

# MAURITIUS CANE INDUSTRY AUTHORITY

## MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2014

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### SUGAR CANE CROP 2014 Status: End September 2014

#### 1. CLIMATE

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

The island's average rainfall for the month of September 2014 over the sugar cane areas was 55 mm. It represented 69% of the long-term mean (80 mm). Below normal rainfall was recorded in all sectors with 22 mm, 74 mm, 63 mm, 11 mm and 95 mm in the North, East, South, West and Centre respectively. These amounts represented 51% of the long-term mean in the North, 94% in the East, 57% in the South, 55% in the West and 75% in the Centre.

Cumulative rainfall for the period October 2013 to September 2014 amounted to 2178 mm, representing 108% of the long-term mean for the island. During the same period 1193 mm were recorded in the North, 2674 mm in the East, 2613 mm in the South, 1029 mm in the West and 2776 mm in the Centre. Compared to their respective long-term mean, cumulative rainfall represented 89%, 129%, 102%, 112% and 100% of the respective long-term means in the North, East, South, West and the Centre respectively.

**Table 1a. Rainfall (mm) for the month of September for crops 2013, 2014 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2013</b>	13 (30)	49 (62)	50 (45)	1 (5)	66 (52)	38 (48)
<b>2014</b>	<b>22</b> (51)*	<b>74</b> (94)	<b>63</b> (57)	<b>11</b> (55)	<b>95</b> (75)	<b>55</b> (69)
<b>LTM</b>	44	79	112	20	126	80

\* Figures in brackets are % of LTM

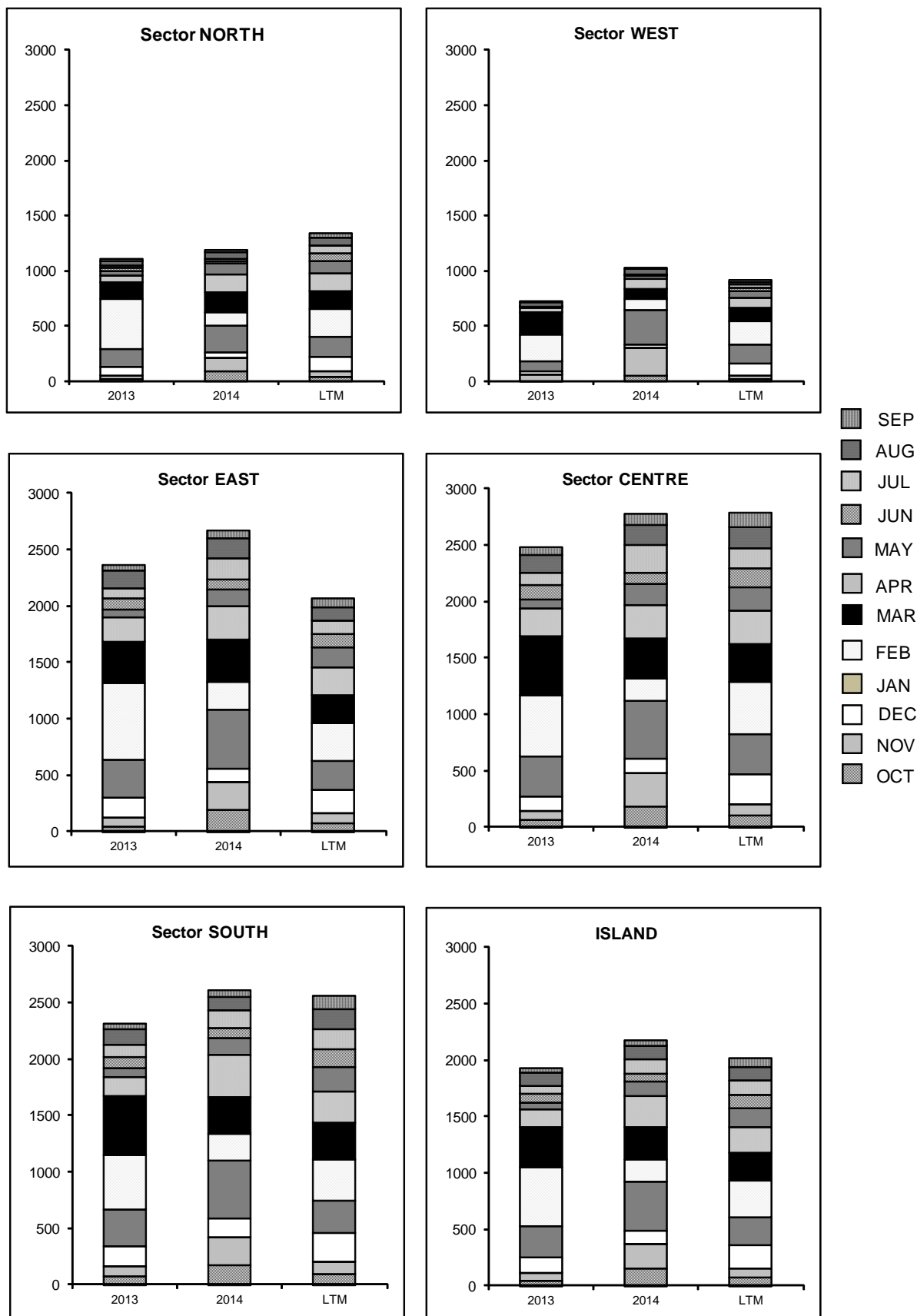
**Table 1b. Cumulative rainfall (mm) from October 2013 to September 2014 for crop 2014 compared to that of crop 2013 and the long term mean (LTM)**

