MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020 22 April 2022

SUGAR CANE CROP 2022

Status: End March 2022

1. CLIMATE

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

The island's average rainfall for the month of March 2022 amounted to 449 mm over the sugar cane areas and represented 144% of the long-term mean (LTM). Rainfall in March 2022 exceeded the LTM with 257 mm (125%) in the North, 486 mm (127%) in the East, 602 mm (171%) in the South, 230 mm (149%) in the West and 474 mm (126%) in the Centre.

The cumulative rainfall for the period October 2021 to March 2022 was 863 mm in the North, 1612 mm in the East, 1768 mm in the South, 737 mm in the West and 1844 mm in the Centre. These cumulated rainfall figures accounted for 107%, 104%, 121%, 104% and 116% of the respective long-term mean. The island average of 1441 mm for this period represented 112% of the long-term mean (1285 mm).

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

	North	East	South	West	Centre	Island
2021	143 *(69)*	231 *(60)*	259 *(74)*	107 *(69)*	223 *(59)*	209 *(67)*
2022	**257** *(125)**	**486** *(127)*	**602** *(171)*	**230** *(149)*	**474** *(126)*	**449** *(144)*
LTM	206	382	352	154	376	313

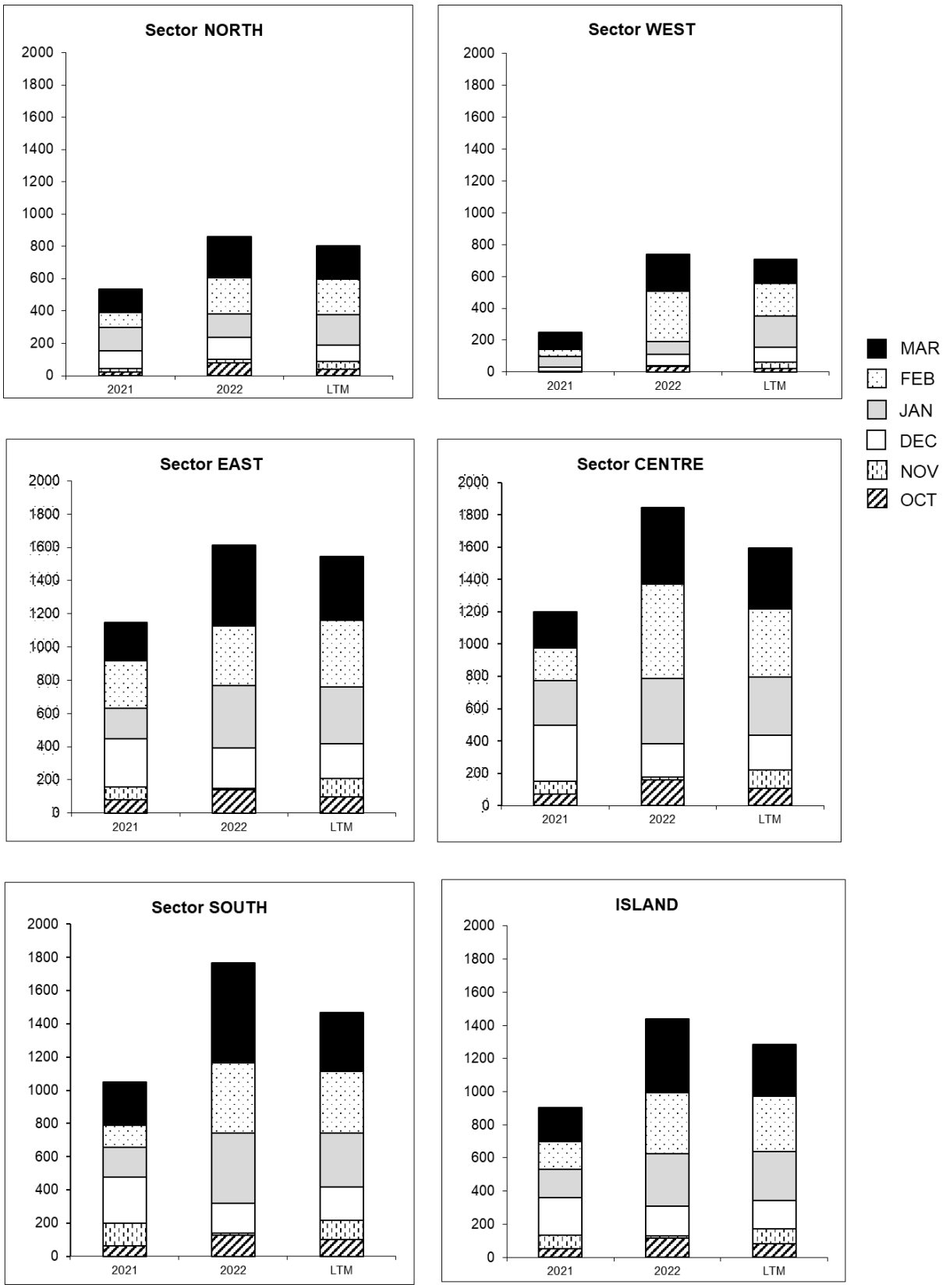
* figures in brackets are % of LTM (1991-2020)

