

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Ref A 1/2009

12 November 2009

SUGAR CANE CROP 2009

Status: End October 2009

1. CLIMATE

1.1 Rainfall (Table 1)

Rainfall recorded during the month of October 2009 over the cane areas of the island averaged 252 mm and represented 352% of the long term mean (72 mm) for the month. October rainfall well exceeded the long-term mean in all sectors. Rainfall for the month was 147 mm in the North, 326 mm in the East, 266 mm in the South, 195 mm in the West and 296 mm in the Centre and represented 359%, 441%, 277%, 1083%, and 290% of the respective long term mean for the sectors.

The rainfall recorded in October over the island was the highest on record for the past fifty years.

Table 1. Rainfall (mm) of Aug, Sep and Oct for crops 2008, 2009 and the long term mean (LTM)

	Crop	North	East	South	West	Centre	Island
<i>AUGUST</i>	2008	268 (609)	444 (562)	381 (340)	243 (1215)	386 (306)	361 (436)
	2009	51 (116)	127 (161)	83 (74)	15 (75)	89 (71)	83 (100)
	LTM	44	79	112	20	126	83
<i>SEPTEMBER</i>	2008	268 (609)	444 (562)	381 (340)	243 (1215)	386 (306)	361 (436)
	2009	51 (116)	127 (161)	83 (74)	15 (75)	89 (71)	83 (100)
	LTM	44	79	112	20	126	83
<i>OCTOBER</i>	2008	29 (71)	82 (111)	89 (93)	8 (44)	88 (86)	67 (93)
	2009	147 (359)	326 (441)	266 (277)	195 (1083)	296 (290)	252 (352)
	LTM	41	74	96	18	102	72

1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of October 2009 at MSIRI agro-meteorological stations are given below.

The mean maximum temperature was below normal at Pamplémousses by 0.5 °C but it was above normal by 0.8 °C at Réduit, 1.0 °C at Union Park and 1.2 °C at Belle Rive. The mean minimum temperature was above the normal at all stations. The resulting mean amplitude was above normal at Réduit only but below normal at the other stations.

Table 2 Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in October 2009

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplémousses	27.9 (28.4) *	18.6 (17.7)	9.3 (10.7)
Réduit	25.7 (24.9)	17.3 (16.9)	8.4 (8.0)
Belle Rive	25.0 (23.8)	16.9 (15.3)	8.1 (8.5)
Union Park	24.6 (23.6)	17.7 (16.4)	6.9 (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 2009 were higher than normal at Pamplémousses, close to normal at Belle Rive and Réduit but below normal at Union Park. Recorded bright sunshine as a percentage of the normal was 106 at Pamplémousses, 98 at Réduit, 101 at Belle Rive and 93 at Union Park.

Table 3 Sunshine duration (hrs) recorded on MSIRI agro-meteorological stations in October 2009

Station	Oct 2009	Normal	% of Normal
Pamplémousses	269	254	106
Réduit	241	247	98
Belle Rive	213	211	101
Union Park	168	182	93

2. Sucrose Accumulation (Table 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 2009.

Sectors	R 573	R 575	M 387/85	M 1246/84	M 1176/77	M 1400/86	R 579	M 3035/66	R 570
North					16.0	15.8	15.4		15.6
East				15.9			15.3	16.6	16.2
South						15.6	14.9		15.0
West	16.8	16.0							
Centre			14.4					15.5	14.9

The *richesse* at end-October 2009 was 15.7% in the North, 15.9% in the East, 15.1% in the South, 16.3% in the West and 14.9% in the Centre. Compared to the corresponding period in 2008, *richesse* for the present crop was higher in all sectors, the advantage being 1.3° in the North, 0.5° in the East, 0.6° in the South and 0.7° in the West and Centre. Compared to the corresponding period in 2007, sucrose content for the present crop was comparable in the East, lagging by 0.9° in the North, but higher by 0.2° in the Centre, 0.3° in the South and 1.0° in the West.

Table 4b Comparison of Pol % Cane (*richesse*) at the end of September and October 2007, 2008 and 2009.

