

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020

14 September 2020

SUGAR CANE CROP 2020

Status: End August 2020

1. CLIMATE

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

The island average rainfall of 58 mm recorded over the sugar cane areas during the month of August 2020 was 50% of the long-term mean (LTM) of 117 mm. Sector-wise, below normal rainfall was recorded in all sectors with 20 mm in the North, 73 mm in the East, 67 mm in the South, 2 mm in the West and 125 mm in the Centre. These amounts represented 34% of the long-term mean in the North, 53% in the East, 44% in the South, 11% in the West and 78% in the Centre.

Rainfall over the period October 2019 to August 2020 cumulated to 2172 mm representing 102% of the long-term mean for the island. During the same period, 1287 mm were recorded in the North, 2521 mm in the East, 2661 mm in the South, 822 mm in the West and 2825 mm in the Centre. These values represented 104%, 103%, 98%, 95% and 118% of the respective long-term means.

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

	North	East	South	West	Centre	Island
2019	46 (79)	124 (90)	263 (172)	8 (44)	171 (107)	146 (125)
2020	20 (34)*	73 (53)	67 (44)	2 (11)	125 (78)	58 (50)
LTM	58	138	153	18	160	117

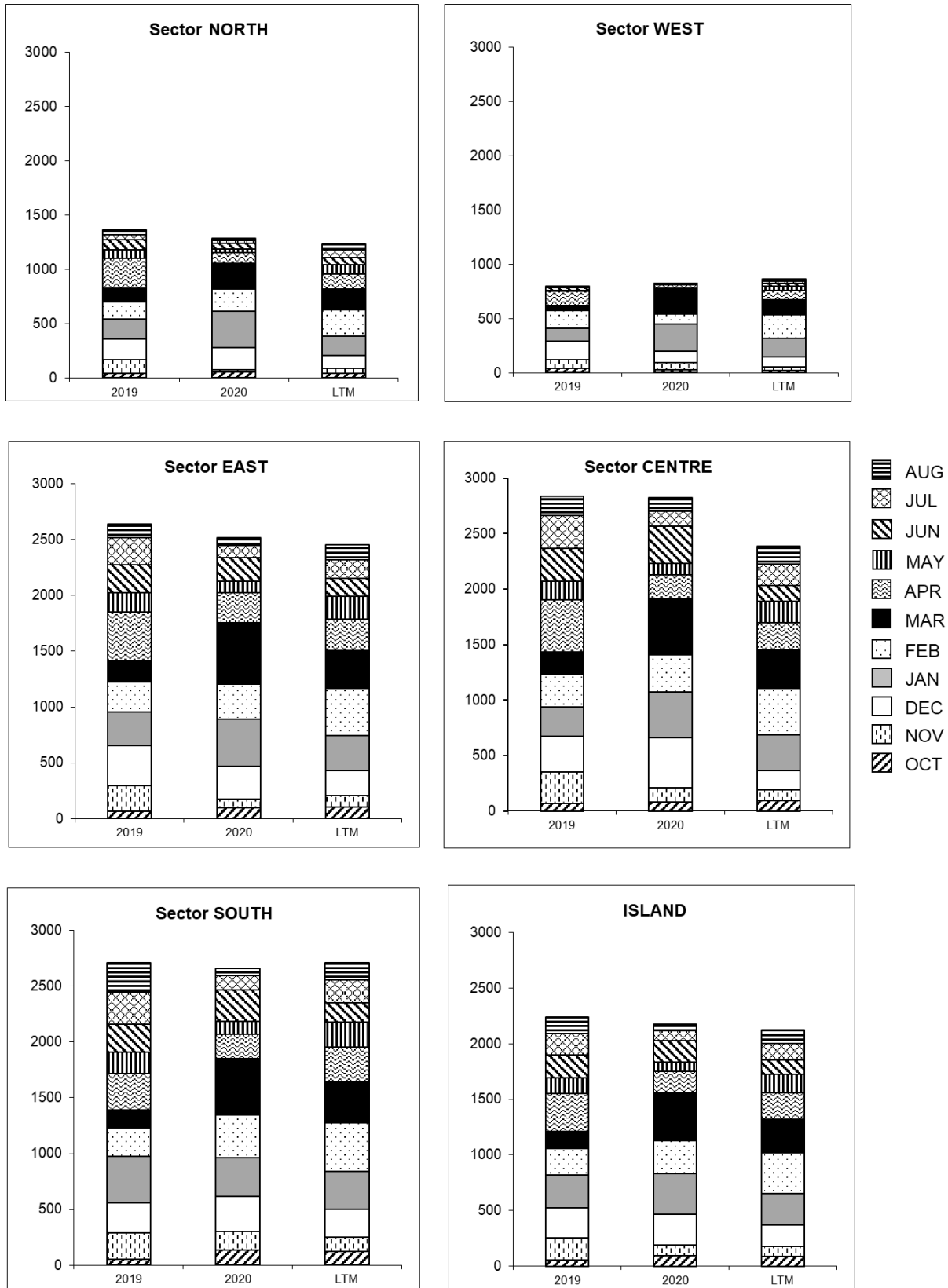
* figures in brackets are % of LTM (1981-10)

