

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020

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SUGAR CANE CROP 2021

Status: End December 2020

1. CLIMATE

1.1 Rainfall (Table 1a, 1b, Figure 1)

Rainfall recorded over the island during December 2020 was above the long-term mean (LTM) with an average of 228 mm representing 122% of the long-term mean (188 mm) for the sugar cane areas. Rainfall recorded in December 2020 was 110 mm in the North, 288 mm in the East, 278 mm in the South, 28 mm in the West and 349 mm in the Centre. These amounts represented 93%, 129%, 122%, 28% and 178% of the long-term mean for these sectors, respectively.

Cumulative rainfall from October to December 2020 amounted to 360 mm for the island, i.e. 100% of the long-term mean. During that period, 154 mm were recorded in the North, 446 mm in the East, 477 mm in the South, 32 mm in the West and 499 mm in the Centre. These figures represented 75%, 103%, 106%, 21% and 127% of the respective LTM.

Table 1a. Rainfall (mm) for the month of December for crops 2020, 2021⁺ and the long term mean (LTM)

	North	East	South	West	Centre	Island
2020	204 (173)	294 (131)	316 (139)	107 (108)	453 (231)	280 (149)
2021	110 (93)*	288 (129)	278 (122)	28 (28)	349 (178)	228 (122)
LTM	118	224	227	99	196	188

⁺ Crop year is from October to September

* figures in brackets are % of LTM (1981-10)

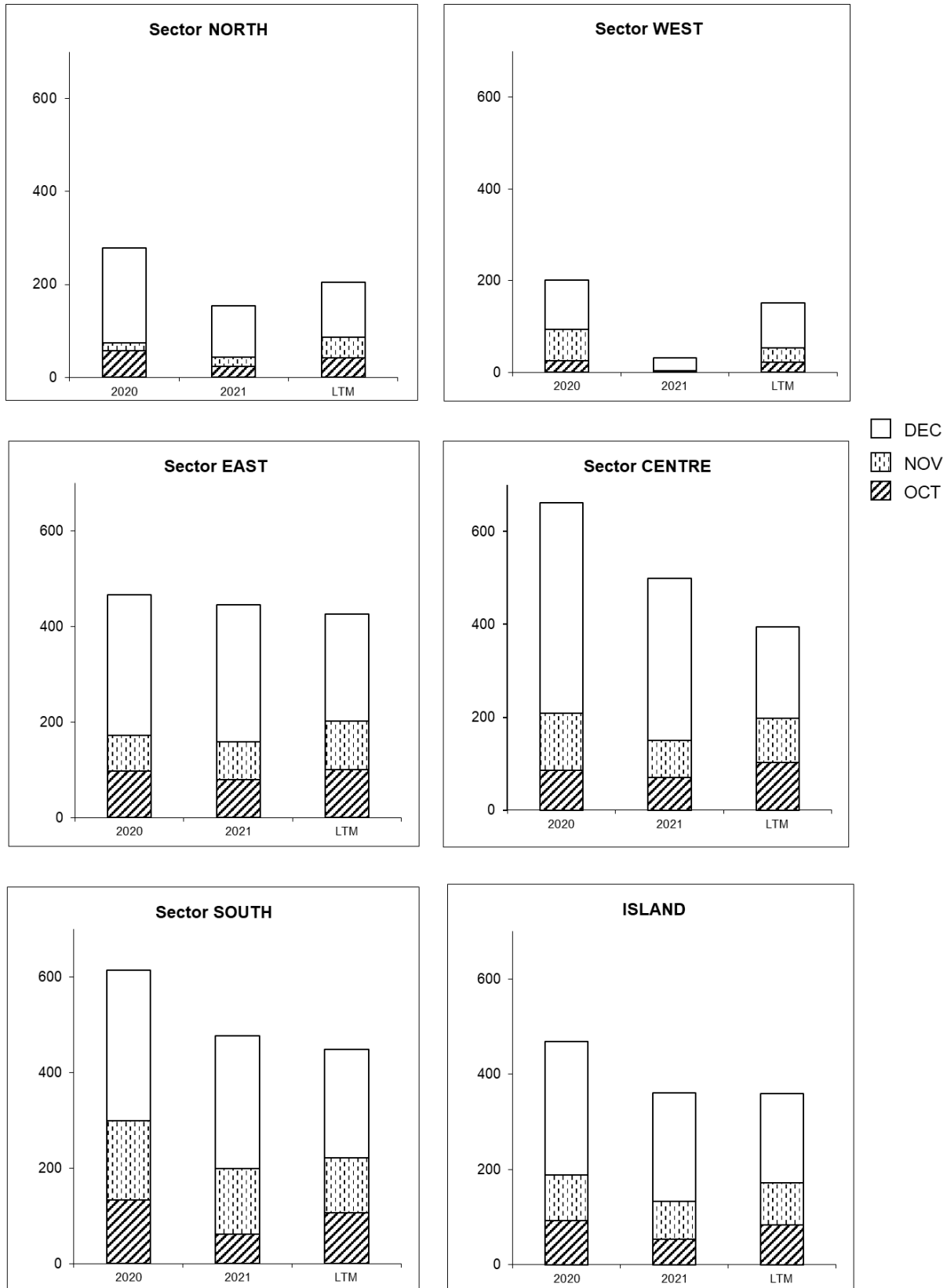
Table 1b. Cumulative rainfall (mm) from October to December 2020 for crop 2021 compared to that of crop 2020 and the LTM

	North	East	South	West	Centre	Island
2020	278 (136)	466 (108)	615 (137)	201 (132)	662 (168)	468 (130)
2021	154 (75)*	446 (103)	477 (106)	32 (21)	499 (127)	360 (100)
LTM	205	432	448	152	394	359

* figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October to December 2020 for the 2021 crop compared to the corresponding period of the 2020 crop and to the long term mean (LTM).



