

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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5 August 2011

SUGAR CANE CROP 2011

Status: End July 2011

1. CLIMATE`

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

Rainfall recorded in July over the sugar cane areas of the island was below normal with an average of 105 mm and represented 82% of the long-term mean. In sectors North, South, West and Centre, rainfall was 58 mm, 136 mm, 10 mm and 110 mm respectively and represented 79%, 76%, 40% and 61% of their respective long-term mean. In the East, the 135 mm rain was 16% above the normal (116 mm).

Cumulative rainfall for the period October 2010 to July 2011 amounted to 1694 mm. This is 8% lower than the island long-term mean of 1848 mm. During the same period, a total of 1247 mm was recorded in the North, 2280 mm in the East, 1715 mm in the South, 892 mm in the West and 1724 mm in the Centre. Compared to their respective long-term mean, cumulative rainfall represented 101% in the North, 122% in the East, 76% in the South, 102% in the West and 70% in the Centre.

Table 1a. Rainfall (mm) of July for crops 2010 and 2011 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2010	82 (112)	212 (183)	208 (116)	29 (116)	256 (141)	170 (133)
2011	58 (79)	135 (116)	136 (76)	10 (40)	110 (61)	105 (82)
LTM	73	116	180	25	181	128

* Figures in brackets are % of LTM

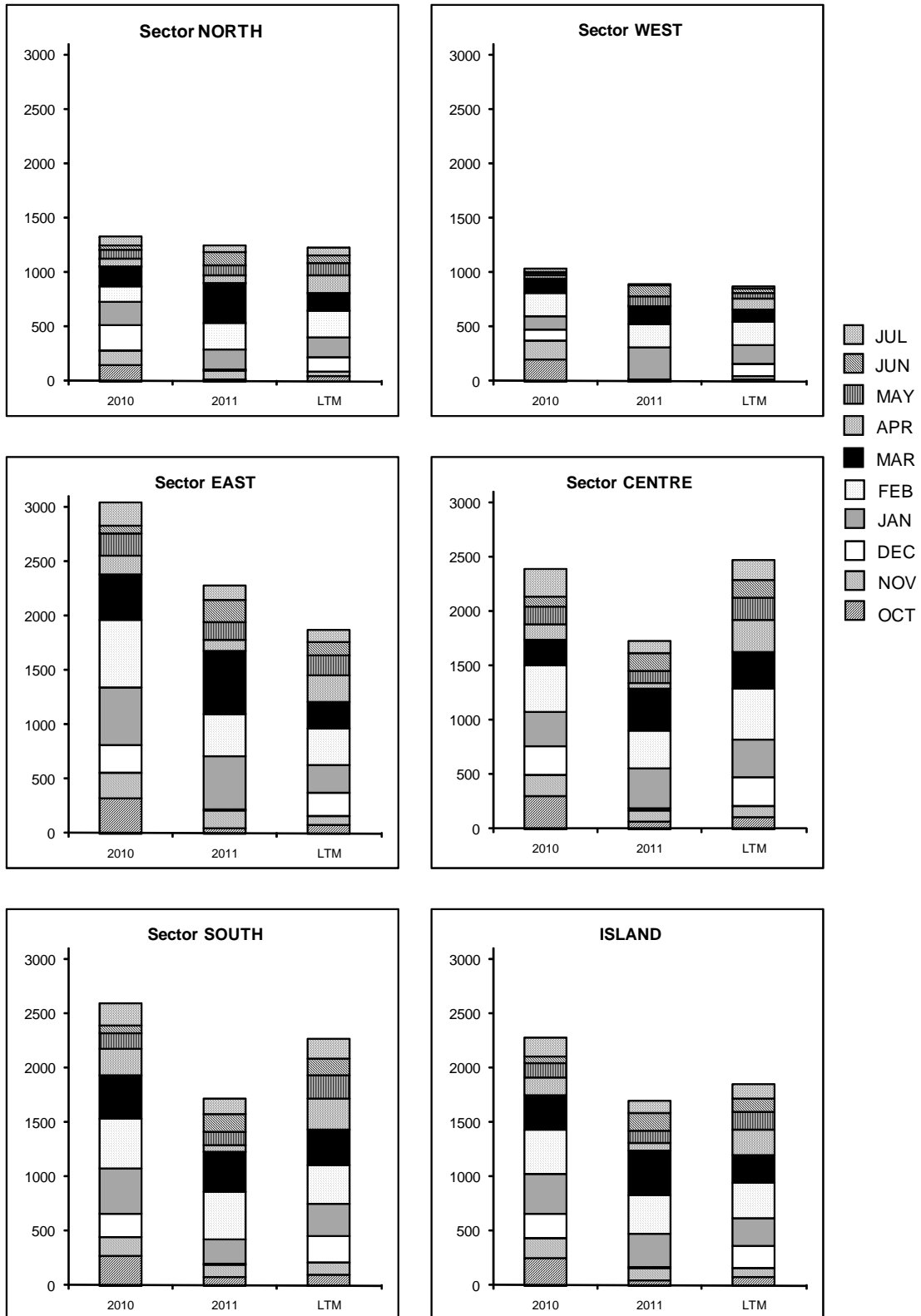
Table 1b. Cumulative rainfall (mm) from October 2010 to July 2011 for crop 2011 compared to that of crop 2010 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2010	1330 (108)	3042 (162)	2598 (115)	1037 (119)	2374 (96)	2279 (123)
2011	1247 (101)	2280 (122)	1715 (76)	892 (102)	1724 (70)	1694 (92)
LTM	1229	1872	2265	872	2472	1848

* Figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period Oct 2010 to July 2011 for crop 2011 compared to the corresponding period of crop 2010 and to the long term mean (LTM)



1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of July 2011 on MSIRI agro-meteorological stations are given below.

Mean monthly maximum temperature was above normal at all stations, the difference ranging from 0.5°C at Pamplémousses to 2.1°C at Union Park. The mean monthly minimum temperature also exceeded the normal at all stations. The resulting mean amplitude was higher than the normal by 1.3°C at Union Park, 1.2°C at Réduit and Pamplémousses and 0.5°C at Belle Rive.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in July 2011

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplémousses	26.0 (25.5) *	16.5 (16.2)	9.5 (9.3)
Réduit	23.6 (22.3)	15.4 (15.3)	8.2 (7.0)
Belle Rive	23.0 (22.0)	14.5 (14.0)	8.5 (8.0)
Union Park	23.5 (21.4)	16.2 (15.4)	7.3 (6.0)

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

1.3 Sunshine (Table 3)

The number of sunshine hours recorded during July 2011 on all MSIRI agro-meteorological stations was higher than the normal. Recorded bright sunshine as a percentage of the normal amounted to 104 at Pamplémousses and Réduit, 126 at Belle Rive and 138 at Union Park.

Table 3. Sunshine duration (hrs) recorded on MSIRI agro-meteorological stations in July 2011

Station	July 2011	Normal	% of Normal
Pamplémousses	246	235	104
Réduit	231	222	104
Belle Rive	236	188	126
Union Park	184	134	138

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 at end July 2011. 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 2010 and 2009.

Table 4a. Average Pol % Cane (richesse) at end-July 2011

Sector	M 3035/66	M 695/69	M 1176/77	M 52/78	M 1246/84	M 387/85	M 1394/86	M 1400/86	M 2256/88	M 703/89	M 1861/89	M 1672/90	M 2593/92	R 570	R 573	R 575	R 579
North			12.4		11.5			11.9	14.4			13.0	13.3	11.2	12.8		12.4
East	13.6		12.8		11.6			12.8	13.6				10.8	12.3	13.8		11.6
South		13.3	13.0	14.0			12.7	11.6			14.7	9.2	13.2	11.4	13.4	13.9	11.8
West			13.6					11.9					11.9	12.2	13.8	14.6	13.4
Centre	12.1	14.1	12.9	15.8		13.2		13.6		14.1				12.0	14.6		13.3

The *richesse* at end-July 2011 was 12.3% in the North, 12.4% in the East, 12.6% in the South, 13.4% in the West and 13.9% in the Centre. Compared to the corresponding period in 2010, *richesse* was inferior by 1.7° in the North, 1.2° in the East, 1.4° in the South and 1.0° in the West. In the Centre, it was higher by 0.4°. Sucrose content at the end of July for the present crop was also lower than that of the corresponding period in 2009 in sectors North, East, South and West by 1.5°, 1.1°, 0.6° and 0.6° respectively. In the Centre, it was higher than that of 2009 by 1.4°.

