

MAURITIUS CANE INDUSTRY AUTHORITY

MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

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9 July 2014

SUGAR CANE CROP 2014

Status: End June 2014

1. CLIMATE

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

The island's average rainfall for the month of June 2014 was 67 mm over the sugar cane areas and represented 57% of the long-term mean (118 mm). Below normal rainfall was recorded in all sectors with 19 mm in the North, 88 mm in the East, 94 mm in the South, 2 mm in the West and 96 mm in the Centre.

Cumulative rainfall for the period October 2013 to June 2014 amounted to 1090 mm in the North, 2239 mm in the East, 2276 mm in the South, 957 mm in the West and 2257 mm in the Centre. The average cumulative rainfall for the same period for the island was 1876 mm. These figures represented 94%, 127%, 109%, 113%, 99% and 111% of the long-term mean of the respective sectors and of the island.

Table 1a. Rainfall (mm) for the month of June for crops 2013, 2014 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2013	33 (46)	99 (80)	101 (64)	4 (12)	131 (81)	79 (67)
2014	19 (26)*	88 (71)	94 (60)	2 (6)	96 (59)	67 (57)
LTM	72	123	157	33	163	118

* Figures in brackets are % of LTM

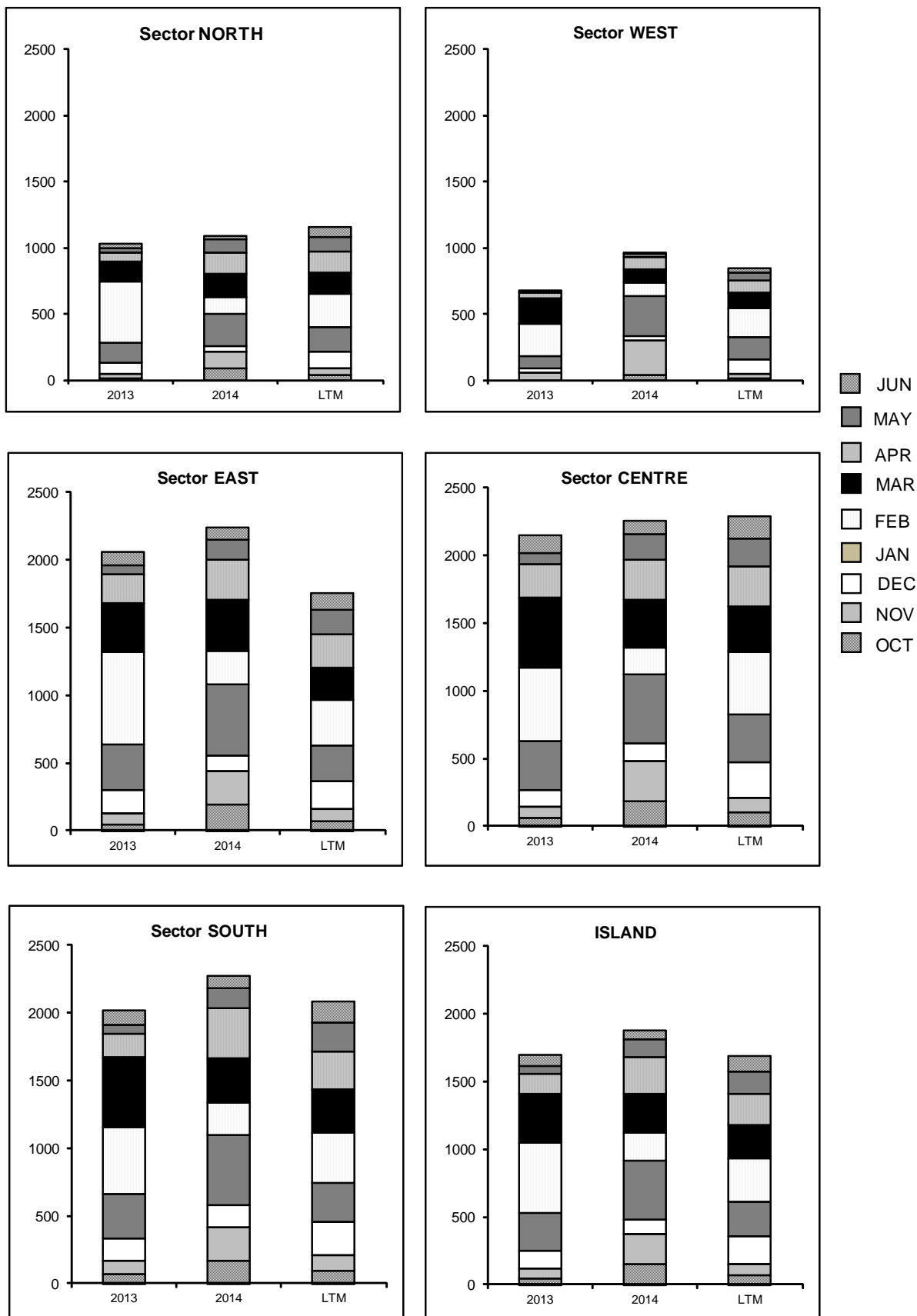
Table 1b. Cumulative rainfall (mm) from October 2013 to June 2014 for crop 2014 compared to that of crop 2013 and the long term mean (LTM)

