MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020 20 September 2021

SUGAR CANE CROP 2021

Status: End August 2021

1. CLIMATE

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

The 204 mm of rainfall recorded over the sugar cane areas during the month of August 2021 exceeded the normal of 119 mm, representing 172% of the long-term mean (LTM). Above normal rainfall was recorded in all sectors with 85 mm in the North, 279 mm in the East, 239 mm in the South, 37 mm in the West and 307 mm in the Centre. The second half of August 2021 was wetter than the first half of the month.

Rainfall over the period October 2020 to August 2021 cumulated to 1125 mm in the North, 2604 mm in the East, 2693 mm in the South, 596 mm in the West and 2900 mm in the Centre. These amounts represented 92%, 106%, 111%, 67% and 119% of their respective long-term means. The island average of 2158 mm for the island represented 106% of the long-term mean for the same period.

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

	North	East	South	West	Centre	Island
2020	20 *(36)*	73 *(49)*	67 *(45)*	2 *(10)*	125 *(76)*	58 *(49)*
2021	**85** *(152)**	**279** *(186)*	**239** *(160)*	**37** *(185)*	**307** *(186)*	**204** *(172)*
LTM	56	150	149	20	165	119

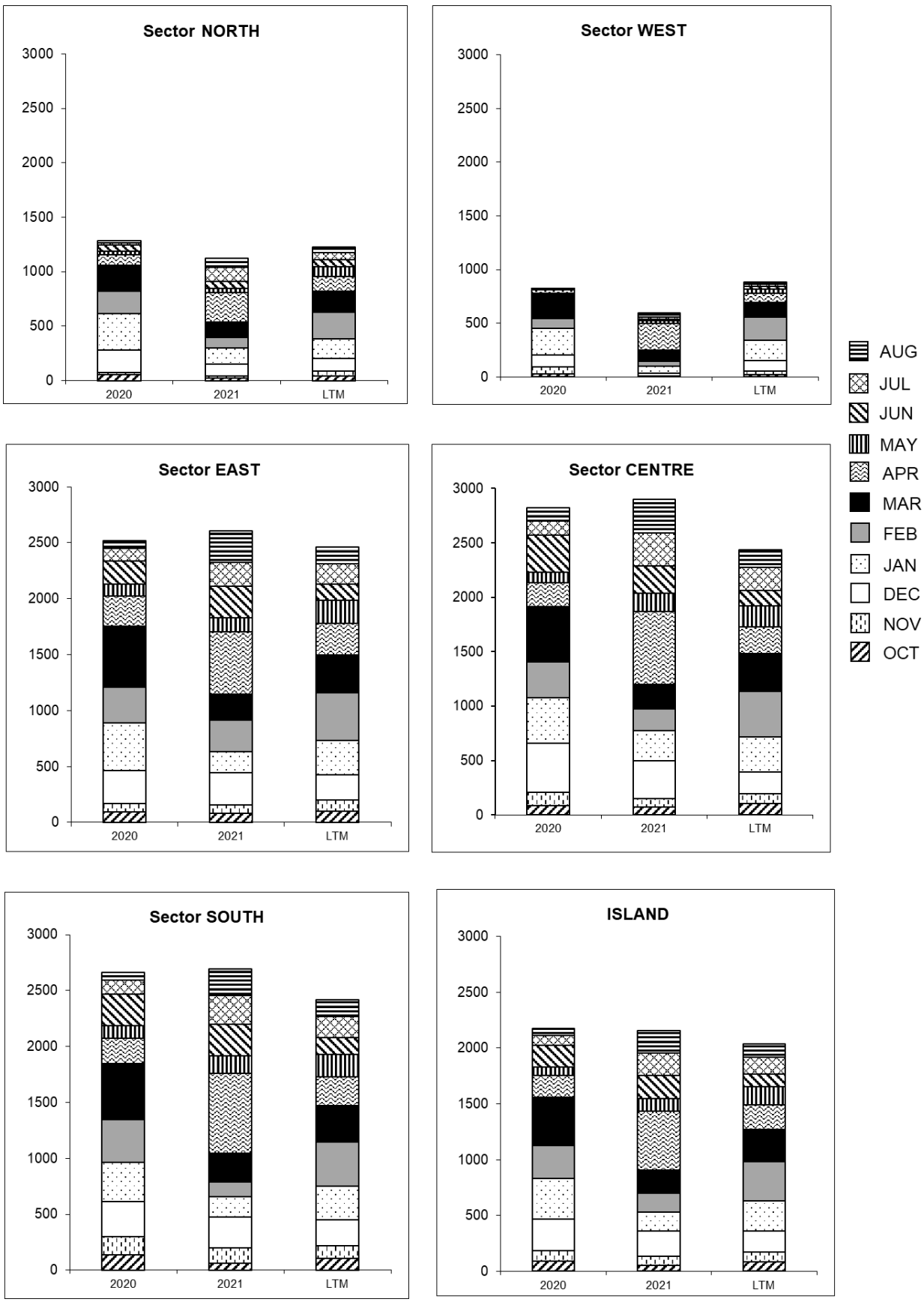
* figures in brackets are % of LTM (1991-2020)

