

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2015

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SUGAR CANE CROP 2015

Status: End March 2015

1. CLIMATE

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

Rainfall recorded over the sugar cane areas of the island in March 2015 was 412 mm and it represented 160% of the long-term mean (LTM). Rainfall in March exceeded the LTM in all sectors by 65 mm (36%) in the North, 183 mm (67%) in the East, 213 mm (68%) in the South, 147 mm (106%) in the West and 127 mm (36%) in the Centre.

Cumulative rainfall for the period October 2014 to March 2015 amounted to 1669 mm. This is higher than the LTM (1195 mm) of the island by 40% for that period. During that same period, a total of 1000 mm were recorded in the North, 2030 mm in the East, 1902 mm in the South, 959 mm in the West and 2135 mm in the Centre. These amounts represented 122%, 162%, 133%, 144%, and 131% of the respective long-term mean.

The month of March was excessively wet following the heavy downpours recorded during the first fortnight amounting to about 80% of the total rainfall for the month.

Table 1a. Rainfall (mm) for the month of March for crops 2014, 2015 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2014	175 (98)	376 (138)	332 (106)	96 (69)	355 (100)	289 (112)
2015	244 (136)*	455 (167)	525 (168)	286 (206)	481 (136)	412 (160)
LTM	179	272	312	139	354	258

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

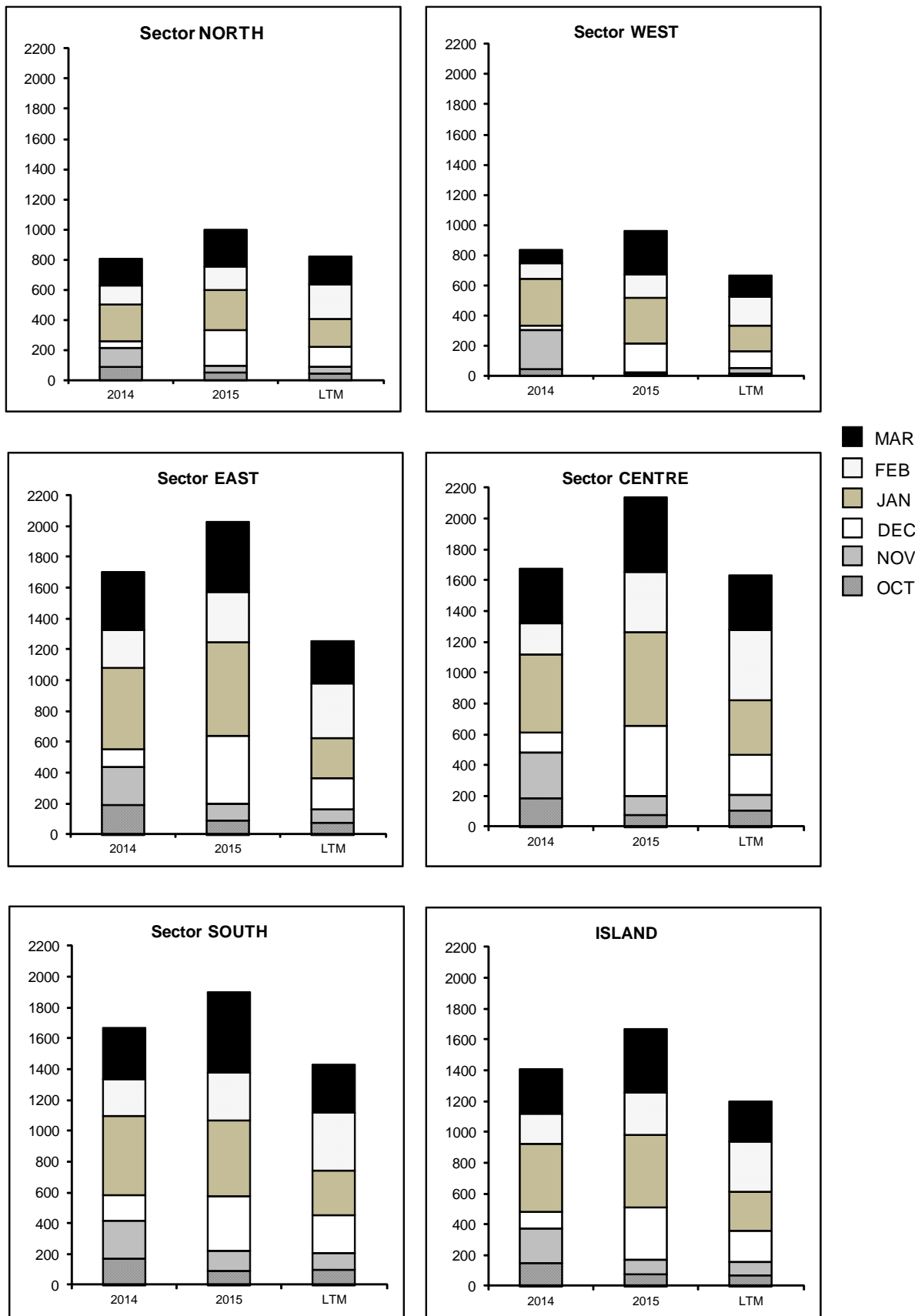
Table 1b. Cumulative rainfall (mm) from October 2014 to March 2015 for crop 2015 compared to that of crop 2014 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2014	803 (98)	1707 (136)	1665 (117)	839 (126)	1677 (103)	1410 (118)
2015	1000 (122)*	2030 (162)	1902 (133)	959 (144)	2135 (131)	1669 (140)
LTM	817	1252	1429	667	1630	1195

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2014 to March 2015 for the 2015 crop compared to the corresponding period of the 2014 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 March 2015 on the four MSIRI agro-meteorological stations are presented in Table 2.

