

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2018

17 December 2018

SUGAR CANE CROP 2018

Status: End November 2018

1. CLIMATE

1.1 Rainfall (Table 1)

The island's average rainfall over the sugar cane areas for November was 200 mm representing 228% of the long term mean (LTM, 88 mm). November rainfall exceeded the LTM in all sectors by 84 mm (187%) in the North, 118 mm (110%) in the East, 122 mm (107%) in the South, 50 mm (161%) in the West and 186 mm (196%) in the Centre.

Cumulative rainfall for the months of October and November 2018 amounted to 255 mm for the island, i.e. 149% of the long-term mean. During that period, 168 mm were recorded in the North, 293 mm in the East, 290 mm in the South, 122 mm in the West and 352 mm in the Centre. These figures represented 193%, 141%, 131%, 230% and 178% of the respective LTM.

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

	North	East	South	West	Centre	Island
2018	95 (211)	148 (138)	106 (93)	35 (113)	133 (140)	112 (127)
2019	129 (287)*	225 (210)	236 (207)	81 (261)	281 (296)	200 (228)
LTM	45	107	114	31	95	88

⁺ Crop year is from October to September

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

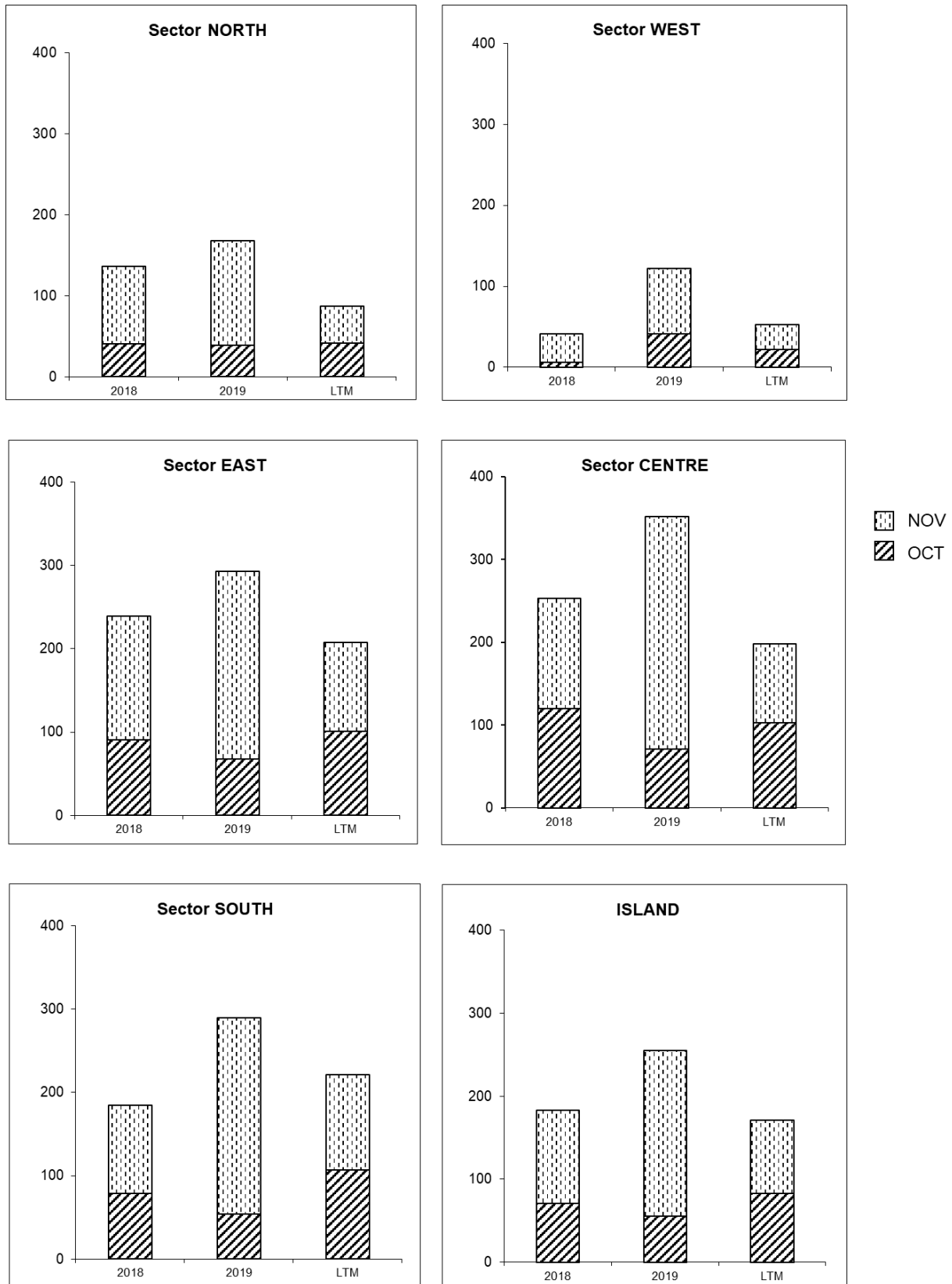
Table 1b. Cumulative rainfall (mm) from October to November 2018 for crop 2019 compared to that of crop 2018 and the LTM

