

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2015

11 February 2016

SUGAR CANE CROP 2016 Status: End December 2015

1. CLIMATE

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

The island's average rainfall over the sugar cane areas for December was 147 mm and represented 83% of the long term mean (176 mm). December rainfall was below the long-term mean (LTM) by 39 mm in the North, 67 mm in the East and 29 mm in the Centre. In the West it exceeded the long-term mean by 14 mm whereas in the South it was comparable to the long-term mean.

The cumulative rainfall for the period of October to December 2015 amounted to 403 mm for the island, i.e. 121% of the long-term mean. During that period, 237 mm were recorded in the North, 406 mm in the East, 521 mm in the South, 232 mm in the West and 550 mm in the Centre. These cumulated rainfall represented 112%, 114%, 126%, 149% and 123% of the respective LTM.

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

	North	East	South	West	Centre	Island
2015	230 (192)	439 (234)	349 (167)	189 (197)	462 (200)	344 (196)
2016	81 (68)*	121 (64)	208 (100)	110 (115)	202 (87)	147 (83)
LTM	120	188	209	96	231	176

⁺ Crop year is from October to September

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

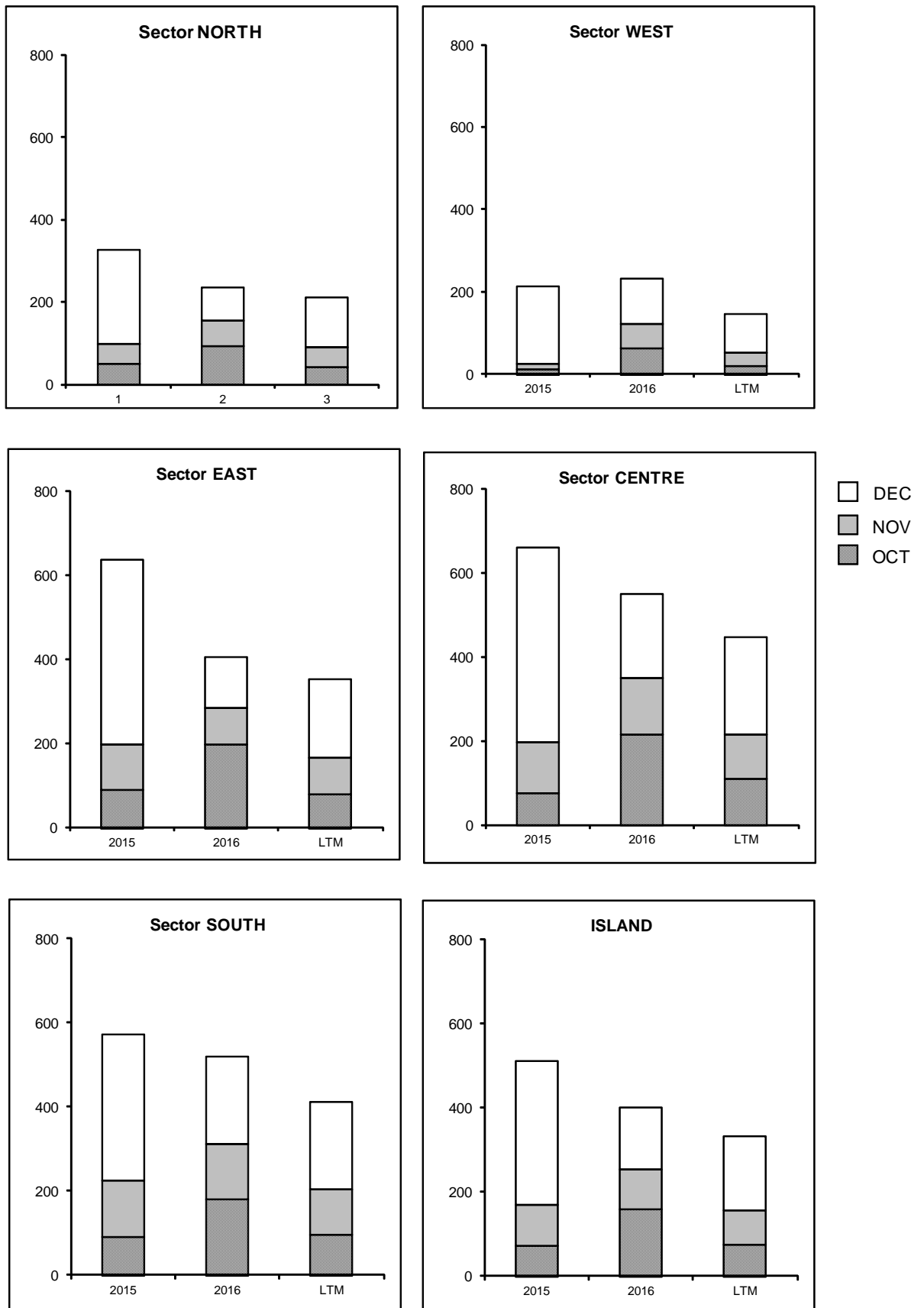
Table 1b. Cumulative rainfall (mm) from October to December 2015 for crop 2016 compared to that of crop 2014 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2015	329 (156)	638 (180)	573 (139)	212 (136)	658 (148)	513 (154)
2016	237 (112)*	406 (114)	521 (126)	232 (149)	550 (123)	403 (121)
LTM	211	355	412	156	446	333

