

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2019

16 September 2019

### SUGAR CANE CROP 2019

**Status: End August 2019**

#### 1. CLIMATE

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

Rainfall recorded over the sugar cane areas during the month of August 2019 was above normal with an island average of 146 mm, representing 119% of the long-term mean (LTM) of 123 mm. Above normal rainfall was recorded in sectors South with 263 mm and Centre with 171 mm while the other sectors recorded below normal rainfall with 46 mm in the North, 124 mm in the East and 8 mm in the West.

Rainfall over the period October 2018 to August 2019 cumulated to 2240 mm representing 111% of the long-term mean for the island. During the same period, 1368 mm were recorded in the North, 2643 mm in the East, 2712 mm in the South, 797 mm in the West and 2835 mm in the Centre. These values represented 112%, 111%, 110%, 90% and 118% of the respective long-term means.

The rainfall pattern during the first half of August 2019 was slightly deficient over most regions except in the South and Centre sectors. The second fortnight of August 2019 received slightly above normal rainfall where most of the rainfall occurred over the southern half of the island.

**Table 1a. Rainfall (mm) for the month of August for crops 2018, 2019 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2018</b>	20 (34)	36 (26)	51 (29)	2 (11)	63 (41)	37 (30)
<b>2019</b>	<b>46</b> (79)*	<b>124</b> (90)	<b>263</b> (150)	<b>8</b> (44)	<b>171</b> (113)	<b>146</b> (119)
<b>LTM</b>	58	138	175	18	152	123

\* figures in brackets are % of LTM (1981-2010)

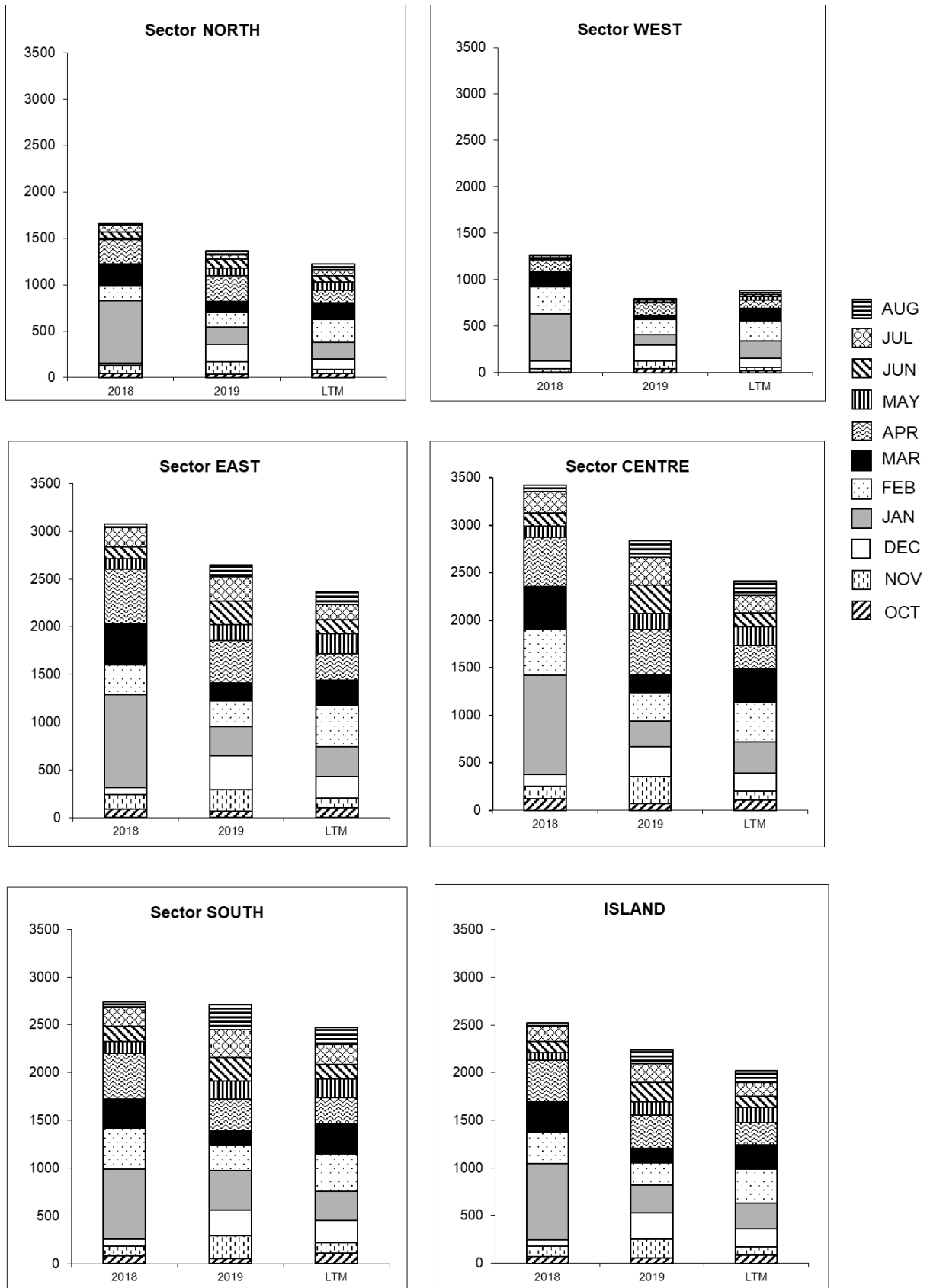
**Table 1b. Cumulative rainfall (mm) from October 2018 to August 2019 for crop 2019 compared to that of crop 2018 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2018</b>	1665 (136)	3074 (130)	2742 (111)	1263 (143)	3418 (142)	2527 (125)
<b>2019</b>	<b>1368</b> (112)*	<b>2643</b> (111)	<b>2712</b> (110)	<b>797</b> (90)	<b>2835</b> (118)	<b>2240</b> (111)
<b>LTM</b>	1225	2371	2468	885	2406	2022

\* figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October 2018 to August 2019 for the 2019 crop compared to the same period of the 2018 crop and to the long-term mean (LTM)**



### 1.2 Air Temperature (Table 2)

Air temperature data during the month of August 2019 on MSIRI agro-meteorological stations are given below.

**Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in August 2019**

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Aug 2019	DevN*	Aug 2019	DevN*	Aug 2019	DevN*
<b>Ferret</b>	25.8	+0.1	18.0	+1.5	7.8	-1.4
<b>Réduit</b>	23.0	+0.5	16.6	+1.3	6.4	-0.8
<b>Belle Rive</b>	23.1	+1.1	15.5	+1.5	7.6	-0.4
<b>Union Park</b>	23.2	+1.7	16.7	+1.4	6.5	+0.3

\* Deviation from the Normal (1981-2010)

Mean maximum temperature during August 2019 exceeded the normal at all stations. Similarly, mean minimum temperature exceeded the normal at all stations by more than 1.3°C with the resulting mean amplitude lagging behind the normal at all stations except at Union Park.

### 1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during August 2019 were below normal at Ferret and Réduit, but above normal at Belle Rive and Union Park. Recorded bright sunshine as a percentage of the normal amounted to 98% at Ferret, 97% at Réduit, 109% at Belle Rive and 108% at Union Park.

**Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in August 2019**

Station	August 2019	Normal	% of Normal
<b>Ferret</b>	243	247	98
<b>Réduit</b>	213	220	97
<b>Belle Rive</b>	220	202	109
<b>Union Park</b>	155	143	108

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

Analysis of sucrose content was carried out during the last week of August 2019 in cane samples 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) at end-August 2019**

Sectors	R 573	R 575	M 387/85	M 1246/84	M 2593/92	M 2283/98	M 1400/86	M 1176/77	R 579	M 1672/90	R 570
North	14.1			13.8	14.7		14.9	14.5	14.9	14.8	13.7
East			14.0						12.3		12.1
South	13.7				13.4	11.9	12.8	13.7	12.2	12.3	13.0
West	13.9	15.5			14.5		14.3	14.3	14.7		14.2
Centre			13.2		12.2		12.9	13.3	11.4		

**Table 4b. Comparison of Pol % cane (richesse) at the end of July and August 2017, 2018 and 2019**

Sectors	July			August		
	2017	2018	2019	2017	2018	2019
North	11.3	12.5	12.6	12.4	15.1	14.6
East	11.7	12.4	12.0	12.8	13.8	12.6
South	10.2	12.5	11.9	12.4	14.0	12.7
West	12.1	13.4	13.4	13.3	14.8	14.6
Centre	11.1	12.0	11.4	11.9	13.7	12.3
Island	11.1	12.5	12.2	12.6	14.2	13.2

At the end of August 2019 sucrose content amounted to 14.6% in the North, 12.6% in the East, 12.7% in the South, 14.6% in the West and 12.3% in the Centre. Compared to the corresponding period in 2018, sucrose content at end-August 2019 was lagging behind in all sectors by a margin varying from 0.2° in the West to 1.4° in the Centre. Sucrose content at the end of August, for the present crop, was higher than those of the corresponding period in 2017 in all sectors except in the East.

