

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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9 October 2015

SUGAR CANE CROP 2015 Status: End September 2015

1. CLIMATE

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

Rainfall recorded during the month of September 2015 was below normal over the island representing only 44% of the long-term mean. It was also below normal in all sectors with 23 mm, 48 mm, 63 mm, 20 mm and 72 mm in the North, East, South, West and Centre respectively. These amounts represented 40% of the long-term mean (LTM) in the North, 37% in the East, 46% in the South, 74% in the West and 58% in the Centre.

Rainfall for the period October 2014 to September 2015 cumulated to 2579 mm for the island. This figure is 28% higher than the island long-term mean of 2010 mm. During the same period, a total of 1478 mm was recorded in the North, 3193 mm in the East, 3010 mm in the South, 1222 mm in the West and 3346 mm in the Centre. Compared to their respective long-term mean, cumulative rainfall represented 112% in the North, 149% in the East, 121% in the South, 132% in the West and 122% in the Centre.

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

	North	East	South	West	Centre	Island
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

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

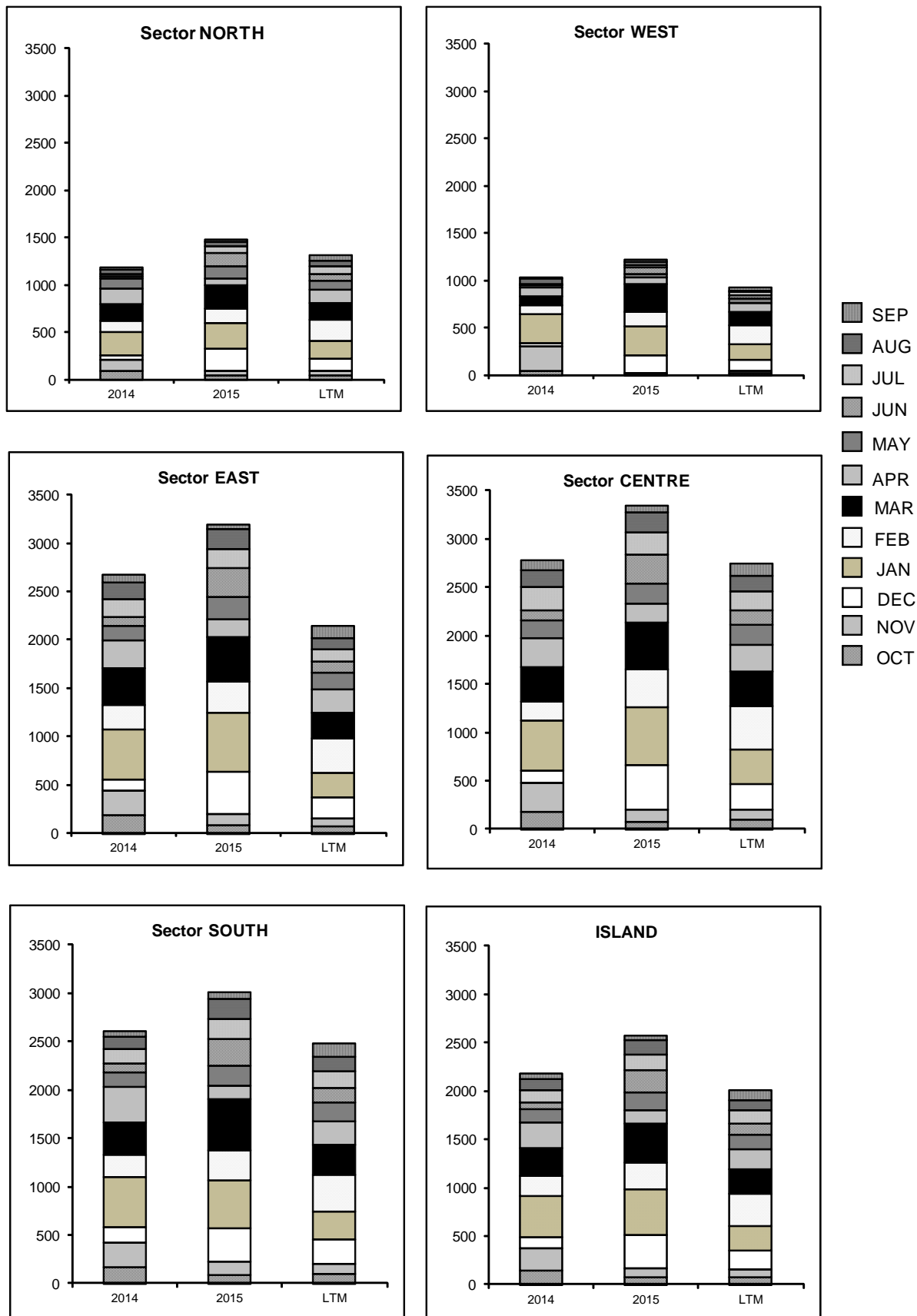
Table 1b. Cumulative rainfall (mm) from October 2014 to September 2015 for crop 2015 compared to that of crop 2014 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2014	1193 (91)	2674 (125)	2613 (105)	1029 (111)	2776 (101)	2180 (108)
2015	1478 (112)*	3193 (149)	3010 (121)	1222 (132)	3346 (122)	2579 (128)
LTM	1314	2146	2482	925	2746	2010

* figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2014 to September 2015 for the 2015 crop compared to the corresponding period of the 2014 crop and to the long term mean (LTM).



1.2 Temperature (Table 2)

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

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Sep 2015	DevN*	Sep 2015	DevN*	Sep 2015	DevN*
Pamplemousses	27.6	+0.8	16.9	+0.1	10.7	+0.7
Réduit	24.6	+1.1	15.1	-0.7	9.5	+2.2
Belle Rive	23.4	+0.6	14.8	+0.3	8.6	+0.3
Union Park	23.6	+1.2	16.7	+0.9	6.9	+0.3

* Deviation from the Normal (1981-2010)

The mean maximum temperature during September 2015 was above normal at all stations. The mean monthly minimum temperature exceeded the normal only at Belle Rive (+0.3°C) and Union Park (+0.9°C) whereas at Pamplemousses it was close to normal and below normal at Réduit (-0.7°C). The resulting mean amplitude was superior to the normal at all stations and was conducive to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during September 2015 were above normal at all stations except at Réduit. Recorded bright sunshine as a percentage of the normal amounted to 110 at Pamplemousses, 93 at Réduit, 119 at Belle Rive and 118 at Union Park. Above normal solar radiation is conducive to photosynthesis and hence to growth and sucrose accumulation.

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

Station	Sep 2015	Normal*	% of Normal
Pamplemousses	257	233	110
Réduit	203	217	93
Belle Rive	235	197	119
Union Park	178	150	118

* Normal (1981-2010)

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

During the last week of September 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.

Table 4a. Average Pol % cane (richesse) at end-September 2015.

Sectors	R 573	R 575	M 387/85	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				15.1	14.1	15.4	16.6			16.3	16.1	15.8
East	16.6			14.3		15.9	14.8			15.1		13.8
South	15.4					15.0	16.4			14.0	13.3	15.2
West	16.7	15.6				15.6	14.7	16.3	15.0	15.9		15.4
Centre			15.5				13.6			13.4		

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

Sectors	AUGUST			SEPTEMBER		
	2013	2014	2015	2013	2014	2015
North	15.0	17.2	13.1	15.3	16.1	15.8
East	14.6	16.9	13.4	14.7	16.0	15.0
South	15.1	16.1	13.6	14.9	15.4	14.8
West	15.2	16.5	14.9	15.9	15.5	15.6
Centre	14.5	15.3	13.2	14.3	15.1	14.1
Island	14.9	16.5	13.5	14.9	15.7	15.1

The *richesse* at end-September 2015 was 15.8% in the North, 15.0% in the East, 14.8% in the South, 15.6% in the West and 14.1% in the Centre. These figures were lower than those obtained at the corresponding period last year by 0.3° in the North, 0.6° South and 1.0° in both the East and Centre. In the West, *richesse* in September 2015 was comparable to that of 2014. Compared to the corresponding period in 2013, *richesse* in September 2015 was inferior by 0.3° in the West and 0.2° in the Centre, comparable in the South but was higher in the North and East by 0.5° and 0.3°, respectively.

