

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020

16 November 2021

SUGAR CANE CROP 2021

Status: End October 2021

1. CLIMATE

1.1 Rainfall (Table 1)

The island average rainfall of 116 mm recorded over the sugar cane areas during the month of October 2021 exceeded the long-term mean (LTM) of 80 mm by 45%. All sectors received above normal rainfall. The North recorded 81 mm of rainfall, the East 138 mm, the South 129 mm, the West 35 mm and the Centre 161 mm. These amounts represented 208% of the long-term mean in the North, 142% in the East, 128% in the South and 152% in both the West and the Centre. The first half of the month of October 2021 was wetter than the second half.

Table 1. Rainfall in mm and as a percentage of the long term mean (LTM) for September and October during crops 2020 and 2021

	Crop	North	East	South	West	Centre	Island
September	2020	30 (67)	96 (83)	88 (77)	20 (83)	112 (89)	74 (80)
	2021	34 (76)	87 (75)	95 (83)	7 (29)	135 (107)	75 (82)
	LTM	45	116	114	24	126	92
October	2020	24 (62)	79 (81)	61 (60)	4 (17)	71 (67)	54 (67)
	2021	81 (208)*	138 (142)	129 (128)	35 (152)	161 (152)	116 (145)
	LTM	39	97	101	23	106	80

* figures in brackets are % of LTM (1991-2020) Source: Mauritius Meteorological Services

1.2 Air Temperature (Table 2)

Data on air temperatures recorded during the month of October 2021 on MSIRI agrometeorological stations are given below.

During October 2021, mean maximum temperature was below normal at all stations except at Union Park. Mean minimum temperature exceeded the normal at all stations except at Ferret. The resulting mean temperature amplitude was lagging behind the normal at all stations by 0.6 °C at Ferret, 1.9 °C at Réduit, 2.8 °C at Belle Rive and 0.5 °C at Union Park.

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

Stations	Maximum (°C)		Minimum (°C)		Amplitude (°C)	
	Oct 2021	DevN*	Oct 2021	DevN*	Oct 2021	DevN*
Ferret	26.9	-1.5	17.3	-0.9	9.6	-0.6
Réduit	24.6	-0.7	18.1	+1.2	6.5	-1.9
Belle Rive	22.6	-1.7	17.0	+1.1	5.6	-2.8
Union Park	24.8	+0.6	18.1	+1.1	6.7	-0.5

* Deviation from the Normal (1991-2020)

1.3 Sunshine (Table 3)

Data from the four MSIRI agro-meteorological stations showed that bright sunshine hours during October 2021 were lagging behind the normal at all stations. Recorded bright sunshine as a percentage of the normal amounted to 96% at Ferret, 86% at Réduit, 75% at Belle Rive and 83% at Union Park.

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

Station	Oct 2021	Normal	% of Normal
Ferret	248	260	96
Réduit	221	256	86
Belle Rive	161	214	75
Union Park	151	183	83

* Normal (1991-2020)

2. SUCROSE ACCUMULATION (Tables 4a and 4b)

During the last week of October 2021, clean 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*) for each sector was calculated on the basis of area under cultivation for each variety in the different factory areas of the sector. The results were compared with those of the last two years.

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

Variety	North	East	South	West	Centre
M 1861/89			13.1		
M 1672/90	14.4		13.5		
M 2593/92	14.4		13.5	13.7	
M 2283/98			12.6		
M 1989/99	13.0				
M 1246/84	12.3				
M 1400/86	13.8				
M 1561/01			12.8		
M 915/05			12.5		12.7
R570	12.0	12.8			
R579	12.6	12.1	11.9	12.1	11.6

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

Sectors	SEPTEMBER			OCTOBER		
	2019	2020	2021	2019	2020	2021
North	14.8	15.8	12.9	15.3	16.2	13.4
East	13.5	13.8	12.6	13.6	13.9	12.4
South	14.0	14.9	13.0	14.4	14.5	12.6
West	15.0	14.8	13.3	14.6	14.9	12.9
Centre	12.4	13.3	11.6	13.2	–	11.6
Island	14.0	14.6	12.8	14.3	14.7	12.6

The *richesse* obtained at the end of October 2021 amounted to 13.4% in the North, 12.4% in the East, 12.6% in the South, 12.9% in the West and 11.6% in the Centre. These figures were lower than those obtained during the corresponding periods in 2020 and 2019. Compared to the corresponding period in 2020, sucrose content at end-October 2021 was lagging behind by 2.8° in the North, 1.5° in the East, 1.9° in the South and 2.0° in the West. Similarly, compared to October 2019, the shortfall in sucrose content ranged from 1.2° in the East to 1.9° in the North.

