

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2018

15 November 2018

### SUGAR CANE CROP 2018

**Status: End October 2018**

#### 1. CLIMATE

##### 1.1 Rainfall (Table 1)

Rainfall recorded over the sugar cane areas of the island during October 2018 averaged 55 mm and represented 66% of the long-term mean (LTM, 83 mm) for the month. Rainfall was below the long-term mean in sectors North with 39 mm, East with 68 mm, South with 54 mm and Centre with 71 mm. In the West, the 41 mm of rainfall recorded in October 2018 was above the LTM.

October is known to be a dry month and most of the rainfall in October 2018 occurred towards the second half on the month. The crop water requirements have not been met in all sectors except in areas benefiting from sufficient irrigation.

**Table 1. Rainfall in mm and as a percentage of the long term mean (LTM) for September and October during crops 2017 and 2018**

	<b>Crop</b>	<b>North</b>	<b>East</b>	<b>South</b>	<b>West</b>	<b>Centre</b>	<b>Island</b>
<b>September</b>	<b>2017</b>	21 (37)	71 (55)	85 (63)	9 (35)	87 (69)	61 (57)
	<b>2018</b>	37 (65)	102 (78)	103 (76)	31 (119)	149 (118)	86 (81)
	<b>LTM</b>	57	130	136	26	126	106
<b>October</b>	<b>2017</b>	41 (98)	91 (90)	79 (74)	6 (27)	120 (117)	71 (86)
	<b>2018</b>	<b>39</b> (93)*	<b>68</b> (67)	<b>54</b> (50)	<b>41</b> (186)	<b>71</b> (69)	<b>55</b> (66)
	<b>LTM</b>	42	101	107	22	103	83

\* figures in brackets are % of LTM (1981-10, based on 23 stations over Mauritius)

[Source: raw provisional data from Mauritius Meteorological Services]

### 1.2 Air Temperature (Table 2)

Data on maximum and minimum temperatures as well as temperature amplitude recorded during the month of October 2018 on MSIRI agro-meteorological stations are given below.

**Table 2. Air temperatures recorded on MSIRI agro-meteorological stations in October 2018**

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Oct 2018	DevN*	Oct 2018	DevN	Oct 2018	DevN
<b>Ferret</b>	28.5	+0.3	18.5	+0.5	10.0	-0.2
<b>Réduit</b>	25.3	+0.4	17.2	+0.2	8.1	+0.2
<b>Belle Rive</b>	24.7	+0.7	16.0	+0.5	8.7	+0.2
<b>Union Park</b>	25.4	+1.8	17.1	+0.4	8.3	+1.4

\* Deviation from the Normal (1981-2010)

Mean maximum temperature during October 2018 was above normal at all stations, the difference ranging from 0.3°C at Ferret to 1.8°C at Union Park. Likewise, mean minimum temperature exceeded the normal by more than 0.2°C at all stations. The resulting mean amplitude was above normal at all stations except at Ferret. Temperature amplitude exceeding normal generally favours sucrose accumulation in the stalk.

### 1.3 Sunshine duration (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during October 2018 exceeded the normal at Belle Rive and Union Park but was below normal at the other two stations. Recorded bright sunshine as a percentage of the normal amounted to 96% at both Ferret and at Réduit, 104% at Belle Rive and 124% at Union Park.

**Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in October 2018**

Station	October 2018	Normal	% of Normal
<b>Ferret</b>	253	264	96
<b>Réduit</b>	245	256	96
<b>Belle Rive</b>	224	215	104
<b>Union Park</b>	213	172	124

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

During the last week of October 2018, clean cane samples from miller-planters' land were analysed for sucrose content. The fields chosen covered all factory areas under 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 months of September and October for the last two years.

**Table 4a. Average Pol % cane (*richesse*) at end-October 2018.**

Sectors	M 1400/86	M 1176/77	R 579	R 570
North	15.5		15.7	16.4
East			14.1	
South		16.4	14.7	15.8
West			15.3	
Centre	14.1		12.9	

**Table 4b. Comparison of Pol % cane (*richesse*) at the end of September and October 2016, 2017 and 2018.**

Sectors	SEPTEMBER			OCTOBER		
	2016	2017	2018	2016	2017	2018
North	16.1	13.9	15.7	17.3	16.4	15.8
East	14.2	13.4	14.2	16.8	13.8	14.1
South	16.2	13.6	14.8	16.1	15.1	15.4
West	13.7	14.5	15.1	14.4	15.4	15.3
Centre	13.6	12.6	13.2	14.9	-	13.4
Island	15.2	13.6	14.7	16.3	15.0	15.0

The *richesse* at end-October 2018 stood at 15.8% in the North, 14.1% in the East, 15.4% in the South, 15.3% in the West and 13.4% in the Centre. These values were higher than those for the corresponding period in 2017 by 0.3° in both the East and South, comparable in the West but lagged behind by 0.6° in the North. Compared to the corresponding period in 2016, sucrose content at the end of October 2018 was higher in the West by 0.9° but lagged behind in the other sectors by 1.5° in the North, 2.7° in the East, 0.7° in the South and 1.5° in the Centre.

