

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2018

13 August 2018

SUGAR CANE CROP 2018

Status: End July 2018

1. CLIMATE

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

Rainfall recorded over the sugar cane areas during the month of July 2018 was above the normal with an island average of 162 mm, representing 116% of the long-term mean (LTM) of 140 mm. Sector-wise, rainfall was equal to the LTM in the West but exceeded the LTM in the other sectors with 77 mm in the North, 203 mm in both the East and South, and 228 in the Centre.

The cumulative rainfall over the period October 2017 to July 2018 was 1645 mm in the North, 3038 mm in the East, 2691 mm in the South, 1261 mm in the West and 3355 mm in the Centre, and represented 141%, 155%, 124%, 148% and 137% of the respective LTM. The island average of 2490 mm for this period represented 138% of the LTM (1801 mm).

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

	North	East	South	West	Centre	Island
2017	80 (113)	174 (106)	279 (154)	27 (117)	226 (114)	179 (128)
2018	77 (108)*	203 (124)	203 (112)	23 (100)	228 (115)	162 (116)
LTM	71	164	181	23	198	140

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

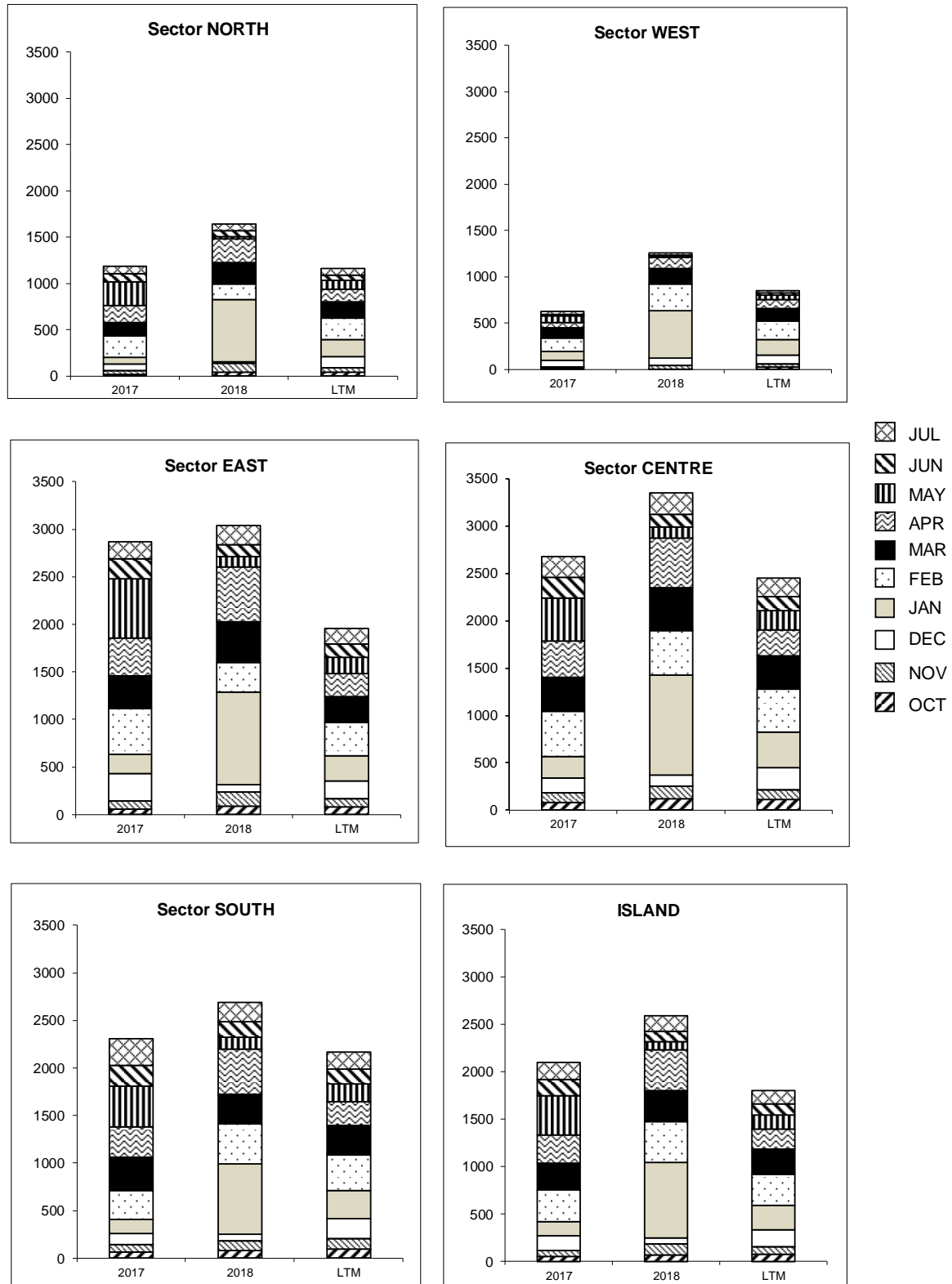
Table 1b. Cumulative rainfall (mm) from October 2017 to July 2018 for crop 2018 compared to that of crop 2017 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
2017	1190 (102)	2866 (146)	2308 (106)	626 (73)	2682 (109)	2100 (117)
2018	1645 (141)*	3038 (155)	2691 (124)	1261 (148)	3355 (137)	2490 (138)
LTM	1165	1957	2169	853	2455	1801