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

	North	East	South	West	Centre	Island
2019	1368 (111)	2643 (108)	2712 (100)	797 (92)	2835 (119)	2240 (106)
2020	1287 (104)*	2521 (103)	2661 (98)	822 (95)	2825 (118)	2172 (102)
LTM	1236	2455	2709	864	2384	2121

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

Figure 1. Monthly rainfall (mm) for the period October 2019 to August 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 August 2020, the maximum and minimum temperatures as well as temperature amplitude on the four MSIRI agro-meteorological stations are given below.

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Aug 2020	DevN*	Aug 2020	DevN*	Aug 2020	DevN*
Ferret	24.4	-1.3	16.7	+0.2	7.7	-1.5
Réduit	22.5	0.0	15.3	0.0	7.2	0.0
Belle Rive	22.1	+0.1	14.6	+0.6	7.5	-0.5
Union Park	22.5	+1.0	15.9	+0.6	6.6	+0.4

* Deviation from the Normal (1981-2010)

Mean maximum temperature during August 2020 was close to normal at Réduit and Belle Rive, lagged behind the normal at Ferret by 1.3 °C whereas at Union Park it was above normal by 1.0 °C. The mean minimum temperature exceeded the normal at all stations except at Réduit where it was similar to the normal. The resulting mean amplitude was below the normal at Ferret and Belle Rive, similar to the normal at Réduit while at Union Park it exceeded the normal by 0.4°C.

1.3 Sunshine (Table 3)

During the month of August 2020, data from the MSIRI agro-meteorological stations showed that sunshine hours were below normal at Ferret and Réduit while it was comparable to the normal at Belle Rive and above normal at Union Park. Recorded bright sunshine as a percentage of the normal amounted to 93% at Ferret, 96% at Réduit, 100% at Belle Rive and 104% at Union Park.

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

Station	August 2020	Normal	% of Normal
Ferret	230	247	93
Réduit	212	220	96
Belle Rive	201	202	100
Union Park	149	143	104

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

Cane samples were analysed for sucrose content during the last week of August 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-August 2020.

Variety	North	East	South	West	Centre
R 573			14.8	12.8	
M 2256/88	13.7			13.6	
R 575				14.1	
M 387/85					12.7
M 1246/84	13.7				
M 2593/92	14.8		12.9	13.0	12.0
M 2283/98			11.5		
M 1400/86	15.2		12.6	13.0	
M 1176/77	14.9	13.9	13.7	14.3	13.3
M 2502/99		12.6			
R 579	14.5	12.8	12.2	12.5	10.9
M 1672/90	15.3		12.0		
R 570	12.1	14.2	13.4		
M 1392/00	14.3				
M 683/99	13.7			12.9	
M 1561/01		14.7			
M 915/05	15.6			13.8	11.2
M 1002/02	14.2			14.1	

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

Sectors	JULY			AUGUST		
	2018	2019	2020	2018	2019	2020
North	12.5	12.6	13.4	15.1	14.6	14.4
East	12.4	12.0	11.4	13.8	12.6	13.4
South	12.5	11.9	12.0	14.0	12.7	12.8
West	13.4	13.4	12.4	14.8	14.6	13.4
Centre	12.0	11.4	11.2	13.7	12.3	11.9
Island	12.5	12.2	12.1	14.2	13.2	13.3

At the end of August 2020, sucrose content was 14.4% in the North, 13.4% in the East, 12.8% in the South, 13.4% in the West and 11.9% in the Centre. These values were lagging behind that of the corresponding period in 2019 by 0.2° in the North, 1.2° in the West and 0.4° in the Centre, was comparable in the South but was higher in the East by 0.8°. Compared to the corresponding period in 2018, *richesse* at end-August 2020 was lower in all sectors.

