# MAURITIUS CANE INDUSTRY AUTHORITY

# MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2015 16 March 2016

## SUGAR CANE CROP 2016

## Status: End February2016

### 1. CLIMATE

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

The island's average rainfall for the month of February 2016 was 448 mm over the sugar cane areas and represented 137% of the long-term mean (328 mm). Above normal rainfall was recorded in all sectors with 378 mm in the North, 557 mm in the East, 410 mm in the South, 282 mm in the West and 576 mm in the Centre.

Rainfall for the period October 2015 to February 2016 cumulated to 1032 mm for the island. This is 112% of the island long-term mean of 920 mm for that period. During that same period, 719 mm were recorded in the North, 1144 mm in the East, 1171 mm in the South, 611 mm in the West and 1372 mm in the Centre. These amounts represented 115%, 118%, 108%, 117% and 107% of the respective long-term mean.

Even though rainfall during February 2016 was well above the normal, water logging was observed only for a short period as a fair amount of the torrential rainfall fell during a short time span. Thus excess water ran rapidly as surface runoff. At some specific sites, particularly in the North, mild lodging in long season plant cane was observed.

**Table 1a. Rainfall (mm) for the month of February for crops 2015, 2016 and the long term mean (LTM)**

| | North | East | South | West | Centre | Island |
|---|---|---|---|---|---|---|
| **2015** | **161** *(69)* | **330** *(94)* | **308** *(83)* | **155** *(78)* | **390** *(86)* | **275** *(84)* |
| **2016** | **378** *(163)** | **557** *(159)* | **410** *(110)* | **282** *(142)* | **576** *(127)* | **448** *(137)* |
| **LTM** | 232 | 351 | 372 | 198 | 452 | 328 |

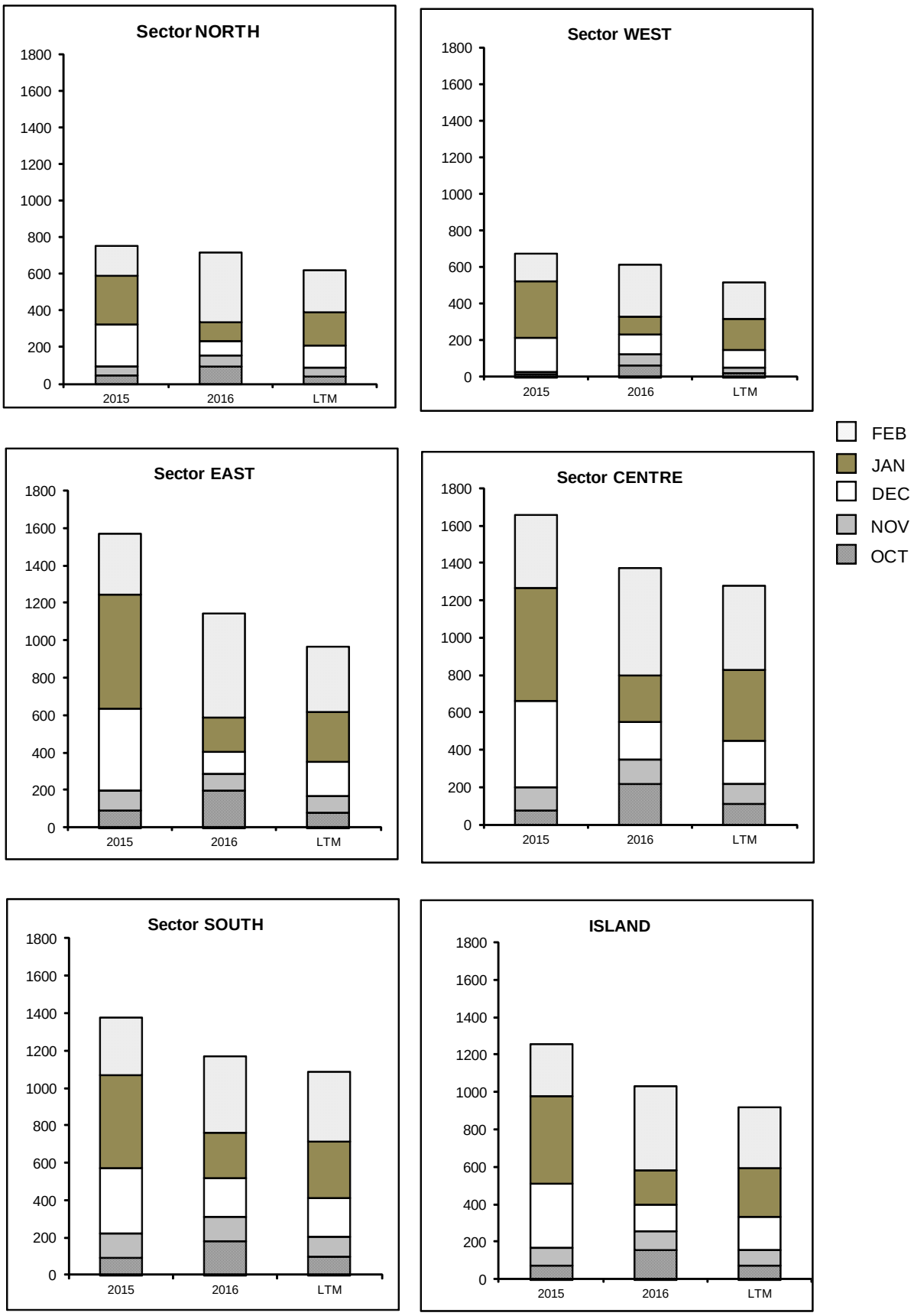
* figures in brackets are % of LTM (1981-2010)

