

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2017

10 March 2017

### SUGAR CANE CROP 2017

Status: End February 2017

#### 1. CLIMATE

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

The island's average rainfall for the month of February 2017 amounted to 341 mm over the sugar cane areas and represented 104% of the long-term mean (LTM) (328 mm). Rainfall in February 2017 was similar to the normal in the North and above normal in sectors East and Centre by 38% and 7%, respectively. Below normal rainfall was recorded in the South and West sectors, representing 83% and 72% of LTM, respectively.

The cumulative rainfall for the period October 2016 to February 2017 was 431mm in the North, 1116 mm in the East, 714 mm in the South, 337 mm in the West and 1046 mm in the Centre. These cumulated rainfall accounted for 69%, 115%, 66%, 64% and 82% of the respective LTM. The island average of 758 mm for this period represented 82% of the long-term mean (920 mm).

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

	North	East	South	West	Centre	Island
<b>2016</b>	378 (163)	557 (159)	410 (110)	282 (142)	576 (127)	448 (137)
<b>2017</b>	<b>232</b> (100)*	<b>486</b> (138)	<b>307</b> (83)	<b>143</b> (72)	<b>483</b> (107)	<b>341</b> (104)
<b>LTM</b>	232	351	372	198	452	328

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

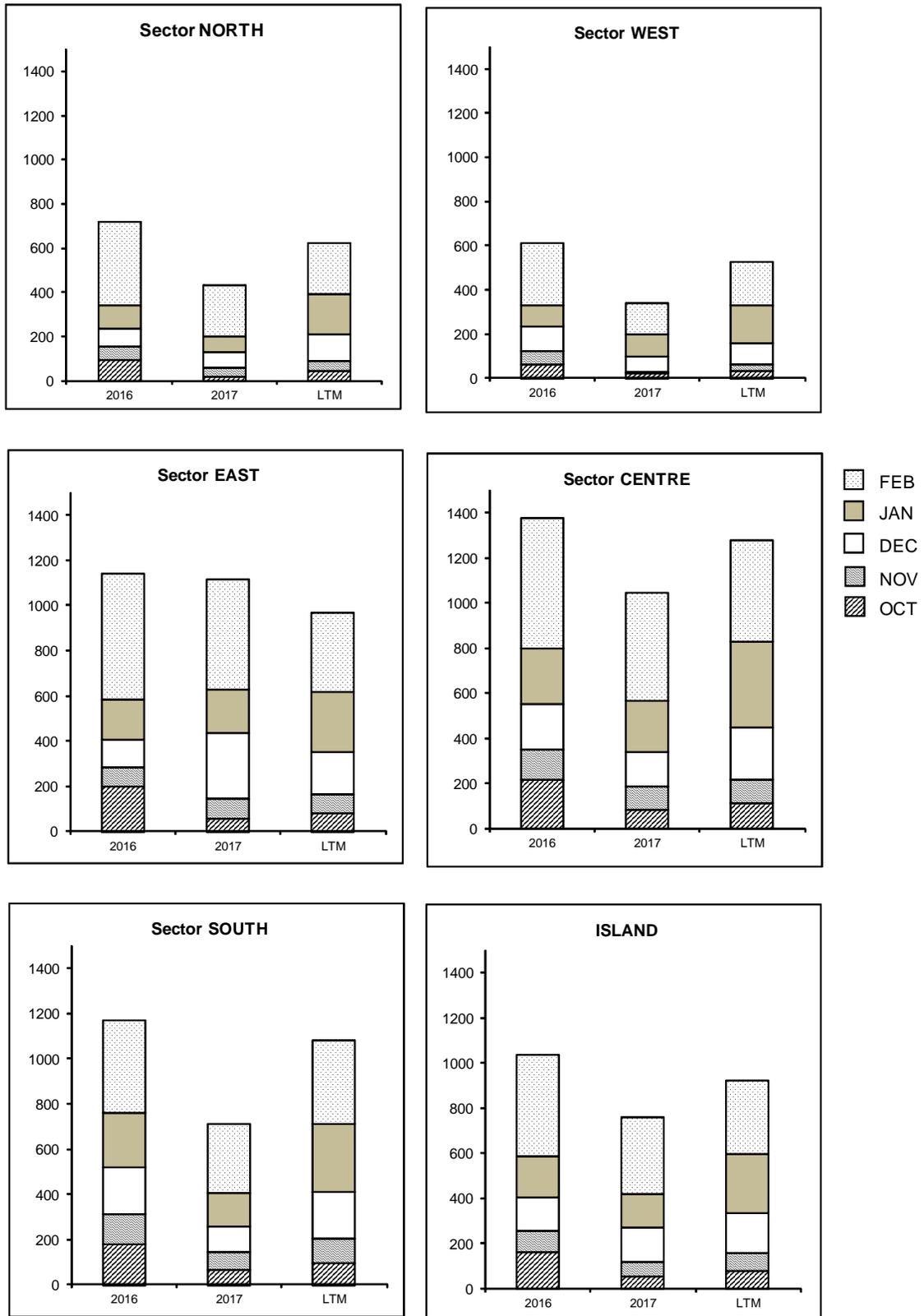
**Table 1b. Cumulative rainfall (mm) from October 2016 to February 2017 for crop 2017 compared to that of crop 2016 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2016</b>	719 (115)	1144 (118)	1171 (108)	611 (117)	1372 (107)	1033 (112)
<b>2017</b>	<b>431</b> (69)*	<b>1116</b> (115)	<b>714</b> (66)	<b>337</b> (64)	<b>1046</b> (82)	<b>758</b> (82)
<b>LTM</b>	623	971	1084	524	1277	920

\* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October 2016 to February 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)

Data on maximum and minimum temperatures together with sunshine duration recorded during the month of February 2017 on the four MSIRI agro-meteorological stations are given below.