	North	East	South	West	Centre	Island
<b>2013</b>	1106 (82)	2366 (115)	2319 (91)	714 (78)	2478 (89)	1925 (95)
<b>2014</b>	<b>1193</b> (89)*	<b>2674</b> (129)	<b>2613</b> (102)	<b>1029</b> (112)	<b>2776</b> (100)	<b>2178</b> (108)
<b>LTM</b>	1341	2065	2557	918	2790	2019

\*Figures in brackets are % of LTM

[Source : provisional data from Mauritius Meteorological Services]

**Figure 1. Monthly rainfall (mm) for the period October 2013 to September 2014 for the 2014 crop compared to the corresponding period of the 2013 crop and to the long term mean (LTM)**



### 1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of September 2014 on the four MSIRI agro-meteorological stations are given below.

The mean monthly maximum temperature was above normal at all stations, the difference ranging from 0.5°C at Belle Rive to 1.3°C at Union Park. Above normal mean monthly minimum temperature was recorded at Union Park (+ 0.3°C) and Belle Rive(+ 0.4°C) whereas at the two other stations it was below normal by 0.9°C at Réduit and 0.2°C at Pamplémousses. The resulting mean amplitude was comparable to the normal at Belle Rive but exceeded the normal at the other three stations.

**Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in September 2014**

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
<b>Pamplémousses</b>	<b>27.9</b> (26.8) *	<b>16.6</b> (16.8)	<b>11.3</b> (10.0)
<b>Réduit</b>	<b>24.5</b> (23.5)	<b>14.9</b> (15.8)	<b>9.6</b> (7.7)
<b>Belle Rive</b>	<b>23.3</b> (22.8)	<b>14.9</b> (14.5)	<b>8.4</b> (8.3)
<b>Union Park</b>	<b>23.7</b> (22.4)	<b>16.1</b> (15.8)	<b>7.6</b> (6.6)

\* figures in brackets are the Normal (1981-2010)

### 1.3 Sunshine (Table 3)

Data from the MSIRI agro-meteorological stations showed that sunshine hours during September 2014 were above normal at all four stations. Recorded bright sunshine as a percentage of the normal was 111 at Pamplémousses, 115 at Réduit, 123 at Belle Rive and 130 at Union Park.

**Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in September 2014**

Station	September 2014	Normal (1981-2010)	% of Normal
<b>Pamplémousses</b>	258	233	111
<b>Réduit</b>	250	217	115
<b>Belle Rive</b>	242	197	123
<b>Union Park</b>	195	150	130

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

Cane samples from miller-planters' land in all factory areas and covering the main cultivated varieties were analyzed for sucrose content during the last week of September 2014. The average pol % cane (*richesse*) was calculated on the basis of area under cultivation of each variety in the different factory areas of each sector. The results are compared with those of the last two years.

**Table 4a. Average Pol % cane (richesse) at end September 2014.**

Sectors	M 52/78	R 573	R 575	M 1246/84	M 2593/92	M 1400/86	M 1176/77	M 1861/89	R 579	M 1672/90	R 570
North				16.1	16.4	15.6	16.0			16.2	16.6
East				16.6	16.4	16.3	17.8		15.1		15.9
South	15.2							16.5	14.9	16.4	15.4
West			15.9		15.5	15.6			15.3		14.8
Centre		15.3				14.8	15.4		15.0		15.1

**Table 4b. Comparison of Pol % cane (richesse) at the end of August and September 2012, 2013 and 2014.**

Sectors	AUGUST			SEPTEMBER		
	2012	2013	2014	2012	2013	2014
North	14.2	15.0	17.2	15.5	15.3	16.1
East	14.6	14.6	16.9	15.1	14.7	16.0
South	14.5	15.1	16.1	15.1	14.9	15.4
West	15.3	15.2	16.5	15.9	15.9	15.5
Centre	14.4	14.5	15.3	14.3	14.3	15.1
Island	14.5	14.9	16.5	15.2	14.9	15.7

The *richesse* at end-September 2014 was 16.1% in the North, 16.0% in the East, 15.4% in the South, 15.5% in the West and 15.1% in the Centre. These figures were higher than those obtained at the corresponding period last year by 0.8° in the North, 1.3° in the East, 0.5° South and 0.8° in the Centre. In the West, *richesse* in September 2014 was lagging behind that of 2013 by 0.4°. Similarly, sucrose content at the end of September 2014 was higher than that of 2012 in all sectors except in the West.

During the period end-August 2014 to end-September 2014, *richesse* has regressed in all sectors by 1.1° in the North, 0.9° in the East, 0.7° in the South, 1.0° in the West and 0.2° in the Centre. During the corresponding period last year, regression in sucrose content was observed only in sectors South and Centre. On average for the island, the decrease in *richesse* in 2014 amounted to 0.80 compared to the stagnation observed in 2013 and the increase of 0.7° in 2012. The possible explanation for this decrease could be high rainfall and maximum temperature recorded in August and September, especially in Sectors East, Centre and South which triggered vegetative growth of the crop at the expense of sucrose accumulation. Island-wise, the *richesse* of 15.7% recorded at the end of September 2014 was higher than those of the corresponding period in 2013 (14.9%) and 2012 (15.2%).

### 3. CROP 2014

As at 27 September 2014, 17 190 ha representing about 50% of miller-planters' land had been harvested compared to 18 309 ha (53%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 47% in both the North and East, 50% in the South, 59% in the West and 56% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. On account of the centralization of milling activities and since all the canes from the Centre are crushed at factories in the East, harvest statistics relative to extraction rate and sugar productivity have been combined for these two sectors.

#### 3.1 Cane productivity (Table 5a)

Cane productivity for the island as at end of September 2014 reached 83.4 TCH and this exceeded the 75.9 TCH recorded in 2013 by 7.5 TCH (9.9%). Sector-wise, the West recorded the best cane productivity to-date with 90.1 TCH, followed by the South (86.0 TCH), the East (82.5 TCH), the North (78.5 TCH) and the Centre (76.5 TCH). These figures when compared to the same period in 2013 were higher in all sectors by 7.2 TCH in the North, 6.4 TCH in the East, 7.4 TCH in the South, 7.1 TCH in the West and 9.7 TCH in the Centre.