From end September to end October 2021, sucrose content has improved slightly only in sector North by 0.5°, was the same in the Centre but has regressed in the other sectors. On average for the island, the *richesse* has subsided by 0.2° in October 2021 compared to September 2021.

Island-wise, the *richesse* of 12.6% recorded at the end of October 2021 was much lower than those of 2020 (14.7%) by 2.1° and 2019 (14.3%) by 1.7°.

3. CROP PRODUCTIVITY 2021

As at 30 October 2021, 18 825 ha representing about 67% of miller-planters' land was harvested compared to 22 117 ha (75%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 60% in the North, 69% in the East, 67% in the South, 77% in the West and 66% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters follows.

3.1 Cane productivity (Table 5a)

At the end of October 2021, the 70.2 TCH cane productivity for the island exceeded that of the corresponding period in 2020 (67.1 TCH) by 3.1 TCH, but lagged behind that of October 2019 (81.9 TCH) by 11.7 TCH. Sector-wise, cane productivity recorded was 70.7 TCH in the North, 72.8 TCH in the East, 73.2 TCH in the South, 65.2 TCH in the West and 53.9 TCH in the Centre. Cane productivity recorded to-date was comparable to that of last year in sectors North and West, but was higher in the East, South and Centre by 4.6 TCH, 5.3 TCH and 3.0 TCH, respectively. When compared to October 2019, cane productivity to-date was inferior in all sectors.

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

Sector	End September			End October		
	2019	2020	2021	2019	2020	2021
North	82.4	75.2	71.8	80.9	70.8	70.7
East	82.0	70.9	73.4	80.9	68.2	72.8
South	82.6	70.8	73.5	83.3	67.9	73.2
West	88.8	67.9	66.0	90.1	65.4	65.2
Centre	72.2	53.9	54.9	69.4	50.9	53.9
Island	82.3	70.0	70.7	81.9	67.1	70.2

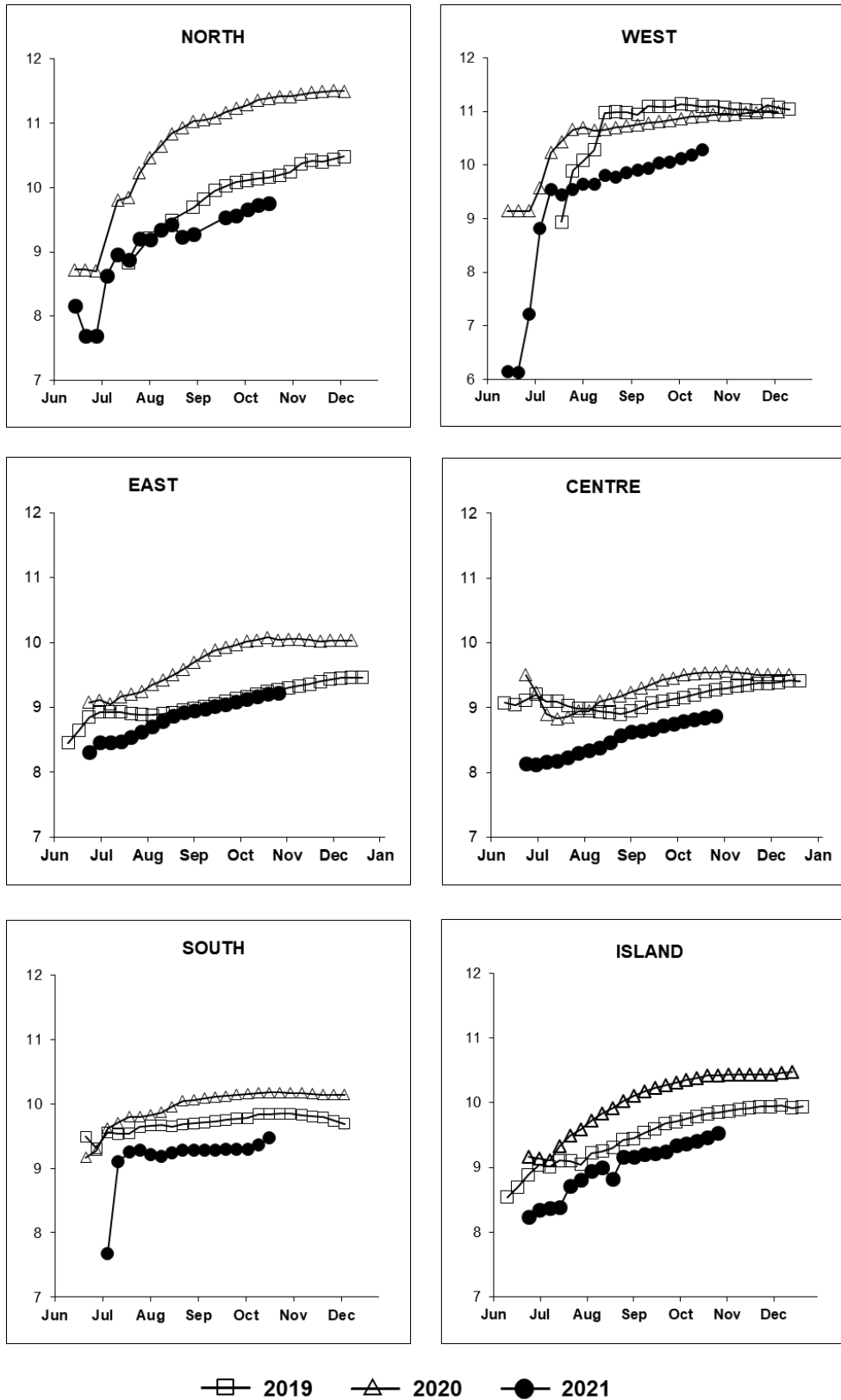
3.2 Extraction rate (Table 5b, Figure 1)

