

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020

20 October 2021

### SUGAR CANE CROP 2021

**Status: End September 2021**

#### 1. CLIMATE

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

The island average rainfall of 75 mm recorded over the sugar cane areas during the month of September 2021 was 82% of the long-term mean (LTM) of 92 mm. Apart from the Centre sector, all the other sectors received below normal rainfall. The North recorded 34 mm of rainfall, the East 87 mm, the South 95 mm, the West 7 mm and the Centre 135 mm. These amounts represented 76% of the long-term mean in the North, 75% in the East, 83% in the South, 29% in the West and 107% in the Centre.

Total rainfall over period October 2020 to September 2021 amounted to 2233 mm, which is higher than the island long-term mean of 2127 mm by 5% for this period. During the same period 1159 mm were recorded in the North, 2691 mm in the East, 2788 mm in the South, 603 mm in the West and 3035 mm in the Centre. These figures represented 91%, 104%, 110%, 66% and 118% of the respective long-term mean.

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

	North	East	South	West	Centre	Island
<b>2020</b>	30 (67)	96 (83)	88 (77)	20 (83)	112 (89)	74 (80)
<b>2021</b>	<b>34</b> (76)*	<b>87</b> (75)	<b>95</b> (83)	<b>7</b> (29)	<b>135</b> (107)	<b>75</b> (82)
<b>LTM</b>	45	116	114	24	126	92

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

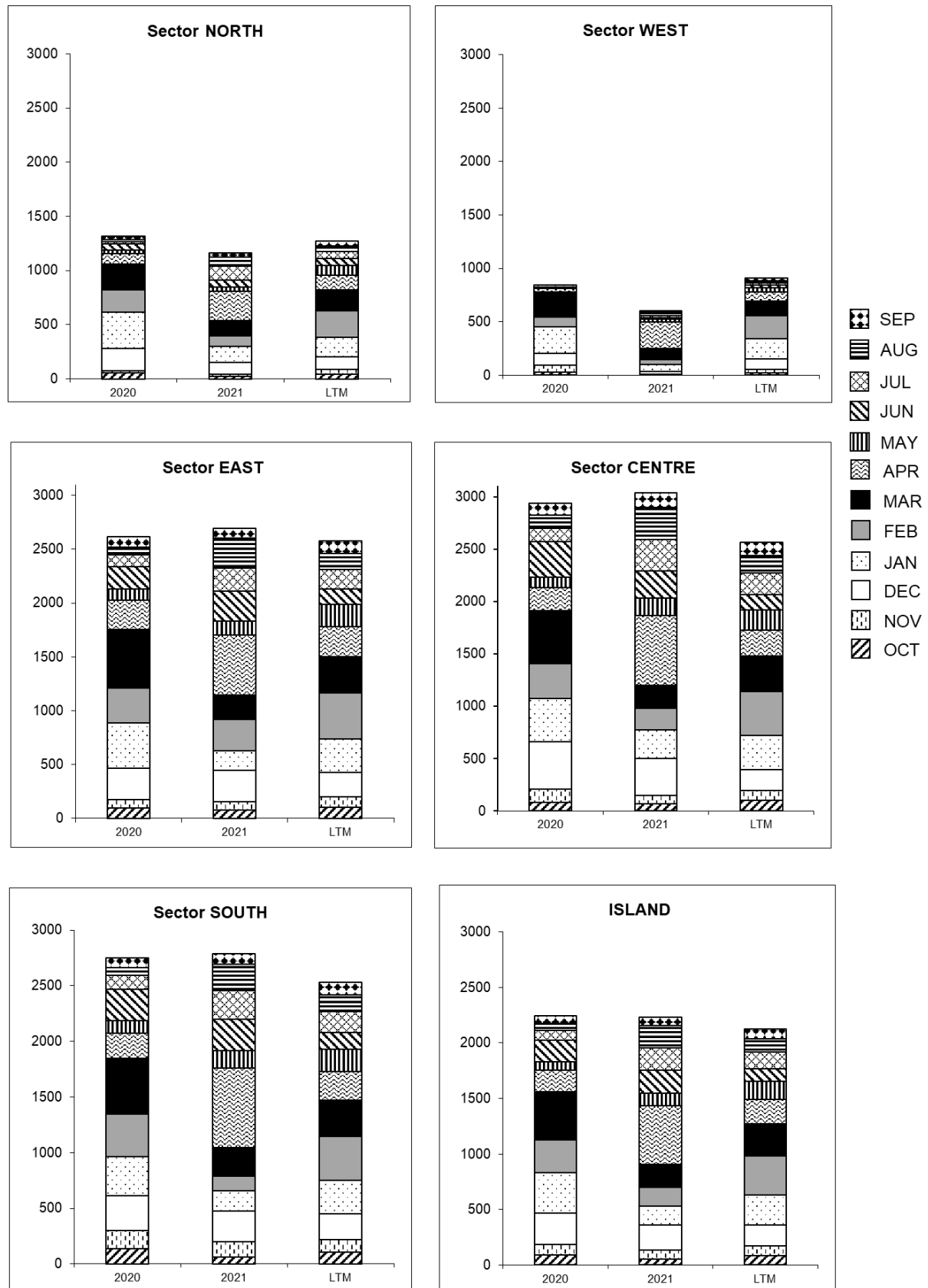
**Table 1b. Cumulative rainfall (mm) from October 2020 to September 2021 for crop 2021 compared to that of crop 2020 and the LTM**

