

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2024

20 August 2024

SUGAR CANE CROP 2024

Status: June and July 2024

1. CLIMATE

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

Rainfall recorded over the sugar cane growing areas of the island during June 2024 was 162 mm which represented 126% of the long-term mean (LTM, 129 mm) for the month. Above normal rainfall was recorded in all sectors of the island. Generally, these rainfall amounts were considered sufficient for the crop water requirement except in sector West.

The island's average rainfall for the month of July 2024 was 53 mm over the sugar cane growing areas and it represented 37% of the long-term mean (146 mm). Rainfall for the month of July 2024 lagged behind the long-term mean in all sectors with 16 mm in the North, 53 mm in the East, 87 mm in the South, 5 mm in the West and 72 mm in the Centre.

Cumulative rainfall from October 2023 to July 2024 amounted to 2494 mm for the island, i.e. 128% of the LTM. During that period, 1428 mm were recorded in the North, 2893 mm in the East, 3082 mm in the South, 1109 mm in the West and 3116 mm in the Centre. These figures exceeded their respective LTM in all sectors.

Table 1a. Rainfall (mm) for the month of May for crop 2023, 2024 and the long term mean (LTM)

	Crop	North	East	South	West	Centre	Island
June	2023	49 (73)	82 (51)	148 (93)	16 (59)	103 (60)	92 (72)
	2024	103 (154)	183 (114)	202 (127)	34 (126)	222 (129)	162 (126)
July	2023	44 (68)	156 (87)	175 (93)	16 (80)	187 (89)	128 (88)
	2024	16 (25)	53 (30)	87 (46)	5 (25)	72 (34)	53 (37)

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

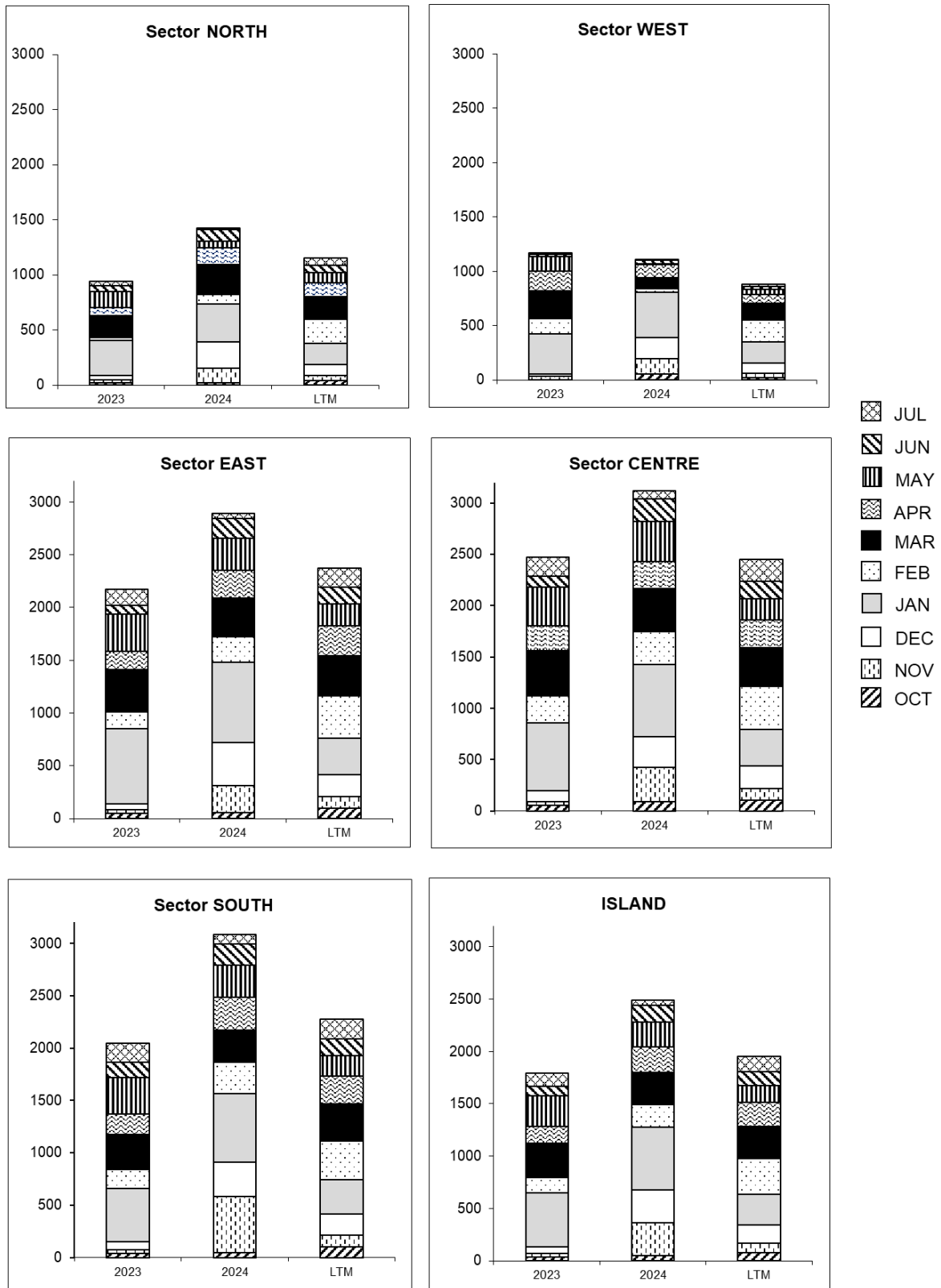
Table 1b. Cumulative rainfall (mm) from October 2023 to July 2024 for crop 2024 compared to that of crop 2023 and the LTM