Sectors	SEPTEMBER			OCTOBER		
	2007	2008	2009	2007	2008	2009
North	16.0	14.7	15.0	16.6	14.4	15.7
East	15.3	15.1	15.4	15.8	15.4	15.9
South	14.8	14.3	14.7	14.8	14.5	15.1
West	15.2	15.2	15.0	15.3	15.6	16.3
Centre	14.4	14.1	14.2	14.7	14.2	14.9
Island	15.2	14.7	14.9	15.5	14.7	15.5

During the month of October, *richesse* for the present crop increased by 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. For the corresponding period last year, the increases were 0.3° in the East, 0.2° in the South, 0.4° in the West and 0.1° in the Centre whereas in the North a decrease of 0.3° was recorded during that period.

Island-wise, the *richesse* of 15.5% at the end of October 2009 was higher than the 14.7% for the corresponding period in 2008 but similar to that recorded in 2007.

4. CROP 2009

As at 31 October 2009, 25 118 ha representing about 73% of miller-planters' land had been harvested compared to 24 706 ha (71%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 57% in the North, 73% in the East, 75% in the South, 93% in the West and 71% in the Centre. An analysis of cane and sugar productivity based on the harvest statistics for miller-planters follows. However, following the centralization of milling activities and the transfer of canes from one factory area to another, the comparisons made are not strictly comparable for sugar productivity and extraction rates except for the North, West and South sectors where data for the same factory areas are presented. Since all the canes from the Centre sector is being sent to the East, harvest statistics in terms of extraction rate and sugar productivity have been combined for these two sectors.

4.1 Cane productivity (Table 5a)

Cane productivity for the island as at 31 October 2009 was 83.3 TCH compared to 80.1 TCH recorded in 2008, representing an increase of 4% over last year's performance. Sector-wise, the best cane productivity to-date was recorded in the West with 92.6 TCH, followed by the South (84.0 TCH), the East (82.8 TCH), the North (81.2 TCH) and the Centre (74.1 TCH). Compared to the corresponding period in 2008, cane productivity to-date was lower in the Centre by 4.5 TCH whereas in the other sectors it was higher, the incremental yield being 10.6 TCH in the North, 5.5 TCH in the East, 0.9 TCH in the South and 0.7 TCH in the West.

Table 5a Cane productivity (TCH) as at end September and October for the 2008 and 2009 crops

Sectors	End September		End October	
	2008	2009	2008	2009
North	68.6	82.1	70.6	81.2
East	76.7	82.7	77.3	82.8
South	83.6	83.5	83.1	84.0
West	88.9	93.6	91.9	92.6
Centre	81.1	76.1	78.6	74.1
Island	79.7	83.6	80.1	83.3

4.2 Extraction (Table 5b and Figure 1)

The recorded island extraction rate of 10.16% was higher than that of the corresponding period in 2008 (9.90%) by 0.26°. Sector-wise, extraction rates recorded to-date were 9.61% in the North, 10.36% in the East-Centre, 10.07% in the South and 10.79% in the West. Compared to the corresponding period last year, cumulative extraction rate was higher in all the sectors, the advantage being 0.28° in the North, 0.20° in the East-Centre, 0.28° in the South and 0.38° in the West. It should be noted that last year's extraction rate for East-Centre sector included part of the cane harvested in the Mon Loisir factory area.