**Table 1b. Cumulative rainfall (mm) from October 2015 to February 2016 for crop 2016 compared to that of crop 2015 and the long term mean (LTM)**

| | North | East | South | West | Centre | Island |
|---|---|---|---|---|---|---|
| **2015** | 756 *(121)* | 1575 *(162)* | 1377 *(127)* | 673 *(128)* | 1654 *(130)* | 1257 *(137)* |
| **2016** | **719** *(115)** | **1144** *(118)* | **1171** *(108)* | **611** *(117)* | **1372** *(107)* | **1032** *(112)* |
| **LTM** | 638 | 971 | 1084 | 524 | 1277 | 920 |

* figures in brackets are % of LTM ***[Source : raw provisional data from Meteorological Services]***

**Figure 1. Monthly rainfall (mm) for the period October 2015 to February 2016 for the 2016 crop compared to the corresponding period of the 2015 crop and to the long term mean (LTM).**



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

Data on air temperature and sunshine duration recorded during the month of February 2016 at the four MSIRI agro-meteorological stations are given below.

**Table 2. Air temperature and sunshine duration recorded on MSIRI agro-meteorological stations in February 2016**

| Stations | Maximum Temp (°C) | | Minimum Temp (°C) | | Sunshine hour | |
|---|---|---|---|---|---|---|
| | Feb 2016 | DevN* | Feb2016 | DevN | Feb 2016 | % Normal |
| **Pamplemousses** | 31.3 | +0.4 | 23.3 | +0.8 | 171 | 80 |
| **Réduit** | 28.9 | +0.7 | 22.1 | +0.2 | 160 | 77 |
| **Belle Rive** | 27.6 | +0.2 | 20.8 | +0.8 | 136 | 82 |
| **Union Park** | 28.9 | +1.5 | 22.2 | +1.2 | 120 | 78 |

* Deviation from the Normal (1981-2010)

In February 2016, both the mean monthly maximum and minimum temperature exceeded their respective normal at all stations. For maximum temperature, the difference from normal ranged from 0.2°C at Belle Rive to 1.5°C at Union Park, whereas for minimum temperature the margin varied from 0.2°C at Réduit to 1.2°C at Union Park. However, sunshine hours during February 2016 were well below normal everywhere. Recorded bright sunshine as a percentage of the normal amounted to 80% at Pamplemousses, 77% at Réduit, 82% at Belle Rive and 78% at Union Park.

## 2. STALK HEIGHT

Measurement of stalk height was carried out during the last week of February 2016 at 52 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. Data collected are compared with those of the corresponding period in February 2015 and to the mean of the five best cane yielding crops for the period 2006 to 2015 in each sector (referred to as normal).

### *2.1 Stalk elongation (Table 3a)*

Stalk elongation during the month of February 2016 was higher than that during the corresponding period in 2015 in all sectors. It amounted to 52.3 cm in the North, 50.0 cm in the East, 47.0 cm in the South, 50.0 cm in the West and 39.2 cm in the Centre. These growth figures are superior to those of 2015 by 7.0 cm, 7.2 cm, 5.3 cm, 15.3 cm and 5.7 cm respectively. February 2016 elongation was also above the normal for the corresponding period in all sectors, the difference ranging from 2.7 cm in the South to 9.3 cm in the East. The island stalk elongation of 48.8 cm was higher than that for the corresponding period in 2015 by 7.2 cm (17.5%) and to the normal by 5.8 cm (13.5%).