During the month of September 2015, *richesse* has improved in all sectors, with an increase of 2.7° in the North, 1.6° in the East, 1.2° in the South, 0.7° in the West and 0.9° in the Centre. For the corresponding period last year, a regression in *richesse* was observed in all sectors. On average for the island, the increase in *richesse* in September was 1.6° in 2015 compared to a decrease of 0.8° observed in 2014 and the stagnation in 2013 for the same period.

Island-wise, the *richesse* of 15.1% at the end of September 2015 was inferior to the 15.7% in 2014 but slightly higher than the 14.9% recorded in 2013.

3. CROP 2015

As at 26 September 2015, 16 837 ha representing about 48% of miller-planters' land had been harvested compared to 17 190 ha (52%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 41% in the North, 53% in the East, 54% in the South, 24% in the West and 51% 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 85.8 TCH for the island as at 26 September 2015 was higher than the 83.7 TCH recorded in 2014 by 2.1 TCH (2.5 %). Sector-wise, the best cane productivity to-date was recorded in the South with 88.3 TCH, followed by the West (87.3 TCH), the East (86.9 TCH), the North (81.3 TCH) and the Centre (77.1 TCH). Compared to the same period in 2014, cane productivity recorded to-date was higher in the East by 4.8 TCH, the South by 1.5 TCH and the Centre by 1.7 TCH, but was comparable in the other sectors.

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

Sectors	End August		End September	
	2014	2015	2014	2015
North	80.5	81.8	80.6	81.3
East	82.2	87.0	82.1	86.9
South	86.8	88.0	86.8	88.3
West	88.5	89.1	88.3	87.3
Centre	75.8	78.3	75.4	77.1
Island	83.7	85.9	83.7	85.8

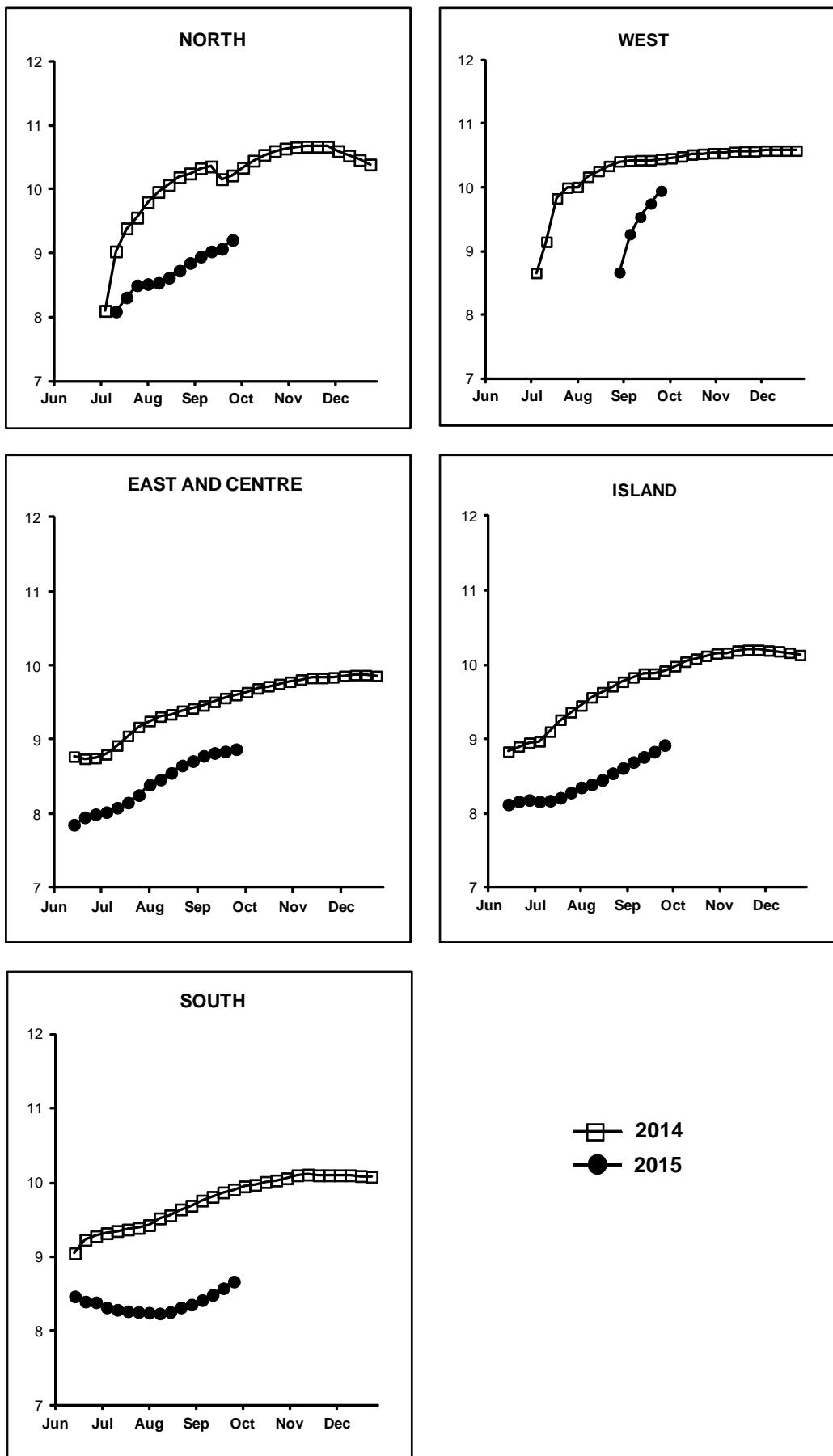
3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 8.69% was lagging behind that of the corresponding period in 2014 (9.83%) by 1.14^o. Sector-wise, extraction rates recorded to-date were 8.95% in the North, 8.78% in the East/Centre, 8.42% in the South and 9.27% in the West. Compared to the corresponding period last year, cumulative extraction rate was inferior in all the sectors by 1.38^o in the North, 0.68^o in the East/Centre, 1.34^o in the South and 1.15^o in the West.

