MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2009

Status: End September 2009

1. CLIMATE

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

A rainfall of 83 mm was recorded during the month of September 2009 over the cane areas in Mauritius. It represented 100% of the long-term mean of the month. Sector-wise, rainfall for the month of September was 51 mm in the North, compared to a long-term mean of 44 mm, and 127 mm in the East which has a long-term mean of 79 mm. In the other sectors, rainfall was below the long-term mean by 26% in the South (83 mm), by 25% in the West (15 mm) and by 29% in the Centre (89 mm).

Cumulative rainfall during the period October 2008 to September 2009 for the island amounted to 2200 mm and exceeded the long-term mean of 2060 mm by 7%. During that same period 1312 mm were recorded in the North, 2762 mm in the East, 2572 mm in the South, 856 mm in the West and 2633 mm in the Centre. These cumulated rainfall represented 98%, 134%, 101%, 93% and 94% of the respective long-term mean.

Table 1a. Rainfall (mm) of September for crops 2008, 2009 and the long term mean (LTM)

	North	East	South	West	Centre	Island
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

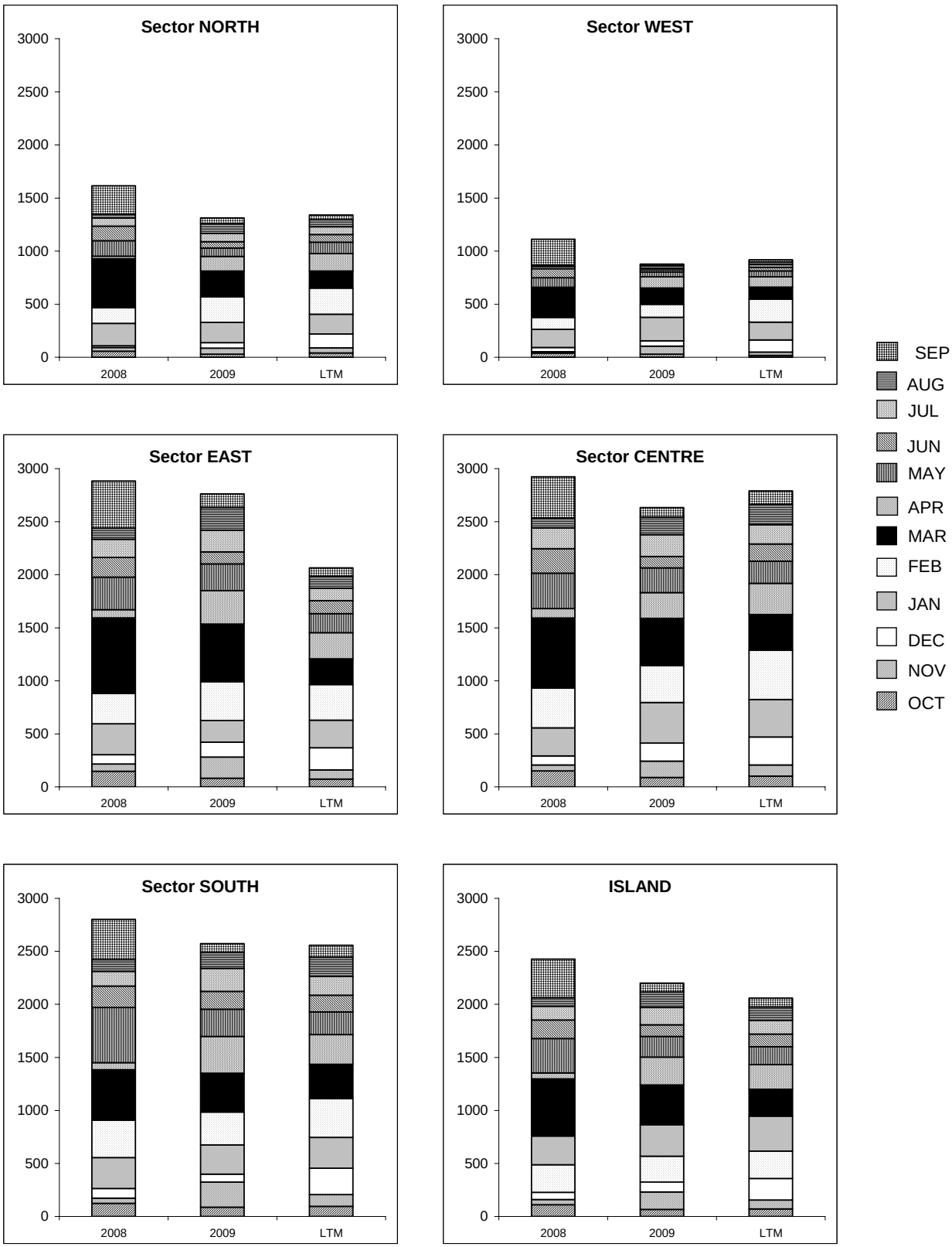
* figures in brackets are % of LTM

Table 1b. Cumulative rainfall (mm) from Oct 2008 to Sep 2009 for crop 2009 compared to that of crop 2008 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2008	1616 *(121)*	2883 *(140)*	2802 *(110)*	1112 *(121)*	2923 *(105)*	2426 *(118)*
2009	**1312** *(98)*	**2762** *(134)*	**2572** *(101)*	**856** *(93)*	**2633** *(94)*	**2200** *(107)*
LTM	1341	2065	2557	918	2790	2060

* figures in brackets are % of LTM ***[Source : raw provisional data from Meteorological Services]***

Figure 1. Monthly rainfall (mm) for period Oct 2008 to Sep 2009 for the 2009 crop compared to that of the same period for crop 2008 and of the long-term mean (LTM).



1.2 Temperature (Table 2)

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

