

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2010

Status: End September 2010

1. CLIMATE

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

The island's average rainfall for the month of September 2010 over the sugar cane areas was 64 mm. It represented 77% of the long-term mean (83 mm). Below normal rainfall was recorded in all sectors with 29 mm, 77 mm, 80 mm, 12 mm and 97 mm in the North, East, South, West and Centre respectively. These amounts represented 66% of the long-term mean in the North, 97% in the East, 71% in the South, 60% in the West and 77% in the Centre.

Cumulative rainfall for the period October 2009 to September 2010 was 1464 mm in the North, 3348 mm in the East, 2853 mm in the South, 1078 mm in the West and 2704 mm in the Centre. The average for the island was 2509 mm. They represented 109%, 162%, 112%, 117%, 97% and 122% of the respective cumulative long-term mean of the sectors and of the island.

Table 1a. Rainfall (mm) of September for crops 2009, 2010 and the long-term mean (LTM)

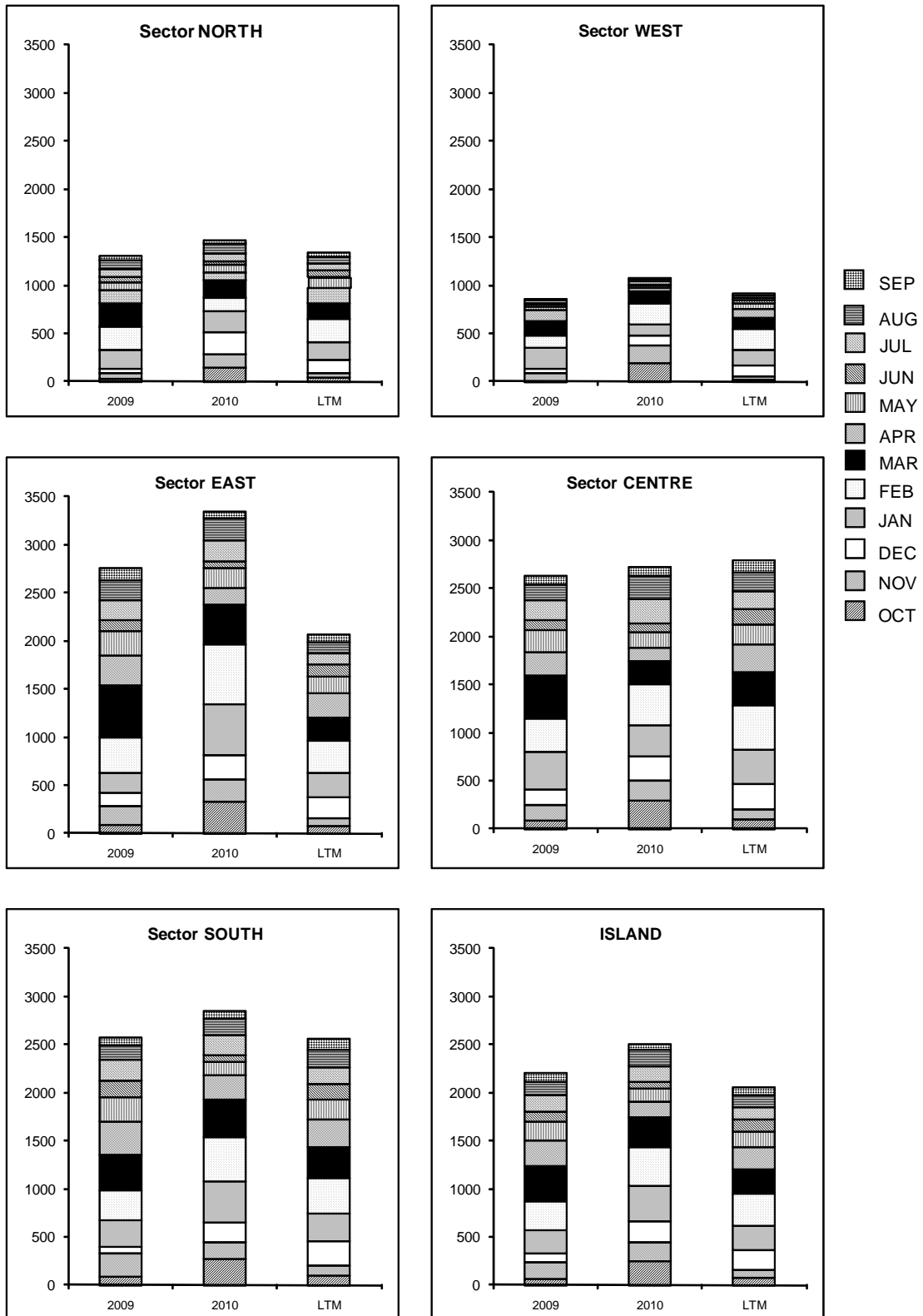
	North	East	South	West	Centre	Island
2009	51 (116)	127 (161)	83 (74)	15 (75)	89 (71)	83 (100)
2010	29 (66)	77 (97)	80 (71)	12 (60)	97 (77)	64 (77)
LTM	44	79	112	20	126	83

