

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2019

15 October 2019

### SUGAR CANE CROP 2019

#### Status: End September 2019

## 1. CLIMATE

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

The island's average rainfall for the month of September 2019 over the sugar cane areas was 93 mm. It represented 83% of the long-term mean (LTM) that amounted to 111 mm. Below normal rainfall was recorded in sectors North with 38 mm, East with 101 mm, South with 134 mm and West with 16 mm. In the Centre above normal rainfall of 129 mm was recorded.

Cumulative rainfall over the period October 2018 to September 2019 amounted to 2333 mm representing 109% of the LTM for the island. During the same period, 1406 mm were recorded in the North, 2744 mm in the East, 2846 mm in the South, 813 mm in the West and 2964 mm in the Centre. Compared to their long-term means, these values represented 110% in both the North and East, 109% in the South, 89% in the West and 117% in the Centre.

The rainfall pattern during September 2019 was that almost all regions of the island had below normal rainfall, except in the Centre.

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

	North	East	South	West	Centre	Island
<b>2018</b>	37 (65)	102 (78)	103 (67)	31 (119)	149 (127)	86 (77)
<b>2019</b>	<b>38</b> (67*)	<b>101</b> (78)	<b>134</b> (87)	<b>16</b> (62)	<b>129</b> (110)	<b>93</b> (83)
<b>LTM</b>	57	130	154	26	117	111

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

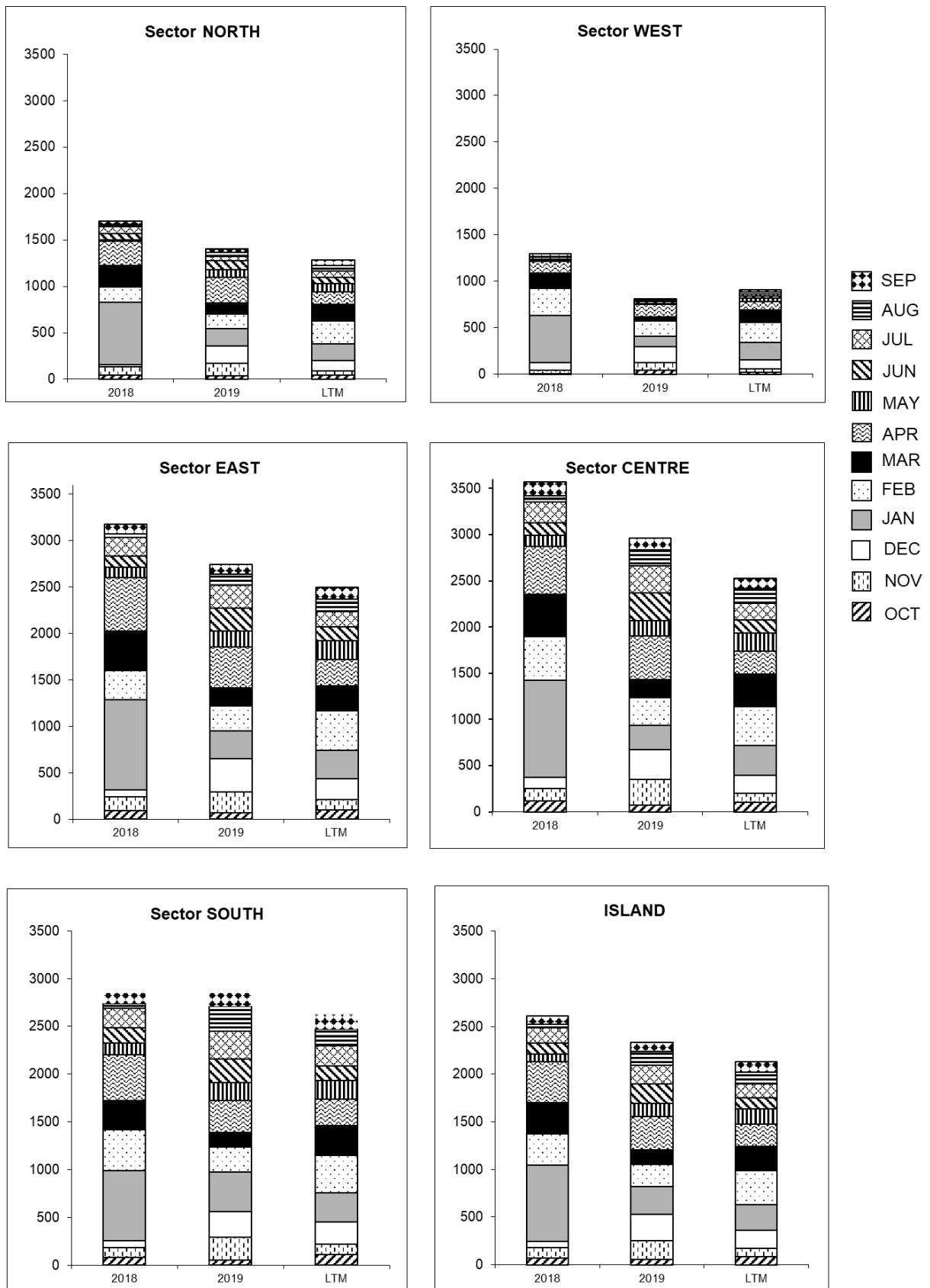
**Table 1b. Cumulative rainfall (mm) from October 2018 to September 2019 for crop 2019 compared to that of crop 2018 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2018</b>	1702 (133)	3176 (127)	2845 (109)	1294 (142)	3567 (141)	2613 (123)
<b>2019</b>	<b>1406</b> (110)*	<b>2744</b> (110)	<b>2846</b> (109)	<b>813</b> (89)	<b>2964</b> (117)	<b>2333</b> (109)
<b>LTM</b>	1282	2501	2622	911	2523	2133

\* figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

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

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Sep 2019	DevN*	Sep 2019	DevN*	Sep 2019	DevN*
<b>Ferret</b>	26.7	-0.1	18.2	+1.4	8.5	-1.5
<b>Réduit</b>	23.5	0.0	16.4	+0.6	7.1	-0.6
<b>Belle Rive</b>	23.7	+0.9	15.6	+1.1	8.1	-0.2
<b>Union Park</b>	24.0	+1.6	16.6	+0.8	7.4	+0.8

\* Deviation from the Normal (1981-2010)

Mean maximum temperature during September 2019 was close to normal at Ferret and Réduit but above normal at the other two stations. Mean minimum temperature exceeded the normal at all stations, the difference ranging from 0.6°C at Réduit to 1.4°C at Ferret. The resulting mean amplitude temperature lagged 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 September 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 96% at both Ferret and Réduit, 102% at Belle Rive and 108% at Union Park.

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

Station	September 2019	Normal	% of Normal
<b>Ferret</b>	220	233	96
<b>Réduit</b>	209	217	96
<b>Belle Rive</b>	201	197	102
<b>Union Park</b>	162	150	108

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

Sucrose content was assessed during the last week of September 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-September 2019**

Sectors	R 573	R 575	M 387/85	M 1246/84	M 2593/92	M 1400/86	M 1176/77	R 579	M 1672/90	R 570
North				14.1	14.8	16.3	14.9	14.3	15.5	13.3
East			14.6					13.3		13.0
South	14.7				13.5	14.5	15.1	13.3		14.2
West	15.0	15.5			15.4	14.9	15.1	14.6		
Centre			14.0				13.1	11.4		

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

Sectors	August			September		
	2017	2018	2019	2017	2018	2019
North	12.4	15.1	14.6	13.9	15.7	14.8
East	12.8	13.8	12.6	13.4	14.2	13.5
South	12.4	14.0	12.7	13.6	14.8	14.0
West	13.3	14.8	14.6	14.5	15.1	15.0
Centre	11.9	13.7	12.3	12.6	13.2	12.4
Island	<b>12.6</b>	<b>14.2</b>	<b>13.2</b>	<b>13.6</b>	<b>14.7</b>	<b>14.0</b>

Sucrose content at the end of September 2019 reached 14.8% in the North, 13.5% in the East, 14.0% in the South, 15.0% in the West and 12.4% in the Centre. Compared to the corresponding period in 2018, sucrose content to-date was comparable in the West but lagged behind in all sectors by a margin varying from 0.7° in the East to 0.9° in the North. Sucrose content at the end of September, for the present crop, was higher than those of the corresponding period in 2017 in sectors North, South and West. It was comparable in the East but slightly lower in the Centre.