Island-wise, the *richesse* of 13.3% recorded at end of August 2020 was comparable to that of the corresponding period in 2019 but lagged behind that of 2018 by 0.9°.

4. CROP PRODUCTIVITY 2020

As at 29 August 2020, 10 070 ha representing 34% of miller-planters' land were harvested compared to 10 655 ha (34%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 24.2% in the North, 37.2% in the East, 36.4% in the South, 36.3% in the West and 36.1% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters follows.

4.1 Cane productivity (Table 5a)

Cane productivity for the island as at end August 2020 was 72.1 TCH and was below that of August 2019 (82.1 TCH) and that of 2018 (73.5 TCH). Sector-wise, cane productivity to-date recorded was 77.2 TCH in the North, 73.1 TCH in the East, 74.3 TCH in the South, 66.0 TCH in the West and 57.8 TCH in the Centre. Compared to the same period in 2019, cane productivity recorded to-date was lagging behind in all sectors; by 6.4 TCH in the North, 9.9 TCH in the East, 8.0 TCH in the South, 13.4 TCH in the West and 16.3 TCH in the Centre. When compared to the corresponding period in 2018, cane productivity in August 2020 was lower by 1.8 TCH in the North, 13.7 TCH in the West and 3.0 TCH in the Centre but was higher by 1.1 TCH in the East and 2.4 TCH in the South.

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

Sector	End July			End August		
	2018	2019	2020	2018	2019	2020
North	80.2	83.2	78.3	79.0	83.6	77.2
East	73.7	81.4	73.7	72.0	83.0	73.1
South	73.1	82.0	78.9	71.9	82.3	74.3
West	80.7	92.3	67.2	79.7	79.4	66.0
Centre	61.5	76.1	62.3	60.8	74.1	57.8
Island	74.4	82.2	74.3	73.5	82.1	72.1

4.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.78% at end-August 2020 was higher than that at the corresponding period in 2019 (9.19%) and 2018 (9.68%). Sector-wise, the extraction rate recorded was 10.60% in the North, 9.38% in the East-Centre, 9.79% in the South and 10.06% in the South. Compared to the corresponding period last year, extraction rate to-date was higher in all sectors, the difference ranging from 0.23° in the South to 1.16° in the North. When compared to August 2018, extraction rate to-date was lagging behind in all sectors except in the North sector.