Sucrose content has improved in all sectors from end-July up to end-August 2019. The highest increment of 2.0° was observed in the North followed by 1.2° in the West, 0.9° in the Centre, 0.8° in the South and 0.6° in the East. On average for the island, the increase in *richesse* was 1.0° in 2019 which was lower than the increment obtained in 2018 and 2017.

Island-wise, the *richesse* of 13.2% recorded at end of August 2019 was lagging behind that of the corresponding period in 2018 by 1.0° but exceeded that of 2017 by 0.6°.

### 3. CROP 2019

As at 31 August 2019, 10 657 ha representing about 34% of miller-planters' land had been harvested compared to 13 697 ha (42%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 36% in the North, 39% in the East, 29% in both the South and West sectors, and 30% 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-August 2019 was 82.1 TCH and was higher than that recorded in 2018 (73.5 TCH) by 8.6 TCH (11.7 %). Sector-wise, the best cane productivity to-date was recorded in the North with 83.5 TCH followed by the East (83.0 TCH), the South (82.3 TCH), the West (79.4 TCH) and the Centre (74.1 TCH).

Compared to the same period last year, cane productivity recorded to-date was comparable in the West but exceeded those in the other sectors with the difference ranging from 4.4 TCH in the North to 13.3 TCH in the Centre.

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

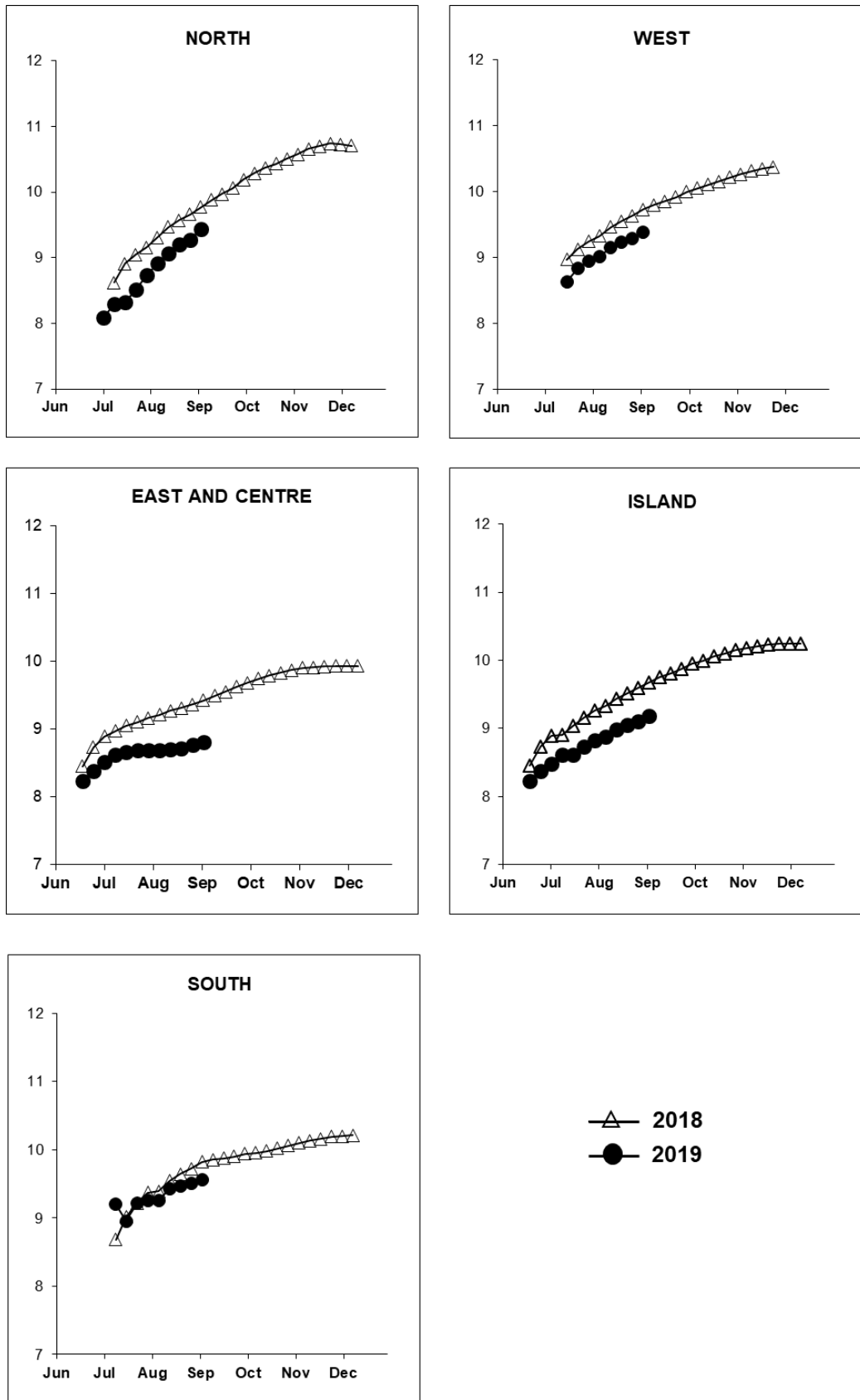
Sector	End July		End August	
	2018	2019	2018	2019
North	80.2	83.2	79.1	83.5
East	73.7	81.4	72.0	83.0
South	73.1	82.0	71.9	82.3
West	80.7	92.3	79.7	79.4
Centre	61.5	76.1	60.8	74.1
<b>Island</b>	<b>74.4</b>	<b>82.2</b>	<b>73.5</b>	<b>82.1</b>

