

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2018

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SUGAR CANE CROP 2018

Status: End September 2018

1. CLIMATE

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

The island's average rainfall for the month of September 2018 over the sugar cane areas was 86 mm. It represented 81% of the long-term mean (LTM) (106 mm). Below normal rainfall was recorded in sectors North with 37 mm, East with 102 mm and South with 103 mm while above normal rainfall occurred in the other two sectors.

Total rainfall over the period October 2017 to September 2018 cumulated to 1702 mm in the North, 3176 mm in the East, 2845 mm in the South, 1294 mm in the West and 3567 mm in the Centre. These figures represented 133%, 143%, 116%, 144% and 130% of the respective LTM. The island average of 2613 mm for this period represented 129% of the LTM (2024 mm).

Most of the rain was recorded during the first fortnight of the month while the second half had deficient rainfall in all regions of the island.

Table 1a. Rainfall (mm) for the month of September for crops 2017, 2018 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
2017	21 (37)	71 (55)	85 (63)	9 (35)	87 (69)	61 (57)
2018	37 (65)*	102 (78)	103 (76)	31 (119)	149 (118)	86 (81)
LTM	57	130	136	26	126	106

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

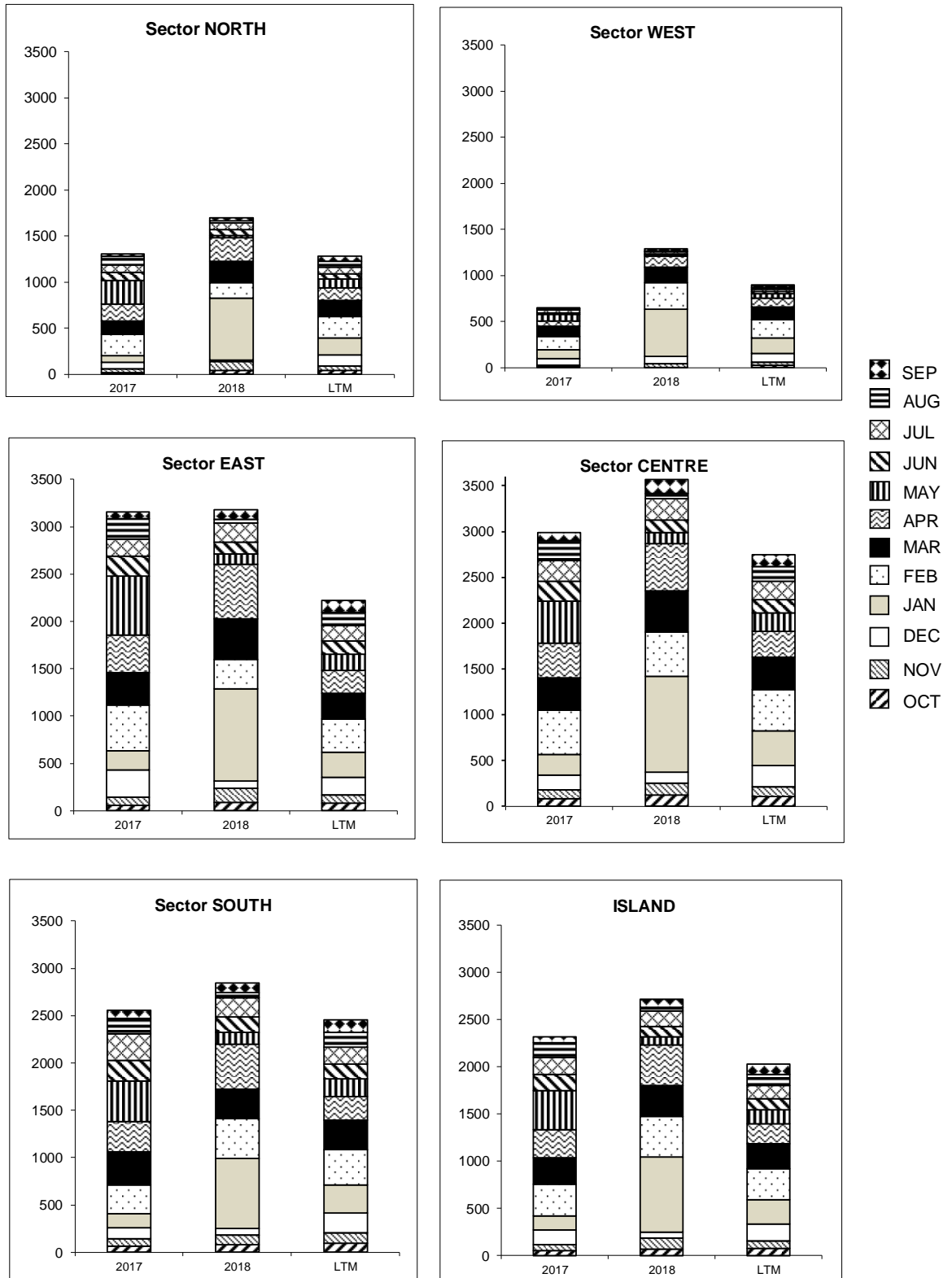
Table 1b. Cumulative rainfall (mm) from October 2017 to September 2018 for crop 2018 compared to that of crop 2017 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
2017	1306 (102)	3155 (142)	2557 (104)	650 (73)	2990 (109)	2316 (114)
2018	1702 (133)*	3176 (143)	2845 (116)	1294 (144)	3567 (130)	2613 (129)
LTM	1281	2225	2458	896	2744	2024