**Table 5a. Cane productivity (TCH) as at end August and September for the 2013 and 2014 crops**

Sectors	End August		End September	
	2013	2014	2013	2014
North	71.8	80.5	71.3	78.5
East	75.7	82.2	76.1	82.5
South	79.1	86.8	78.6	86.0
West	79.9	88.5	83.0	90.1
Centre	68.9	75.8	66.8	76.5
<b>Island</b>	<b>75.9</b>	<b>83.7</b>	<b>75.9</b>	<b>83.4</b>

#### 3.2 Extraction (Table 5b, Figure 2)

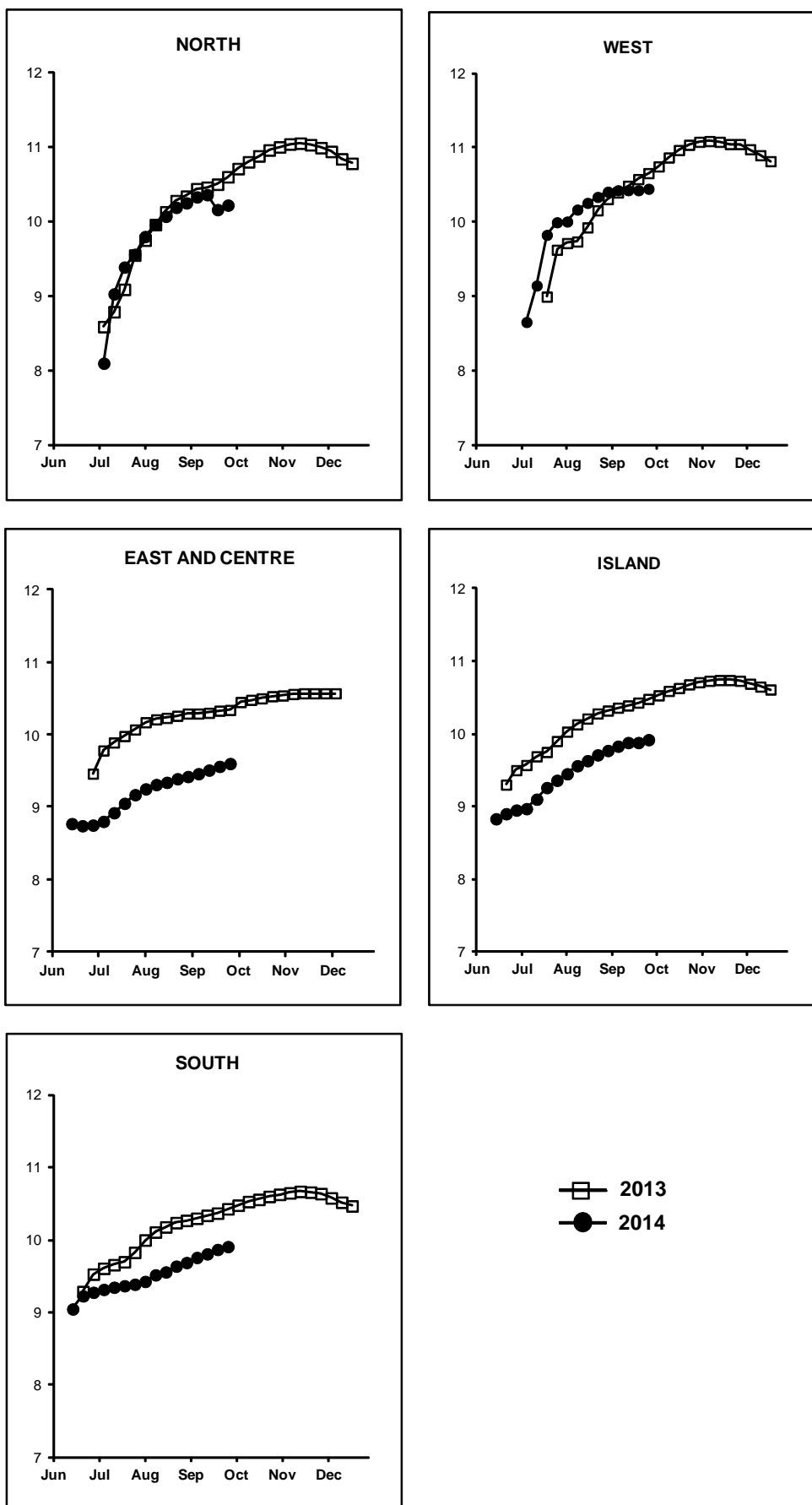
The recorded island extraction rate of 9.92% was slightly lower than that of the corresponding period in 2013 (10.48%) by 0.56°. Sector-wise, extraction rates recorded to-date were 10.22% in the North, 9.60% in the East-Centre, 9.91% in the South and 10.45% in the West. Compared to the corresponding period last year, cumulative extraction rate was lagging behind in all the sectors by 0.38° in the North, 0.74° in the East-Centre, 0.52° in the South and 0.21° in the West.