Table 4b. Comparison of Pol % Cane (richesse) of June and July 2009, 2010 and 2011

Sector	JUNE			JULY		
	2009	2010	2011	2009	2010	2011
North	10.9	12.2	11.3	13.8	14.0	12.3
East	12.6	12.4	11.5	13.5	13.6	12.4
South	11.6	12.7	12.2	13.2	14.0	12.6
West	12.1	13.5	11.5	14.0	14.4	13.4
Centre	12.5	12.6	13.2	12.5	13.5	13.9
Island	11.8	12.6	11.8	13.4	13.9	12.6

From end-June 2011 up to end-July 2011, *richesse* has improved in all sectors, with an increase of 1.9° in the West, 1.0° in the North, 0.9° in the East, 0.7° in the Centre and 0.4° in the South. For the corresponding period last year, the increments recorded were 1.8° in the North, 1.2° in the East, 1.3° in the South and 0.9° in both the West and the Centre. On average for the island, the increase in *richesse* in July was 0.8° in 2011 compared to 1.3° in 2010 and 1.6° in 2009 for the same period.

Island-wise, the *richesse* of 12.6% at the end of July 2011 lagged behind the 13.4% and 13.9% recorded in 2009 and 2010, respectively.

3. CROP 2011

Harvest and milling activities have started in all factory areas. As at 30 July 2011, 7428 ha, representing 20.8% of miller-planters' land had been harvested compared to 7683 ha (21.9%) at the same period last year. Sector-wise and for miller-planters only, the harvested area reached 8.9% in the North, 32.6% in the East, 20.5% in the South, 7.2% in the West and 27.8% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. Because of the centralization of milling activities and since 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 30 July 2011 amounted to 73.9 TCH and was lower than the 83.0 TCH recorded at the same period in 2010 by 9.1 TCH (11%). Sector-wise, the best cane productivity to-date was recorded in the West with 93.2 TCH, followed by the North (81.3 TCH), the South (76.1 TCH), the Centre (71.0 TCH) and the East (70.0 TCH). Compared to the same period in 2010, cane productivity recorded to-date was lower in all sectors. The difference amounted to 6.5 TCH in the North, 8.9 TCH in East, 7.7 TCH in the South, 4.2 TCH in the West and 11.4 TCH in the Centre.

Table 5a. Cane productivity (TCH) as at end July for the 2010 and 2011 crops

	North	East	South	West	Centre	Island
2010	87.8	78.9	83.8	97.4	82.4	83.0
2011	81.3	70.0	76.1	93.2	71.0	73.9

3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.30% was slightly lower than at the corresponding period in 2010 (9.63%) by 0.33%. Sector-wise, it was 8.76% in the North, 9.37% in the East-Centre, 9.31% in the South and 9.82% in the West. Compared to end-July of last year, extraction rate was slightly higher in the South (by 0.03%), slightly lower in the North (by 0.04%) and lower in the East-Centre and West by 0.62% and 0.88% respectively.

Table 5b. Extraction rate (%) as at end July for the 2010 and 2011 crops

	North	East -Centre	South	West	Island
2010	8.80	9.99	9.28	10.70	9.63
2011	8.76	9.37	9.31	9.82	9.30

