

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2022

Status: End December 2021

1. CLIMATE

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

Rainfall recorded over the island during December 2021 amounted to 180 mm representing 103% of the long-term mean (LTM - 174 mm) for the sugar cane areas. Rainfall recorded in the different sectors amounted to 138 mm in the North, 240 mm in the East, 177 mm in the South, 74 mm in the West and 208 mm in the Centre. These amounts were above the LTM in the North and East sectors whereas in the other sectors they were below the LTM. However, during the first fortnight of December 2021, rainfall was deficient over the whole island and most of the rain was received towards the end of the second half of the month.

Cumulative rainfall for the months of October and December 2021 amounted to 309 mm for the island, i.e. 89% of the LTM. During that period, 239 mm were recorded in the North, 390 mm in the East, 318 mm in the South, 110 mm in the West and 384 mm in the Centre. These figures represented 127%, 94%, 76%, 70% and 88% of the respective LTM.

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

	North	East	South	West	Centre	Island
2021	110 (108)	288 (136)	278 (138)	28 (29)	349 (162)	228 (131)
2022	138 (135)*	240 (114)	177 (88)	74 (77)	208 (96)	180 (103)
LTM	102	211	201	96	216	174

⁺ Crop year is from October to September

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

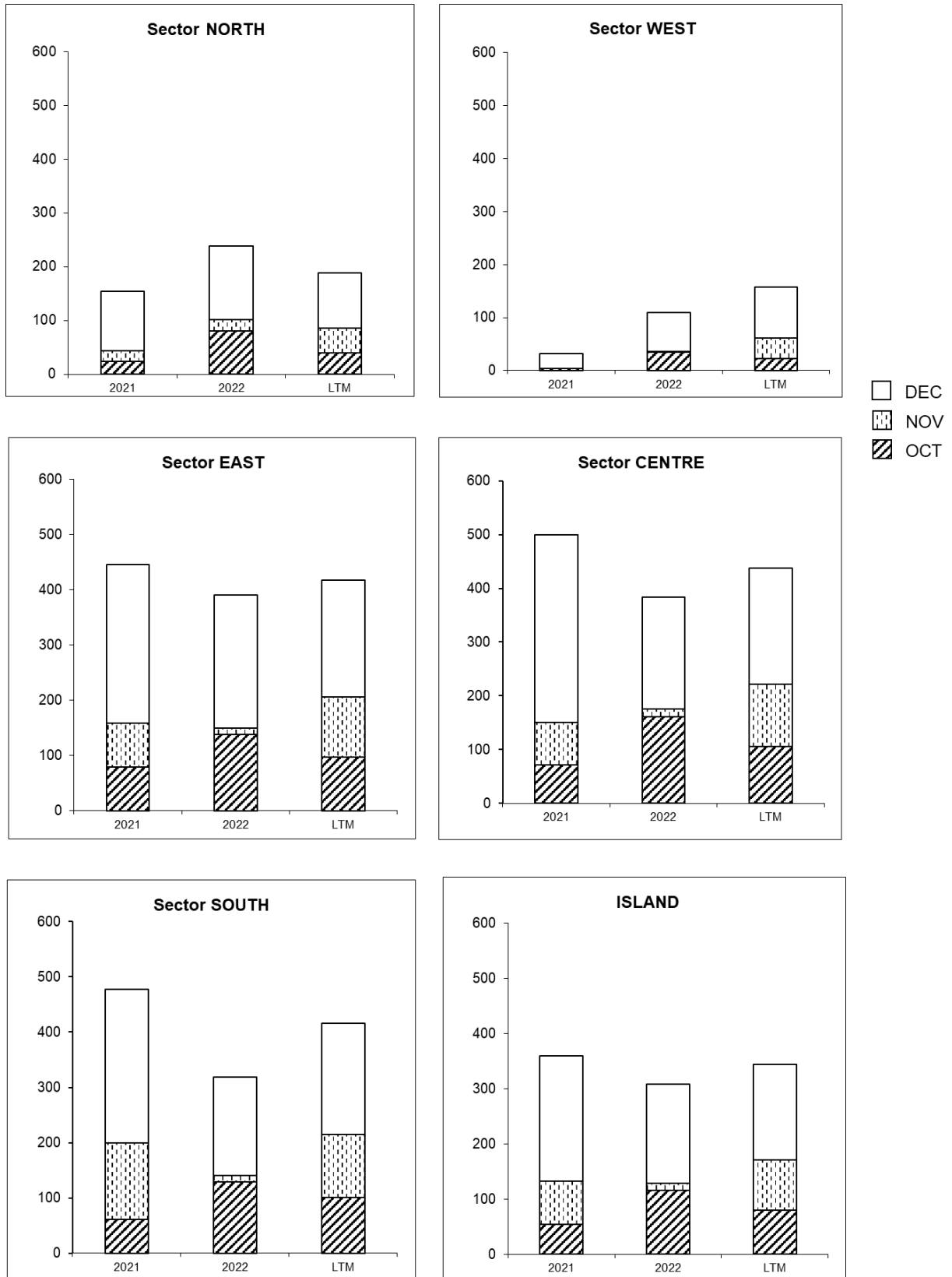
Table 1b. Cumulative rainfall (mm) from October to December 2021 for crop 2022 compared to that of crop 2021 and the LTM

	North	East	South	West	Centre	Island
2021	154 (82)	446 (107)	477 (115)	32 (20)	499 (114)	360 (104)
2022	239 (127)*	390 (94)	318 (76)	110 (70)	384 (88)	309 (89)
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 and December 2021 for the 2022 crop compared to the corresponding period of the 2021 crop and to the long term mean (LTM).