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

	North	East	South	West	Centre	Island
2020	1287 *(105)*	2521 *(102)*	2661 *(110)*	822 *(93)*	2825 *(116)*	2173 *(107)*
2021	**1125** *(92)**	**2604** *(106)*	**2693** *(111)*	**596** *(67)*	**2900** *(119)*	**2158** *(106)*
LTM	1229	2465	2416	885	2438	2034

* figures in brackets are % of LTM ***[Source: Mauritius Meteorological Services]***

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



1.2 Air Temperature (Table 2)

Data on air temperatures recorded during the month of August 2021 on MSIRI agro-meteorological stations are given below.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in August 2021

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Aug 2021	DevN*	Aug 2021	DevN*	Aug 2021	DevN*
Ferret	24.6	-1.1	14.0	-2.5	10.6	+1.4
Réduit	22.1	-0.4	15.4	+0.1	6.7	-0.5
Belle Rive	21.4	-0.6	14.7	+0.7	6.7	-1.3
Union Park	22.3	+0.8	16.1	+0.8	6.2	0.0

* Deviation from the Normal (1981-2010)

During August 2021, mean maximum temperature was below normal at all stations except at Union Park where it was higher by 0.8 ºC. Mean minimum temperature was lower than the normal by 2.5 ºC at Ferret, comparable to the normal at Réduit but exceeded the normal at the other two stations. These resulted in a mean temperature amplitude lagging behind the normal at Réduit and Belle Rive, equal to the normal at Union Park whereas at Ferret it exceeded the normal by 1.4 ºC.

1.3 Sunshine (Table 3)

Data from the four MSIRI agro-meteorological stations showed that the sky was overcast during August 2021 at all stations. Recorded bright sunshine as a percentage of the normal amounted to 87% at both Ferret and Réduit, 86% at Belle Rive and 93% at Union Park.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in August 2021

Station	Aug 2021	Normal	% of Normal
Ferret	215	247	87
Réduit	192	220	87
Belle Rive	173	202	86
Union Park	133	143	93

2.0 SUCROSE ACCUMULATION (Tables 4a and 4b)

During the last week of August 2021, cane samples were analysed for sucrose content from miller-planters' land in all factory areas covering the main cultivated varieties. The average Pol % cane (*richesse*) was calculated on the basis of area under cultivation for each variety in the different factory areas of each sector. The results were compared with those of the last two years.

Table 4a. Average Pol % cane (richesse) in different varieties at end-August 2021.

Variety	North	East	South	West	Centre
M 1176/77	13.2		13.3	14.9	13.4
M 1861/89			13.6		
M 1672/90	13.0	12.0	12.9		
M 2593/92	12.7		13.3	13.9	12.6
M 2283/98			12.5		
M 1989/99	11.7		12.3		
M 1246/84	12.0				
M 1400/86	12.2		14.0	13.5	
M 1561/01			13.1		
M 216/02			13.3		
M 1002/02				13.9	
M 1256/04			11.8		
M 915/05			11.5	13.4	13.4
R570	10.2	12.6	13.4	14.2	
R573				13.7	
R575				14.7	
R579	12.4	12.4	12.3	12.3	11.6

Table 4b. Comparison of Pol % cane (richesse) at the end of July and August 2019, 2020 and 2021.

Sectors	JULY			AUGUST		
	2019	2020	2021	2019	2020	2021
North	12.6	13.4	11.0	14.6	14.4	12.2
East	12.0	11.4	11.5	12.6	13.4	12.5
South	11.9	12.0	12.4	12.7	12.8	12.8
West	13.4	12.4	12.0	14.6	13.4	13.9
Centre	11.4	11.2	11.7	12.3	11.9	12.3
Island	**12.2**	**12.1**	**11.7**	**13.2**	**13.3**	**12.6**

The *richesse* at the end of August 2021 was 12.2% in the North, 12.5% in the East, 12.8% in the South, 13.9% in the West and 12.3% in the Centre. Compared to the corresponding period in 2020, sucrose content at end-August 2021 was comparable in sector South, exceeded that of last year by 0.5° in the West and 0.4° in the Centre, but lagged behind by 2.2° in the North and 0.9° in the East. Sucrose content at the end of August, for the present crop, was comparable to that of the corresponding period in 2019 in sectors East, South and Centre but lagged behind in sectors North by 2.4° and West by 0.7°.