During period end-September to end-October, a slight increase in sucrose content was noted in all sectors except the North. On average for the island, the increase in *richesse* was 0.3° in 2018, which was much lower than the increment of 1.4° obtained in 2017 and 1.1° in 2016.

Island-wise, the *richesse* of 15.0% recorded at end of October 2018 was similar to that obtained in the corresponding period in 2017 but lagged behind that of 2016 by 1.3°.

### 3. CROP 2018

As at 27 October 2018, a total of 25 396 ha representing about 77% of miller-planters' land was harvested compared to 23 680 ha (70%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 78% in the North, 74% in both the East and South, 97% in the West and 70% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. Since all the canes from the Centre are crushed at Alteo in the East, harvest statistics relative to extraction rate and sugar productivity have been combined for these two sectors.

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

As at end-October 2018, cane productivity for the island was 71.1 TCH and was lower than that recorded in 2017 (79.1 TCH) by 8.0 TCH (10.1 %). Sector-wise, the best cane productivity to-date was recorded in the West with 79.3 TCH followed by the North (73.6 TCH), the South (71.3 TCH), the East (68.9 TCH) and the Centre (54.8 TCH). These figures compared to those recorded at the same period last year were inferior by more than 13 TCH in both the East and Centre, 7.1 TCH in the North, 6.2 TCH in the West and 3.4 TCH in the South. Compared to the corresponding period in 2016, cane productivity in October 2018 was lagging behind in all sectors, the shortfall ranging from 5.7 TCH in the North to 14.4 TCH in the Centre.

**Table 5a. Cane productivity (TCH) as at end of September and October for the 2016, 2017 and 2018 crops**

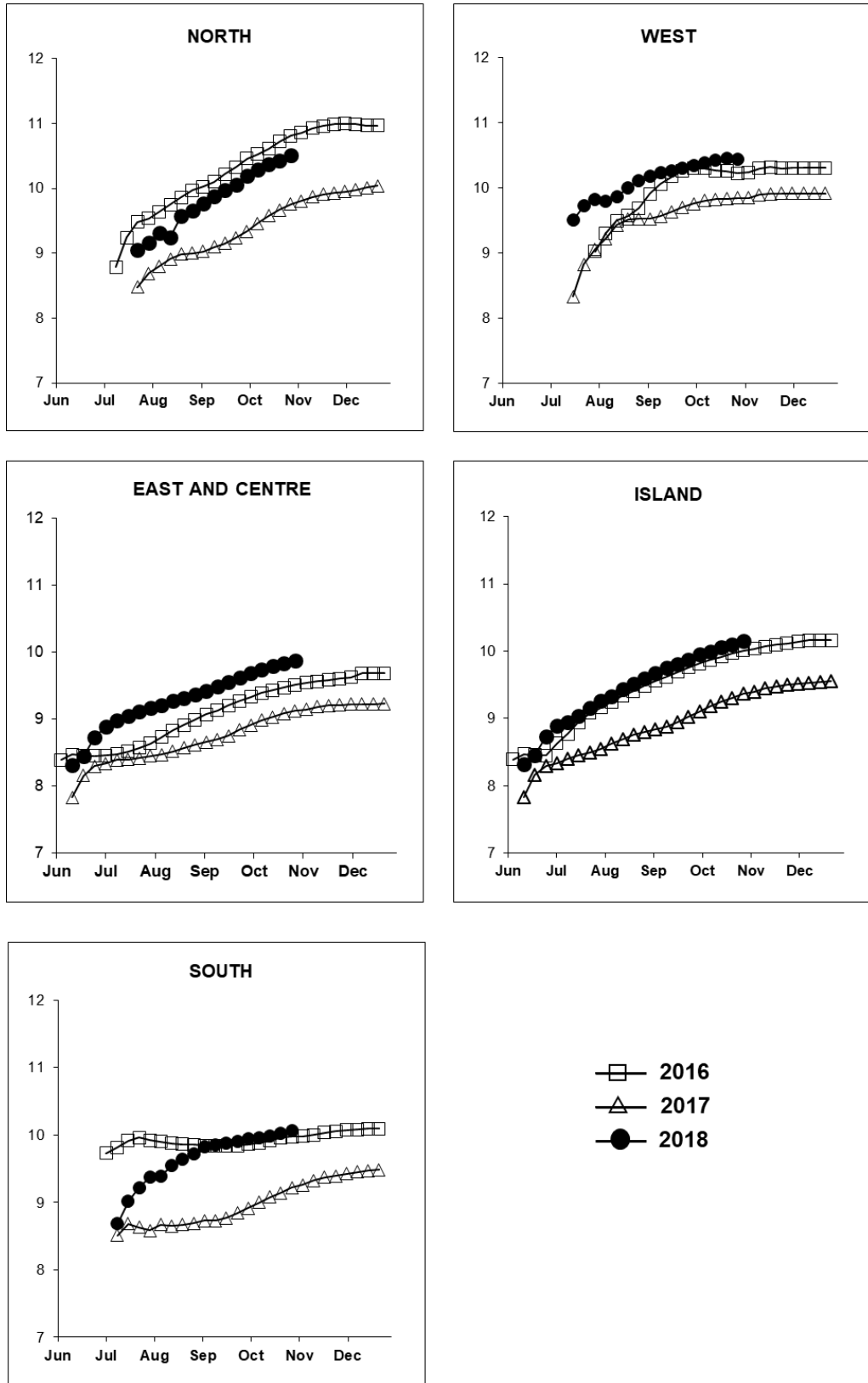
Sector	End September			End October		
	2016	2017	2018	2016	2017	2018
North	81.3	81.2	76.1	79.3	80.7	73.6
East	78.3	82.6	70.5	77.1	82.1	68.9
South	81.5	75.3	72.0	79.9	74.7	71.3
West	91.6	86.2	78.6	90.6	85.5	79.3
Centre	70.5	69.2	58.0	69.2	68.3	54.8
<b>Island</b>	<b>80.5</b>	<b>79.8</b>	<b>72.3</b>	<b>79.2</b>	<b>79.1</b>	<b>71.1</b>

