

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2015

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SUGAR CANE CROP 2016

Status: End July 2016

1. CLIMATE

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

Rainfall recorded in July 2016 over the sugar cane areas was above normal with an island average of 190 mm, representing 145% of the long-term mean (LTM) of 131 mm. Rainfall for the month of July exceeded the LTM by 92% in the East (252 mm), 38% in the South (245 mm) and 53% in the Centre (299 mm). In the other sectors, it was below the LTM with 70 mm (88% of LTM) in the North and 6 mm (19% of LTM) in the West.

The cumulative rainfall for the period October 2015 to July 2016 amounted to 1910 mm, which is higher (by 7%) than the island LTM of 1781 mm for this period. During the same period 1088 mm were recorded in the North, 2271 mm in the East, 2283 mm in the South, 755 mm in the West and 2723 mm in the Centre. These figures represented 92%, 120%, 106%, 87% and 111% of the respective long-term mean.

Table 1a. Rainfall (mm) for the month of July for crops 2015, 2016 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2015	64 (80)	196 (150)	215 (121)	27 (87)	231 (118)	159 (122)
2016	70 (88)*	252 (192)	245 (138)	6 (19)	299 (153)	190 (145)
LTM	80	131	177	31	195	131

* figures in brackets are % of LTM (1981-2010)

Table 1b. Cumulative rainfall (mm) from October 2015 to July 2016 for crop 2016 compared to that of crop 2015 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2015	1409 (119)	2938 (155)	2740 (127)	1163 (133)	3066 (125)	2379 (134)
2016	1088 (92)*	2271 (120)	2283 (106)	755 (87)	2723 (111)	1910 (107)
LTM	1181	1900	2162	872	2458	1781

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

1.2 Temperature (Table 2)

Data on air temperatures recorded during the month of July 2016 on MSIRI agro-meteorological stations are given below.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in July 2016

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	July 2016	DevN*	July 2016	DevN*	July 2016	DevN*
Pamplemousses	25.1	-0.4	17.3	+1.1	7.8	-1.5
Réduit	22.3	0.0	15.8	+0.5	6.5	-0.5
Belle Rive	20.9	-1.1	15.1	+1.1	5.8	-2.2
Union Park	21.7	+0.3	16.1	+0.7	5.6	-0.4

* Deviation from the Normal (1981-2010)

Mean maximum temperature during July 2016 was similar to the normal at Réduit, above normal at Union Park whereas at the other two stations, it was below normal by 0.4°C at Pamplemousses and 1.1°C at Belle Rive. Mean minimum temperature was above normal by at least 0.5° at all four stations. The resulting mean amplitude was below normal at all stations. Below normal temperature amplitude is not conducive to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the four MSIRI agro-meteorological stations showed that sunshine hours during July 2016 were below normal at all stations except at Pamplemousses. Recorded bright sunshine as a percentage of the normal amounted to 102 at Pamplemousses, 90 at Réduit, 79 at Belle Rive and 96 at Union Park.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in July 2016

Station	July 2016	Normal	% of Normal
Pamplemousses	239	235	102
Réduit	200	222	90
Belle Rive	148	188	79
Union Park	129	134	96

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

Cane samples were analysed for sucrose content during the last week of July 2016 from miller-planters' land in all factory areas and representing the main cultivated varieties. The average Pol % cane (*richesse*) was computed on the basis of area under cultivation for 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 2016.

Sectors	M 52/78	M 703/89	R 573	M 695/69	R 575	M 387/85	M 1246/84	M 1861/89	M 2593/92	M 2283/98	M 1400/86	M 1176/77	R 579	M 1672/90	R 570
North			15.6				14.9		14.3		14.1	14.8	13.2	13.5	12.5
East									14.3		13.4	13.7	13.3		13.0
South	15.8	15.1	14.9	13.8				15.4	13.7	11.6	14.3	15.0	13.5	12.2	13.2
West			15.2		14.5				12.8		11.7	13.1	13.3		8.1
Centre	15.1	14.4				13.6					11.9	14.3	12.0		

Table 4b. Comparison of Pol % cane (*richesse*) at the end of June and July 2014, 2015 and 2016.

