

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2019

14 August 2019

### SUGAR CANE CROP 2019

Status: End July 2019

#### 1. CLIMATE

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

Rainfall recorded over the sugar cane areas during the month of July 2019 was above normal with an island average of 199 mm, representing 137% of the long-term mean (LTM) of 146 mm. Above normal rainfall was recorded in sectors East with 247 mm, South with 289 mm and Centre with 295 mm while the North and West sectors recorded below normal rainfall with 46 mm and 7 mm, respectively.

Cumulative rainfall over the period October 2018 to July 2019 amounted to 2094 mm representing 110% of the long-term mean for the island. During the same period, 1322 mm were recorded in the North, 2519 mm in the East, 2449 mm in the South, 789 mm in the West and 2664 mm in the Centre. These values represented 113%, 113%, 107%, 91% and 118% of the respective long-term means.

The rainfall pattern during July 2019 was such that the first half of the month was dry with only 27% of the normal rainfall while most of the rainfall of July 2019 occurred during the second half of the month.

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

	North	East	South	West	Centre	Island
<b>2018</b>	77 (108)	203 (124)	203 (99)	23 (100)	228 (126)	162 (111)
<b>2019</b>	46 (65)*	247 (151)	289 (141)	7 (30)	295 (163)	199 (137)
<b>LTM</b>	71	164	205	23	181	146

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

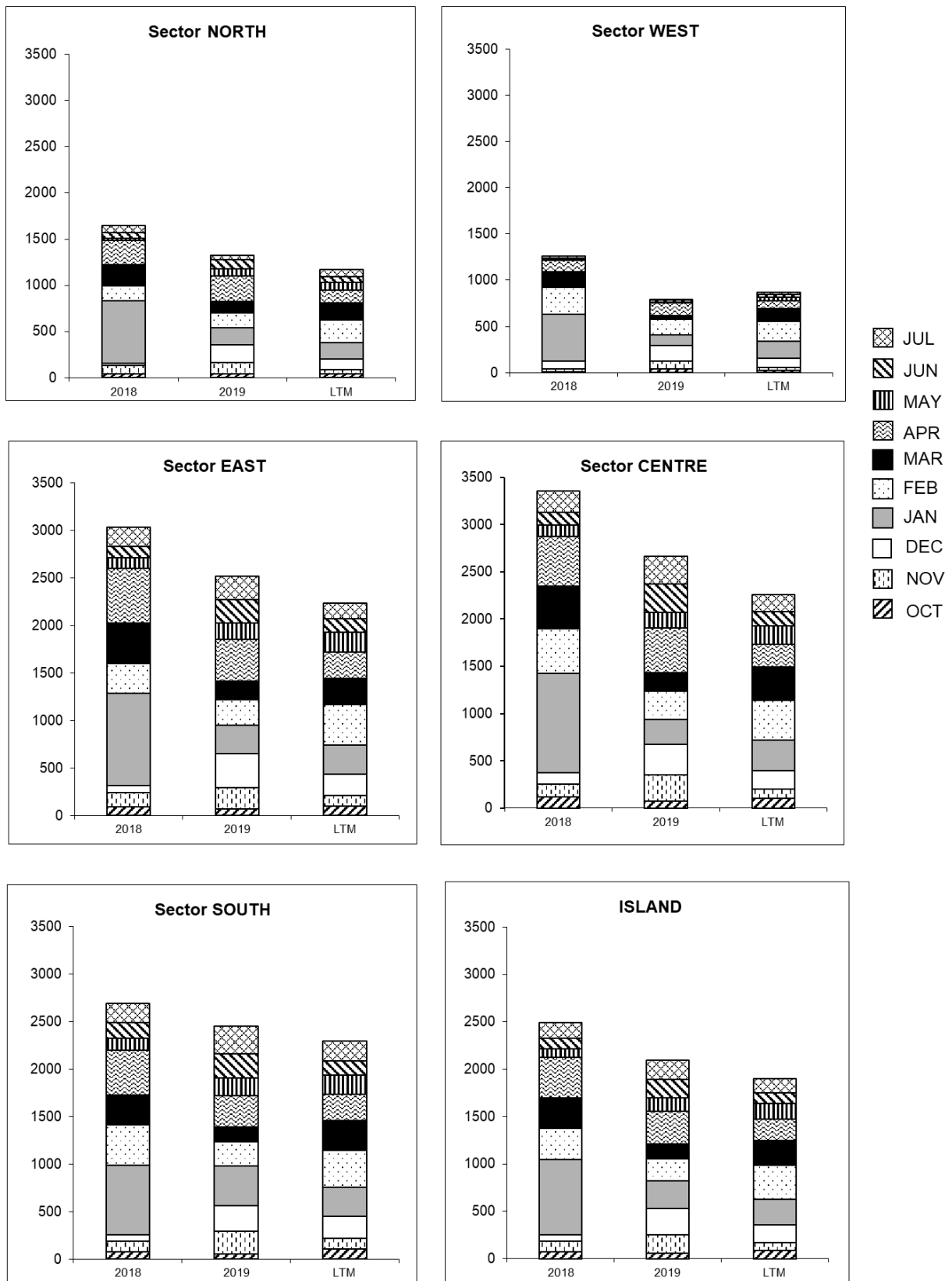
**Table 1b. Cumulative rainfall (mm) from October 2018 to July 2019 for crop 2019 compared to that of crop 2018 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2018</b>	1645 (141)	3038 (136)	2691 (117)	1261 (145)	3355 (149)	2490 (131)
<b>2019</b>	1322 (113)*	2519 (113)	2449 (107)	789 (91)	2664 (118)	2094 (110)
<b>LTM</b>	1167	2233	2293	867	2254	1898

\* figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October 2018 to July 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 July 2019 on MSIRI agro-meteorological stations are given below.

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	July 2019	DevN*	July 2019	DevN*	July 2019	DevN*
<b>Ferret</b>	25.3	-0.2	17.8	+1.6	7.5	-1.8
<b>Réduit</b>	23.1	+0.8	16.6	+1.3	6.5	-0.5
<b>Belle Rive</b>	22.9	+0.9	16.1	+2.1	6.8	-1.2
<b>Union Park</b>	23.2	+1.8	17.3	+1.9	5.9	-0.1

\* Deviation from the Normal (1981-2010)

Mean maximum temperature during July 2019 was comparable to the normal at Ferret but exceeded the normal at the other stations. Mean minimum temperature exceeded the normal at all stations, the difference ranging from 1.3° at Réduit to 2.1° at Belle Rive. The resulting mean amplitude was comparable at Union Park but lagged behind the normal at the other stations.

## 1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during July 2019 were below normal at Réduit, comparable to the normal at Ferret and Belle Rive, but above normal at Union Park. Recorded bright sunshine as a percentage of the normal amounted to 100% at Ferret, 91% at Réduit, 98% at Belle Rive and 105% at Union Park.

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

Station	July 2019	Normal	% of Normal
<b>Ferret</b>	236	235	100
<b>Réduit</b>	203	222	91
<b>Belle Rive</b>	185	188	98
<b>Union Park</b>	141	134	105

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

Analysis of sucrose content during the last week of July 2019 was carried out 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-July 2019.**

Sectors	M 52/78	R 573	M 2256/88	R 575	M 387/85	M 1246/84	M 1989/99	M 2593/92	M 2283/98	M 1400/86	M 1176/77	M 1861/89	R 579	M 1672/90	R 570
North		13.0	14.0			13.5		13.1		12.4	12.1		12.7	12.1	12.0
East		12.0			13.4			12.5		13.0			11.3		11.7
South		13.0		11.5	13.4		11.0	11.9	10.3	12.1	13.0	13.3	11.1	11.2	11.4
West		13.0		14.6				13.4		12.6	13.9		13.3		13.5
Centre	14.2				12.9			11.6		11.9	11.9		10.1		

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

Sectors	June			July		
	2017	2018	2019	2017	2018	2019
North	9.4	11.4	10.7	11.3	12.5	12.6
East	11.3	11.1	10.7	11.7	12.4	12.0
South	10.7	12.0	10.4	10.2	12.5	11.9
West	11.1	12.8	11.1	12.1	13.4	13.4
Centre	11.6	11.7	10.0	11.1	12.0	11.4
Island	<b>10.7</b>	<b>11.7</b>	<b>10.6</b>	11.1	12.5	12.2

