

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2017

Status: End April 2017

1. CLIMATE

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

For the month of April 2017, the island's average rainfall over the sugar cane areas was 295 mm representing 141% of the long-term mean (LTM) (210 mm). Sector-wise, rainfall was well above the respective LTM of the month with 187 mm in the East, 394 mm in the East, 323 mm in the South and 380 mm in the Centre. However, in the West, rainfall of April 2017 was lagging behind the LTM by 32 mm.

Total rainfall for the period October 2016 to April 2017 was 763 mm in the North, 1853 mm in the East, 1384 mm in the South, 510 mm in the West and 1784 mm in the Centre. These cumulated rainfall accounted for 81%, 125%, 84%, 67% and 94% of the respective LTM. The island average of 1335 mm for this period represented 96% of the long-term mean.

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

	North	East	South	West	Centre	Island
2016	114 (83)	318 (135)	346 (139)	81 (87)	350 (127)	264 (126)
2017	187 (136)*	394 (167)	323 (130)	61 (66)	380 (138)	295 (141)
LTM	137	236	249	93	276	210

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

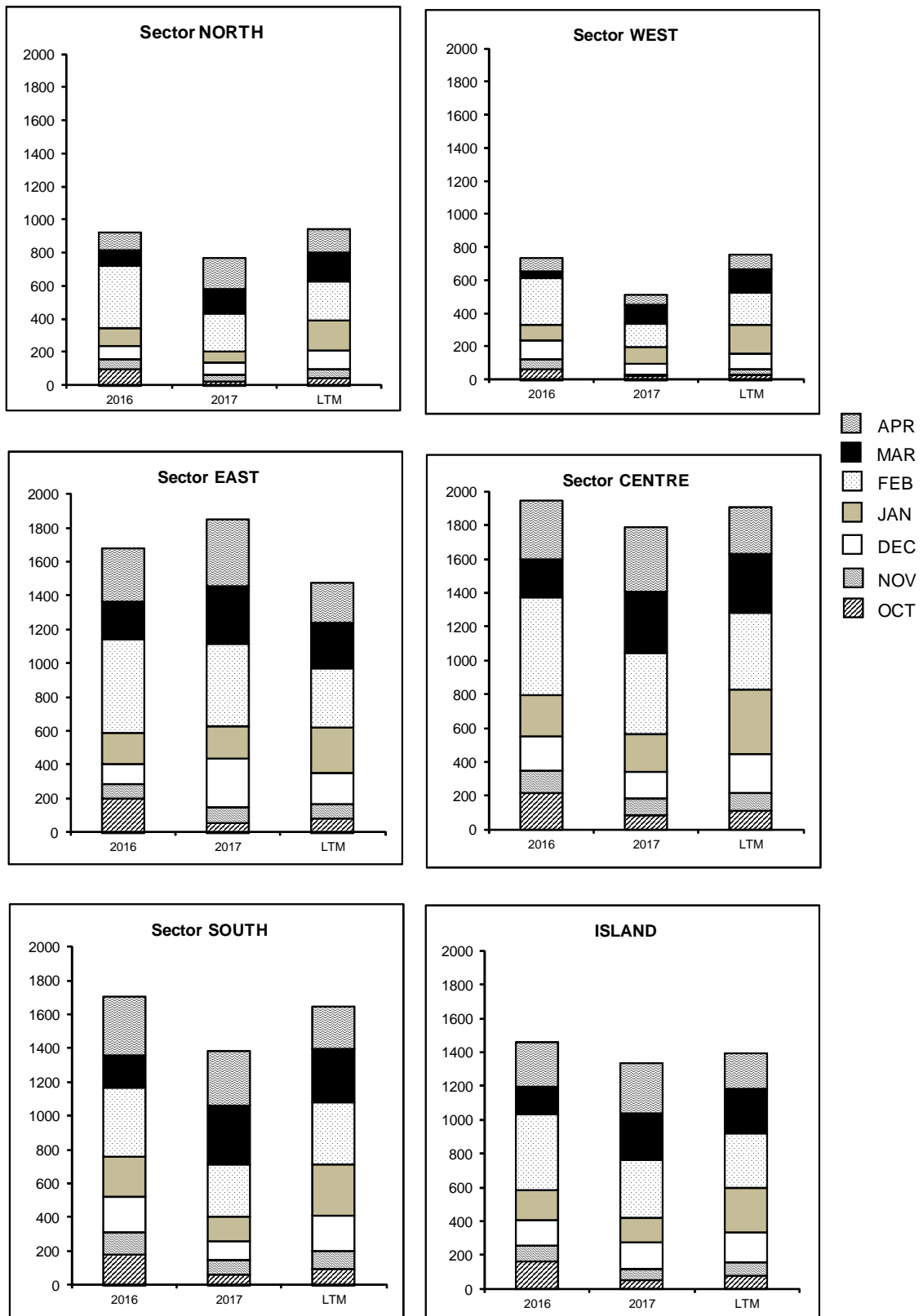
Table 1b. Cumulative rainfall (mm) from October 2016 to April 2017 for crop 2017 compared to that of crop 2016 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2016	924 (98)	1680 (114)	1704 (104)	730 (97)	1944 (102)	1462 (105)
2017	763 (81)*	1853 (125)	1384 (84)	510 (67)	1784 (94)	1335 (96)
LTM	939	1479	1645	756	1907	1390

