### MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2012 7 August 2012

## **SUGAR CANE CROP 2012**

Status: End July 2012

#### 1. CLIMATE

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

Rainfall recorded in July over the sugar cane areas was below normal with an island average of 116 mm, representing 93% of the long-term mean of 125 mm. Rainfall was below the long-term mean in the North with 57 mm, the South with 151 mm, the West with 7 mm and the Centre with 128 mm. These amounts represented 78%, 84%, 28% and 71% of the respective long-term mean of the sector. In the East, the 153 mm of rainfall received during July 2012 exceeded the long-term mean by 32%.

Cumulative rainfall for the period October 2011 to July 2012 amounted to 1668 mm, representing 93% of the long-term mean for the island. During the same period 932 mm were recorded in the North, 2144 mm in the East, 1910 mm in the South, 642 mm in the West and 2088 mm in the Centre. Compared to their respective long-term mean, cumulative rainfall represented 77%, 116%, 86%, 75% and 86% of the respective long-term means.

Table 1a Rainfall (mm) of July for crops 2011, 2012 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
Crop 2011	58 (79)	135 (116)	136 (76)	10 (40)	110 (61)	105 (82)
Crop 2012	<b>57</b> (78)	<b>153</b> (132)	151 (84)	<b>7</b> (28)	128 (71)	116 (93)
LTM	73	116	180	25	181	125

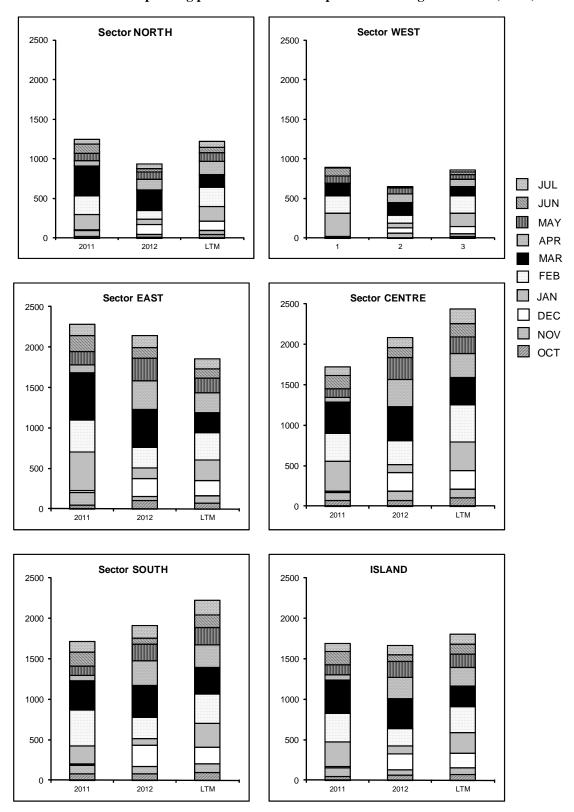
<sup>\*</sup> figures in brackets are % of LTM

Table 1b Cumulative rainfall (mm) from October 2011 to July 2012 for crop 2012 compared to that of crop 2011 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
Crop 2011	1247 (102)	2280 (123)	1715 (77)	892 (104)	1724 (71)	1694 (94)
Crop 2012	<b>932</b> (77)	<b>2144</b> (116)	<b>1910</b> (86)	<b>642</b> (75)	<b>2088</b> (86)	<b>1668</b> (93)
LTM	1218	1851	2221	855	2439	1802

<sup>\*</sup> figures in brackets are % of LTM

Figure 1 Monthly rainfall (mm) for the period Oct 2011 to July 2012 for the 2012 crop compared to the corresponding period of the 2011 crop and to the long term mean (LTM).



## 1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of July 2012 on MSIRI agro-meteorological stations are given below.

The mean monthly maximum temperature was comparable at Pamplemousses but exceeded the normal by 1.0 °C at Réduit, 1.3 °C at Union Park and 0.3 °C at Belle Rive. The mean monthly minimum temperature was higher than the normal by 0.7 °C at Pamplemousses, 0.2 °C at Réduit, 0.9 °C at Union Park and 1.3 °C at Belle Rive. The resulting mean amplitude was higher at Réduit and Union Park, but lower at Pamplemousses and Belle Rive.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in July 2012

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplemousses	25.6	16.9	8.7
	(25.5) *	(16.2)	(9.3)
Réduit	23.3	15.5	7.8
	(22.3)	(15.3)	(7.0)
Belle Rive	22.3	15.3	7.0
	(22.0)	(14.0)	(8.0)
Union Park	22.7	16.3	6.4
	(21.4)	(15.4)	(6.0)

<sup>\*</sup> 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 July 2012 were just above normal at all stations except Belle Rive. Recorded bright sunshine as a percentage of the normal amounted to 97 at Belle Rive, 104 at Union Park and 109 at both Pamplemousses and Réduit.

