MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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SUGAR CANE CROP 2013

Status: End March 2013

1. CLIMATE

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

The island's average rainfall of 366 mm over the sugar cane areas for the month of March 2013 represented 147% of the long-term mean (249 mm). Rainfall for the month of March exceeded the long-term mean by 124 mm (51%) in the East, 194 mm (60%) in the South, 80 mm (71%) in the West and 178 mm (53%) in the Centre. In the North, it was inferior to the long-term mean by 10 mm (6%).

Rainfall for the period October 2012 to March 2013 cumulated to 1414 mm for the island. This is 118% of the island long-term mean of 1196 mm for that period. During that same period, a total of 901 mm were recorded in the North, 1684 mm in the East, 1673 mm in the South, 620 mm in the West and 1688 mm in the Centre. These amounts represented 111%, 139%, 117%, 94% and 104% of the respective long-term mean.

| | North | East | South | West | Centre | Island |
|------|------------|------------|------------|------------|------------|------------|
| 2012 | 259 | 468 | 394 | 161 | 420 | 367 |
| | (161) | (193) | (121) | (144) | (125) | (147) |
| 2013 | 151 | 367 | 519 | 192 | 515 | 366 |
| | (94)* | (151) | (160) | (171) | (153) | (147) |
| LTM | 161 | 243 | 325 | 212 | 337 | 249 |

Table 1a Rainfall (mm) in March for crops 2012, 2013 and the long-term mean (LTM)

* figures in brackets are % of LTM

Table 1bCumulative rainfall (mm) from October 2012 to March 2013 for crop 2013
compared to crop 2012 and the long-term mean (LTM)

| | North | East | South | West | Centre | Island |
|------|------------|-------------|-------------|------------|-------------|-------------|
| 2012 | 606 | 1232 | 1173 | 448 | 1228 | 1005 |
| | (75) | (102) | (82) | (68) | (76) | (84) |
| 2013 | 901 | 1684 | 1673 | 620 | 1688 | 1414 |
| | (111)* | (139) | (117) | (94) | (104) | (118) |
| LTM | 812 | 1208 | 1436 | 661 | 1625 | 1196 |

* figures in brackets are % of LTM

[Source : raw provisional data from Meteorological Services]

Figure 1 Monthly rainfall (mm) for the period October 2012 to March 2013 for the 2013 crop compared to the corresponding period of the 2012 crop and to the long term mean (LTM)













2. STALK HEIGHT

Cane growth was assessed during the last week of March 2013 in the 60 sites representative of the five sugar cane sectors of the island. These sites cover the various agro-climatic zones, varieties under cultivation and stages of development of the crop. Data collected are compared with the mean of the five best cane yielding years of the last ten years in each sector, referred to as normal, and to the corresponding period in March 2012.

2.1 Stalk elongation (Table 2a)

Stalk growth during the month of March 2013 was inferior to that recorded during the corresponding period in 2012 except in sector West. Elongation amounted to 40.7 cm in the North, 43.1 cm in the East, 45.7 cm in the South, 43.4 cm in the West and 40.4 cm in the Centre. The elongation rates of March 2013 were also below the normal in all sectors, the difference being 14.2 cm in the North, 4.7 cm in the East, 5.0 cm in the South, 4.5 cm in the West and 5.9 cm in the Centre. The 43.2 cm average elongation for the island represented 90.5% of that recorded in March 2012 (47.7 cm) and 87.3% of the normal (49.5 cm).

| | Stalk elongation (cm) during March | | | March 2013 as % of | | |
|---------|------------------------------------|------|--------|--------------------|--------|--|
| Sectors | 2013 | 2012 | Normal | 2012 | Normal | |
| North | 40.7 | 46.0 | 54.9 | 88.5 | 74.2 | |
| East | 43.1 | 49.8 | 47.8 | 86.5 | 90.2 | |
| South | 45.7 | 50.2 | 50.7 | 91.0 | 90.1 | |
| West | 43.4 | 36.8 | 47.9 | 117.9 | 90.6 | |
| Centre | 40.4 | 46.4 | 46.3 | 87.1 | 87.3 | |
| Island | 43.2 | 47.7 | 49.5 | 90.5 | 87.3 | |