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2016 to April 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 April 2017 on MSIRI agro-meteorological stations are given below.

Table 2. Air temperature and sunshine duration recorded on MSIRI agro-meteorological stations in April 2017

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Amplitude (°C)	
	Apr 2017	DevN*	Apr2017	DevN	Apr 2017	DevN
Réduit	28.2	+1.4	21.0	+0.7	7.2	+0.7
Belle Rive	27.1	+0.7	20.1	+1.5	7.0	-0.8
Union Park	27.2	+1.3	20.8	+1.1	6.4	+0.2

* Deviation from the Normal (1981-2010)

Mean maximum temperature during April 2017 was above normal, the difference ranging from 0.7° at Belle Rive to 1.4° at Réduit. Mean minimum temperature, compared to the normal, was higher by more than 0.7° at all stations. The resulting mean amplitude exceeded the normal by 0.7° at Réduit and by 0.2° at Union Park, but lagged behind the normal by 0.8° at Belle Rive. Above normal maximum temperatures favours sucrose production through photosynthesis while higher temperature amplitudes are conducive to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during April 2017 were below normal at Réduit and Belle Rive but above normal at Union Park. Recorded bright sunshine as a percentage of the normal amounted to 97 at Réduit, 91 at Belle Rive and 108 at Union Park.

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

Station	April 2017	Normal	% of Normal
Réduit	204	211	97
Belle Rive	175	192	91
Union Park	165	152	108

2. STALK HEIGHT

Measurement of stalk height was carried out during the last week of April 2017 at 48 sites in the five sugar cane sectors of the island. These sites were representative of the various agro-climatic zones, different varieties and crop categories. Data collected were compared with those of the corresponding period in 2016 and to the mean of the five best cane yielding crops for the period 2007 to 2016 in each sector (referred to as normal).

2.1 Stalk elongation (Table 4a)

Stalk growth during the month of April 2017 was higher than that recorded during the corresponding period in 2016 in all sectors. Stalk elongation amounted to 45.9 cm in the North, 36.5 cm in the East, 42.4 cm in the South, 39.5 cm in the West and 29.9 cm in the Centre. The elongation rates of April 2017 were also above normal by 13.5 cm in the North, 3.1 cm in the East, 7.2 cm in the South and 6.3 cm in the West. It was similar to the normal in the Centre. The 40.2 cm average elongation for the island in April 2017 represented 153.2% of that recorded in April 2016 (26.3 cm) and 121.4% of the normal (33.1 cm).

Table 4a. Stalk elongation during the month of April 2017

Sectors	Stalk elongation (cm) during April			April 2017 as % of	
	2017	2016	Normal	2016	Normal
North	45.9	24.3	32.4	188.9	141.7
East	36.5	23.5	33.4	155.3	109.2
South	42.4	30.9	35.2	137.2	120.3
West	39.5	24.9	33.2	158.6	118.8
Centre	29.9	23.8	29.9	125.6	99.9
Island	40.2	26.3	33.1	153.2	121.4

2.2 Cumulative Elongation (Table 4b)

During the period end-December 2016 to end-April 2017, cumulative growth reached 165.6 cm in the North, 175.0 cm in the East, 161.9 cm in the South, 145.1 cm in the West and 148.3 cm in the Centre. These cumulative growths exceeded those of 2016 in the East and Centre while it was comparable in the South. However, in the North and West, cumulative growth in 2017 was lagging behind that of 2016. For the same period, growth in 2017 was comparable to the normal in the North whereas in the East and Centre it was above normal. In the other two sectors namely, in the South and West, cumulative growth in 2017 was below those of the normal. Island-wise the cumulative elongation of 164.1 cm was comparable to those of the 2016 crop (165.8 cm) and the normal (162.7 cm).