Sucrose content has improved in all sectors from July to August 2021 with an increment of 1.2° in the North, 1.0 ° in the East, 0.4° in the South, 1.9° in the West and 0.6° in the Centre. On average for the island, the increase in *richesse* was 0.9° in 2021 compared to 1.2 ° and 1.0° for the corresponding period in 2020 and 2019.

Island-wise, the *richesse* of 12.6% recorded at end of August 2021 was lagging behind those of 2020 (13.3%) by 0.7° and 2019 (13.2%) by 0.6°.

3. CROP PRODUCTIVITY 2021

As at 28 August 2021, 8066 ha representing about 29% of miller-planters' land was harvested compared to 10 070 ha (34%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 23% in the North, 37% in the East, 22% in the South, 33% in the west and 38% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters follows.

3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end August 2021 amounted to 69.6 TCH and lagged behind those of August 2020 (72.1 TCH) and August 2019 (82.1 TCH). Sector-wise, cane productivity recorded was 71.7 TCH in the North, 73.3 TCH in the East, 71.5 TCH in the South, 63.5 TCH in the West and 55.8 TCH in the Centre. Compared to the same period last year, cane productivity recorded to-date was comparable in the East, but inferior in the other sectors by 5.5 TCH in the North, 2.8 TCH in the South, 2.5 TCH in the West and 2.0 TCH in the Centre. When compared to August 2019, cane productivity to-date was inferior in all sectors.

Table 5a. Cane productivity (TCH) as at end July and August for the 2019, 2020 and 2021crops

Sector	End July			End August		
	2019	**2020**	**2021**	**2019**	**2020**	**2021**
North	83.2	78.3	72.2	83.5	77.2	71.7
East	81.4	73.7	74.7	83.0	73.1	73.3
South	82.0	78.9	72.9	82.3	74.3	71.5
West	92.3	67.2	53.8	79.4	66.0	63.5
Centre	76.1	62.3	58.1	74.1	57.8	55.8
Island	**82.2**	**74.3**	**69.2**	**82.1**	**72.1**	**69.6**

3.2 Extraction (Table 5b, Figure 2)

The recorded island extraction rate of 9.17% was lower than that of the corresponding period in 2020 (10.02%) and 2019 (9.43%). Sector-wise, the extraction rate recorded was 9.42% in the North, 8.92% in in the East, 9.24% in the South, 9.81% in the West and 8.57% in the Centre. Compared to the corresponding period last year, extraction rate to-date was lagging behind by 1.42 ° in the North, 0.67° in the East, 0.72° in the South, 0.85° in the West and 0.61° in the Centre. Extraction rate obtained in August 2021 was inferior in all sectors compared to that in August 2019.