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

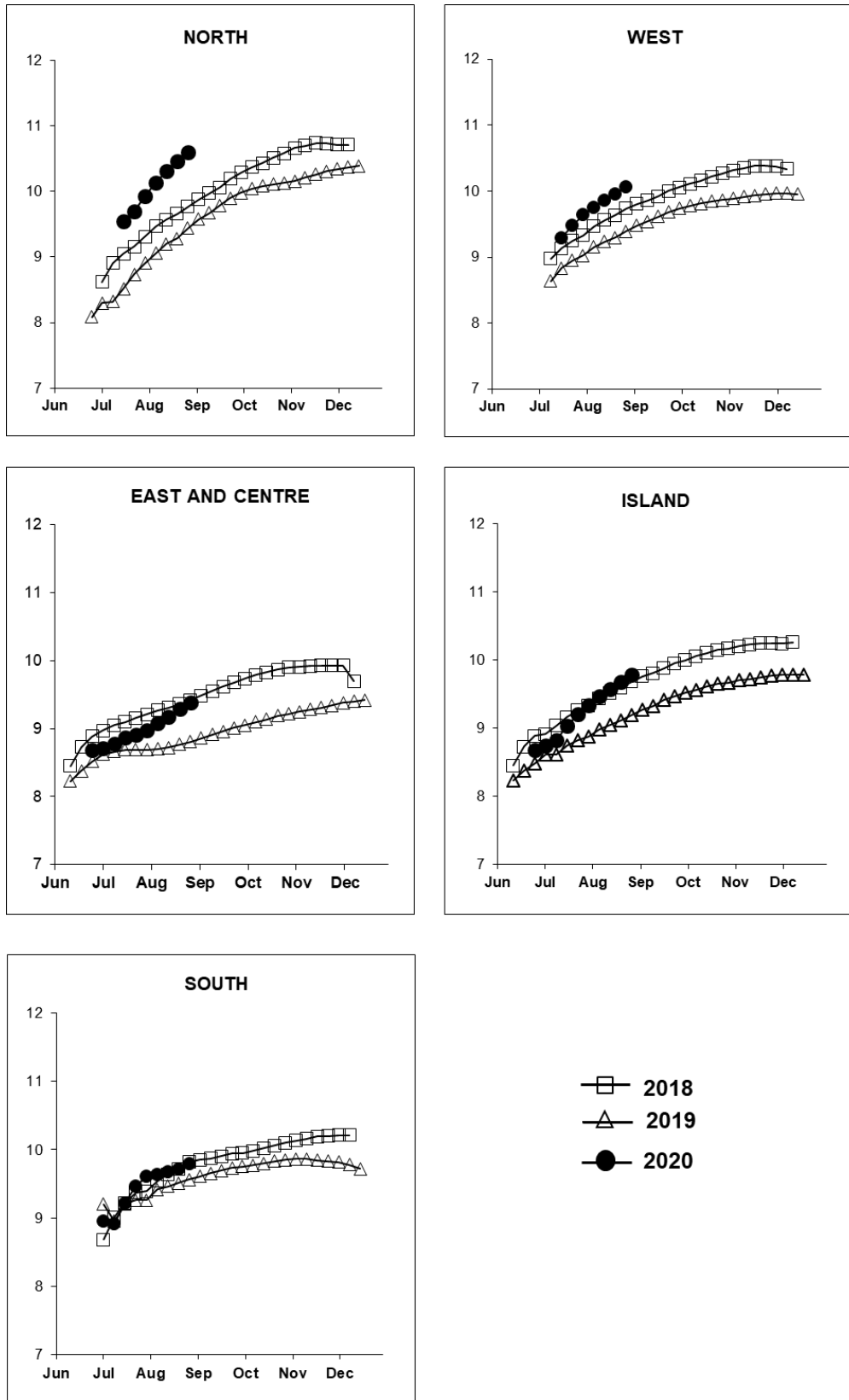


Table 5b. Extraction rate (%) as at end July and End August for the 2018, 2019 and 2020 crops

Sectors	End July			End August		
	2018	2019	2020	2018	2019	2020
North	9.31	8.91	9.93	9.77	9.44	10.60
East/Centre	9.21	8.69	8.97	9.42	8.81	9.38
South	9.39	9.26	9.61	9.82	9.56	9.79
West	9.33	9.02	9.64	10.18	9.39	10.06
Island	9.33	8.88	9.34	9.68	9.19	9.78

4.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.05 TSH was lower than that at the corresponding period in 2019 (7.54 TSH) by 0.49 tonne (7%). Sector-wise, sugar productivity was 8.81 TSH in the North, 6.59 TSH in the East-Centre, 7.27 TSH in the South and 6.64 TSH in the West. Compared to the corresponding period in 2019, these figures were lagging behind by 0.61 TSH in the East-Centre, 0.60 TSH in the South and 0.82 TSH in the West while in the North it was higher by 0.92 TSH.

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

Sectors	End July			End August		
	2018	2019	2020	2018	2019	2020
North	7.37	7.41	7.78	7.72	7.89	8.81
East/Centre	6.54	7.01	6.41	6.61	7.20	6.59
South	6.91	7.59	7.58	7.06	7.87	7.27
West	7.92	8.33	6.48	8.11	7.46	6.64
Island	6.88	7.30	6.94	7.11	7.54	7.05

5. CROP 2020

The weather conditions prevailing during the month of August 2020 were characterised by deficient rainfall in all sectors coupled with below to near normal solar radiation and below normal temperature amplitude. The deficit rainfall was favourable to ripening rather than growth of the crop, but the rate of sucrose accumulation could have been better had it been for above normal solar radiation and temperature amplitude. So far, with 34% of the crop harvested on miller-planters' land, milling data indicate a lower cane productivity when compared to that of last year. The shortfall in cane productivity over the island stood at 10.0 TCH at end August 2020, while extraction rate in August 2020 over the island exceeded that of last year by 0.59°.

The overall sugar productivity in August 2020 over the island has been on the lower side, with a shortfall of 0.49 TSH compared to 2019. Based on these data and with no major departure in the weather from the normal in the coming weeks, the deficit in sugar productivity for crop 2020 as compared to that of last year could be further reduced in the event of further improvement in extraction.