

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2015

11 February 2016

### SUGAR CANE CROP 2016

Status: End January 2016

#### 1. CLIMATE

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

Rainfall recorded over the sugar cane area of the island in January 2016 was 182 mm and represented 70% of the long-term mean (LTM). Below normal rainfall was recorded in all sectors with 104 mm in the North, 181 mm in the East, 240 mm in the South, 97 mm in the West and 246 mm in the Centre.

The cumulative rainfall for the period of October 2015 to January 2016 amounted to 584 mm for the island, i.e. 99% of the long-term mean. During that period, 341 mm were recorded in the North, 587 mm in the East, 761 mm in the South, 329 mm in the West and 796 mm in the Centre. These cumulated rainfall represented 87%, 95%, 107%, 101% and 96% of the respective LTM.

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

	North	East	South	West	Centre	Island
<b>2015</b>	266 (148)	607 (229)	496 (165)	306 (180)	606 (160)	468 (180)
<b>2016</b>	<b>104</b> (58)*	<b>181</b> (68)	<b>240</b> (80)	<b>97</b> (57)	<b>246</b> (65)	<b>182</b> (70)
<b>LTM</b>	180	265	300	170	379	260

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

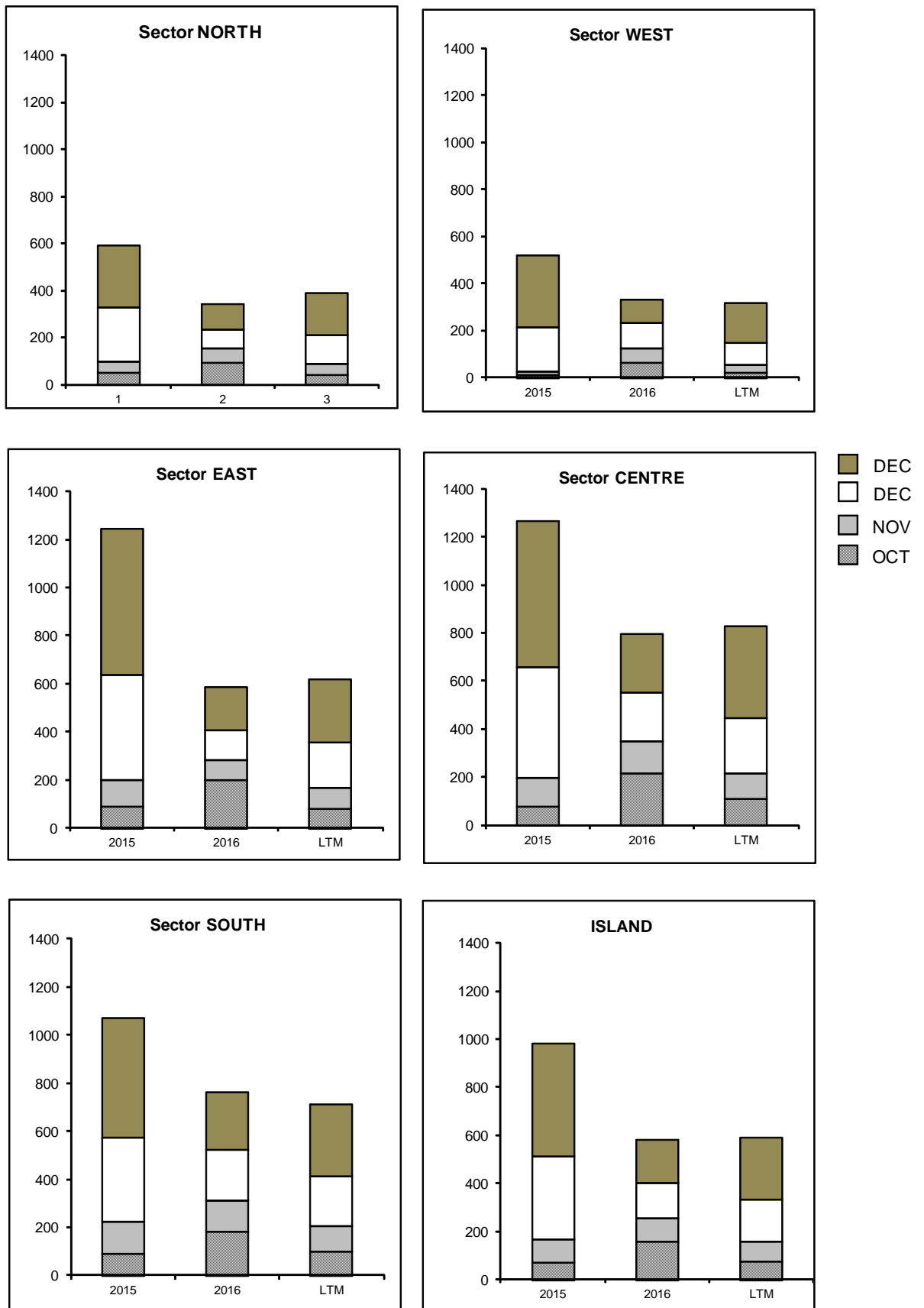
**Table 1b. Cumulative rainfall (mm) from October 2015 to January 2016 for crop 2016 compared to that of crop 2015 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2015</b>	595 (152)	1245 (201)	1069 (150)	518 (159)	1264 (153)	981 (166)
<b>2016</b>	<b>341</b> (87)*	<b>587</b> (95)	<b>761</b> (107)	<b>329</b> (101)	<b>796</b> (96)	<b>584</b> (99)
<b>LTM</b>	391	620	712	326	825	593

\* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

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



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

Data on air temperature and sunshine duration recorded during the month of January 2016 at the four MSIRI agro-meteorological stations are given below.

