

# MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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## SUGAR CANE CROP 2010

**Status: End July 2010**

### 1. CLIMATE

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

The island's average rainfall for the month of July 2010 was 170 mm over the sugar cane areas and it represented 133% of the long-term mean (128 mm). Rainfall for the month of July exceeded the long-term mean by 12% in the North (82 mm), 83% in the East (212 mm), 16% in the South (208 mm) and West (29 mm), and 41% in the Centre (256 mm).

Cumulative rainfall for the period October 2009 to June 2010 amounted to 1330 mm in the North, 3042 mm in the East, 2598 mm in the South, 1037 mm in the West and 2374 mm in the Centre. The average cumulative rainfall for the same period for the island was 2279 mm. It represented 108%, 163%, 115%, 119%, 96% and 123% of the long-term mean of the respective sector and of the island.

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

	North	East	South	West	Centre	Island
<b>2009</b>	79 (108)	204 (176)	217 (121)	14 (56)	205 (113)	164 (128)
<b>2010</b>	<b>82</b> (112)	<b>212</b> (183)	<b>208</b> (116)	<b>29</b> (116)	<b>256</b> (141)	<b>170</b> (133)
<b>LTM</b>	73	116	180	25	181	128

\* figures in brackets are % of LTM

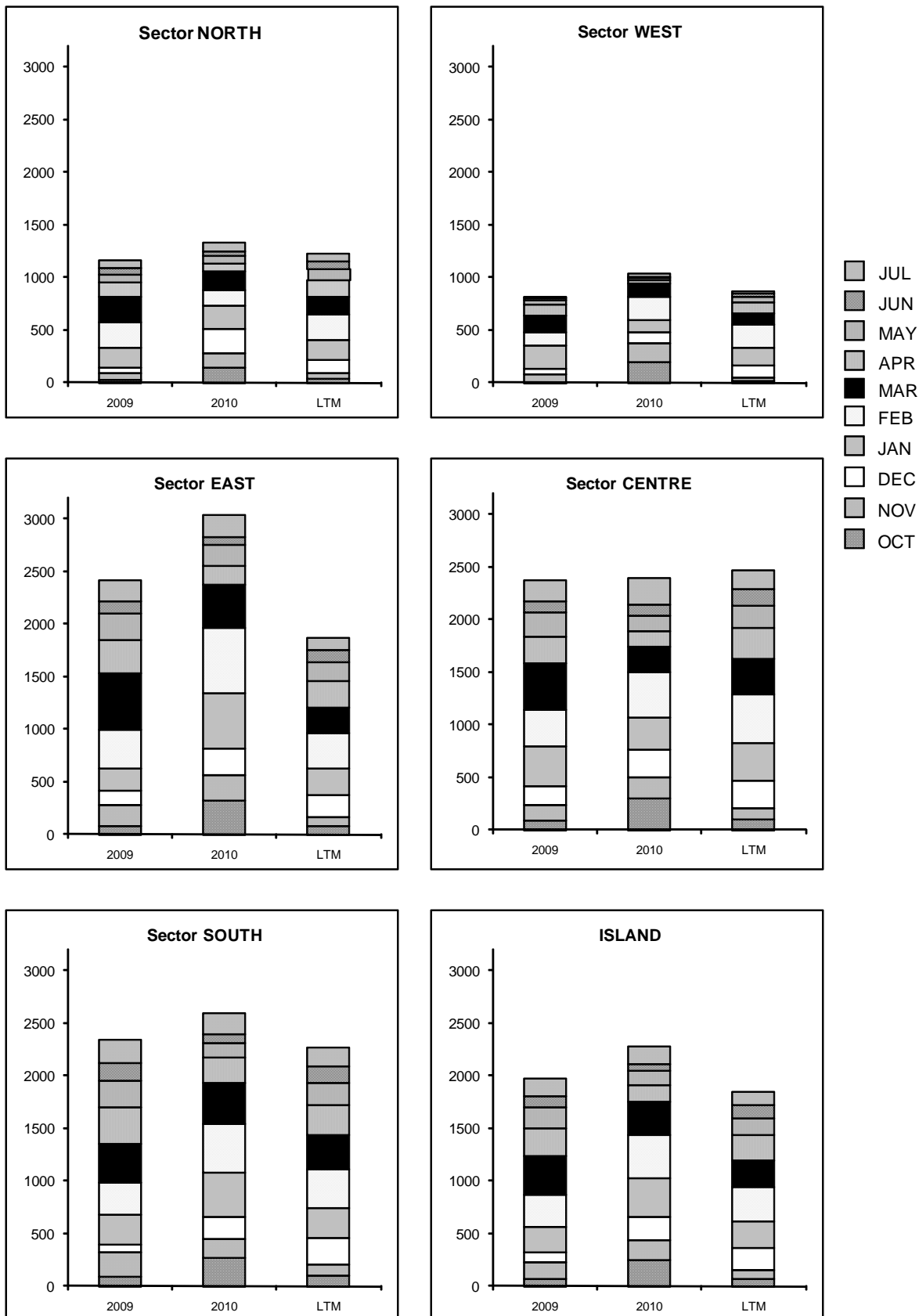
**Table 1b. Cumulative rainfall (mm) from Oct 2009 to July 2010 for crop 2010 compared to that for crop 2009 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2009</b>	1167 (95)	2420 (129)	2339 (103)	817 (94)	2378 (96)	1972 (107)
<b>2010</b>	<b>1330</b> (108)	<b>3042</b> (163)	<b>2598</b> (115)	<b>1037</b> (119)	<b>2374</b> (96)	<b>2279</b> (123)
<b>LTM</b>	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 period Oct 2009 to July 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 July 2010 on MSIRI agro-meteorological stations are given below.

