

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2015

Status: End October 2015

1. CLIMATE

1.1 Rainfall (Table 1)

Rainfall recorded during the month of October 2015 over the cane areas of the island averaged 158 mm and represented 209% of the long term mean (76 mm) for the month. October rainfall highly exceeded the long-term mean in all sectors. Rainfall for the month was 94 mm in the North, 200 mm in the East, 181 mm in the South, 62 mm in the West and 215 mm in the Centre and represented 219%, 247%, 187%, 221%, and 195% of the respective long term mean for the sectors.

In contrast to the month of September when rainfall was deficient in all sectors, October although known to be a dry month was characterized by above normal rainfall.

Table 1. Rainfall in mm and as a percentage of the long term mean (LTM) for September and October during crops 2014 and 2015

	Crop	North	East	South	West	Centre	Island
September	2014	22 (39)	74 (57)	63 (47)	11 (41)	95 (77)	55 (52)
	2015	23 (40)	48 (37)	63 (46)	20 (74)	72 (58)	46 (44)
	LTM	57	130	136	27	124	105
October	2014	50 (116)	92 (114)	90 (93)	11 (39)	74 (67)	73 (96)
	2015	94 (219)*	200 (247)	181 (187)	62 (221)	215 (195)	158 (209)
	LTM	43	81	97	28	110	76

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

[Source: Mauritius Meteorological Services]

1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of October 2015 on MSIRI agro-meteorological stations are given below.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in October 2015

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Oct. 2015	DevN*	Oct 2015	DevN*	Oct 2015	DevN*
Pamplemousses	29.4	+1.2	19.3	+1.3	10.1	-0.1
Réduit	26.0	+1.1	17.2	+0.2	8.8	+0.9
Belle Rive	24.4	+0.4	16.1	+0.6	8.3	-0.2
Union Park	24.7	+1.1	18.3	+1.6	6.4	-0.5

* Deviation from the Normal (1981-2010)

The mean maximum and minimum temperature during October 2015 was above normal at all stations. The resulting mean amplitude was inferior to the normal at all stations except at Réduit where it exceeded the normal. Below normal temperature amplitude is not conducive to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during October 2015 were above normal at Belle Rive and Union Park, close to normal at Pamplemousses but below normal at Réduit. Above normal solar radiation is conducive to photosynthesis and growth.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in October 2015

Station	Oct 2015	Normal*	% of Normal
Pamplemousses	265	264	100
Réduit	231	256	90
Belle Rive	219	215	102
Union Park	180	172	105

* Normal (1981-2010)

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

During the last week of October 2015, cane samples from miller-planters' land in all factory areas and representing the main cultivated varieties were analyzed for sucrose content. The average Pol % cane (*richesse*) was calculated 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 2013 and 2014. In the Centre, all fields earmarked for sucrose accumulation monitoring were harvested.

Table 4a. Average Pol % cane (*richesse*) at end of October 2015.

Sectors	R 573	R 575	M 1246/84	M 2256/88	M 2593/92	M 1400/86	M 1176/77	M 1989/99	R 579	M 1672/90	R 570
North				15.3	16.1	16.7			16.6	16.3	16.6
East			14.7			15.1			15.1		15.3
South	16.3								16.4		16.0
West	18.2	17.7			17.0	15.8	18.7	15.7	16.1		15.3

Table 4b. Comparison of Pol % cane (*richesse*) at the end of September and October 2013, 2014 and 2015.

Sectors	SEPTEMBER			OCTOBER		
	2013	2014	2015	2013	2014	2015
North	15.3	16.1	15.8	15.6	16.5	16.3
East	14.7	16.0	15.0	14.5	17.0	15.1
South	14.9	15.4	14.8	16.8	16.2	16.3
West	15.9	15.5	15.6	14.6	16.2	17.1
Centre	14.3	15.1	14.1	15.0	16.2	-
Island	14.9	15.7	15.1	15.6	16.5	16.0

The *richesse* at end-October 2015 was 16.3% in the North, 15.1% in the East, 16.3% in the South and 17.1% in the West. Compared to the corresponding period last year, these figures were higher in the West by 0.9°, comparable in the North and South and lagging behind by 1.9° in the East. Compared to the corresponding period in 2013, *richesse* in October 2015 was higher in the other sectors by 0.7° in the North, 0.6° in the East and 2.5° in the West and inferior by 0.5° in the South.