The mean maximum temperature was below normal at Pamplemousses by 0.6 ^{o}C but it was above normal at the other stations by 0.7 ^{o}C at Réduit and 1.1 ^{o}C at both Union Park and Belle Rive. The mean minimum temperature was comparable to the normal at Réduit but above the normal at the other three stations. The resulting mean amplitude was above normal at all stations except at Pamplemousses where it was below normal.

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

Station	Maximum (^{o}C)	Minimum (^{o}C)	Amplitude (^{o}C)
Pamplemousses	**26.3** *(26.9) **	**17.0** *(16.6)*	**9.3** *(10.3)*
Réduit	**24.0** *(23.3)*	**15.6** *(15.7)*	**8.4** *(7.6)*
Belle Rive	**23.8** *(22.7)*	**15.0** *(14.2)*	**8.8** *(8.4)*
Union Park	**23.3** *(22.2)*	**16.2** *(15.3)*	**7.1** *(6.9)*

* 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 September 2009 were above normal at all stations. Recorded bright sunshine as a percentage of the normal was 108 at Pamplemousses, 104 at Réduit, 102 at Belle Rive and 117 at Union Park.

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

Station	Sep 2009	Normal	% of Normal
Pamplemousses	243	224	108
Réduit	228	219	104
Belle Rive	200	196	102
Union Park	176	150	117

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 September 2009.

Sectors	R 573	R 575	M 387/85	M 1246/84	M 2256/88	M 1176/77	M 1400/86	R 579	M 3035/66	R 570
North				15.5		15.5	15.0	14.6		14.3
East	15.7			15.0	14.3		15.4	15.1	16.1	15.6
South	15.6					14.9	14.9	14.3		14.3
West	15.7	14.8	14.6			14.5	16.9			13.8
Centre			13.9			14.9	14.4		14.7	13.5

The *richesse* at end-September 2009 was 15.0% in the North, 15.4% in the East, 14.7% in the South, 15.0% in the West and 14.2% in the Centre. Compared to the corresponding period in 2008, *richesse* was comparable in the Centre, lower in the West by 0.2^o but higher in the other sectors, namely by 0.4^o in the South and 0.3^o in both the North and East. Compared to the corresponding period in 2007, sucrose content for the present crop was comparable in the East and South but was lagging in the North by 1.0^o and by 0.2^o in the West and Centre.

