## MAURITIUS CANE INDUSTRY AUTHORITY

### MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020 19 October 2020

### **SUGAR CANE CROP 2020**

Status: End September 2020

#### 1. CLIMATE

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

The island average rainfall of 71 mm recorded over the sugar cane areas during the month of September 2020 was 67% of the long-term mean (LTM) of 106 mm. In all sectors, below normal rainfall was recorded with 30 mm in the North, 95 mm in the East, 81 mm in the South, 19 mm in the West and 112 mm in the Centre.

Cumulative rainfall over the period October 2019 to September 2020 amounted to 2243 mm representing 101% of the long-term mean for the island. During the same period, 1317 mm were recorded in the North, 2616 mm in the East, 2742 mm in the South, 841 mm in the West and 2937 mm in the Centre. These values represented 102%, 101%, 96%, 94% and 117% of the respective long-term means.

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

	North	East	South	West	Centre	Island
2019	<b>38</b> (67)	<b>101</b> (78)	<b>134</b> (99)	<b>16</b> (62)	<b>129</b> (102)	<b>93</b> (87)
2020	<b>30</b> (53)*	<b>95</b> (73)	<b>81</b> (60)	<b>19</b> (73)	112 (89)	<b>71</b> (67)
LTM	57	130	136	26	126	106

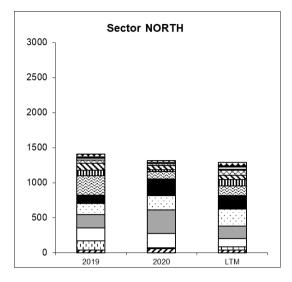
<sup>\*</sup> figures in brackets are % of LTM (1981-10)

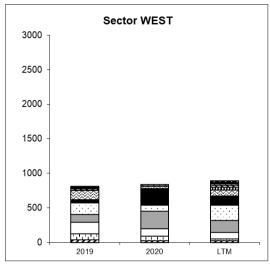
Table 1b. Cumulative rainfall (mm) from October 2019 to September 2020 for crop 2020 compared to that of crop 2019 and the LTM

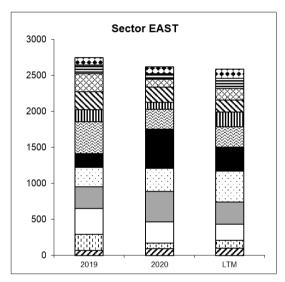
	North	East	South	West	Centre	Island
2019	1406 (109)	2744 (106)	2846 (100)	813 (91)	2964 (118)	2333 (105)
2020	1317 (102)*	<b>2616</b> (101)	<b>2742</b> (96)	<b>841</b> (94)	<b>2937</b> (117)	<b>2243</b> (101)
LTM	1293	2585	2845	890	2510	2228

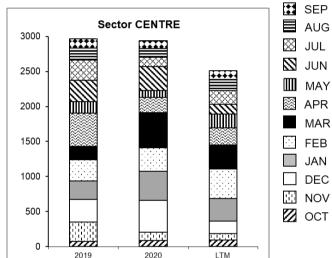
<sup>\*</sup> figures in brackets are % of LTM [Source: provisional data from Mauritius Meteorological Services]

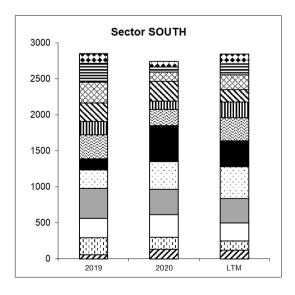
Figure 1. Monthly rainfall (mm) for the period October 2019 to September 2020 for the 2020 crop compared to the corresponding period of the 2019 crop and to the long term mean (LTM).

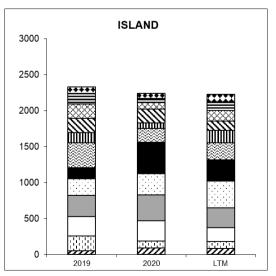












### 1.2 Air Temperature (Table 2)

For the month of September 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 September 2020

	Maximum (°C)		Minimum	(°C)	Amplitude (°C)	
Stations	Sep 2020	DevN*	Sep 2020	DevN*	Sep 2020	DevN*
Ferret	25.6	-1.2	17.6	+0.8	8.0	-2.0
Réduit	23.4	-0.1	16.5	+0.7	6.9	-1.2
Belle Rive	23.3	+0.9	15.4	+0.9	7.6	-0.7
Union Park	23.0	+0.2	16.7	+0.9	6.6	0.0

<sup>\*</sup> Deviation from the Normal (1981-2010)

In September 2020, mean maximum temperature was close to normal at Réduit, lagged behind the normal at Ferret by 1.2 °C, but was above normal at Belle Rive and Union Park. The mean minimum temperature exceeded the normal at all stations by more than 0.7 °C. The resulting mean amplitude was below the normal at all stations except at Union Park where it was similar to the normal.