1.2 Air Temperature (Table 2)

The air temperature and sunshine duration data recorded during the month of December 2021 on MSIRI agro-meteorological stations are given below.

Table 2. Air temperature and sunshine hours recorded on MSIRI agro-meteorological stations in December 2021

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Dec 2021	DevN*	Dec 2021	DevN*	Dec 2021	% Normal
Ferret	30.6	-0.4	22.5	+1.2	225	90
Réduit	28.2	-0.1	20.9	+0.7	271	113
Belle Rive	26.0	-1.1	18.7	-0.2	210	104
Union Park	28.1	+0.8	20.8	+1.0	223	112

* Deviation from the Normal (1991-2020)

Mean maximum temperature exceeded the normal at Union Park, was comparable to the normal at Réduit but was below normal at the other two stations. The mean minimum temperature was slightly below normal at Belle Rive, but exceeded the normal at the other stations. Sunshine duration during December 2021 was above normal at all stations, except at Ferret. Recorded bright sunshine during December 2021 as a percentage of the normal was 90% at Ferret, 113% at Réduit, 104% at Belle Rive and 112% at Union Park.

2.0 STALK HEIGHT (Table 3)

Stalk height were initially measured at 54 sites in the five sugar cane sectors of the island during the last week of December 2021. 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 December 2020 and to the normal referred to as the mean of the five best cane yielding crops during the period 2012 to 2021.

Stalk height at end December 2021 averaged 21.9 cm in the North, 32.1 cm in the East, 27.3 cm in the South, 26.0 cm in the West and 35.1 cm in the Centre. These figures were lagging behind those recorded in December 2020 by 21.0 cm in the East, 14.6 cm in the South, 2.5 cm in the West and 6.1 cm in the Centre. In the North it was higher by 2.9 cm. When compared to the normal, stalk height recorded in December 2021 was lower in all sectors by 3.6 cm in the North, 15.3 cm in the East, 11.1 cm in the South, 8.6 cm in the West and 10.0 cm in the Centre. At island level, the cane height of 28.1 cm as at end-December 2021, was lagging behind that of the corresponding period in December 2020 as well as the normal by 10.9 cm and 10.3 cm, respectively.

Table 3. Stalk height (cm) at end-December 2021 compared to end-December 2020 and the normal.

Sectors	Stalk height (cm) at end-Dec			End-Dec 2021 as % of	
	2021	2020	Normal	2020	Normal
North	21.9	19.0	25.5	115.3	85.9
East	32.1	53.1	47.4	60.5	67.7
South	27.3	41.9	38.4	65.2	71.2
West	26.0	28.5	34.6	91.2	75.2
Centre	35.1	41.2	45.1	85.2	77.9
Island	28.1	39.0	38.4	72.0	73.2

3.0 CROP 2021 (Table 4 and Figure 2)

Harvest of crop 2021 in all sectors ended at mid-December 2021 except in the North which ended on 8th January 2022. At the end of harvest of crop 2021, cane productivity for the island was 69.6 TCH and exceeded that recorded in 2020 (64.9 TCH) by 4.7 TCH (7.2 %). In 2021, cane productivity in the different sectors was higher than that of Crop 2020, except in the West sector where it was comparable. The difference in cane productivity ranged from 4.8 TCH in the North to 6.9 TCH in the Centre. When compared to Crop 2019, cane productivity lagged behind in all sectors.