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October to December 2015 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 maximum and minimum temperatures together with sunshine duration recorded during the month of December 2015 on the four MSIRI agro-meteorological stations are given below.

Table 2. Air temperature and sunshine duration recorded on MSIRI agro-meteorological stations in December 2015

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Sunshine hour	
	Dec 2015	DevN*	Dec 2015	DevN	Dec 2015	% Normal
Pamplemousses	33.0	+2.2	22.4	+1.4	260	103
Réduit	29.7	+1.9	20.0	-0.3	209	91
Belle Rive	27.7	+0.8	19.8	+1.4	208	101
Union Park	28.4	+1.6	21.2	+1.7	200	101

* Deviation from the Normal (1981-2010)

The mean monthly maximum temperature was above normal at all stations, the difference ranging from 0.8°C at Belle Rive to 2.2°C at Pamplemousses. Similarly, the mean monthly minimum temperature exceeded the normal at all stations except at Réduit. Sunshine hours during December 2015 were below normal at Réduit but exceeded the normal at the other stations. Above normal temperature and solar radiation are conducive to growth of the crop.

2. STALK HEIGHT (Table3)

Stalk height measurements were initially made during the last week of December 2015 at 53 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. The measurements are compared to those of the corresponding period in December 2014 and to the mean of the five best cane yielding crops of the period 2006 to 2015 in each sector (referred to as normal).

Table 3. Stalk height as at end-December 2015

Sectors	Stalk height (cm) at end-December			End-December 2015 as % of	
	2015	2014	Normal	2014	Normal
North	24.1	24.0	25.8	100.4	93.5
East	45.1	44.3	47.4	101.8	95.1
South	41.4	50.1	45.2	82.6	91.6
West	38.1	39.8	38.4	95.7	99.3
Centre	45.8	49.0	42.9	93.5	106.7
Island	38.9	41.9	41.0	92.7	94.8

The average stalk height as at end December 2015 stood at 24.1 cm in the North, 45.1 cm in the East, 41.4 cm in the South, 38.1 cm in the West and 45.8 cm in the Centre. Compared to the corresponding period in 2014, cane height at end December 2015 was comparable in the North, slightly better in the East but it lagged behind by 8.7 cm in the South, 1.7 cm in the West and 3.2 cm in the Centre.

Stalk height as at end-December 2015 was above normal in the Centre by 6.7% (2.9 cm), comparable in the West but in the other sectors it was below the normal by 6.5% (1.7 cm) in the North, 4.9% (2.3 cm) in the East and 8.4% (3.8 cm) in the South.

At island level, the stalk height of 38.9 cm as at end-December 2015 was shorter than both the corresponding period in December 2014 by 3.0 cm (7.3%) and the normal by 2.1 cm (5.2%).