* figures in brackets are % of LTM

[Source: raw provisional data from Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2017 to September 2018 for the 2018 crop compared to the corresponding period of the 2017 crop and to the long-term mean (LTM).



1.2 Air Temperature (Table 2)

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

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Sep 2018	DevN*	Sep 2018	DevN	Sep 2018	DevN
Ferret	27.7	+0.9	18.5	+1.7	9.2	-0.8
Réduit	23.9	+0.4	17.0	+1.2	6.9	-1.2
Belle Rive	23.4	+0.6	16.0	+1.5	7.4	-0.9
Union Park	24.0	+1.6	16.9	+1.1	7.1	+0.5

* Deviation from the Normal (1981-2010)

Mean maximum temperature during September 2018 was above normal at all stations, the difference ranging from 0.4°C at Réduit to 1.6°C at Union Park. Similarly mean minimum temperature exceeded the normal by more than 1.1°C at all stations. The resulting mean amplitude was below normal at all stations except at Union Park where it exceeded the normal by 0.5°C. Generally, below normal temperature amplitude does not favour optimum sucrose accumulation.

1.3 Sunshine duration (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during September 2018 exceeded the normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 109% at Ferret, 106% at Réduit, 120% at Belle Rive and 134% at Union Park.

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

Station	September 2018	Normal	% of Normal
Ferret	250	247	109
Réduit	243	220	106
Belle Rive	193	202	120
Union Park	163	143	134

2.0 SUCROSE ACCUMULATION (Tables 4a and 4b)

During the last week of September 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 last two years.

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

Sectors	R 573	M 2593/92	M 1400/86	M 1176/77	M 1861/89	R 579	R 570
North		15.6	15.0	16.5		15.2	16.1
East						14.0	14.5
South	14.8	14.1		15.8	16.6	14.2	15.0
West		14.5				14.5	16.3
Centre			14.0			12.6	

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

Sectors	AUGUST			SEPTEMBER		
	2016	2017	2018	2016	2017	2018
North	14.9	12.4	15.1	16.1	13.9	15.7
East	13.8	12.8	13.8	14.2	13.4	14.2
South	14.5	12.4	14.0	16.2	13.6	14.8
West	13.1	13.3	14.8	13.7	14.5	15.1
Centre	13.8	11.9	13.7	13.6	12.6	13.2
Island	14.2	12.6	14.2	15.2	13.6	14.7

The *richesse* at end-September 2018 stood at 15.7% in the North, 14.2% in the East, 14.8% in the South, 15.1% in the West and 13.2% in the Centre. These values were higher than those for the corresponding period in 2017 by 1.8° in the North, 0.8° in the East, 1.2° in the South and 0.6° in both the West and the Centre. Compared to the corresponding period in 2016, sucrose content at the end of September 2018 was comparable in the East, higher in the West by 1.4° but lagged behind by 1.4° in the South and 0.4° in both the North and the Centre.

Sucrose content from end-August 2018 up to end-September 2018 increased in all sectors except in the Centre where a decrease of 0.5° was noted. The highest incremental margin of 0.8° was observed in the South followed by 0.6° in the North, 0.4° in the East and 0.3° in the West. On average for the island, the increase in *richesse* was 0.5° in 2018, which was lower than the increment of 1.0° obtained in 2017 and 2016.

