

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2017

13 June 2017

SUGAR CANE CROP 2017

Status: End May 2017

1. CLIMATE

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

Rainfall recorded over the sugar cane areas during the month of May 2017 was well above the normal with an island average of 413 mm, representing 272% of the long-term mean of 152 mm. Sector-wise, rainfall was above the respective LTM of the month with 255 mm in the North, 622 mm in the East, 426 mm in the South, 66 mm in the West and 456 mm in the Centre. It should be noted here that nearly 90% of the total rainfall in May 2017 occurred during the first half of the month.

Rainfall for the period October 2016 to May 2017 cumulated to 1748 mm, which is higher by 13% than the island long-term mean of 1542 mm for this period. During the same period 1018 mm were recorded in the North, 2475 mm in the East, 1810 mm in the South, 576 mm in the West and 2240 mm in the Centre representing 99%, 150%, 99%, 72% and 106% of the respective long-term mean.

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

	North	East	South	West	Centre	Island
2016	39 (42)	157 (92)	185 (97)	10 (20)	226 (112)	134 (88)
2017	255 (277)*	622 (364)	426 (224)	66 (135)	456 (227)	413 (272)
LTM	92	171	190	49	201	152

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

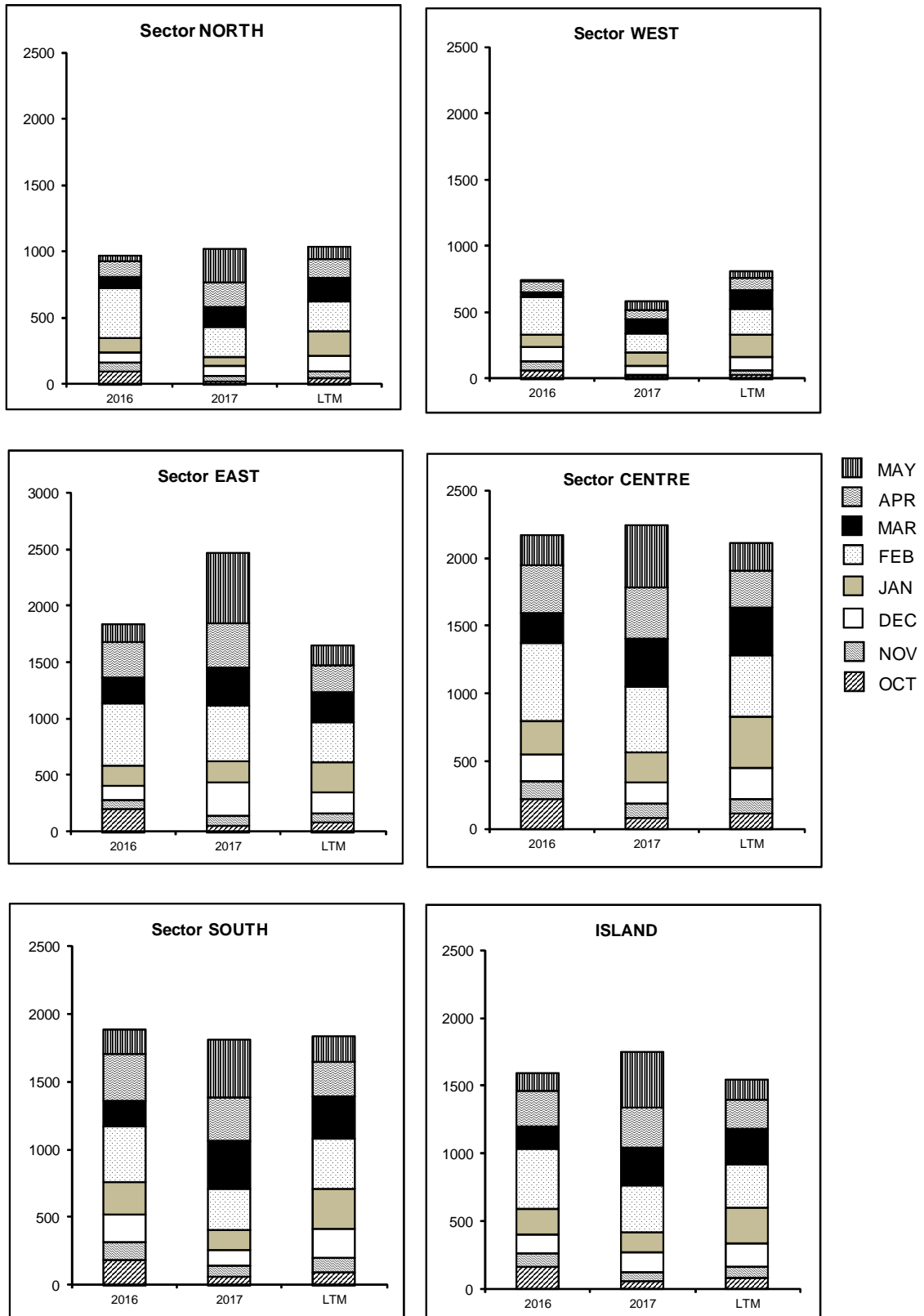
Table 1b. Cumulative rainfall (mm) from October 2016 to May 2017 for crop 2017 compared to that of crop 2016 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2016	963 (93)	1837 (111)	1889 (103)	740 (92)	2170 (103)	1595 (103)
2017	1018 (99)*	2475 (150)	1810 (99)	576 (72)	2240 (106)	1748 (113)
LTM	1031	1650	1835	805	2108	1542

