

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2023

Status: March 2023

1. CLIMATE

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

The island's average rainfall for the month of March 2023 amounted to 326 mm and represented 104% of the long-term mean (LTM). Sector-wise, rainfall received in March 2023 was 197 mm in the North, 399 mm in the East, 339 mm in the South, 256 mm in the West and 443 mm in the Centre. These represented 96%, 104%, 96%, 166% and 118% of their respective LTM of the month (Table 1a).

Cumulative rainfall from October 2022 to March 2023 amounted to 1121 mm for the island, i.e. 87% of the LTM. During that period, 630 mm were recorded in the North, 1408 mm in the East, 1178 mm in the South, 819 mm in the West and 1562 mm in the Centre (Table 1b & Fig. 1). These figures were lower than their respective LTM except for sector West.

Table 1a. Rainfall (mm) for the month of March for crop 2022, 2023 and the long term mean (LTM)

Crop	North	East	South	West	Centre	Island
2022	257 (125)	486 (127)	602 (171)	230 (149)	474 (126)	449 (144)
2023	197 (96)	399 (104)	339 (96)	256 (166)	443 (118)	326 (104)
LTM	206	382	352	154	376	313

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

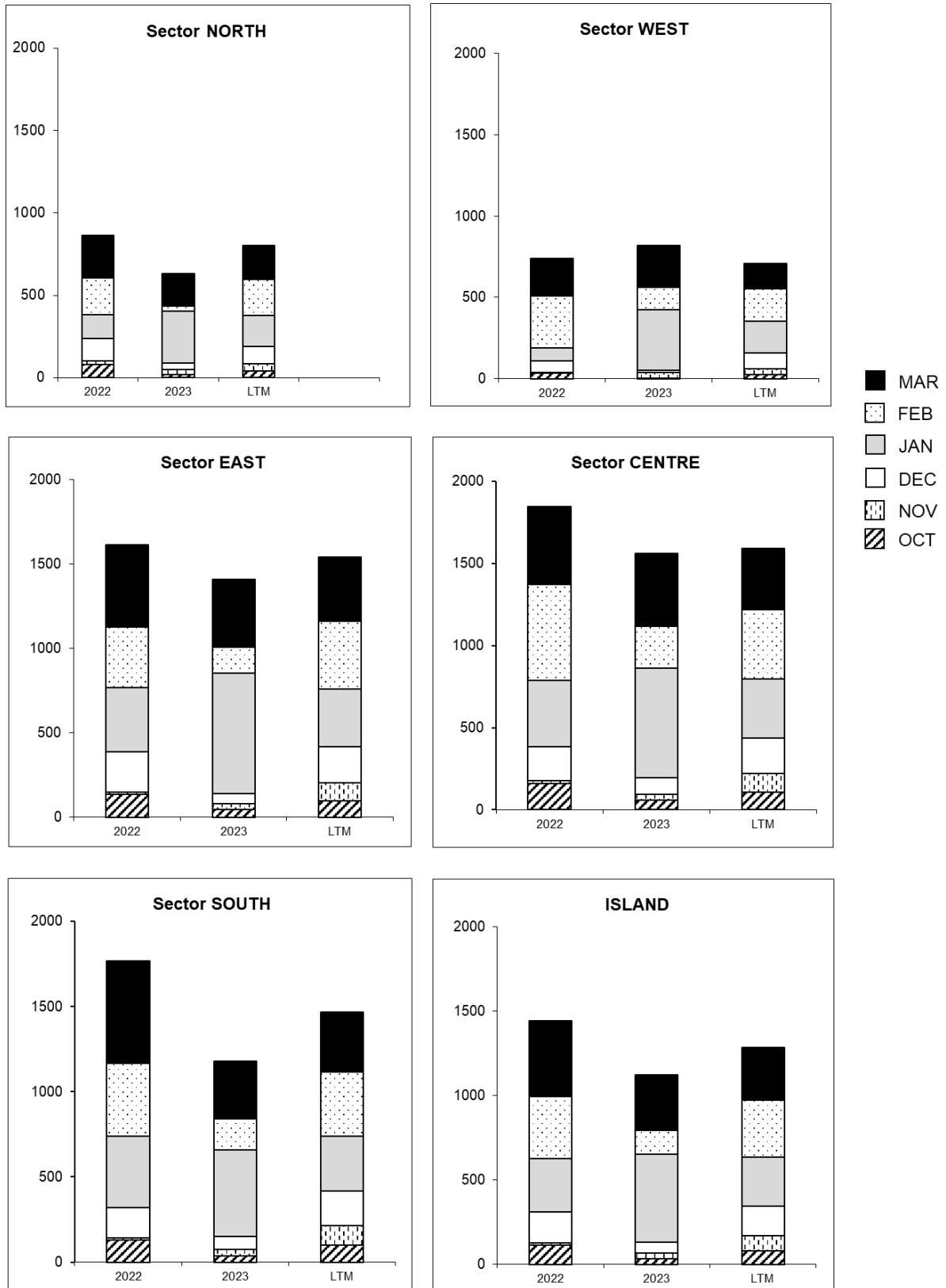
Table 1b. Cumulative rainfall (mm) from October 2022 to March 2023 for crop 2023 compared to that of crop 2022 and the LTM