The recorded island extraction rate at end October 2021 was 9.53% and it was lower than that of the corresponding period in 2020 (10.20%) and 2019 (9.85%). Sector-wise, the extraction rate recorded was 9.75% in the North, 9.23% in the East, 9.47% in the South, 10.28% in the West and 8.87% in the Centre. Compared to the corresponding period last year, extraction rate to-date was lagging behind in all sectors by 1.64° in the North, 0.81° in the East, 0.71° in the South, 0.63° in the West and 0.67° in the Centre. The October 2021 extraction rate was inferior in all sectors compared to that in October 2019.

Table 5b. Extraction rate (%) as at end September and end October for crops 2019, 2020 and 2021

Sectors	End September			End October		
	2019	2020	2021	2019	2020	2021
North	9.95	11.17	9.54	10.16	11.39	9.75
East	9.10	9.96	9.09	9.27	10.04	9.23
South	9.73	10.12	9.29	9.84	10.18	9.47
West	11.10	10.81	10.03	11.09	10.91	10.28
Centre	9.10	9.46	8.76	9.28	9.54	8.87
Island	9.68	10.31	9.34	9.85	10.20	9.53

Figure 1. Evolution of extraction rate on miller-planters' land for crops 2019, 2020 and 2021.



3.3 Sugar productivity (Table 5c)

Sugar productivity over the island at the end of October 2021 was 6.69 TSH and was lower than that at the corresponding period in 2020 (6.84 TSH) by 0.15 tonne (2.2%). The recorded sugar productivity in the different sectors was 6.89 TSH in the North, 6.72 TSH in the East, 6.93 TSH in the South, 6.70 TSH in the West and 4.78 TSH in the Centre. Compared to October 2020, sugar productivity to-date was comparable in the South and Centre, but was lagging behind by 1.17 TSH in the North, 0.13 TSH in the East and 0.44 TSH in the West. These sugar productivity figures in October 2021 were also inferior to those obtained in October 2019.

Table 5c. Sugar productivity (TSH) as at end September and end October for crops 2019, 2020 and 2021

Sectors	End September			End October		
	2019	2020	2021	2019	2020	2021
North	8.20	8.40	6.85	8.22	8.06	6.89
East	7.46	7.06	6.67	7.50	6.85	6.72
South	8.04	7.16	6.83	8.20	6.91	6.93
West	9.86	7.34	6.62	9.99	7.14	6.70
Centre	6.57	5.10	4.81	6.44	4.86	4.78
Island	7.97	7.22	6.60	8.07	6.84	6.69

4. CROP 2021

The weather conditions that prevailed during October 2021, in terms of above normal rainfall in all sectors coupled with below normal solar radiation and temperature amplitude, have been favourable to cane growth rather than sucrose accumulation. This is reflected in the *richesse* recorded at end October 2021 which was below that of the corresponding month of the two previous years. Moreover, with nearly two-thirds of miller's planter fields already harvested, milling data over the island indicated an extraction rate lagging behind that of last year by 0.67°. Although cane productivity in October 2021 was higher than that in October 2020 by 3.1 TCH, the resulting sugar productivity was lagging behind that of last year over the island by 0.15 TSH. At this point in time, no major improvement in sugar productivity is anticipated with the onset of the dry summer period.