Crop	North	East	South	West	Centre	Island
2023	944 (82)	2173 (92)	2043 (90)	1170 (133)	2472 (101)	1795 (92)
2024	1428 (124)	2893 (122)	3082 (135)	1109 (126)	3116 (127)	2494 (128)
LTM	1152	2374	2277	877	2449	1947

figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2023 to July 2024 for the 2024 crop compared to the corresponding period of the 2023 crop and to the long term mean (LTM).



1.2 Air Temperature (Table 2)

Data on air temperature recorded during the month of June and July 2024 on the MSIRI agro-meteorological stations are given in Table 2.

Table 2. Air temperature recorded on MSIRI agro-meteorological stations in June and July 2024

	Stations	Maximum	+ / -	Minimum	+ / -	Amplitude	+ / -
June	Ferret	26.8	+0.5	18.5	+1.3	8.3	-0.8
	Réduit	24.1	+0.6	16.7	+0.6	7.4	0.0
	Union Park	23.3	+0.4	17.4	+0.8	5.9	-0.4
July	Ferret	26.3	+0.9	16.8	+0.2	9.5	+0.7
	Réduit	24.0	+1.4	15.2	-0.3	8.8	+1.7
	Union Park	23.5	+1.7	15.4	-0.4	8.1	+2.1

+ / - Deviation from the Normal (1991-2020)

The mean maximum and minimum temperature during June 2024 was above normal at all stations. The resulting temperature amplitude was equal to the normal at Réduit but was lagging behind the normal at the other two stations.

During July 2024, the mean maximum temperature at all stations exceeded the normal by more than 0.9°C. The mean minimum temperature was below normal at Réduit and Union Park while at Ferret it was slightly higher than the normal. The resulting temperature amplitude was above normal by 0.7°C at Ferret, 1.7°C at Réduit and 2.1°C at Union Park. Above normal temperature amplitude is generally favourable to sucrose accumulation.

1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that bright sunshine duration during June 2024 was below normal at all three stations while in July 2024 it was above normal at Ferret and Union Park and comparable to the normal at Réduit.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations during the June and July 2024.