	North	East	South	West	Centre	Island
<b>2020</b>	1317 (103)	2617 (101)	2749 (109)	842 (93)	2937 (115)	2247 (106)
<b>2021</b>	<b>1159</b> (91)*	<b>2691</b> (104)	<b>2788</b> (110)	<b>603</b> (66)	<b>3035</b> (118)	<b>2233</b> (105)
<b>LTM</b>	1274	2581	2530	909	2564	2127

\* figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October 2020 to September 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 September 2021 on MSIRI agro-meteorological stations are given below.

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Sep 2021	DevN*	Sep 2021	DevN*	Sep 2021	DevN*
Ferret	25.4	-1.3	15.5	-1.5	9.9	+0.2
Réduit	23.0	-0.7	16.6	+0.8	6.4	-1.5
Belle Rive	21.1	-1.9	15.6	+0.8	5.5	-2.7
Union Park	23.2	+0.4	16.4	+0.4	6.8	0.0

\* Deviation from the Normal (1991-2020)

During the month of September 2021, mean maximum temperature was below normal at all stations except at Union Park. Mean minimum temperature exceeded the normal at all stations except at Ferret. The mean temperature amplitude was comparable to the normal at Ferret and Union Park, but lagged behind the normal at the other two stations by more than 1.5 °C.

### 1.3 Sunshine (Table 3)

Data from the four MSIRI agro-meteorological stations showed that bright sunshine hours during September 2021 exceeded the normal at all stations except at Belle Rive. Recorded bright sunshine as a percentage of the normal amounted to 109% at Ferret, 104% at Réduit, 92% at Union Park and 111% at Belle Rive.

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

Station	Sep 2021	Normal	% of Normal
Ferret	252	232	109
Réduit	230	222	104
Belle Rive	179	194	92
Union Park	165	148	111

\* Normal (1991-2020)

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

During the last week of September 2021, cane samples (clean cane) were analysed for sucrose content from miller-planters' land in all factory areas covering the main cultivated varieties. The average Pol % cane (*richesse*) was calculated on the basis of area under cultivation for 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-September 2021.**

Variety	North	East	South	West	Centre
M 1176/77	13.0		13.7	14.3	
M 1861/89			13.1		
M 1672/90	12.7	12.2	13.3		
M 2593/92	14.1		13.9	13.4	
M 2283/98			12.9		
M 1989/99	12.5				
M 1246/84	12.6				
M 1400/86	12.8		13.9		
M 1561/01			12.8		
M 915/05			13.0		12.7
R570	11.4	13.1	13.3		
R573				13.7	
R579	12.7	12.3	12.2	12.0	11.6

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

Sectors	AUGUST			SEPTEMBER		
	2019	2020	2021	2019	2020	2021
North	14.6	14.4	12.2	14.8	15.8	12.9
East	12.6	13.4	12.5	13.5	13.8	12.6
South	12.7	12.8	12.8	14.0	14.9	13.0
West	14.6	13.4	13.9	15.0	14.8	13.3
Centre	12.3	11.9	12.3	12.4	13.3	11.6
<b>Island</b>	<b>13.2</b>	<b>13.3</b>	<b>12.6</b>	<b>14.0</b>	<b>14.6</b>	<b>12.8</b>

The *richesse* obtained at the end of September 2021 amounted to 12.9% in the North, 12.6% in the East, 13.0% in the South, 13.3% in the West and 11.6% in the Centre. These figures were inferior to those obtained during the corresponding period in 2020 and 2019. Compared to the corresponding period in 2020, sucrose content at end-September 2021 was lagging behind by 2.9° in the North, 1.2° in the East, 1.9° in the South, 1.5° in the West and 1.7° in the Centre. Similarly, compared to September 2019, the deficit in sucrose content ranged from 0.8° in the Centre to 1.9° in the North.

