MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2021

Status: End March 2021

1. CLIMATE

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

The island average rainfall of 209 mm recorded over the sugar cane areas during the month of March 2021 was 73% of the long-term mean (LTM) of 285 mm. Below normal rainfall was recorded in all sectors with 143 mm in the North, 231 mm in the East, 259 mm in the South, 107 mm in the West and 223 mm in the Centre. These values represented 75%, 68%, 79%, 78% and 65% of the respective long-term means.

The cumulative rainfall over the period October 2020 to March 2021 amounted to 907 mm representing 71% of the long-term mean for the island. During the same period, 536 mm were recorded in the North, 1147 mm in the East, 1048 mm in the South, 249 mm in the West and 1200 mm in the Centre. These values represented 66%, 76%, 71%, 36% and 81% of the respective long-term means.

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

	North	East	South	West	Centre	Island
2020	**238** *(125)*	**546** *(162)*	**502** *(154)*	**239** *(173)*	**506** *(148)*	**432** *(152)*
2021	**143** *(75)**	**231** *(68)*	**259** *(79)*	**107** *(78)*	**223** *(65)*	**209** *(73)*
LTM	190	338	327	138	343	285

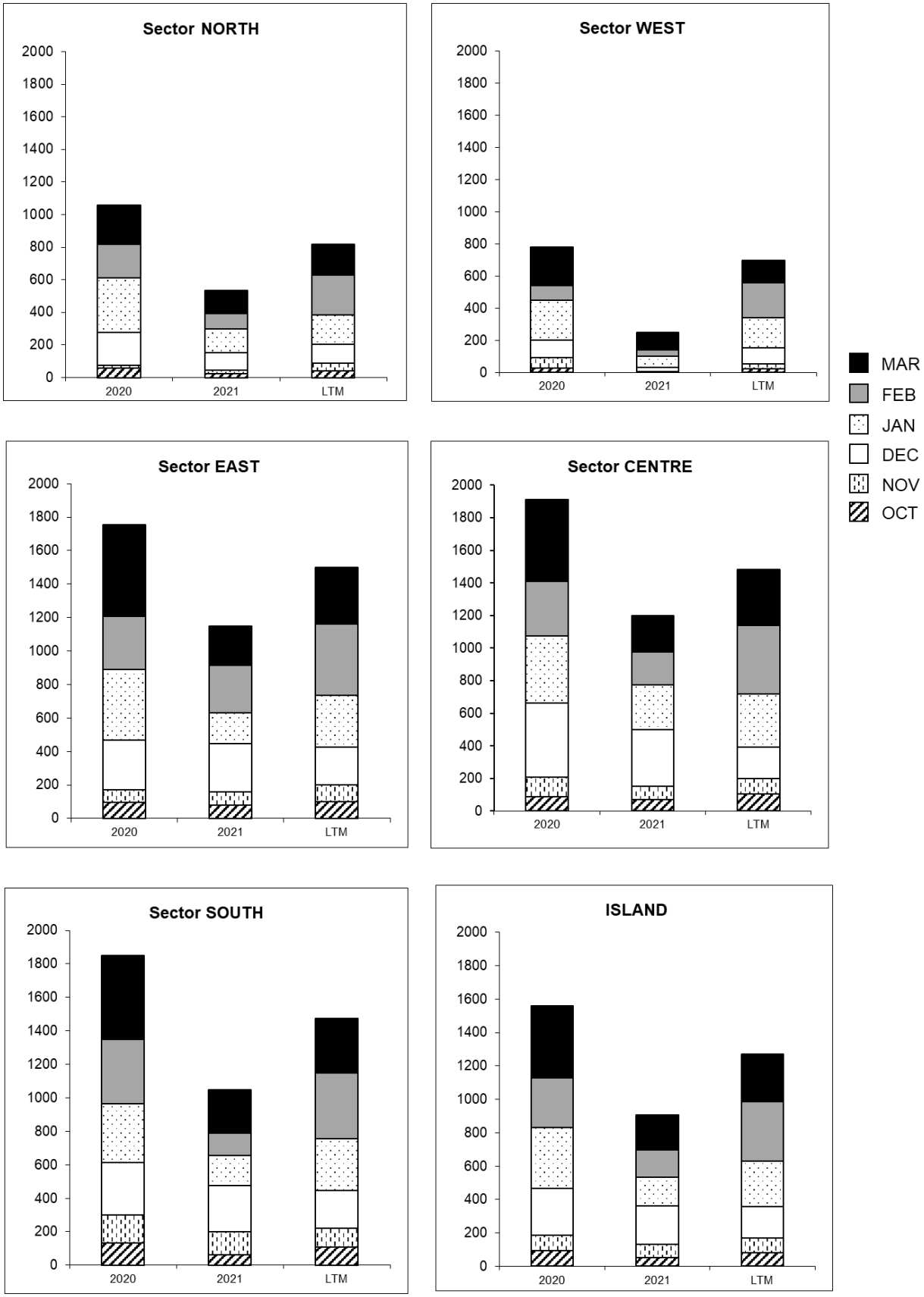
* figures in brackets are % of LTM (1981-2010)