During the month of September 2015, *richesse* has improved in all the other sectors by 0.5° in the North and 1.5° in both the South and West and has stagnated in the East. For the corresponding period last year, an improvement in *richesse* was observed in all sectors. On average for the island, the increase in *richesse* in October was 0.9° in 2015 compared to an increase of 0.8° observed in 2014 and 0.7° in 2013 for the same period.

Island-wise, the *richesse* of 16.0% at the end of October 2015 was inferior to the 16.5% in 2014 but higher than that recorded in 2013 (15.6%).

3. CROP 2015

As at 31 October 2015, 23 527 ha representing about 67% of miller-planters' land had been harvested compared to 23 324 ha (71%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 62% in the North, 69% in the East, 75% in the South, 41% in the West and 72% in the Centre.

An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. On account of the centralization of milling activities and since all the canes from the Centre are crushed at factories in the East, harvest statistics relative to extraction rate and sugar productivity have been combined for these two sectors.

3.1 Cane productivity (Table 5a)

The cane productivity of 83.1 TCH for the island as at 31 October 2015 was similar to that recorded for the corresponding period in 2014. Sector-wise, the best cane productivity to-date was recorded in the West with 90.6 TCH, followed by the East (85.7 TCH), the South (83.8 TCH), the North (79.3 TCH) and the Centre (72.2 TCH). Sector-wise, compared to last year, cane productivity in October 2015 was higher in the North by 2.7 TCH and East by 2.0 TCH, comparable in the West but lagged behind in sectors South and Centre by 1.4 TCH and 4.4 TCH respectively.

During the month of October 2015, cane productivity has decreased in all sectors except in the West where an increment of 3.3 TCH was noted.

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

Sectors	End September		End October	
	2014	2015	2014	2015
North	80.6	81.3	76.6	79.3
East	82.1	86.9	83.7	85.7
South	86.8	88.3	85.2	83.8
West	88.3	87.3	90.2	90.6
Centre	75.4	77.1	76.6	72.2
Island	83.7	85.8	83.1	83.1

3.2 Extraction (Table 5b, Figure 1)

The recorded island extraction rate of 9.15% was still lagging behind that of the corresponding period in 2014 (10.15%) by 1.0°. Sector-wise, extraction rates recorded to-date were 9.61% in the North, 8.92% in the East/Centre, 8.94% in the South and 10.1% in the West. Sector-wise, the extraction rate recorded at end of October 2015 was inferior to that obtained at the same period last year, the difference ranging from 0.44° in the West to 1.12° in the South.

During the month of October 2015, extraction rate over the island has improved by 0.46° compared to 0.32° in 2014.