Figure 1. Evolution of extraction rate for the 2008 and 2009 crops

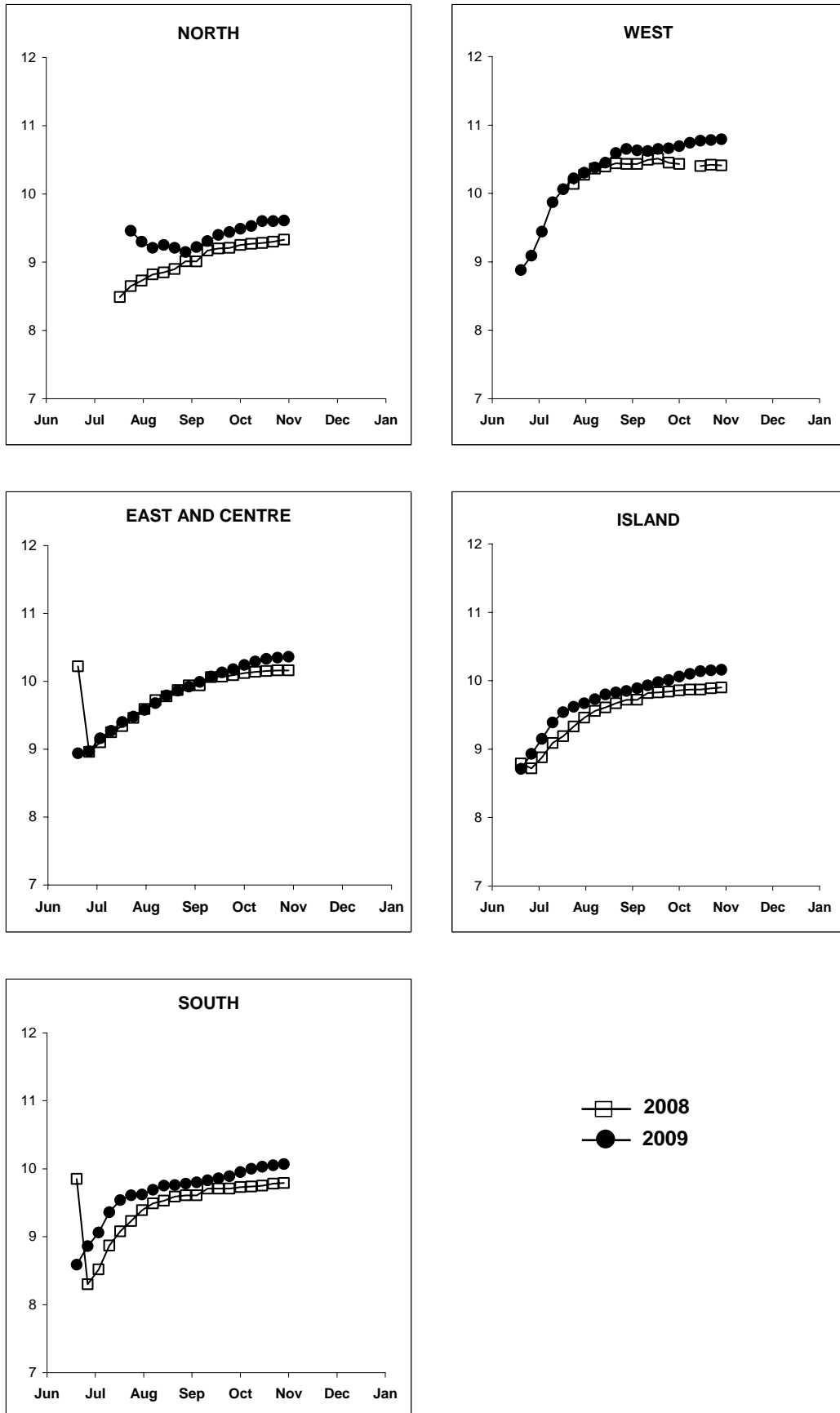


Table 5b Extraction rate (%) as at end September and October for the 2008 and 2009 crops

Sectors	End September		End October	
	2008	2009	2008	2009
North	9.21	9.44	9.33	9.61
East /Centre	10.09	10.18	10.16	10.36
South	9.71	9.89	9.79	10.07
West	10.45	10.66	10.41	10.79
Island	9.84	10.01	9.90	10.16

4.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 8.46 TSH exceeded that of the corresponding period in 2008 (7.93 TSH) by 0.53 tonne. Sector-wise sugar productivity was 7.80 TSH in the North, 8.34 in the East-Centre, 8.46 in the South and 9.99 TSH in the West. Sugar productivity was superior to that of the corresponding period last year in all sectors with an increment of 1.21 TSH in the North, 0.46 TSH in the East/Centre, 0.32 TSH in the South and 0.42 TSH in the West.

Table 5c Sugar productivity (TSH) as at end September and October for the 2008 and 2009 crops

Sectors	End September		End October	
	2008	2009	2008	2009
North	6.32	7.75	6.59	7.80
East / Centre	7.84	8.75	7.88	8.34
South	8.12	8.26	8.14	8.46
West	9.29	9.98	9.57	9.99
Island	7.84	8.37	7.93	8.46

5. 2009 CROP PRODUCTIVITY

During the month of October cane yield regressed marginally by 0.3 TCH as opposed to a slight increase of 0.4 TCH for the corresponding period of the 2008 crop. Extraction rate on the other hand increased by 0.15° compared to only 0.06 for the same period last year. Sugar productivity is still better than at the same date last year as with the advantage being 0.53 TSH.

6. 2010 CROP

Weather to-date has been favourable for a good start of the 2010 crop. The heavy rainfall events recorded during October island-wise coupled with the generally above normal temperatures will prompt rapid development and an early onset of elongation.