

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2008

Status: End July 2008

1. CLIMATE

1.1 *Rainfall (Tables 1a, 1b and Figure 1)*

Rainfall recorded over the sugar cane areas during the month of July was slightly above normal with an island average of 130 mm, representing close to 102% of the long-term mean of 128 mm. Sector-wise rainfall for the month of July was well above normal in the East with 173 mm compared to 116 mm, slightly above normal in the North and Centre with 76 mm, and 195 mm respectively against a long-term mean of 73 mm, and 181 mm. In the other two sectors, it was below the long-term mean in the South (140 mm) by 22% and in the West (22 mm) by 12%.

Rainfall for the period October 2007 to July 2008 cumulated to 1982 mm, an amount above the long-term mean of 1849 mm for the island. The rainfall recorded was as follows: 1311 mm in the North, 2335 mm in the East, 2312 mm in the South, 856 mm in the West and 2442 mm in the Centre and represented 107%, 125%, 102%, 98% and 99% of their respective long-term mean.

Except for the West sector, rainfall has been in excess or near to the crop's water requirements.

1.2 *Temperature*

Data on maximum and minimum temperatures recorded during the month of July 2008 on MSIRI agro-meteorological stations are given below.

The mean maximum temperature was above normal by 0.4 °C at Union Park and 0.9 °C at Belle Rive but it was below the normal at Réduit and Pamplémousses by 0.2 °C and 0.6 °C respectively. The mean minimum temperature was similar or close to the normal at Union Park, Pamplémousses and Belle Rive but below normal at Réduit by 0.5 °C. The resulting mean amplitude was above normal at Réduit (0.3 °C), Union Park (0.4 °C) and Belle Rive (1.0 °C) but below normal at Pamplémousses (0.5 °C). Above normal temperature amplitudes are usually conducive to ripening.

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Réduit	22.2 (22.4)*	14.8 (15.3)	7.4 (7.1)
Union Park	21.9 (21.5)	15.2 (15.2)	6.7 (6.3)
Pamplemousses	25.1 (25.7)	15.9 (16.0)	9.2 (9.7)
Belle Rive	22.8 (21.9)	13.9 (14.0)	8.9 (7.9)

* Figures in bracket represent the normal (1971-2000)

1.3 Sunshine

Data from the MSIRI agro-meteorological stations showed that sunshine hours during July 2008 were above normal on all stations. Recorded bright sunshine as a percentage of the normal amounted to 104 at Réduit, 114 at Union Park, 102 at Pamplemousses, and 120 at Belle Rive. Above normal solar radiation enhances photosynthesis and sucrose accumulation when it coincides with other favourable weather conditions.

	July 2008	Normal	% of Normal
Réduit	229	221	104
Union Park	158	138	114
Pamplemousses	243	238	102
Belle Rive	223	186	120

2. SUCROSE ACCUMULATION (TABLES 2A AND 2B)

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 to those of last year and to those of the reference year 2001.

The *richesse* at end-July 2008 was 13.0% in the North, 14.2% in the East, 13.7% in the South, 14.2% in the West and 13.2% in the Centre compared to 12.8%, 13.7%, 13.7%, 13.8% and 12.9% respectively for the corresponding period in 2007. In the South, *richesse* was similar to that of the corresponding period in 2007, whereas in the other sectors, it was higher by 0.2° in the North, 0.5° in

the East, 0.4° in the West and 0.3° in the Centre. Compared to the corresponding period in 2001, the reference crop, *richesse* at the end of July 2008 was higher by 0.2° in the East, and 1.4° both in the West and Centre but was lagging behind by 1.0° in the North and 0.9° in the South.

During the month of July, *richesse* for the present crop has increased in all sectors. The most significant increase was 2.9° in the West followed by 2.4° in the South, 1.6° in the North, 1.5° in the East and 0.9° in the Centre. For the corresponding period last year, the increments were 1.7° in the North, 0.7° in the East, 1.6° in the South and West with no increase in the Centre.

Island-wise, the *richesse* of 13.7% recorded at the end of July 2008 is higher than that at the corresponding period in 2007 (13.4%) but lower than that of crop 2001 (13.9%). Compared to end of June 2008, *richesse* for the island increased on average by 1.9° which is higher than that of the corresponding period in 2007 (1.2°) but below by 2.2° of that recorded in 2001.

3. CROP 2008

As at 26 July 2008, 6469 ha representing about 16% of miller-planters' land had been harvested compared to 5797 ha (14%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 9% in the North, 19% in the East, 18% in the South, 5% in the West and 17% in the Center. An analysis of cane and sugar productivity based on the harvest statistics for miller-planters follows. However, it should be noted that following centralization of milling activities and the transfer of canes from one factory area to another, the comparisons made are not strictly comparable except for the 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. In the case of the North sector, part of the cane is being channelled to FUEL.

3.1 Cane productivity

Cane productivity for the island as at 26 July 2008 amounted to 78.1 TCH compared to 71.2 TCH in 2007. Sector-wise, to-date the best cane productivity has been recorded in the South with 82.6 TCH. It is followed by the West (79.6 TCH), the Centre (78.7 TCH), the East (75.2 TCH) and the North (67.1 TCH). Apart from sector West, cane productivity observed to-date is higher in all sectors compared to 2007. Productivity is higher by 5.7 TCH in the North, 8.2 TCH in the East, 3.2 TCH in the South and 10.6 TCH in the Centre. The shortfall is 15.3 TCH in the West.

Cane productivity (TCH) as at end July for the 2007 and 2008 crops

	North	East	South	West	Centre	Island
2007	61.4	67.0	79.4	94.9	68.1	71.2
2008	67.1	75.2	82.6	79.6	78.7	78.1

3.2 Extraction (Figure 2)

The recorded island extraction rate of 9.33% was slightly lower than that of the corresponding period in 2007 (9.35%). Sector-wise, extraction rates recorded to-date were 10.14% in the West followed by 9.46% in the East-Centre, 9.24% in the South and 8.65% in the North. Except for the South, extraction rate was inferior in all other sectors when compared to the corresponding period last year.

Extraction rate (%) as at end July for the 2007 and 2008 crops

	North	East and Centre	South	West	Island
2007	8.66	9.66	8.84	10.30	9.35
2008	8.65	9.46	9.24	10.14	9.33

3.3 Sugar productivity

Island-wise, the recorded sugar productivity of 7.29 TSH was higher than at the corresponding period in 2007 (6.66 TSH) by 0.63 tonne. Sector-wise sugar productivity was 5.80 TSH in the North, 7.19 TSH in the Centre/East, 7.63 TSH in the South and 8.07 TSH in the West. Only in the West sector was sugar productivity lower than at the same time in 2007.

Sugar productivity (TSH) as at end July for the 2007 and 2008 crops

	North	East and Centre	South	West	Island
2007	5.32	6.49	7.01	9.77	6.66
2008	5.80	7.19	7.63	8.07	7.29

4. CROP ESTIMATE

As expected, cane productivity is higher this year compared to 2007 except in the West where, it should be pointed out, only 5% of the area has been harvested. Thus no conclusion on the potential production of the West sector should be drawn at this stage. Generally, however, indications up to now are for a higher cane productivity this year compared to 2007. Overall weather has also been favourable for ripening during the month of July and the gap with last year's data has narrowed. This trend is expected to continue for at least two to three weeks as the mild water stress favourable to maturation maintains itself. Sugar productivity is thus expected to be higher than that of last year by a margin that will bring production to within the range given for the initial crop estimate.