1.2 Air Temperature and sunshine duration (Table 2)

Data on air temperature and sunshine duration recorded during the month of December 2020 at the four MSIRI agro-meteorological stations are given below.

Table 2. Air temperature and sunshine hours recorded on MSIRI agro-meteorological stations in December 2020

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Dec 2020	DevN*	Dec 2020	DevN	Dec 2020	% Normal
Ferret	30.0	-0.8	23.0	+2.0	240	95
Réduit	27.8	0.0	21.1	+0.8	266	116
Union Park	26.9	+0.1	20.8	+1.3	160	81
Belle Rive	25.9	-1.0	19.4	+1.0	180	87

Mean maximum temperature was close to normal at Réduit and Union Park but below normal at the other two stations. The mean minimum temperature exceeded the normal at all stations, the difference ranging from +0.8°C at Réduit to +2.0°C at Ferret. Sunshine duration during December 2020 was below normal at all stations except at Réduit. Recorded bright sunshine during December 2020 as a percentage of the normal was 95% at Ferret, 116% at Réduit, 81% at Union Park and 87% at Belle Rive.

2.0 STALK HEIGHT (Table 3)

Stalk height were initially measured during the last week of December 2020 at 48 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 December 2019 and to the normal referred as the mean of the five best cane yielding crops during the period 2011 to 2020.

Stalk height at end December 2020 averaged 19.0 cm in the North, 53.1 cm in the East, 41.9 cm in the South, 28.5 cm in the West and 41.2 cm in the Centre. These figures exceeded those recorded in December 2019 by 12.7 cm in the East and 8.6 cm in the South, but were lagging behind in the other sectors by 20.8 cm in the North, 11.4 cm in the West and 2.6 cm in the Centre. The same tendency was observed when stalk height in December 2020 was compared to the normal. It was higher than the normal by 5.7 cm in the East and 4.2 cm in the South but lagged behind by 5.8 cm in the North, 6.1 cm in the West and 1.8 cm in the Centre. At island level, the cane height of 39.0 cm, as at end-December 2020, was comparable to that of the corresponding period in December 2019 but slightly higher than the normal by 3.2%.

Table 3. Stalk height (cm) at end-December 2020

Sectors	Stalk height (cm) at end-Dec			End-Dec 2020 as % of	
	2020	2019	Normal	2019	Normal
North	19.0	39.8	24.8	47.7	76.6
East	53.1	40.4	47.4	131.4	112.0
South	41.9	33.3	37.7	125.8	111.1
West	28.5	39.9	34.6	71.4	82.5
Centre	41.2	43.8	43.0	94.1	95.7
Island	39.0	38.4	37.8	101.7	103.3

3.0 CROP 2020 (Table 4a and 4b)

Harvest of crop 2020 in all sectors ended at mid-December 2020. At the end of harvest of crop 2020, cane productivity for the island was 64.9 TCH and lagged behind that recorded in 2019 (80.9 TCH) by 16.0 TCH (19.8 %). In 2020, cane productivity across sectors was lower than that of Crop 2019. The difference in cane productivity ranged from 11.9 TCH in the East to 24.3 TCH in the West. When compared to Crop 2018, cane productivity was comparable in the East sector but lagged behind in the other sectors.

Table 4a. Cane productivity (TCH) of the 2020 crop compared to 2019 and 2018 crops

Sectors	North	East	South	West	Centre	Island
2018	72.4	67.7	72.6	80.2	52.1	70.4
2019	80.3	79.1	83.6	89.3	64.2	80.9
2020	65.3	67.2	67.0	65.0	44.1	64.9

The recorded island extraction rate at the end of harvest of crop 2020 was 10.33% and exceeded those of 2018 (10.26%) and of 2019 (9.78%). Sector-wise, the extraction rate recorded was 11.21% in the North, 10.01% in the East-Centre, 10.00% in the South and 10.51% in the West. These figures were superior than those obtained in 2019 and also than those of 2018 except in sector South.

Table 4b. Extraction rate (%) and sugar productivity (TSH) for crop 2020 compared to crop 2019 and crop 2018

Sector	Extraction rate (%)			Sugar Productivity (TSH)		
	2018	2019	2020	2018	2019	2020
North	10.71	10.39	11.21	7.75	8.34	7.32
East-Centre	9.97	9.42	10.01	6.48	7.22	6.28
South	10.21	9.69	10.00	7.41	8.10	6.70
West	10.38	9.94	10.51	8.33	8.88	6.83
Island	10.26	9.78	10.33	7.22	7.91	6.70

The sugar productivity of 6.70 TSH recorded over the island at the end of harvest of crop 2020 was lower than that of 2019 (7.91 TSH) by 1.21 tonnes (15.3%) and also that of 2018 (7.22 TSH) by 0.52 tonne (7.2%). Similarly, sugar productivity in all sectors was lagging behind that of 2019 and 2018.

4. CROP 2021

The month of December 2020 was characterised by above normal rainfall in sectors East, South and Centre while the other two sectors received below normal rainfall. Moreover, maximum air temperature and total sunshine duration was lagging behind the normal at most of the stations. Overall, the weather prevailing in December 2020 was not favourable to crop growth in the North and West sector which is reflected in stalk height for December 2020 being lower than the normal and to that of December 2019. The slow growth observed in the late season varieties could explain the below normal stalk height. However, in sectors East and South the above normal rainfall was conducive to growth and led to above normal stalk height. The Centre reached 96% of stalk growth in spite of recording above normal rainfall. This shortfall could be recouped provided weather conducive to growth prevails in the coming months and that agronomic and cultural practices are adopted as per established recommendations.