

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2018

15 January 2019

### SUGAR CANE CROP 2019

Status: End December 2018

#### 1. CLIMATE

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

The island's average rainfall over the sugar cane areas for December was 272 mm and represented 145% of the long term mean (188 mm). December rainfall exceeded the long-term mean (LTM) in all sectors by 70 mm in the North, 135 mm in the East, 43 mm in the South, 73 mm in the West and 123 mm in the Centre.

Cumulative rainfall for the period October to December 2018 reached 356 mm in the North, 652 mm in the East, 560 mm in the South, 294 mm in the West and 671 mm in the Centre. These figures represented 174%, 151%, 125%, 193% and 170% of the respective long-term mean. The island's average rainfall of 527 mm for this period represented 147% of the long-term mean (359 mm).

**Table 1a. Rainfall (mm) for the month of December for crops 2018, 2019<sup>+</sup> and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2018</b>	<b>22</b> (19)	<b>74</b> (33)	<b>68</b> (30)	<b>82</b> (83)	<b>120</b> (61)	<b>65</b> (35)
<b>2019</b>	<b>188</b> (159)*	<b>359</b> (160)	<b>270</b> (119)	<b>172</b> (174)	<b>319</b> (163)	<b>272</b> (145)
<b>LTM</b>	118	224	227	99	196	188

<sup>+</sup> Crop year is from October to September

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

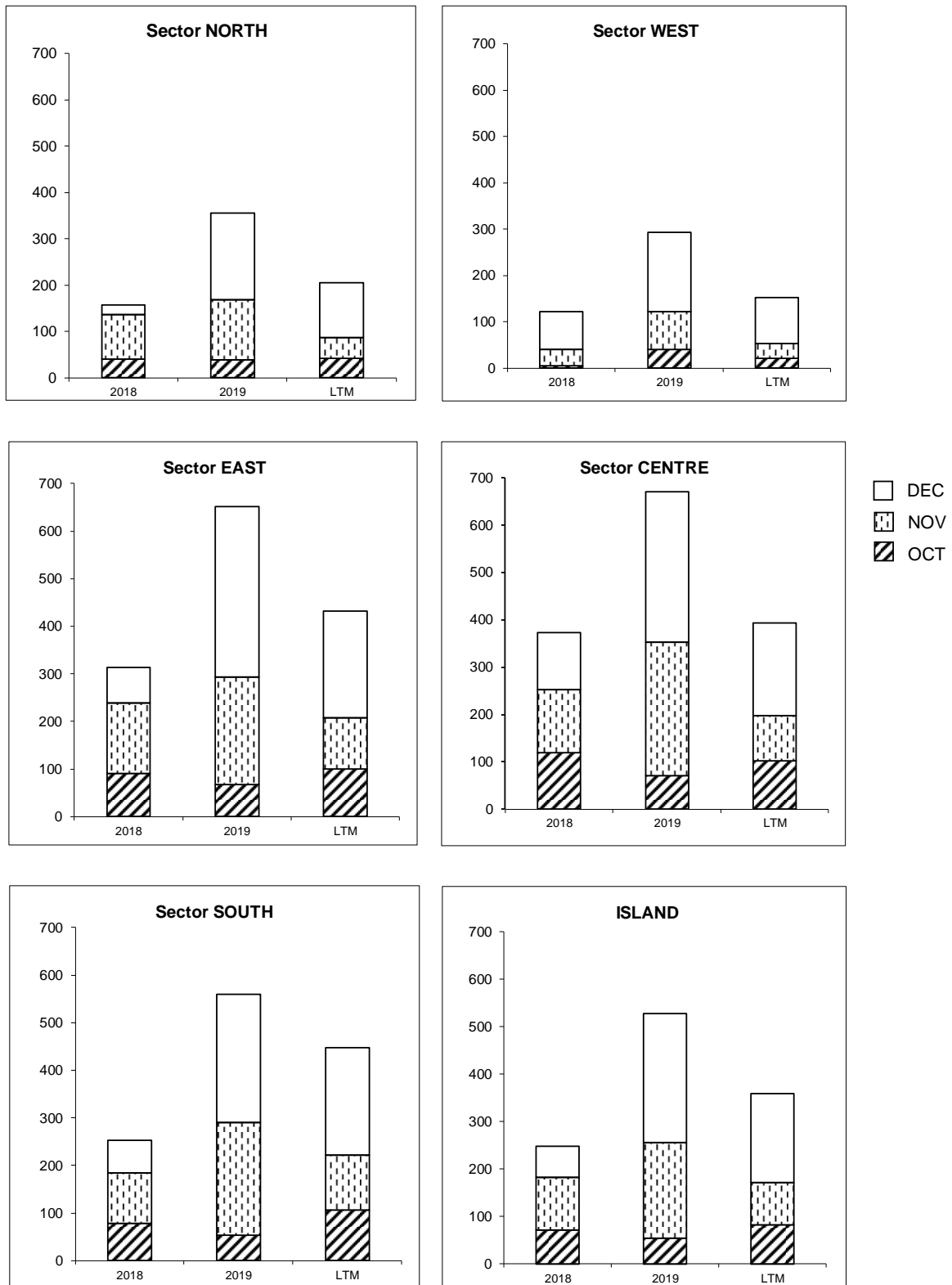
**Table 1b. Cumulative rainfall (mm) from October to December 2018 for crop 2019 compared to that of crop 2018 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2018</b>	158 (77)	313 (72)	253 (56)	123 (81)	373 (95)	248 (69)
<b>2019</b>	<b>356</b> (174)*	<b>652</b> (151)	<b>560</b> (125)	<b>294</b> (193)	<b>671</b> (170)	<b>527</b> (147)
<b>LTM</b>	205	432	448	152	394	359

\* figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October to December 2018 for the 2019 crop compared to the corresponding period of the 2018 crop and to the long term mean (LTM).**



## 1.2 Air Temperature and Sunshine duration (Table 2)

Data on maximum and minimum temperatures together with sunshine duration recorded during the month of December 2018 on the four MSIRI agro-meteorological stations are given below.

**Table 2. Air temperature and sunshine duration recorded on MSIRI agro-meteorological stations in December 2018**

Stations	Maximum (°C)		Minimum (°C)		Sunshine hours	
	Dec 2018	DevN*	Dec 2018	DevN	Dec 2018	% Normal
<b>Ferret</b>	30.6	-0.2	22.3	+1.3	276	110
<b>Réduit</b>	28.2	+0.4	20.7	+0.4	268	117
<b>Belle Rive</b>	27.7	+0.8	19.8	+1.4	218	106
<b>Union Park</b>	28.7	+1.9	20.7	+1.2	238	120

\* Deviation from the Normal (1981-2010)

The mean monthly maximum temperature during December 2018 exceeded the normal at all stations except at Ferret. The mean monthly minimum temperature was above the normal at all stations ranging from +0.4°C at Réduit to +1.4°C at Belle Rive. Sunshine hours during December 2018 were well above normal at all stations. The recorded bright sunshine, as a percentage of the normal was 110% at Ferret, 117% at Réduit, 106% at Belle Rive and 120% at Union Park. Above normal temperature and solar radiation are conducive to crop growth.

## 2. STALK HEIGHT (Table 3)

Stalk height were initially measured during the last week of December 2018 at 46 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 2017 and to the mean of the five best cane yielding crops for the period 2009 to 2018 in each sector (referred to as normal).

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

Sectors	Stalk height (cm) at end-Dec			End-Dec 2018 as % of	
	2018	2017	Normal	2017	Normal
North	35.6	19.0	24.7	187.4	144.1
East	40.4	53.7	48.6	75.2	83.1
South	28.9	23.0	44.4	125.7	65.1
West	42.1	42.0	37.3	100.2	112.9
Centre	35.6	43.6	43.5	81.6	81.8
<b>Island</b>	35.8	34.9	40.8	102.3	87.7

Stalk height at end December 2018 averaged 35.6 cm in the North, 40.4 cm in the East, 28.9 cm in the South, 42.1 cm in the West and 35.6 cm in the Centre. These figures exceeded those recorded in December 2017 by 16.6 cm in the North and 5.9 cm in the South but was comparable in the West. In the East and Centre, stalk height at end December 2018 was lagging behind that of the previous year by 13.3 cm and 8.0 cm, respectively.

Stalk height in December 2018 was higher than the normal by 44.1% in the North and 12.9% in the West. In the other sectors, it lagged behind by 16.9% in the East, 34.9% in the South and 18.2% in the Centre.

At island level, the cane height of 35.8 cm, as at end-December 2018, was just above that of the corresponding period in December 2017 by 2.3% but shorter than the normal by 12.3%.

### **3. CROP 2019**

The weather in December 2018 was characterised by above normal rainfall, air temperature and solar radiation, conducive to crop growth. This is reflected in stalk height for December 2018 in sectors North and West being higher than that of December 2017 and the normal as regrowth has been much better. However, in the other three sectors the below normal stalk height recorded in December 2018 could be attributed to the delay in harvest and slow growth observed in the late season varieties. This shortfall can be recouped provided weather conducive to growth prevails in the coming months and that agronomic and cultural practices are adopted as per established recommendations.