Island-wise, the *richesse* of 14.7% recorded at end of September 2018 was higher than the corresponding period in 2017 by 1.1° but lagged behind that of 2016 by 0.5°.

3. CROP 2018

As at 29 September 2018, 19 471 ha representing about 60% of miller-planters' land were harvested compared to 18 017 ha (53%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 58% in the North, 59% in the East, 56% in the South, 72% in the West and 54% 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)

Cane productivity for the island as at end-September 2018 was 72.3 TCH and was lower than that recorded in 2017 (79.8 TCH) by 7.5 TCH (9.4 %). Sector-wise, the best cane productivity to-date was recorded in the West with 78.6 TCH followed by the North (76.1 TCH), the South (72.0 TCH), the East (70.5 TCH) and the Centre (58.0 TCH).

Compared to September 2017, cane productivity recorded to-date was inferior in all sectors with the shortfall ranging from 3.3 TCH in the South to 12.1 TCH in the East.

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

Sector	End August			End September		
	2016	2017	2018	2016	2017	2018
North	82.6	79.9	79.0	81.3	81.2	76.1
East	78.2	82.3	72.0	78.3	82.6	70.5
South	83.1	74.7	71.9	81.5	75.3	72.0
West	95.8	83.3	79.7	91.6	86.2	78.6
Centre	71.3	68.4	60.8	70.5	69.2	58.0
Island	81.3	79.0	73.5	80.5	79.8	72.3

3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.95% at end-September 2018 was higher than that of the corresponding period in 2017 (9.10%) by 0.85° and in 2016 (9.82%) by 0.13°. Sector-wise, the extraction rate recorded was 10.19% in the North, 9.68% in the East-Centre, 9.94% in the South and 10.35% in the West. These figures exceeded those of the corresponding period in 2017 by 0.85° in the North, 0.77° in the East-Centre, 1.03° in the South and 0.59° in the West. When compared to that in 2016, extraction rate to-date was comparable in the South and West, higher in the East-Centre by 0.35° but lagged behind in the North by 0.27°.

During the period end-August to end-September, extraction rate had improved in all sectors. The highest increment of 0.42° was observed in the North whilst the lowest increment of 0.12° occurred in the South. On average for the island, the increase in extraction rate from end-August to end-September was 0.27° in 2018 comparable to the 0.26° obtained in 2017 and 2016.

