

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2022

14 February 2023

SUGAR CANE CROP 2023

Status: December 2022

1. CLIMATE

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

Rainfall recorded over the island during December 2022 was 61 mm and represented 35% of the long-term mean (LTM, 174 mm) for the month. Rainfall recorded in all sectors was inferior to the LTM with 38 mm in the North, 61 mm in the East, 76 mm in the South, 17 mm in the West and 103 mm in the Centre. The month of December 2022 was dry and the crop water requirements in rainfed fields were not satisfied.

Cumulative rainfall for the months of October to December 2022 amounted to 130 mm for the island, i.e. 38% of the LTM. During that period, 87 mm were recorded in the North, 142 mm in the East, 151 mm in the South, 53 mm in the West and 196 mm in the Centre. These represented 46%, 34%, 36%, 34% and 45% of the respective LTM.

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

Crop	North	East	South	West	Centre	Island
2022	138 (135)	240 (114)	177 (88)	74 (77)	208 (96)	180 (103)
2023	38 (37)*	61 (29)	76 (38)	17 (18)	103 (48)	61 (35)
LTM	102	211	201	96	216	174

⁺ Crop year is from October to September

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

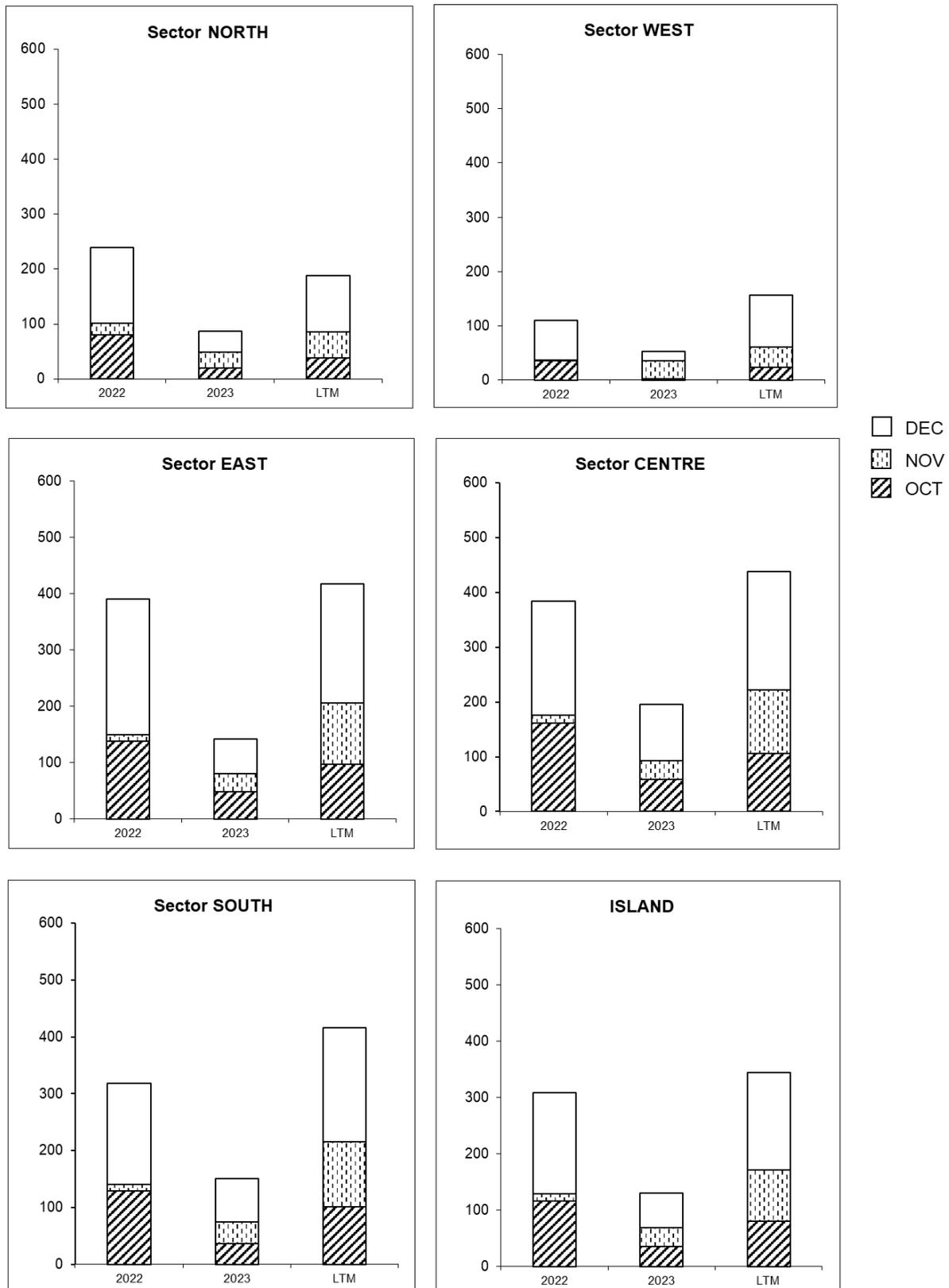
Table 1b. Cumulative rainfall (mm) from October to December 2022 for crop 2023 compared to that of crop 2022 and the LTM