	North	East	South	West	Centre	Island
2018	136 (156)	239 (115)	185 (84)	41 (77)	253 (128)	183 (107)
2019	168 (193)*	293 (141)	290 (131)	122 (230)	352 (178)	255 (149)
LTM	87	208	221	53	198	171

* figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October to November 2018 for the 2019 crop compared to the corresponding period of the 2018 crop and to the long term mean (LTM).



1.2 Air Temperature and Sunshine duration (Table 2)

Data on maximum and minimum temperatures together with sunshine duration recorded during the month of November 2018 on the four MSIRI agro-meteorological stations are given below.

Table 2. Air temperature and sunshine duration recorded on MSIRI agro-meteorological stations in November 2018

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Nov 2018	DevN*	Nov 2018	DevN	Nov 2018	% Normal
Ferret	30.1	+0.2	21.3	+2.1	279	107
Réduit	27.4	+0.8	19.8	+1.4	252	100
Belle Rive	26.4	+0.8	18.8	+2.1	226	104
Union Park	27.2	+1.8	19.6	+1.7	224	110

* Deviation from the Normal (1981-2010)

Above normal maximum temperature was recorded at all stations during November 2018, the difference ranging from 0.2°C at Ferret to 1.8°C at Union Park. Likewise, mean minimum temperature exceeded the normal by more than 1.4°C at all stations. Recorded bright sunshine as a percentage of the normal was 107% at Ferret, 100% at Réduit, 104% at Belle Rive and 110% at Union Park. Above normal temperature and solar radiation are conducive to crop growth.

2.0 CROP 2018

As at 1 December 2018, a total of 31 700 ha representing about 96% of miller-planters' land was harvested compared to 30 124 ha (89%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 98% in the North, 93% in the East and 96% in both the South and the Centre. Harvest was already completed in the West. Since all the canes from the Centre are crushed at Alteo in the East, harvest statistics relative to extraction rate and sugar productivity were combined for these two sectors.

2.1 Cane productivity (Table 3a)

As at end-November 2018, cane productivity for the island was 70.5 TCH and was lower than that recorded in 2017 (79.2 TCH) by 8.7 TCH (11.0 %). Sector-wise, the best cane productivity to-date was recorded in the West with 80.2 TCH followed by the North and South (72.5 TCH), the East (67.8 TCH) and the Centre (52.2 TCH). These figures were inferior to those recorded at the same period last year by 10.1 TCH in the North, 13.5 TCH in the East, 12.4 TCH in the Centre, 5.6 TCH in the West and 3.2 TCH in the South. Compared to the corresponding period in 2016, cane productivity in November 2018 was lagging behind in all sectors, the shortfall ranging from 5.4 TCH in the North to 17.2 TCH in the Centre.