Table 3 Sunshine duration (hrs) recorded on MSIRI agro-meteorological stations in July 2012

Station	July 2012	Normal	% of Normal
Pamplemousses	256	235	109
Réduit	241	222	109
Belle Rive	182	188	97
Union Park	139	134	104

#### 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. 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.

Sectors	M 52/78	M 703/89	R 573	69/S69 W	R 575	M 387/85	M 1246/84	M 2256/88	M 2593/92	M 1400/86	M 1176/77	M 1861/89	R 579	M 1394/86	M 3035/66	M 1672/90	R 570
North			14.4	15.3			11.4		12.1	12.3	14.0		14.2			12.6	11.6
East	16.6	15.2	14.7	14.3		14.6	13.4		14.3	13.2	13.6		12.8		13.2		12.7
South	14.7		14.2	14.0	14.5	14.5			11.4	13.1	13.4	14.1	12.7	13.8		11.3	11.8
West			12.7		14.3				11.7	12.0	13.0		13.4				10.9
Centre	15.8	13.9	13.3			13.3				12.9	13.1		11.8		13.8		11.7

Table 4a Average Pol % Cane (richesse) at end-July 2012.

The *richesse* at end-July 2012 amounted to 12.9% in the North, 13.6% in the East, 13.3% in the South, 13.2% in the West and 13.6% in the Centre. Sucrose content to-date, when compared to the corresponding period in 2011, was higher by 0.6° in the North, by 1.2° in the East and by 0.7° in the South. In the other two sectors, it lagged behind that of the corresponding period last year, by 0.2° in the West and 0.3° in the Centre. Sucrose content at the end of July 2012 was lagging behind that of 2010 by 1.1° in the North, 0.7° in the South and 1.2° in the West, but was similar in the East and comparable in the Centre.

Table 4b. Comparison of Pol % Cane (*richesse*) at the end of June and July 2010, 2011 and 2012.

Sectors		JUNE		JULY			
	2010	2011	2012	2010	2011	2012	
North	12.2	11.3	10.6	14.0	12.3	12.9	
East	12.4	11.5	12.3	13.6	12.4	13.6	
South	12.7	12.2	12.4	14.0	12.6	13.3	
West	13.5	11.5	11.6	14.4	13.4	13.2	
Centre	12.6	13.2	12.5	13.5	13.9	13.6	
Island	12.6	11.8	11.9	13.9	12.6	13.3	

During the period of end-June 2012 up to end-July 2012, *richesse* has increased in all sectors with the highest increment of 2.3° observed in the North followed by 1.6° in the West, 1.3° in the East, 1.1° in the Centre and 0.9° in the South. For the corresponding period last year, the increments recorded were 1.0° in the North, 0.9° in the East, 0.4° in the South, 1.9° in the West and 0.7° in the Centre. On average for the island in 2012, the increase in *richesse* was 1.4° which was higher than both the 0.8° obtained in 2011 and the 1.3° obtained in 2010 for the same period.

Island-wise, the *richesse* of 13.3% recorded at the end of July 2012 was higher than that of 2011 (12.6%) by 0.7° at the same period but lower than that of 2010 (13.9%) by 0.6°.

#### 3. CROP PRODUCTIVITY 2012

Harvest and milling activities have started in all factory areas. As at 28 July 2012, 5773 ha, representing 16.7% of miller-planters' land had been harvested compared to 7427 ha (21.2%) at the same period last year. Sector-wise and for miller-planters only, the harvested area reached 11.4% in the North, 21.6% in the East, 17.5% in the South, 11.0% in the West and 16.0% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. Because of the centralization of milling activities and since all the canes from the Centre are crushed at FUEL, 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 28 July 2012 amounted to 76.4 TCH and was higher than the 73.9 TCH recorded at the same period in 2011 by 2.5 TCH (3%). Sector-wise, the best cane productivity to-date was recorded in the South with 79.1 TCH, followed by the Centre (76.4 TCH), the North (76.2 TCH), the West (75.7 TCH) and the East (74.1 TCH). Compared to the same period in 2011, cane productivity recorded to-date was higher by 4.1 TCH in the East, 3.0 TCH in the South and 5.4 TCH in the Centre. In sectors North and West, cane productivity at end-July 2012 was inferior to that of last year by 5.2 TCH and 17.5 TCH respectively.

