

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2016 Status: End September 2016

1. CLIMATE

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

The island average of 50 mm of rainfall recorded during the month of September 2016 was below normal representing only 49% of the long-term mean of 102 mm. It was also below normal in all sectors with 16 mm, 58 mm, 68 mm, 2 mm and 94 mm in the North, East, South, West and Centre, respectively. These amounts represented 24% of the long-term mean (LTM) in the North, 53% in both the East and the South, 6% in the West and 65% in the Centre.

The cumulative rainfall for the period October 2015 to September 2016 amounted to 2093 mm, which is higher than the island LTM of 1991 mm for this period. During the same period 1157 mm were recorded in the North, 2477 mm in the East, 2542 mm in the South, 798 mm in the West and 3010 mm in the Centre. These figures represented 88%, 117%, 104%, 86% and 109% of the respective LTM.

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

	North	East	South	West	Centre	Island
2015	23 (34)	48 (44)	63 (49)	20 (65)	72 (50)	46 (45)
2016	16 (24)*	58 (53)	68 (53)	2 (6)	94 (65)	50 (49)
LTM	67	109	129	31	145	102

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

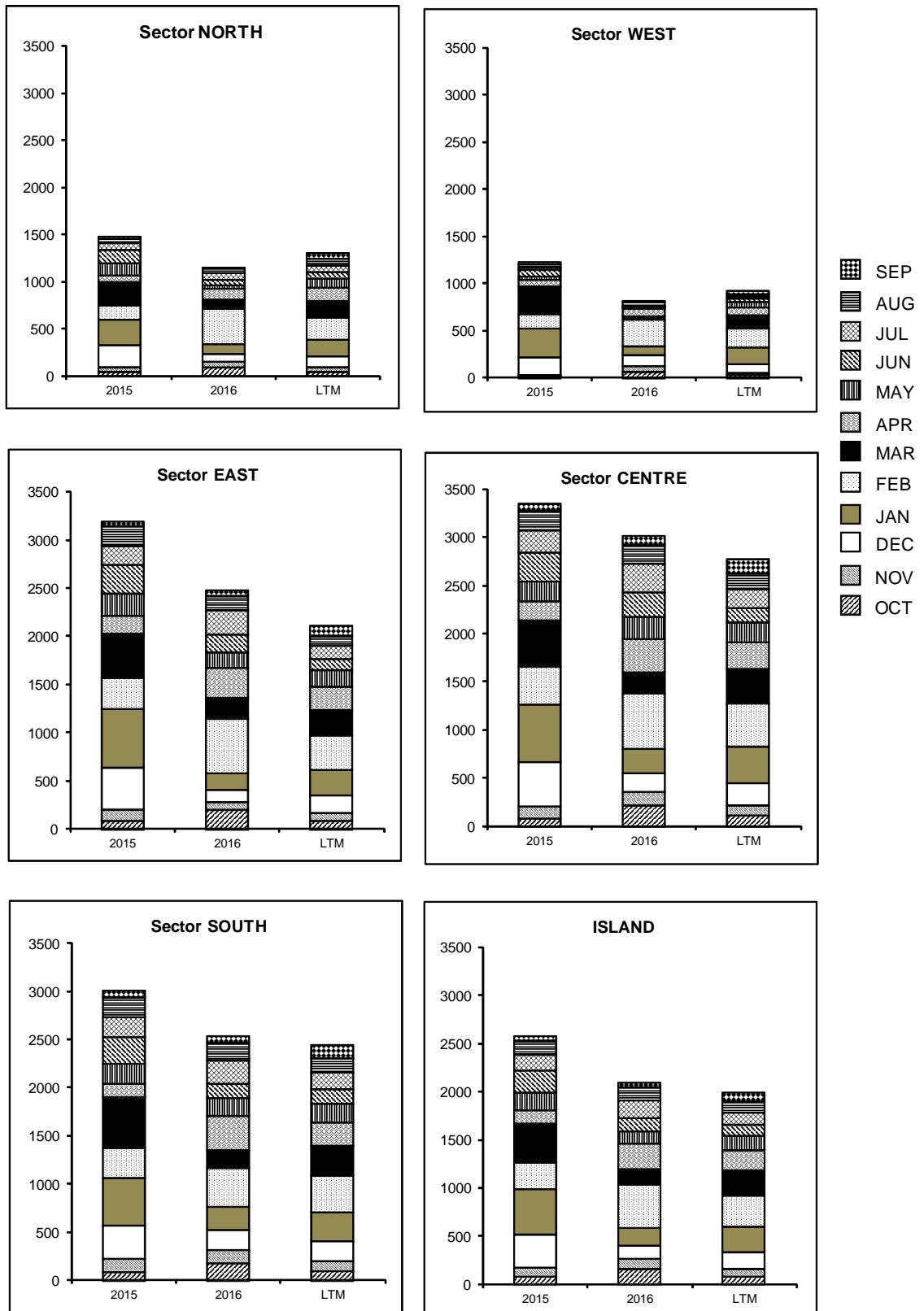
Table 1b. Cumulative rainfall (mm) from October 2015 to September 2016 for crop 2016 compared to that of crop 2015 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
2015	1478 (113)	3193 (151)	3010 (123)	1222 (132)	3346 (121)	2579 (130)
2016	1157 (88)*	2477 (117)	2542 (104)	798 (86)	3010 (109)	2093 (105)
LTM	1309	2116	2442	925	2768	1991