### 1.3 Sunshine (Table 3)

During the month of September 2020, data from the MSIRI agro-meteorological stations showed that sunshine hours were below normal at Réduit and Belle Rive, comparable to the normal at Ferret but above normal at Union Park. Recorded bright sunshine as a percentage of the normal amounted to 99% at Ferret, 96% at Réduit, 98% at Belle Rive and 104% at Union Park.

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

Station	Sep 2020	Normal	% of Normal
Ferret	231	233	99
Réduit	208	217	96
Belle Rive	192	197	98
Union Park	156	150	104

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

During the last week of September 2020, cane samples were analysed for sucrose content 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 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 2020.

Variety	North	East	South	West	Centre
R 573			16.6	13.9	
M 1246/84	16.0				
M 2593/92	15.6		14.8	14.9	
M 1400/86	16.5		15.2	14.7	
M 1176/77	17.9		15.6	15.0	13.9
R 579	15.4	13.6	14.2	14.7	13.0
M 1672/90	17.4				
R 570	13.5	14.1	15.3		
M 1392/00	16.1				
M 683/99	15.5				
M 1561/01		13.8			
M 915/05	15.9				13.7
M 1002/02	16.5				

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

Sectors		AUGUST		SEPTEMBER		
	2018	2019	2020	2018	2019	2020
North	15.1	14.6	14.4	15.7	14.8	15.8
East	13.8	12.6	13.4	14.2	13.5	13.8
South	14.0	12.7	12.8	14.8	14.0	14.9
West	14.8	14.6	13.4	15.1	15.0	14.8
Centre	13.7	12.3	11.9	13.2	12.4	13.3
Island	14.2	13.2	13.3	14.7	14.0	14.6

At the end of September 2020, sucrose content was 15.8% in the North, 13.8% in the East, 14.9% in the South, 14.8% in the West and 13.3% in the Centre. These values exceeded those of the corresponding period in 2019 by 1.0° in the North, 0.9° in the South, 0.3° in the East and 0.9° in the Centre, while in the West it was slightly lower by 0.2°. Compared to the corresponding period in 2018, *richesse* at end-September 2020 was comparable in sectors North, South and Centre but lower by 0.3° in both the East and West sectors.

Island-wise, the *richesse* of 14.6% recorded at end of September 2020 was higher than that of the corresponding period in 2019 by 0.6° but was comparable to that of 2018.

### 3. CROP PRODUCTIVITY 2020

As at 3<sup>rd</sup> October 2020, 16 451 ha representing 56% of miller-planters' land were harvested compared to 15 779 ha (51%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 42% in the North, 58% in the East, 60% in the South, 63% in the West and 55% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters follows.

# 3.1 Cane productivity (Table 5a)

The recorded cane productivity of 70.0 TCH for the island as at end September 2020 was below that obtained at the corresponding period in September 2019 (82.4 TCH) and that of 2018 (72.3 TCH). Sector-wise, cane productivity to-date recorded was 75.2 TCH in the North, 70.9 TCH in the East, 70.8 TCH in the South, 67.9 TCH in the West and 53.9 TCH in the Centre. Compared to the same period in 2019, cane productivity recorded to-date was lagging behind in all sectors by 6.8 TCH in the North, 10.9 TCH in the East, 12.2 TCH in the South, 21.8 TCH in the West and 18.2 TCH in the Centre. When compared to the corresponding period in 2018, cane productivity in September 2020 was slightly higher in the East but lower in the other sectors by 0.9 TCH in the North, 1.2 TCH in the South, 10.7 TCH in the West and 4.1 TCH in the Centre.

