MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2012 8 May 2012

SUGAR CANE CROP 2012

Status: End April 2012

1. CLIMATE

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

Rainfall recorded over the sugar cane areas of the island in April 2012 was 263 mm and represented 114% of the long-term mean. Sector-wise, rainfall recorded during April 2012 exceeded the long-term mean for that month by 102 mm (42%) in the East, 20 mm (7%) in the South, 6 mm (7%) in the West and 45 mm (16%) in the Centre. In the North, the recorded 132 mm of rain in April 2012 was below the long-term mean by 33 mm (20%).

Cumulative rainfall for the period October 2011 to April 2012 amounted to 1270 mm for the island. This was 9% lower than the island long-term mean of 1390 mm for that period. During that same period, 738 mm were recorded in the North, 1579 mm in the East, 1473 mm in the South, 551 mm in the West and 1566 mm in the Centre. These amounts represented 76%, 110%, 88%, 74%, and 83% of their respective long-term mean.

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

	North	East	South	West	Centre	Island
Crop 2011	72 *(44)*	96 *(39)*	63 *(23)*	3 *(3)*	53 *(18)*	68 *(30)*
Crop 2012	**132** *(80)*	**347** *(142)*	**300** *(107)*	**103** *(107)*	**338** *(116)*	**263** *(114)*
LTM	165	245	280	97	293	231