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

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

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

Stations*	Maximum Temp (°C)		Minimum Temp (°C)		Amplitude (°C)	
	May 2017	DevN**	May 2017	DevN	May 2017	DevN
Réduit	25.6	+0.5	19.3	+1.3	6.3	-0.8
Belle Rive	24.6	-0.2	18.7	+2.1	5.9	-2.3
Union Park	24.3	0.0	19.1	+1.2	5.2	-1.2

* Data for Pamplemousses not provided due to relocation of agro-meteorological station to Ferret, Belle Vue

** Deviation from the Normal (1981-2010)

Mean maximum temperature during May 2017 was above normal at Réduit but close to normal at the other stations. Mean minimum temperature, compared to the normal, was higher by more than 1.2° at all stations. The resulting mean amplitude lagged behind the normal by 0.8° at Réduit, 2.3° at Belle Rive and 1.2° at Union Park. Lower temperature amplitudes are usually not conducive to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that the sky was overcast during May 2017 at all stations. Recorded bright sunshine as a percentage of the normal amounted to 89 at Réduit and 84 at both Belle Rive and Union Park.

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

Stations*	May 2017	Normal	% of Normal
Réduit	193	217	89
Belle Rive	172	204	84
Union Park	136	162	84

* Data for Pamplemousses not provided due to relocation of agro-meteorological station to Ferret, Belle Vue

2. STALK HEIGHT

Assessment of stalk height was carried out during the last week of May 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 elongation during the month of May 2017 amounted to 26.3 cm in the North, 10.6 cm in the East, 21.0 cm in the South, 22.3 cm in the West and 4.7 cm in the Centre. These figures were higher than those recorded during the corresponding period in 2016 in all sectors except in the West where it was comparable. The elongation rates of May 2017 were also above normal by 5.8 cm in the North, 6.2 cm in the South and 3.5 cm in the West. It was lagging behind the normal in the East and Centre. The 18.0 cm average elongation for the island in May 2017 represented 126.5% of that recorded in May 2016 (14.2 cm) and 106.0% of the normal (17.0 cm).

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

Sectors	Stalk elongation (cm) during May			May 2017 as % of	
	2017	2016	Normal	2016	Normal
North	26.3	20.8	20.5	126.4	128.5
East	10.6	9.1	16.6	116.5	63.9
South	21.0	14.0	14.8	150.0	142.3
West	22.3	22.9	18.8	97.4	118.6
Centre	4.7	4.3	8.9	109.3	52.6
Island	18.0	14.2	17.0	126.5	106.0

2.2 Cumulative Elongation (Table 4b)

Cumulative growth during period end-December 2016 to end-May 2017 was 191.9 cm in the North, 185.6 cm in the East, 182.9 cm in the South, 167.4 cm in the West and 153.0 cm in the Centre. These cumulative growths exceeded those of 2016 in the East, South and Centre while it was comparable in the North and lagged behind in the West. For the same period, growth in 2017 was comparable to the normal in the South and Centre whereas in the North and East it was above normal. In the West, cumulative growth in 2017 was below that of the normal. Island-wise the cumulative elongation of 182.0 cm was comparable to those of the 2016 crop (180.0 cm) and the normal (179.6 cm).

