

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020

19 August 2020

SUGAR CANE CROP 2020

Status: End July 2020

1. CLIMATE

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

Rainfall recorded over the sugar cane areas during the month of July 2020 was well below the normal with an island average of 90 mm, representing 61% of the long-term mean (LTM) of 147 mm. Sector-wise, rainfall for the month of July was below the long-term mean in all sectors with 24 mm in the North, 111 mm in the East, 129 mm in the South, 1 mm in the west and 131 mm in the Centre.

The cumulative rainfall over the period October 2019 to July 2020 amounted to 1267 mm in the North, 2448 mm in the East, 2594 mm in the South, 820 mm in the West and 2700 mm in the Centre, and represented 108%, 106%, 101%, 97% and 121% of the respective LTM. The island average of 2114 mm for this period represented 105% of the LTM (2004 mm).

Table 1a. Rainfall (mm) for the month of July for crops 2019, 2020 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2019	46 (65)	247 (152)	289 (141)	7 (30)	295 (154)	199 (136)
2020	24 (34)*	111 (68)	129 (63)	1 (4)	131 (68)	90 (61)
LTM	71	163	205	23	192	147

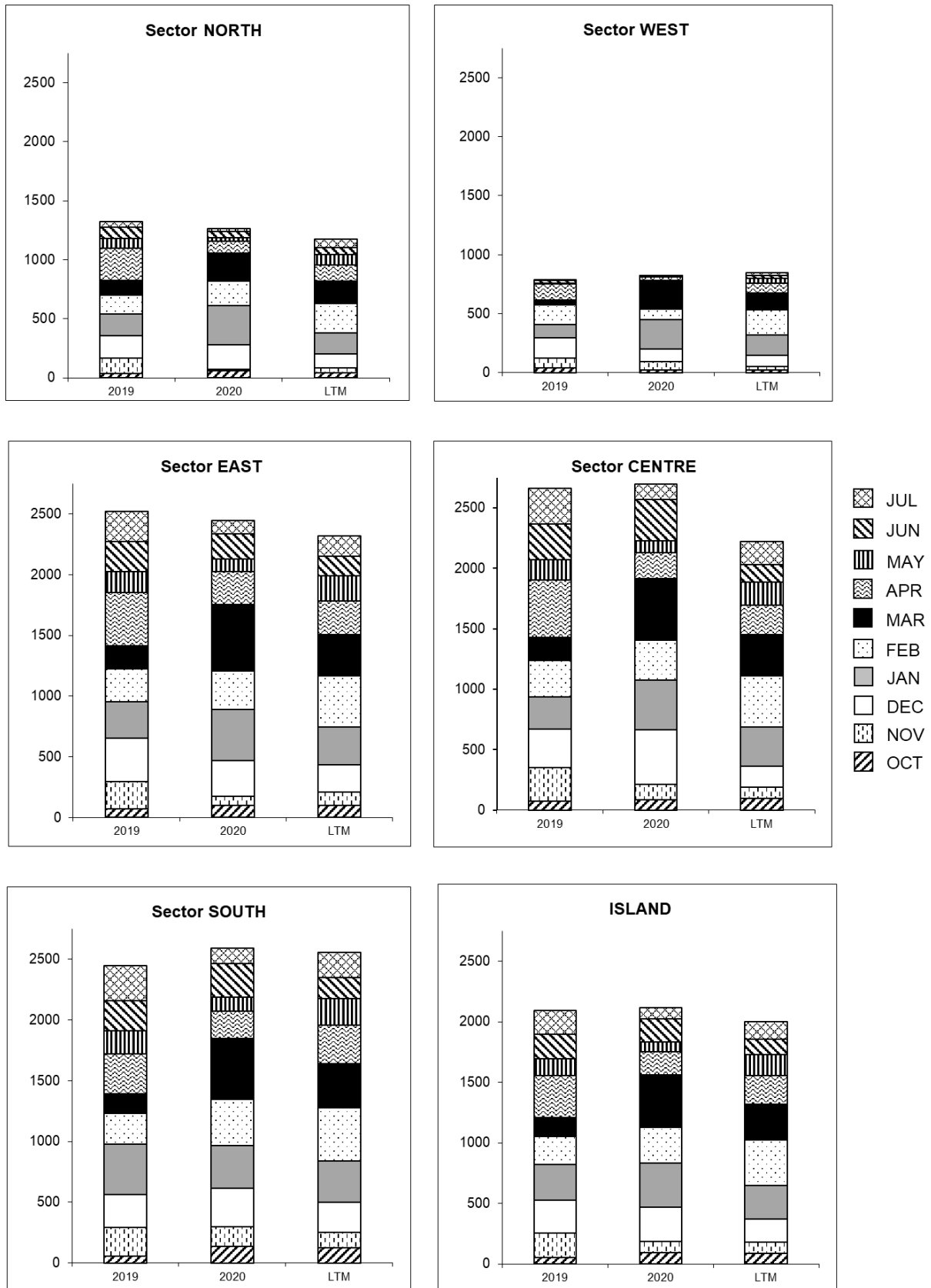
* figures in brackets are % of LTM (1981-10)

