## MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Ref A 1/2011

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## **SUGAR CANE CROP 2011**

## Status: End March 2011

### 1. CLIMATE

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

The island's average rainfall of 410 mm over the sugar cane areas for the month of March 2011 represented 163% of the long-term mean (252 mm). Sector-wise, rainfall recorded during March 2011 exceeded the long-term mean for that month by 212 mm (132%) in the North, 339 mm (140%) in the East, 40 mm (12%) in the South, 45 mm (40%) in the West and 47 mm (14%) in the Centre.

Rainfall for the period October 2010 to March 2011 cumulated to 1239 mm for the island. This was 3% higher than the island long-term mean of 1199 mm for that period. During that same period, 906 mm were recorded in the North, 1682 mm in the East, 1229 mm in the South, 687 mm in the West and 1288 mm in the Centre. These amounts represented 112%, 139%, 86%, 104%, and 79% of the respective long-term mean.

	North	East	South	West	Centre	Island
2010	180	417	389	124	238	313
	(112)	( <i>172</i> )	(120)	(111)	(71)	(124)
2011	<b>373</b>	<b>582</b>	<b>365</b>	<b>157</b>	<b>384</b>	<b>410</b>
	(232)	(240)	(112)	(140)	(114)	(163)
LTM	161	243	325	112	337	252

### Table 1a Rainfall (mm) of March for crops 2010, 2011 and the long term mean (LTM)

\* Figures in brackets are % of LTM

## Table 1bCumulative rainfall (mm) from October 2010 to March 2011 for crop 2011<br/>compared to that of crop 2010 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2010	1055	2378	1928	939	1722	1749
	(130)	(197)	(134)	(142)	(106)	(146)
2011	<b>906</b>	<b>1682</b>	<b>1229</b>	<b>687</b>	<b>1288</b>	<b>1239</b>
	(112)	(139)	(86)	(104)	(79)	(103)
LTM	811	1208	1436	661	1625	1199

\* Figures in brackets are % of LTM

[Source: raw provisional data from Meteorological Services]

### MSIRI

# Figure 1. Monthly rainfall (mm) for the period Oct 2010 to Mar 2011 for the 2011 crop compared to the corresponding period of the 2010 crop and to the long term mean (LTM)













### 2. STALK HEIGHT

Measurements of stalk height had been carried out during the last week of March 2011 at 60 sites in the five sugar cane growing sectors of the island. These sites are representative of the various agro-climatic zones, varieties, and crop categories. Data collected were compared to those at the corresponding period in March 2010 and with 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 2a)

Growth during the month of March was superior to that recorded during the corresponding period in 2010 in all sectors. It amounted to 67.4 cm in the North, 58.5 cm in the East, 58.1 cm in the South, 62.8 cm in the West and 56.1 cm in the Centre. Compared to the normal for the corresponding month, growth was also higher in all sectors, the advantage being 15.6 cm in the North, 11.3 cm in the East, 9.5 cm in the South, 13.2 cm in the West and 13.9 cm in the Centre. The 60.6 cm average elongation for the island represented 145.2% of that recorded in March 2010 (41.8 cm) and 129.0% of the normal (47.0 cm).

	Stalk elongation (cm) during March			March 2011 as % of		
Sectors	2011	2010	Normal	2010	Normal	
North	67.4	43.1	51.8	156.4	130.2	
East	58.5	41.8	47.2	140.0	124.0	
South	58.1	41.2	48.6	141.0	119.5	
West	62.8	44.6	49.6	140.8	126.6	
Centre	56.1	37.9	42.2	148.0	133.1	
Island	60.6	41.8	47.0	145.2	129.0	

Table 2a. Stalk elongation during the month of March

## 2.2 Cumulative Elongation (Table 2b)

Cumulative growth from end-December 2010 to end-March 2011 reached 125.9 cm in the North, 126.7 cm in the East, 133.4 cm in the South, 135.8 cm in the West and 115.1 cm in the Centre. These cumulative growths were higher than those of 2010 by 3.9 cm (3.2%) in the North, 0.6 cm (0.5%) in the East, 2.8 cm (2.1%) in the South and 9.4 cm (8.9%) in the Centre, while in the West, it lagged behind by 4.1 cm (2.9%).

	Cumulative elongation (cm) at end- March			March 2011 as % of		
Sectors	2011	2010	Normal	2010	Normal	
North	125.9	122.0	136.7	103.2	92.1	
East	126.7	126.1	136.8	100.5	92.6	
South	133.4	130.6	148.6	102.1	89.8	
West	135.8	139.9	137.2	97.1	99.0	
Centre	115.1	105.7	122.5	108.9	94.0	
Island	128.2	125.6	139.5	102.1	91.9	

 Table 2b. Cumulative elongation at end-March

For the same period, cumulative growth was below normal in all sectors. The difference amounted to 10.8 cm in the North, 10.1 cm in the East, 15.2 cm in the South, 1.4 cm in the West and 7.4 cm in the Centre. Island-wise the cumulative elongation of 128.2 cm was higher than that of the 2010 crop (125.6 cm) by 2.1% but inferior to the normal (139.5 cm) by 8.1%.

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

Total cane height at end March 2011 was 146.9 cm in the North, 159.2 cm in the East, 173.3 cm in the South, 160.6 cm in the West and 145.2 cm in the Centre to give an island average of 159.5 cm. Compared to end-March 2010, cane height was slightly taller by 0.2 cm in the North but shorter in the other sectors by 6.5 cm in the East, 8.6 cm in the South, 22.5 cm in the West and 8.1 cm in the Centre. Total cane height at the end of March 2011 was also lower than the normal in all sectors, and lagged by 17.1 cm (10.4 %) in the North, 20.6 cm (11.5%) in the East, 27.3 cm (13.6%) in the South, 9.4 cm (5.5%) in the West and 26.4 cm (15.4%) in the Centre.

Island-wise the total cane height of 159.5 cm at end-March 2011 was lagging behind that of end-March 2010 by 7.1 cm (4.3%) and the normal by 23.4 cm (12.8%).

	Stalk he	Stalk height (cm) at end-March			End-March 2011 as % of		
Sectors	2011	2010	Normal	2010	Normal		
North	146.9	146.7	164.0	100.1	89.6		
East	159.2	165.7	179.8	96.1	88.5		
South	173.3	181.9	200.6	95.3	86.4		
West	160.6	183.1	170.0	87.7	94.5		
Centre	145.2	153.3	171.6	94.7	84.6		
Island	159.5	166.6	182.9	95.7	87.2		

Table 2c. Stalk height at end-March

### 3. CROP 2011

Weather during the month of March has been extremely favourable to growth and has resulted in an exceptional 60.6 cm average growth for the island. This growth rate exceeded those recorded during the same period in 2010 and in February 2011 by some 50%. Around 15% of the recorded backlog of 20.8 % at end-February has been recovered to bring the total stalk height to within only 4.3% of that at end-March 2010. However, the 2011 crop is still lagging the normal by 23.4 cm.



### Figure 2. Stalk height at end- March 2011