

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2020

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SUGAR CANE CROP 2021

Status: End February 2021

1. CLIMATE

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

The island's average rainfall for the month of February 2021 was 165 mm over the sugar cane areas representing a deficit of 54% compared to the normal (356 mm). In all sectors, rainfall recorded was below the normal with 96 mm in the North, 286 mm in the East, 132 mm in the South, 43 mm in the West and 204 mm in the Centre. These amounts represented 39%, 67%, 34%, 20% and 49% of the normal for these sectors, respectively.

Rainfall for the period October 2020 to February 2021 cumulated to 393 mm in the North, 916 mm in the East, 789 mm in the South, 142 mm in the West and 977 mm in the Centre. These cumulative rainfalls represented 63%, 78%, 69%, 25% and 86% of the respective long-term mean (LTM). The island average of 697 mm for this period represented 71% of the long-term mean (985 mm).

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

| | North | East | South | West | Centre | Island |
|-------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| 2020 | 206 (84) | 319 (75) | 383 (97) | 91 (42) | 332 (79) | 296 (83) |
| 2021 | 96 (39)* | 286 (67) | 132 (34) | 43 (20) | 204 (49) | 165 (46) |
| LTM | 245 | 426 | 393 | 218 | 420 | 356 |

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

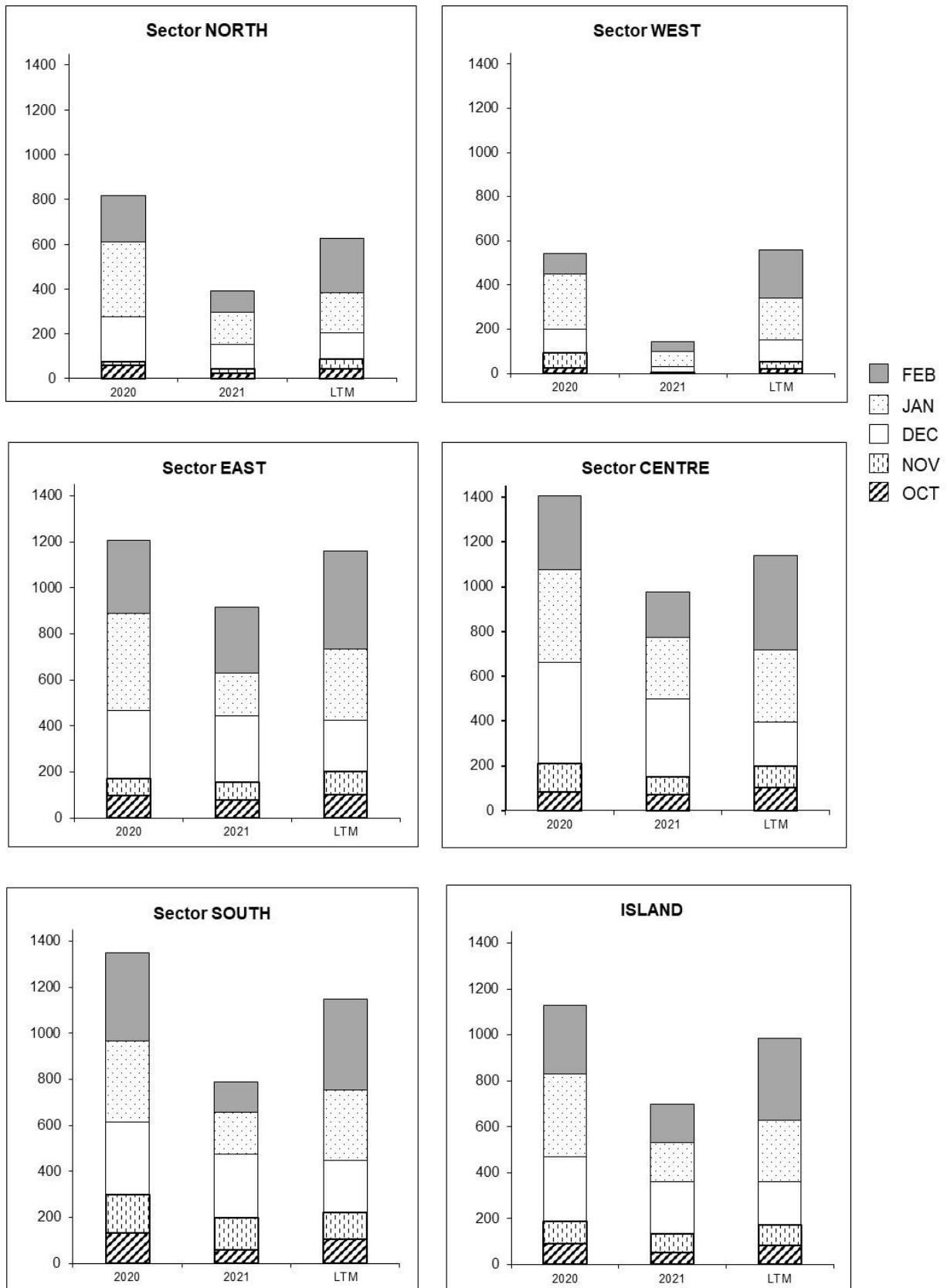
Table 1b. Cumulative rainfall (mm) from October 2020 to February 2021 for crop 2021 compared to that of crop 2020 and the LTM

