

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2017

18 August 2017

SUGAR CANE CROP 2017

Status: End July 2017

1. CLIMATE

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

Rainfall recorded in July 2017 over the sugar cane areas was above normal with an island average of 179 mm, representing 136% of the long-term mean (LTM) of 132 mm. Above normal rainfall was recorded in the East, South and Centre with 174 mm, 279 mm and 226 mm, respectively. Rainfall recorded in the North was equal to the long-term mean while in the West, the recorded 27 mm of rain was below the long-term mean.

Rainfall over period October 2016 to July 2017 cumulated to 2101 mm, which is higher by 17% than the island long-term mean of 1789 mm for this period. During the same period 1190 mm were recorded in the North, 2866 mm in the East, 2308 mm in the South, 626 mm in the West and 2682 mm in the Centre. These figures represented 101%, 151%, 107%, 72% and 109% of the respective long-term mean.

Table 1a. Rainfall (mm) for the month of July for crops 2016, 2017 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2016	70 (88)	252 (192)	245 (138)	6 (19)	299 (153)	192 (146)
2017	80 (100)*	174 (133)	279 (158)	27 (87)	226 (116)	179 (136)
LTM	80	131	177	31	195	132

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

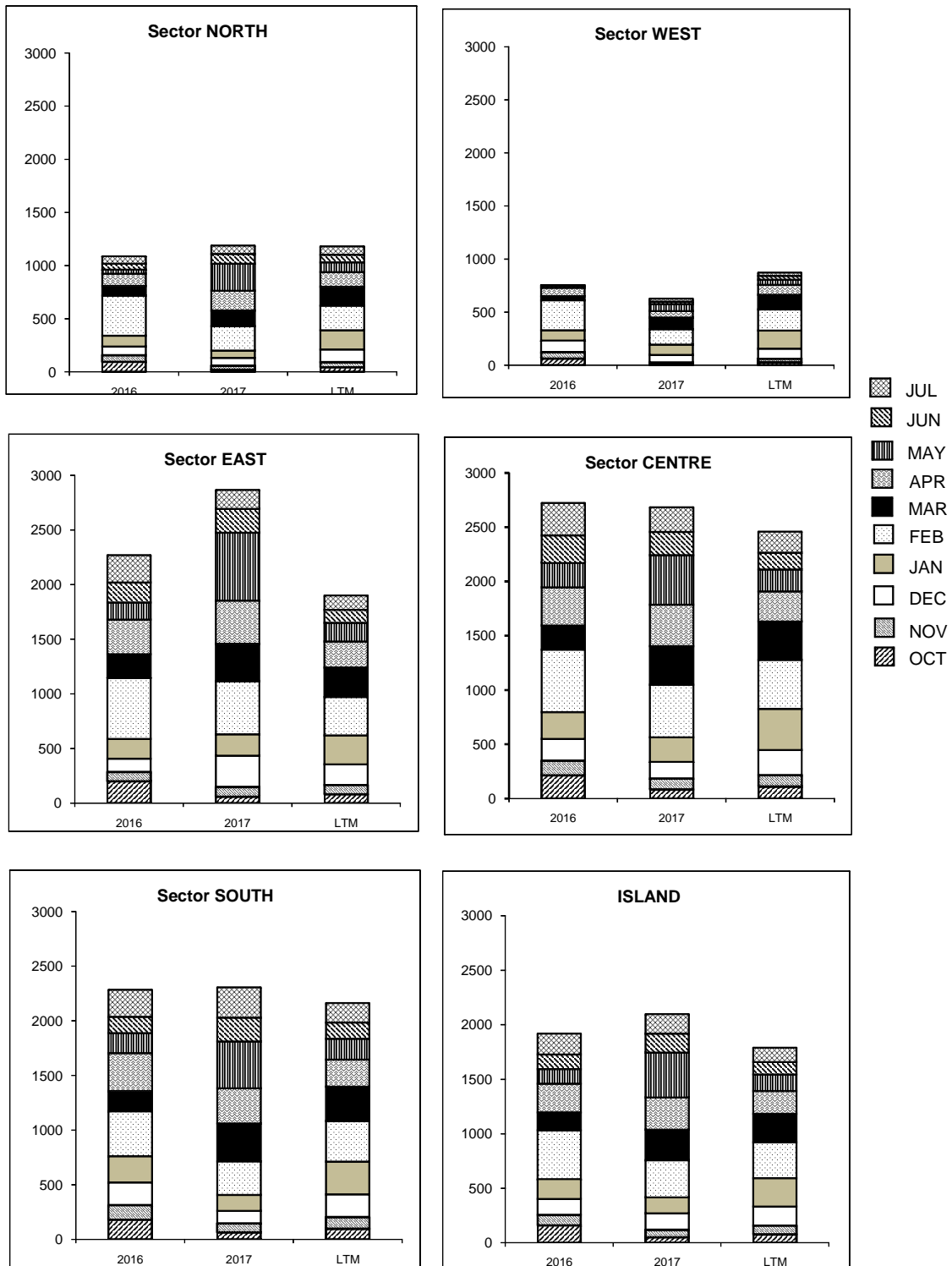
Table 1b. Cumulative rainfall (mm) from October 2016 to July 2017 for crop 2017 compared to that of crop 2016 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2016	1088 (92)	2271 (120)	2283 (106)	755 (87)	2723 (111)	1922 (107)
2017	1190 (101)*	2866 (151)	2308 (107)	626 (72)	2682 (109)	2101 (117)
LTM	1181	1900	2162	872	2458	1789

