

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2017

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### SUGAR CANE CROP 2017

Status: End March 2017

#### 1. CLIMATE

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

The island's average rainfall of 281 mm over the sugar cane areas for the month of March 2017 represented 108% of the long-term mean (261 mm). Rainfall for the month of March was comparable to the long-term mean (LTM) in the Centre but exceeded the long-term mean by 71 mm (26%) in the East and 35 mm (11%) in the South. In the North and West, it was inferior to the long-term mean by 34 mm (19%) and 27 mm (19%), respectively.

Total rainfall for the period October 2016 to March 2017 was 576 mm in the North, 1459 mm in the East, 1061 mm in the South, 449 mm in the West and 1404 mm in the Centre. These figures accounted for 72%, 117%, 76%, 68% and 86% of the respective LTM. The island average of 1040 mm for this period represented 88% of the long-term mean.

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

	North	East	South	West	Centre	Island
<b>2016</b>	91 (51)	218 (80)	187 (60)	38 (27)	222 (63)	165 (63)
<b>2017</b>	<b>145</b> (81)*	<b>343</b> (126)	<b>347</b> (111)	<b>112</b> (81)	<b>358</b> (101)	<b>281</b> (108)
<b>LTM</b>	179	272	312	139	354	261

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

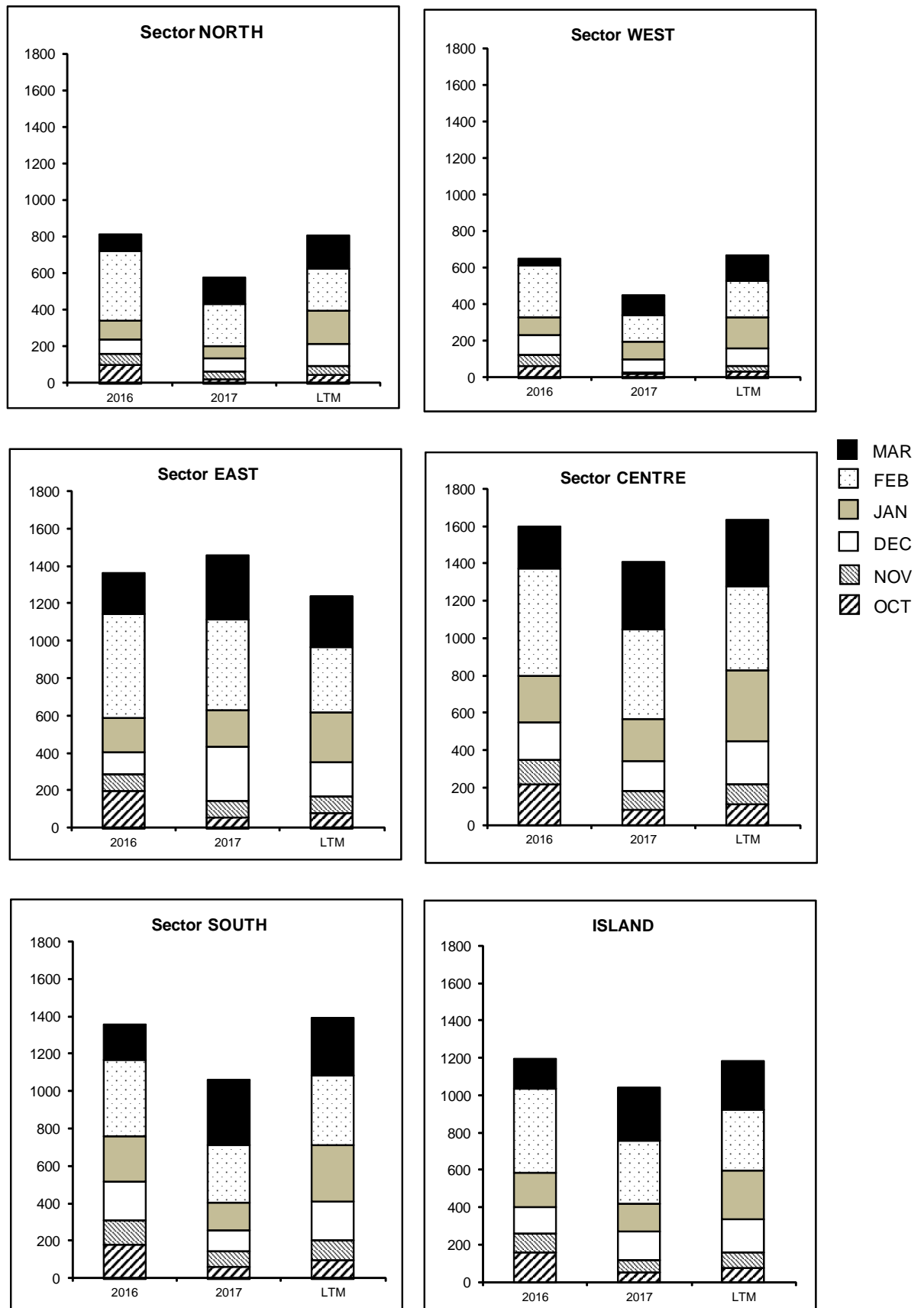
**Table 1b. Cumulative rainfall (mm) from October 2016 to March 2017 for crop 2017 compared to that of crop 2016 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2016</b>	810 (101)	1362 (110)	1358 (97)	649 (98)	1594 (98)	1198 (101)
<b>2017</b>	<b>576</b> (72)*	<b>1459</b> (117)	<b>1061</b> (76)	<b>449</b> (68)	<b>1404</b> (86)	<b>1040</b> (88)
<b>LTM</b>	802	1243	1396	663	1631	1181

\* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

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



## 1.2 Air Temperature and Sunshine duration (Table 2)

In March 2017, data on maximum and minimum temperatures together with sunshine duration recorded on the four MSIRI agro-meteorological stations are given below.