| | North | East | South | West | Centre | Island |
|-------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 2020 | 818 (130) | 1208 (103) | 1348 (118) | 541 (97) | 1408 (124) | 1128 (115) |
| 2021 | 393 (63)* | 916 (78) | 789 (69) | 142 (25) | 977 (86) | 697 (71) |
| LTM | 628 | 1168 | 1147 | 558 | 1138 | 985 |

* figures in brackets are % of LTM

[Source: Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2020 to February 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)

During the month of February 2021, air temperature and sunshine duration were recorded at the four MSIRI agro-meteorological stations and are given below.

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

| Stations | Maximum (°C) | | Minimum (°C) | | Sunshine hours | |
|------------|--------------|-------|--------------|------|----------------|----------|
| | Feb 2021 | DevN* | Feb 2021 | DevN | Feb 2021 | % Normal |
| Ferret | 31.2 | +0.3 | 23.4 | +0.9 | 242 | 113 |
| Réduit | 28.3 | +0.1 | 21.8 | -0.1 | 232 | 112 |
| Union Park | 26.8 | -0.6 | 20.6 | -0.4 | 178 | 116 |
| Belle Rive | 28.2 | +0.8 | 21.6 | +1.6 | 165 | 100 |

The mean maximum temperature was above normal at Ferret and Belle Rive, comparable to the normal at Réduit but below normal at Union Park. The mean minimum temperature exceeded the normal at Ferret and Belle Rive, and was close to normal at Réduit but below normal at Union Park. Sunshine duration during February 2021 was equal to the normal at Belle Rive but exceeded the normal at the other stations with 113% at Ferret, 112% at Réduit and 116% at Union Park.

2.0 STALK HEIGHT (Table 3a, 3b)

Stalk height was measured during the last week of February 2021 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 February 2020 and to the normal, referred to as the mean of the five best cane yielding crops during the period 2011 to 2020.

2.1 Stalk elongation (Table 3a)

During the month of February 2021, stalk elongation reached 40.8 cm in the North, 52.3 cm in the East, 40.9 cm in the South, 36.5 cm in the West and 41.7 cm in the Centre. These values were higher than those recorded at the same period in 2020 in all sectors except in the South.

Table 3a. Stalk elongation during the month of February

| Sectors | Stalk elongation (cm) during February | | | February 2021 as % of | |
|---------|---------------------------------------|------|--------|-----------------------|--------|
| | 2021 | 2020 | Normal | 2020 | Normal |
| North | 40.8 | 35.8 | 48.3 | 114.0 | 84.4 |
| East | 52.3 | 38.2 | 43.0 | 136.9 | 121.7 |
| South | 40.9 | 42.6 | 47.3 | 96.0 | 86.5 |
| West | 36.5 | 27.6 | 46.2 | 132.2 | 78.9 |
| Centre | 41.7 | 31.2 | 35.8 | 133.7 | 116.5 |
| Island | 39.5 | 37.3 | 45.1 | 105.8 | 87.6 |

Compared to the normal for the corresponding period, growth was higher than the normal in the East and Centre, but lagged behind the normal in the other sectors by 7.5 cm in the North, 6.4 cm in the South and 9.7 cm in the West, representing respectively 84.4%, 86.5% and 78.9% of the normal.