Table 1b. Cumulative rainfall (mm) from October 2019 to July 2020 for crop 2020 compared to that of crop 2019 and the LTM

	North	East	South	West	Centre	Island
2019	1322 (112)	2519 (109)	2449 (96)	789 (93)	2664 (120)	2094 (104)
2020	1267 (108)*	2448 (106)	2594 (101)	820 (97)	2700 (121)	2114 (105)
LTM	1178	2317	2556	846	2224	2004

* figures in brackets are % of LTM [Source: provisional data from Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2019 to July 2020 for the 2020 crop compared to the corresponding period of the 2019 crop and to the long term mean (LTM).



1.2 Air Temperature (Table 2)

During the month of July 2020, the maximum and minimum temperatures as well as temperature amplitude on MSIRI agro-meteorological stations are given below.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in July 2020

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	July 2020	DevN*	July 2020	DevN*	July 2020	DevN*
Ferret	24.4	-1.1	17.5	+1.3	6.9	-2.4
Réduit	21.8	-0.5	16.4	+1.1	5.4	-1.6
Belle Rive	21.8	-0.2	15.1	+1.1	6.7	-1.3
Union Park	22.1	+0.7	16.5	+1.1	5.6	-0.4

* Deviation from the Normal (1981-2010)

Mean maximum temperature during July 2020 was below normal at all stations except at Union Park. Mean minimum temperature exceeded the normal by more than 1.0° C at all stations. The resulting mean amplitude lagged behind the normal at all stations. Generally, below normal maximum temperature and temperature amplitude are not conducive to optimum sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during July 2020 were below normal at all stations except at Belle Rive. Recorded bright sunshine as a percentage of the normal amounted to 93% at Ferret, 89% at Réduit, 102% at Belle Rive and 88% at Union Park.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in July 2020

Station	July 2020	Normal	% of Normal
Ferret	219	235	93
Réduit	198	222	89
Belle Rive	191	188	102
Union Park	118	134	88

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

Cane samples were analysed for sucrose content during the last week of July 2020 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) in different varieties at end-July 2020.

Variety	North	East	South	West	Centre
M 52/78					12.2
M 703/89		11.8			
R 573	14.4		13.6	12.6	
M 2256/88	14.1			14.2	
R 575			13.0	12.8	
M 387/85		12.5			11.5
M 1246/84	13.2				
M 1989/99			11.0		
M 2593/92	13.6	13.2	12.3	13.0	11.6
M 2283/98			12.4		
M 1400/86	14.4	11.6	11.9	12.2	11.6
M 1176/77	14.4	12.0	12.2	12.9	11.8
M 1861/89			13.5		
M 2502/99		12.7			
R 579	12.2	10.5	11.0	11.4	10.7
M 1672/90	14.2		11.4		
R 570	11.6	10.9	12.0	12.0	
M 1392/00	14.7			13.4	
M 683/99	12.6			11.7	
M 216/02				13.6	
M 1561/01		13.1			
M 915/05	13.2			12.5	10.9
M 1002/02	13.3			12.6	

Table 4b. Comparison of Pol % cane (richesse) at the end of June and July 2018, 2019 and 2020.