	North	East	South	West	Centre	Island
2022	239 (127)	390 (94)	318 (76)	110 (70)	384 (88)	309 (89)
2023	87 (46)*	142 (34)	151 (36)	53 (34)	196 (45)	130 (38)
LTM	188	417	416	157	438	345

* figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October to December 2022 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 December 2022 on four MSIRI agro-meteorological stations are given in Table 2.

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

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Dec 2022	+ / -	Dec 2022	+ / -	Dec 2022	% Normal
Ferret	30.6	-0.4	20.2	-1.1	224	90
Réduit	28.7	+0.4	19.5	-0.7	276	115
Union Park	27.4	+0.1	19.8	0.0	231	122
Belle Rive	26.5	-0.6	18.5	-0.4	193	94

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

Mean maximum temperature during December 2022 was higher than the normal at Réduit, comparable to the normal at Union Park but lagged behind the normal at the other two stations. The mean minimum temperature in December 2022 was below the normal at all stations except at Union Park where it was equal to the normal. Sunshine duration recorded in December 2022 exceeded the normal at Réduit and Union Park but was below the normal at Ferret and Belle Rive stations.

2.0 STALK HEIGHT (Table 3)

Stalk height were initially measured at 55 sites in the five sugar cane sectors of the island during the last week of December 2022. The sites selected are representative of the various agro-climatic zones, varieties and crop categories. The measurements were compared to those of the corresponding period in December 2021 and to the normal referred to as the mean of the five best cane yielding crops during the period 2013 to 2022.

Stalk height at end December 2022 averaged to 20.4 cm in the North, 29.8 cm in the East, 34.1 cm in the South, 24.0 cm in the West and 25.5 cm in the Centre. These figures were lagging behind those recorded in December 2021 by 1.5 cm in the North, 2.3 cm in the East, 2.0 cm in the West and 9.6 cm in the Centre. In the South, it was higher by 6.8 cm. When compared to the normal, stalk height recorded in December 2022 was inferior in all sectors by 5.1 cm in the North, 16.5 cm in the East, 3.7 cm in the South, 10.6 cm in the West and 19.0 cm in the Centre. At island level, the cane height of 27.8 cm as at end-December 2022, was comparable to that of the corresponding period in December 2021, but lagged behind the normal by 10.7 cm.

Table 3. Stalk height (cm) at end-December 2022 compared to end-December 2021 and the normal.

Sectors	Stalk height (cm) at end-Dec			End-Dec 2022 as % of	
	2022	2021	Normal	2021	Normal
North	20.4	21.9	25.5	93.2	80
East	29.8	32.1	46.3	92.8	64.3
South	34.1	27.3	37.8	124.9	90.2
West	24	26	34.6	92.3	69.4
Centre	25.5	35.1	44.5	72.6	57.3
Island	27.8	28.1	38.5	98.8	72.3

3.0 CROP 2023

The dry regime in October and November 2022 persisted in December 2022, with rainfall recorded for the latter month over the island being 35% of the normal and the cumulative rainfall for the last three months being only 38% of the normal. This has slowed crop growth in fields harvested earlier during the season and mainly those under rainfed conditions. This is reflected in the initial stalk height recorded at the end of December 2022 which was 72% of the normal over the island.