* 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 July 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 together with temperature amplitude as recorded during the month of July 2018 on MSIRI agro-meteorological stations are given below.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in July 2018

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	July 2018	DevN*	July 2018	DevN	July 2018	DevN
Ferret	25.1	-0.4	16.9	+0.7	8.2	-1.1
Réduit	22.4	+0.1	15.3	0.0	7.1	+0.1
Belle Rive	22.0	0.0	14.1	+0.1	7.9	-0.1
Union Park	22.3	+0.9	15.9	+0.5	6.4	+0.4

* Deviation from the Normal (1981-2010)

Mean maximum temperature during July 2018 was below normal at Ferret, close to the normal at Réduit and Belle Rive but higher than the normal at Union Park. Similarly, mean minimum temperature was comparable to the normal at Réduit and Belle Rive but above the normal by 0.7° at Ferret and 0.5° at Union Park. The resulting mean amplitude was below normal at Ferret by 1.1°, close to the normal at Réduit and Belle Rive but exceeded the normal only at Union Park by 0.4°.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during July 2018 were close to the normal at Réduit and Ferret but above the normal at the other two stations. Recorded bright sunshine as a percentage of the normal amounted to 101 at Ferret, 98 at Réduit, 109 at Belle Rive and 116 at Union Park.

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

Station	July 2018	Normal	% of Normal
Ferret	238	235	101
Réduit	217	222	98
Belle Rive	204	188	109
Union Park	155	134	116

2.0 SUCROSE ACCUMULATION (Tables 4a and 4b)

During the last week of July 2018 cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analyzed (based on clean cane samples) for sucrose content. 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 2018.

Sectors	M 52/78	R 573	M 695/69	R 575	M 1246/84	M 387/85	M 2593/92	M 2283/98	M 1400/86	M 1176/77	M 1861/89	R 579	M 1672/90	R 570
North					12.5		12.6		11.8	13.2		12.7	12.4	11.9
East						13.5	13.4		12.3	13.9		11.8		11.3
South		13.8	13.4	13.7			12.2	11.8	12.5	12.8	13.4	12.1	12.0	10.3
West		14.1		14.5			13.1		12.0	14.6		12.6		12.4
Centre	13.8					13.0			11.6	12.5		10.4		

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

Sectors	JUNE			JULY		
	2016	2017	2018	2016	2017	2018
North	13.7	9.4	11.4	14.1	11.3	12.5
East	12.6	11.3	11.1	13.5	11.7	12.4
South	13.1	10.7	12.0	14.2	10.2	12.5
West	11.5	11.1	12.8	12.9	12.1	13.4
Centre	12.7	11.6	11.7	13.4	11.1	12.0
Island	12.9	10.7	11.7	13.8	11.1	12.5

The derived *richesse* at the end of July 2018 reached 12.5% in the North, 12.4% in the East, 12.5% in the South, 13.4% in the West and 12.0% in the Centre. These figures were higher than the corresponding period in 2017 by 1.2° in the North, 0.7° in the East, 2.3° in the South, 1.3° in the West and 0.9° in the Centre. Compared to the corresponding period in 2016, sucrose content at the end of July 2018 was inferior to that of all sectors except in the West where it was higher by 0.5°.