	North	East	South	West	Centre	Island
2011	81.4	70.0	76.1	93.2	71.0	73.9
2012	76.2	74.1	79.1	75.7	76.4	76.4

Table 5a. Cane productivity (TCH) as at end July for the 2011 and 2012 crops

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

The recorded island extraction rate of 9.39% was slightly higher than at the corresponding period in 2011 (9.30%) by 0.09°. Sector-wise, it was 8.99% in the North, 9.27% in the East-Centre, 9.57% in the South and 10.21% in the West. Compared to end-July of last year, extraction rate was higher in the North by 0.13°, in the South by 0.26° and in the West by 0.39°. In the East-Centre sector, extraction rate recorded to-date was lower than that of last year by 0.10°.

	North	East -Centre	South	West	Island
2011	8.86	9.37	9.31	9.82	9.30
2012	8.99	9.27	9.57	10.21	9.39

Table 5b. Extraction rate (%) as at end July for the 2011 and 2012 crops

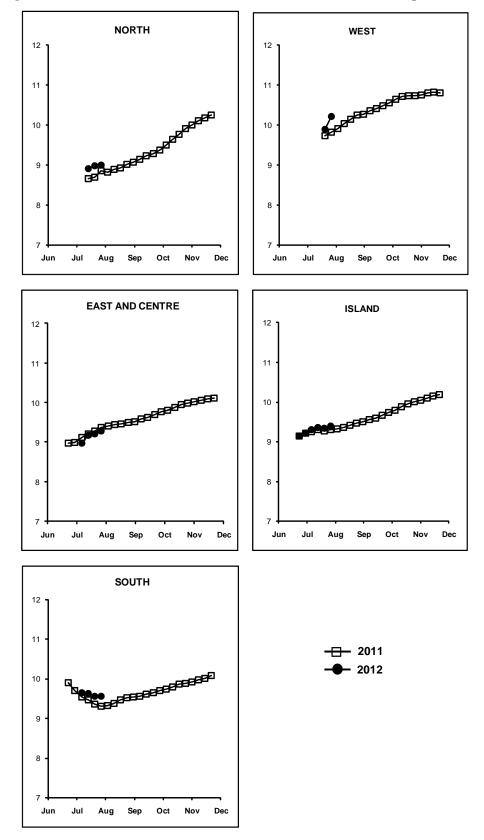
# 3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.17 TSH was higher than that at the corresponding period in 2011 (6.87 TSH) by 0.30 tonne (4%). Sector-wise sugar productivity was 6.85 TSH in the North, 6.89 TSH in the East-Centre, 7.57 TSH in the South and 7.73 TSH in the West. Sugar productivity to-date was lower than that at the corresponding period in 2011 by 0.36 TSH in the North and 1.42 TSH in the West. In sectors East-Centre and South, sugar productivity at end-July 2012 was higher than that of the corresponding period last year by 0.31 TSH and 0.49 TSH respectively.

Table 5c. Sugar productivity (TSH) as at end July for the 2011 and 2012 crops

	North	East -Centre	South	West	Island
2011	7.21	6.58	7.08	9.15	6.87
2012	6.85	6.89	7.57	7.73	7.17

Figure 2. Evolution of extraction rate (%) for the 2011 and 2012 crops



#### 4. CROP 2012

Weather was average during the month of July 2012 with most parameters near to normal, except for the sparse rainfall recorded in sectors North and West that favoured ripening. This impact is well reflected in the sucrose accumulation that was highest in these two sectors.

Harvest has not covered extensive areas yet, with only about 17% of miller planters' land. Nevertheless, some trends appear to be developing with regard to weather experienced during the annual cycle to-date, namely lower cane yields in the North and West but a generally better cane productivity coupled with a slightly higher extraction rate compared to last year at island level. Hence sugar productivity for the island exceeds that of last year at the same period by 0.31 TSH. This is comforting but a clearer picture will only be obtained in the next two to three weeks when a more substantial area would have been harvested. Based on present harvest statistics and forthcoming conducive weather, the potential is for a 2012 crop comparable to that of 2011.