	215	114
Union Park	191	172	111

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

Sucrose content was assessed during the last week of October 2019 in cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties. 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 were compared with those of the last two years.

Table 4a. Average Pol % cane (*richesse*) at end-October 2019

Sectors	R 573	M 387/85	M 2593/92	M 1400/86	M 1176/77	R 579	R 570
North			15.1	15.9		14.3	
East		14.3				13.3	13.7
South	15.5				15.0	13.7	14.9
West	15.0		14.5	14.3	15.5	13.9	
Centre					15.1	12.2	

Table 4b. Comparison of Pol % cane (*richesse*) at end of September and October 2017, 2018 and 2019

Sectors	September			October		
	2017	2018	2019	2017	2018	2019
North	13.9	15.7	14.8	16.4	15.8	15.3
East	13.4	14.2	13.5	13.8	14.1	13.6
South	13.6	14.8	14.0	15.1	15.4	14.4
West	14.5	15.1	15.0	15.4	15.3	14.6
Centre	12.6	13.2	12.4		13.4	13.2
Island	13.6	14.7	14.0	15.0	15.0	14.3

Sucrose content at the end of October 2019 was 15.3% in the North, 13.6% in the East, 14.4% in the South, 14.6% in the West and 13.2% in the Centre. Compared to the corresponding period in 2018, sucrose content to-date was comparable in the Centre, but lagged behind in all sectors by a margin varying from 0.5° in the North to 1.0° in the South. Sucrose content at the end of October, for the present crop, was lower than those of the corresponding period in 2017 in all sectors.

From end-September to end-October 2019, sucrose content has improved in sectors North, South and Centre by 0.5°, 0.4° and 0.8°, respectively. No major change occurred in the East whereas in the West a decrease in sucrose content was noted. On average for the island, the increase in *richesse* was 0.3° in 2019, which was similar to that observed in 2018 but lower than that obtained in 2017 (1.4°).

Island-wise, the *richesse* of 14.3% recorded at end of October 2019 was lagging behind that of the corresponding period in both 2018 and 2017 by 0.7°.

3. CROP PRODUCTIVITY 2019

As at 2 November 2019, 20 538 ha representing 65% of miller-planters' land had been harvested compared to 26 619 ha (81%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 69% in the North, 68% in the East, 63% in the South, 65% in the West and 55% in the Centre. On account of the fact that all harvested cane in the West sector are being processed in the three mills of the island, the extraction rate for the West sector was computed as the weighted mean of the extraction rate based on the agreed ratio of consignments sent to the three mills. An analysis of cane productivity based on the harvest statistics for miller-planters follows.

3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end-October 2019 was 81.9 TCH and was higher than that recorded in 2018 (71.1 TCH) by 10.8 TCH (15.2 %). Sector-wise, the best cane productivity of 90.1 TCH was recorded in the West followed by the South (83.3 TCH), the North and East (80.9 TCH), and the Centre (69.4 TCH).

Cane productivity recorded to-date was superior in all sectors when compared to the same period last year, the difference ranging from 7.6 TCH in the North to 15.5 TCH in the Centre.

Table 5a. Cane productivity (TCH) as at end September and October for the 2018 and 2019 crops

Sector	End September		End October	
	2018	2019	2018	2019
North	76.1	82.4	73.3	80.9
East	70.5	82.0	68.9	80.9
South	72.0	82.6	71.3	83.3
West	78.6	88.8	80.2	90.1
Centre	58.0	72.2	53.9	69.4
Island	72.3	82.3	71.1	81.9

3.2 Extraction (Table 5b, Figure 1)

The recorded island extraction rate reached 9.67% at end-October 2019 and was lower than that of the corresponding period in 2018 (10.17%) by 0.50°. Sector-wise, the extraction rate recorded was 10.13% in the North, 9.22% in the East-Centre, 9.85% in the South and 9.87% in the West. These figures lagged behind those of the corresponding period in 2018 by 0.45° in the North, 0.68° in the East-Centre, 0.25° in the South and 0.40° in the West.

Extraction rate improved from end-September 2019 to end-October 2019 in all sectors. The highest increment of 0.23° was observed in the North whilst the lowest increment of 0.12° occurred in the South. On average for the island, the increase in extraction rate was 0.20° in 2019 and was comparable to the 0.22° obtained in 2018.