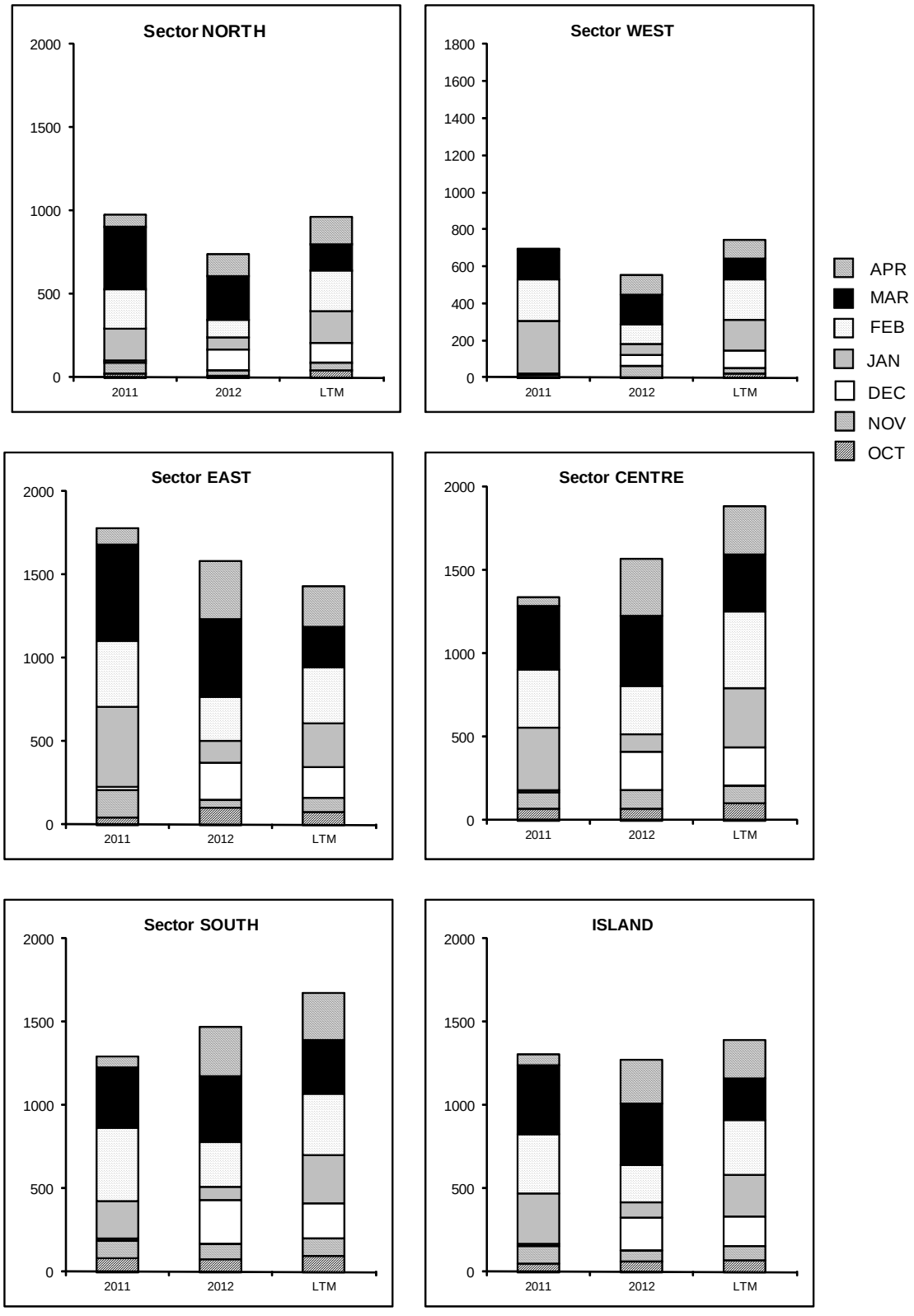
* figures in brackets are % of LTM

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

	North	East	South	West	Centre	Island
Crop 2011	978 *(101)*	1778 *(124)*	1292 *(77)*	690 *(93)*	1341 *(71)*	1307 *(94)*
Crop 2012	**738** *(76)*	**1579** *(110)*	**1473** *(88)*	**551** *(74)*	**1566** *(83)*	**1270** *(91)*
LTM	966	1432	1672	741	1886	1390

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

Figure 1 Monthly rainfall (mm) for the period Oct 2011 to Apr 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 April 2012 on MSIRI agro-meteorological stations are given below.

The mean monthly maximum temperature was comparable to the normal at Pamplemousses and Belle Rive but exceeded the normal by 0.7 ^{o}C at Réduit and 0.8 ^{o}C at Union Park. Above normal mean monthly minimum temperature was recorded at Réduit (+0.5 ^{o}C), Pamplemousses (+1.2 ^{o}C), Union Park (+0.8 ^{o}C) and Belle Rive (+1.3 ^{o}C). The resulting mean amplitude was similar to the normal at Union Park, slightly higher at Réduit but lower at Pamplemousses and Belle Rive.

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

Station	Maximum (^{o}C)	Minimum (^{o}C)	Amplitude (^{o}C)
Pamplemousses	**29.7** *(29.7) **	**22.2** *(21.0)*	**7.5** *(8.7)*
Réduit	**27.5** *(26.8)*	**20.8** *(20.3)*	**6.7** *(6.5)*
Belle Rive	**26.5** *(26.4)*	**19.9** *(18.6)*	**6.6** *(7.8)*
Union Park	**26.7** *(25.9)*	**20.5** *(19.7)*	**6.2** *(6.2)*

* 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 April 2012 were 9% below normal at Belle Rive but above normal at the other stations. Recorded bright sunshine as a percentage of the normal amounted to 110 at Pamplemousses, 115 at Réduit, 91 at Belle Rive and 107 at Union Park.

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

Station	Apr 2012	Normal	% of Normal
Pamplemousses	255	232	110
Réduit	243	211	115
Belle Rive	175	192	91
Union Park	162	152	107

2. STALK HEIGHT

Cane growth was assessed during the last week of April 2012 at 60 sites in the five sugar cane sectors of the island. These sites are representative of the various agro-climatic zones, varieties and crop categories. Data collected are compared with those of the corresponding period in

April 2011 and to the mean of the five best cane yielding crops of the last ten years in each sector (referred to as normal).

2.1 Stalk elongation (Table 4a)

Stalk elongation during the month of April 2012 was higher than during the corresponding period in 2011 in all sectors. It amounted to 42.4 cm in the North, 38.6 cm in the East, 39.3 cm in the South, 44.4 cm in the West and 33.8 cm in the Centre. These growth increments exceeded those of 2011 by 4.2 cm, 3.6 cm, 1.0 cm, 13.2 cm and 0.3 cm, respectively. Compared to the normal for the corresponding month, growth was also higher in all sectors, the advantage being 4.8 cm in the North, 2.3 cm in the East, 8.4 cm in the South, 12.1 cm in the West and 3.2 cm in the Centre. The 39.7 cm average elongation for the island represented 109.1% of that recorded in April 2011 (36.4 cm) and 123.5% of the normal (32.2 cm).

Table 4a. Stalk elongation during the month of April

	Stalk elongation (cm) during April			April 2012 as % of	
Sectors	**2012**	**2011**	**Normal**	**2011**	**Normal**
North	42.4	38.2	37.6	111.0	112.7
East	38.6	35.0	36.3	110.3	106.3
South	39.3	38.3	30.9	102.6	127.2
West	44.4	31.2	32.3	142.3	137.5
Centre	33.8	33.5	30.6	100.9	110.5
Island	**39.7**	**36.4**	**32.2**	**109.1**	**123.5**