* figures in brackets are % of LTM
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[Source : raw provisional data from Meteorological

Figure 1. Monthly rainfall (mm) for the period October 2016 to July 2017 for the 2017 crop compared to the corresponding period of the 2016 crop and to the long term mean (LTM).



1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of July 2017 on MSIRI agro-meteorological stations are given below.

Table 2. Air temperature recorded on MSIRI agro-meteorological stations in July 2017

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Amplitude (°C)	
	July 2017	DevN*	July 2017	DevN	July 2017	DevN
Ferret, Belle Vue	26.2	+0.7	18.9	+2.7	7.3	-2.0
Réduit	24.0	+1.7	17.4	+2.1	6.6	-0.4
Belle Rive	23.1	+1.1	16.8	+2.8	6.3	-1.7
Union Park	22.8	+1.4	17.5	+2.1	5.3	-0.7

* Deviation from the Normal (1981-2010)

Mean maximum temperature during July 2017 was above normal at all stations. Mean minimum temperature, compared to the normal, was higher by more than 2.0°C at all stations. The resulting mean amplitude was well below the normal at all stations. Lower temperature amplitudes are generally detrimental to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that solar radiation was below normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 92 at Ferret, 90 at Union Park and 91 at both Réduit and Belle Rive.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in July 2017

Station	July 2017	Normal*	% of Normal
Ferret	216	235	92
Réduit	201	222	91
Belle Rive	172	188	91
Union Park	120	134	90

* Normal (1981-2010)

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

During the last week of July 2017 cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analyzed 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 of July 2017.

Sectors	M 52/78	R 573	M 2256/88	M 695/69	R 575	M 387/85	M 1246/84	M 2593/92	M 2283/98	M 1400/86	M 1176/77	M 1861/89	R 579	M 1672/90	R 570
North		12.4	13.5				12.4	11.9		10.4	11.3		11.4	11.2	10.1
East		14.1						12.4		12.1	13.2		11.0		10.8
South		12.8		12.1	12.7			10.2	11.0	10.3	11.8	11.8	9.6	10.7	9.0
West		12.3			12.6			11.8		11.1	12.3		12.4		11.4
Centre	12.8					12.6				10.5	11.1		9.9		

Table 4b. Comparison of Pol % cane (*richesse*) at the end of June and July 2015, 2016 and 2017.