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

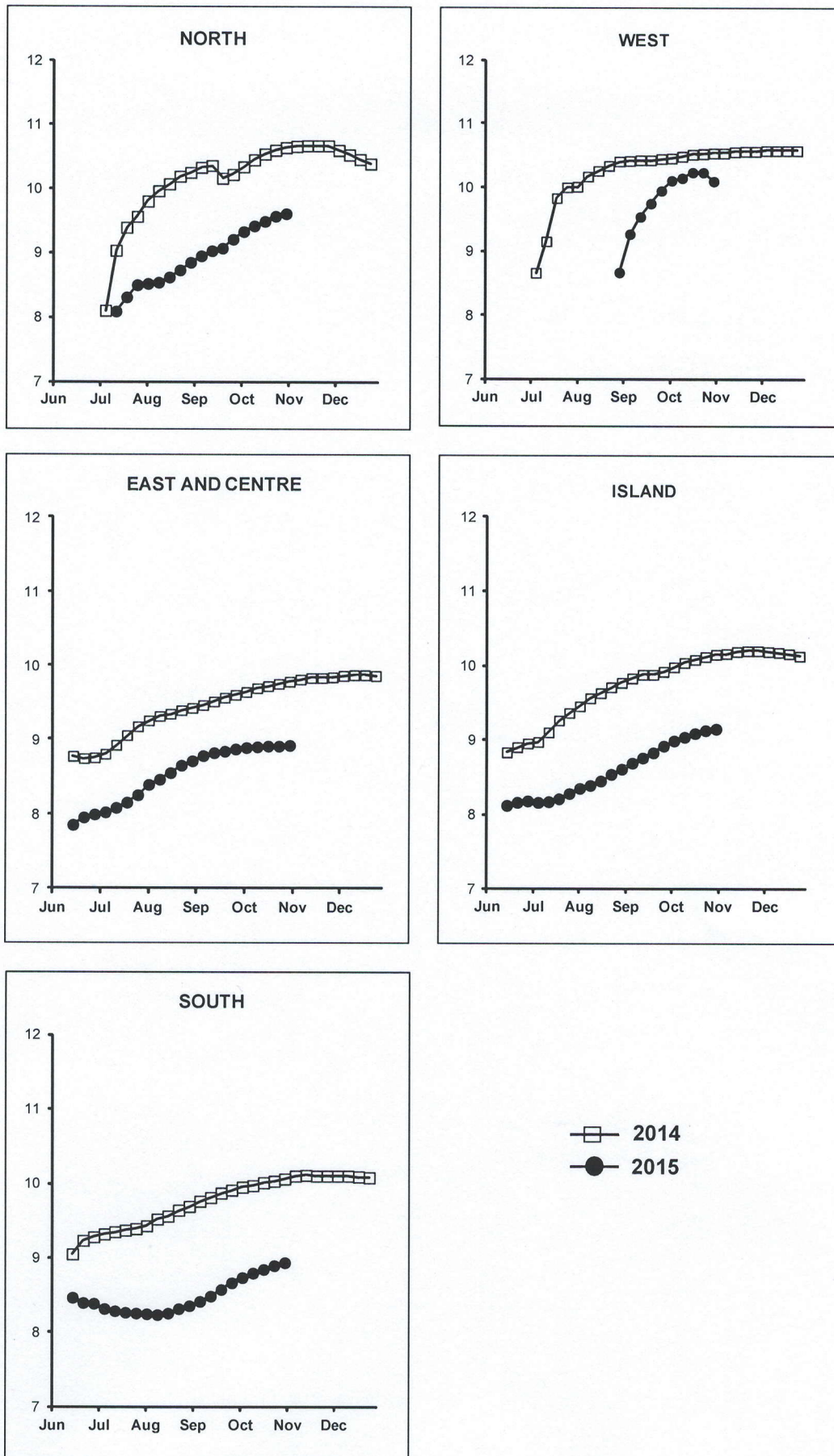


Table 5b. Cumulative extraction rate (%) as at end September and October for the 2014 and 2015 crops

Sectors	End September		End October	
	2014	2015	2014	2015
North	10.33	8.95	10.64	9.61
East/Centre	9.46	8.78	9.78	8.92
South	9.76	8.42	10.06	8.94
West	10.42	9.27	10.54	10.10
Island	9.83	8.69	10.15	9.15

During the month of October 2015, extraction rate over the island has improved by 0.46° compared to 0.32° in 2014.

3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.60 TSH was lower by 0.83 tonne (9.9%) compared to the corresponding period in 2014 (8.43 TSH). Sector-wise sugar productivity amounted to 7.62 TSH in the North, 7.43 TSH in the East/Centre, 7.49 TSH in the South and 9.15 TSH in the West. Compared to the corresponding period in 2014, sugar productivity in 2015 is lagging behind in all sectors by 0.53 TSH in the North, 0.60 TSH in the East/Centre, 1.08 TSH in the South and 0.36 TSH in the West.

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

Sectors	End September		End October	
	2014	2015	2014	2015
North	8.33	7.28	8.15	7.62
East/Centre	7.64	7.49	8.03	7.43
South	8.47	7.43	8.57	7.49
West	9.20	8.09	9.51	9.15
Island	8.23	7.46	8.43	7.60

4. 2015 CROP PRODUCTIVITY

Weather during the month of October was characterized by above normal rainfall, close to normal solar radiation and below normal temperature amplitude which were conducive to growth processes rather than sucrose accumulation. Cane productivity during the month of October has increased in the West and has decreased in the other sectors. Even though cumulative extraction rate has improved in the different sectors, it is still lagging behind that obtained during the same period last year. Consequently, with nearly two-thirds of miller planters' fields already harvested, sugar productivity over the island is below that of last year by nearly 10%.

Moreover, the rainfall event recorded during October should prove particularly conducive to cane development and should thus be beneficial to the start of the 2016 crop.