

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2012

Status: End February 2012

1. CLIMATE

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

The island's average rainfall for the month of February 2012 was 219 mm over the sugar cane areas representing a deficit of 33% over the normal (328 mm). In all sectors, the rainfall recorded was below the long-term mean with 110 mm in the North, 259 mm in the East, 268 mm in the South, 106 mm in the West and 294 mm in the Centre. These amounts represented 45%, 77%, 73%, 48% and 63% of the respective long-term mean of the sector.

Cumulative rainfall for the period October 2011 to February 2012 amounted to 639 mm, 70% of the long-term mean for the island. During the same period 347 mm were recorded in the North, 764 mm in the East, 779 mm in the South, 287 mm in the West and 808 mm in the Centre. These values represented 54%, 81%, 73%, 54% and 64% of the respective long-term means.

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

	North	East	South	West	Centre	Island
Crop 2011	241 (98)	396 (118)	438 (120)	223 (102)	346 (75)	355 (108)
Crop 2012	110 (45)	259 (77)	268 (73)	106 (48)	294 (63)	219 (67)
LTM	245	336	366	219	464	328

* figures in brackets are % of LTM

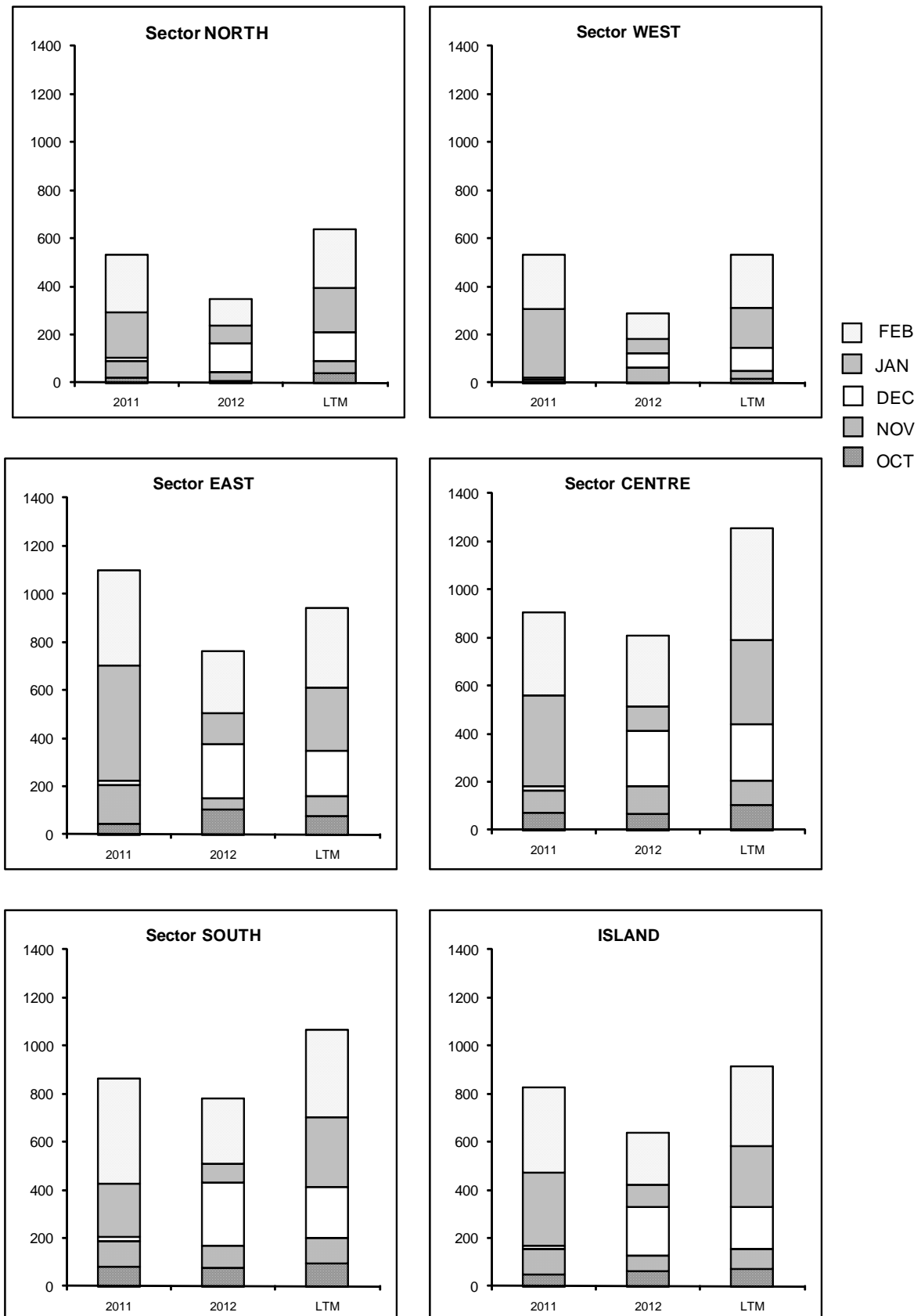
Table 1b Cumulative rainfall (mm) from October 2011 to February 2012 for crop 2012 compared to that of crop 2011 and the long-term mean (LTM)

