

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Ref A 1/2010

9 November 2010

SUGAR CANE CROP 2010

Status: End October 2010

1. CLIMATE

1.1 Rainfall (Table 1)

Rainfall recorded during the month of October 2010 over the cane areas of the island amounted to 49 mm, which represented 69% of the long term mean (72 mm) for the month. Rainfall was below the long-term mean in all sectors with 20 mm in the North, 45 mm in the East, 80 mm in the South, only 1 mm in the West and 70 mm in the Centre. These amounts represented 50%, 61%, 83%, 5% and 68% of the respective long-term means.

October is known to be a dry month. In the North, East and West, crop water requirements have not been met except in areas benefiting from sufficient irrigation.

Table 1. Rainfall in mm and as a percentage of the long term mean (LTM) for Aug, Sep and Oct during crops 2009 and 2010

	Crop	North	East	South	West	Centre	Island
<i>AUGUST</i>	2009	94 (138)	215 (189)	150 (83)	24 (92)	166 (86)	146 (114)
	2010	105 (154)	229 (201)	175 (97)	29 (112)	233 (121)	167 (131)
	LTM	68	114	180	26	192	128
<i>SEPTEMBER</i>	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
<i>OCTOBER</i>	2009	147 (359)	326 (441)	266 (277)	195 (1083)	296 (290)	252 (352)
	2010	20 (50)	45 (61)	80 (83)	1 (5)	70 (68)	49 (69)
	LTM	41	74	96	18	102	72

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

1.2 Temperature (Table 2)

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

The mean maximum temperature was above normal at all stations, the difference being 0.3 °C at Pamplémousses, 0.8 °C at Réduit, 1.6 °C at Belle Rive and 2.1 °C at Union Park. Above normal mean minimum temperature was also recorded at all stations, the difference ranging from 0.2 °C to 1.4 °C. The resulting mean amplitude was above normal at Réduit and at Union Park whereas at Pamplémousses and Belle Rive, it was close to the normal.

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

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplémousses	28.7 (28.4) *	17.9 (17.7)	10.8 (10.7)
Réduit	25.7 (24.9)	17.1 (16.9)	8.6 (8.0)
Belle Rive	25.4 (23.8)	16.7 (15.3)	8.7 (8.5)
Union Park	25.7 (23.6)	17.6 (16.4)	8.1 (7.2)

* figures in brackets are the Normal (1971-2000)

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during October 2010 were above normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 108 at Pamplémousses, 111 at Réduit, 114 at Belle Rive and 115 at Union Park.

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

Station	October 2010	Normal	% of Normal
Pamplémousses	274	254	108
Réduit	275	247	111
Belle Rive	240	211	114
Union Park	209	182	115

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-October 2010.

Sectors	R 575	M 387/85	M 1246/84	M 1400/86	M 1176/77	R 579	M 3035/66	R 570
North			15.8	16.0	16.3	15.4		15.9
East			14.9		16.5	15.0	16.2	16.1
South				16.8		16.1		16.7
West	16.0	14.7		16.0				15.0
Centre		14.6				14.3	15.0	14.9

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

Sectors	SEPTEMBER			OCTOBER		
	2008	2009	2010	2008	2009	2010
North	14.7	15.0	14.9	14.4	15.7	16.0
East	15.1	15.4	14.7	15.4	15.9	15.6
South	14.3	14.7	15.5	14.5	15.1	16.5
West	15.2	15.0	16.0	15.6	16.3	15.6
Centre	14.1	14.2	13.8	14.2	14.9	14.7
Island	14.7	14.9	15.0	14.7	15.5	15.9

The *richesse* at end-October 2010 was 16.0% in the North, 15.6% in the East, 16.5% in the South, 15.6% in the West and 14.7% in the Centre. Compared to the corresponding period in 2009, *richesse* for the present crop was higher in the North and South by 0.3° and 1.4° respectively. It was lower by 0.3° in the East, 0.7° in the West and 0.2° in the Centre. In comparison to the same period in 2008, sucrose content at end October 2010 was similar in the West but higher in all the other sectors, the difference ranging from 0.2° in the East to 2.0° in the South.