Table 3a. Cane productivity (TCH) as at end of October and November for the 2016, 2017 and 2018 crops

Sector	End October			End November		
	2016	2017	2018	2016	2017	2018
North	79.3	80.7	73.6	77.9	82.6	72.5
East	77.1	82.1	68.9	77.2	81.3	67.8
South	79.9	74.7	71.3	79.1	75.7	72.5
West	90.6	85.5	79.3	85.7	85.8	80.2
Centre	69.2	68.3	54.8	69.4	64.6	52.2
Island	79.2	79.1	71.1	78.4	79.2	70.5

2.2 Extraction (Table 3b, Figure 2)

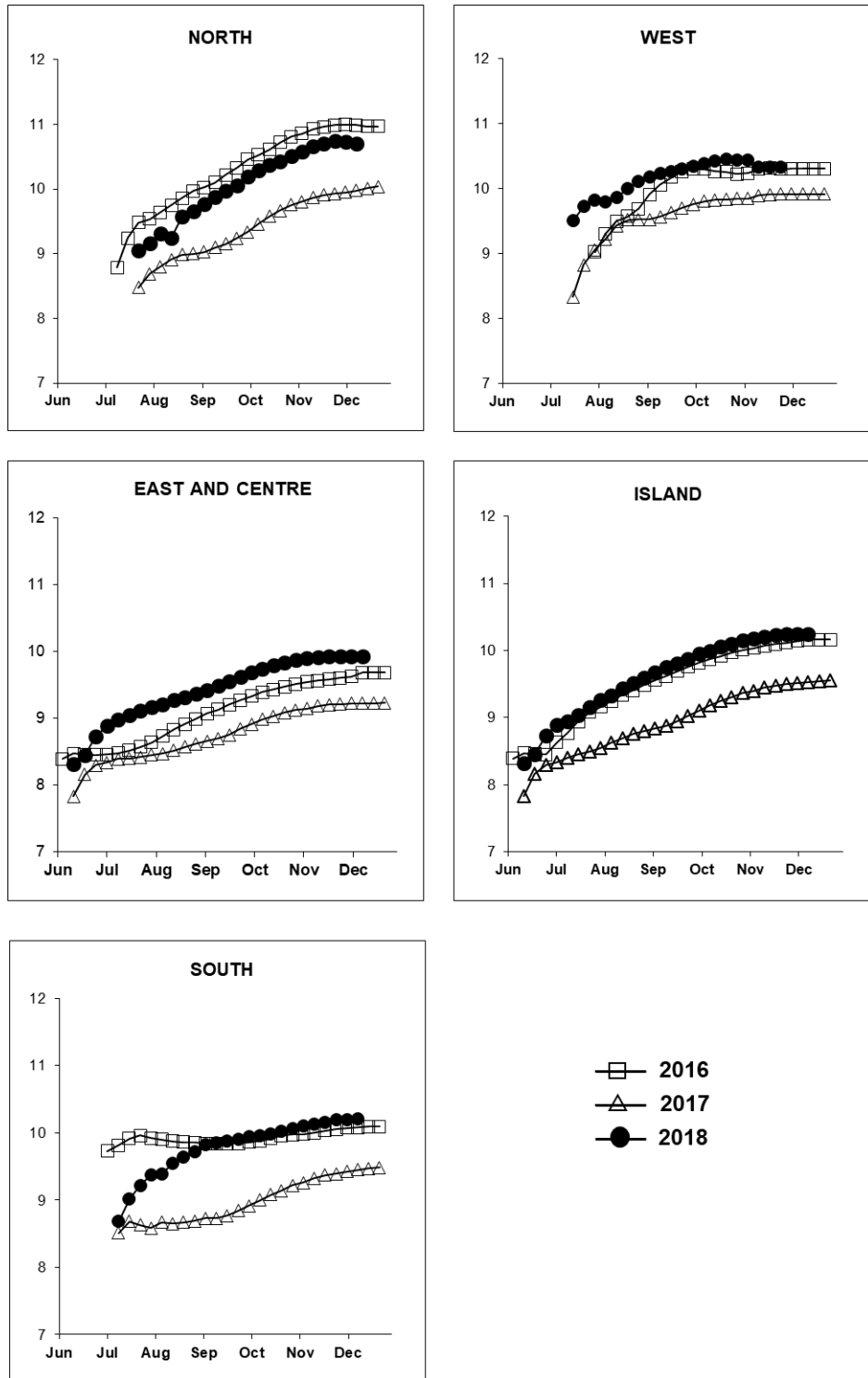
The recorded island extraction rate of 10.25% at end-November 2018 was higher than that of the corresponding period in 2017 (9.51%) by 0.74° and in 2016 (10.14%) by 0.11°. Sector-wise, the extraction rate recorded was 10.73% in the North, 9.93% in the East-Centre, 10.20% in the South and 10.34% in the West. These figures exceeded those of the corresponding period in 2017 by 0.78° in both the North and the South, 0.71° in the East-Centre and 0.42° in the West. When compared to that in 2016, extraction rate to-date was lower in the North but higher in the other sectors.