The *richesse* at the end of July 2019 was 12.6% in the North, 12.0% in the East, 11.9% in the South, 13.4% in the West and 11.4% in the Centre. Compared to the corresponding period in 2018, sucrose content at end-July 2019 was comparable in the North and West but lagged behind by 0.4° in the East and 0.6° in both the South and Centre. Sucrose content at the end of July, for the present crop, was higher than those of the corresponding period in 2017 in all sectors.

Sucrose content has improved in all sectors from end-June 2019 up to end-July 2019. The highest increment of 2.3° was observed in the West followed by 1.9° in the North, 1.5° in the South, 1.4° in the Centre and 1.3° in the East. On average for the island, the increase in *richesse* was 1.6° in 2019 which was much higher than the increment obtained in 2018 and 2017.

Island-wise, the *richesse* of 12.2% recorded at end of July 2019 was lagging behind that of the corresponding period in 2018 by 0.3° but exceeded that of 2017 by 1.1°.

### 3. CROP 2019

As at 3 August 2019, 6249 ha representing about 20% of miller-planters' land had been harvested compared to 7878 ha (24%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 21% in the North, 26% in the East, 16% in the South, 10% in the West and 20% 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-July 2019 was 82.2 TCH and was higher than that recorded in 2018 (74.4 TCH). Sector-wise, the best cane productivity to-date was recorded in the West with 92.3 TCH, followed by the North (83.2 TCH), the South (82.0 TCH), the East (81.4 TCH) and the Centre (76.1 TCH). These figures exceeded those of the corresponding period in 2018 in all sectors ranging from 3.0 TCH in the North to 14.6 TCH in the Centre.

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

	North	East	South	West	Centre	Island
<b>2018</b>	80.2	73.7	73.1	80.7	61.5	74.4
<b>2019</b>	83.2	81.4	82.0	92.3	76.1	82.2

