MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2010

Status: End August 2010

1. CLIMATE

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

The island's average rainfall for the month of August 2010 was 167 mm over the sugar cane areas and represented 131% of the long-term mean (128 mm). Sector-wise, rainfall for the month of August exceeded the long-term mean by 54% in the North (105 mm), 101% in the East (229 mm), 12% in the West (29 mm) and 21% in the Centre (233 mm). It was below the long-term mean by 3% in the South (175 mm).

Cumulative rainfall during the period October 2009 to August 2010 for the island amounted to 2446 mm and was 124% of the long-term mean of 1976 mm. During that same period 1435 mm were recorded in the North, 3271 mm in the East, 2773 mm in the South, 1066 mm in the West and 2607 mm in the Centre. These rainfall amounts represented 111%, 165%, 113%, 119% and 98% of the long-term mean for the respective sectors.

	North	East	South	West	Centre	Island
2009	94	215	150	24	166	146
	(138)	(189)	(83)	(92)	(86)	(114)
2010	105	229	175	29	233	167
	(154)	(201)	(97)	(112)	(121)	(131)
LTM	68	114	180	26	192	128

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

* figures in brackets are % of LTM

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

	North	East	South	West	Centre	Island
2009	1261 (97)	2635 (133)	2489 (102)	841 (94)	2544 (96)	2118 (107)
2010	1435 (111)	3271 (165)	2773 (113)	1066 (119)	2607 (98)	2446 (124)
LTM	1297	1986	2445	898	2664	1976

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]



Figure 1. Monthly rainfall (mm) for period Oct 2009 to August 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 August 2010 on MSIRI agro-meteorological stations are given below.

The mean maximum temperature was just below the normal at Pamplemousses. It exceeded the normal by 0.6 °C at Réduit, 1.0 °C at Belle Rive and 1.2 °C at Union Park. The mean minimum temperature was close to the normal at Réduit, just above at Pamplemousses by 0.2 °C and above by 0.7 °C at both Belle Rive and Union Park. The resulting mean amplitude was below normal at Pamplemousses but above normal at the other three stations.

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplemousses	25.7	16.4	9.3
	(25.9) *	(16.2)	(9.7)
Réduit	23.0	15.2	7.8
	(22.4)	(15.3)	(7.1)
Belle Rive	22.8	14.6	8.2
	(21.8)	(13.9)	(7.9)
Union Park	22.6	15.8	6.8
	(21.4)	(15.1)	(6.3)

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

* 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 August 2010 were higher than normal at Pamplemousses, Réduit and Belle Rive but was below normal at Union Park. Recorded bright sunshine as a percentage of the normal amounted to 102 at Pamplemousses, 103 at Réduit, 107 at Belle Rive and 95 at Union Park.

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

Station	August 2010	Normal	% of Normal
Pamplemousses	243	238	102
Réduit	229	223	103
Belle Rive	206	193	107
Union Park	137	144	95

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.

Sectors	M 52/78	M 703/89	R 573	M 692/69	R 575	M 387/85	M 1246/84	M 2593/92	M 1400/86	M 1176/77	R 579	M 1394/86	M 3035/66	R 570
North							14.8	15.0	14.7	15.3	14.1			14.5
East			15.5				13.8		15.1	14.8	13.6		15.8	14.1
South			15.8	14.8					14.7	15.4	14.8	13.1	14.5	14.3
West			16.6	15.7	15.7	14.7			15.6	16.1				15.3
Centre	15.0	13.2				13.8			14.3	14.5	12.1		13.5	12.0

Table 4aAverage Pol % Cane (richesse) at end-August 2010.

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

Sectors		JULY		AUGUST			
	2008	2009	2010	2008	2009	2010	
North	13.0	13.8	14.0	13.7	14.4	14.8	
East	14.2	13.5	13.6	14.8	14.6	14.5	
South	13.7	13.2	14.0	14.3	14.1	14.9	
West	14.2	14.0	14.4	14.9	14.8	15.7	
Centre	13.2	12.5	13.5	13.8	13.4	13.8	
Island	13.7	13.4	13.9	14.3	14.3	14.7	

The *richesse* at end-August 2010 was 14.8% in the North, 14.5% in the East, 14.9% in the South, 15.7% in the West and 13.8% in the Centre. Compared to the corresponding period in 2009, *richesse* was comparable in the East but was higher in the other sectors, the advantage being 0.9° in the West, 0.8° in the South and 0.4° in both the North and Centre. As opposed to the same period in 2008, sucrose content at end August 2010 was similar in the Centre but higher in sectors North, South and West by 1.1° , 0.6° and 0.8° respectively. In the East, it was lower than that of 2008 by 0.3° .

