

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2015

15 November 2016

### SUGAR CANE CROP 2016

Status: End October 2016

#### 1. CLIMATE

##### 1.1 Rainfall (Table 1)

Rainfall recorded during October 2016 over the sugar cane areas of the island was below normal with an average of 50 mm which represented 66% of the long-term mean (76 mm) for the month. Rainfall was below the long-term mean in all sectors with 20 mm in the North, 59 mm in the East, 65 mm in the South, 19 mm in the West and 82 mm in the Centre. These amounts represented 47%, 73%, 67%, 68% and 75% of the respective LTM.

October is known to be a dry month and the crop water requirements have not been met in most sectors except in areas benefiting from sufficient irrigation.

**Table 1. Rainfall in mm and as a percentage of the long term mean (LTM) for September and October during crops 2015 and 2016**

	Crop	North	East	South	West	Centre	Island
September	2015	23 (34)	48 (44)	63 (49)	20 (65)	72 (50)	46 (45)
	2016	16 (24)	58 (53)	68 (53)	2 (6)	94 (65)	50 (49)
	LTM	67	109	129	31	145	102
October	2015	74 (172)	113 (140)	95 (98)	40 (143)	104 (95)	91 (120)
	2016	20 (47)*	59 (73)	65 (67)	19 (68)	82 (75)	50 (66)
	LTM	43	81	97	28	110	76

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

[Source: Mauritius Meteorological Services]

### 1.2 Temperature (Table 2)

Maximum and minimum air temperatures recorded during the month of October 2016 on MSIRI agro-meteorological stations are given below.

**Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in October 2016**

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Amplitude (°C)	
	Oct 2016	DevN*	Oct 2016	DevN	Oct 2016	DevN
<b>Pamplemousses</b>	29.2	+1.0	18.2	+0.2	11.0	+0.8
<b>Réduit</b>	26.1	+1.2	17.3	+0.3	8.8	+0.9
<b>Belle Rive</b>	24.1	+0.1	16.4	+0.9	7.7	-0.8
<b>Union Park</b>	25.1	+1.5	17.6	+0.9	7.5	+0.6

\* Deviation from the Normal (1981-2010)

Mean maximum temperature during October 2016 was close to the normal at Belle Rive but was above normal at the other three stations. Mean minimum temperature was above normal at all stations. The resulting mean amplitude was above normal at all stations except at Belle Rive. Above normal temperature amplitude is favourable to sucrose accumulation.

### 1.3 Sunshine (Table 3)

Data from the four MSIRI agro-meteorological stations showed that sunshine hours during October 2016 were above normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 105 at Pamplemousses, 107 at both Réduit and Belle Rive, and 128 at Union Park

**Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in October 2016**

Station	Oct 2016	Normal	% of Normal
<b>Pamplemousses</b>	277	264	105
<b>Réduit</b>	273	256	107
<b>Belle Rive</b>	230	215	107
<b>Union Park</b>	221	172	128

## 2. SUCROSE ACCUMULATION (Tables 4a and 4b)

Cane samples were analysed for sucrose content during the last week of October 2016 from miller-planters' land in all factory areas and representing the main cultivated varieties. The average Pol % cane (*richesse*) was computed on the basis of area under cultivation for each variety in the different factory areas of each sector. The results were compared with those of the last two years.

**Table 4a. Average Pol % cane (richesse) at end-October 2016.**

Sectors	R 575	M 2593/92	M 1400/86	M 1176/77	R 579	M 1672/90	R 570
North		17.6	16.6	18.0	16.5	17.9	18.0
East					16.1		17.9
South					15.1		17.9
West	15.8	15.7	13.5	14.6			11.2
Centre					14.9		

**Table 4b. Comparison of Pol % cane (richesse) at the end of September and October 2014, 2015 and 2016.**

Sectors	SEPTEMBER			OCTOBER		
	2014	2015	2016	2014	2015	2016
North	16.1	15.8	16.1	16.5	16.3	17.3
East	16.0	15.0	14.2	17.0	15.1	16.8
South	15.4	14.8	16.2	16.2	16.3	16.1
West	15.5	15.6	13.7	16.2	17.1	14.4
Centre	15.1	14.1	13.6	16.2	-	14.9
Island	15.7	15.1	15.2	16.5	16.0	16.3

At end-October 2016, the *richesse* was 17.3% in the North, 16.8% in the East, 16.1% in the South, 14.4% in the West and 14.9% in the Centre. These figures were higher than those obtained at the corresponding period last year in the North and East but lagged behind in the South and West sectors. Compared to the corresponding period in 2014, sucrose content at end of October 2016 was higher in the North, comparable in the East and South but lower in the other sectors by 1.8° West and 1.3° in the Centre.

Sucrose content from end-September 2016 up to end-October 2016 has improved in all sectors except in the South. The highest increment of 2.6° was observed in the East whilst the lowest increment of 0.7° occurred in the West. On average for the island, the increase in *richesse* was 1.1° in 2016 compared to 0.9° in 2015 and 0.8° in 2014.

Island-wise, the *richesse* of 16.3% recorded at the end of October 2016 was higher than that of the corresponding period in 2015 (16.0%) but below that of 2014 (16.5%).