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

Sectors	AUGUST			SEPTEMBER		
	2007	2008	2009	2007	2008	2009
North	14.6	13.7	14.4	16.0	14.7	15.0
East	14.3	14.8	14.6	15.3	15.1	15.4
South	14.1	14.3	14.1	14.8	14.3	14.7
West	14.5	14.9	14.8	15.2	15.2	15.0
Centre	13.7	13.8	13.4	14.4	14.1	14.2
Island	**14.3**	**14.3**	**14.3**	**15.2**	**14.7**	**14.9**

From end-August 2009 to end-September 2009, *richesse* has improved in all sectors. The highest increment of 0.8^o was observed in the East and Centre sectors followed by 0.6^o in the North and South, and 0.2^o in the West. For the corresponding period last year, no increase was observed in the South whereas in the other sectors the gains were 1.0^o in the North and 0.3^o in the East, West and Centre. Thus, on average for the island, the increase in *richesse* of 0.6^o in 2009 was better than the 0.4^o recorded in 2008 but below the 0.9^o of 2007.

Island-wise, the *richesse* of 14.9% at the end of September 2009 was higher than the 14.7% for the corresponding period in 2008 but below the 15.2% recorded in 2007.

4. CROP 2009

As at 26 September 2009, 18 510 ha representing about 54% of miller-planters' land had been harvested compared to 18 072 ha (52%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 37% in the North, 54% in the East, 57% in the South, 71% in the West and 52% 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 26 September 2009 amounted to 83.6 TCH and was higher than the 79.7 TCH recorded in 2008. Sector-wise, the best cane productivity to-date was recorded in the West with 93.6 TCH, followed by the South (83.5 TCH), the East (82.7 TCH), the North (82.1 TCH) and the Centre (76.1 TCH). Compared to the corresponding period in 2008, cane productivity to-date was comparable in the South but higher in sectors North, East and West by 13.5 TCH, 6.0 TCH and 4.7 TCH, respectively. In the Centre, cane productivity at the end of September 2009 was below that of 2008 by 5.0 TCH.

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

	End August		End September	
Sectors	**2008**	**2009**	**2008**	**2009**
North	67.6	84.3	68.6	82.1
East	76.5	83.9	76.7	82.7
South	84.0	84.0	83.6	83.5
West	86.8	97.4	88.9	93.6
Centre	80.8	79.2	81.1	76.1
Island	**79.4**	**85.2**	**79.7**	**83.6**

4.2 Extraction (Table 5b and Figure 2)

The recorded island extraction rate of 10.01% was higher than that of the corresponding period in 2008 (9.84%) by 0.17°. Sector-wise, extraction rates recorded to-date were 9.44% in the North, 10.18% in the East-Centre, 9.89% in the South and 10.66% in the West. Compared to the corresponding period last year, cumulative extraction rate was higher in all the sectors, the advantage being 0.23° in the North, 0.09° in the East-Centre, 0.18° in the South and 0.21° 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 2. Evolution of extraction rate for the 2008 and 2009 crops