**Table 3a. Stalk elongation during the month of February**

| | Stalk elongation (cm) during February | | | February 2016 as % of | |
|---|---|---|---|---|---|
| **Sectors** | **2016** | **2015** | **Normal** | **2015** | **Normal** |
| North | 52.3 | 45.3 | 44.1 | 115.5 | 118.6 |
| East | 50.0 | 42.8 | 40.7 | 116.8 | 122.9 |
| South | 47.0 | 41.7 | 44.3 | 112.7 | 106.2 |
| West | 50.0 | 34.7 | 42.6 | 144.1 | 117.3 |
| Centre | 39.2 | 33.5 | 33.8 | 117.0 | 116.1 |
| **Island** | **48.8** | **41.6** | **43.0** | **117.5** | **113.5** |

## *2.2 Cumulative Elongation (Table 3b)*

Cumulative growth from end-December 2015 to end-February 2016 stood at 92.8 cm in the North, 93.3 cm in the East, 80.0 cm in the South, 82.9 cm in the West and 72.6 cm in the Centre. These cumulative growths exceeded those of 2015 by 2.6 cm in the North, 11.0 cm in the East and 3.6 cm in the Centre but lagged behind those of 2015 in the South by 2.8 cm and the West by 4.4 cm. For the same period, growth was higher than the normal in the North, East and Centre whereas in the other two sectors, it was below the normal. Island-wise the cumulative elongation of 86.5 cm was higher than those of the 2015 crop (83.7 cm) by 3.3% and the normal (80.8 cm) by 7.1%.

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

| | Cumulative elongation (cm) at end- February | | | End-February 2016 as % of | |
|---|---|---|---|---|---|
| **Sectors** | **2016** | **2015** | **Normal** | **2015** | **Normal** |
| North | 92.8 | 90.2 | 77.2 | 102.9 | 120.2 |
| East | 93.3 | 82.3 | 81.6 | 113.4 | 114.3 |
| South | 80.0 | 82.8 | 84.7 | 96.6 | 94.5 |
| West | 82.9 | 87.3 | 87.0 | 95.0 | 95.3 |
| Centre | 72.6 | 69.0 | 67.0 | 105.2 | 108.3 |
| **Island** | **86.5** | **83.7** | **80.8** | **103.3** | **107.1** |

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

Total stalk height recorded at end February 2016 was 116.9 cm in the North, 138.4 cm in the East, 121.4 cm in the South, 121.0 cm in the West and 118.4 cm in the Centre giving an island average of 125.3 cm. These figures,when compared to the same period in 2015, were higher by 2.7 cm in the North and11.8 cm in the East. In the Centre, stalk height was comparable to that obtained in February 2015 whereas in sectors South and West, it lagged behind that of 2015 by 11.5 cm and 6.1 cm, respectively. Total stalk height at end-February 2016 was higher than those of the normal in the North by 13.9 cm, the East by 9.4 cm and the Centre by 8.4 cm, whereas in the other two sectors it lagged behind by 8.5 cm in the South and 4.4 cm in the West.

At island level, the total stalk height of 125.3 cm was close to that of the corresponding period in 2015 but above the normal by 3.6 cm (3 %).

**Table 3c. Stalk height at end-February.**

| | Stalk height (cm) at end-February | | | End-February 2016 as % of | |
|---|---|---|---|---|---|
| **Sectors** | **2016** | **2015** | **Normal** | **2015** | **Normal** |
| North | 116.9 | 114.2 | 103.0 | 102.4 | 113.5 |
| East | 138.4 | 126.6 | 129.0 | 109.3 | 107.3 |
| South | 121.4 | 132.9 | 129.9 | 91.3 | 93.5 |
| West | 121.0 | 127.1 | 125.4 | 95.2 | 96.5 |
| Centre | 118.4 | 118.0 | 110.0 | 100.3 | 107.7 |
| **Island** | **125.3** | **125.6** | **121.7** | **99.8** | **103.0** |

## 3.0 CROP 2016

Apart from the below normal solar radiation, weather in terms of rainfall and temperature during the month of February 2016 has been in general conducive to growth and development of the sugar cane crop. This is reflected in the good elongation rate, recorded in all sectors and generally better than in 2015 and than the normal. With a total cumulative elongation for the island better than that of the normal and that of last year at the same date, a normal crop is being expected provided that favourable climatic conditions continue to prevail until the end of the growth season.

**Figure 2. Stalk height at end- February 2016**