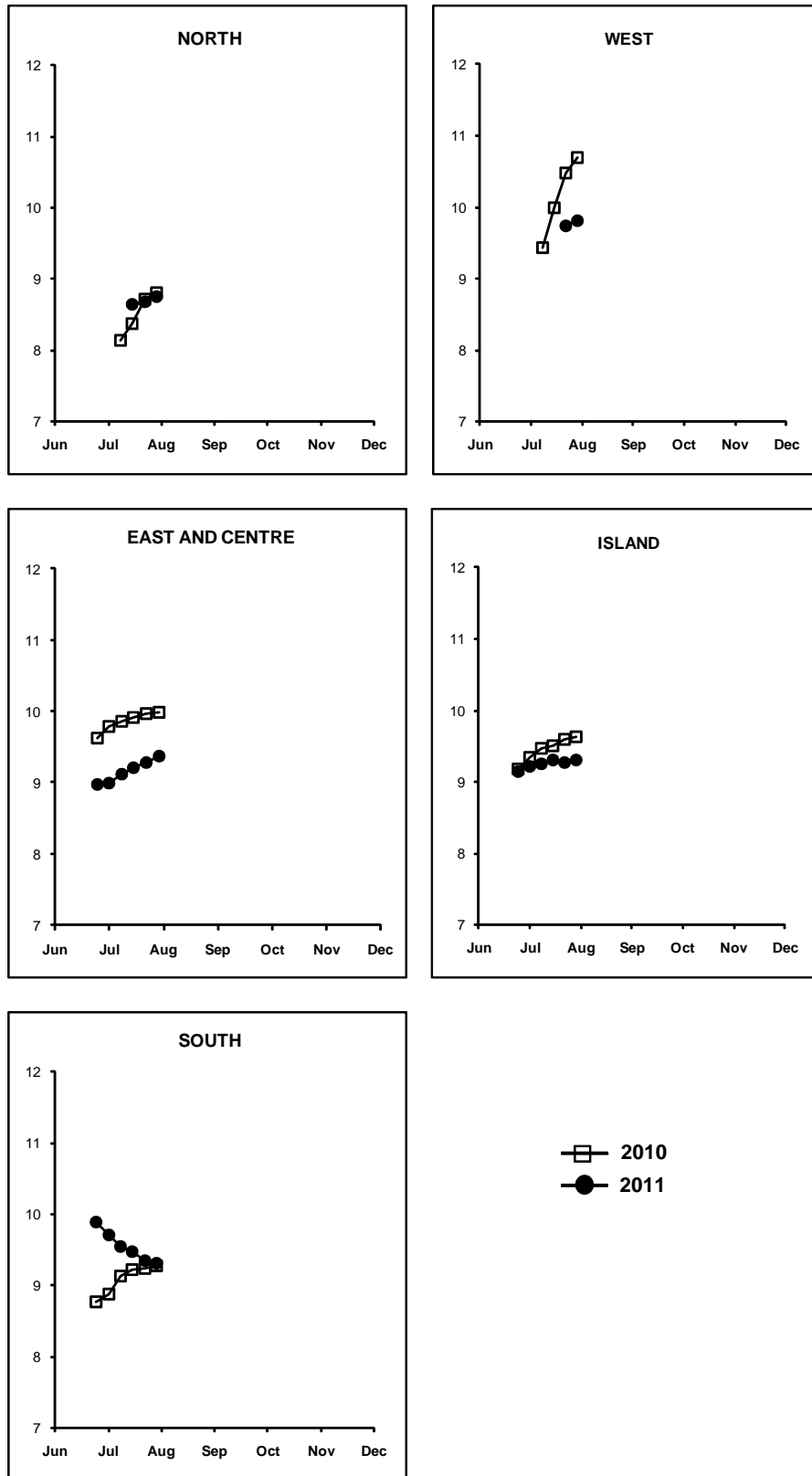
3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 6.87 TSH was much lower than that at the corresponding period in 2010 (7.99 TSH) by 1.12 tonne (14%). Sector-wise sugar productivity was 7.12 TSH in the North, 6.58 TSH in the East-Centre, 7.08 TSH in the South and 9.15 TSH in the West. In all sectors, sugar productivity was lower than that at the corresponding period in 2010, the difference being 0.61 TSH in the North, 1.36 TSH in the East-Centre, 0.70 TSH in the South and 1.27 TSH in the West.

Table 5c. Sugar productivity (TSH) as at end July for the 2010 and 2011 crops

	North	East -Centre	South	West	Island
2010	7.73	7.94	7.78	10.42	7.99
2011	7.12	6.58	7.08	9.15	6.87

Figure 2. Evolution of extraction rate (%) for the 2010 and 2011 crops



4. CROP PRODUCTIVITY 2011

Weather conditions during the month of July had not been favourable to the 2011 crop. Though rainfall, which has been deficient in most sectors, may have been adequate to meet the crop water requirements, the above normal temperatures have been detrimental to sucrose accumulation. As a result, the recorded increase in *richesse* was 0.8° in July 2011 compared to 1.3° in 2010 and 1.6° in 2009 for the same period.

With some 20% of the area of miller planters' land harvested, the harvest statistics is a reflection of the weather recorded during the crop season. Cane productivity was substantially depressed (-9.1%) as a result of the drought that affected the growth during the development phases in the early part of the season. The same drought has also delayed the onset of sucrose accumulation while weather thereafter has not been always optimal for maturation, hence the generally lower extraction rate recorded, which averaged 0.33° less than that of last year at the same period for the island. Sugar productivity, doubly affected by both components of cane yield and extraction rate, is at a significantly lower level, a 14% reduction compared to end-July 2010.