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

	North	East	South	West	Centre	Island
2021	536 *(67)*	1147 *(74)*	1048 *(71)*	249 *(35)*	1200 *(75)*	907 *(71)*
2022	**863** *(107)**	**1612** *(104)*	**1768** *(121)*	**737** *(104)*	**1844** *(116)*	**1441** *(112)*
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 2021 to March 2022 for the 2022 crop compared to the corresponding period of the 2021 crop and to the long term mean (LTM).



1.2 Air Temperature and sunshine hours (Table 2)

During the month of March 2022, the air temperature and sunshine duration recorded at the four MSIRI agro-meteorological stations are given below.

Table 2. Air temperature and sunshine hours recorded on MSIRI agro-meteorological stations in March 2022

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	March 2022	DevN*	March 2022	DevN*	March 2022	% Normal
Ferret	30.8	+0.2	23.4	+1.4	232	98
Réduit	28.1	+0.3	22.2	+0.9	203	89
Union Park	28.4	+1.5	22.3	+1.7	143	84
Belle Rive	26.3	-1.0	21.4	+1.9	171	89

* Deviation from the Normal (1991-2020)

Mean maximum temperature exceeded the normal at all stations except at Belle Rive, while the mean minimum temperature was higher than the normal at all stations. The sunshine duration recorded during the month of March 2022 was comparable to the normal at Ferret, but was well below the normal at the other three stations representing 89% of the normal at Réduit, 84% at Union Park and 89% at Belle Rive.

2. STALK HEIGHT *(Table 3a, 3b)*

The stalk height measurement was taken during the last week of March 2022 at 54 sites in the five sugar cane sectors 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 2021 and to the normal, referred to as the mean of the five best cane yielding crops during the period 2012 to 2021.

2.1 Stalk elongation (Table 3a)

The stalk elongation recorded during the month of March 2022 was 50.8 cm in the North, 54.2 cm in the East, 51.7 cm in the South, 55.7 cm in the West and 37.0 cm in the Centre. These growth values were higher than those recorded at the same period in 2021 in all sectors except in the Centre. Compared to the normal for the corresponding period, growth was higher by 3.1 cm in the North, 9.7 cm in the East, 6.5 cm in the South and 13.9 cm in the West. In the Centre, it was lagging behind by 5.6 cm.

The island stalk elongation of 51.5 cm in March 2022 exceeded that of the corresponding period in 2021 (44.8 cm) by 6.7 cm and the normal (44.4 cm) by 7.1 cm.