From end-August to end-September 2019, sucrose content has improved by 0.2° in the North, 0.9° in the East, 1.3° in the South and 0.4° in the West. In the Centre, the increment was negligible. On average for the island, the increase in *richesse* was 0.8° in 2019 which was higher than the increment obtained in 2018 but lower than that obtained in 2017.

Island-wise, the *richesse* of 14.0% recorded at end of September 2019 was lagging behind that of the corresponding period in 2018 by 0.7° but exceeded that of 2017 by 0.4°.

### 3. CROP 2019

As at 28 September 2019, 14 716 ha representing about 47% of miller-planters' land had been harvested compared to 19 473 ha (59%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 49% in the North, 51% in the East, 42% in the South, 43% in the West and 41% 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-September 2019 was 82.3 TCH and was higher than that recorded in 2018 (72.3 TCH) by 10.0 TCH (13.8 %). Sector-wise, the West recorded highest cane productivity of 88.8 TCH followed by the South (82.6 TCH), the North (82.4 TCH), the East (82.0 TSH) and the Centre (72.2 TCH).

Compared to the same period last year, cane productivity recorded to-date was higher in all sectors, the difference ranging from 6.3 TCH in the North to 14.2 TCH in the Centre.

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

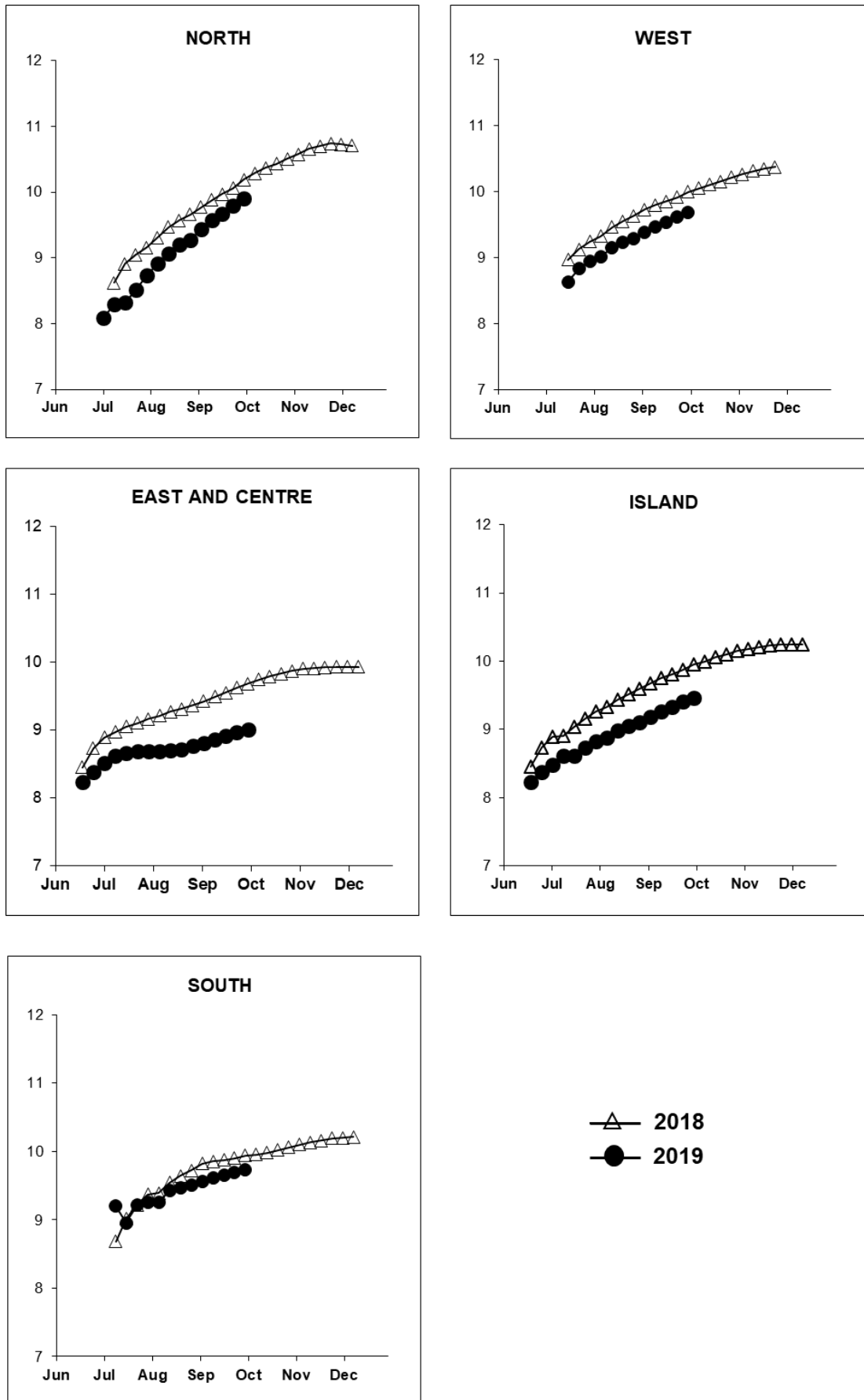
Sector	End August		End September	
	2018	2019	2018	2019
North	79.1	83.5	76.1	82.4
East	72.0	83.0	70.5	82.0
South	71.9	82.3	72.0	82.6
West	79.7	79.4	78.6	88.8
Centre	60.8	74.1	58.0	72.2
<b>Island</b>	<b>73.5</b>	<b>82.1</b>	<b>72.3</b>	<b>82.3</b>