### 3. CROP 2016

As at 29 October 2016, 25 140 ha representing 72% of miller-planters' land had been harvested compared to 23 527 ha (68%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 68% in the North, 77% in the East, 70% in the South, 73% in the West and 72% in the Centre. On account of the centralization of milling activities, harvest statistics relative to extraction rate and sugar productivity have been combined for the East and Centre sectors since all the canes from the Centre are crushed at factories in the East. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows.

#### 3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end October 2016 was 79.3 TCH and was lower than that recorded in 2014 and 2015 (83.1 TCH) by 3.8 TCH (4.6%). Sector-wise, the best cane productivity to-date was recorded in the West with 90.6 TCH, followed by the South (79.9 TCH), the North (79.3 TCH), the East (77.1 TCH) and the Centre (69.2 TCH).

Compared to the same period last year and in 2014, cane productivity recorded to-date was lagging behind in sectors East, South and Centre. In sectors North and West, it was similar to that in 2015 but higher than that in 2014.

**Table 5a. Cane productivity (TCH) as at end September and October for the 2014, 2015 and 2016 crops**

Sector	End September			End October		
	2014	2015	2016	2014	2015	2016
North	78.6	80.3	81.3	76.6	79.3	79.3
East	82.5	85.6	78.3	83.7	85.7	77.1
South	86.0	85.4	81.5	85.2	83.8	79.9
West	90.1	90.8	91.6	90.2	90.6	90.6
Centre	76.5	74.7	70.5	76.6	72.2	69.2
<b>Island</b>	<b>83.4</b>	<b>84.1</b>	<b>80.5</b>	<b>83.1</b>	<b>83.1</b>	<b>79.3</b>

#### 3.2 Extraction (Table 5b, Figure 1)

The recorded island extraction rate of 10.01% was slightly lower than that of the corresponding period in 2014 (10.15 %) by 0.14°. Sector-wise, the extraction rate recorded was 10.81% in the North, 9.51% in the East-Centre, 9.97% in the South and 10.23% in the West. Compared to that of 2014, the extraction rate to-date was higher in the North by 0.17° but lagged behind by 0.27° in the East-Centre, 0.09° in the South and 0.31° in the West.

**Table 5b. Extraction rate (%) as at end September and October for the 2014, 2015 and 2016 crops**

Sectors	End September			End October		
	2014	2015	2016	2014	2015	2016
North	10.22	9.33	10.46	10.64	9.61	10.81
East/Centre	9.60	8.89	9.33	9.78	8.92	9.51
South	9.91	8.74	9.86	10.06	8.94	9.97
West	10.45	10.11	10.30	10.54	10.10	10.23
<b>Island</b>	<b>9.92</b>	<b>8.99</b>	<b>9.82</b>	<b>10.15</b>	<b>9.15</b>	<b>10.01</b>

**3.3 Sugar productivity (Table 5c)**

Island-wise, the recorded sugar productivity of 7.94 TSH was higher than that of the corresponding period in 2015 (7.60 TSH) by 0.34 tonne (4.5%) but lower than that of the same period in 2014 (8.43 TSH) by 0.49 tonne (5.9%). The sugar productivity by sectors stood at 8.57 TSH in the North, 7.20 TSH in the East-Centre, 7.97 TSH in the South and 9.27 TSH in the West. Sugar productivity at end October 2016 was higher than those at the corresponding period in 2015 by 0.95 TSH in the North, 0.48 TSH in the South and 0.12 TSH in the West but lagged behind by 0.23 TSH in the East-Centre. Compared to the corresponding period in 2014, sugar productivity to-date was higher in the North only but was inferior in the other sectors.

**Table 5c. Sugar productivity (TSH) as at end September and October for the 2014, 2015 and 2016 crops**

Sectors	End September			End October		
	2014	2015	2016	2014	2015	2016
North	8.03	7.50	8.51	8.15	7.62	8.57
East/Centre	7.81	7.45	7.18	8.04	7.43	7.20
South	8.52	7.46	8.03	8.57	7.49	7.97
West	9.42	9.18	9.43	9.51	9.15	9.27
<b>Island</b>	<b>8.27</b>	<b>7.56</b>	<b>7.91</b>	<b>8.43</b>	<b>7.60</b>	<b>7.94</b>

#### **4. 2016 CROP PRODUCTIVITY**

The salient features for the weather conditions in October 2016 were below normal rainfall coupled with above normal temperature and sunshine duration which favoured ripening. In the low-lying rainfed fields, the dry conditions have caused cane desiccation.

With more than 70% of the area of miller planters' land harvested, cane productivity at island level in 2016 is still lagging behind that of both 2015 and 2014 by 4.6%. Moreover, extraction rate at end October 2016 compared to the corresponding period in 2014 is lower in all sectors except in the North. Hence, sugar productivity of 7.94 TSH at end October 2016, although exceeding that of 2015, is still lagging behind that of 2014 at the same period by 5.9%. The production level for 2016 remains dependent on the forthcoming weather, a persisting dry hot weather as experienced during October being potentially detrimental to the standing crop.

Figure 1. Evolution of extraction rate (%) for the 2014, 2015 and 2016 crops