**Table 5b. Cumulative extraction rate (%) as at end August and September for the 2013 and 2014 crops**

Sectors	End August		End September	
	2013	2014	2013	2014
North	10.34	10.25	10.60	10.22
East /Centre	10.29	9.42	10.34	9.60
South	10.27	9.69	10.43	9.91
West	10.31	10.41	10.66	10.45
<b>Island</b>	<b>10.32</b>	<b>9.77</b>	<b>10.48</b>	<b>9.92</b>

From end August 2014 to end September 2014, cumulative extraction rate has increased only slightly in sectors East-Centre and the South by 0.18° and 0.22° respectively and in the West by 0.04°, with a tendency to stagnate in the West, whereas in the North a slight decrease occurred which was attributed to the outbreak of fire during the first week of September.

**Figure 2. Evolution of extraction rate (%) for the 2013 and 2014 crops**



### 3.3 Sugar productivity (Table 5c)

Island-wise, the sugar productivity of 8.27 TSH recorded at the end of September 2014 was higher than at the corresponding period in 2013 (7.95 TSH) by 0.32 tonne (4.0 %). Sector-wise sugar productivity amounted to 8.02 TSH in the North, 7.81 TSH in the East-Centre, 8.52 TSH in the South and 9.42 TSH in the West. Compared to the corresponding period in 2013, sugar productivity to-date was above that of the corresponding period in 2013 by 0.46 TSH in the North, 0.13 TSH in the East-Centre, 0.32 TSH in the South and 0.57 TSH in the West.

**Table 5c. Sugar productivity (TSH) as at end August and September for the 2013 and 2014 crops**

Sectors	End August		End September	
	2013	2014	2013	2014
North	7.42	8.25	7.56	8.02
East / Centre	7.66	7.62	7.68	7.81
South	8.12	8.41	8.20	8.52
West	8.24	9.21	8.85	9.42
<b>Island</b>	<b>7.83</b>	<b>8.18</b>	<b>7.95</b>	<b>8.27</b>

## 4. 2014 CROP PRODUCTIVITY

Weather during the month of September can be considered to be generally favourable to maturation with below normal rainfall, an above normal temperature amplitude and solar radiation exceeding the normal. Cane productivity during the month of September has increased slightly in sectors West, East and Centre but has regressed in sectors North and South. However cumulated cane yields in all sectors to-date are still higher compared to those in 2013 with cane productivity at island level exceeding that of 2013 by 7.5 TCH (10%). During the month of September, cumulative extraction rate has slightly increased in sectors East-Centre and the South by 0.18° and 0.22° respectively whereas in the North a slight decrease occurred and is attributed to the outbreak of fire during the first week of September. Hence, extraction rate in September 2014, compared to 2013, is maintaining its slightly lower rate in all sectors. As a result of higher cane productivity, sugar yield at island level is higher than at the same period last year by 0.32 TSH (4%). Based on the fact that more than half of the area has been harvested and assuming that there is no major deviation in weather from the normal, sugar productivity is expected to be better than that of last year.