

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2022

16 August 2022

SUGAR CANE CROP 2022

Status: End July 2022

1. CLIMATE

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

The 127 mm of rainfall recorded over the sugar cane areas during the month of July 2022 was below normal representing 87% of the long-term mean (LTM). Sector-wise, rainfall was lagging behind the respective LTM of the month with 63 mm in the North, 155 mm in the East, 153 mm in the South and 8 mm in the West. In the Centre, it stood at 220 mm and exceeded the LTM by 4%.

The cumulative rainfall over the period October 2021 to July 2022 amounted to 1334 mm in the North, 2669 mm in the East, 2951 mm in the South, 921 mm in the West and 3053 mm in the Centre, and represented 116%, 112%, 130%, 105% and 125% of the respective LTM. The island average of 2348 mm represented 121% of the LTM (1947 mm).

Table 1a. Rainfall (mm) for the month of July for crops 2021, 2022 and the long term mean (LTM).

	North	East	South	West	Centre	Island
2021	127 (195)	214 (120)	256 (136)	21 (105)	303 (144)	200 (137)
2022	63 (97)*	155 (87)	153 (81)	8 (40)	220 (104)	127 (87)
LTM	65	179	188	20	211	146

* figures in brackets are % of LTM (1991-2020)

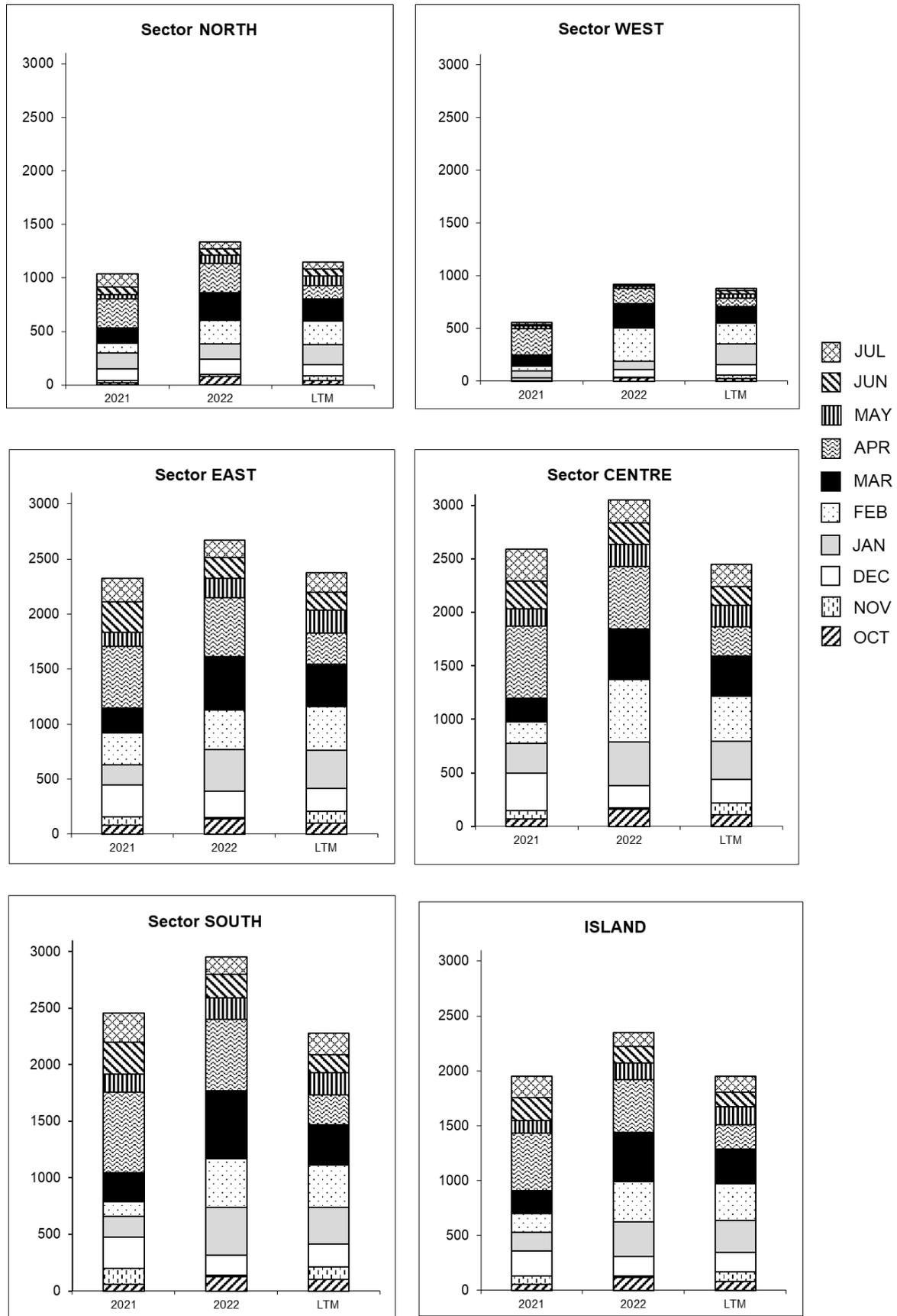
Table 1b. Cumulative rainfall (mm) from October 2021 to July 2022 for crop 2022 compared to that of crop 2021 and the long term mean (LTM).