Crop	North	East	South	West	Centre	Island
2022	863 (107)	1612 (104)	1768 (121)	737 (104)	1844 (116)	1441 (112)
2023	630 (78)	1408 (91)	1178 (80)	819 (116)	1562 (98)	1121 (87)
LTM	803	1543	1466	708	1593	1285

figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2022 to March 2023 for the 2023 crop compared to the corresponding period of the 2022 crop and to the long term mean (LTM).



1.2 Air Temperature (Table 2)

Data on air temperature and sunshine duration recorded during the month of March 2023 on the four MSIRI agro-meteorological stations are given in Table 2.

Table 2. Air temperature and sunshine hours recorded on MSIRI agro-meteorological stations in March 2023

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Mar 2023	+ / -	Mar 2023	+ / -	Mar 2023	% Normal
Ferret	30.6	0.0	22.4	+0.2	233	104
Réduit	28.6	+0.4	21.7	-0.1	217	99
Union Park	28.2	+0.8	21.5	+0.7	165	104
Belle Rive	27.4	-0.1	20.2	+0.2	174	95

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

The mean maximum temperature was above normal at Reduit and Union Park and close to normal at the other two stations. The mean minimum temperature was comparable to the normal at Reduit but higher than the normal at the other stations. Moreover, sunshine duration recorded during March 2023 exceeded the normal at Ferret and Union Park and comparable to the normal at Reduit but was below normal at Belle Rive.

2. STALK HEIGHT (Table 3a, 3b, 3c and Figure 2)

Stalk height assessment was carried out during the last week of March 2023 at 55 sites earmarked in the five sugarcane growing areas of the island. These selected sites are representative of the various agro-climatic zones, varieties and crop categories. The measurements were compared to those of the corresponding period in March 2022 and to the normal, referred to as the mean of the five best cane yielding crops during the period 2013 to 2022.

2.1 Stalk elongation (Table 3a)

Stalk elongation during the month of March 2023 amounted to 43.4 cm in the North, 49.3 cm in the East, 49.9 cm in the South, 46.8 cm in the West and 37.9 cm in the Centre. These growth values were inferior to those recorded in March 2022 in all sectors except in the Centre where it was comparable. Compared to the normal for the corresponding period, growth was higher in the East, South and West sectors but lagged behind the normal in the other sectors by 4.3 cm in the North and 1.4 cm in the Centre.

The island stalk elongation of 47.0 cm in March 2023 was lower than that of March 2022 by 4.5 cm but was slightly higher than the normal by 1.5 cm.