* figures in brackets are % of LTM

Table 1b. Cumulative rainfall (mm) from Oct 2009 to September 2010 for crop 2010 compared to that for crop 2009 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
2009	1312 (98)	2762 (134)	2572 (101)	856 (93)	2633 (94)	2201 (107)
2010	1464 (109)	3348 (162)	2853 (112)	1078 (117)	2704 (97)	2509 (122)
LTM	1341	2065	2557	918	2790	2059

Figure 1. Monthly rainfall (mm) for period Oct 2009 to September 2010 for the 2010 crop compared to that of the same period for crop 2009 and of the long-term mean (LTM).



1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of September 2010 on MSIRI agro-meteorological stations are given below.

The mean maximum temperature was close to the normal at Pamplémousses but higher by 0.9 °C at Réduit, 1.0 °C at Belle Rive and 2.1 °C at Union Park. The mean minimum temperature was below normal at Pamplémousses by 0.7 °C. At Réduit, it was close to the normal whereas at Belle Rive and Union Park it exceeded the normal by 1.1 °C and 1.0 °C, respectively. The resulting mean amplitude was above normal at all stations except at Belle Rive where it was similar to the normal.

Table 2 Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in September 2010

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplémousses	26.8 (26.9) *	15.9 (16.6)	10.9 (10.3)
Réduit	24.2 (23.3)	15.6 (15.7)	8.6 (7.6)
Belle Rive	23.7 (22.7)	15.3 (14.2)	8.4 (8.4)
Union Park	24.3 (22.2)	16.3 (15.3)	8.0 (6.9)

* figures in brackets are the Normal (1971-00)

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during September 2010 were below normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 97 at Pamplémousses, 91 at Réduit, 95 at Belle Rive and 98 at Union Park.

Table 3 Sunshine duration (hrs) recorded on MSIRI agro-meteorological stations in September 2010

Station	September 2010	Normal	% of Normal
Pamplémousses	218	224	97
Réduit	199	219	91
Belle Rive	185	196	95
Union Park	147	150	98

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. 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 2010.

Sectors	R 573	M 695/69	R 575	M 387/85	M 1246/84	M 1400/86	M 1176/77	R 579	M 3035/66	R 570
North					14.2	15.3	15.1	13.8		15.0
East					14.0	15.9	15.3	14.1	15.7	13.7
South	16.3					15.1	16.4	14.9	15.9	15.1
West	15.6	16.3	15.7	15.9		15.9	16.8			15.9
Centre				14.1			15.1	12.3	14.0	13.6

Table 4b. Comparison of Pol % Cane (richesse) at end of August and September 2008, 2009 and 2010.

Sectors	AUGUST			SEPTEMBER		
	2008	2009	2010	2008	2009	2010
North	13.7	14.4	14.8	14.7	15.0	14.9
East	14.8	14.6	14.5	15.1	15.4	14.7
South	14.3	14.1	14.9	14.3	14.7	15.5
West	14.9	14.8	15.7	15.2	15.0	16.0
Centre	13.8	13.4	13.8	14.1	14.2	13.8
Island	14.3	14.3	14.7	14.7	14.9	15.0

The *richesse* at end-September 2010 was 14.9% in the North, 14.7% in the East, 15.5% in the South, 16.0% in the West and 13.8% in the Centre. Compared to the corresponding period in 2009, *richesse* was comparable in the North, lower in the East and Centre by 0.7° and 0.4°, but higher by 0.8° in the South and by 1.0° in the West. As opposed to the same period in 2008, sucrose content at end September 2010 was higher in sectors North, South and West by 0.2°, 1.2° and 0.8° respectively. It was lower than that of 2008 by 0.4° in the East and 0.3° in the Centre.