	North	East	South	West	Centre	Island
2021	1040 (90)	2325 (98)	2454 (108)	559 (64)	2593 (106)	1953 (100)
2022	1334 (116)*	2669 (112)	2951 (130)	921 (105)	3053 (125)	2348 (121)
LTM	1152	2374	2277	877	2449	1947

* figures in brackets are % of LTM

[Source: Provisional data from Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2021 to July 2022 for the 2022 crop compared to the same period of the 2021 crop and to the long-term mean (LTM).



1.2 Air Temperature (Table 2)

The recorded air temperature during the month of July 2022 on MSIRI agro-meteorological stations are given below in Table 2.

Table 2. Air temperature recorded on MSIRI agro-meteorological stations in July 2022.

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	July 2022	DevN*	July 2022	DevN*	July 2022	DevN*
Ferret	24.1	-1.0	16.1	-0.5	8.0	-0.8
Réduit	21.7	-0.5	15.5	0.0	6.2	-0.9
Union Park	21.4	-0.1	15.8	0.0	5.6	-0.4
Belle Rive	19.4	-2.8	14.6	0.0	4.8	-2.8

* Deviation from the Normal (1991-2020)

Mean maximum temperature during July 2022 was comparable to the normal at Union Park but was below normal at the other stations. The mean minimum temperature was below normal at Ferret by 0.5°C and was similar to the normal at the other stations. The resulting mean temperature amplitude lagged behind the normal at all stations and generally below normal temperature amplitude is not conducive to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during the month of July 2022 were below normal at all stations except at Ferret where it was comparable to the normal. Recorded bright sunshine compared to the normal amounted to 101% at Ferret, 94% at Réduit, 86% at Union Park and 68% at Belle Rive.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in July 2022.

Station	July 2022	Normal	% of Normal
Ferret	229	226	101
Réduit	200	212	94
Union Park	109	142	86
Belle Rive	121	186	68

2.0 SUCROSE ACCUMULATION (Tables 4a and 4b)

Cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analysed for sucrose content during the last week of July 2022. The average Pol % cane (*richesse*) was calculated on the basis of area cultivated under each variety in the different factory areas of each sector. The results were compared with those of the last two years.

Table 4a. Average Pol % cane (richesse) at end-July 2022.

Variety	Harvest Date *	North	East	South	West	Centre
M 52/78	E			12.3		14.4
R573	E, M			14.0	10.3	
M 2256/88	E, M	12.4				
R575	E, M			14.3	12.8	
M 387/85	E, M		12.8			11.9
M 1246/84	M, L	10.8	11.4			
M 1989/99	M, L	9.7				
M 2283/98	M, L			10.8		
M 1176/77	M	12.1	13.7	12.6	12.0	11.8
M 1861/89	M, L			11.9		
M 2593/92	M/L	12.0	12.2	11.3	10.3	11.3
M 1400/86	M	11.0	10.9	11.2	10.1	
M 2502/99	M		11.4			
R579	L	10.1	10.3	10.9	10.3	10.2
M 1672/90	M, L	10.3	9.9			
R570	M, L	10.5	10.6	11.6	10.8	
M 915/05	M, L			10.8	11.2	
M 683/99	M, L	9.6			11.6	
M 216/02	E, M			12.3		
M 1561/01	E, M			11.4		
M 1256/04	M			11.1		
M 1002/02	M, L				13.0	
M 64	M, L			11.8		

* as per Recommendation Sheet No. 197 (harvest), April 2022, (E - early, M - middle, L - late)

Table 4b. Comparison of Pol % cane (richesse) at the end of June and July 2020, 2021 and 2022.

Sectors	June			July		
	2020	2021	2022	2020	2021	2022
North	11.8	9.9	10.0	13.4	11.0	11.2
East	10.3	10.3	10.6	11.4	11.5	11.2
South	10.8	10.4	10.3	12.0	12.4	11.7
West	11.1	10.0	10.9	12.4	12.0	11.3
Centre	10.0	9.8	9.8	11.2	11.7	11.1
Island	10.8	10.2	10.4	12.1	11.7	11.4

The *richesse* at the end of July 2022 was 11.2% in the North and the East, 11.7% in the South, 11.3% in the West and 11.1% in the Centre. Compared to the corresponding period in 2021, *richesse* at end-July 2022 was higher by 0.2° in the North, but lagged behind in the other sectors by 0.3° in the East, 0.7° in both the South and West, and 0.6° in the Centre. Sucrose content at the end of July for the present crop, was inferior to that of the corresponding period in 2020 in all sectors.