During the month of October, *richesse* for the present crop increased by 1.1° in the North, 0.9° in the East, 1.0° in the South and 0.9° in the Centre. In the West, a decrease of 0.4° was recorded. For the corresponding period last year, the increases were 0.7° in the North, 0.5° in the East, 0.4° in the South, 1.3° in the West and 0.7° in the Centre.

Island-wise, the *richesse* of 15.9% at the end of October 2010 was higher than the 15.5% for the corresponding period in 2009 and the 14.7% recorded in 2008.

3. CROP 2010

As at 23 October 2010, 25 037 ha representing about 70% of miller-planters' land had been harvested compared to 24 017 ha (69%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 56% in the North, 73% in the East, 75% in the South, 76%

in the West and 69% 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 23 October 2010, cane productivity for the island amounted to 83.0 TCH, a level comparable to that recorded at the same period in 2009. Sector-wise, the best cane productivity was recorded in the West with 95.3 TCH, followed by the North (85.8 TCH), the South (82.9 TCH), the East (79.8 TCH) and the Centre (73.3 TCH). Compared to the same period in 2009, recorded cane productivity was lower in the East, South and Centre by 2.4 TCH, 0.8 TCH and 1.2 TCH respectively. In the other two sectors, cane productivity at the end of October 2010 exceeded that of 2009 with an advantage of 4.2 TCH in the North and 3.0 TCH in the West.

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

Sectors	End September		End October	
	2009	2010	2009	2010
North	82.1	91.2	81.6	85.8
East	82.7	79.8	82.2	79.8
South	83.6	84.3	83.7	82.9
West	93.6	95.2	92.3	95.3
Centre	76.1	75.8	74.5	73.3
Island	83.7	84.3	83.1	83.0

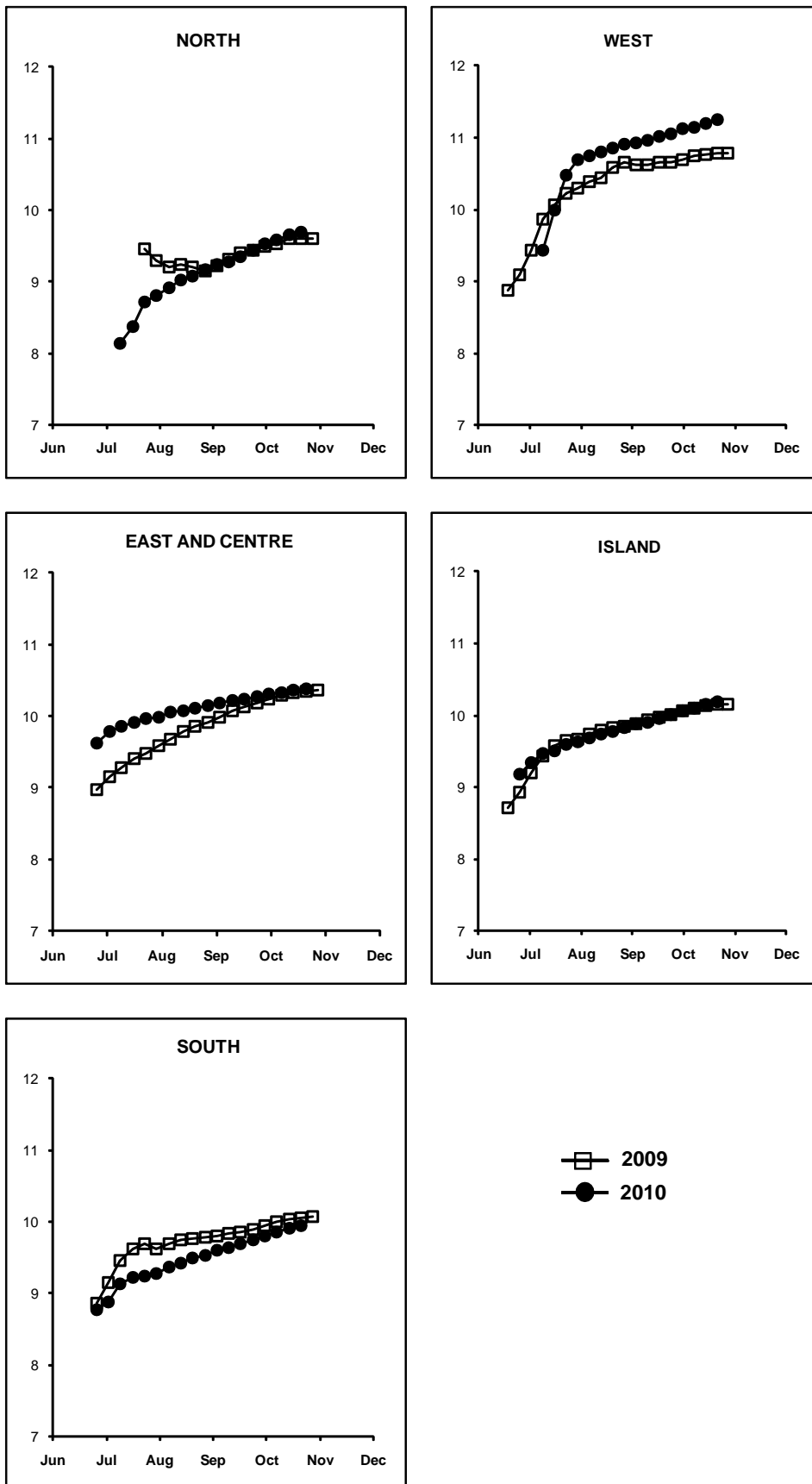
4.2 Extraction (Table 5b and Figure 2)