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

The recorded island extraction rate of 10.15% at end-October 2018 was higher than that of the corresponding period in 2017 (9.37%) by 0.78° and in 2016 (10.01%) by 0.14°. Sector-wise, the extraction rate recorded was 10.51% in the North, 9.87% in the East-Centre, 10.06% in the South and 10.44% in the West. These figures exceeded those of the corresponding period in 2017 by 0.75° in both the North and the East-Centre, 0.84° in the South and 0.59° in the West. When compared to that in 2016, extraction rate to-date was lower in the North but higher in the other sectors by 0.36° in the East-Centre, 0.09° in the South and 0.21° in the West.

During the period end-September 2018 to end-October 2018, extraction rate had improved in all sectors, with the highest gain of 0.32° obtained in the North and the lowest of 0.09° in the West. On average for the island, the increase in extraction rate during the period end-September to end-October was 0.20° in 2018 compared to 0.27° obtained in 2017 and 0.19° in 2016.

**Figure 2. Evolution of extraction rate (%) for the 2016, 2017 and 2018 crops**



**Table 5b. Extraction rate (%) as at end of September and October for the 2016, 2017 and 2018 crops**

Sectors	End September			End October		
	2016	2017	2018	2016	2017	2018
North	10.46	9.34	10.19	10.81	9.76	10.51
East/Centre	9.33	8.91	9.68	9.51	9.12	9.87
South	9.86	8.91	9.94	9.97	9.22	10.06
West	10.30	9.76	10.35	10.23	9.85	10.44
<b>Island</b>	<b>9.82</b>	<b>9.10</b>	<b>9.95</b>	<b>10.01</b>	<b>9.37</b>	<b>10.15</b>

### 3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.22 TSH is lagging behind the corresponding period in 2017 (7.41 TSH) by 0.19 tonne (2.6%) and in 2016 (7.93 TSH) by 0.71 tonne (8.9%). Sector-wise sugar productivity is 7.74 TSH in the North, 6.57 TSH in the East-Centre, 7.17 TSH in the South and 8.28 TSH in the West. Sugar productivity at end-October 2018 was higher than that of the corresponding period in 2017 by 0.28 TSH in the South but was inferior by 0.72 TSH in the East-Centre, and 0.14 TSH in both the North and West. Compared to the corresponding period in October 2016, sugar productivity in 2018 lagged behind in all sectors with differences ranging from 0.63 TSH in the East-Centre to 0.99 TSH in the West.

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

Sectors	End September			End October		
	2016	2017	2018	2016	2017	2018
North	8.50	7.58	7.75	8.57	7.88	7.74
East/Centre	7.18	7.18	6.63	7.20	7.29	6.57
South	8.04	6.71	7.16	7.97	6.89	7.17
West	9.43	8.41	8.14	9.27	8.42	8.28
<b>Island</b>	<b>7.91</b>	<b>7.26</b>	<b>7.19</b>	<b>7.93</b>	<b>7.41</b>	<b>7.22</b>

#### **4.0 CROP 2018**

As was the case in September 2018, the dry weather conditions persisted in October 2018 over the island and has generally favoured ripening on account of the overall dry and hot weather conditions. This is reflected in the increasing trend in extraction rate that has been noted in all sectors which at the end of October 2018 was higher than that of last year by 0.78° over the island. On the other hand, cane productivity over the island at the end of October 2018 was lower than that of 2017 by 10%. The general trend over the past three months showed that the deficit in cane productivity between 2018 and 2017 has kept on increasing while the gain in extraction of 2018 over 2017 has been reduced. Thus, this has resulted in a sugar productivity over the island which in August 2018 was better than that in 2017 by 0.13 TSH while in October 2018 sugar productivity was lagging behind that of 2017 by 0.19 TSH. With nearly 77% of the area of miller-planters' harvested and in case the dry hot weather persists in November 2018, sugar productivity in 2018 is expected to lag behind that of crop 2017.