# MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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# **SUGAR CANE CROP 2011**

## Status: End January 2011

### 1. CLIMATE

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

Rainfall recorded over the sugar cane areas of the island in January 2011 was 304 mm and it represented 118% of the long-term mean. January rainfall exceeded the long-term mean by 220 mm (85%) in the East, 121 mm (72%) in the West and 20 mm (6%) in the Centre. It was close to the long-term mean in the North, whereas in the South it was inferior to the long-term mean by 67 mm (23%).

Rainfall for the period October 2010 to January 2011 amounted to 473 mm for the island. This is 23% lower than the island long-term mean of 616 mm for that period. During that same period, 292 mm were recorded in the North, 704 mm in the East, 426 mm in the South, 307 mm in the West and 558 mm in the Centre. These amounts represented 72%, 112%, 57%, 93%, and 68% of the respective long-term mean.

January 2011 has been characterized by heavy downpours with substantial surface runoff. Rainfall received was generally adequate to meet crop water requirements.

	North	East	South	West	Centre	Island
2010	216	524	422	115	314	367
	(116)	(202)	(146)	(69)	(89)	(143)
2011	<b>188</b>	<b>480</b>	<b>223</b>	<b>288</b>	<b>374</b>	<b>304</b>
	(102)	(185)	(77)	(172)	(106)	(118)
LTM	186	260	290	167	354	257

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

\* figures in brackets are % of LTM

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

	North	East	South	West	Centre	Island
2010	729	1337	1078	594	1052	1026
	(180)	(213)	(145)	(180)	(128)	(167)
2011	<b>292</b>	<b>704</b>	<b>426</b>	<b>307</b>	<b>558</b>	<b>473</b>
	(72)	(112)	(57)	(93)	(68)	(77)
LTM	405	629	745	330	824	616

\* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]



# Figure 1 Monthly rainfall (mm) for the period Oct 2010 to Jan 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 January 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 are compared to those of the corresponding period in January 2010 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 2a)

Stalk elongation during the month of January 2011 was inferior to that of the same period in 2010 in all sectors. During January 2011, the best growth was observed in the South with 27.4 cm followed by 22.4 cm in the West, 20.0 cm in the Centre, 19.9 cm in the East and 13.7 cm in the North. Compared to the normal for the corresponding period, growth lagged by 23.4 cm in the North, 23.8 cm in the East, 24.1 cm in the South, 17.8 cm in the West and 22.9 cm in the Centre. The stalk elongation of 21.0 cm for the island was 19.6 cm (48.3%) below that of the corresponding period in 2010, and below that of the normal by 23.7 cm (53.1%).

	Stalk elongation (cm) during Jan			Jan 2011 as % of		
Sectors	2011	2010	Normal	2010	Normal	
North	13.7	38.3	37.1	35.8	36.9	
East	19.9	40.7	43.7	48.9	45.5	
South	27.4	43.7	51.5	62.7	53.2	
West	22.4	46.0	40.2	48.7	55.7	
Centre	20.0	31.6	42.9	63.3	46.6	
Island	21.0	40.6	44.7	51.7	46.9	

 Table 2a. Stalk elongation during the month of January.

### 2.2 Total cane height (Table 2b and Figure 2)

Total cane height at end January 2011 stood at 34.7 cm in the North, 52.4 cm in the East, 67.3 cm in the South, 47.2 cm in the West and 50.1 cm in the Centre to give an island average of 52.3 cm. Compared to end-January 2010, cane height was lagging behind by 28.3 cm in the North, 27.9 cm in the East, 27.7 cm in the South, 42.0 cm in the West and 29.1 cm in the Centre. Total cane height at the end of January 2011 were also lower than the normal in all sectors, the difference being 29.7 cm (46.1 %) in the North, 34.4 cm (39.6%) in the East, 36.2 cm (35%) in the South, 25.9 cm (35.4%) in the West and 41.9 cm (45.6%) in the Centre.

At island level, the total cane height of 52.3 cm at the end of January 2011 was inferior to that of the corresponding period in 2010 by 29.3 cm (36%) and the normal by 35.9 cm (40.7%).

	Stalk height (cm) at end-Jan			End-Jan 2011 as % of		
Sectors	2011	2010	Normal	2010	Normal	
North	34.7	63.0	64.4	55.1	53.9	
East	52.4	80.3	86.8	65.3	60.4	
South	67.3	95.0	103.5	70.8	65.0	
West	47.2	89.2	73.1	52.9	64.6	
Centre	50.1	79.2	92.0	63.3	54.4	
Island	52.3	81.6	88.1	64.0	59.3	

Table 2a. Stalk height at end-January.

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Weather during the month of January has been in general conducive to growth and development of the sugar cane. The heavy downpours have replenished the soil moisture reserve and have on the whole eliminated the long-standing drought spell. However, since the latter had already affected severely the crop, it takes some time for the sugar cane to recover. Additionally, in many cases tillering has yet to be completed before elongation can start. This is seen in the reduced elongation rates recorded in January 2011 when compared to those of last year and of the normal. Thus the difference in total cane height has increased to reach 29% and 36% from 24% and 28% when compared to the same period in 2010 and to the normal. Full recovery of the crop to reach that of 2010 or that of the normal is very unlikely.

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Figure 2. Stalk height at end- January 2011.