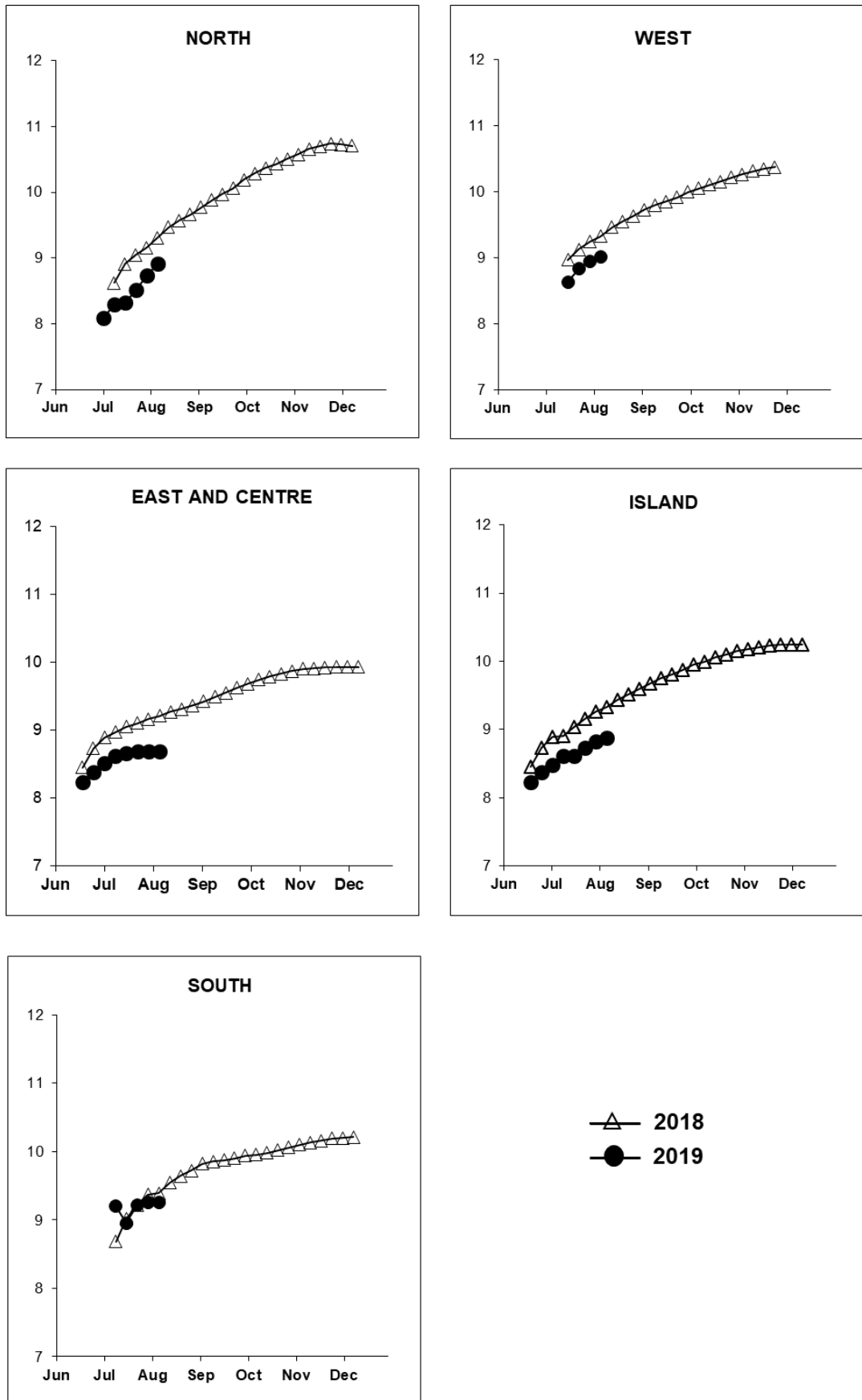
#### 3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 8.88% at end July 2019 was lower than that of the corresponding period in 2018 (9.33%) by 0.45°. Sector-wise, the extraction rate recorded was 8.91% in the North, 8.69% in the East-Centre, 9.26% in the South and 9.02% in the West. These figures lagged behind those of the corresponding period in 2018 by 0.40° in the North, 0.52° in the East-Centre, 0.13° in the South and 0.31° in the West.

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

	North	East-Centre	South	West	Island
<b>2018</b>	9.31	9.21	9.39	9.33	9.33
<b>2019</b>	8.91	8.69	9.26	9.02	8.88

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



### 3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.30 TSH at the end of July 2019 is higher than that of the corresponding period in 2018 (6.94 TSH) by 0.36 tonne (5.2%). Sector-wise sugar productivity was 7.41 TSH in the North, 7.01 TSH in the East-Centre, 7.59 TSH in the South and 8.33 TSH in the West. Sugar productivity at end-July 2019 exceeded that of the corresponding period in 2018 by 0.41 TSH in the East-Centre, 0.73 TSH in the South and 0.80 TSH in the West, but was comparable in the North.

**Table 5c. Sugar productivity (TSH) as at end July for the 2016, 2017 and 2018 crops**

	North	East-Centre	South	West	Island
<b>2018</b>	7.47	6.60	6.86	7.53	6.94
<b>2019</b>	7.41	7.01	7.59	8.33	7.30

### 4.0 CROP 2019

Weather conditions during the month of July 2019 have not been favourable for optimum sucrose accumulation especially during the second half of the month. Rainfall during the month has exceeded the normal in most sectors especially during the second half of the month coupled with below normal temperature amplitude. As a result, the recorded *richesse* at end-July 2019 as well as the extraction rate over the island was lower than that of July 2018.

As at 3 August 2019, only 20% of miller-planters' land had been harvested. Cane productivity at island level in 2019 was higher than that recorded during the same period last year. Although extraction rate in July 2019 was lower than that of last year by 4.8% over the island, the sugar productivity of 7.30 TSH at end July 2019 was higher than that of 2018 by 5.2%. However, if normal winter conditions prevail in the coming months there is still room for improvement in sucrose accumulation and sugar productivity for the 2019 crop.