Sucrose content from end-June 2018 up to end-July 2018 has improved in all sectors. The highest increment of 1.3° was observed in the East followed by 1.1° in the North, 0.6° in the West, 0.5° in the South and 0.3° in the Centre. On average for the island, the increase in *richesse* was 0.8° in 2018 which was higher than that obtained in 2017 but comparable to that obtained in 2016.

Island-wise, the *richesse* of 12.5% recorded at end of July 2018 was higher than that of the corresponding period in 2017 by 1.4° but lagged behind that of 2016 by 1.3°.

3. CROP 2018

As at 28 July 2018, 6 520 ha representing about 20% of miller-planters' land had been harvested compared to 5 947 ha (18%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 16% in the North, 26% in the East, 15% in the South, 17% in the West and 25% 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 28 July 2018 was 74.3 TCH and was lower than that recorded in 2017 (78.7 TCH) and 2016 (79.8 TCH). Sector-wise, the best cane productivity to-date was recorded in the West with 80.7 TCH, followed by the North (80.5 TCH), the South (73.7 TCH), the East (73.3 TCH) and the Centre (62.3 TCH).

Compared to the same period last year, cane productivity recorded to-date was lagging behind in all sectors ranging from 1.1 TCH in the West to 8.7 TCH in the Centre.

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

	North	East	South	West	Centre	Island
2016	78.6	78.5	82.1	101.4	74.3	79.8
2017	83.6	80.3	74.9	81.8	71.0	78.7
2018	80.5	73.3	73.7	80.7	62.3	74.3

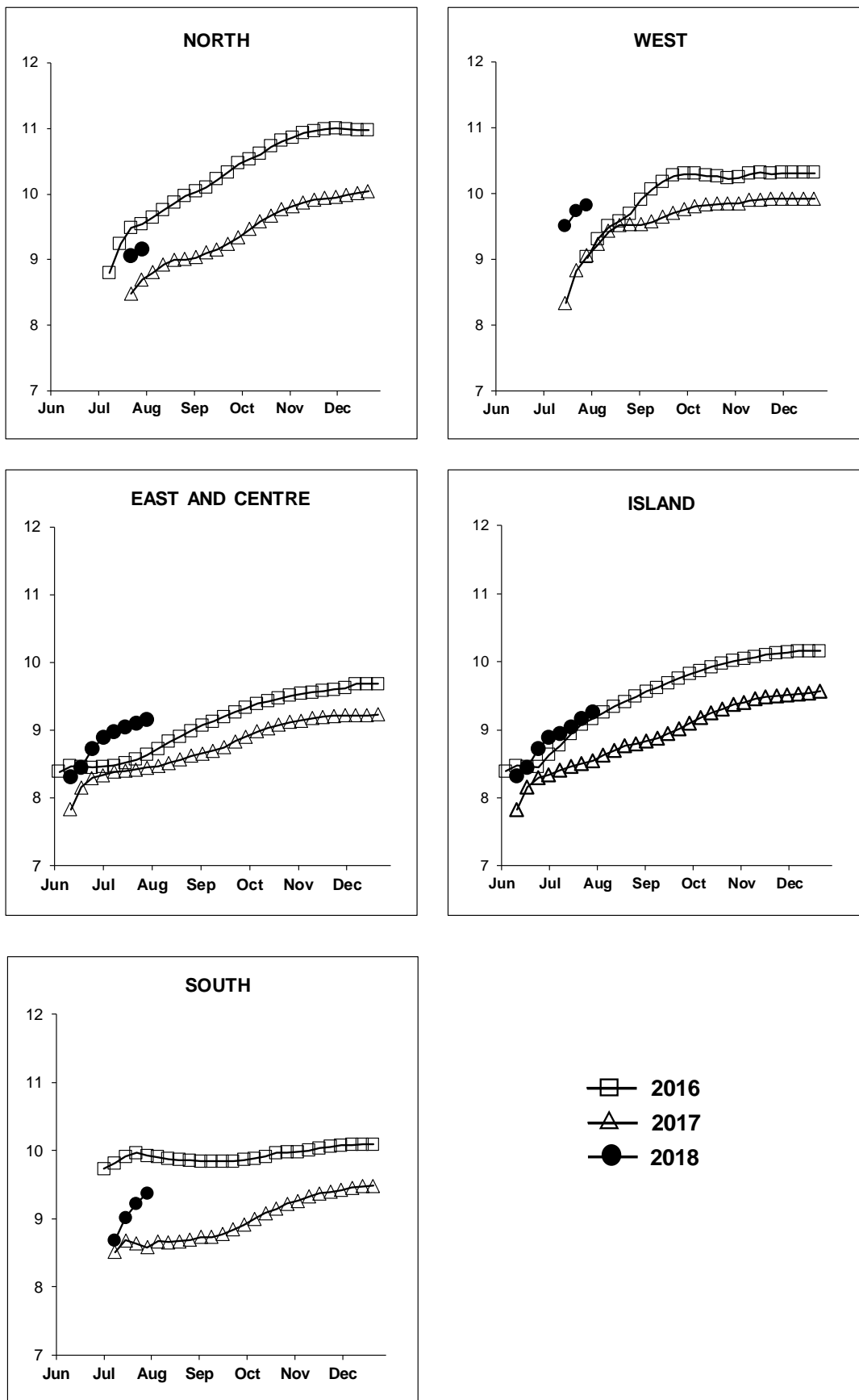
3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.26% at end July 2018 was higher than that of the corresponding period in 2017 (8.55%) by 0.71° and in 2016 (9.16%) by 0.10°. Sector-wise, the extraction rate recorded was 9.16% in both the North and the East-Centre, 9.37% in the South and 9.82% in the West. These figures exceeded those of the corresponding period in 2017 by 0.47° in the North, 0.71° in the East-Centre, 0.79° in the South and 0.76° in the West. When compared to that in 2016, extraction rate to-date was higher in the East-Centre by 0.52° and West by 0.79° whereas in the other sectors it lagged behind by 0.38° in the North and 0.55° in the South.