	North	East	South	West	Centre	Island
2013	1033 (89)	2064 (118)	2016 (97)	675 (80)	2151 (94)	1699 (100)
2014	1090 (94)*	2239 (127)	2276 (109)	957 (113)	2257 (99)	1876 (111)
LTM	1156	1756	2085	847	2291	1692

*Figures in brackets are % of LTM

[Source : provisional data from Mauritius Meteorological Services]

Figure 1. Monthly rainfall (mm) for the period October 2013 to June 2014 for the 2014 crop compared to the corresponding period of the 2013 crop and to the long term mean (LTM)



1.2 Temperature (Table 2)

Data on maximum and minimum temperatures recorded during the month of June 2014 on MSIRI agro-meteorological stations are given below.

The mean monthly maximum temperature exceeded the normal by 1.0°C at Pamplemousses, 0.6°C at Réduit and 0.8°C at Union Park, but was comparable at Belle Rive. Above normal mean monthly minimum temperature was recorded at Pamplemousses (0.5°C), Union Park (1.1°C) and Belle Rive (0.8°C) whereas at Réduit it was close to the normal. The resulting mean amplitude exceeded the normal at Pamplemousses and Réduit whereas at the other two stations it was below the normal.

Table 2. Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in June 2014

Station	Maximum (°C)	Minimum (°C)	Amplitude (°C)
Pamplemousses	27.3 (26.3) *	17.3 (16.8)	10.0 (9.5)
Réduit	23.9 (23.3)	15.9 (16.0)	8.0 (7.3)
Belle Rive	23.1 (23.0)	15.5 (14.7)	7.6 (8.3)
Union Park	23.3 (22.5)	17.1 (16.0)	6.2 (6.5)

* 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 June 2014 were above normal at all stations. Recorded bright sunshine as a percentage of the normal reached 116 at Pamplemousses, 105 at Réduit, 109 at Belle Rive and 110 at Union Park.

Table 3. Sunshine duration (h) recorded on MSIRI agro-meteorological stations in June 2014

Station	June 2014	Normal	% of Normal
Pamplemousses	266	230	116
Réduit	230	219	105
Belle Rive	212	195	109
Union Park	160	146	110

2. STALK HEIGHT

Stalk height was assessed during the last week of June 2014 in the 63 sites representative of the five sugar cane sectors of the island. These sites cover the various agro-climatic zones, the varieties under cultivation and the stages of development of the crop. Data collected were compared with those of the corresponding period in June 2013 and to the mean of the five best cane yielding crops of the last ten years in each sector (referred to as the normal).

2.1 Stalk elongation (Table 4a)

Stalk elongation during the month of June 2014 amounted to 6.5 cm in the North, 4.3 cm in the East, 7.6 cm in the South, 7.3 cm in the West and 2.8 cm in the Centre. Compared to the corresponding period in 2013, stalk elongation in June 2014 was higher in sectors North, East and South. In the West, it was close to that of last year whereas in the Centre it was lower than the corresponding period in 2013. Stalk elongation in June 2014 also exceeded the normal in the South and West sectors. It lagged behind the normal in the other three sectors. The island stalk elongation of 6.0 cm was slightly higher than that for the corresponding period in 2013 by 0.9 cm but lagged behind the normal by 2.0 cm.