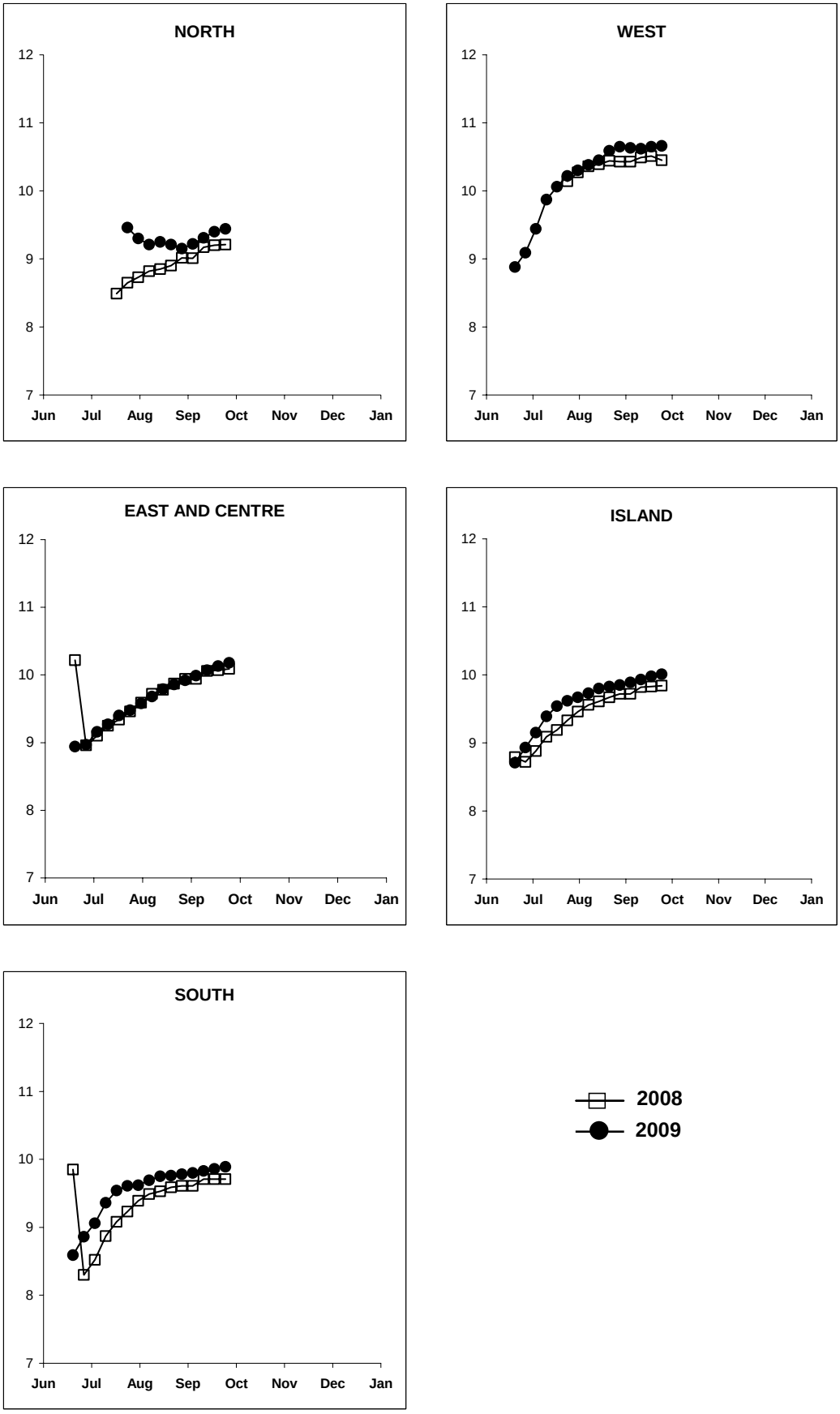


Table 5b Extraction rate (%) as at end August and September for the 2008 and 2009 crops

	End August		End September	
Sectors	**2008**	**2009**	**2008**	**2009**
North	9.01	9.15	9.21	9.44
East /Centre	9.94	9.92	10.09	10.18
South	9.61	9.78	9.71	9.89
West	10.43	10.65	10.45	10.66
Island	**9.72**	**9.85**	**9.84**	**10.01**

4.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 8.37 TSH exceeded that of the corresponding period in 2008 (7.84 TSH) by 0.53 tonne. Sector-wise sugar productivity was 7.75 TSH in the North, 8.75 in the East-Centre, 8.26 in the South and 9.98 TSH in the West. Sugar productivity was higher than that of the corresponding period last year in all sectors with an increment of 1.43 TSH in the North, 0.91 TSH in the East/Centre, 0.14 TSH in the South and 0.69 TSH in the West.

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

	End August		End September	
Sectors	**2008**	**2009**	**2008**	**2009**
North	6.09	7.71	6.32	7.75
East / Centre	7.66	8.22	7.84	8.75
South	8.07	8.22	8.12	8.26
West	9.05	10.37	9.29	9.98
Island	**7.72**	**8.39**	**7.84**	**8.37**

5. 2009 CROP PRODUCTIVITY

Weather during the month of September can be considered as having been generally favourable to maturation with rainfall equal to the normal, an above normal temperature amplitude and solar radiation slightly exceeding the normal. Overall cane productivity at this point of the year still exceeded that at the corresponding time in 2008 by 3.9 TCH. However cumulated cane yield has regressed from 85.2 TCH at the end of August to 83.6 TCH at the end of September. Extraction rate rose as expected to reach 10.01% which is 0.17^{o} more than that at the same period last year. Sugar productivity at the end of September 2009 remained above that of 2008 by 0.53 TSH (6.8%).