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

	North	East - Centre	South	West	Island
2016	9.54	8.64	9.92	9.03	9.16
2017	8.69	8.45	8.58	9.06	8.55
2018	9.16	9.16	9.37	9.82	9.26

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



3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 6.88 TSH at the end of July 2018 is higher than the corresponding period in 2017 (6.73 TSH) by 0.15 tonne (2%) but lagged behind that of 2016 (7.31 TSH) by 0.43 TSH (5.9%). Sector-wise sugar productivity was 7.37 TSH in the North, 6.54 TSH in the East-Centre, 6.91 TSH in the South and 7.92 TSH in the West. Sugar productivity at end-July 2018 exceeded that of the corresponding period in 2017 by 0.11 TSH in the North, 0.48 TSH in the South and 0.51 TSH in the West, but was lagging behind by 0.13 TSH in the East-Centre. Compared to the corresponding period in July 2016, sugar productivity in 2018 lagged behind in all sectors with differences ranging from 0.13 TSH in the North to 1.24 TSH in the West.

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

	North	East - Centre	South	West	Island
2016	7.50	6.73	8.14	9.16	7.31
2017	7.26	6.67	6.43	7.41	6.73
2018	7.37	6.54	6.91	7.92	6.88

4.0 CROP 2018

The prevailing climatic conditions during the month of July 2018, with slightly wetter conditions in most sectors and temperature amplitude not exceeding the normal, did not favour optimal sucrose accumulation. As such, the recorded *richesse* at end-July 2018 of 12.5%, although being higher than that of July 2017, was lagging behind that of 2016 (13.8%).

Harvest as at end-July 2018 represented only about 20% of miller planters' land. Cane productivity at island level as at July 2018 was lower than that recorded during the same period in 2017 by 4.4 TCH and 2016 by 5.5 TCH. Although extraction rate in July 2018 was higher than that of last year, it lagged behind that recorded in July 2016. However, the sugar productivity of 6.88 TSH at end July 2018 was slightly higher than that of 2017 (6.73 TSH) but was behind that of 2016 (7.31 TSH) at the same period by 5.9%. Improvement in sucrose accumulation and sugar productivity for the 2018 crop can be expected if normal winter conditions prevail in the coming months.