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

The recorded island extraction rate of 9.47% at end-September 2019 was lower than that of the corresponding period in 2018 (9.95%) by 0.48°. Sector-wise, the extraction rate recorded was 9.90% in the North, 9.01% in the East-Centre, 9.73% in the South and 9.69% in the West. These figures lagged behind those of the corresponding period in 2018 by 0.29° in the North, 0.67° in the East-Centre, 0.21° in the South and 0.31° in the West.

Improvement in extraction rate was recorded from end-August 2019 to end-September 2019 in all sectors. The highest increment of 0.46° was observed in the North whilst the lowest increment of 0.17° occurred in the South. On average for the island, the increase in extraction rate was 0.28° in 2019 and was comparable to the 0.27° obtained in 2018.

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



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

Sector	End August		End September	
	2018	2019	2018	2019
North	9.77	9.44	10.19	9.90
East-Centre	9.42	8.81	9.68	9.01
South	9.82	9.56	9.94	9.73
West	9.33	9.39	10.00	9.69
<b>Island</b>	<b>9.68</b>	<b>9.19</b>	<b>9.95</b>	<b>9.47</b>

### 3.3 Sugar productivity (Table 5c)

The sugar productivity of 7.79 TSH recorded over the island at the end of September 2019 is higher than that of the corresponding period in 2018 (7.19 TSH) by 0.60 tonne (8.3%). Sector-wise sugar productivity was 8.16 TSH in the North, 7.26 TSH in the East-Centre, 8.04 TSH in the South and 8.60 TSH in the West. Sugar productivity at end-September 2019 exceeded that of the corresponding period in 2018 by 0.41 TSH in the North, 0.63 TSH in the East-Centre, 0.88 TSH in the South and 0.74 TSH in the West.

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

Sector	End August		End September	
	2018	2019	2018	2019
North	7.73	7.88	7.75	8.16
East-Centre	6.61	7.20	6.63	7.26
South	7.06	7.87	7.16	8.04
West	7.76	7.46	7.86	8.60
<b>Island</b>	<b>7.11</b>	<b>7.54</b>	<b>7.19</b>	<b>7.79</b>

## 4.0 CROP 2019

The weather conditions that prevailed during September 2019 were characterised by below normal rainfall in all sectors, except the Centre, coupled with below normal to above normal solar radiation. Temperature amplitude was below normal in most stations except at Union Park. These conditions did not favour optimum sucrose accumulation.

With nearly half of the area of miller planters' land harvested, cane productivity at island level in 2019 is higher than that of 2018 by 14%. However, extraction rate at end-September 2019 compared to the corresponding period in 2018 is lagging behind in all sectors and is lower by 5% over the island. The island sugar productivity of 7.79 TSH at end-September 2019 is better than that of last year by 0.60 TSH. Based on these harvest data, cane and sugar productivity are expected to exceed those of crop 2018 provided there is no major departure in the weather from the normal.