From August to September 2021, sucrose content has improved slightly in the North, East and South but has decreased in the other two sectors. On average for the island, the slight increase in *richesse* was 0.2° in 2021 compared to 1.3° and 0.8° for the corresponding period in 2020 and 2019.

Island-wise, the *richesse* of 12.8% recorded at the end of September 2021 was much below those of 2020 (14.6%) by 1.8° and 2019 (14.0%) by 1.2°.

### 3. CROP PRODUCTIVITY 2021

As at 2 October 2021, 13 864 ha representing about 49% of miller-planters' land was harvested compared to 16 451 ha (56%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 43% in the North, 55% in the East, 45% in the South, 58% in the West and 54% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters follows.

#### 3.1 Cane productivity (Table 5a)

At the end of September 2021, the 70.7 TCH cane productivity for the island was slightly higher than that of the corresponding period in 2020 (70.0 TCH) but lagged behind that of September 2019 (82.3 TCH). Sector-wise, cane productivity recorded was 71.8 TCH in the North, 73.4 TCH in the East, 73.5 TCH in the South, 66.0 TCH in the West and 54.9 TCH in the Centre. Compared to the same period last year, cane productivity recorded to-date was higher in the East, South and Centre but inferior by 3.4 TCH in the North and 1.9 TCH in the West. When compared to September 2019, cane productivity to-date was inferior in all sectors.

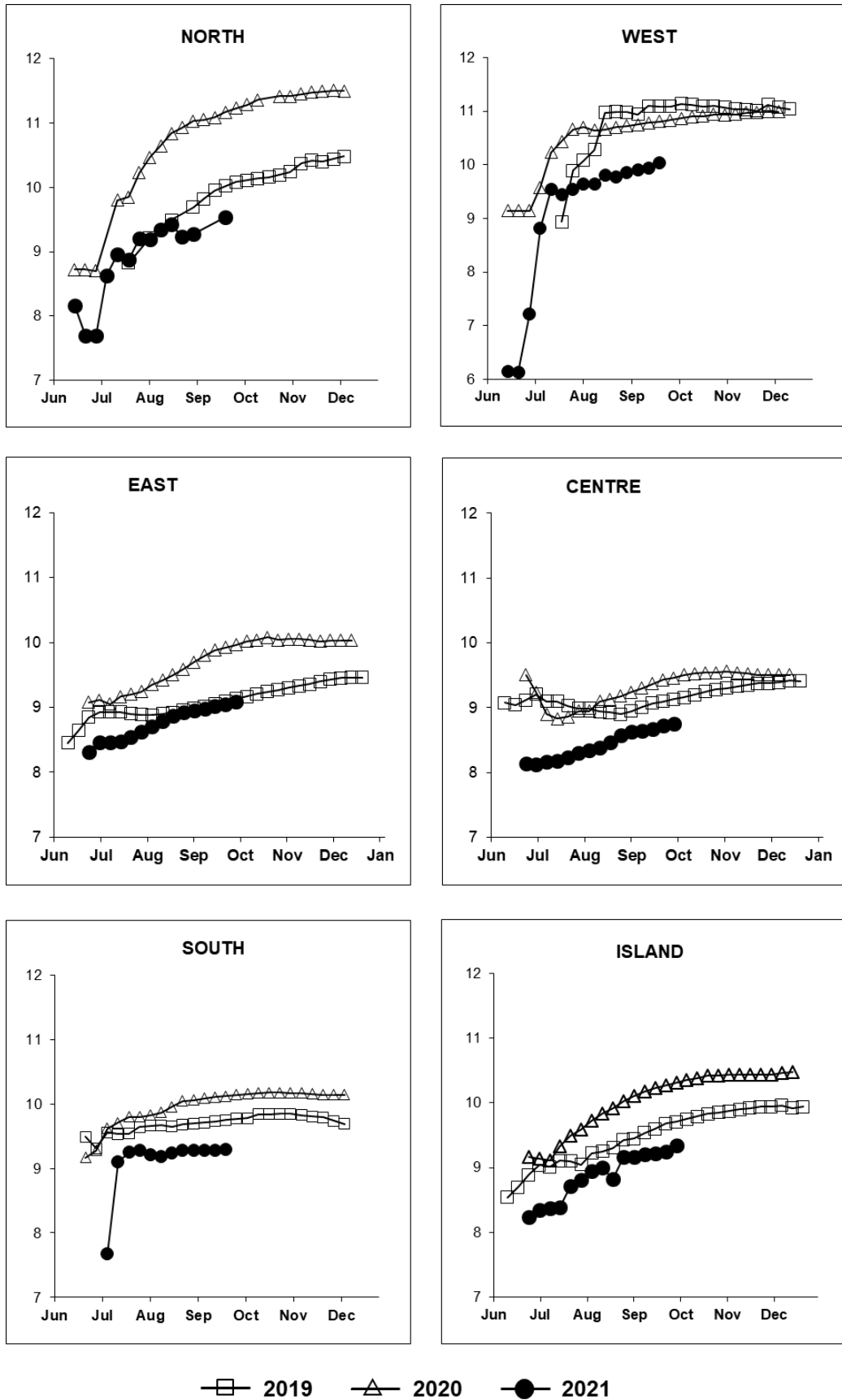
**Table 5a. Cane productivity (TCH) as at end August and end September for the 2019, 2020 and 2021 crops**