The mean maximum temperature was close to the normal at Pamplemousses but it exceeded the normal by 2.0 °C at Réduit and 1.3 °C at both Union Park and at Belle Rive. Above normal mean minimum temperature was also recorded at Réduit (1.2 °C), Union Park (1.0 °C) and Belle Rive (0.9 °C) whereas at Pamplemousses it was similar to the normal. The resulting mean amplitude was close to the normal at Pamplemousses and above at Réduit, Union Park and Belle Rive.

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

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
<b>Pamplemousses</b>	<b>25.6</b> (25.7) *	<b>16.0</b> (16.0)	<b>9.6</b> (9.7)
<b>Réduit</b>	<b>24.4</b> (22.4)	<b>16.5</b> (15.3)	<b>7.9</b> (7.1)
<b>Belle Rive</b>	<b>23.2</b> (21.9)	<b>14.9</b> (14.0)	<b>8.3</b> (7.9)
<b>Union Park</b>	<b>22.8</b> (21.5)	<b>16.2</b> (15.2)	<b>6.6</b> (6.3)

\* 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 July 2010 were above normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 107 at Pamplemousses, 103 at Réduit, 120 at Belle Rive and 102 at Union Park.

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

Station	July 2010	Normal	% of Normal
<b>Pamplemousses</b>	254	238	107
<b>Réduit</b>	227	221	103
<b>Belle Rive</b>	224	186	120
<b>Union Park</b>	140	138	102

## 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-July 2010.**

Sectors	M 52/78	M 703/89	R 573	M 695/69	R 575	M 387/85	M 1246/84	M 2256/89	M 2593/92	M 1400/86	M 1176/77	R 579	M 1394/86	M 3035/66	R 570
North			16.8				12.7		14.0	13.4	14.6	11.8			14.2
East			14.7	14.1		15.2	12.9	13.9		13.9	14.5	12.5		13.8	12.7
South	15.0	13.6	14.5	14.2	15.2					13.6	14.9	13.3	12.8	13.3	13.4
West			15.0	15.3	15.2	14.0				13.4	13.9	14.4			13.6
Centre	15.9	13.6				14.0				12.9	12.7	11.8		11.8	11.0

**Table 4b Comparison of Pol % Cane (richesse) at end of June and July 2008, 2009 and 2010.**

Sectors	JUNE			JULY		
	2008	2009	2010	2008	2009	2010
North	11.4	10.9	12.2	13.0	13.8	14.0
East	12.7	12.6	12.4	14.2	13.5	13.6
South	11.3	11.6	12.7	13.7	13.2	14.0
West	11.3	12.1	13.5	14.2	14.0	14.4
Centre	12.3	12.5	12.6	13.2	12.5	13.5
Island	<b>11.8</b>	<b>11.8</b>	<b>12.6</b>	<b>13.7</b>	<b>13.4</b>	<b>13.9</b>