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

The recorded island extraction rate of 9.19% at end-August 2019 was lower than that of the corresponding period in 2018 (9.68%) by 0.49°. Sector-wise, the extraction rate recorded was 9.44% in the North, 8.81% in the East-Centre, 9.56% in the South and 9.39% in the West. These figures lagged behind those of the corresponding period in 2018 by 0.33° in the North, 0.61° in the East-Centre, 0.26° in the South and 0.79° in the West.

Extraction rate has improved from end-July 2019 to end-August 2019 in all sectors. The highest increment of 0.53° was observed in the North whilst the lowest increment of 0.12° occurred in the East-Centre. On average for the island, the increase in extraction rate from end-July to end-August was 0.31° in 2019 and was comparable to the 0.35° obtained in 2018.

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



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

Sector	End July		End August	
	2018	2019	2018	2019
North	9.31	8.91	9.77	9.44
East-Centre	9.21	8.69	9.42	8.81
South	9.39	9.26	9.82	9.56
West	9.33	9.02	10.18	9.39
<b>Island</b>	<b>9.33</b>	<b>8.88</b>	<b>9.68</b>	<b>9.19</b>

### 3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.54 TSH at the end of August 2019 is higher than that of the corresponding period in 2018 (7.11 TSH) by 0.43 tonne (6%). Sector-wise sugar productivity was 7.88 TSH in the North, 7.20 TSH in the East-Centre, 7.87 TSH in the South and 7.46 TSH in the West. Sugar productivity at end-August 2019 exceeded that of the corresponding period in 2018 by 0.15 TSH in the North, 0.59 TSH in the East-Centre, 0.81 TSH in the South, but lagged behind by 0.65 TSH in the West.

**Table 5c. Sugar productivity (TSH) as at end July and August for 2018 and 2019 crops**

Sector	End July		End August	
	2018	2019	2018	2019
North	7.47	7.41	7.73	7.88
East-Centre	6.60	7.01	6.61	7.20
South	6.86	7.59	7.06	7.87
West	7.53	8.33	8.11	7.46
<b>Island</b>	<b>6.94</b>	<b>7.30</b>	<b>7.11</b>	<b>7.54</b>

## 4.0 CROP 2019

Weather conditions during the month of August 2019 were characterised by above normal rainfall especially in sectors South and Centre, solar radiation comparable to normal and a temperature amplitude below the normal. These conditions did not favour optimal sucrose accumulation in the cane stalk. The *richesse* accumulated during the month of August 2019 was lower than that recorded during the same period in 2018 and 2017.

So far with one third of the crop harvested on miller-planters' land, milling data indicate a cane productivity exceeding that of last year by nearly 12% and with an extraction rate lagging behind that of 2018 by 5.1%. Thus, the resulting sugar productivity in August 2019 over the island is better than that of last year by 0.43 TSH. Based on these data and with no major departure in the weather from the normal, sugar productivity in 2019 is expected to be higher than that of last year.