

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020

17 August 2021

### SUGAR CANE CROP 2021

**Status: End July 2021**

#### 1. CLIMATE

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

The 200 mm of rainfall recorded over the sugar cane areas during the month of July 2021 exceeded the normal of 146 mm, representing 137% of the long-term mean (LTM). Above normal rainfall was recorded in all sectors with 127 mm in the North, 214 mm in the East, 256 mm in the South, 21 mm in the West and 303 mm in the Centre.

The cumulative rainfall over the period October 2020 to July 2021 was 1040 mm in the North, 2325 mm in the East, 2454 mm in the South, 559 mm in the West and 2593 mm in the Centre. These amounts represented 89%, 100%, 108%, 65% and 114% in sectors North, East, South, West and Centre respectively. The island average of 1953 mm for the island represented 102% of the long-term mean for the same period.

**Table 1a. Rainfall (mm) for the month of July for crops 2020, 2021 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2020</b>	24 (37)	111 (62)	129 (69)	1 (5)	131 (62)	90 (62)
<b>2021</b>	<b>127</b> (195)*	<b>214</b> (120)	<b>256</b> (136)	<b>21</b> (105)	<b>303</b> (144)	<b>200</b> (137)
<b>LTM</b>	65	179	188	20	211	146

\* figures in brackets are % of LTM (1991-2020)

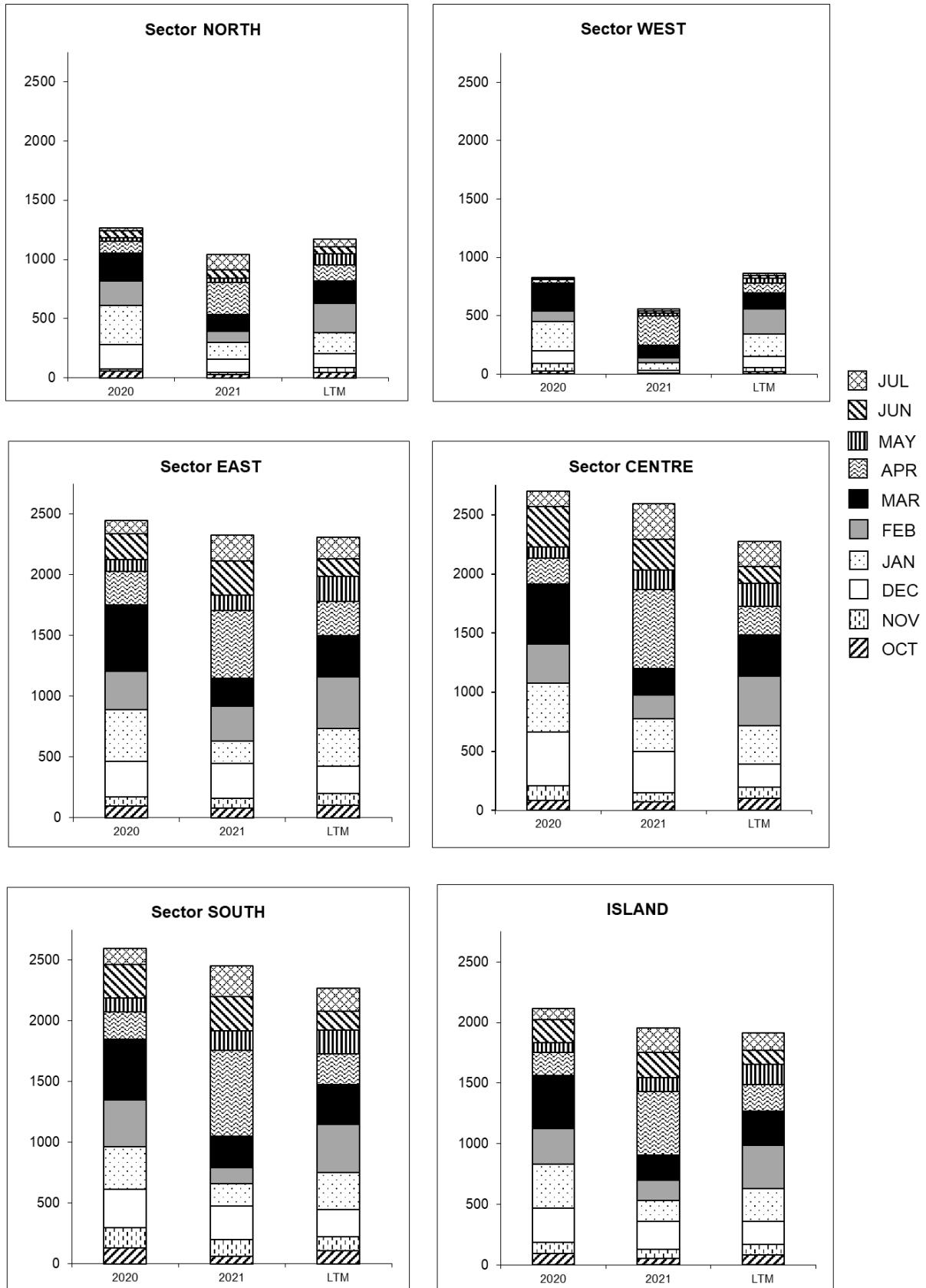
**Table 1b. Cumulative rainfall (mm) from October 2020 to July 2021 for crop 2021 compared to that of crop 2020 and the LTM**

