

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2013 Status: End September 2013

1. CLIMATE

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

The island's average rainfall for the month of September 2013 over the sugar cane areas was 39 mm. It represented 48% of the long-term mean (81 mm). Below normal rainfall was recorded in all sectors with 13 mm, 49 mm, 50 mm, 1 mm and 66 mm in the North, East, South, West and Centre respectively. These amounts represented 30% of the long-term mean in the North, 62% in the East, 45% in the South, 5% in the West and 52% in the Centre.

Cumulative rainfall from October 2012 to September 2013 amounted to 1937 mm for the island. This is 5% lower than the island long-term mean of 2043 mm. During the same period 1106 mm were recorded in the North, 2366 mm in the East, 2319 mm in the South, 714 mm in the West and 2478 mm in the Centre. Compared to their respective long-term mean, cumulative rainfall represented 83%, 115%, 91%, 78% and 89% of the respective long-term means.

Table 1a Rainfall (mm) in September for crops 2012, 2013 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
2012	18 (41)	76 (96)	80 (71)	3 (15)	88 (70)	59 (73)
2013	13 (30)*	49 (62)	50 (45)	1 (5)	66 (52)	39 (48)
LTM	44	79	112	20	126	81

* figures in brackets are % of LTM (1971-00)

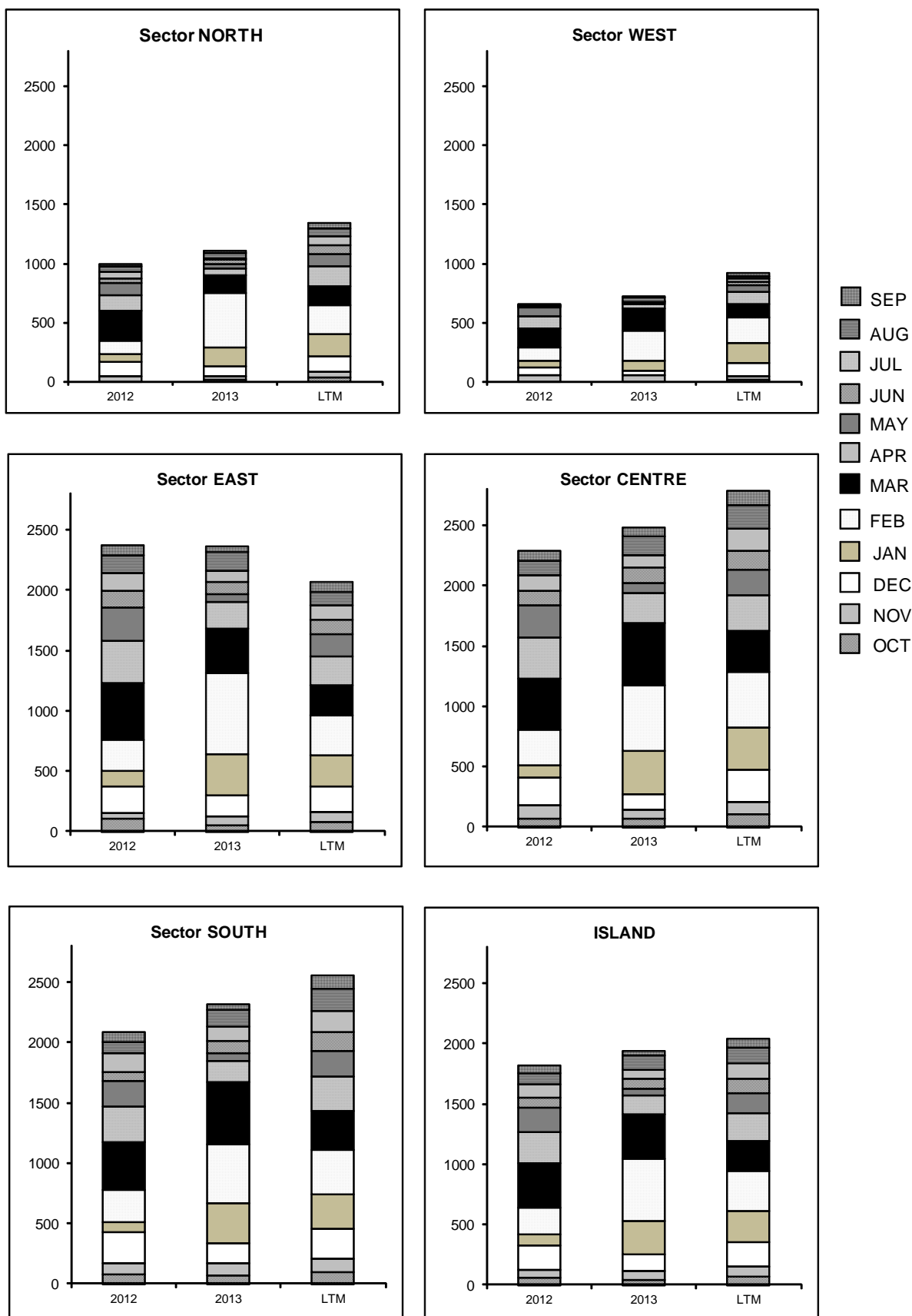
Table 1b Cumulative rainfall (mm) from October 2012 to September 2013 for crop 2013 compared to crop 2012 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
2012	996 (74)	2368 (115)	2084 (81)	649 (71)	2292 (82)	1814 (89)
2013	1106 (83)*	2366 (115)	2319 (91)	714 (78)	2478 (89)	1937 (95)
LTM	1341	2065	2557	918	2789	2043

