

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2023

13 June 2023

### SUGAR CANE CROP 2023

**Status: February 2023**

#### 1. CLIMATE

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

In February 2023, rainfall recorded over the sugar cane growing areas of the island was 143 mm which represented only 43% of the long-term mean (LTM, 336 mm) for the month. Below normal rainfall was recorded in all sectors, particularly in the North with only 30 mm. The passage of intense tropical cyclone *Freddy* in the vicinity of the island on 20 February 2023 did not bring much rainfall.

Cumulative rainfall from October 2022 to February 2023 amounted to 796 mm for the island, i.e. 82% of the LTM. During that period, 433 mm were recorded in the North, 1009 mm in the East, 839 mm in the South, 563 mm in the West and 1119 mm in the Centre. These figures were lower than their respective LTM except for sector West which was comparable to the LTM.

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

Crop	North	East	South	West	Centre	Island
<b>2022</b>	222 (102)	358 (90)	425 (114)	318 (157)	581 (138)	366 (109)
<b>2023</b>	<b>30</b> (14)	<b>156</b> (39)	<b>181</b> (48)	<b>138</b> (68)	<b>257</b> (61)	<b>143</b> (43)
<b>LTM</b>	218	400	374	202	420	336

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

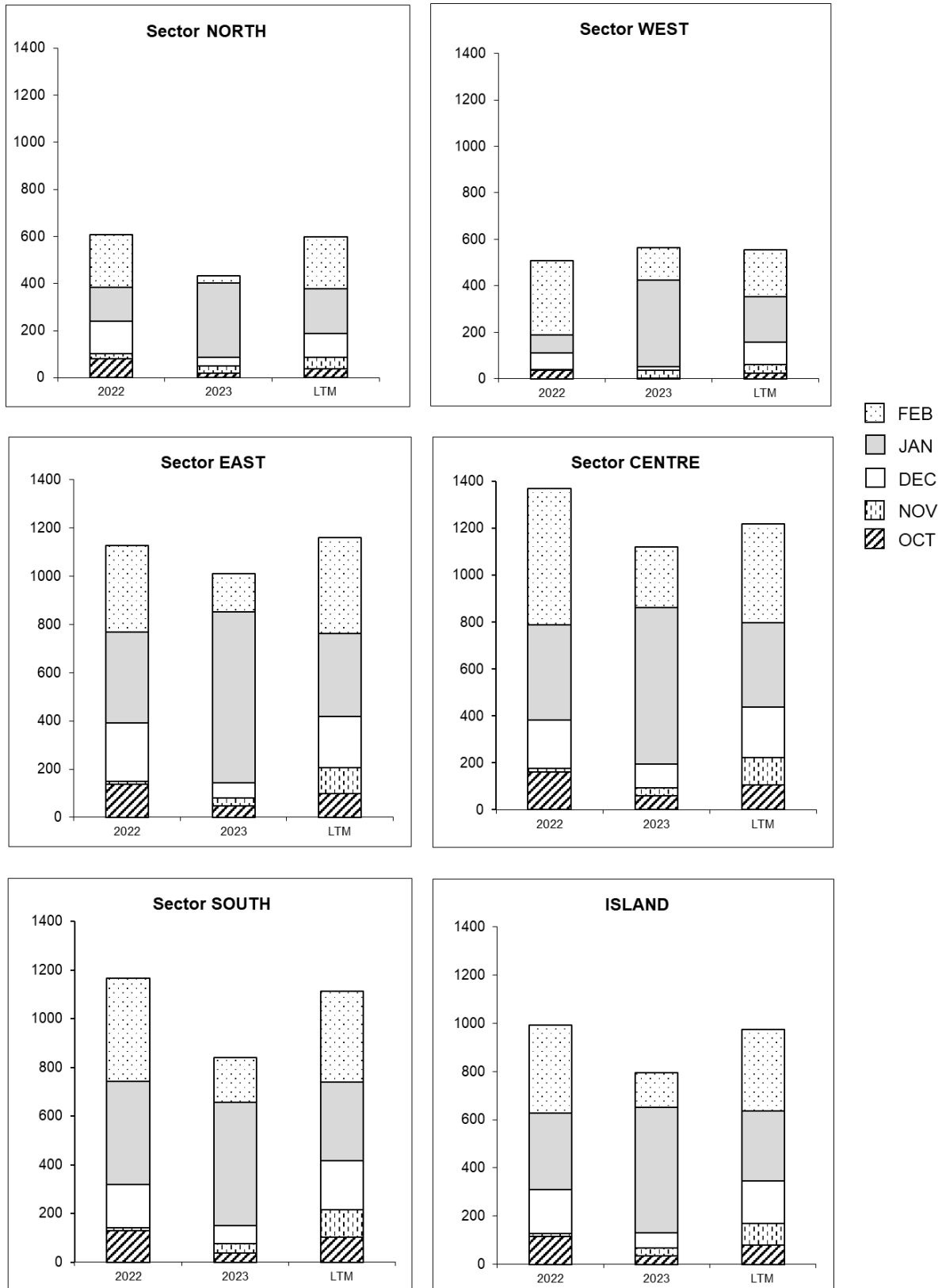
**Table 1b. Cumulative rainfall (mm) from October 2022 to February 2023 for crop 2023 compared to that of crop 2022 and the LTM**