From end-August 2010 to end-September 2010, *richesse* has improved in sectors South, West and East by 0.6°, 0.3° and 0.2° respectively. In the North, the increase was negligible (0.1°) whereas in the Centre *richesse* stagnated. For the corresponding period last year, the increments were 0.6° in the North, 0.8° in the East, 0.6° in the South, 0.2° in the West and 0.8° in the Centre. Thus, on average for the island, the increase in *richesse* of 0.3° in 2010 was lower than that recorded in 2009 (0.4°) and 2008 (0.6°).

Island-wise, the *richesse* of 15.0% recorded at the end of September 2010 exceeded that of the corresponding period for crop 2009 by 0.1° and that of 2008 by 0.3°.

3. CROP 2010

As at 25 September 2010, 18 572 ha representing about 52% of miller-planters' land had been harvested compared to 18 727 ha (54%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 37% in the North, 57% in both the East and the South, 54% in the West and 53% in the Centre. An analysis of cane and sugar productivity based on the

harvest statistics for miller-planters 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)

As at 25 September 2010, cane productivity for the island amounted to 84.3 TCH and was higher than the 83.7 TCH recorded at the same period in 2009 by 0.6 TCH. Sector-wise, the best cane productivity was recorded in the West with 95.2 TCH, followed by the North (91.2 TCH), the South (84.3 TCH), the East (79.8 TCH) and the Centre (75.8 TCH). Compared to the same period in 2009, recorded cane productivity was lower in the East and the Centre by 2.9 TCH and 0.3 TCH respectively. In the other three sectors, cane productivity at the end of September 2010 exceeded that of 2009 by 9.1 TCH in the North, 0.7 TCH in the South and 1.6 TCH in the West.

Table 5a Cane productivity (TCH) as at end August and September for the 2009 and 2010 crops

Sectors	End August		End September	
	2009	2010	2009	2010
North	84.3	93.0	82.1	91.2
East	83.9	80.2	82.7	79.8
South	84.1	83.8	83.6	84.3
West	97.4	97.0	93.6	95.2
Centre	79.2	78.1	76.1	75.8
Island	85.2	84.4	83.7	84.3

4.2 Extraction (Table 5b and Figure 2)

The recorded cumulative island extraction rate of 10.01% was similar to that at the corresponding period in 2009. Sector-wise, the cumulative extraction rates recorded to-date were 9.45% in the North, 10.27% in the East-Centre, 9.75% in the South and 11.06% in the West. Compared to the corresponding period last year, extraction rate was comparable in the North but was higher in sectors East-Centre by 0.09° and West by 0.40°. In the South, the extraction rate was below that of last year by 0.14°.

Figure 2. Evolution of extraction rate (%) for the 2009 and 2010 crops.