	North	East	South	West	Centre	Island
Crop 2011	533 (83)	1100 (1164)	864 (81)	530 (100)	904 (72)	828 (91)
Crop 2012	347 (54)	764 (81)	779 (73)	287 (54)	808 (64)	639 (70)
LTM	640	944	1067	532	1256	911

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

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



2. STALK HEIGHT

Measurements of stalk height had been carried out during the last week of February 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 February 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 2a)

Stalk elongation during the month of February 2012 was lower than during the corresponding period in 2011 in all sectors. It amounted to 26.6 cm in the North, 34.7 cm in the East, 33.7 cm in the South, 27.5 cm in the West and 34.9 cm in the Centre. These growth increments are inferior to those of 2011 by 18.2 cm, 13.6 cm, 14.2 cm, 23.1 cm and 4.1 cm respectively. February 2012 elongation was also below the normal for the corresponding period in all sectors. It lagged by 19.7 cm in the North, 9.7 cm in the East, 13.0 cm in the South, 21.1 cm in the West and 1.7 cm in the Centre. Island-wise the 31.9 cm growth represented 68.4 % of both the elongation of 2011 and the normal.

Table 2a. Stalk elongation during the month of February

Sectors	Stalk elongation (cm) during Feb			Feb 2012 as % of	
	2012	2011	Normal	2011	Normal
North	26.6	44.8	46.3	59.4	57.5
East	34.7	48.3	44.4	71.8	78.2
South	33.7	47.9	46.7	70.4	72.1
West	27.5	50.6	48.6	54.3	56.6
Centre	34.9	39.0	36.6	89.5	95.4
Island	31.9	46.6	46.6	68.4	68.4

2.2 Cumulative Elongation (Table 2b)

Cumulative growth from end-December 2011 to end-February 2012 amounted to 48.9 cm in the North, 70.0 cm in the East, 65.5 cm in the South, 46.7 cm in the West and 64.5 cm in the Centre. These data were inferior to those of 2011 by 9.6 cm (16.4%) in the North, 9.8 cm (13.0%) in the South and 26.3 cm (36.0%) in the West. In sectors East and Centre, cumulative elongation exceeded that of the last year's crop by 1.8 cm (2.6%) and 5.5 cm (9.3%) respectively.

Table 2b. Cumulative elongation at end-February.

Sectors	Cumulative elongation (cm) at end- Feb			Feb 2012 as % of	
	2012	2011	Normal	2011	Normal
North	48.9	58.5	79.2	83.6	61.8
East	70.0	68.2	85.7	102.6	81.6
South	65.5	75.3	91.8	87.0	71.4
West	46.7	73.0	88.9	64.0	52.5
Centre	64.5	59.0	72.3	109.3	89.3
Island	61.1	67.6	85.4	90.4	71.5

For the same period, growth was below normal in all sectors. The difference amounted to 30.3 cm (38.2%) in the North, 15.7 cm (18.4%) in the East, 26.3 cm (28.6 %) in the South, 42.2 cm

(47.5%) in the West and 7.8 cm (10.7%) in the Centre. Island-wise the cumulative elongation of 61.1 cm is inferior to that of the 2011 crop (67.6 cm) and to the normal (85.4 cm) by 9.6% and 28.5% respectively.

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

At end-February 2012, total cane height was 69.6 cm in the North, 120.6 cm in the East, 108.7 cm in the South, 76.5 cm in the West and 102.8 cm in the Centre, giving an island average of 99.3 cm. Compared to the corresponding period in February 2011, cane was taller in the East and Centre by 19.9 cm and 13.7 cm respectively but shorter in the North, South and West by 9.9 cm, 6.5 cm and 21.3 cm respectively. Total cane height at the end of February 2012 was lower than the normal by 36.4 cm (34.3 %) in the North, 10.2 cm (7.8 %) in the East, 34.1 cm (23.9%) in the South, 46.5 cm (37.8 %) in the West and 14.6 cm (12.4%) in the Centre.

At island level, the total cane height of 99.3 cm at the end of February 2012 was comparable to that of the corresponding period in 2011 but lagged behind the normal by 28.5 cm (22.3 %).

Table 2c. Stalk height at end-February.

Sectors	Stalk height (cm) at end-Feb			End-Feb 2012 as % of	
	2012	2011	Normal	2011	Normal
North	69.6	79.5	106.0	87.5	65.7
East	120.6	100.7	130.8	119.8	92.2
South	108.7	115.2	142.8	94.4	76.1
West	76.5	97.8	123.0	78.2	62.2
Centre	102.8	89.1	117.4	115.4	87.6
Island	99.3	98.8	127.8	100.4	77.7

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Rainfall received during February 2012 has been timely and partially relieved the then generally prevailing water stress. However, the amount recorded in the North and West sectors has not been adequate to fully remove the water stress and therefore the water requirements of sugar cane have not been met in these sectors. Beneficial effects of higher temperatures and solar radiation can only be realized when there is no soil moisture stress. This is clearly seen from the elongation data with February growth lagging below those of 2011 and the normal in all sectors. The impact has been more severe in the North and West sectors with just above 55% of normal growth. Total cane height at the end of February was still below the normal in all sectors and lack of water for irrigation has been and remains another compounding factor. Therefore at this stage of the crop cycle the situation does not look promising for the 2012 crop.

Figure 2. Stalk height at end- February 2012.