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

Sectors	End August		End September	
	2014	2015	2014	2015
North	10.25	8.85	10.33	8.95
East/Centre	9.42	8.71	9.46	8.78
South	9.69	8.36	9.76	8.42
West	10.41	8.57	10.42	9.27
Island	9.77	8.61	9.83	8.69

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



3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.46 TSH was lower by 0.77 tonne (9.4%) compared to the corresponding period in 2014 (8.23 TSH). Sector-wise sugar productivity amounted to 7.28 TSH in the North, 7.49 TSH in the East-Centre, 7.43 TSH in the South and 8.09 TSH in the West. Compared to the corresponding period in 2014, sugar productivity in 2015 is comparable in sector East/Centre but is lagging behind in the other sectors by 1.05 TSH in the North, 1.04 TSH in the South and 1.11 TSH in the West.

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

Sectors	End August		End September	
	2014	2015	2014	2015
North	8.25	7.24	8.33	7.28
East/Centre	7.62	7.45	7.64	7.49
South	8.41	7.36	8.47	7.43
West	9.21	7.64	9.20	8.09
Island	8.18	7.40	8.23	7.46

4. 2015 CROP PRODUCTIVITY

Weather during the month of September 2015 has been favourable to ripening particularly the below normal rainfall coupled with above normal temperature amplitude and solar radiation. This has contributed to a higher increase in *richesse* during September 2015 compared to the corresponding month of the two previous years. Nevertheless, the overall *richesse* remains below that of last year and this is well translated in the lower extraction rates recorded in all sectors at end-September 2015, giving an overall deficit of 1.14° compared to that in 2014. Moreover, cane productivity over the island in 2015 has stagnated during the past month. Although a slightly higher cane productivity has been observed, the low extraction rate has resulted in sugar yield over the island much lower than that at the same period last year by 0.77 TSH (9.4%). Based on the fact that nearly half of the area has been already harvested and in light of the expected weather conditions that would prevail till the end of this crop season, sugar productivity is expected to lag behind that of last year.