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

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Sunshine hour	
	Feb 2017	DevN*	Feb 2017	DevN	Feb 2017	% Normal
Pamplemousses	31.2	+0.3	22.7	+0.2	223	104
Réduit	29.4	+1.2	21.4	-0.5	195	94
Belle Rive	27.6	+0.2	19.7	-0.3	164	99
Union Park	29.1	+1.7	21.6	+0.6	199	130

\* Deviation from the Normal (1981-2010)

In February 2017, the mean monthly maximum temperature exceeded the normal at all four agro-meteorological stations. As for the mean monthly minimum temperature, it was above normal at Pamplemousses and Union Park, but below normal at the other two stations. Sunshine hours during February 2017 was comparable to that of the normal at Belle Rive, it exceeded that of the normal at Pamplemousses and Union Park but was below that of the normal at Réduit. Above normal temperature and solar radiation are usually known to favour crop growth.

## 2. STALK HEIGHT

Measurement of stalk height was carried out during the last week of February 2017 at 48 sites in the five sugar cane sectors of the island. These selected sites are representative of the various agro-climatic zones, varieties and crop categories. Data collected were compared with those of the corresponding period in February 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 elongation during the month of February 2017 was lagging behind that of the same period in 2016 in all sectors except in the Centre where it was comparable to that of last year. Stalk growth was highest in the North with 48.3 cm followed by the East (47.9 cm), the West (43.4 cm), the South (40.5 cm) and the Centre (39.9 cm). With respect to the normal for the corresponding period, stalk elongation in February 2017 was comparable in the West, inferior to the normal in the South by 3.8 cm but exceeded the normal in the other sectors by 3.0 cm in the North, 7.2 cm in the East and 6.1cm in the Centre. The island stalk elongation of 44.6 cm recorded in February 2017 was below that of the corresponding period in 2016 by 4.2 cm (-8.6%) but higher than that of the normal by 1.6 cm (3.7%).

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

Sectors	Stalk elongation (cm) during February			February 2017 as % of	
	2017	2016	Normal	2016	Normal
North	48.3	52.3	45.3	92.4	106.6
East	47.9	50.0	40.7	95.8	117.7
South	40.5	47.0	44.3	86.2	91.5
West	43.4	50.0	42.6	86.8	101.8
Centre	39.9	39.2	33.8	101.8	118.2
<b>Island</b>	<b>44.6</b>	<b>48.8</b>	<b>43.0</b>	<b>91.4</b>	<b>103.7</b>

### 2.2 Cumulative Elongation (Table 3b)

Stalk growth from end-December 2016 to end-February 2017 cumulated to 68.5 cm in the North, 88.6 cm in the East, 71.4 cm in the South, 58.4 cm in the West and 75.2 cm in the Centre. These cumulative growths were lagging behind those of 2016 by 24.3 cm in the North, 4.7 cm in the East, 8.6 cm in the South and 24.5 cm in the West whereas in the Centre it was higher by 2.6 cm. 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 75.0 cm was lagging behind those of the 2016 crop (86.5 cm) by 13.3% and the normal (80.8 cm) by 7.2%.

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

Sectors	Cumulative elongation (cm) at end- February			End-February 2017 as % of	
	2017	2016	Normal	2016	Normal
North	68.5	92.8	79.4	73.8	86.3
East	88.6	93.3	81.6	95.0	108.6
South	71.4	80.0	84.7	89.3	84.3
West	58.4	82.9	87.0	70.4	67.1
Centre	75.2	72.6	67.0	103.6	112.2
<b>Island</b>	<b>75.0</b>	<b>86.5</b>	<b>80.8</b>	<b>86.7</b>	<b>92.8</b>

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

Total stalk height at end February 2017 was 87.9 cm in the North, 134.2 cm in the East, 111.8 cm in the South, 87.3 cm in the West and 118.1 cm in the Centre, giving an island average of 111.7 cm. Total stalk height compared to that of February 2016 was inferior by 29.0cm in the North, 4.2 cm in the East, 9.6 cm in the South and 33.7 cm in the West whereas in the Centre it was equal. Compared to the normal, total stalk height in February 2017 was higher by 5.2 cm in the East and 8.1 cm in the Centre but was below normal in the other sectors by 17.1 cm in the North, 18.1 cm in the South and 38.1 cm in the West.

At island level, the total stalk height of 111.7 cm at end of February 2017 was lower than those of the corresponding period in 2016 by 13.6 cm (10.9%) and the normal by 10.1 cm (9.3 %).

**Table 3c. Stalk height at end-February.**

Sectors	Stalk height (cm) at end-February			End-February 2017 as % of	
	2017	2016	Normal	2016	Normal
North	87.9	116.9	105.0	75.2	83.7
East	134.2	138.4	129.0	97.0	104.0
South	111.8	121.4	129.9	92.1	86.1
West	87.3	121.0	125.4	72.1	69.6
Centre	118.1	118.0	110.0	100.1	107.4
<b>Island</b>	<b>111.7</b>	<b>125.3</b>	<b>121.8</b>	<b>89.1</b>	<b>91.7</b>

### 3. CROP 2017

The month of February 2017 was characterised by the passage of moderate tropical cyclone *Carlos* during the first week of February 2017, which has been beneficial to the sugarcane crop with the heavy downpours that contributed in correcting the soil moisture deficit, which prevailed during the past months. Temperature and solar radiation have also been favourable to crop growth and this is reflected in the stalk elongation of February 2017 being higher than that of the normal over the island. Total stalk height for the island which was below normal by 15% in January 2017 is now lagging behind that of the normal by 8%.

Figure 2. Stalk height at end-February 2017