2.2 Cumulative Elongation (Table 4b)

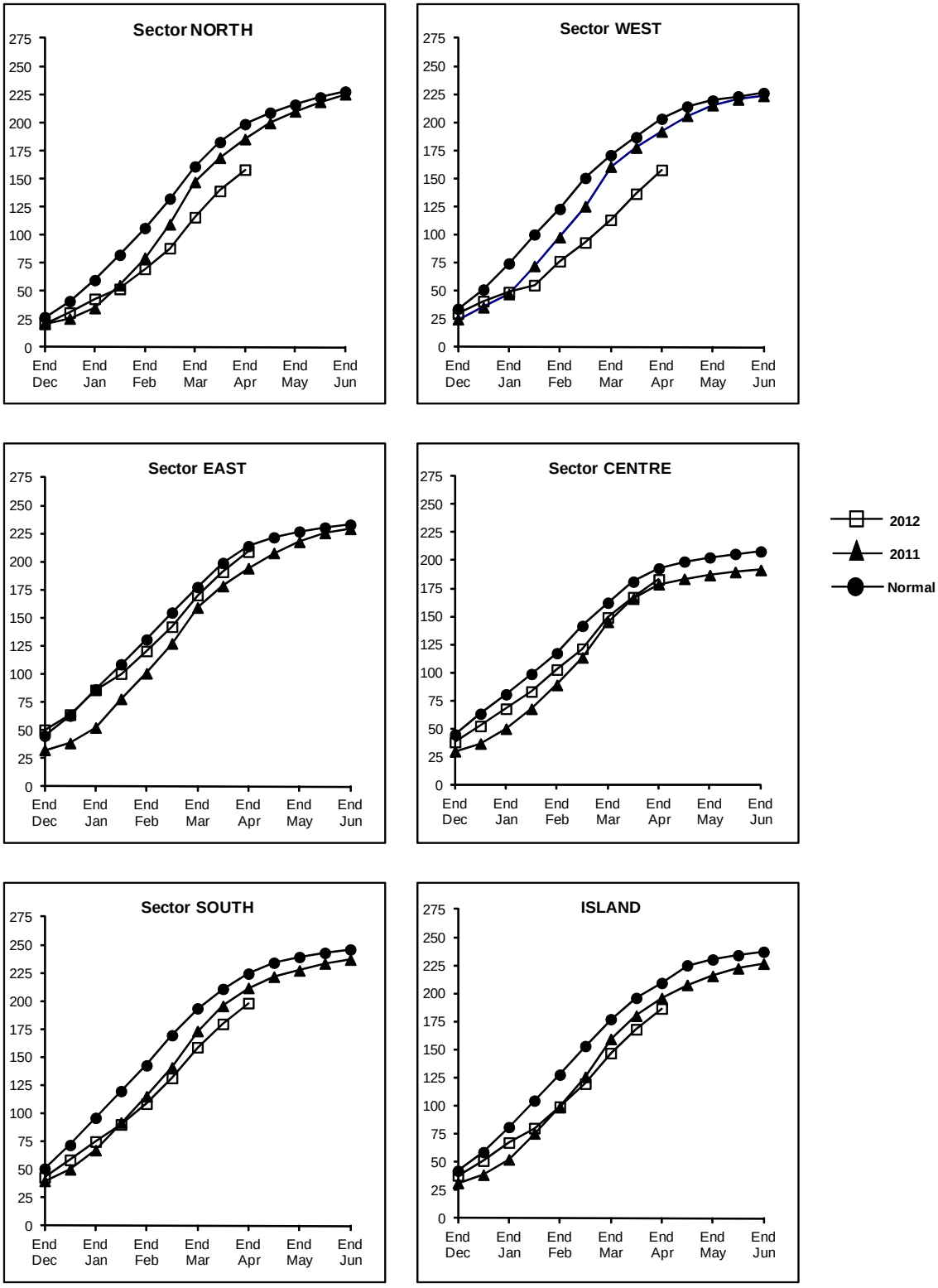
Cumulative growth from end-December 2011 to end-April 2012 reached 137.3 cm in the North, 158.4 cm in the East, 155.0 cm in the South, 127.9 cm in the West and 144.7 cm in the Centre. These data were inferior to those of 2011 in all sectors, the difference being 26.8 cm (16.3%) in the North, 3.3 cm (2.0%) in the East, 16.7 cm (9.7%) in the South, 39.1 cm (23.4%) in the West and 3.9 cm (2.6%) in the Centre.

Table 4b. Cumulative elongation at end-April.

	Cumulative elongation (cm) at end-April			April 2012 as % of	
Sectors	**2012**	**2011**	**Normal**	**2011**	**Normal**
North	137.3	164.1	171.6	83.7	80.0
East	158.4	161.7	168.8	98.0	93.8
South	155.0	171.7	173.4	90.3	89.4
West	127.9	167.0	169.1	76.6	75.7
Centre	144.7	148.6	147.8	97.4	97.9
Island	**148.5**	**164.6**	**167.1**	**90.2**	**88.9**

For the same period, growth was below normal in all sectors. The difference amounted to 34.3 cm (20.0%) in the North, 10.4 cm (6.2%) in the East, 18.4 cm (10.6 %) in the South, 41.2 cm (24.3%) in the West and 3.1 cm (2.1%) in the Centre. Island-wise the cumulative elongation of 148.5 cm is inferior to that of the 2011 crop (164.6 cm) and to the normal (167.1 cm) by 9.8% and 11.1% respectively.