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

Stations	Maximum Temp (°C)		Minimum Temp (°C)		Sunshine hour	
	March 2015	DevN*	March 2015	DevN*	March 2015	% Normal
Pamplemousses	30.9	+0.3	22.1	+0.1	250	106
Réduit	28.3	+0.5	21.0	-0.3	225	98
Belle Rive	27.2	-0.1	20.0	+0.5	211	110
Union Park	27.6	+0.7	21.2	+0.6	176	104

* Deviation from the Normal (1981-2010)

Mean monthly maximum temperature during March 2015 was above normal in the range of 0.3° to 0.7° at all stations except at Belle Rive where it was comparable to the normal. Mean minimum temperature compared to the normal was higher at Belle Rive by 0.5° and Union Park by 0.6°. It was close to normal at Pamplemousses but below normal by 0.3° at Réduit. Moreover, sunshine hours recorded during March 2015 was comparable to the normal at Réduit but exceeded the normal at the other three stations by 6% at Pamplemousses, 10% at Belle Rive and 4% at Union Park.

2. STALK HEIGHT

Stalk height were measured during the last week of March 2015 at 53 sites in the five sugar cane sectors of the island. The selected sites cover the various agro-climatic zones, varieties and crop categories. The measurements were compared to those of the corresponding period in March 2014 and to the mean of the five best cane yielding crops of the period 2005 to 2014 in each sector (referred to as normal).

2.1 Stalk elongation (Table 3a)

Stalk elongation during the month of March 2015 lagged behind that of the same period in 2014 in all sectors. During March 2015, highest stalk growth was observed in the North with 43.3 cm followed by the West (41.4 cm), South (38.7 cm), East (35.8 cm) and the Centre (32.4 cm). Compared to the normal for the corresponding period, growth was below normal in all sectors, the difference ranging from 6.1 cm in the West to 14.2 cm in the Centre. The island stalk elongation of 38.6 cm was below that for both the corresponding period in 2014 by 10.9 cm (21.9%) and the normal by 10.5 cm (21.3%).

Table 3a. Stalk elongation during the month of March 2015

Sectors	Stalk elongation (cm) during March			March 2015 as % of	
	2015	2014	Normal	2014	Normal
North	43.3	51.7	53.8	83.8	80.4
East	35.8	50.9	47.9	70.3	74.8
South	38.7	49.7	50.2	77.9	77.2
West	41.4	42.7	47.5	97.0	87.2
Centre	32.4	45.5	46.6	71.2	69.6
Island	38.6	49.5	49.1	78.1	78.7

2.2 Cumulative elongation (Table 3b)

Cumulative elongation from end-December 2014 to end-March 2015 reached 133.5 cm in the North, 118.1 cm in the East, 121.5 cm in the South, 128.7 cm in the West and 101.4 cm in the Centre. These data were inferior to those of 2014 in all sectors ranging from 2.8 cm in the North to 28.2 cm in the East. For the same period, growth exceeded the normal in the North only whereas in the other sectors it lagged behind the normal. Island-wise the cumulative elongation of 122.4 cm was lower than that of the 2014 crop (136.6 cm) by 10.4% and the normal (132.7 cm) by 7.8%.

Table 3b. Cumulative elongation at end-March

Sectors	Cumulative elongation (cm) at end- March			End-March 2015 as % of	
	2015	2014	Normal	2014	Normal
North	133.5	136.3	129.9	98.0	102.7
East	118.1	146.3	130.3	80.7	90.6
South	121.5	132.8	138.5	91.5	87.7
West	128.7	140.1	135.6	91.9	94.9
Centre	101.4	115.9	113.6	87.5	89.2
Island	122.4	136.6	132.7	89.6	92.2

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

Total stalk height at end March 2015 reached 157.5 cm in the North, 162.4 cm in the East, 171.6 cm in the South, 168.5 cm in the West and 150.4 cm in the Centre giving an island average of 164.3 cm. Compared to end-March 2014, stalk height was lagging behind by 3.2 cm in the North, 40.1 cm in the East, 5.4 cm in the West and 17.5 cm in the Centre. In the South, it exceeded that of the corresponding period last year by 6.3 cm. Moreover, total stalk height at end-March 2015 was close to normal in the North and West but was below normal in the other sectors by 15.7 cm in the East, 14.0 cm in the South and 6.2 cm in the Centre. Island-wise the total cane height of 164.3 cm was inferior than that of end-March 2014 by 11.4 cm (6.5%) and the normal by 9.9 cm (5.7%).

Table 3c. Stalk height at end-March

Sectors	Stalk height (cm) at end-March			End-March 2015 as % of	
	2015	2014	Normal	2014	Normal
North	157.5	160.7	155.8	98.0	101.1
East	162.4	202.5	178.1	80.2	91.2
South	171.6	165.3	185.6	103.8	92.4
West	168.5	173.9	170.7	96.9	98.7
Centre	150.4	167.9	156.6	89.6	96.1
Island	164.3	175.7	174.2	93.5	94.3

3. CROP 2015

Although temperature and solar radiation were conducive to crop growth, the weather during the first fortnight of March 2015 was characterized by excessive rainfall. Thus, stalk elongation during March suffered from a slow development, particularly in the East and Centre sectors with only around 70% of the growth recorded in March 2014. As a result at end-March, total cane height was lagging behind that of 2014 and the normal, the difference being 11.4 cm and 9.9 cm respectively. This reduced elongation, which occurred at the exponential phase of crop growth, could have an impact on cane productivity unless favourable weather is experienced in the coming months.

Figure 2. Stalk height at end-March 2015.