Station	June	% N	July	% N
Ferret	206	92	259	115
Réduit	165	78	211	99
Union Park	97	68	173	136

%N : % of Normal (1991-2020)

2. STALK HEIGHT IN JUNE 2024(Tables 4a, 4b and Figure 2)

The final measurement of stalk height was carried out during the last week of June 2024 at 61 sites in the five sugar cane sectors of the island. These selected sites are representative of the various agro-climatic zones, different varieties and crop categories. Data collected were compared with that of the last year and the mean of the five best cane yielding crops for the period 2014 to 2023 in each sector (referred to as normal).

2.1 Stalk elongation

Stalk elongation recorded during the month of June 2024 was 15.3 cm in the North, 9.9 cm in the East, 19.1 cm in the South, 8.0 cm in the West and 4.4 cm in the Centre. These growth values were higher than those recorded at the same period in 2023 in sectors North and South but lagged behind in the other sectors. Compared to the normal, cane growth in June 2024 was higher in all sectors except in the West. The island stalk elongation of 13.3 cm in June 2024 was higher than that of last year and the normal.

Table 4a. Stalk elongation during the month of June 2024

Sectors	Stalk elongation (cm)			June 2024 as % of	
	June 2024	June 2023	Normal	June 2023	Normal
North	15.3	13.6	9.0	113	170
East	9.9	11.4	5.1	87	194
South	19.1	11.0	10.8	174	177
West	8.0	9.0	8.4	89	95
Centre	4.4	6.7	2.1	66	212
Island	13.3	11.2	7.3	119	181

2.2 Total stalk height

Total stalk height at end-June 2024 reached 225.0 cm in the North, 227.0 cm in the East, 261.2 cm in the South, 212.2 cm in the West and 168.8 cm in the Centre giving an island average of 232.3 cm. These figures were higher than those recorded at the corresponding period in 2023 in all sectors except in the East and Centre. Stalk height at end-June 2024 exceeded the normal in the North and South only but lagged behind the normal in the other sectors. At island level, the total stalk height of 232.3 cm at end-June 2024 was higher than the corresponding period in 2023 by 6.4 cm and the normal by 5.1 cm.

Table 4b. Total stalk height at end-June 2024

Sectors	Stalk height (cm)			June 2024 as % of	
	June 2024	June 2023	Normal	June 2023	Normal
North	225.0	203.5	223.7	111	101
East	227.0	234.9	233.5	97	97
South	261.2	252.6	236.7	103	110
West	212.2	209.5	228.1	101	93
Centre	168.8	181.6	195.1	93	87
Island	232.3	225.9	227.2	103	102