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

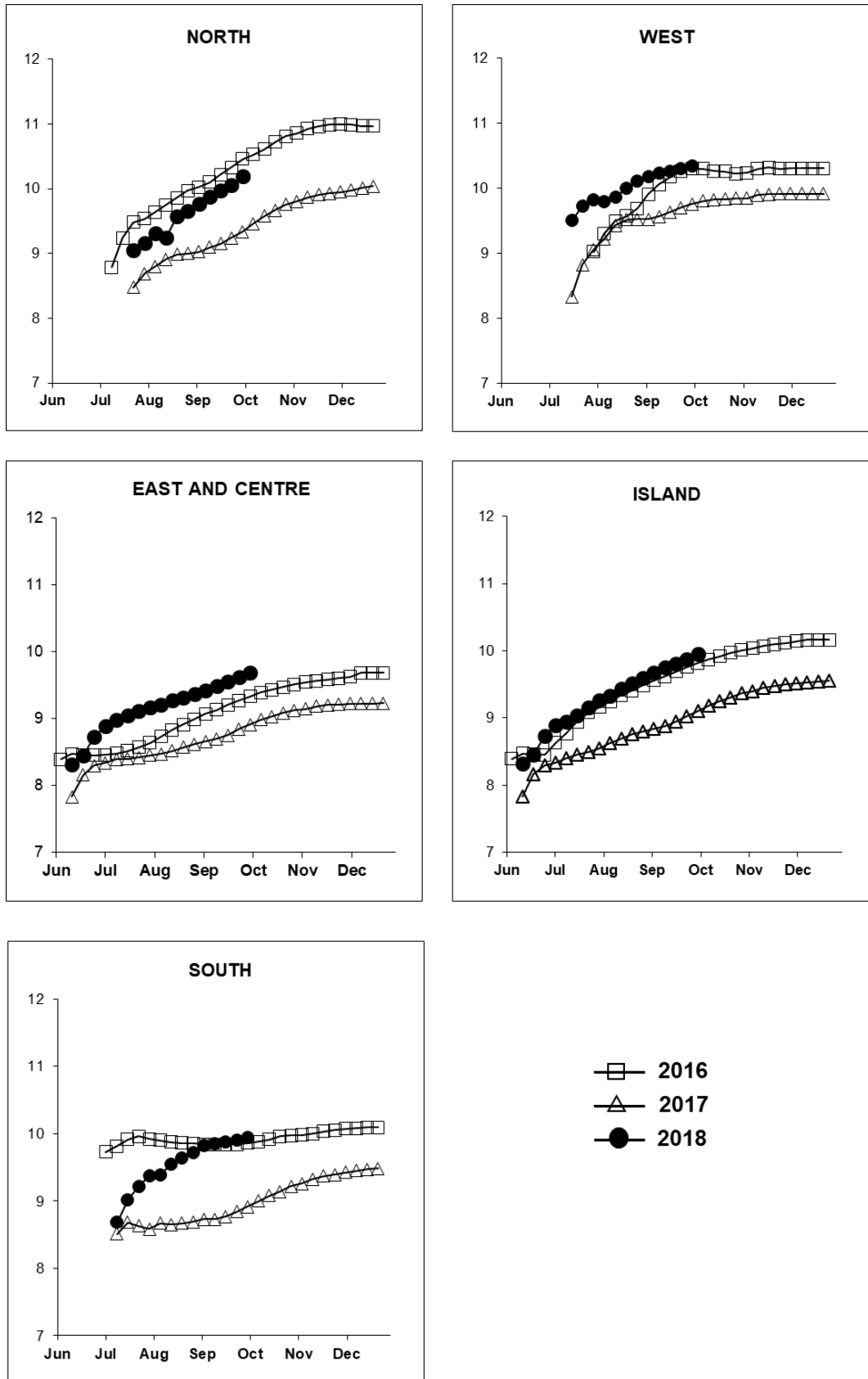


Table 5b. Extraction rate (%) as at end of August and September for the 2016, 2017 and 2018 crops

Sectors	End August			End September		
	2016	2017	2018	2016	2017	2018
North	10.03	9.03	9.77	10.46	9.34	10.19
East/Centre	9.07	8.66	9.42	9.33	8.91	9.68
South	9.84	8.73	9.82	9.86	8.91	9.94
West	9.91	9.53	10.18	10.30	9.76	10.35
Island	9.56	8.84	9.68	9.82	9.10	9.95

3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.19 TSH was comparable to that of the corresponding period in 2017 (7.26 TSH) but was lagging behind that of the same period in 2016 (7.91 TSH) by 0.72 tonne (9.1%). Sector-wise sugar productivity was 7.75 TSH in the North, 6.63 TSH in the East-Centre, 7.16 TSH in the South and 8.14 TSH in the West. Sugar productivity at end-September 2018 was higher than that of the corresponding period in 2017 by 0.17 TSH in the North and 0.45 TSH in the South but was lagging behind by 0.55 TSH in the East-Centre and 0.27 TSH in West. Compared to the corresponding period in September 2016, sugar productivity in 2018 lagged behind in all sectors with differences ranging from 0.55 TSH in the East-Centre to 1.29 TSH in the West.

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

Sectors	End August			End September		
	2016	2017	2018	2016	2017	2018
North	8.28	7.21	7.72	8.50	7.58	7.75
East/Centre	6.99	6.96	6.61	7.18	7.18	6.63
South	8.18	6.52	7.06	8.04	6.71	7.16
West	9.49	7.94	8.11	9.43	8.41	8.14
Island	7.77	6.98	7.11	7.91	7.26	7.19

4.0 CROP 2018

The weather conditions prevailing during the major part of September 2018 was deficient in rainfall coupled and solar radiation was above normal. Temperature amplitude was lower than normal and did not favour optimum sucrose accumulation. So far with nearly 60% of the crop harvested on miller-planters' land, milling data indicate a lower cane productivity when compared to the past two years. Compared to last year, the shortfall in cane productivity at the end of September 2018 over the island stood at 7.5 TCH. Extraction rate throughout the island in September 2018 was better than in 2017 by 0.85° and that of 2016 by 0.13°. Thus, sugar productivity at the end of September 2018 over the island was comparable to that of last year but below that of 2016 by 0.72 TSH. Based on these data and with no major departure in the weather from the normal, sugar productivity is expected to be inferior to that of 2016 but comparable to that of 2017.