	North	East	South	West	Centre	Island
<b>2020</b>	1267 (108)	2448 (106)	2594 (114)	820 (95)	2700 (119)	2115 (110)
<b>2021</b>	<b>1040</b> (89)*	<b>2325</b> (100)	<b>2454</b> (108)	<b>559</b> (65)	<b>2593</b> (114)	<b>1953</b> (102)
<b>LTM</b>	1173	2315	2267	865	2273	1915

\* figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October 2020 to July 2021 for the 2021 crop compared to the corresponding period of the 2020 crop and to the long term mean (LTM).**



### 1.2 Air Temperature (Table 2)

Data on air temperatures recorded during the month of July 2021 on MSIRI agro-meteorological stations are given below.

**Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in July 2021**

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	July 2021	DevN*	July 2021	DevN*	July 2021	DevN*
Ferret	24.7	-0.8	17.1	+0.9	7.6	-1.7
Réduit	22.3	0.0	15.9	+0.6	6.4	-0.6
Belle Rive	20.5	-1.5	15.1	+1.1	5.4	-2.6
Union Park	22.6	+1.2	16.5	+1.1	6.1	+0.1

\* Deviation from the Normal (1981-2010)

Mean maximum temperature during July 2021 was comparable to the normal at Réduit, higher than the normal at Union Park but was below normal at Ferret and Belle Rive. Mean minimum temperature was above normal at all stations resulting in a mean temperature amplitude lagging behind the normal at Ferret, Réduit and Belle Rive, whereas at Union Park it was comparable to the normal. Generally, low temperature amplitude is not conducive to optimum sucrose accumulation.

### 1.3 Sunshine (Table 3)

Data from the four MSIRI agro-meteorological stations showed that sunshine hours recorded during July 2021 were above normal at all stations except at Belle Rive. Recorded bright sunshine as a percentage of the normal amounted to 103% at Ferret, 101% at Réduit, 94% at Belle Rive and 104% at Union Park

**Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in July 2021**

Station	July 2021	Normal	% of Normal
Ferret	241	235	103
Réduit	225	222	101
Belle Rive	176	188	94
Union Park	139	134	104

## 2.0 SUCROSE ACCUMULATION (Tables 4a and 4b)

Assessment of sucrose content during the last week of July 2021 was carried out in cane samples taken 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 2021.**

Variety	North	East	South	West	Centre
M 52/78			13.8		
R573	12.6		12.7	11.9	
M 2256/88	12.8				
R575			13.6	12.9	
M 387/85		13.6			12.2
M 1246/84	10.9	11.0			
M 1989/99	9.7		11.9		
M 2283/98			12.5		
M 1176/77	12.5		12.3	12.5	12.8
M 1861/89			13.5		
M 2593/92	11.3	12.1	12.7	11.7	10.8
M 1400/86	10.8	11.6	11.7	11.9	11.6
M 2502/99					
R579	11.6	10.9	12.0	10.7	11.5
M 1672/90	10.8	10.6	11.5		
R570	9.9	11.2	11.8	11.0	
M 915/05			11.5	12.1	12.1
M 683/99				13.2	
M 216/02			11.7		
M 1561/01			12.3		
M 1256/04			12.2		
M 1002/02				13.2	

**Table 4b. Comparison of Pol % cane (richesse) at the end of June and July 2019, 2020 and 2021.**

Sectors	JUNE			JULY		
	2019	2020	2021	2019	2020	2021
North	10.7	11.8	9.9	12.6	13.4	11.0
East	10.7	10.3	10.3	12.0	11.4	11.5
South	10.4	10.8	10.4	11.9	12.0	12.4
West	11.1	11.1	10.0	13.4	12.4	12.0
Centre	10.0	10.0	9.8	11.4	11.2	11.7
<b>Island</b>	<b>10.6</b>	<b>10.8</b>	<b>10.2</b>	<b>12.2</b>	<b>12.1</b>	<b>11.7</b>