Sectors	JUNE			JULY		
	2014	2015	2016	2014	2015	2016
North	12.6	10.8	13.7	15.0	12.2	14.1
East	12.7	11.5	12.6	14.4	12.2	13.5
South	12.3	11.8	13.1	14.5	12.7	14.2
West	12.2	11.8	11.5	12.7	13.4	12.9
Centre	12.7	11.7	12.7	13.4	13.0	13.4
Island	12.5	11.5	12.9	14.3	12.5	13.8

The *richesse* at end-July 2016 amounted to 14.1% in the North, 13.5% in the East, 14.2% in the South, 12.9% in the West and 13.4% in the Centre. These figures were higher than those obtained at the corresponding period last year in all sectors except in the West where it was lagging behind by 0.5°. Compared to the corresponding period in 2014, sucrose content at end of July 2016 was comparable in sectors Centre and West but lagged behind in the other three sectors by 0.3° in the South and 0.9° in both the North and East sectors.

Sucrose content from end-June 2016 up to end-July 2016 has improved in all sectors. The highest increment of 1.4° was observed in the West followed by 1.1° in the South, 0.9° in the East, 0.7° in the Centre and 0.4° in the North. On average for the island, the increase in *richesse* was 0.9° in 2016 which was lower than that obtained in 2015 and in 2014.

Island-wise, the *richesse* of 13.8% recorded at the end of July 2016 was higher than that of the corresponding period in 2015 (12.5%) but lagged behind that of 2014 (14.3%).

3. CROP 2015

As at 30 July 2016, 7374 ha representing about 21% of miller-planters' land had been harvested compared to 7494 ha (22%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 16% in the North, 32% in the East, 19% in the South, 5% in the West and 24% in the Centre. 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 factories 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 30 July 2016 amounted to 79.8 TCH and was lower than that recorded in 2015 (86.3 TCH) by 6.5 TCH (8%). Sector-wise, the best cane productivity to-date was recorded in the West with 101.4 TCH, followed by the South (82.1 TCH), the North (78.6 TCH), the East (78.5 TCH) and the Centre (74.3 TCH).

Compared to the same period last year and in 2014, cane productivity recorded to-date was lagging behind in all sectors except in the West.

Table 5a. Cane productivity (TCH) as at end July for the 2014, 2015 and 2016 crops

	North	East	South	West	Centre	Island
2014	81.9	83.3	85.8	90.4	76.0	84.0
2015	81.3	88.4	87.2	76.2	79.4	86.3
2016	78.6	78.5	82.1	101.4	74.3	79.8

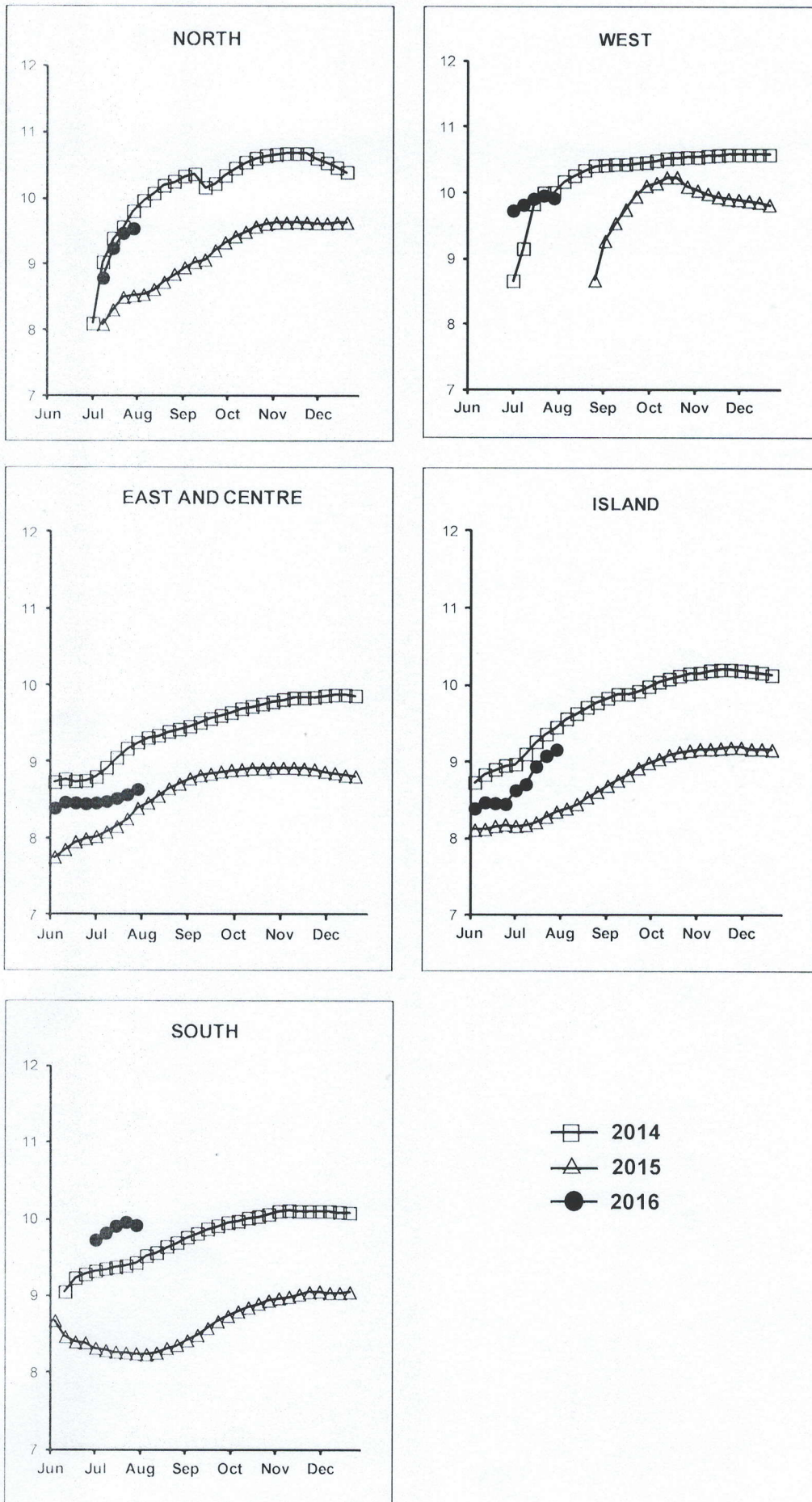
3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.16% was higher than that of the corresponding period in 2015 (8.35%) by 0.81°. Sector-wise, the extraction rate recorded was 9.54% in the North, 8.64% in the East-Centre, 9.92% in the South and 9.02% in the West. These figures were higher than those of the corresponding period in 2015 in all sectors, although in the 2015 season the extraction rate was the lowest ever recorded since 1947. However, compared to the same period in 2014, extraction rate to-date was higher in the South by 0.49° but lagged behind by 0.26° in the North, 0.61° in the East-Centre and 0.99° in the West.