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

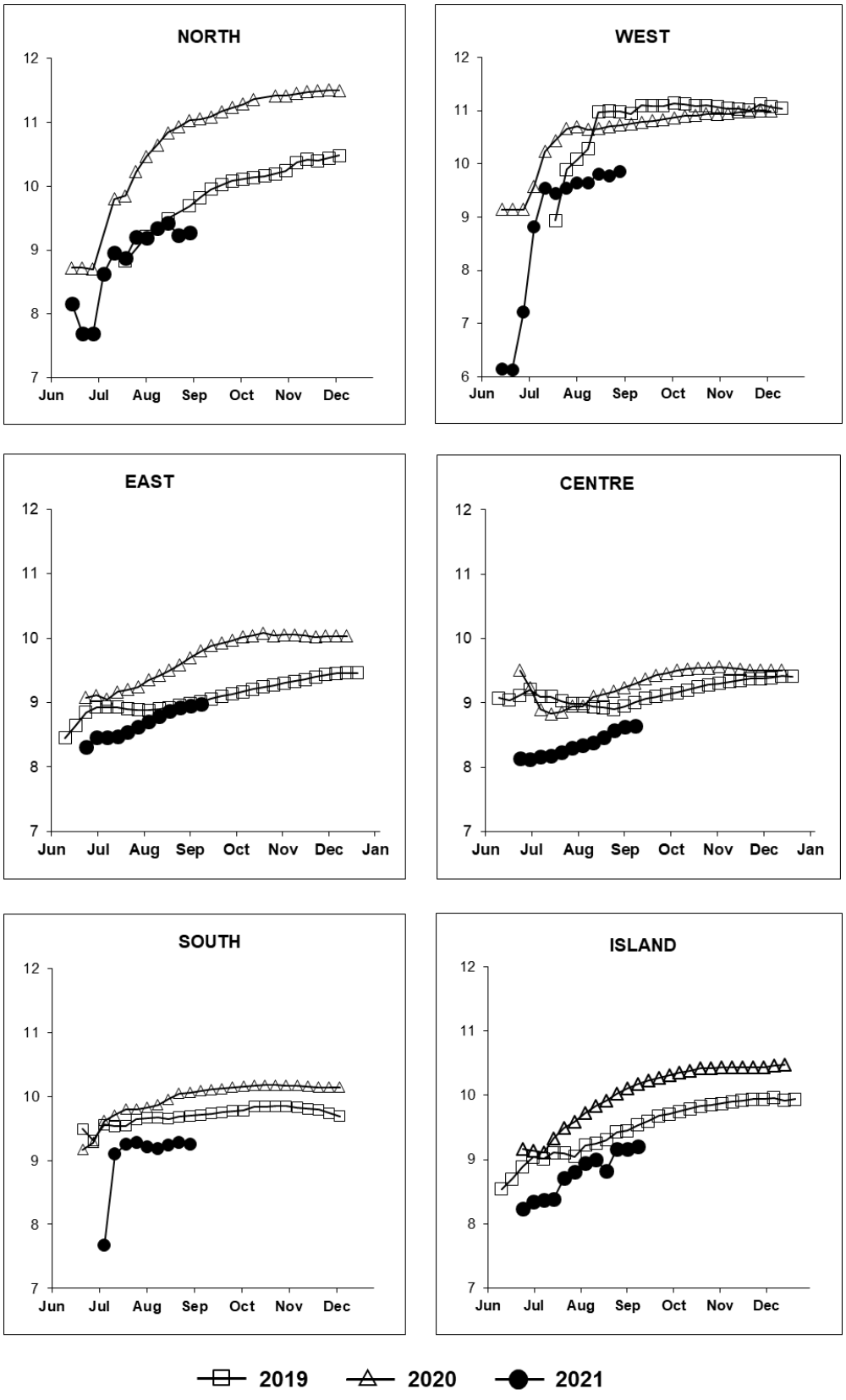


Table 5b. Extraction rate (%) as at end July and End August for the 2019, 2020 and 2021 crops

Sectors	End July			End August		
	2019	**2020**	**2021**	**2019**	**2020**	**2021**
North	8.82	9.85	8.88	9.49	10.84	9.42
East	8.89	9.24	8.62	8.96	9.59	8.92
South	9.54	9.80	9.25	9.65	9.96	9.24
West	8.94	10.44	9.44	10.97	10.66	9.81
Centre	8.99	8.95	8.31	8.90	9.18	8.57
Island	**9.05**	**9.59**	**8.81**	**9.43**	**10.02**	**9.17**

3.3 Sugar productivity (Table 5c)

Island-wise, the sugar productivity of 6.38 TSH was lower than that at the corresponding period in 2020 (7.22 TSH) by 0.84 tonne (11.6%). The recorded sugar productivity in the different sectors reached 6.75 TSH in the North, 6.54 TSH in the East, 6.61 TSH in the South, 6.23 TSH in the West and 4.78 TSH in the Centre. These figures when compared to those of July 2020 were lagging behind by 1.62 TSH in the North, 0.47 TSH in the East, 0.79 TSH in the South, 0.81 TSH in the West and 0.53 TSH in the Centre. These sugar productivity figures in August 2021 were also inferior to those obtained in August 2019.

Table 5c. Sugar productivity (TSH) as at end July and August for the 2019, 2020 and 2021 crops

Sectors	End July			End August		
	2019	**2020**	**2021**	**2019**	**2020**	**2021**
North	7.34	7.71	6.41	7.92	8.37	6.75
East	7.24	6.81	6.44	7.44	7.01	6.54
South	7.82	7.73	6.74	7.94	7.40	6.61
West	8.25	7.02	5.08	8.71	7.04	6.23
Centre	6.84	5.58	4.83	6.59	5.31	4.78
Island	7.44	7.13	6.10	7.74	7.22	6.38

4. CROP 2021

The salient features of climatic conditions that prevailed during the month of August 2021 were an above normal rainfall in all sectors coupled with a lower solar radiation. These conditions did not favour optimal sucrose accumulation. The *richesse* obtained during the month of August 2021 over the island was lower than that recorded during the same period in 2020 and 2019.

So far with 29% of the crop harvested on miller-planters' land, milling data indicate that both cane productivity and extraction rate in 2021 are lower than those recorded in 2019 and 2020. Thus, the resulting sugar productivity in August 2021 over the island is lagging behind that of last year by 0.84 TSH (11.6%). Based on these data and with no major departure in the weather from the normal, sugar productivity in 2021 is projected not to exceed that of last year.