**Table 2. Air temperature and sunshine duration recorded on MSIRI agro-meteorological stations in January 2016**

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Sunshine hour	
	Jan 2016	DevN*	Jan 2016	DevN	Jan 2016	% Normal
<b>Pamplemousses</b>	32.7	+1.5	22.9	+0.7	248	101
<b>Réduit</b>	29.7	+1.3	21.4	-0.2	244	105
<b>Belle Rive</b>	28.2	+0.7	20.6	+1.0	222	113
<b>Union Park</b>	28.7	+1.2	21.9	+1.2	184	99

\* Deviation from the Normal (1981-2010)

The mean monthly maximum temperature exceeded the normal at all stations, the difference ranging from 0.7°C at Belle Rive to 1.5°C at Pamplemousses. Similarly, the mean monthly minimum temperature was above normal at all stations except at Réduit. Sunshine hours during January 2015 were close to normal at Pamplemousses and Union Park but exceeded the normal at the other two stations. Generally, above normal temperature and solar radiation are favourable to growth of the crop.

## 2. STALK HEIGHT

Measurement of stalk height was carried out during the last week of January 2016 at 52 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 are compared with those of the corresponding period in January 2015 and to the mean of the five best cane yielding crops of the period 2006 to 2015 in each sector (referred to as normal).

### 2.1 Stalk elongation (Table 3a)

Stalk elongation during the month of January 2016 lagged behind in all sectors except in the East. During January 2016, the highest stalk growth was observed in the East with 43.3 cm followed by the North (40.5 cm), Centre (33.4 cm), South (33.0 cm) and the West (32.9 cm). With respect to the normal for the corresponding period, growth was comparable in the Centre but exceeded the normal by 7.4 cm in the North and 2.4 cm in the East. In the other two sectors, it was inferior to the normal by 7.4 cm in the South and 11.5 cm in the West. The island stalk elongation of 37.7 cm in January 2016 was comparable to the normal and below that for the corresponding period in 2015 by 4.5 cm (10.6%).

**Table 3a. Stalk elongation during the month of January**

Sectors	Stalk elongation (cm) during January			January 2016 as % of	
	2016	2015	Normal	2015	Normal
North	40.5	44.9	33.1	90.2	122.2
East	43.3	39.5	40.9	109.6	105.8
South	33.0	41.1	40.4	80.3	81.6
West	32.9	52.6	44.4	62.5	74.1
Centre	33.4	35.5	33.3	94.1	100.4
<b>Island</b>	<b>37.7</b>	<b>42.2</b>	<b>37.8</b>	<b>89.4</b>	<b>99.8</b>

## 2.2 Total stalk height (Table 3b and Figure 2)

Total stalk height at end January 2016 stood at 64.6 cm in the North, 88.4 cm in the East, 74.4 cm in the South, 71.0 cm in the West and 79.2 cm in the Centre giving an island average of 76.5 cm. Compared to end-January 2015, stalk height lagged behind by 4.3 cm in the North, 16.8 cm in the South, 21.4 cm in the west and 5.3 cm in the Centre, whereas in the East it was higher by 4.6 cm. Total stalk height at end-January 2016 was close to normal in the East but was higher than normal in the North by 5.7 cm and the Centre by 3.0 cm. In the South and West, it lagged behind the normal by 11.2 cm and 11.7 cm, respectively.

At island level, the total stalk height of 76.5 cm at end of January 2016 was lower than both the corresponding period in 2015 by 7.6 cm (9%) and the normal by 2.2 cm (2.8 %).

**Table 3b. Stalk height at end-January.**

Sectors	Stalk height (cm) at end-January			End-January 2016 as % of	
	2016	2015	Normal	2015	Normal
North	64.6	68.9	58.9	93.8	109.6
East	88.4	83.8	88.3	105.5	100.1
South	74.4	91.2	85.6	81.6	86.9
West	71.0	92.4	82.7	76.8	85.8
Centre	79.2	84.5	76.2	93.7	103.9
<b>Island</b>	<b>76.5</b>	<b>84.1</b>	<b>78.7</b>	<b>91.0</b>	<b>97.2</b>

## 3. CROP 2016

The month of January 2016 has been relatively dry in the North, in the West and in the lowland areas of the other sectors, which resulted in slow cane growth and development. This is reflected in the stalk elongation data measured in these sectors which lagged behind those of last year at the same period. Moreover, late harvest during the previous crop cycle has also contributed to the below normal stalk height over the island. However, the 2016 crop can catch up with the normal if favourable weather conditions are encountered during the coming months.

**Figure 2. Stalk height at end- January 2016**