Table 3a. Stalk elongation during the month of March 2022

	Stalk elongation (cm) during March 2022			March 2022 as % of	
Sectors	**2022**	**2021**	**Normal**	**2021**	**Normal**
North	50.8	49.5	47.7	102.6	106.4
East	54.2	38.4	44.5	141.1	121.7
South	51.7	48.6	45.2	106.4	114.3
West	55.7	45.4	41.8	122.7	133.4
Centre	37.0	39.6	42.6	93.4	86.9
Island	**51.5**	**44.8**	**44.4**	**115.0**	**116.0**

2.2 Cumulative Elongation (Table 3b)

The stalk growth from end-December 2021 to end-March 2022 cumulated to 117.3 cm in the North, 132.8 cm in the East, 123.6 cm in the South, 121.9 cm in the West and 93.2 cm in the Centre. These cumulative growths compared to the same period last year were higher by 6.7 cm in the North and 21.6 cm in the West, whereas in the other sectors it lagged behind by 2.2 cm in the East, 4.2 cm in the South and 20.2 cm in the Centre. For the same period, cumulative growth was comparable to the normal in the East, but lagged behind the normal in the other sectors. Island-wise the cumulative elongation of 122.4 cm in March 2022 was comparable to that of the 2021 crop (122.0 cm) but was lower than the normal (125.4 cm) by 2.4%.

Table 3b. Cumulative elongation at end-March 2022.

	Cumulative elongation (cm) at end-March			End-March 2022 as % of	
Sectors	**2022**	**2021**	**Normal**	**2021**	**Normal**
North	117.3	110.6	136.2	106.1	86.1
East	132.8	135.0	132.7	98.4	100.1
South	123.6	127.8	127.5	96.7	97.0
West	121.9	100.3	126.7	121.5	96.2
Centre	93.2	113.4	113.9	82.2	81.8
Island	**122.4**	**122.0**	**125.4**	**100.3**	**97.6**

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

At the end of March 2022, total stalk height reached 139.2 cm in the North, 164.9 cm in the East, 150.9 cm in the South, 147.9 cm in the West and 128.3 cm in the Centre giving an island average of 150.9 cm. Compared to end-March 2021, stalk height to-date was higher in the North and West by 9.6 cm and 19.1 cm, respectively. In the other sectors it lagged behind by 23.2 cm in the East, 18.8 cm in the South and 26.3 cm in the Centre. Total stalk height at end-March 2022 was lagging behind the normal by 22.5 cm in the North, 15.2 cm in the East, 14.9 cm in the South, 13.3 cm in the West and 30.7 cm in the Centre.

At island level, the total stalk height of 150.9 cm at end of March 2022 was lagging behind that of last year by 10.5 cm and the normal by 13.0 cm.

Table 3c. Total stalk height at end-March 2022

	Total stalk height (cm) at end-March 2022			**End-March 2022 as % of**	
Sectors	**2022**	**2021**	**Normal**	**2021**	**Normal**
North	139.2	129.6	161.7	107.4	86.1
East	164.9	188.1	180.1	87.7	91.6
South	150.9	169.7	165.8	88.9	91.0
West	147.9	128.8	161.2	114.8	91.7
Centre	128.3	154.6	159.0	83.0	80.7
Island	**150.9**	**161.4**	**163.9**	**93.5**	**92.1**

3. CROP 2022

The overall weather conditions during the month of March 2022 were characterised by above normal rainfall in all sectors of the island coupled with above normal maximum temperature and below normal sunshine duration. Compared to the normal, significant crop growth occurred in all sectors, except in the Centre where growth was not optimal. This is reflected in the stalk elongation of March 2022 for the island which exceeded that of March 2021 and the normal by 16%. The deficit in total stalk height for the island which was 17% in February 2022, is now at 8% of the normal. Further reduction in the stalk growth deficit as compared to the normal could be expected provided favourable weather prevails in the coming months.

Figure 2. Stalk height at end-March 2022