Sectors	JUNE			JULY		
	2018	2019	2020	2018	2019	2020
North	11.4	10.7	11.8	12.5	12.6	13.4
East	11.1	10.7	10.3	12.4	12.0	11.4
South	12.0	10.4	10.8	12.5	11.9	12.0
West	12.8	11.1	11.1	13.4	13.4	12.4
Centre	11.7	10.0	10.0	12.0	11.4	11.2
Island	11.7	10.6	10.8	12.5	12.2	12.1

At the end of July 2020, sucrose content was 13.4% in the North, 11.4% in the East, 12.0% in the South, 12.4% in the West and 11.2% in the Centre. Compared to the corresponding period in 2019, *richesse* at end-July 2020 was comparable in sectors South and Centre, lagged behind in the East by 0.6° and the West by 1.0°, but exceeded that of the North by 0.8°. Sucrose content at the end of July, for the present crop, was lower than that of the corresponding period in 2018 in all sectors except in the North.

Island-wise, the *richesse* of 12.1% recorded at end of July 2020 was comparable to that of the corresponding period in 2019 but lagged behind that of 2018 by 0.4°.

3. CROP PRODUCTIVITY 2020

As at 1 August 2020, 5 271 ha representing 18% of miller-planters' land had been harvested compared to 6 248 ha (20%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 10% in the North, 22% in the East, 19% in the South, 16% in the West and 23% in the Centre. On account of the closing of milling activity at Médine, all harvested cane in the West sector are now processed in the three mills of the island. As such the extraction rate for the West sector has been 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 July 2020 amounted to 74.3 TCH and was below that of July 2019 (82.2 TCH) but was comparable to that obtained in July 2018. Sector-wise, cane productivity recorded to-date was 78.3 TCH in the North, 73.7 TCH in the East, 78.9 TCH in the South, 67.2 TCH in the West and 62.3 TCH in the Centre. Compared to the same period in 2019, cane productivity recorded to-date was lagging behind in all sectors by 4.9 TCH in the North, 7.7 TCH in the East, 3.1 TCH in the South, 25.1 TCH in the West and 13.8 TCH in the Centre. When compared to July 2018, cane productivity in July 2020 was comparable in the East and Centre, higher by 5.8 TCH in the South but lagged behind in the other two sectors.

Table 5a. Cane productivity (TCH) as at end July for the 2018, 2019 and 2020 crops

	North	East	South	West	Centre	Island
2018	80.2	73.7	73.1	80.7	61.5	74.4
2019	83.2	81.4	82.0	92.3	76.1	82.2
2020	78.3	73.7	78.9	67.2	62.3	74.3