Table 5b. Extraction rate (%) as at end July for the 2014, 2015 and 2016 crops

	North	East -Centre	South	West	Island
2014	9.80	9.25	9.43	10.01	9.45
2015	8.52	8.39	8.25	-	8.35
2016	9.54	8.64	9.92	9.02	9.16

Figure 2. Evolution of extraction rate (%) for the 2014, 2015 and 2016 crops



3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.31 TSH was slightly higher than that of the corresponding period in 2015 (7.21 TSH) by 0.10 tonne (1%) but lower than that of the same period in 2014 (7.94 TSH) by 0.63 tonne (8%). Sector-wise sugar productivity was 7.50 TSH in the North, 6.73 TSH in the East-Centre, 8.14 TSH in the South and 9.15 TSH in the West. Sugar productivity at end-July 2016 was higher than at the corresponding period in 2015 by 0.57 TSH in the North and 0.95 TSH in the South but lagged behind by 0.58 TSH in the East-Centre. Compared to the corresponding period in 2014, sugar productivity to-date was higher in sectors South and West but lower in the other sectors.

Table 5c. Sugar productivity (TSH) as at end July for the 2014, 2015 and 2016 crops

	North	East -Centre	South	West	Island
2014	8.03	7.57	8.09	9.05	7.94
2015	6.93	7.31	7.19	-	7.21
2016	7.50	6.73	8.14	9.15	7.31

4. 2016 CROP PRODUCTIVITY

Weather conditions during the month of July 2016 were characterized by above normal rainfall in most sectors coupled with below normal temperature amplitude and sunshine duration which were not favourable to optimum ripening. As a result, the recorded *richesse* at end-July 2016 reached 13.8% compared to 14.3% in 2014.

Harvest has not covered extensive areas yet, with only about 21% of miller planters' land. Cane productivity at island level in July 2016 was lower than that recorded during the same period in 2015 and 2014. Cane productivity for the island as at 30 July 2016 amounted to 79.8 TCH and was lower than that recorded in 2014 (84.0 TCH) and in 2015 (86.3 TCH). Extraction rate in July 2016 lagged behind that recorded in July 2014 but was higher than that in 2015. Hence, recorded sugar productivity of 7.31 TSH at end July 2016 was slightly higher than that of 2015 but was behind that of 2014 at the same period by 8%. If normal winter conditions prevail in the coming months there is still room for further improvement in sucrose accumulation and sugar productivity.