The sucrose content at the end of July 2021 was 11.0% in the North, 11.5% in the East, 12.4% in the South, 12.0% in the West and 11.7% in the Centre. Compared to the corresponding period in 2020, *richesse* at end-July 2021 was comparable in sector East, exceeded that of last year by 0.4° in the South and 0.5° in the Centre, but lagged behind by 2.4° in the North and 0.4° in the West. Sucrose content at the end of July, for the present crop, was also lower than that of the corresponding period in 2019 in all sectors except in the South and Centre.

Sucrose content has improved in all sectors from June to July 2021 with an increment of 1.1° in the North, 1.2° in the East, 2.0° in both the South and West, and 1.9° in the Centre. On average for the island, the increase in *richesse* was 1.5° in 2021 compared to 1.3° for the corresponding period in 2020.

Island-wise, the *richesse* of 11.7% recorded at end of July 2021 was lagging behind those of 2020 (12.1%) by 0.4° and 2019 (12.2%) by 0.5°.

### 3. CROP PRODUCTIVITY 2021

As at 31 July 2021, 3820 ha representing about 13.6% of miller-planters' land had been harvested compared to 5271 ha (17.9%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 5.5% in the North, 22.4% in the East, 8.1% in the South, 14.6% in the west and 25.9% 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 July 2021 reached 69.2 TCH and was below that of July 2020 (74.3 TCH) and July 2019 (82.2 TCH). Sector-wise, cane productivity recorded was 72.2 TCH in the North, 74.7 TCH in the East, 72.9 TCH in the South, 53.8 TCH in the West and 58.1 TCH in the Centre. Compared to the same period last year, cane productivity recorded to-date was lagging behind by 6.1 TCH in the North, 6.0 TCH in the South, 13.4 TCH in the West and 4.2 TCH in the Centre, but was higher by 1.0 TCH in the East. When compared to July 2019, cane productivity in July 2021 was inferior in all sectors.

**Table 5a. Cane productivity (TCH) as at end July for the 2019, 2020 and 2021 crops**

	North	East	South	West	Centre	Island
<b>2019</b>	83.2	81.4	82.0	92.3	76.1	82.2
<b>2020</b>	78.3	73.7	78.9	67.2	62.3	74.3
<b>2021</b>	72.2	74.7	72.9	53.8	58.1	69.2