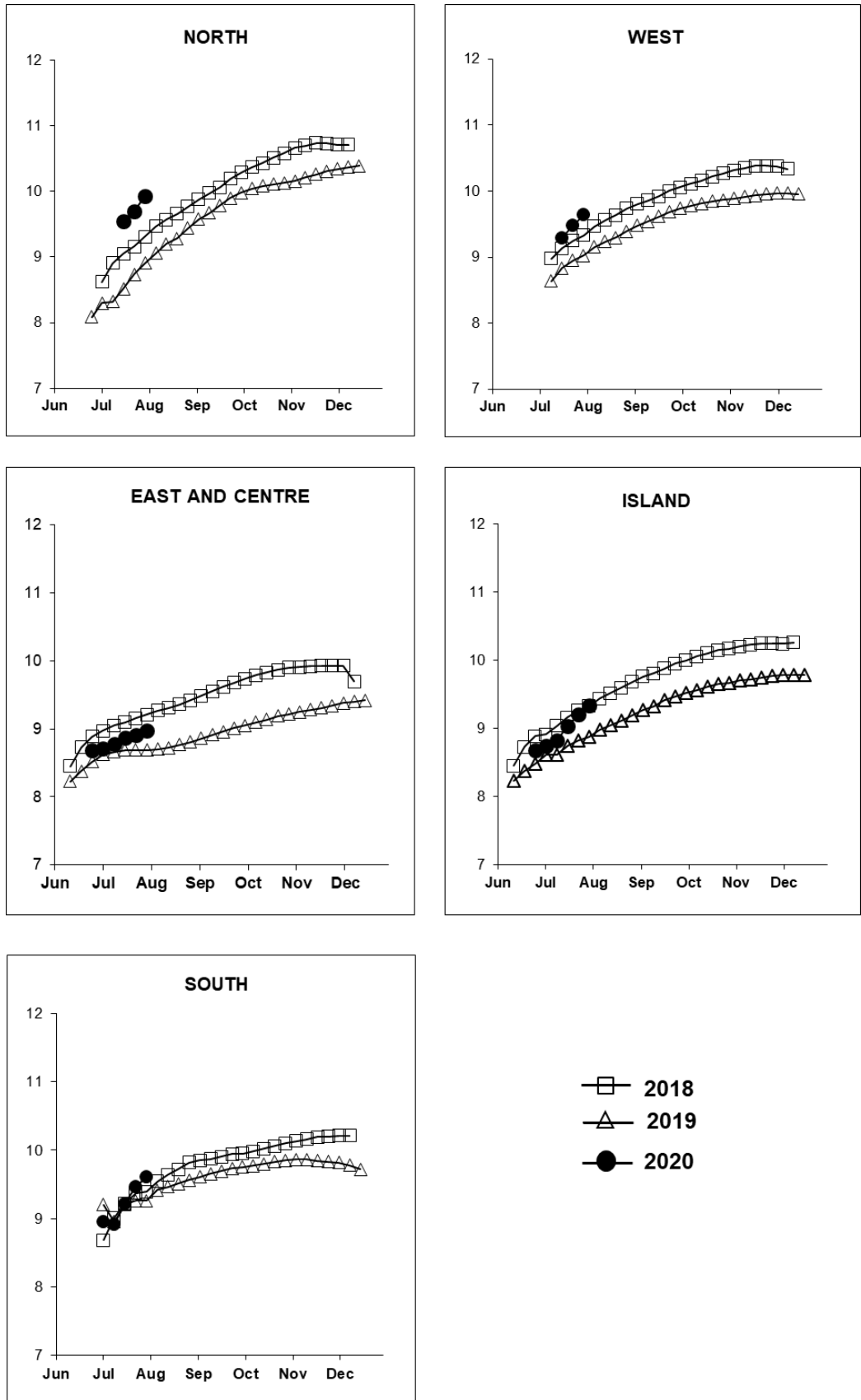
3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.34% was higher than that at the corresponding period in 2019 (8.88%) but comparable to that recorded in July 2018. Sector-wise, the extraction rate recorded was 9.93% in the North, 8.97% in in the East-Centre, 9.61% in the South and 9.64% in the South. Compared to the corresponding period last year, extraction rate to-date was higher by 1.02° in the North, 0.28° in sector East-Centre, 0.35° in the South and 0.62° in the West. When compared to July 2018, extraction rate to-date was higher in all sectors except in the East-Centre.

Table 5b. Extraction rate (%) as at end July for the 2018, 2019 and 2020 crops

	North	East-Centre	South	West	Island
2018	9.31	9.21	9.39	9.33	9.33
2019	8.91	8.69	9.26	9.02	8.88
2020	9.93	8.97	9.61	9.64	9.34

Figure 2. Evolution of extraction rate (%) for the 2018, 2019 and 2020 crops



3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 6.94 TSH was lower than that of the corresponding period in 2019 (7.30 TSH) by 0.36 tonne (5%). Sector-wise, sugar productivity was 7.78 TSH in the North, 6.41 TSH in the East-Centre, 7.58 TSH in the South and 6.48 TSH in the West. These figures when compared to those of July 2019 was comparable in the South, higher in the North but lagged behind in the other sectors.

Table 5c. Sugar productivity (TSH) as at end July for the 2018, 2019 and 2020 crops

	North	East-Centre	South	West	Island
2018	7.47	6.60	6.86	7.53	6.94
2019	7.41	7.01	7.59	8.33	7.30
2020	7.78	6.41	7.58	6.48	6.94

4. CROP 2020

The month of July 2020 was characterised by below normal rainfall in all sectors of the island coupled with below normal temperature amplitude and solar radiation which did not favour optimal sucrose accumulation. As such, the recorded *richesse* at end-July 2020 of 12.1% was comparable to that of July 2019, but lagged behind that of 2018 (12.5%).

With about 18% of miller-planters' land harvested as at 1 August 2020, the cane productivity at island level in 2020 was lagging behind that recorded during the same period last year by 10%. However, extraction rate recorded at the end of July 2020 over the island was higher than that of last year while the overall sugar productivity of 6.94 TSH at end- July 2020 was lower than that of 2019 by 5%. This deficit in sugar productivity can be reduced provided normal winter conditions prevail in the coming months which will boost the sucrose accumulation potential of the remaining standing crop.