Table 2a. Stalk elongation during the month of March

2.2 Cumulative elongation (Table 2b)

Cumulative growth from end-December 2012 to end-March 2013 reached 134.5 cm in the North, 156.0 cm in the East, 132.0 cm in the South, 130.9 cm in the West and 120.5 cm in the Centre. These cumulative growths were higher than those of 2012, the difference ranging from 9.6 cm in the Centre to 39.6 cm in the North.

| | Cumula | Cumulative elongation (cm) at end- March | | | March 2013 as % of | | |
|---------|--------|---------------------------------------------|--------|-------|--------------------|--|--|
| Sectors | 2013 | 2012 | Normal | 2012 | Normal | | |
| North | 134.5 | 94.9 | 134.0 | 141.7 | 100.4 | | |
| East | 156.0 | 119.8 | 132.0 | 130.2 | 118.2 | | |
| South | 132.0 | 115.7 | 142.5 | 114.1 | 92.6 | | |
| West | 130.9 | 83.5 | 136.8 | 156.8 | 95.7 | | |
| Centre | 120.5 | 110.9 | 118.4 | 108.7 | 101.8 | | |
| Island | 138.1 | 109.0 | 135.0 | 126.7 | 102.3 | | |

Table 2b. Cumulative elongation at end-March

For the same period, cumulative growth was close to normal in the North but was above normal in sectors East and Centre by 24.0 cm and 2.1 cm, respectively. In the South and West, it lagged behind the normal by 10.5 cm in the South and 5.9 cm in the West. Island-wise the cumulative elongation of 138.1 cm is superior than that of the 2012 crop (109.0 cm) and to the normal (135.0 cm) by 26.7% and 2.3% respectively.

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

Total stalk height at end March 2013 was at 153.2 cm in the North, 197.8 cm in the East, 169.1 cm in the South, 159.1 cm in the West and 160.8 cm in the Centre to give an island average of 171.8 cm. These figures were higher than that of the corresponding period last year in all sectors, the difference being 37.6 cm in the North, 27.4 cm in the East, 10.2 cm in the South, 45.8 cm in the West and 11.6 cm in the Centre. Total stalk height at end-March 2013 exceeded the normal only in the East by 20.7 cm (11.7 %), whereas in the other sectors it lagged behind the normal by 7.6 cm (4.8%) in the North, 24.4 cm (12.6%) in the South, 11.8 cm (6.9%) in the West and 2.7 cm (1.7%) in the Centre.

| | Stalk height (cm) at end-March | | | End-March 2013 as % of | | |
|---------|--------------------------------|-------|--------|------------------------|--------|--|
| Sectors | 2013 | 2012 | Normal | 2012 | Normal | |
| North | 153.2 | 115.6 | 160.8 | 132.5 | 95.2 | |
| East | 197.8 | 170.4 | 177.1 | 116.1 | 111.7 | |
| South | 169.1 | 158.9 | 193.5 | 106.4 | 87.4 | |
| West | 159.1 | 113.3 | 170.9 | 140.4 | 93.1 | |
| Centre | 160.8 | 149.2 | 163.5 | 107.8 | 98.3 | |
| Island | 171.8 | 147.5 | 177.4 | 116.5 | 96.9 | |

At island level, the total stalk height of 171.8 cm at the end of March 2013 was above that of the corresponding period in 2012 by 24.3 cm (16.5%) but was below the normal by 5.6 cm (3.1%).

3. CROP 2013

Although above normal rainfall was recorded during the month of March 2013 in all the sectors except the North, the rainfall distribution within the month was not even especially in the lowlying areas where rainfed fields suffered mild water stress during the second half of the month. Solar radiation and temperature recorded on MSIRI stations during the month were also close to the normal. Hence, this is reflected in the elongation rates during March 2013 lagging behind that of the corresponding period in 2012 and the normal. However, total stalk height at end of March 2013 is better compared to the same period last year but is still below normal by 5.6 cm (3.1%). The heavy downpours recorded at the end of March 2013 has replenished the soil moisture reserve and provided favourable climatic conditions prevail, another fortnight of vigorous growth may be anticipated which may well enable full recovery in terms of total stalk height compared to the normal. Figure 2. Stalk height at end-March 2013.