Figure 2. Stalk height at end-April 2012.



2.3 Total cane height (Table 4c and Figure 2)

At end-April 2012, total cane height stood at 158.0 cm in the North, 209.0 cm in the East, 198.2 cm in the South, 157.7 cm in the West and 183.0 cm in the Centre, giving an island average of 186.7 cm. Compared to the corresponding period in April 2011, cane was taller in the East and Centre by 14.8 cm and 4.3 cm respectively but shorter in the North, South and West by 27.1 cm, 13.4 cm and 34.1 cm, respectively. Compared to the normal, total cane height at the end of April 2012 lagged by 40.5 cm (20.4 %) in the North, 4.9 cm (2.3 %) in the East, 26.2 cm (11.7%) in the South, 45.5 cm (22.4 %) in the West and 9.9 cm (5.1%) in the Centre.

Island-wise the total cane height of 186.7 cm at end-April 2012 was inferior to that of end-April 2011 by 9.2 cm (4.7%) and the normal by 22.7 cm (10.8%).

Table 4c. Stalk height at end-April.

	Stalk height (cm) at end-April			End-April 2012 as % of	
Sectors	**2012**	**2011**	**Normal**	**2011**	**Normal**
North	158.0	185.1	198.5	85.4	79.6
East	209.0	194.2	213.9	107.6	97.7
South	198.2	211.6	224.4	93.7	88.3
West	157.7	191.8	203.2	82.2	77.6
Centre	183.0	178.7	192.9	102.4	94.9
Island	**186.7**	**195.9**	**209.4**	**95.3**	**89.2**

3. SUCROSE ACCUMULATION (Tables 5a and 5b)

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.

The data indicate a higher sucrose content at most sites under the early varieties M 52/78, M 703/89, R 573, M 695/69 and R 575 compared to the mid- and late-season ones. However, sucrose content is still far from the achievable potential, even in the early varieties.

Table 5a Average Pol % Cane (richesse) at end April 2012.

Sectors	**M 52/78**	**M 703/89**	**R 573**	**M 695/69**	**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			7.2	6.9			3.2	5.8	4.2	3.2	6.5		6.3			5.2	4.2
East	9.9	10.2	9.7	9.8	11.8	10.6	6.0	9.4	7.4	7.1	7.2		7.3		7.4		6.3
South	9.5	10.4	9.2	7.6	7.2	8.3			7.0	6.7	7.2	7.8	6.4	4.4		5.4	3.8
West			6.5		6.3				5.7	3.7	6.6		6.3				3.4
Centre	9.8	9.3	7.4			6.7				6.1	5.7		6.7		6.6		4.9

The *richesse* derived from the end-April 2012 sampling amounted to 4.9% in the North, 8.1% in the East, 7.2% in the South, 5.7% in the West and 7.7% in the Centre. Compared to the corresponding period in 2011, sucrose content at end-April 2012 was higher in sectors East by 1.1^{o}, South by 0.3^{o} and Centre by 0.8^{o}. In the North and West, sucrose content at end-April 2012 was lower than that of last year by 0.4^{o}. Compared to the corresponding period in 2010, sucrose content was lagging in all sectors, the difference being 3.0^{o} in the North and West, 0.4^{o} in the East, and 1.0^{o} in the South and 1.1^{o} the Centre.

Table 5b Comparison of Pol % Cane (richesse) at the end of April 2010, 2011 and 2012.

Sectors	APRIL		
	2010	2011	2012
North	7.9	5.3	4.9
East	8.5	7.0	8.1
South	8.2	6.9	7.2
West	8.7	6.1	5.7
Centre	8.8	6.9	7.7
Island	8.3	6.5	6.8

Island-wise, the *richesse* of 6.8% recorded at the end of April 2012 was slightly higher than that of 2011 (0.3^{o}) at the same period but lagging severely behind that of 2010 (1.5^{o}).

4 CROP 2012

Weather has been average to favourable for growth during April 2012 as witnessed by a generally better elongation rate during that month than in April 2011 and to the normal for the month of April. Total cane height at end-April 2012 was however still lagging by about 5% and 10% from that of 2011 and the normal. Sucrose accumulation is at a level comparable to that of last year but remained well below that of 2010. Based on current state of growth and maturation, the 2012 crop will be a normal one if weather conditions are optimal in the forthcoming months.