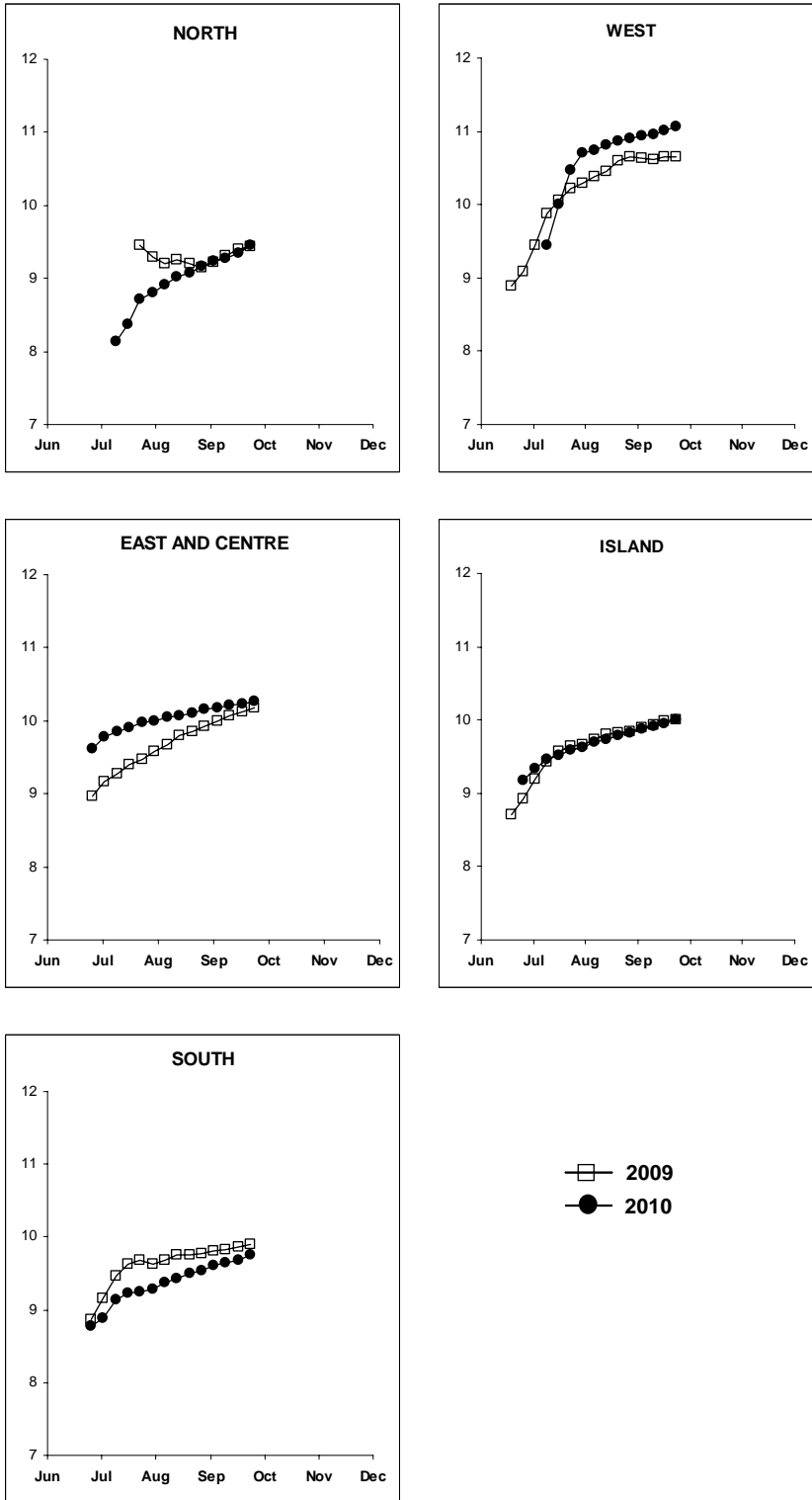


Table 5b Cumulative Extraction rate (%) as at end August and end September for the 2009 and 2010 crops

Sectors	End August		End September	
	2009	2010	2009	2010
North	9.15	9.17	9.44	9.45
East / Centre	9.92	10.15	10.18	10.27
South	9.78	9.53	9.89	9.75
West	10.65	10.91	10.66	11.06
Island	9.85	9.83	10.01	10.01

4.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 8.44 TSH was higher than that at the corresponding period in 2009 (8.38 TSH) by 0.06 tonne. Sector-wise sugar productivity was 8.62 TSH in the North, 8.12 TSH in the East-Centre, 8.22 TSH in the South and 10.53 TSH in the West. Compared to the corresponding period in 2009, sugar productivity at end-September 2010 lagged by 0.13 TSH in the East-Centre and by 0.05 TSH in the South whereas in the North and West it was higher by 0.87 TSH and 0.55 TSH respectively.

Table 5c Sugar productivity (TSH) as at end August and end September for the 2009 and 2010 crops

Sectors	End August		End September	
	2009	2010	2009	2010
North	7.71	8.53	7.75	8.62
East / Centre	8.20	8.48	8.25	8.12
South	8.22	7.99	8.27	8.22
West	10.37	10.58	9.98	10.53
Island	8.39	8.30	8.38	8.44

5. CROP 2010 PRODUCTIVITY

The month of September was marked by a weather regime more favourable to sucrose accumulation rather than to growth on account of the lower rainfall in all sectors. As a result, the existing deficit of 0.02° in extraction rate at end-August has been made up for during the month of September and a similar extraction rate to that of September 2009 has been recorded. Compared to 2009, the tendency for cane yield has changed from a deficit of 0.8 TCH at the end of August 2010 to an advantage of 0.6 TCH at end-September 2010. Still when compared to the corresponding months in 2009, the combined effect of the extraction rate and cane yield advantage has resulted in an upturn in sugar productivity from a lag of 0.09 TSH at the end of August 2010 to an advantage of 0.06 TSH by the end of September 2010.