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

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Sunshine hour	
	Mar 2017	DevN*	Mar2017	DevN	Mar 2017	% Normal
<b>Pamplemousses</b>	31.0	+0.4	23.7	+1.7	230	97
<b>Réduit</b>	29.2	+1.4	22.3	+1.0	229	100
<b>Belle Rive</b>	27.5	+0.2	21.5	+2.0	196	103
<b>Union Park</b>	28.2	+1.3	22.0	+1.4	167	98

\* Deviation from the Normal (1981-2010)

The mean monthly maximum and minimum temperature in March 2017 exceeded the normal at all four agro-meteorological stations. Sunshine hours during March 2017 were similar to the normal at Réduit and comparable to the normal at the other three stations. Above normal temperature and near normal solar radiation are conducive to crop growth.

## 2. STALK HEIGHT

Measurement of stalk height was carried out during the last week of March 2017 at 48 sites in the five sugar cane sectors of the island. These selected sites are 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 3a)

Stalk growth during the month of March 2017 was inferior to that recorded during the corresponding period in 2016. Stalk elongation amounted to 51.2 cm in the North, 49.9 cm in the East, 48.1 cm in the South, 47.2 cm in the West and 43.2 cm in the Centre. The elongation rates of March 2017 were also below normal in the North by 2.1 cm, in the South by 2.3 cm and in the Centre by 3.4 cm. It exceeded the normal by 3.9 cm in the East and was comparable in the West. The 48.9 cm average elongation for the island in March 2017 represented 92.1% of that recorded in March 2016 (53.0 cm) and was close to the normal (48.8 cm).

**Table 3a. Stalk elongation during the month of March 2017**

Sectors	Stalk elongation (cm) during March			March 2017 as % of	
	2017	2016	Normal	2016	Normal
North	51.2	55.7	53.3	91.9	96.1
East	49.9	51.5	46.0	96.9	108.4
South	48.1	52.3	50.4	92.0	95.4
West	47.2	57.7	46.3	81.8	101.9
Centre	43.2	48.2	46.6	89.6	92.7
<b>Island</b>	<b>48.9</b>	<b>53.0</b>	<b>48.8</b>	<b>92.1</b>	<b>100.2</b>

## 2.2 Cumulative Elongation (Table 3b)

Cumulative growth from end-December 2016 to end-March 2017 reached 119.7 cm in the North, 138.5 cm in the East, 119.5 cm in the South, 105.6 cm in the West and 118.4 cm in the Centre. These cumulative growths were lagging behind those of 2016, the difference ranging from 2.4 cm in the Centre to 35.0 cm in the West. For the same period, growth was higher than that of the normal in the East and Centre whereas in the other sectors, it was below the normal. Island-wise the cumulative elongation of 123.8 cm was below those of the 2016 crop (139.5 cm) by 11.2% and the normal (129.6 cm) by 4.4%.

**Table 3b. Cumulative elongation at end-March 2017.**

Sectors	Cumulative elongation (cm) at end- March			End-March 2017 as % of	
	2017	2016	Normal	2016	Normal
North	119.7	148.5	132.7	80.6	90.2
East	138.5	144.8	127.6	95.6	108.5
South	119.5	132.3	135.1	90.3	88.5
West	105.6	140.6	133.3	75.1	79.2
Centre	118.4	120.8	113.6	98.0	104.2
<b>Island</b>	<b>123.8</b>	<b>139.5</b>	<b>129.6</b>	88.8	95.6

## 2.3 Total stalk height (Table 3c and Figure 2)

Total stalk height at end March 2017 stood at 139.1 cm in the North, 184.1 cm in the East, 159.9 cm in the South, 134.5 cm in the West and 161.3 cm in the Centre, giving an island average of 160.5 cm. Compared to the corresponding period in 2016, total stalk height in March 2017 was inferior by 33.5 cm in the North, 5.8 cm in the East, 13.8 cm in the South and 44.2 cm in the West whereas in the Centre it was higher by 10.9 cm. Total stalk height in March 2017 with respect to the normal was higher by 9.1 cm in the East and 4.7 cm in the Centre but was below normal in the other sectors by 19.2 cm in the North, 20.4 cm in the South and 37.2 cm in the West.

At island level, the total stalk height of 160.5 cm at end of March 2017 was inferior to those of the corresponding period in 2016 by 17.9 cm (10.0%) and the normal by 10.1 cm (5.9 %).

**Table 3c. Stalk height at end-March 2017.**

Sectors	Stalk height (cm) at end-March			End-March 2017 as % of	
	2017	2016	Normal	2016	Normal
North	139.1	172.6	158.3	80.6	87.9
East	184.1	189.9	175.0	96.9	105.2
South	159.9	173.7	180.3	92.1	88.7
West	134.5	178.7	171.7	75.3	78.3
Centre	161.3	150.4	156.6	107.2	103.0
<b>Island</b>	<b>160.5</b>	<b>178.4</b>	<b>170.6</b>	<b>90.0</b>	<b>94.1</b>

### **3. CROP 2017**

The overall weather conditions that prevailed during the month of March, and with the absence of adverse weather events such as cyclones and dry periods, have favoured growth and development of the crop. This is reflected in the stalk elongation of March 2017 being comparable to the normal over the island. Total stalk height for the island, which was below normal by 8% in February 2017, is now lagging behind that of the normal by 6%. The current situation is therefore one of below normal crop productivity in 2017, unless very favourable weather condition is experienced in the coming months.

**Figure 2. Stalk height at end-March 2017**