* figures in brackets are % of LTM (1971-00)

[Source : Mauritius Meteorological Services]

Figure 1 Monthly rainfall (mm) for the period October 2012 to September 2013 for the 2013 crop compared to the corresponding period of the 2012 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 2013 on MSIRI agro-meteorological stations are given below.

The mean monthly maximum temperature was above normal at all stations, the difference ranging from 0.5°C at Belle Rive to 1.3°C at Union Park. The mean minimum temperature was also above normal at all stations except at Réduit. Consequently, the resulting mean amplitude was lower than the normal by 0.3°C at Pamplemousses and 0.2°C at Belle Rive but higher than normal at Réduit and Union Park by 1.5 °C and 0.7°C, respectively.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in September 2013

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplemousses	28.0 (26.8) *	18.3 (16.8)	9.7 (10.0)
Réduit	24.5 (23.5)	15.3 (15.8)	9.2 (7.7)
Belle Rive	23.3 (22.8)	15.2 (14.5)	8.1 (8.3)
Union Park	23.7 (22.4)	16.4 (15.8)	7.3 (6.6)

* figures in brackets are the Normal (1981-2010)

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations during September 2013 showed that above normal sunshine hours were recorded at all stations. Recorded bright sunshine as a % of the normal amounted to 113 at Pamplemousses, 118 at Réduit, 125 at Belle Rive and 126 at Union Park.

Table 3 Sunshine duration (hr) recorded on MSIRI agro-meteorological stations in September 2013

Station	September 2013	Normal (1981-2010)	% of Normal
Pamplemousses	264	233	113
Réduit	256	217	118
Belle Rive	246	197	125
Union Park	189	150	126

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

Cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analyzed for sucrose content during the last week of September 2013. The average pol % cane (*richesse*) was calculated on the basis of area under cultivation of each

variety in the different factory areas of each sector. The results are compared with those of the last two years.

Table 4a Average Pol % Cane (richesse) at end September 2013

Sectors	R 573	R 575	M 1246/84	M 2593/92	M 1400/86	M 1176/77	M 1861/89	R 579	M 3035/66	M 1672/90	R 570
North			15.4	15.8	15.6	15.0		14.2		16.7	14.3
East						14.7		14.4			15.1
South					15.4		16.2	14.3		15.7	14.5
West		16.7		15.3	15.8			15.3			14.2
Centre	14.1							14.3	14.0		14.0

The *richesse* at end-September 2013 stood at 15.3% in the North, 14.7% in the East, 14.9% in the South, 15.9% in the West and 14.3% in the Centre. In comparison to the corresponding period in 2012, sucrose content to-date was similar in the West and Centre but lower by 0.4° in the East and 0.2° in both the North and south. Sucrose content at the end of September 2013 was higher than in September 2011 in the North, West and Centre but comparable in the East and South.

Table 4b Comparison of Pol % Cane (richesse) at the end of August and September 2011, 2012 and 2013

Sectors	AUGUST			SEPTEMBER		
	2011	2012	2013	2011	2012	2013
North	13.3	14.2	15.0	15.1	15.5	15.3
East	13.5	14.6	14.6	14.6	15.1	14.7
South	13.6	14.5	15.1	14.8	15.1	14.9
West	14.4	15.3	15.2	15.4	15.9	15.9
Centre	14.1	14.4	14.5	13.7	14.3	14.3
Island	13.6	14.5	14.9	14.8	15.2	14.9

From end-August 2013 to end-September 2013, *richesse* has regressed by 0.2° in both the South and Centre, was comparable in the East but has improved by 0.3° in the North and 0.7° in the West. During the corresponding period last year, the increments were 1.3° in the North, 0.5° in the East and 0.6° in both the South and the West whereas in the Centre, it was comparable. On average for the island, *richesse* in 2013 has stagnated compared to the increase of 0.7° and 1.2° obtained in 2012 and 2011 respectively for the same period.