The *richesse* at end-July 2010 amounted to 14.0% in the North, 13.6% in the East, 14.0% in the South, 14.4% in the West and 13.5% in the Centre. Compared to the corresponding period in 2009, *richesse* was comparable in the North and East but higher in the other sectors, the increment being 0.8° in the South, 0.4° in the West and 1.0° in the Centre. Sucrose content at the end of July for the present crop was also higher than that of the corresponding period in 2008 in sectors North (1.0°), South (0.3°), West (0.2°) and Centre (0.3°). In the East, *richesse* lagged behind that of 2008 by 0.6°.

*Richesse* has improved in all sectors during the past month. The highest increment of 1.8° was observed in the North followed by 1.3° in the South, 1.2° in the East and 0.9° in both the West and Centre. For the corresponding period in 2009, the increments were 2.9° in the North, 0.9° in the East, 1.6° in the South and 1.9° in the West whereas in the Centre it remained stable. On average for the island, *richesse* increased by 1.9° in 2008 and 1.6° in 2009 compared to 1.3° in 2010 for the same period.

Island-wise, the *richesse* of 13.9% recorded at the end of July 2010 was higher than those of the corresponding period for crops 2009 and 2008 by 0.5° and 0.2°.

### 3. CROP 2010

As at 31 July 2010, 7678 ha representing about 22% of miller-planters' land had been harvested compared to 8429 ha (24%) at the same period last year. Sector-wise and for miller-planters

only, harvested area reached 9% in the North, 28% in the East, 26% in the South, 15% in the West and 22% 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)

Cane productivity for the island as at 31 July 2010 amounted to 83.0 TCH and was lower than the 85.0 TCH recorded in 2009 by 2.0 TCH (2.4%). Sector-wise, the best cane productivity to-date was recorded in the West with 97.4 TCH, followed by the North (87.7 TCH), South (83.8), Centre (82.4 TCH) and the East (78.9 TCH). Compared to the same period in 2009, cane productivity recorded to-date was lower in the East by 4.5 TCH, comparable in the South and Centre whereas in the North and West it was higher by 6.0 TCH and 0.8 TCH respectively.

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

	North	East	South	West	Centre	Island
<b>2009</b>	81.7	83.4	83.8	96.6	82.5	85.0
<b>2010</b>	87.7	78.9	83.8	97.4	82.4	83.0