Sector	End August			End September		
	2019	2020	2021	2019	2020	2021
North	83.5	77.2	71.7	82.4	75.2	71.8
East	83.0	73.1	73.3	82.0	70.9	73.4
South	82.3	74.3	71.5	82.6	70.8	73.5
West	79.4	66.0	63.5	88.8	67.9	66.0
Centre	74.1	57.8	55.8	72.2	53.9	54.9
<b>Island</b>	<b>82.1</b>	<b>72.1</b>	<b>69.6</b>	<b>82.3</b>	<b>70.0</b>	<b>70.7</b>

#### 3.2 Extraction rate (Table 5b, Figure 2)

At end September 2021, the recorded island extraction rate of 9.34% was lower than that of the corresponding period in 2020 (10.31%) and 2019 (9.68%). Sector-wise, the extraction rate recorded was 9.54% in the North, 9.09% in the East, 9.29% in the South, 10.03% in the West and 8.76% in the Centre. Compared to the corresponding period last year, extraction rate to-date was lagging behind by 1.63° in the North, 0.87° in the East, 0.83° in the South, 0.78° in the West and 0.70° in the Centre. Extraction rate obtained in September 2021 was inferior in all sectors compared to that in September 2019.

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



**Table 5b. Extraction rate (%) as at end August and End September for the 2019, 2020 and 2021 crops**

Sectors	End August			End September		
	2019	2020	2021	2019	2020	2021
North	9.49	10.84	9.42	9.95	11.17	9.54
East	8.96	9.59	8.92	9.10	9.96	9.09
South	9.65	9.96	9.24	9.73	10.12	9.29
West	10.97	10.66	9.81	11.10	10.81	10.03
Centre	8.90	9.18	8.57	9.10	9.46	8.76
<b>Island</b>	<b>9.43</b>	<b>10.02</b>	<b>9.17</b>	<b>9.68</b>	<b>10.31</b>	<b>9.34</b>

### 3.3 Sugar productivity (Table 5c)

Sugar productivity over the island at the end of September 2021 was 6.60 TSH and was lower than that at the corresponding period in 2020 (7.22 TSH) by 0.62 tonne (8.6%). The recorded sugar productivity in the different sectors reached 6.85 TSH in the North, 6.67 TSH in the East, 6.83 TSH in the South, 6.62 TSH in the West and 4.81 TSH in the Centre. These figures when compared to those of September 2020 were lagging behind by 1.55 TSH in the North, 0.39 TSH in the East, 0.33 TSH in the South, 0.72 TSH in the West and 0.29 TSH in the Centre. These sugar productivity figures in September 2021 were also lower than those obtained in September 2019.

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

Sectors	End August			End September		
	2019	2020	2021	2019	2020	2021
North	7.92	8.37	6.75	8.20	8.40	6.85
East	7.44	7.01	6.54	7.46	7.06	6.67
South	7.94	7.40	6.61	8.04	7.16	6.83
West	8.71	7.04	6.23	9.86	7.34	6.62
Centre	6.59	5.31	4.78	6.57	5.10	4.81
<b>Island</b>	<b>7.74</b>	<b>7.22</b>	<b>6.38</b>	<b>7.97</b>	<b>7.22</b>	<b>6.60</b>

#### **4. CROP 2021**

The weather conditions that prevailed during the month of September 2021 in terms of deficient rainfall, except for the Centre sector, coupled with above normal solar radiation and below normal temperature amplitude did not favour optimum sucrose accumulation. So far, nearly 50% of the crop on miller-planters' land have been harvested and milling data at the island level indicated comparable cane productivity to last year, but well below that of 2019. Extraction rate for the island in September 2021 was lower than in 2020 by 0.97° and that of 2019 by 0.34°. Thus, sugar productivity at the end of September 2021 over the island was well below those of 2020 and 2019 by 0.62 TSH and 1.37 TSH respectively. At the onset of summer, no major improvement in sugar productivity is anticipated.