During the period end-October 2018 to end-November 2018, extraction rate improved in all sectors, with the highest gain of 0.22° obtained in the North and the lowest of 0.06° in the East and Centre. On average for the island, the increase in extraction rate during the period end-October to end-November was 0.10° in 2018 compared to 0.14° obtained in 2017 and 0.13° in 2016.

Table 3b. Extraction rate (%) as at end of October and November for the 2016, 2017 and 2018 crops

Sectors	End October			End November		
	2016	2017	2018	2016	2017	2018
North	10.81	9.76	10.51	11.00	9.95	10.73
East/Centre	9.51	9.12	9.87	9.62	9.22	9.93
South	9.97	9.22	10.06	10.07	9.42	10.20
West	10.23	9.85	10.44	10.31	9.92	10.34
Island	10.01	9.37	10.15	10.14	9.51	10.25

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



2.3 Sugar productivity (Table 3c)

Island-wise, the recorded sugar productivity of 7.23TSH was lagging behind the corresponding period in 2017 (7.53 TSH) by 0.30 tonne (4.0%) and in 2016 (7.95 TSH) by 0.72 tonne (9.1%). Sector-wise sugar productivity was 7.78 TSH in the North, 6.45 TSH in the East-Centre, 7.40 TSH in the South and 8.29 TSH in the West. Sugar productivity as at end-November 2018 was higher than that of the corresponding period in 2017 by 0.27 TSH in the South but was inferior by 0.44 TSH in the North, 0.78 TSH in the East-Centre, and 0.22 TSH in the West. Compared to the corresponding period in November 2016, sugar productivity in 2018 lagged behind in all sectors with differences ranging from 0.55 TSH in the West to 0.84 TSH in the East-Centre sector.

Table 3c. Sugar productivity (TSH) as at end of October and November for the 2016, 2017 and 2018 crops

Sectors	End October			End November		
	2016	2017	2018	2016	2017	2018
North	8.57	7.88	7.74	8.57	8.22	7.78
East/Centre	7.20	7.29	6.57	7.29	7.23	6.45
South	7.97	6.89	7.17	7.97	7.13	7.40
West	9.27	8.42	8.28	8.84	8.51	8.29
Island	7.93	7.41	7.22	7.95	7.53	7.23

3.0 CROP 2018

The weather that prevailed during November 2018 was humid with above normal rainfall recorded in all sectors coupled with solar radiation and air temperature exceeding their respective normal. Such conditions were conducive to crop growth rather than sucrose accumulation. The decreasing trend in cane productivity over the island which was 1.2 TCH in September and October 2018 reached 0.6 TCH in November 2018. Extraction rate over the island during November 2018 increased slightly by 0.10° resulting in an overall sugar productivity of 7.23 TSH compared to 7.53 TSH during the corresponding period in 2017. With nearly 4% of the area of miller-planters left to be harvested, sugar productivity in 2018 is expected to lag behind those of crop 2017 and crop 2016.

The Crop 2018 growth phase was affected by excessive rainfall in January, March and April, and by below normal solar radiation that prevailed during the months of January to April 2018. Crop elongation was affected so that at the end of the growth phase the deficit in total cane height compared to 2017 was lagging behind by almost 5%. Nevertheless, the weather that prevailed during the ripening phase in 2018 was characterised by below normal rainfall, above normal sunshine duration and above normal temperature amplitude, which were conducive to sucrose accumulation. In spite of the better extraction rate recorded so far over the island as compared to those of 2017 and 2016, the shortfall in cane productivity recorded over the island in 2018 resulted in a sugar productivity which was inferior to those of 2017 and 2016.

4.0 CROP 2019

Weather that prevailed during November 2018 over the island in terms of above normal rainfall, air temperature and solar radiation have been favourable for good regrowth of harvested fields. The initial conditions for the 2019 crop are considered promising assuming all cultural practices are implemented as per established recommendations.