Table 4b. Cumulative elongation at end-May 2017

Sectors	Cumulative elongation (cm) at end - May			End-May 2017 as % of	
	2017	2016	Normal	2016	Normal
North	191.9	193.6	185.5	99.1	103.4
East	185.6	177.4	177.6	104.6	104.5
South	182.9	177.2	185.1	103.2	98.8
West	167.4	188.4	185.4	88.9	90.3
Centre	153.0	148.9	152.5	102.8	100.3
Island	182.0	180.0	179.6	101.1	101.3

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

Total stalk height at end May 2017 amounted to 211.3 cm in the North, 231.2 cm in the East, 223.3 cm in the South, 196.3 cm in the West and 195.9 cm in the Centre, giving an island average of 218.7 cm. Compared to the corresponding period in 2016, total stalk height in May 2017 was lagging behind by 6.4 cm in the North and 30.2 cm in the West. However, in the other sectors, it was higher than that of 2016 by 8.7 cm in the East, 4.7 cm in the South and 13.4 cm in the Centre. Total stalk height in May 2017 with respect to the normal was higher by 6.2 cm in the East, comparable in the North and Centre but lagged behind the normal by 7.0 cm in the South and 27.4 cm in the West.

At island level, the total stalk height of 218.7 cm at end of May 2017 was comparable to those of the corresponding period in 2016 (218.9 cm) and the normal by (220.7 cm).

Table 4c. Stalk height at end-May

Sectors	Stalk height (cm) at end-May			End-May 2017 as % of	
	2017	2016	Normal	2016	Normal
North	211.3	217.7	211.2	97.1	100.1
East	231.2	222.5	225.0	103.9	102.7
South	223.3	218.6	230.3	102.2	97.0
West	196.3	226.5	223.7	86.7	87.7
Centre	195.9	182.5	195.4	107.3	100.2
Island	218.7	218.9	220.7	99.9	99.1

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 May 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-May 2017

Sectors	M 52/78	M 703/89	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			9.4	11.3				6.8	7.5		6.4	7.6		7.5	6.8	6.3
East		10.2	10.9	12.1			10.4		9.6		9.6	8.8		7.8		7.4
South	11.5	10.0	9.5		8.9	10.4	9.1		8.2	8.1	8.5	8.5	9.0	7.6	7.9	6.9
West			9.6			9.5			7.7		7.3	9.2		8.2		5.8
Centre	11.4	10.8					8.5				9.0	8.6		7.7		

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

Sectors	APRIL			MAY		
	2015	2016	2017	2015	2016	2017
North	7.6	8.5	6.2	9.7	10.4	7.2
East	8.2	8.8	6.8	9.4	10.3	9.0
South	8.3	8.9	7.4	10.6	10.6	8.5
West	8.1	6.9	6.0	8.9	9.6	8.4
Centre	8.6	8.8	6.2	10.7	10.9	9.5
Island	8.1	8.6	6.7	9.9	10.4	8.4

The *richesse* in the end-May 2017 samples was 7.2% in the North, 9.0% in the East, 8.5% in the South, 8.4% in the West and 9.5% in the Centre. Compared to the corresponding period in 2016, sucrose content at end-May 2017 was lagging behind in all sectors by 3.2° in the North, 1.3° in the East, 2.1° in the South, 1.2° in the West and 1.4° in the Centre. Sucrose content at the end of May for the present crop was also below that of 2015 in all sectors.

From end-April 2017 up to end-May 2017, *richesse* has improved in all sectors. The highest increment of 3.3° was observed in the Centre followed by 2.4° in the West, 2.2° in the East, 1.1° in the South and 1.0° in the North. On average for the island, the increase in *richesse* was 1.7° in 2017 which was comparable to the increment obtained in 2016 and 2015.

Island-wise, the *richesse* of 8.4% recorded at the end of May 2017 was inferior to that of the corresponding period in 2016 (10.4%) and 2015 (9.9%).

4.0 CROP 2017

High rainfall that prevailed during the month of May 2017 was favourable to stalk growth at the expense of sucrose accumulation. Moreover, the delay in elongation due to water stress conditions that prevailed in December and January had a negative impact on sucrose accumulation. In addition, the crop is still growing actively with the result that the deficit in stalk elongation as compared to the normal is being reduced. The deficit in total stalk height over the island which was 1.4% at the end of April 2017 has now reached 0.9% in May 2017 as compared to the normal. With the onset of winter conditions, and although sucrose content recorded to-date is low, its evolution will depend on the prevailing climatic conditions during the remaining part of the ripening phase.

Figure 2. Stalk height at end-May 2017