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2015 to September 2016 for the 2016 crop compared to the corresponding period of the 2015 crop and to the long term mean (LTM).



1.2 Temperature (Table 2)

Maximum and minimum air temperatures recorded during the month of September 2016 on MSIRI agro-meteorological stations are given below.

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Sep 2016	DevN*	Sep 2016	DevN*	Sep 2016	DevN*
Pamplemousses	26.2	-0.6	16.7	-0.1	9.5	-0.5
Réduit	23.1	-0.4	15.4	-0.4	7.7	0.0
Belle Rive	21.9	-0.9	14.7	+0.2	7.2	-1.1
Union Park	22.4	0.0	15.9	+0.1	6.5	-0.1

* Deviation from the Normal (1981-2010)

Mean maximum temperature during September 2016 was similar to the normal at Union Park but was below normal at the other three stations. Mean minimum temperature was below normal by 0.4°C at Réduit but was comparable to the normal at all the other stations. The resulting mean amplitude was close to the normal at Réduit and Union Park but below normal at the other two stations. Below normal temperature amplitude is not favourable to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the four MSIRI agro-meteorological stations showed that sunshine hours during September 2016 were near normal at all stations except at Union Park. Recorded bright sunshine as a percentage of the normal amounted to 99 at Pamplemousses, 100 at both Réduit and Belle Rive, and 86 at Union Park

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

Station	Sep 2016	Normal	% of Normal
Pamplemousses	231	233	99
Réduit	217	217	100
Belle Rive	196	197	100
Union Park	130	150	86

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

Cane samples were analysed for sucrose content during the last week of September 2016 from miller-planters' land in all factory areas and represented 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 for the months of August and September.

Table 4a. Average Pol % cane (richesse) at end-September 2016.

Sectors	R 573	R 575	M 1246/84	M 1861/89	M 2593/92	M 1400/86	M 1176/77	R 579	M 1672/90	R 570
North			15.4		15.7	16.9	16.5	15.1	16.1	15.7
East								14.6		13.6
South	17.1			17.4			17.6	15.0		16.6
West		13.5			15.3	15.0	13.0	14.2		10.2
Centre						13.3		13.3		

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

Sectors	AUGUST			SEPTEMBER		
	2014	2015	2016	2014	2015	2016
North	17.2	13.1	14.9	16.1	15.8	16.1
East	16.9	13.4	13.8	16.0	15.0	14.2
South	16.1	13.6	14.5	15.4	14.8	16.2
West	16.5	14.9	13.1	15.5	15.6	13.7
Centre	15.3	13.2	13.8	15.1	14.1	13.6
Island	16.5	13.5	14.2	15.7	15.1	15.2

At end-September 2016, the *richesse* was 16.1% in the North, 14.2% in the East, 16.2% in the South, 13.7% in the West and 13.6% in the Centre. These figures were higher than those obtained at the corresponding period last year in the North and South but lagged behind in the other sectors. Compared to the corresponding period in 2014, sucrose content at the end of September 2016 was higher in the South, similar in the North and lower in the other sectors by 1.5° Centre and 1.8° in both the East and West.

Sucrose content from end-August 2016 up to end-September 2016 has improved in all sectors except in the Centre. The highest increment of 1.7° was observed in the South whilst the lowest increment of 0.4° occurred in the East. On average for the island, the increase in *richesse* was 1.0° in 2016 compared to an increase of 1.6° in 2015 and a decrease of 0.8° in 2014.