Sectors	JUNE			JULY		
	2015	2016	2017	2015	2016	2017
North	10.8	13.7	9.4	12.2	14.1	11.3
East	11.5	12.6	11.3	12.2	13.5	11.7
South	11.8	13.1	10.7	12.7	14.2	10.2
West	11.8	11.5	11.1	13.4	12.9	12.1
Centre	11.7	12.7	11.6	13.0	13.4	11.1
Island	11.5	12.9	10.7	12.5	13.8	11.1

The *richesse* at end-July 2017 amounted to 11.3% in the North, 11.7% in the East, 10.2% in the South, 12.1% in the West and 11.1% in the Centre. These figures were lagging behind those obtained at the corresponding period last year in all sectors by 2.8° in the North, 1.8° in the East, 4.0° in the South, 0.8° in the West and 2.3° in the Centre. Sucrose content at the end of July for the present crop was also below that in 2015 in all sectors.

Sucrose content from end-June 2017 up to end-July 2017 has improved in sectors North, East and West by 1.9°, 0.4° and 1.0°, respectively. In the other two sectors, it has regressed by a margin of 0.5°. The drop in *richesse* can be explained by the fact that most of the fields under early varieties have been harvested as well as unfavourable climatic conditions prevailing during the ripening phase. On average for the island, the slight increase in *richesse* of 0.4° in 2017 was lower than that obtained in 2016 and in 2015.

Island-wise, the *richesse* of 11.1% recorded at the end of July 2017 was inferior to that of the corresponding period in 2016 (13.8%) and 2015 (12.5%).

3. CROP 2017

As at 29 July 2017, 3630 ha representing about 11% of miller-planters' land had been harvested compared to 5038 ha (15%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 22% in the East, 8% in the South, 5% in the West and 16% in the Centre, while in the North harvest has just started. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. On account of the centralization of milling activities and 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 29 July 2017 amounted to 79.0 TCH and was comparable to that recorded in 2016 (79.8 TCH). Sector-wise, the best cane productivity to-date was recorded in the West with 84.8 TCH, followed by the North (83.6 TCH), the East (80.3 TCH), the South (74.6 TCH) and the Centre (71.0 TCH).

Compared to the same period last year, cane productivity recorded to-date was lagging behind in all sectors except in the North and East.

Table 5a. Cane productivity (TCH) as at end July for the 2016 and 2017 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	74.6	84.8	71.0	79.0