Sucrose content had improved in all sectors from end-June 2022 up to end-July 2022. The highest increment of 1.4° was observed in the South followed by 1.3° in the Centre, 1.2° in the North, 0.6° in the East and 0.4° in the West. On average for the island, the increase in *richesse* was 1.0° from end of June to end of July 2022 and was lower than the 1.5° and the 1.3° recorded in 2020 and 2021 respectively during the same period.

Island-wise, the *richesse* of 11.4% recorded at end of July 2022 lagged behind that in July 2021 by 0.3° and that in July 2020 by 0.7°.

3. CROP PRODUCTIVITY 2022

As at 30 July 2022, some 5,527 ha, representing about 21% of miller-planters' land was harvested compared to 3,820 ha (14%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 19.7% in the North, 25.1% in the East, 17.2% in the South, 20.3% in the West and 20.4 % in the Centre. An analysis of crop productivity based on the harvest statistics for miller-planters follows.

3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end July 2022 reached 71.6 TCH and exceeded that of July 2021 (69.2 TCH) by 2.4 TCH, but was inferior to that of July 2020 by 2.7 TCH. Sector-wise, cane productivity recorded was 76.0 TCH in the North, 77.8 TCH in the East, 65.8 TCH in the South, 66.9 TCH in the West and 53.8 TCH in the Centre. Compared to the same period last year, cane productivity recorded to-date was higher by 3.8 TCH in the North, 3.1 TCH in the East and 13.1 TCH in the West, but lagged behind by 7.1 TCH in the South and 4.3 TCH in the Centre. When compared to July 2020, cane productivity in July 2022 was inferior in all sectors except in the East.

Table 5a. Cane productivity (TCH) as at end July for the 2020, 2021 and 2022 crops

	North	East	South	West	Centre	Island
2020	78.3	73.7	78.9	67.2	62.3	74.3
2021	72.2	74.7	72.9	53.8	58.1	69.2
2022	76.0	77.8	65.8	66.9	53.8	71.6

3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.30% was higher than that at the corresponding period in 2021 (8.81%) but lower than that in 2020 (9.59%). Sector-wise, the extraction rate recorded was 9.34% in the North, 9.12% in in the East, 9.41% in the South, 9.77% in the West and 8.85% in the Centre. Compared to the corresponding period last year, extraction rate to-date was higher by 0.46° in the North, 0.50° in the East, 0.16° in the South, 0.33° in the West and

0.54° in the Centre. When compared to July 2020, extraction rate to-date was lower in all sectors.

Table 5b. Extraction rate (%) as at end July for the 2020, 2021 and 2022 crops

	North	East	South	West	Centre	Island
2020	9.85	9.24	9.80	10.44	8.95	9.59
2021	8.88	8.62	9.25	9.44	8.31	8.81
2022	9.34	9.12	9.41	9.77	8.85	9.30

3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 6.66 TSH exceeded that at the corresponding period in 2021 (6.10 TSH) by 0.56 tonne (9.2%). Sector-wise, sugar productivity was 7.10 TSH both in the North and East, 6.19 TSH in the South, 6.54 TSH in the West and 4.76 TSH in the Centre. These figures when compared to those of July 2021 were higher by 0.69 TSH in the North, 0.66 TSH in the East and 1.46 TSH in the West. It was comparable in the Centre but lagged behind in sector South by 0.55 TSH. The sugar productivity in July 2022 was inferior to that of 2020 in all sectors except in the East.

Table 5c. Sugar productivity (TSH) as at end July for the 2019, 2020 and 2021 crops

	North	East	South	West	Centre	Island
2020	7.71	6.81	7.73	7.02	5.58	7.13
2021	6.41	6.44	6.74	5.08	4.83	6.10
2022	7.10	7.10	6.19	6.54	4.76	6.66

4. CROP 2022

Rainfall during the month of July 2022 was below normal in most sectors. The monthly maximum temperature was below normal, while minimum temperature was close to the normal, thus resulting in a below normal temperature amplitude. Moreover, the sky during the month of July 2022 was cloudy as indicated by the below normal sunshine duration recorded on most MSIRI stations. These conditions were not favourable for optimum sucrose accumulation. Hence, the recorded *richesse* at end-July 2022 for the island was slightly below that of July 2021 and lagged behind that of 2020.

As at 30 July 2022, nearly 21% of miller-planters' land was harvested. Cane productivity at island level and in most sectors in 2022 was higher than that recorded during the same period last year, except for the South and Centre. Extraction rate recorded at end-July 2022 was better than that of last year in all sectors. The resulting sugar productivity of 6.66 TSH at end July 2022 was higher than that of 2021 which stood at 6.10 TSH but lagged behind the 7.13 TSH recorded in July 2020. Should dry and warmer days coupled with cold night temperatures prevail in the coming months, sucrose accumulation and sugar productivity could further improve for the 2022 Crop.

Figure 2. Evolution of extraction rate on miller-planters' land for crops 2020, 2021 and 2022