3.0 SUCROSE ACCUMULATION (Table 5)

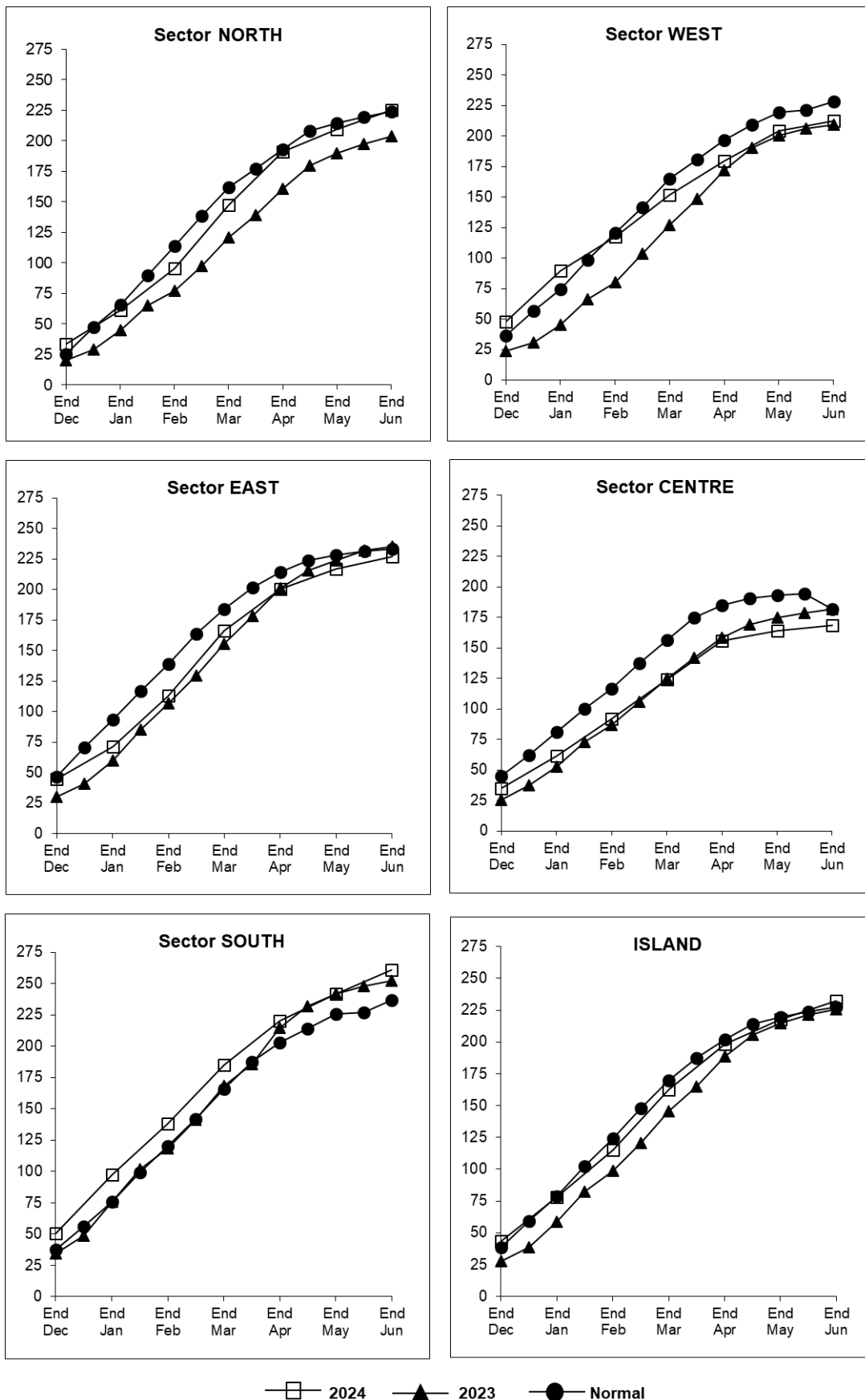
Cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analysed for sucrose content during the first week of July 2024. The average pol % cane (*richesse*) was calculated on the basis of area under cultivation of each variety in the different factory areas of each sector. The results are compared with those of the last two years.

The *richesse* during the first week of July 2024 amounted to 11.6% in the North, 11.3% in the East, 11.5% in the South, 14.5% in the West and 11.5% in the Centre. Sucrose content to-date, when compared to the corresponding period in 2023 and 2022, was higher in all sectors. Island-wise, the *richesse* of 11.8% recorded during the first week of July 2024 was superior to that of the corresponding period in 2023 (9.9%) by 1.9° and in 2022(10.9%) by 0.9°

Table 5 Comparison of Pol % Cane (richesse) at the first week of July 2024, 2023 and 2022

Sectors	First week of July		
	2022	2023	2024
North	10.7	9.1	11.6
East	11.1	10.1	11.3
South	10.8	10.4	11.5
West	11.3	9.8	14.5
Centre	10.1	10.4	11.5
Island	10.9	9.9	11.8

Figure 2. Stalk height at end-June 2024



4. CROP PRODUCTIVITY 2024

As at 27 July 2024, 3 261 ha, representing 13% of miller-planters' land had been harvested compared to 2 981 ha (11%) at the same period last year. Sector-wise and for miller-planters only, the harvested area reached 12% in the North, 15% in the East, 10% in the South, 16% in the West and 13% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows.