The island stalk elongation of 39.5 cm in February 2021 was higher than that of the corresponding period in 2020 (37.3 cm) by 2.2 cm but lagged behind the normal (45.1 cm) by 5.6 cm.

2.2 Cumulative Elongation (Table 3b)

Stalk growth from end-December 2020 to end-February 2021 cumulated to 61.1 cm in the North, 96.6 cm in the East, 79.2 cm in the South, 54.1 cm in the West and 73.8 cm in the Centre. These cumulative growths compared to the same period last year were lower by 23.6 cm in the North, 8.3 cm in the South and 18.9 cm in the West whereas in the East and Centre it was higher by 9.2 cm and 2.6 cm, respectively. For the same period, cumulative growth lagged behind the normal in the North by 22.1 cm, the South by 5.0 cm and the West by 30.8 cm but was higher to the normal in the East by 8.5 cm and the Centre by 6.7 cm. Island-wise the cumulative elongation of 70.8 cm in February 2021 was lower than that of the 2020 crop (84.2 cm) by 15.9% and the normal (82.4 cm) by 14.1%.

Table 3b. Cumulative elongation at end-February 2021.

| Sectors | Cumulative elongation (cm) at end- February | | | End-February 2021 as % of | |
|---------|---|------|--------|---------------------------|--------|
| | 2021 | 2020 | Normal | 2020 | Normal |
| North | 61.1 | 84.7 | 83.2 | 72.1 | 73.4 |
| East | 96.6 | 87.4 | 88.1 | 110.5 | 109.6 |
| South | 79.2 | 87.5 | 84.2 | 90.5 | 94.1 |
| West | 54.1 | 73.0 | 84.9 | 74.1 | 63.7 |
| Centre | 73.8 | 71.2 | 67.1 | 103.7 | 110.0 |
| Island | 70.8 | 84.2 | 82.4 | 84.1 | 85.9 |

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

Total stalk height at end February 2021 stood at 80.1 cm in the North, 149.7 cm in the East, 121.1 cm in the South, 82.6 cm in the West and 115.0 cm in the Centre giving an island average of 116.7 cm. Compared to the corresponding period last year, stalk height to-date was similar to the normal in the South and Centre, lagged behind in the North by 44.4 cm and West by 30.3 cm, whereas in the East it exceeded that of last year by 21.9 cm. Total stalk height at end-February 2021 was above normal by 14.1 cm in the East and 4.9 cm in the Centre but was below normal by 28.0 cm in the North, 0.8 cm in the South and 36.9 cm in the West.

At island level, the total stalk height of 116.7 cm at end of February 2021 was lagging behind that of February 2020 by 5.8 cm (4.7 %) and the normal by 5.1 cm (4.2%).

Table 3c. Total stalk height at end-February.

| Sectors | Stalk height (cm) at end-February | | | End-February 2021 as % of | |
|----------------|--|-------------|---------------|--------------------------------------|---------------|
| | 2021 | 2020 | Normal | 2020 | Normal |
| North | 80.1 | 124.5 | 108.1 | 64.3 | 74.1 |
| East | 149.7 | 127.8 | 135.6 | 117.1 | 110.4 |
| South | 121.1 | 120.8 | 121.9 | 100.2 | 99.4 |
| West | 82.6 | 112.9 | 119.5 | 73.2 | 69.1 |
| Centre | 115.0 | 115.0 | 110.1 | 100.0 | 104.4 |
| Island | 116.7 | 122.5 | 121.8 | 95.3 | 95.8 |

3. CROP 2021

The month of February 2021 has been relatively dry especially in the North, West and South which resulted into slow cane growth and development. This is reflected in the stalk elongation recorded in these sectors, which lagged behind the normal by more than 15%. At this stage of growth and based on total stalk height observed, crop 2021 is below normal especially in sectors North and West, representing 74% and 69% of the normal, respectively.

Figure 2. Stalk height at end-February 2021