From end-July 2010 to end-August 2010, *richesse* has improved in all sectors. The highest increment of 1.3° was observed in the West followed by 0.9° in both the East and the South, 0.8° in the North and 0.3° in the Centre. For the corresponding period last year, the increments recorded were 0.6° in the North, 1.1° in the East, 0.8° in the West and 0.9° in both the South and Centre. Thus, on average for the island, the increase in *richesse* of 0.8° in 2010 was comparable to that recorded in 2009 but better than the 0.6° of 2008.

Island-wise, the *richesse* of 14.7% recorded at the end of August 2010 was higher than those of the corresponding period for crops 2009 and 2008 by 0.4°.

3. CROP 2010

As at 28 August 2010, 13 001 ha representing about 36% of miller-planters' land had been harvested compared to 13 319 ha (39%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 21% in the North, 43% in the East, 41% in the South, 34% in the West and 37% 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 28 August 2010, cane productivity for the island amounted to 84.4 TCH and was lower than the 85.2 TCH recorded at the same period in 2009 by 0.8 TCH. Sector-wise, the best cane productivity to-date was recorded in the West with 97.0 TCH, followed by the North (93.0 TCH), the South (83.8), the East (80.2 TCH) and the Centre (78.1 TCH). Compared to the same period in 2009, recorded cane productivity was lower in the East and the Centre by 3.7 TCH and 1.1 TCH respectively. In the South and West, cane productivity at the end of August 2010 was comparable to that of 2009 whereas in the North it was higher by 8.7 TCH.

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

	End	July	End August		
Sectors	2009	2010	2009	2010	
North	81.7	87.7	84.3	93.0	
East	83.4	78.9	83.9	80.2	
South	83.8	83.8	84.1	83.8	
West	96.6	97.4	97.4	97.0	
Centre	82.5	82.4	79.2	78.1	
Island	85.0	83.0	85.2	84.4	

4.2 Extraction (Table 5b and Figure 2)

The recorded cumulative island extraction rate of 9.83% was slightly below that of the corresponding period in 2009 (9.85%). Sector-wise, the cumulative extraction rates recorded todate were 9.17% in the North, 10.15% in the East-Centre, 9.53% in the South and 10.91% in the West. Compared to the corresponding period last year, extraction rate to-date was comparable in the North and higher in sectors East-Centre by 0.23° and West by 0.26° . In the South, the extraction rate of August 2010 was below that of August 2009 by 0.25° .

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

	End	l July	End August		
Sectors	2009	2010	2009	2010	
North	9.30	8.80	9.15	9.17	
East /Centre	9.58	9.99	9.92	10.15	
South	9.62	9.28	9.78	9.53	
West	10.30	10.70	10.65	10.91	
Island	9.67	9.63	9.85	9.83	



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 8.30 TSH was lower than that at the corresponding period in 2009 (8.39 TSH) by 0.09 tonne. Sector-wise sugar productivity was 8.53 TSH in the North, 8.48 TSH in the East-Centre, 7.99 TSH in the South and 10.58 TSH in the West. Compared to the corresponding period in 2009, sugar productivity at end-August 2010 lagged by 0.23 TSH in the South but was higher in the North, East-Centre and West by 0.82 TSH, 0.28 TSH and 0.21 TSH respectively.

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

	End	July	End August		
Sectors	2009	2010	2009	2010	
North	7.60	7.72	7.71	8.53	
East / Centre	8.02	7.94	8.20	8.48	
South	8.06	7.78	8.22	7.99	
West	9.95	10.42	10.37	10.58	
Island	8.22	7.99	8.39	8.30	

5. CROP 2010 PRODUCTIVITY

The difference in both cane productivity and extraction rate between 2009 and 2010 has narrowed at the end of August. Cane productivity is now lagging by only 0.8 TCH compared to 2.0 TCH at end-July while extraction rate has recovered by 0.02°. As a result, sugar productivity progressed from 7.99 TSH at the end of July to 8.30 at the end of August.