Figure 1. Evolution of extraction rate (%) for the 2018 and 2019 crops

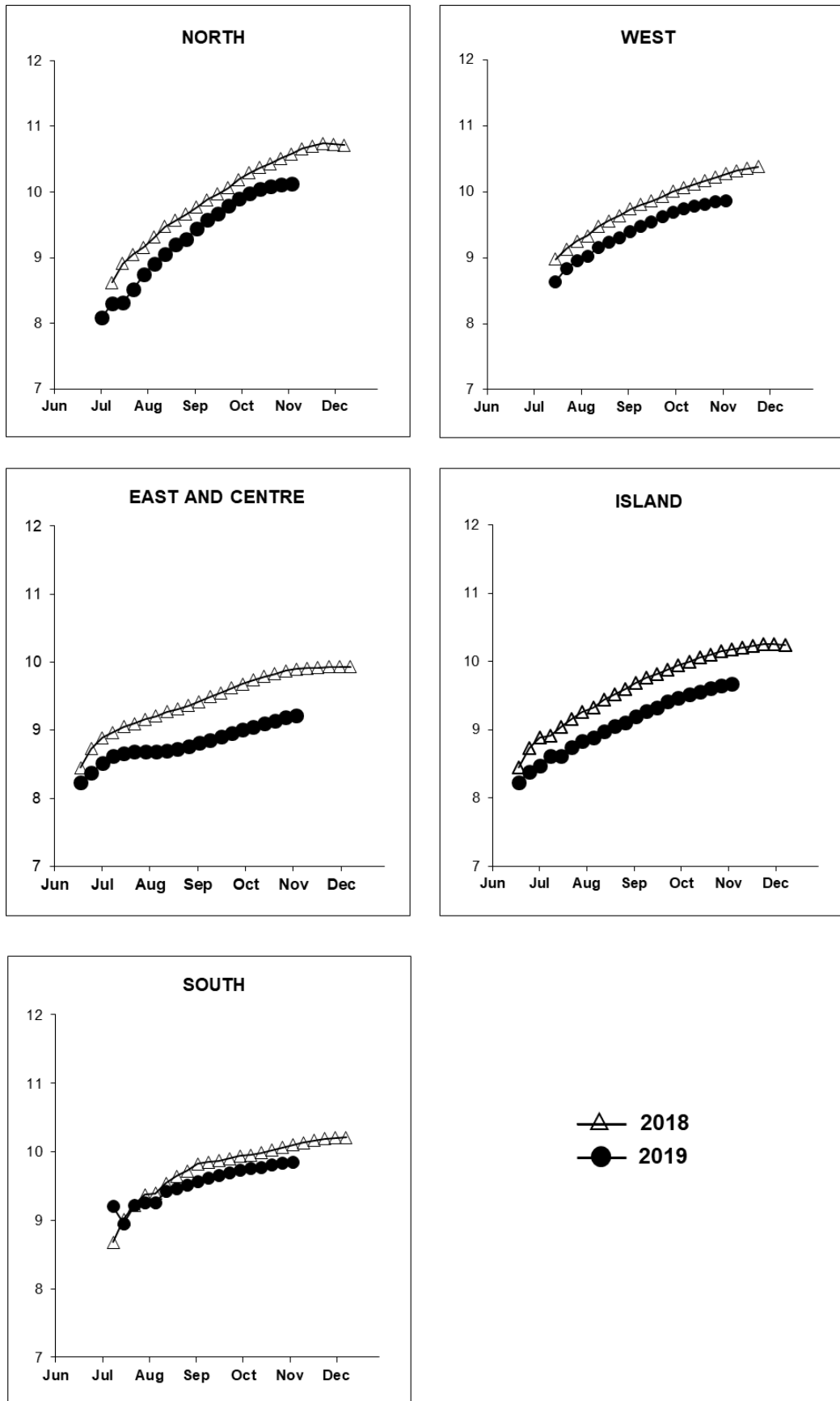


Table 5b. Extraction rate (%) as at end September and October for 2018 and 2019 crops

Sector	End September		End October	
	2018	2019	2018	2019
North	10.19	9.90	10.58	10.13
East-Centre	9.68	9.01	9.90	9.22
South	9.94	9.73	10.10	9.85
West	10.00	9.69	10.27	9.87
Island	9.95	9.47	10.17	9.67

3.3 Sugar productivity (Table 5c)

The sugar productivity of 7.92 TSH recorded over the island at the end of October 2019 is higher than that of the corresponding period in 2018 (7.23 TSH) by 0.69 tonne (9.5%). Sector-wise sugar productivity was 8.20 TSH in the North, 7.29 TSH in the East-Centre, 8.21 TSH in the South and 8.89 TSH in the West. Sugar productivity at end-October 2019 exceeded that of the corresponding period in 2018 by 0.44 TSH in the North, 0.72 TSH in the East-Centre, 1.01 TSH in the South and 0.65 TSH in the West.

Table 5c. Sugar productivity (TSH) as at end September and October for 2018 and 2019 crops

Sector	End September		End October	
	2018	2019	2018	2019
North	7.75	8.16	7.76	8.20
East-Centre	6.63	7.26	6.57	7.29
South	7.16	8.04	7.20	8.21
West	7.86	8.60	8.24	8.89
Island	7.19	7.79	7.23	7.92

4.0 CROP 2019

The weather conditions that prevailed during October 2019 were characterised by above normal rainfall in most sectors especially in the first half of the month coupled with near normal to above normal solar radiation. Moreover, temperature amplitude was below normal in most stations except at Union Park. Thus, these conditions were not conducive for optimum sucrose accumulation as is depicted by the lower *richesse* obtained in 2019 compared to that of 2018 and 2017 in all sectors.

With nearly 65% of the area of miller planters' land already harvested, cane productivity at island level in 2019 is higher than that of 2018 by 15.2%. Although, extraction rate at end-October 2019 is lagging behind that of last year by nearly 5.0%, the island sugar productivity remains ahead of that of end-October 2018 by 10%. Based on these harvest data, the advantage in cane and sugar productivity are expected to exceed those of crop 2018 provided there is no major departure in the weather from the normal.

Moreover, the rainfall recorded during the first half of October 2019 should benefit the start of the 2020 crop.