Island-wise, the *richesse* of 15.2% recorded at the end of September 2016 was comparable to that of the corresponding period in 2015 (15.1%) but lagged behind that of 2014 (15.7%).

3. CROP 2016

As at 1 October 2016, 19 215 ha representing 55% of miller-planters' land had been harvested compared to 18 240 ha (52%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 51% in the North, 62% in the East, 53% in the South, 50% in the West and 58% in the Centre. On account of the centralization of milling activities, harvest statistics relative to extraction rate and sugar productivity have been combined for the East and Centre sectors since all the canes from the Centre are crushed at factories in the East. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows.

3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end September 2016 was 80.5 TCH and was lower than that recorded in 2015 (84.1 TCH) by 3.6 TCH (4.3%). Sector-wise, the best cane productivity to-date was recorded in the West with 91.6 TCH, followed by the South (81.5 TCH), the North (81.3 TCH), the East (78.3 TCH) and the Centre (70.5 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 North and West.

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

Sector	End August			End September		
	2014	2015	2016	2014	2015	2016
North	80.6	81.4	82.7	78.6	80.3	81.3
East	82.1	86.9	78.2	82.5	85.6	78.3
South	86.8	88.3	83.1	86.0	85.4	81.5
West	88.3	90.5	95.8	90.1	90.8	91.6
Centre	75.4	77.1	71.3	76.5	74.7	70.5
Island	83.7	85.9	81.3	83.4	84.1	80.5

3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.82% was slightly lower than that of the corresponding period in 2014 (9.92%) by 0.1°. Sector-wise, the extraction rate recorded was 10.46% in the North, 9.33% in the East/Centre, 9.86% in the South and 10.30% in the West. Compared to that of 2014, the extraction rate to-date was higher in the North, comparable in the South but lagged behind by 0.27° in the East-Centre and 0.15° in the West.

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

Sectors	End August			End September		
	2014	2015	2016	2014	2015	2016
North	10.33	8.95	10.03	10.22	9.33	10.46
East/Centre	9.46	8.78	9.07	9.60	8.89	9.33
South	9.76	8.42	9.84	9.91	8.74	9.86
West	10.42	9.27	9.91	10.45	10.11	10.30
Island	9.83	8.69	9.56	9.92	8.99	9.82

3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.91 TSH was higher than that of the corresponding period in 2015 (7.56 TSH) by 0.35 tonne (4.6%) but lower than that of the same period in 2014 (8.27 TSH) by 0.36 tonne (4.4%). Sector-wise sugar productivity stood at 8.51 TSH in the North, 7.18 TSH in the East/Centre, 8.03 TSH in the South and 9.43 TSH in the West. Sugar productivity at end September 2016 was higher than those at the corresponding period in 2015 by 1.01 TSH in the North, 0.57 TSH in the South and 0.25 TSH in the West but lagged behind by 0.27 TSH in the East/Centre. Compared to the corresponding period in 2014, sugar productivity to-date was higher in the North, comparable in the West but was lower in the other sectors.

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

Sectors	End August			End September		
	2014	2015	2016	2014	2015	2016
North	8.33	7.29	8.29	8.03	7.50	8.51
East/Centre	7.77	7.49	6.99	7.81	7.45	7.18
South	8.47	7.43	8.18	8.52	7.46	8.03
West	9.20	8.39	9.49	9.42	9.18	9.43
Island	8.23	7.46	7.77	8.27	7.56	7.91

4. 2016 CROP PRODUCTIVITY

Weather conditions that prevailed during the month of September 2016 were characterised by below normal rainfall in all sectors coupled with both below normal maximum temperature and temperature amplitude together with near normal sunshine duration which favoured ripening but not at the optimum rate.

With more than half of the area of miller planters' land harvested, cane productivity at island level in 2016 is still lagging behind that of 2015 by 4.3% and 2014 by 3.5%. Moreover, extraction rate at end September 2016 compared to the corresponding period in 2014 is lagging behind in all sectors except in the North sector. Hence, the sugar productivity of 7.91 TSH at end September 2016, although exceeding that of 2015 by 4.6%, is still lower than that of 2014 at the same period by 4.4%. Based on the fact that the difference in sugar productivity between 2016 and 2014 has been reduced from 8.0% in July to 4.4% in September and with no major departure in the weather from the normal, sugar productivity in 2016 is expected to be close to that of crop 2014.

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