4.1 Cane productivity (Table 6)

Cane productivity for the island as at 27 July 2024 amounted to 77.5 TCH and was higher than that of the corresponding period in 2023 and 2022 by 9.5 TCH and 5.9 TCH, respectively. Sector-wise, the best cane productivity to-date was recorded in the South with 82.7 TCH followed by the North (82.5 TCH), the East (76.3 TCH), the West (69.2 TCH) and the Centre (63.4 TCH). Compared to the same period in 2023, cane productivity recorded to-date exceeded that of last year by 15.6 TCH in the North, 3.2 TCH in the East, 14.1 TCH in the South, 9.0 TCH in the West and 3.3 TCH in the Centre. The cane yield obtained in July 2024 was also superior to that in July 2022 in all sectors except in the East.

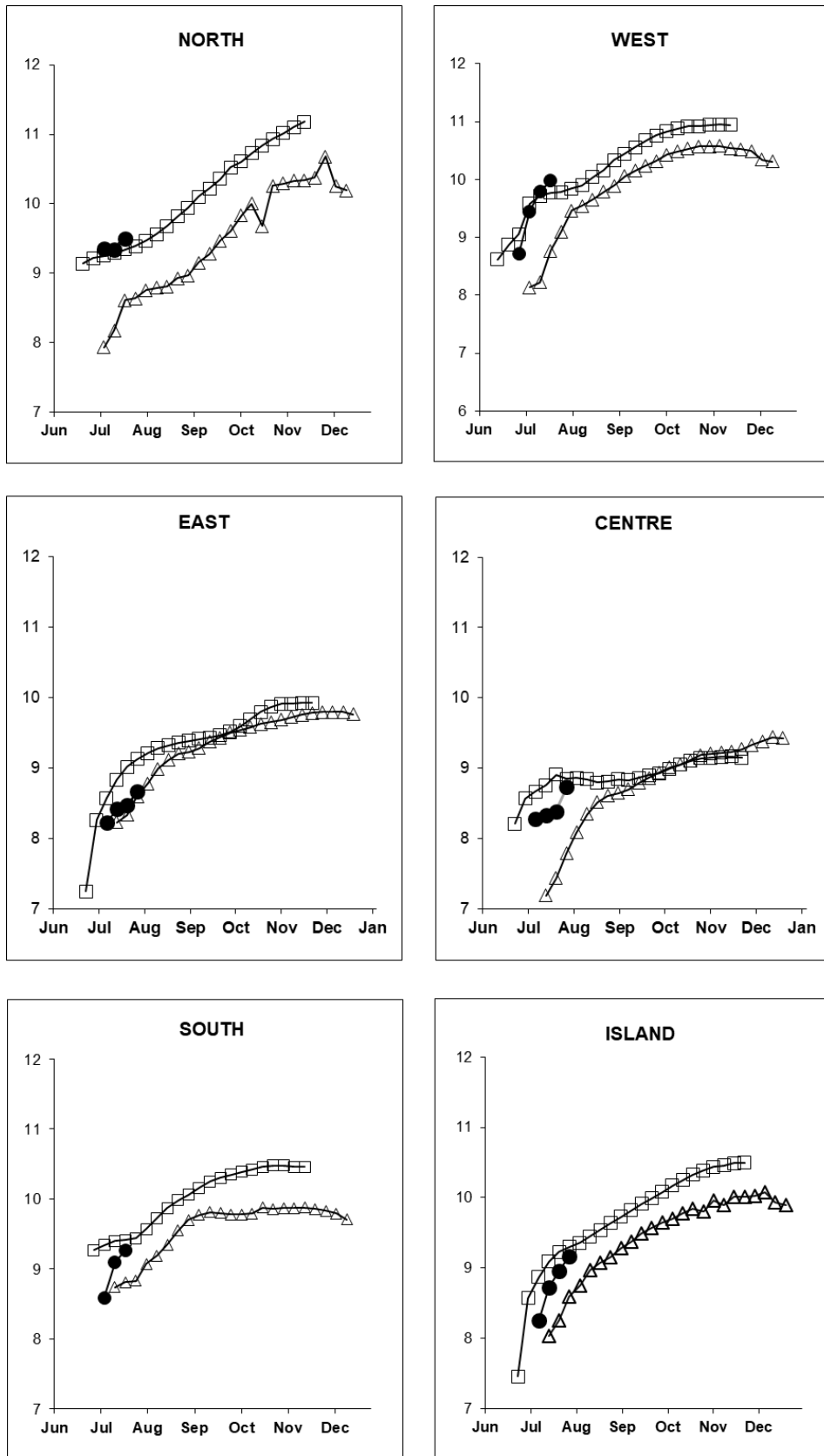
Table 6. Crop productivity as at end July for the 2022, 2023 and 2024 crops