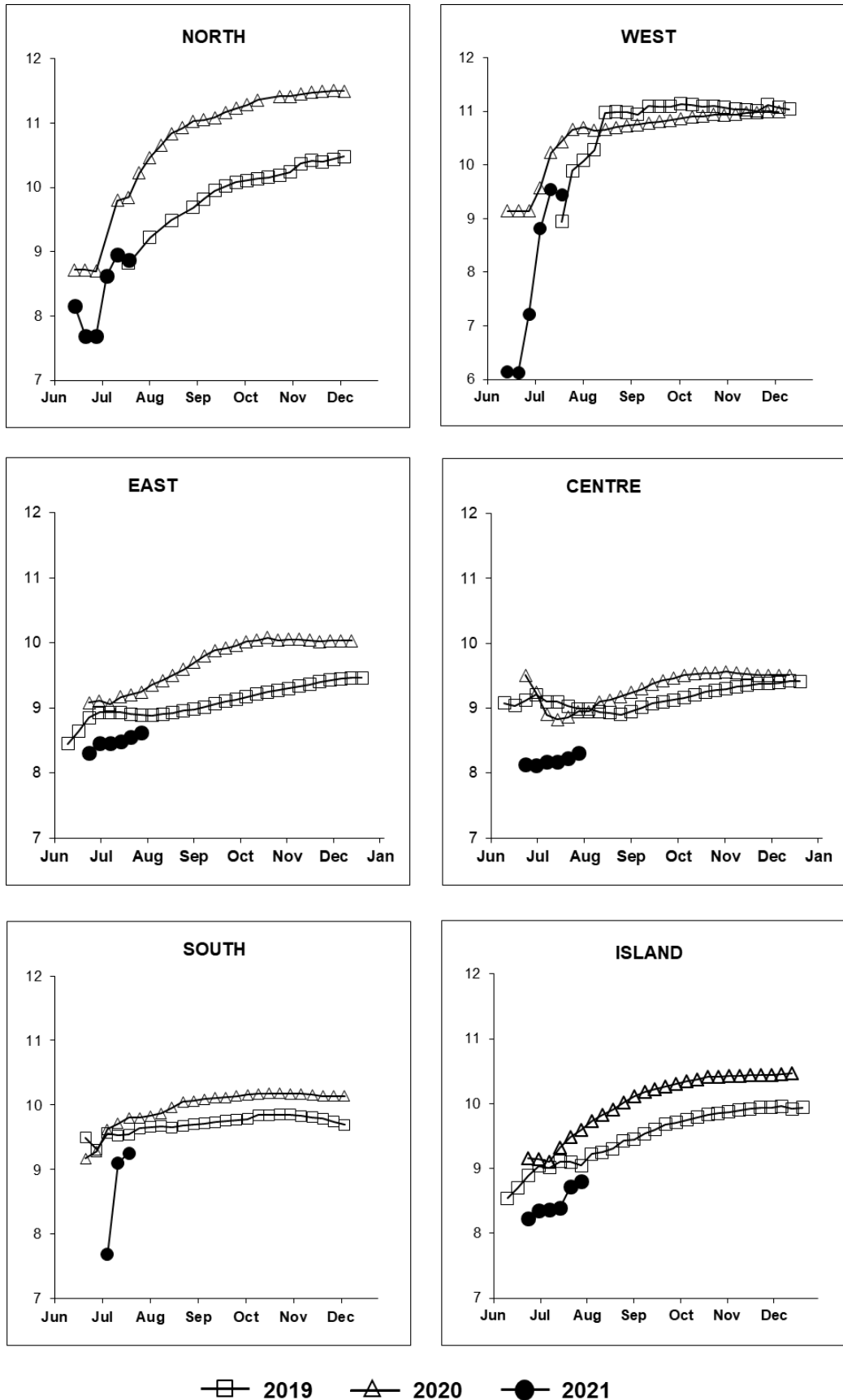
#### 4.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 8.81% was lower than that at the corresponding period in 2020 (9.59%) and 2019 (9.05%). Sector-wise, the extraction rate recorded was 8.88% in the North, 8.62% in the East, 9.25% in the South, 9.44% in the West and 8.31% in the Centre. Compared to the corresponding period last year, extraction rate to-date was lagging behind by 0.97° in the North, 0.62° in the East, 0.55° in the South, 1.0° in the West and 0.64° in the Centre. When compared to July 2019, extraction rate to-date was lower in all sectors except in the North.

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

	North	East	South	West	Centre	Island
<b>2019</b>	8.82	8.89	9.54	8.94	8.99	9.05
<b>2020</b>	9.85	9.24	9.80	10.44	8.95	9.59
<b>2021</b>	8.88	8.62	9.25	9.44	8.31	8.81

**Figure 2. Evolution of extraction rate on miller-planters' land for crops 2019, 2020 and 2021.**



### 4.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 6.10 TSH was lower than that at the corresponding period in 2020 (7.13 TSH) by 1.03 tonne (14.4%). Sector-wise, sugar productivity was 6.41 TSH in the North, 6.44 TSH in the East, 6.74 TSH in the South, 5.08 TSH in the West and 4.83 TSH in the Centre. These figures when compared to those of July 2020 were lagging behind by 1.30 TSH in the North, 0.37 TSH in the East, 0.99 TSH in the South, 1.94 TSH in the West and 0.75 TSH in the Centre.

**Table 5c. Sugar productivity (TSH) as at end July for the 2019, 2020 and 2021 crops**

	North	East	South	West	Centre	Island
<b>2019</b>	7.34	7.24	7.82	8.25	6.84	7.44
<b>2020</b>	7.71	6.81	7.73	7.02	5.58	7.13
<b>2021</b>	6.41	6.44	6.74	5.08	4.83	6.10

## 5. CROP 2021

Climatic conditions, with above normal rainfall and below normal temperature amplitude, that prevailed during the month of July 2021 were not favourable to optimum sucrose accumulation. This is reflected in the *richesse* as well as the extraction rate recorded over the island, which at the end of July 2021 were both lower than those obtained for the corresponding period in 2020. With about 14% of miller-planters' land harvested as at 31 July 2021, the cane productivity at island level in 2021 was lagging behind that recorded during the same period last year by 7%. Moreover, the lower extraction rate recorded at the end of July 2021 over the island compared to that of last year has resulted in an overall sugar productivity of 6.10 TSH, which was lagging behind that of 2020 by 14.4%.