Island-wise and for corresponding periods, the *richesse* of 14.9% recorded at the end of September 2013 was lower than that of 2012 (15.2%) by 0.3° but comparable to that of 2011.

3. CROP PRODUCTIVITY 2013

As at 28 September 2013, 18 309 ha, representing 52.8% of miller-planters' land had been harvested compared to 17 984 ha (51.0%) at the same period last year. Sector-wise and for miller-planters only, the harvested area reached 41.6% in the North, 63.3% in the East, 50.1% in

the South, 45.0% in the West and 67.4% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. Owing to the centralization of milling activities and as all the canes from the Centre are crushed at FUEL, harvest statistics relative to extraction rate and sugar productivity have been combined for these two sectors.

3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end of September 2013 reached 75.9 TCH and this was lower than the 78.0 TCH recorded in 2012 by 2.1 TCH (2.7%). Sector-wise, the West recorded the best cane productivity to-date with 83.0 TCH, followed by the South (78.6 TCH), the East (76.1 TCH), the North (71.3 TCH) and the Centre (66.8 TCH). These figures compared to the same period in 2012 lagged behind in the North, East and Centre by 5.8 TCH, 2.0 TCH and 10.9 TCH respectively. In the South and West, cane productivity at end September 2013 was higher than the corresponding period last year by 0.9 TCH and 2.9 TCH.

Table 5a Cane productivity (TCH) as at end August and September for the 2012 and 2013 crops

Sectors	End August		End September	
	2012	2013	2012	2013
North	78.6	71.7	77.1	71.3
East	76.7	75.7	78.1	76.1
South	77.8	79.1	77.7	78.6
West	80.6	79.9	80.1	83.0
Centre	79.0	68.9	77.7	66.8
Island	77.9	75.9	78.0	75.9

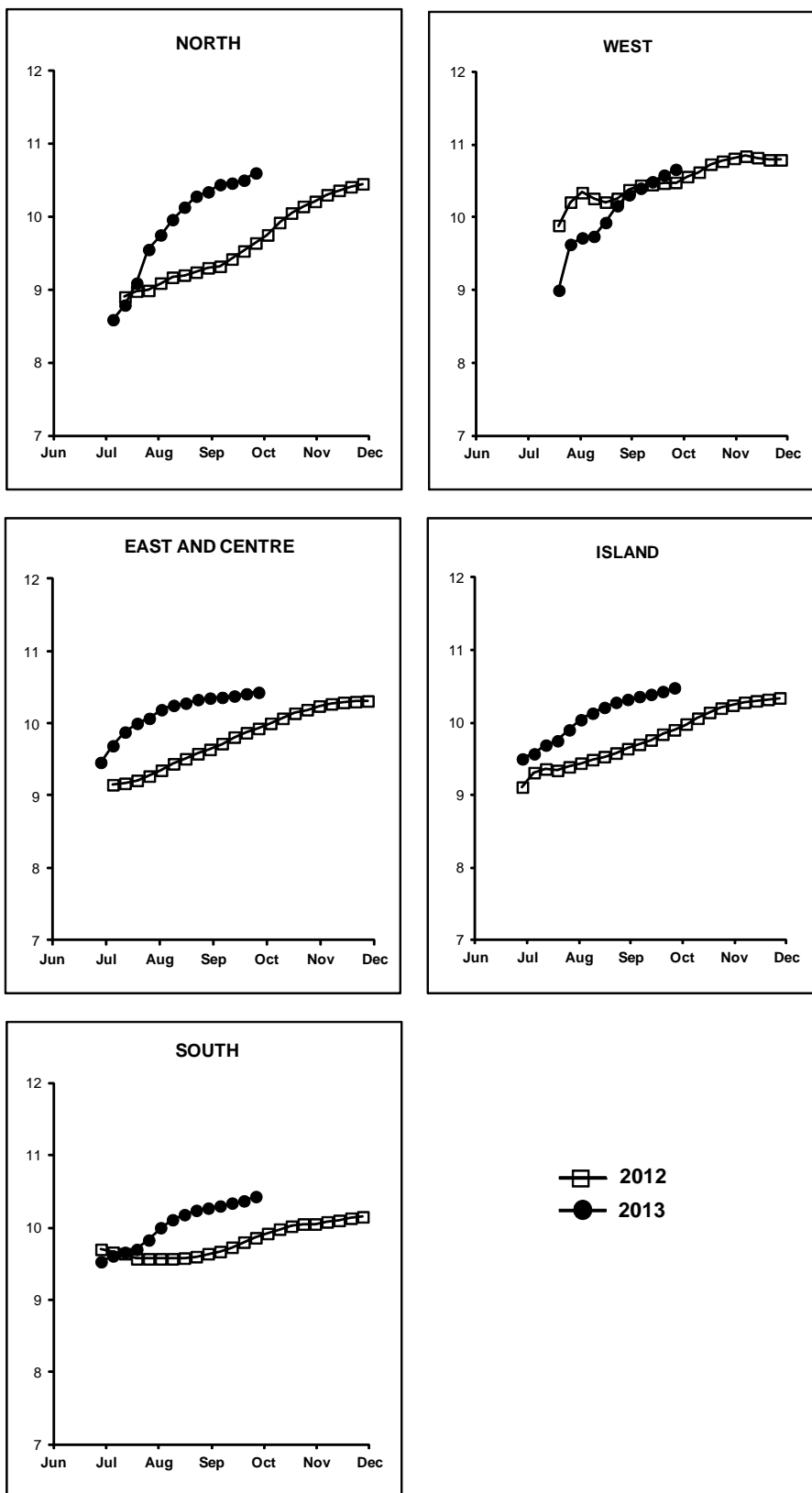
3.2 Extraction (Table 5b, figure 2)