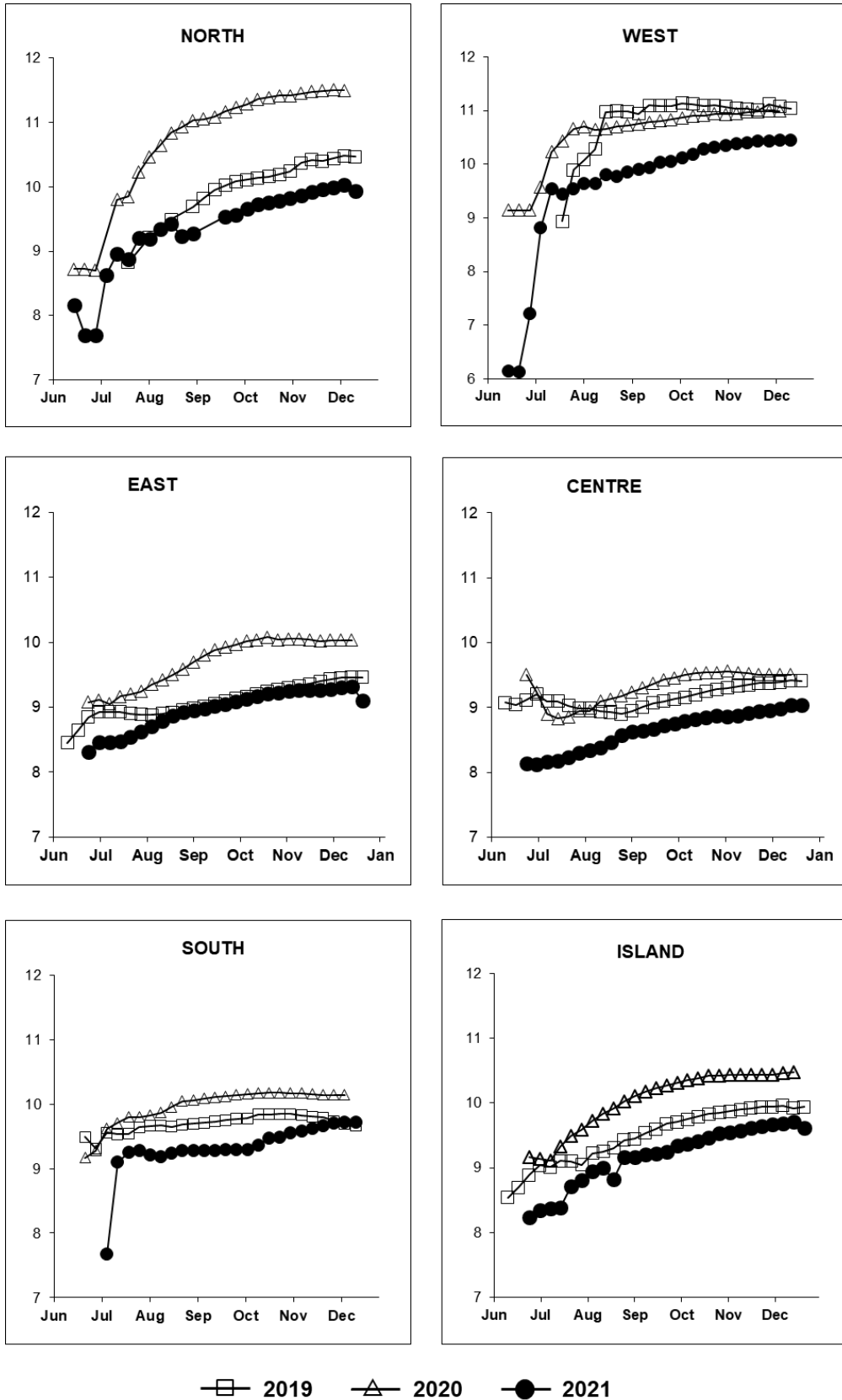
Table 4. Productivity of the 2021 Crop compared to 2020 and 2019 Crops

Sector	Cane Productivity (TCH)			Extraction Rate (%)			Sugar Productivity (TSH)		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
North	80.6	65.3	70.1	10.43	11.50	9.93	8.41	7.51	6.96
East	79.2	67.2	72.3	9.45	10.03	9.10	7.48	6.74	6.58
South	84.3	67.0	73.0	9.57	10.14	9.72	8.07	6.79	7.10
West	89.4	65.0	64.6	10.92	10.99	10.45	9.76	7.14	6.75
Centre	62.3	44.1	51.0	9.42	9.51	9.04	5.87	4.19	4.61
Island	81.0	64.9	69.6	9.85	10.47	9.61	7.98	6.80	6.69

The recorded island extraction rate at the end of harvest of crop 2021 stood at 9.61% and was inferior to that of 2020 (10.47%) and that of 2019 (9.85%). Sector-wise, the extraction rate recorded was 9.93% in the North, 9.10% in the East, 9.72% in the South, 10.45% in the West

and 9.04% in the Centre. These figures lagged behind those recorded in 2020 and those of 2019, except for sector South.

Figure 2. Evolution of extraction rate on miller-planters’ land for crops 2019, 2020 and 2021.



The sugar productivity of 6.69 TSH recorded over the island at the end of harvest of crop 2021 was lower than that of 2020 (6.80 TSH) by 0.11 tonnes (2%) and also to that of 2019 (7.98 TSH) by 1.29 tonne (16%). Similarly, sugar productivity in all sectors lagged behind those of 2020 and 2019, except in the South and Centre for 2020.

4. CROP 2021

Rainfall in December 2021 over the island was comparable to the normal, with sectors North and East recording above normal rainfall, but the distribution was mostly during the second fortnight. Thus, the deficit in rainfall observed during the month of November 2021 persisted during the first half of the month of December 2021. The maximum air temperature recorded in December 2021 was below the normal except at Union Park, while total sunshine duration exceeded the normal at most of the stations, except at Ferret. Overall, the weather that prevailed in December 2021 was not favourable to crop growth, which is reflected in stalk height for December 2021 being lower than the normal and that of December 2020.

However, the heavy downpours that occurred during the last week of December 2021 and during the first week of January 2022 augur good conditions for cane growth. The shortfall recorded in stalk height could be recouped provided weather conducive to growth prevails in the coming months. It is also expected that growers adopt good agronomic and cultural practices as per established recommendations.