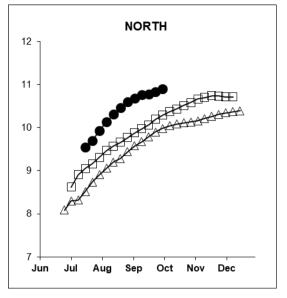
Table 5a. Cane productivity (TCH) as at end August and end September for the 2018, 2019 and 2020 crops

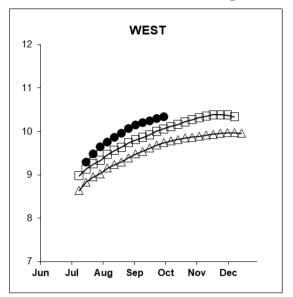
Sector	]	End August			End September		
	2018	2019	2020	2018	2019	2020	
North	79.0	83.6	77.2	76.1	82.0	75.2	
East	72.0	83.0	73.1	70.5	81.8	70.9	
South	71.9	82.3	74.3	72.0	83.0	70.8	
West	79.7	79.4	66.0	78.6	89.7	67.9	
Centre	60.8	74.1	57.8	58.0	72.1	53.9	
Island	73.5	82.1	72.1	72.3	82.4	70.0	

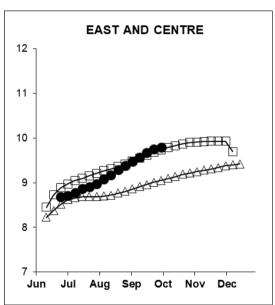
#### 3.2 Extraction (Table 5b, Figure 2)

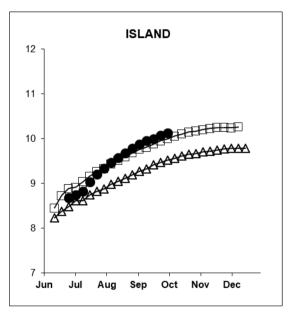
The island extraction rate of 10.12% at end-September 2020 was higher than that at the corresponding period in 2019 (9.52%) and 2018 (9.95%). Sector-wise, the extraction rate recorded was 10.90% in the North, 9.80% in in the East-Centre, 9.99% in the South and 10.34% in the West. Compared to the corresponding period last year, extraction rate to-date was higher in all sectors, the difference ranging from 0.24 ° in the South to 0.92° in the North. The extraction rate of September 2020 was also superior to that obtained in September 2018 in all sectors.

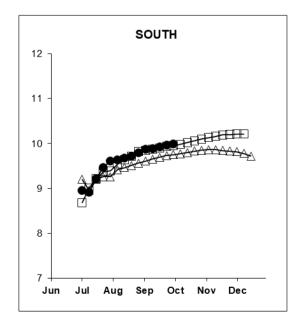
Figure 2. Evolution of extraction rate (%) for the 2018, 2019 and 2020 crops













G. A.	End August			End September		
Sectors	2018	2019	2020	2018	2019	2020
North	9.77	9.44	10.60	10.19	9.98	10.90
East/Centre	9.42	8.81	9.38	9.68	9.05	9.80
South	9.82	9.56	9.79	9.94	9.75	9.99

10.06

9.78

10.00

9.95

9.73

9.52

10.34

10.12

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

### 3.3 Sugar productivity (Table 5c)

10.18

9.68

9.39

9.19

West

**Island** 

Island-wise, the recorded sugar productivity of 7.08 TSH was lower than that at the corresponding period in 2019 (7.84 TSH) by 0.76 tonne (9.7%). Sector-wise, sugar productivity was 8.20 TSH in the North, 6.65 TSH in the East-Centre, 7.07 TSH in the South and 7.02 TSH in the West. Compared to the corresponding period in 2019, these figures were lagging behind by 0.62 TSH in the East-Centre, 1.02 TSH in the South and 1.71 TSH in the West while it was comparable in the North.

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

G4	]	End August			End September		
Sectors	2018	2019	2020	2018	2019	2020	
North	7.72	7.89	8.18	7.75	8.18	8.20	
East/Centre	6.61	7.20	6.59	6.63	7.27	6.65	
South	7.06	7.87	7.27	7.16	8.09	7.07	
West	8.11	7.46	6.64	7.86	8.73	7.02	
Island	7.11	7.54	7.05	7.19	7.84	7.08	

#### 4. CROP 2020

The weather conditions prevailing during the month of September was characterised by deficient rainfall in all sectors coupled with near normal solar radiation, except for one station, and below normal temperature amplitude. The dry condition did not favour cane growth with a deficit in cane yield at island level, which was 10 TCH at the end of August 2020 and stood at nearly 12.4 TCH at end of September 2020, compared to the same period in 2019. Extraction rate to-date over the island was better than that of last year by 0.60°. However, the overall sugar productivity at end September 2020 over the island has been on the lower side with a shortfall of 0.76 TSH compared to the same period in 2019. The deficit in cane and sugar

productivity for the remaining part of the harvest season is likely to increase further on the onset of the dry summer period.