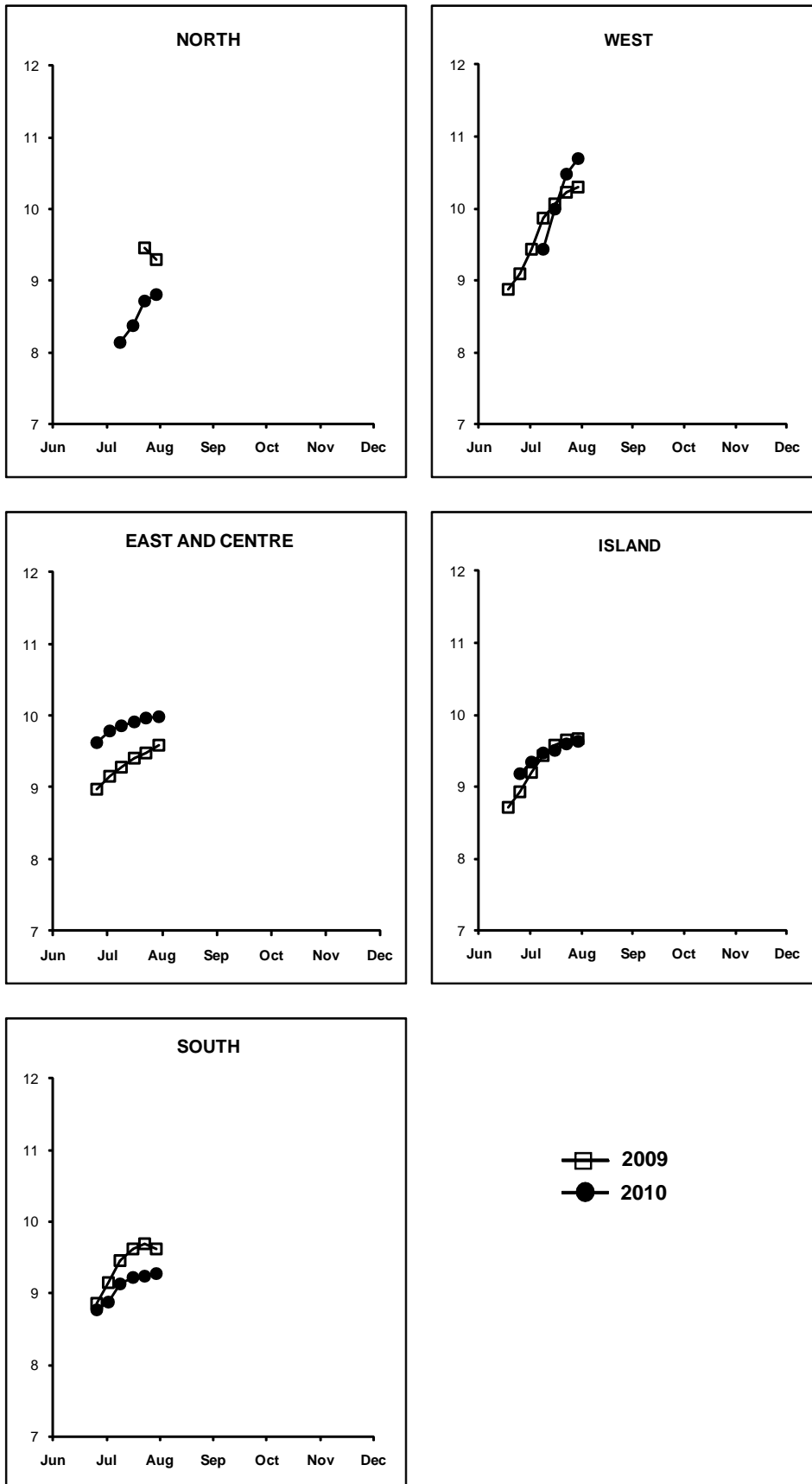
### 4.2 Extraction (Table 6b and Figure 2)

The recorded island extraction rate of 9.63% was lower than at the corresponding period in 2009 (9.67%) by 0.04°. Sector-wise, extraction rates recorded to-date were 8.80% in the North, 9.99% in the East-Centre, 9.28% in the South and 10.70% in the West. Compared to the corresponding period last year, extraction rate to-date was higher in sectors East-Centre by 0.41° and West by 0.40° whereas in the North and South sectors it was lagging behind by 0.50° and 0.34°, respectively.

**Table 5b Extraction rate (%) as at end July for the 2009 and 2010 crops**

	North	East -Centre	South	West	Island
<b>2009</b>	9.30	9.58	9.62	10.30	9.67
<b>2010</b>	8.80	9.99	9.28	10.70	9.63

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



### 4.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.99 TSH was lower than at the corresponding period in 2009 (8.22 TSH) by 0.23 tonne (2.8%). Sector-wise sugar productivity was 7.72 TSH in the North, 7.94 TSH in the East-Centre, 7.78 TSH in the South and 10.42 TSH in the West. Compared to the corresponding period in 2009, sugar productivity at end-July 2010 lagged by 0.08 TSH in the East-Centre and 0.28 TSH in the South but was higher in the North and West by 0.12 TSH and 0.47 TSH respectively.

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

	North	East -Centre	South	West	Island
<b>2009</b>	7.60	8.02	8.06	9.95	8.22
<b>2010</b>	7.72	7.94	7.78	10.42	7.99

## 5. CROP 2010 PRODUCTIVITY

Weather during the month of July has been more favourable to growth than to maturation with above normal rainfall and temperatures over most of the sugarcane areas. This is clearly reflected in the incremental gain in sucrose accumulation in July 2010 being lower than during the corresponding months of the last two years. Similarly and because of the non-conducive weather conditions experienced during July 2010, extraction rate did not progress. However, there is still room for further sucrose accumulation if normal winter conditions prevail in the coming months.