Table 4a. Stalk elongation during the month of June

Sectors	Stalk elongation (cm) during June			June 2014 as % of	
	2014	2013	Normal	2013	Normal
North	6.5	6.1	11.7	106.6	55.5
East	4.3	3.3	6.7	130.3	63.8
South	7.6	5.8	6.8	131.0	112.1
West	7.3	7.4	6.8	98.6	107.7
Centre	2.8	3.6	4.8	77.8	58.6
Island	6.0	5.1	8.0	117.0	75.0

2.2 Cumulative elongation (Table 4b)

Cumulative stalk elongation from end-December 2013 to end-June 2014 reached 192.8 cm in the North, 192.9 cm in the East, 194.5 cm in the South, 202.6 cm in the West and 156.2 cm in the Centre. These data were higher than those of 2013 in sectors North, South and West but were inferior in the other two sectors.

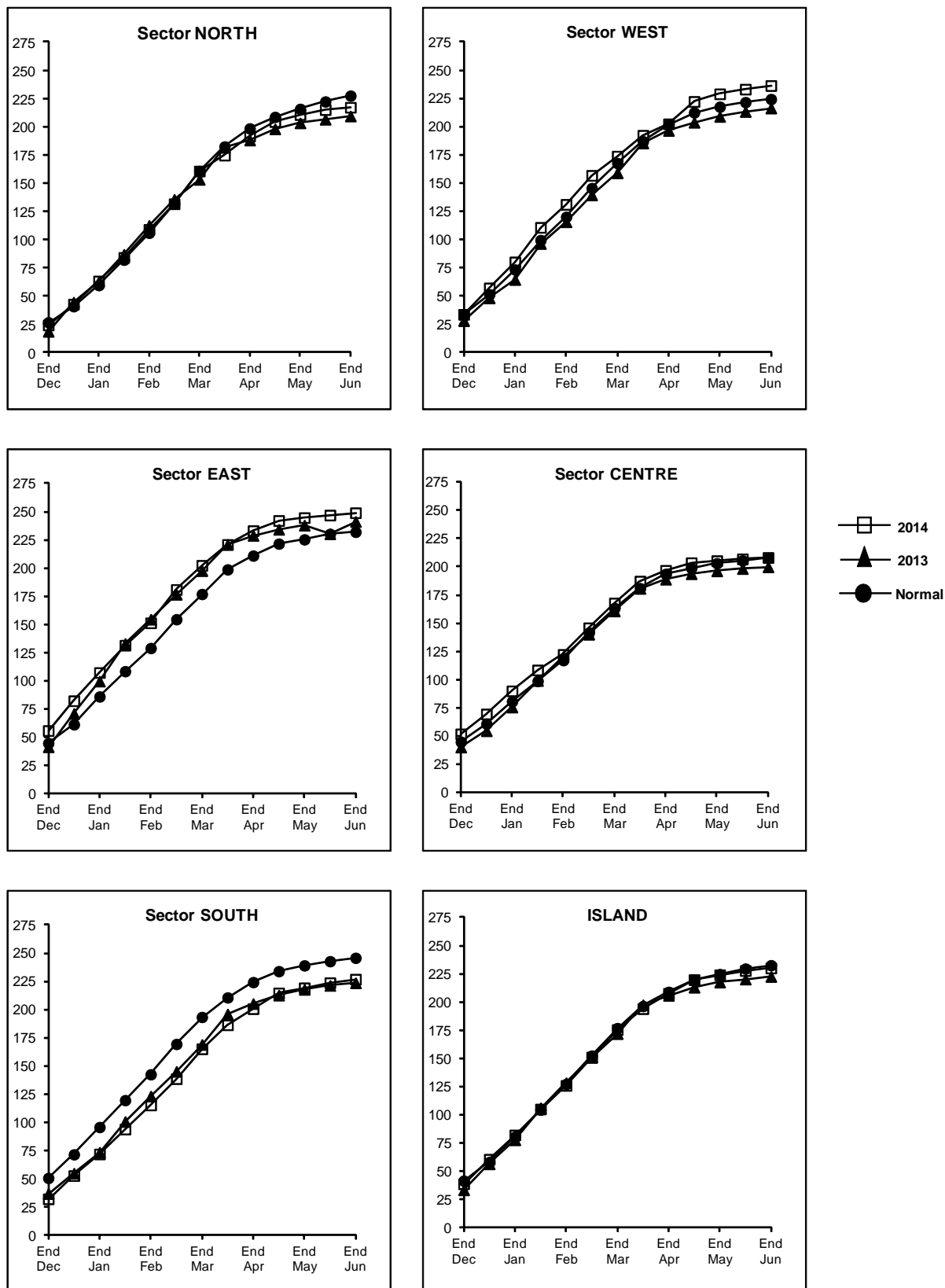
Table 4b. Cumulative elongation at end-June