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

	North	East	South	West	Centre	Island
2020	1056 *(129)*	1754 *(116)*	1850 *(126)*	780 *(112)*	1914 *(129)*	1561 *(123)*
2021	**536** *(66)**	**1147** *(76)*	**1048** *(71)*	**249** *(36)*	**1200** *(81)*	**907** *(71)*
LTM	818	1506	1474	696	1481	1269

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

Figure 1. Monthly rainfall (mm) for the period October 2020 to March 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 and sunshine duration (Table 2)

Weather data during the month of March 2021 were recorded at only two stations namely at Réduit and Union Park, instead of four, on account of the lockdown associated with the COVID-19 pandemic imposed as from 9 March 2021.

Table 2. Air temperature and sunshine duration recorded on two MSIRI agro-meteorological stations in March 2021

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Mar 2021	DevN*	Mar 2021	DevN	Mar 2021	% Normal
Réduit	28.1	+0.3	21.3	0.0	227	99
Union Park	28.5	+1.6	21.5	+0.9	175	103

* Deviation from the Normal (1981-2010)

Mean monthly maximum temperature during March 2021 exceeded the normal by 0.3°C at Réduit and 1.6°C at Union Park. Mean minimum temperature was above normal at Union Park but similar to the normal at Réduit. Sunshine hours recorded in March 2021 amounted to 99% and 103% of the normal at Réduit and Union Park, respectively. Above normal air temperature and sunshine duration are conducive to photosynthesis and crop growth.

2.0 STALK HEIGHT

Assessment of stalk height could not be carried out as scheduled at the end of March 2021 due to the Covid-19 lockdown. Thus, the elongation figures for March 2021 were derived by interpolation following assessment made in mid-April 2021. The measurements were compared to those of mid-March 2020 and to the normal, representing the mean of the five best cane yielding crops for the period 2011 to 2020.

2.1 Stalk elongation (Table 3a)

Stalk growth during the month of March 2021 was estimated to be inferior to that recorded during the corresponding period in 2020, except for sector West.

Table 3a. Stalk elongation during the month of March for crops 2020, 2021 (estimated) and the normal

	Stalk elongation (cm) during March			March 2021 as % of	
Sectors	**2021**	**2020**	**Normal**	**2020**	**Normal**
North	49.5	50.9	50.9	97.2	97.3
East	38.4	46.4	44.5	82.8	86.3
South	48.6	48.8	46.8	99.6	103.8
West	45.4	42.7	41.8	106.3	108.7
Centre	39.6	44.6	45.7	88.8	86.6
Island	**44.8**	**47.5**	**47.0**	**94.2**	**95.3**

Growth during March 2021 was estimated to 49.5 cm in the North, 38.4 cm in the East, 48.6 cm in the South, 45.4 cm in the West and 39.6 cm in the Centre. For the same period, growth exceeded the normal by 1.8 cm in the South and 3.6 cm in the West but lagged behind the normal by 1.4 cm in the North and 6.1 cm in both the East and Centre sectors. The island stalk elongation of 44.8 cm in March 2021 was inferior to those of the corresponding period in 2020 by 2.7 cm (5.8%) and the normal by 2.2 cm (4.7%).