The recorded cumulative island extraction rate of 10.19% was higher than that at the corresponding period in 2009 when it was 10.15%. Sector-wise, the cumulative extraction rates recorded to-date were 9.70% in the North, 10.39% in the East-Centre, 9.95% in the South and 11.25% in the West. Compared to the corresponding period last year, extraction rate was higher in sectors North by 0.10%, East-Centre by 0.04% and West by 0.47%. In the South, the extraction rate was below that of last year by 0.10%.

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

Sectors	End September		End October	
	2009	2010	2009	2010
North	9.44	9.45	9.60	9.70
East /Centre	10.18	10.27	10.35	10.39
South	9.89	9.75	10.05	9.95
West	10.66	11.06	10.78	11.25
Island	10.01	10.01	10.15	10.19

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 8.46 TSH was higher than that at the corresponding period in 2009 (8.43 TSH) by 0.03 tonne. Sector-wise sugar productivity was 8.32 TSH in the North, 8.16 TSH in the East-Centre, 8.25 TSH in the South and 10.72 TSH in the West. Compared to the corresponding period in 2009, sugar productivity at end-October 2010 lagged by 0.15 TSH in the East-Centre and by 0.16 TSH in the South whereas in the North and West it was higher by 0.49 TSH and 0.77 TSH respectively.

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

Sectors	End September		End October	
	2009	2010	2009	2010
North	7.75	8.62	7.83	8.32
East / Centre	8.25	8.12	8.31	8.16
South	8.27	8.22	8.41	8.25
West	9.98	10.53	9.95	10.72
Island	8.38	8.44	8.43	8.46

5. CROP 2010 PRODUCTIVITY

Weather during the month of October has generally favoured ripening on account of the overall below normal rainfall and shiny conditions. This is reflected in the slight fall in cane productivity since end September from 84.3 TCH to 83.0 TCH and to the increase in extraction rate of 0.18^o this year compared to 0.14^o only last year. Sugar productivity has thus increased only marginally, by 0.02 TSH compared to 0.05 TSH for the 2009 crop. It is however encouraging that the sugar productivity is better than that of last year with nearly 75% of the area harvested. The production level for 2010 remains dependent on forthcoming weather, a persisting dry hot weather as experienced during October being potentially detrimental to the standing crops.