Sector	Cane yield (TCH)			Extraction (%)			Sugar yield (TSH)		
	2022	2023	2024	2022	2023	2024	2022	2023	2024
North	76.0	66.9	82.5	9.34	8.61	9.50	7.10	5.76	7.84
East	77.8	73.1	76.3	9.12	8.60	8.67	7.10	6.29	6.62
South	65.8	68.6	82.7	9.41	8.81	9.27	6.19	6.04	7.67
West	66.9	60.2	69.2	9.77	8.77	9.98	6.54	5.28	6.91
Centre	53.8	60.1	63.4	8.85	7.79	8.73	4.76	4.68	5.53
Island	71.6	68.0	77.5	9.30	8.60	9.17	6.66	5.85	7.11

4.2 Extraction (Table 6, figure 3)

The recorded island extraction rate at end-July 2024 (9.17%) was higher than that at the corresponding period in 2023 (8.60%) by 0.57°, but was lower than that of 2022 (9.30%) by 0.13°. Sector-wise, it was 9.50% in the North, 8.67% in the East, 9.27% in the South, 9.98% in the West and 8.73% in the Centre. Compared to end-July of last year, extraction rate was higher in all sectors by 0.89° in the North, 0.07° in the East, 0.46° in the South, 1.21° in the West and 0.94° in the Centre. The recorded extraction rate to-date compared to that of 2022 was higher in the North and West sector but was inferior in the other sectors.

Figure 3. Evolution of extraction rate (%) for the 2022, 2023 and 2024 crops



—□— 2022 —△— 2023 —●— 2024

4.3 Sugar productivity (Table 6)

Island-wise, the recorded sugar productivity of 7.11 TSH was higher than that at the corresponding period in 2023 (5.85 TSH) by 1.26 tonne (22 %). Sector-wise sugar productivity was 7.84 TSH in the North, 6.62 TSH in the East, 7.67 TSH in the South, 6.91 TSH in the West and 5.53 TSH in the Centre. Sugar productivity to-date was higher than that at the corresponding period in 2023 in all sectors. Moreover, sugar productivity at end-July 2024 was also superior to that at end-July 2022 in all sectors except in the East.

5. CROP 2024

The month of June 2024 was characterised by above normal rainfall, reduced solar radiation and below normal temperature amplitude. In spite of these unfavourable conditions for sucrose accumulation, *richesse* recorded was above 11.0% in all sectors and was better than those obtained during the same corresponding period in 2022 and 2023. This shows that crop 2024 had already completed its elongation phase and was at an advance stage of maturity.

Climatic conditions prevailing during the month of July 2024 were characterised by below normal rainfall in all sectors of the island coupled with above normal solar radiation and temperature amplitude at MSIRI stations. These conditions were favourable to sucrose accumulation. Based on 13% of miller-planters' land being harvested as at 27 July 2024, the cane productivity at island level exceeded that recorded during the same period last year by 14%. Moreover, the higher extraction rate recorded at the end of July 2024 over the island compared to that of last year has resulted in an overall sugar productivity of 7.11 TSH which was superior to that of the past two years. The trend in extraction rate recorded during the past weeks and if normal winter conditions prevail in the coming months, sugar productivity during crop 2024 is expected to be better than the past two crop years.