Table 4b. Cumulative elongation at end-April 2017

Sectors	Cumulative elongation (cm) at end- April			End-April 2017 as % of	
	2017	2016	Normal	2016	Normal
North	165.6	172.8	165.1	95.8	100.3
East	175.0	168.3	161.1	104.0	108.7
South	161.9	163.2	170.3	99.2	95.0
West	145.1	165.5	166.6	87.7	87.1
Centre	148.3	144.6	143.6	102.6	103.3
Island	164.1	165.8	162.7	99.0	100.9

2.3 Total stalk height (Table 4c and Figure 2)

Total stalk height at end April 2017 was 185.0 cm in the North, 220.6 cm in the East, 202.3 cm in the South, 174.0 cm in the West and 191.2 cm in the Centre, giving an island average of 200.7 cm. Compared to the corresponding period in 2016, total stalk height in April 2017 was lagging behind by 11.9 cm in the North and 29.6 cm in the West. However, in the East and Centre, it was higher than that of 2016 by 7.2 cm and 15.6 cm, respectively. In the South, stalk height in April 2017 was comparable to that of 2016. Total stalk height in April 2017 with respect to the normal was higher by 12.1 cm in the East and 4.7 cm in the Centre but was below normal in the other sectors by 5.7 cm in the North, 13.2 cm in the South and 30.9 cm in the West.

At island level, the total stalk height of 200.7 cm at end of April 2017 was slightly below those of the corresponding period in 2016 by 3.9cm (1.9%) and the normal by 3.0 cm (1.4 %).

Table 4c. Total stalk height at end-April

Sectors	Stalk height (cm) at end-April			End-April 2017 as % of	
	2017	2016	Normal	2016	Normal
North	185.0	196.9	190.7	94.0	97.0
East	220.6	213.4	208.5	103.4	105.8
South	202.3	204.6	215.5	98.9	93.9
West	174.0	203.6	204.9	85.5	84.9
Centre	191.2	175.6	186.5	108.9	102.5
Island	200.7	204.6	203.7	98.1	98.6

3. SUCROSE ACCUMULATION (Tables 5a and 5b)

Cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analyzed for sucrose content during the last week of April 2017. 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 5a. Average Pol % cane (richesse) at end-April 2017.

Sectors	M 52/78	M 703/89	R 573	M 695/69	R 575	M 387/85	M 1246/84	M 2256/88	M 2593/92	M 2283/98	M 1400/86	M 1176/77	M 1861/89	R 579	M 1672/90	R 570
North			6.3				5.4	5.5	6.3		6.2	7.4		5.3	5.0	4.9
East		8.9	9.4			7.2		8.5	7.3		5.9	7.4		6.4		4.3
South	9.3	8.6	8.5	7.6	7.6	8.9			6.7	6.8	6.9	8.3	7.7	6.8	7.6	6.0
West			7.5		6.5				4.1		5.4	6.2		7.3		4.4
Centre	7.5	7.5				4.4					5.1	6.4		5.0		

Table 5b. Comparison of Pol % cane (richesse) at the end of April 2015, 2016 and 2017

Sectors	APRIL		
	2015	2016	2017
North	7.6	8.5	6.2
East	8.2	8.8	6.8
South	8.3	8.9	7.4
West	8.1	6.9	6.0
Centre	8.6	8.8	6.2
Island	8.1	8.6	6.7

The *richesse* as at the sampling of end-April 2016 was 6.2% in the North, 6.8% in the East, 7.4% in the South, 6.0% in the West and 6.2% in the Centre. Compared to the corresponding period in 2016, sucrose content at end-April 2017 was lagging behind in all sectors by 2.3° in the North, 2.0° in the East, 1.5° in the South, 0.9° in the West and 2.6° in the Centre. Sucrose content at the end of April, for the present crop, was also lower than that of the corresponding period in 2015 in all sectors.

Island-wise, the *richesse* of 6.7% recorded at end of April 2017 was below that of the corresponding period in 2016 and 2015 by 1.9° and 1.4°, respectively.

4.0 CROP 2017

Weather conditions during April 2017, in terms of high rainfall with higher maximum temperature have been favourable to growth, resulting in an overall good elongation rate across all sectors. Thus stalk elongation over the island recorded in April 2017 was well above those of 2016 by 53% and the normal by 21%. Total stalk height over the island, which was lagging behind that of the normal in March by 6% has now dropped to 1.4%. Consequently, sucrose accumulation has not been optimal at the end of April, the island average being only 6.7% and lagging behind those of 2016 and 2015. At this stage, a cane productivity close to the normal can be anticipated while sugar productivity will be determined by the climatic conditions that will prevail in the coming months.

Figure 2. Stalk height at end-April 2017