Crop	North	East	South	West	Centre	Island
<b>2022</b>	606 (102)	1126 (97)	1166 (105)	507 (92)	1370 (113)	992 (102)
<b>2023</b>	<b>433</b> (73)	<b>1009</b> (87)	<b>839</b> (75)	<b>563</b> (102)	<b>1119</b> (92)	<b>796</b> (82)
<b>LTM</b>	597	1161	1114	554	1217	972

figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October 2022 to February 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 February 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 February 2023**

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Feb 2023	+ / -	Feb 2023	+ / -	Feb 2023	% Normal
Ferret	30.9	-0.2	22.5	-0.2	260	125
Réduit	28.3	-0.3	21.4	-0.4	238	117
Union Park	28.2	+0.2	21.3	+0.1	208	132
Belle Rive	27.3	-0.4	20.1	-0.3	192	119

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

The mean maximum temperature was below normal at all stations except at Union Park. The mean minimum temperature was comparable to the normal at Union Park but lower than the normal at the other stations. However, sunshine duration recorded during February 2023 exceeded the normal at all stations by 25% at Ferret, 17% at Réduit, 32% at Union Park and 19% at Belle Rive.

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

During the last week of February 2023, stalk height was assessed at the 55 sites earmarked in the five sugar cane 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 February 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 February 2023 amounted to 32.2 cm in the North, 47.0 cm in the East, 43.1 cm in the South, 35.1 cm in the West and 34.0 cm in the Centre. These growth values were superior to those recorded at the same period in 2022 in all sectors except in the North. Compared to the normal for the corresponding period, growth was higher in the East only, but lagged behind the normal in the other sectors by 16.3 cm in the North, 2.7 cm in the South, 11.1 cm in the West and 2.5 cm in the Centre.

The island stalk elongation of 39.8 cm in February 2023 was higher than that of February 2022 by 7.0 cm but lagged behind the normal by 5.7 cm.

**Table 3a. Stalk elongation during the month of February 2023**

Sectors	Stalk elongation (cm)			February 2023 as % of	
	Feb 2023	Feb 2022	Normal	2022	Normal
North	32.2	35.7	48.5	90.2	66.4
East	47.0	30.2	46.0	155.6	102.1
South	43.1	36.7	45.8	117.4	94.1
West	35.1	31.5	46.2	111.4	75.9
Centre	34.0	22.0	36.5	154.5	93.3
<b>Island</b>	<b>39.8</b>	<b>32.8</b>	<b>45.5</b>	<b>121.3</b>	<b>87.5</b>

## 2.2 Cumulative Elongation (Table 3b)

Cumulative stalk growth from end-December 2022 to end-February 2023 reached 56.7 cm in the North, 76.6 cm in the East, 84.3 cm in the South, 56.4 cm in the West and 61.7 cm in the Centre. These cumulative growths compared to the same period last year were higher by 12.4 cm in the South and 5.5 cm in the Centre whereas in the other sectors it was lower by 9.8 cm in the North, 2.0 cm in the South and 9.8 cm in the West. For the same period, cumulative growth was comparable to the normal in the South but lagged behind the normal in all other sectors, the difference ranging from 10.9 cm in the Centre to 31.8 cm in the North. Island-wise the cumulative elongation of 70.6 cm in February 2023 was comparable to that of the 2022 crop but was lower than the normal (86.1 cm) by 15.5%.

**Table 3b. Cumulative elongation at end-February 2023.**

Sectors	Cumulative elongation (cm) at end- February			End-February 2023 as % of	
	2023	2022	Normal	2022	Normal
North	56.7	66.5	88.5	85.3	64.1
East	76.6	78.6	88.1	97.5	86.9
South	84.3	71.9	83.4	117.2	101.1
West	56.4	66.2	84.9	85.2	66.4
Centre	61.7	56.2	72.6	109.8	85.0
<b>Island</b>	<b>70.6</b>	<b>70.9</b>	<b>86.1</b>	<b>99.6</b>	<b>82.0</b>

### 2.3 Total stalk height (Table 3b and Figure 2)

At end-February 2023, total stalk height was 77.1 cm in the North, 106.4 cm in the East, 118.7 cm in the South, 80.4 cm in the West and 86.9 cm in the Centre giving an island average of 98.5 cm. When compared to corresponding period of last year, stalk height to-date was lower by 11.3 cm in the North, 4.3 cm in the East, 11.8 cm in the West and 4.4 cm in the Centre. In the South, it was higher by 19.5 cm. Total stalk height at end-February 2023 lagged behind the normal in all sectors, the difference ranging from 2.5 cm in the South to 39.1 cm in the West.

At island level, the total stalk height of 98.5 cm at end of February 2023 was comparable to that of last year but was lower than the normal by 26.0 cm.