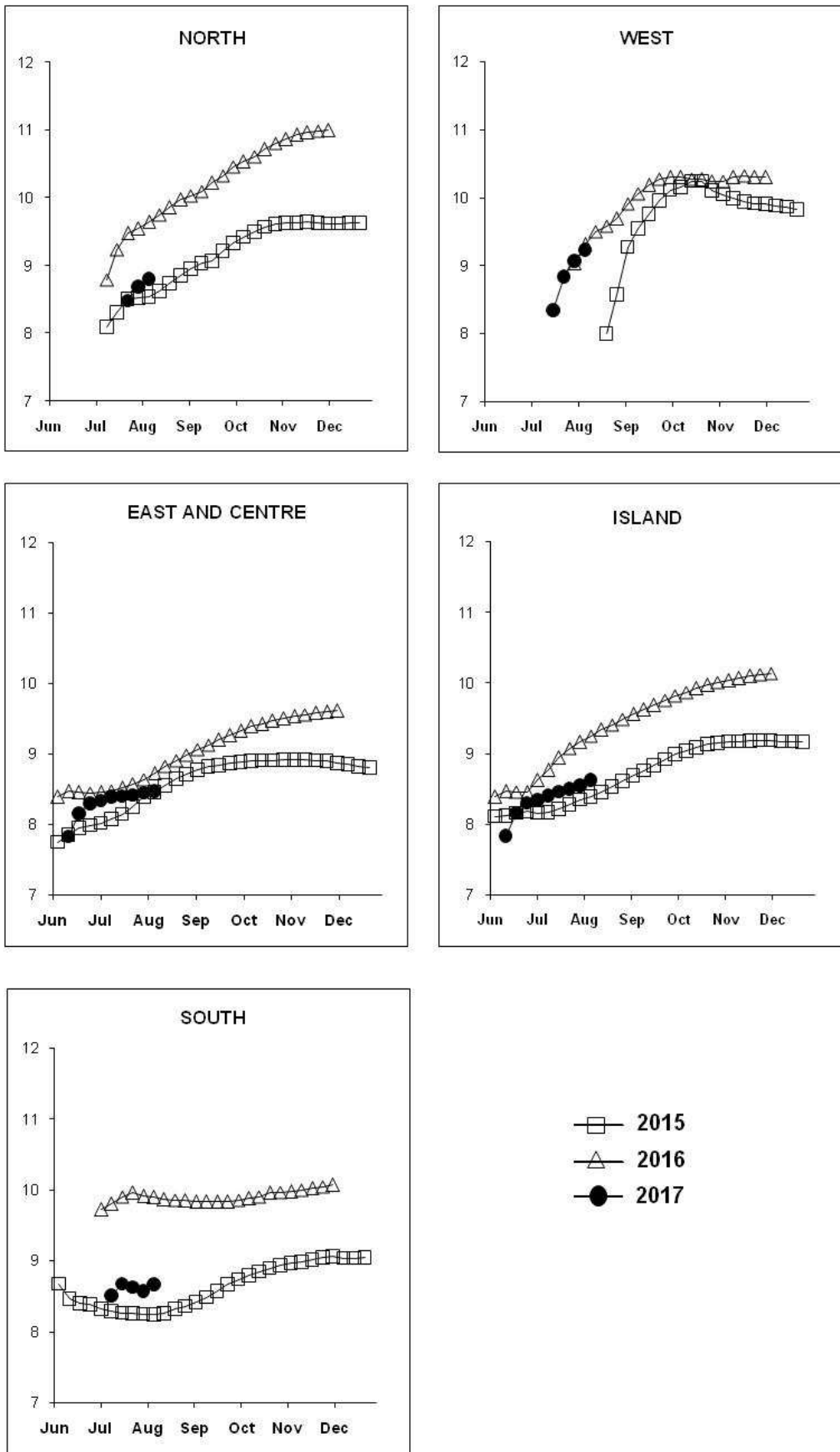
3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 8.55% was below that of the corresponding period in 2016 (9.16%) by 0.61°. Sector-wise, the extraction rate recorded was 8.69% in the North, 8.45% in the East-Centre, 8.58% in the South and 9.06% in the West. These figures lagged behind those of the corresponding period in 2016 by 0.85° in the North, 0.19° in the East-Centre and 1.34° in the South whereas in the West it was comparable.

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

Figure 2. Evolution of extraction rate (%) for the 2015, 2016 and 2017 crops



3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 6.75 TSH is inferior to that of the corresponding period in 2016 (7.31 TSH) by 0.56 tonne (8%). Sector-wise sugar productivity was 7.26 TSH in the North, 6.67 TSH in the East-Centre, 6.43 TSH in the South and 7.68 TSH in the West. Sugar productivity at end-July 2017 was lagging behind that of the corresponding period in 2016 by 0.24 TSH in the North, 1.71 TSH in the South and 1.48 TSH in the West but was comparable in the East-Centre.

Table 5c. Sugar productivity (TSH) as at end July for the 2016 and 2017 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	7.68	6.75

4.0 CROP 2017

Weather conditions during the month of July 2017 have not been favourable to sucrose accumulation. Rainfall during the month has exceeded the normal in most sectors coupled with below normal temperature amplitude and solar radiation, which have been detrimental to sucrose accumulation. As a result, the recorded *richesse* at end-July 2017 reached 11.1% compared to 13.8% in 2016 and 12.5% in 2015 for the same period.

Harvest has not covered extensive areas yet, with only about 11% of miller planters' land. Although cane productivity at island level was comparable to that recorded during the same period last year, extraction rate was inferior. Hence, these have resulted in sugar productivity that lagged behind that of 2016 by 8% for the same period. However, there is still room for further sucrose accumulation if normal winter conditions prevail in the coming months.