The recorded island extraction rate of 10.48% was higher than that at the corresponding period in 2012 (9.90%) by 0.58%.

Table 5b Cumulative extraction rate (%) as at end August and September for the 2012 and 2013 crops

Sectors	End August		End September	
	2012	2013	2012	2013
North	9.30	10.34	9.64	10.60
East /Centre	9.64	10.35	9.93	10.43
South	9.64	10.27	9.86	10.43
West	10.38	10.31	10.48	10.66
Island	9.64	10.32	9.90	10.48

Figure 2 Evolution of extraction rate (%) for the 2012 and 2013 crops.



Sector-wise, extraction rate cumulated to 10.60% in the North, 10.43% in the East-Centre as well as in the South, and 10.66% in the West. Compared to the corresponding period last year, extraction rate to-date was higher by 0.96° in the North, 0.50° in the East-Centre, 0.57° in the South and 0.18° in the West.

From end August 2013 to end September 2013, extraction has increased by 0.26° in the North, 0.08° in the East-Centre, 0.16° in the South and 0.35° in the West. The average island increase for the same period for the present crop reached 0.16° compared to 0.26° for 2012.

3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.95 TSH was higher than that at the corresponding period in 2012 (7.72 TSH) by 0.23 tonne (3.0%). Sector-wise sugar productivity was 7.56 TSH in the North, 7.75 TSH in the East-Centre, 8.20 TSH in the South and 8.85 TSH in the West. Compared to the corresponding period in 2012, sugar productivity to-date was similar in the East-Centre, but higher by 0.13 TSH in the North, 0.54 TSH in the South and 0.46 TSH in the West.

Table 5c Sugar productivity (TSH) as at end August and September for the 2012 and 2013 crops

Sectors	End August		End September	
	2012	2013	2012	2013
North	7.31	7.41	7.43	7.56
East / Centre	7.42	7.71	7.75	7.75
South	7.50	8.12	7.66	8.20
West	8.37	8.24	8.39	8.85
Island	7.51	7.83	7.72	7.95

4. CROP 2013

With about 53% of the crop harvested on miller-planters' land and according to the milling data, the present cane productivity trend is lagging behind that of last year. The shortfall in cane productivity as at September 2013 is 2.1 TCH and is attributed to the persisting dry weather conditions that have prevailed.

Weather in terms of solar radiation and temperature amplitude during September 2013 was conducive to sucrose accumulation and this is reflected in a better extraction rate throughout the island compared to the same period last year. Thus, sugar productivity in September 2013 exceeded that of last year in all sectors apart from East-Centre where it is similar to last year.

At this period of the year most varieties are showing near to optimum maturity and extraction rate is not expected to increase significantly.

Moreover, the dry conditions that usually prevail during the months of October and November, especially in the rainfed crops of the North, West and the lowland areas of the East and South sectors, are likely to lead to further desiccation of the crop. Consequently, with the decreasing trend in cane productivity coupled with the slow increase in extraction rate, sugar productivity is not expected to improve substantially.