Sectors	Cumulative elongation (cm) at end- June			June 2014 as % of	
	2014	2013	Normal	2013	Normal
North	192.8	190.7	200.7	101.1	96.1
East	192.9	199.5	187.1	96.7	103.1
South	194.5	186.6	194.9	104.2	99.8
West	202.6	188.2	190.5	107.6	106.4
Centre	156.2	159.6	162.8	97.9	95.9
Island	188.7	186.8	187.3	101.0	100.8

For the same period, cumulative growth was lagging behind the normal in the North and Centre whereas in sectors East and West, it was above normal. In the South, it was close to the normal.

Island-wise the cumulative elongation of 188.7 cm was slightly higher than that of the 2013 crop (186.8 cm) and the normal (187.3 cm).

Figure 2. Stalk height at end-June 2014.



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

Total stalk height at end-June 2014 stood at 217.2 cm in the North, 249.1 cm in the East, 227.0 cm in the South, 236.4 cm in the West and 208.2 cm in the Centre. Compared to the same period in 2013, cane was taller by 7.8 cm in both the North and the East, 3.3 cm in the South, 20.0 cm in the West and 8.3 cm in the Centre. Total cane height at the end of June 2014 exceeded the normal by 16.9 cm in the East and 11.8 cm in the West. In the Centre it was close to the normal whereas in sectors North and South, it lagged behind the normal by 10.3 cm and 18.9 cm, respectively.

Island-wide the total cane height of 230.2 cm at end-June 2014 was higher than at end-June 2013 by 7.5 cm (3.4%) but was slightly lower than the normal.

Table 4c. Stalk height at end-June

Sectors	Stalk height (cm) at end-May			May 2014 as % of	
	2014	2013	Normal	2013	Normal
North	217.2	209.4	227.5	103.7	95.5
East	249.1	241.3	232.2	103.2	107.3
South	227.0	223.7	245.9	101.5	92.3
West	236.4	216.4	224.5	109.2	105.3
Centre	208.2	199.9	207.9	104.2	100.1
Island	230.2	222.8	232.7	103.4	98.9

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 during the last week of June 2014. The average pol % cane (*richesse*) was computed 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.

Table 5a. Average Pol % cane (richesse) at end June 2014.

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 1672/90	R 570
North			14.2	14.6			10.8		12.7	11.5	13.5		12.1		13.3	12.5
East			14.4		14.3	13.6	14.0	14.3	13.2	12.9	13.7		11.0			13.4
South	14.6	13.5	13.4	11.5	12.7	14.3			12.6	12.5	12.9	13.2	11.5	12.3	10.9	11.2
West			15.0		13.9				10.6	12.1	12.0		11.3			9.6
Centre	14.7	13.5	12.4			12.7				12.9	11.6		11.3			10.6

Table 5b. Comparison of Pol % cane (richesse) at the end of May and June 2012, 2013 and 2014.

Sectors	MAY			JUNE		
	2012	2013	2014	2012	2013	2014
North	7.4	10.6	9.4	10.6	13.3	12.6
East	10.1	11.4	11.2	12.3	13.5	12.7
South	10.0	11.0	10.6	12.4	13.7	12.3
West	8.3	10.5	10.5	11.6	12.8	12.2
Centre	10.5	11.2	11.1	12.5	13.5	12.7
Island	9.3	11.0	10.6	11.9	13.5	12.5

The *richesse* at end-June 2014 was 12.6% in the North, 12.7% in both the East and Centre, 12.3% in the South and 12.2% in the West. These figures were lagging behind those obtained at the corresponding period last year in all sectors by 0.7° in the North, 0.8° in both the East and Centre, 1.4° in the South and 0.6° in the West. Sucrose content at end of June 2014 was higher than that of the corresponding period in 2012 in all sectors except in the South where it was comparable.