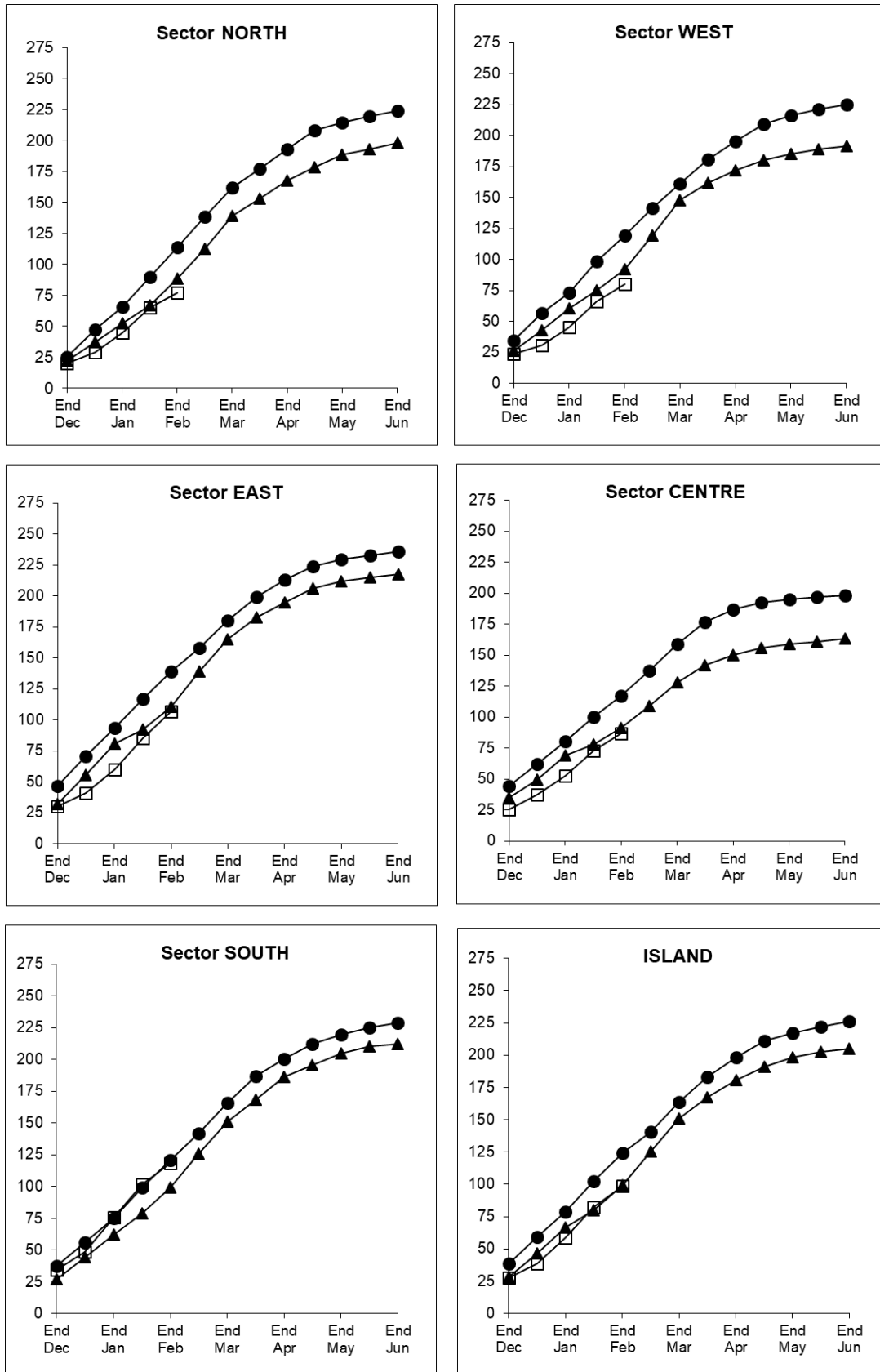
**Table 3b. Total stalk height at end-February 2023**

Sectors	Stalk height (cm) at end-February			End-February 2023 as % of	
	2023	2022	Normal	2022	Normal
North	77.1	88.4	114.0	87.2	67.7
East	106.4	110.7	139.1	96.1	76.5
South	118.7	99.2	121.2	119.7	97.9
West	80.4	92.2	119.5	87.2	67.3
Centre	86.9	91.3	117.1	95.2	74.2
<b>Island</b>	<b>98.5</b>	<b>99.2</b>	<b>124.5</b>	<b>99.3</b>	<b>79.1</b>

### 3.0 CROP 2023

Rainfall during the month of February 2023 was below normal in all sectors of the island even though the intense tropical cyclone *Freddy* passed near the island during the third week of the month. The North sector received the least amount of rainfall (30 mm) representing 14% of the normal rainfall. Although the sunshine duration during February 2023 was above normal at all stations, the below normal rainfall especially in the North and West sector were not favourable for optimum crop growth. This is apparent from the elongation data recorded at end-February 2023, which lagged behind the normal in all sectors except in the East. Total stalk height over the island at end-February 2023 was 79% of the normal but was comparable to that of February 2022.

**Figure 2. Stalk height at end-February 2023**



□ 2023    ▲ 2022    ● Normal