3. CROP 2015

As at 26 December 2015, 33 806 ha representing about 97% of miller-planters' land had been harvested compared to 30 331 ha (92%) at the same period last year. Sector-wise, harvest was completed in all sectors except in the West where harvested area reached 72%. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows.

3.1 Cane productivity (Table 4a)

The cane productivity of 81.8 TCH for the island as at 26 December 2015 was lower than that recorded for the corresponding period in 2014 by 2.2 TCH (3%). Sector-wise, compared to last year, cane productivity of December 2015 was higher in the North by 2.7 TCH but lagged behind in the other sectors, the difference ranging from 1.5 TCH in the East to 12.9 TCH in the Centre. During the month of December 2015, cane productivity had decreased in all sectors.

Table 4a. Cane productivity (TCH) as at end November and December for the 2014 and 2015 crops

Sectors	End November		End December	
	2014	2015	2014	2015
North	76.5	79.0	76.1	78.8
East	84.4	85.4	85.4	83.9
South	85.4	81.7	86.0	81.4
West	91.1	92.7	91.1	85.7
Centre	77.3	69.7	80.5	67.6
Island	83.5	82.2	84.0	81.8

3.2 Extraction (Table 4b, Figure 2)

The recorded island extraction rate of 9.16% was again lagging behind that of the corresponding period in 2014 (10.13%) by 0.97%. Sector-wise, extraction rates recorded were 9.63% in the North, 8.81% in the East/Centre, 9.05% in the South and 9.82% in the West. Sector-wise, the extraction rate recorded at end of December 2015 was inferior to that obtained at the same period last year.

Table 4b Cumulative extraction rate (%) as at end November and December for the 2014 and 2015 crops

Sectors	End November		End December	
	2014	2015	2014	2015
North	10.67	9.63	10.39	9.63
East/Centre	9.84	8.90	9.86	8.81
South	10.10	9.05	10.08	9.05
West	10.58	9.91	10.58	9.82
Island	10.20	9.19	10.13	9.16

3.3 Sugar productivity (Table 4c)

Island-wise, the recorded sugar productivity of 7.49 TSH was lower by 1.02 tonne (12.0%) compared to the corresponding period in 2014 (8.51 TSH). Sector-wise sugar productivity was at 7.59 TSH in the North, 7.14 TSH in the East-Centre, 7.37 TSH in the South and 8.42 TSH in the West. Compared to the corresponding period in 2014, sugar productivity in 2015 lagged behind in all sectors by 0.32 TSH in the North and by more than 1.0 TSH in the other sectors.

Table 4c Sugar productivity (TSH) as at end November and December for the 2014 and 2015 crops

Sectors	End November		End December	
	2014	2014	2014	2015
North	8.16	7.61	7.91	7.59
East/Centre	8.16	7.34	8.34	7.14
South	8.63	7.39	8.67	7.37
West	9.64	9.19	9.64	8.42
Island	8.52	7.55	8.51	7.49

4. 2015 CROP PRODUCTIVITY

The weather encountered in December was favourable to vegetative growth with ample rainfall and above normal solar radiation and temperature. Weather conditions conducive to growth are known to be detrimental to extraction rate such that extraction rate over the island has reached its lowest level of 9.16%. The resulting sugar productivity at December 2015 over the island was below that of 2014 by nearly 1.0 TSH. Harvest was completed in all sectors except at Médine where it is now expected to proceed until end of January 2016. Delaying of harvest beyond December is known to be detrimental to the next crop as it will impact on the tillering and growth phase of these fields in 2016.

5. CROP 2016

Even though cumulative rainfall for the period October to December 2015 was above that recorded during the same period for the 2015 crop, stalk height was lagging behind that of last year at the same period in sectors South, West and Centre due to late harvest. Thus on average for the island, cane height is behind both, that of last year and the normal. However, this delayed growth can still be recovered if weather conducive to growth prevails in the coming months and no extreme climatic conditions are experienced

Figure 2. Evolution of extraction rate (%) for the 2014 and 2015 crops