2.2 Cumulative Elongation (Table 3b)

Cumulative growth from end-December 2020 to end-March 2021 was estimated to have reached 110.6 cm in the North, 135.0 cm in the East, 127.8 cm in the South, 99.5 cm in the West and 113.4 cm in the Centre. These cumulative growths, except for sector East, were lagging behind those of 2020, the difference ranging from 2.4 cm in the Centre to 25.0 cm in the North. For the same period, growth was higher than that of the normal in the East and Centre whereas in the other sectors, it was below the normal. Island-wise the cumulative elongation of 121.9 cm was below those of the 2020 crop (131.7 cm) by 7.4% and the normal (129.4 cm) by 5.8%.

Table 3b. Cumulative elongation at end-March 2021 for crops 2020, 2021 (estimated) and the normal.

	Cumulative elongation (cm) at end-March			**End-March 2021 as % of**	
Sectors	**2021**	**2020**	**Normal**	**2020**	**Normal**
North	110.6	135.6	134.1	81.6	82.5
East	135.0	133.8	132.7	100.9	101.8
South	127.8	136.3	131.0	93.8	97.6
West	99.5	115.7	126.7	86.0	78.5
Centre	113.4	115.8	112.8	97.9	100.5
Island	**121.9**	**131.7**	**129.4**	**92.6**	**94.2**

2.3 Total stalk height (Table 3c and Figure 2)

Total stalk height at end-March 2021 was estimated to stand at 129.6 cm in the North, 188.1 cm in the East, 169.7 cm in the South, 128.0 cm in the West and 154.6 cm in the Centre, bringing an island average of 160.5 cm. Compared to the corresponding period in 2020, total stalk height in March 2021 was higher in the East by 13.9 cm, comparable in the South but was inferior by 45.8 cm in the North, 27.6 cm in the West and 5.0 cm in the Centre. Total stalk height in March 2021 with respect to the normal was higher by 8.0 cm in the East, comparable with the South and Centre, but was below normal by 29.3 cm in the North and 33.2 cm in the West.

At island level, the total stalk height of 160.5 cm at end of March 2021 was inferior to those of the corresponding period in 2020 by 9.6 cm (5.6%) and the normal by 7.7 cm (4.6 %).

Table 3c. Total stalk height at end-March for crops 2020, 2021(estimated) and the normal.

	Stalk height (cm) at end-March			End-March 2021 as % of	
Sectors	**2021**	**2020**	**Normal**	**2020**	**Normal**
North	129.6	175.4	158.9	73.9	81.5
East	188.1	174.2	180.1	108.0	104.5
South	169.7	169.6	168.7	100.1	100.6
West	128.0	155.6	161.2	82.3	79.4
Centre	154.6	159.6	155.9	96.9	99.2
Island	**160.5**	**170.1**	**168.2**	**94.4**	**95.4**

3. CROP 2021

Rainfall recorded during the month of March 2021 was below normal over the island and in all the different sectors. However, the amount of rainfall recorded in the different sectors and over the island in March 2021 was higher than that obtained during the month of February 2021. The above normal air temperature and solar radiation recorded are expected to have boosted crop growth in March 2021. Thus, the deficit in stalk height compared to the normal in sectors North and West in February 2021, which was 26% and 31%, respectively was reduced to 18% and 20% in March 2021. Overall, total stalk height at island level in March 2021 was 95% of the normal.

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Figure 2. Stalk height estimated at end- March 2021