Improvement in *richesse* occurred in all sectors during the month of June 2014 reaching the highest level of 3.2° in the North followed by 1.7° in both the South and West, 1.6° in the Centre and 1.5° in the East. These increments were inferior to those obtained last year for the corresponding period in all sectors except in the North. On average for the island, the increase in *richesse* was 1.9° in 2014, which was lower than the increment of 2.5° obtained in 2013 and 2.6° obtained in 2012.

Island-wise, the *richesse* of 12.5% recorded at the end of June 2014 was lower than that of the corresponding period in 2013 (13.5%) by 1.0° but higher than in 2012 (11.9%) by 0.6°.

4. CROP 2014

As at 28 June 2014, 2685 ha representing about 7.8% of miller-planters' land had been harvested compared to 1276 ha (3.7%) at the same period last year. Sector-wise and for miller-planters only, harvested area reached 13.3% in the East, 8.8% in the South, 0.7% in the West and 12.8% in the Centre. Harvest has not yet started in the North. An analysis of cane productivity based on the harvest statistics for miller-planters in sectors East, South, West and Centre follows. Because of the centralization of milling activities and since all the canes from the Centre are crushed at factories in the East, harvest statistics relative to extraction rate and sugar productivity have been combined for these two sectors.

4.1 Cane productivity (Table 6a)

Cane productivity for the island as at 28 June 2013 amounted to 82.6 TCH and was higher than the 74.8 TCH recorded in 2013 by 7.8 TCH (10.4%). Sector-wise, the best cane productivity to-date was recorded in the West with 98.8 TCH, followed by the South (85.3 TCH), the East (81.6 TCH) and the Centre (76.7 TCH).

Compared to the same period in 2013, cane productivity recorded to-date was higher in the East and South by 13.3 TCH and 3.5 TCH respectively while in the Centre it was lower by 12.6 TCH. No comparison could be made for the West as harvest did not start at the corresponding period last year.

Table 6a. Cane productivity (TCH) as at end June for the 2013 and 2014 crops

	East	South	Centre	West	Island
2013	68.3	81.8	89.3	-	74.8
2014	81.6	85.3	76.7	98.8	82.6

4.2 Extraction (Table 6b)

The recorded island extraction rate of 8.95% was lower than at the corresponding period in 2013 (9.50%) by 0.55^o. Sector-wise, the extraction rate recorded was 8.75% in the East-Centre and 9.28% in the South. Compared to the corresponding period last year, extraction rate to-date was lower by 0.71^o in sector East-Centre and 0.25^o in the South.

Table 6b. Extraction rate (%) as at end June for the 2012 and 2013 crops

	East -Centre	South	Island
2013	9.46	9.53	9.50
2014	8.75	9.28	8.95

4.3 Sugar productivity (Table 6c)

Island-wise, the recorded sugar productivity of 7.39 TSH was higher than at the corresponding period in 2013 (7.11 TSH) by 0.28 tonne (3.9%). Sector-wise sugar productivity was 7.06 TSH in the East-Centre and 7.92 TSH in the South. Sugar productivity at end-June 2014 was higher than at the corresponding period in 2013 by 0.56 TSH in sector East-Centre and 0.12 TSH in the South.

Table 6c. Sugar productivity (TSH) as at end June for the 2013 and 2014 crops

	East -Centre	South	Island
2013	6.50	7.80	7.11
2014	7.06	7.92	7.39

5. 2014 CROP PRODUCTIVITY

Weather in terms of above normal solar radiation and temperature amplitude coupled with below normal rainfall during the month of June has been generally favourable to ripening than growth.

Rainfall during June has been however too low to maintain growth in the rainfed crops of the North, West and the lowland areas of the East and South sectors to boost cane productivity, especially for the late harvested crops.

Though it is still too early to draw a firm conclusion, given the area harvested is only 7.8%, harvest data to-date is indicative of a better cane and sugar productivity in 2014 compared to 2013.