Table 3a. Stalk elongation during the month of March 2023

Sectors	Stalk elongation (cm)			March 2023 as % of	
	March 2023	March 2022	Normal	2022	Normal
North	43.4	50.8	47.7	85.4	90.9
East	49.3	54.2	44.9	91.0	109.9
South	49.9	51.7	44.8	96.5	111.3
West	46.8	55.7	41.8	84.0	112.1
Centre	37.9	37.0	39.3	102.4	96.4
Island	47.0	51.5	45.5	91.3	103.3

2.2 Cumulative Elongation (Table 3b)

Cumulative stalk growth from end-December 2022 to end-March 2023 reached 100.1 cm in the North, 125.9 cm in the East, 134.2 cm in the South, 103.2 cm in the West and 99.6 cm in the Centre. These cumulative growths compared to the same period last year were higher by 10.6 cm in the South and 6.4 cm in the Centre whereas in the other sectors it was lower by 17.2 cm in the North, 6.9 cm in the East and 18.7 cm in the West. For the same period, cumulative growth was higher than that of the normal in the South but lagged behind the normal in all other sectors, the difference ranging from 6.8 cm in the East to 36.1 cm in the North. Island-wise the cumulative elongation of 117.6 cm in March 2023 lagged behind that of the 2022 crop by 4.8 cm (3.9 %) and the normal by 14.0 cm (10.6 %).

Table 3b. Cumulative elongation at end-March 2023.

Sectors	Cumulative elongation (cm) at end- March			End-March 2023 as % of	
	2023	2022	Normal	2022	Normal
North	100.1	117.3	136.2	85.3	73.5
East	125.9	132.8	132.7	94.8	94.9
South	134.2	123.6	128.2	108.6	104.7
West	103.2	121.9	126.7	84.7	81.5
Centre	99.6	93.2	111.9	106.9	89.0
Island	117.6	122.4	131.6	96.1	89.4

2.3 Total stalk height (Table 3c and Figure 2)

At end-March 2023, total stalk height was 120.5 cm in the North, 155.7 cm in the East, 168.6 cm in the South, 127.2 cm in the West and 124.8 cm in the Centre giving an island average of 145.5 cm. When compared to corresponding period of last year, stalk height to-date was lower by 18.7 cm in the North, 9.2 cm in the East, 20.7 cm in the West and 3.5 cm in the Centre. In the South, it was higher by 17.7 cm. Total stalk height at end-March 2023 as compared to the normal was higher in the South only by 2.6 cm. In the other sectors, it lagged behind the normal, the difference ranging from 28.3 cm in the East to 41.2 cm in the North.

At island level, the total stalk height of 145.5 cm at end of March 2023 was below that of last year by 5.4 cm (3.6 %) and the normal by 24.5 cm (14.4 %).

Table 3c. Total stalk height at end-March 2023

Sectors	Stalk height (cm) at end-March			End-March 2023 as % of	
	2023	2022	Normal	2022	Normal
North	120.5	139.2	161.7	86.6	74.5
East	155.7	164.9	184.0	94.4	84.6
South	168.6	150.9	166.0	111.7	101.6
West	127.2	147.9	161.2	86.0	78.9
Centre	124.8	128.3	156.4	97.3	79.8
Island	145.5	150.9	170.0	96.4	85.6

3.0 CROP 2023

The weather conditions that prevailed during the month of March 2023 in terms of above normal rainfall, maximum temperature and sunshine duration were conducive to the process of photosynthesis and growth of the crop. This is reflected on stalk elongation recorded for the month which was slightly higher than the normal over the island. The deficit in total stalk height for the island which was 21% in February 2023 is now at 14% of the normal. Further reduction in the total stalk height deficit as compared to the normal can only be envisaged provided favourable weather is experienced in the coming months.

Figure 2. Stalk height at end-March 2023

