MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

Ref A 1/2012 6 November 2012

SUGAR CANE CROP 2012

Status: End October 2012

1. CLIMATE

1.1 Rainfall (Table 1)

Rainfall recorded during the month of October over the sugar cane areas of the island was below normal with an average of 46 mm which represented 64% of the long-term mean (72 mm) for the month. Rainfall was below the long-term mean in all sectors with 17 mm in the North, 47 mm in the East, 71 mm in the South, 4 mm in the West and 65 mm in the Centre. These amounts represented 41%, 64%, 74%, 22% and 64% of the respective long-term means.

October is known to be a dry month. In sectors North, East and West, crop water requirements have not been met except in areas benefiting from sufficient irrigation.

Table 1 Rainfall in mm and as a percentage of the long term mean (LTM) for August, September and October during crops 2011 and 2012

	Crop	North	East	South	West	Centre	Island
AUGUST	**2011**	**115** *(169)*	**278** *(244)*	**208** *(116)*	**51** *(196)*	**204** *(106)*	**192** *(154)*
	2012	**46** *(68)*	**148** *(130)*	**94** *(52)*	**4** *(15)*	**116** *(60)*	**93** *(75)*
	LTM	68	114	180	26	192	125
SEPTEMBER	**2011**	**13** *(30)*	**74** *(94)*	**58** *(52)*	**3** *(15)*	**71** *(56)*	**49** *(60)*
	2012	**18** *(41)*	**76** *(96)*	**80** *(71)*	**3** *(15)*	**88** *(70)*	**59** *(73)*
	LTM	44	79	112	20	126	81
OCTOBER	**2011**	**7** *(17)*	**103** *(139)*	**77** *(80)*	**1** *(6)*	**69** *(68)*	**61** *(85)*
	2012	**17** *(41)*	**47** *(64)*	**71** *(74)*	**4** *(22)*	**65** *(64)*	**46** *(64)*
	LTM	41	74	96	18	102	72

* figures in brackets are % of LTM ***[Source : raw provisional data from Meteorological Services]***

1.2 Temperature (Table 2)

The mean monthly maximum and minimum temperatures recorded during the month of October 2012 on MSIRI agro-meteorological stations are given below.

During October 2012, the mean monthly maximum temperature was above normal at all stations, the difference ranging from 0.4 ^{o}C at Belle Rive to 2.0 ^{o}C at Union Park. The mean monthly minimum temperature was comparable at Réduit but exceeded the normal by 0.7 ^{o}C at Pamplemousses, 0.6 ^{o}C at Union Park and 0.9 ^{o}C at Belle Rive. The resulting mean amplitude was above normal at Pamplemousses, Réduit and Union Park whereas at Belle Rive it was below normal.

Table 2 Maximum and minimum air temperatures recorded on MSIRI agro-meteorological stations in October 2012

Station	Maximum (^{o}C)	Minimum (^{o}C)	Amplitude (^{o}C)
Pamplemousses	**29.8** *(28.2)* *	**18.7** *(18.0)*	**11.1** *(10.2)*
Réduit	**25.7** *(24.9)*	**17.1** *(17.0)*	**8.6** *(7.9)*
Belle Rive	**24.4** *(24.0)*	**16.4** *(15.5)*	**8.0** *(8.5)*
Union Park	**25.6** *(23.6)*	**17.3** *(16.7)*	**8.3** *(6.9)*

* figures in brackets are the Normal (1981-2010)

1.3 Sunshine (Table 3)

Total bright sunshine duration for the month of October 2012 at the MSIRI agro-meteorological stations was above normal at Union Park whereas at the other three stations it was below normal. Recorded bright sunshine as a percentage of the normal amounted to 93 at Pamplemousses, 99 at Réduit, 93 at Belle Rive and 115 at Union Park.

Table 3 Sunshine duration (hr) recorded on MSIRI agro-meteorological stations in October 2012

Station	Oct 2012	Normal*	% of Normal
Pamplemousses	247	264	93
Réduit	254	256	99
Belle Rive	199	215	93
Union Park	198	172	115

* Normal 1981-2010

2. SUCROSE ACCUMULATION (Tables 4a and 4b)

Sucrose content was analyzed from cane samples taken from miller-planters' land in all factory areas and covering the main cultivated varieties. The average pol % cane (*richesse*) was calculated 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 4a Average Pol % Cane (*richesse*) at end-October 2012.

Sectors	R 573	R 575	M 387/85	M 1246/84	M 2593/92	M 1400/86	M 1176/77	R 579	M 1394/86	M 3035/66	R 570
North				17.4	16.7	18.2		15.2			16.1
East				17.0				15.3			17.3
South								15.7	14.5		15.3
West		16.4				17.4					15.1
Centre	15.1		15.3				16.8	15.5		15.9	15.7

At end-October 2012, *richesse* amounted to 16.9% in the North, 16.3% in the East, 15.3% in the South, 16.5% in the West and 15.8% in the Centre. Compared to the corresponding period in 2011, *richesse* for the present crop was comparable in the South but higher in the other sectors by 0.9^{o} in the North, 0.5^{o} in the East, 0.2^{o} in the West and 0.7^{o} in the Centre. In comparison to the same period in 2010, sucrose content at end October 2012 was higher in the North by 0.9^{o}, in the East by 0.7^{o}, in the West by 0.9^{o} and in the Centre by 1.1^{o}, whereas in the South, it was lower by 1.2^{o}.

Table 4b Comparison of Pol % Cane (*richesse*) at the end of September and October 2010, 2011 and 2012.

Sectors	SEPTEMBER			OCTOBER		
	2010	2011	2012	2010	2011	2012
North	14.9	15.1	15.5	16.0	16.0	16.9
East	14.7	14.6	15.1	15.6	15.8	16.3
South	15.5	14.8	15.1	16.5	15.2	15.3
West	16.0	15.4	15.9	15.6	16.3	16.5
Centre	13.8	13.7	14.3	14.7	15.1	15.8
Island	**15.0**	**14.8**	**15.2**	**15.9**	**15.6**	**16.1**

During the month of October, *richesse* for the present crop has increased by 1.4^{o} in the North, 1.2^{o} in the East, 0.2^{o} in the South, 0.6^{o} in the West and 1.5^{o} in the Centre. For the corresponding period last year, the increments were 0.9^{o} in the North, 1.2^{o} in the East, 0.4^{o} in the South, 0.9^{o} in the West and 1.4^{o} in the Centre.

Island-wise, the *richesse* of 16.1% at the end of October 2012 was higher than the 15.6% for the corresponding period in 2011 and the 15.9% recorded in 2010.

3. CROP PRODUCTIVITY 2012

As at 27 October 2012, 24 006 ha, representing 69 % of miller-planters' land had been harvested compared to 25 696 ha (73%) at the same period last year. Sector-wise and for miller-planters only, the harvested area reached 62% in the North, 75% in the East, 66% in the South, 76% in the West and 73% in the Centre. An analysis of cane productivity based on the harvest statistics for miller-planters in all sectors follows. Since all the canes from the Centre are crushed at FUEL due to the centralization of milling activities, the harvest statistics relative to extraction rate and sugar productivity have been combined for sectors East and Centre.

3.1 Cane productivity (Table 5a)

Cane productivity for the island as at 27 October 2012 amounted to 77.9 TCH and was lower than the 79.1 TCH recorded at the same period in 2011 by 1.2 TCH (1.5%). Sector-wise, the highest cane productivity to-date was again recorded in the West with 82.4 TCH, followed by East with 78.4 TCH, the South with 77.6 TCH, the Centre with 77.3 TCH and the North with 75.2 TCH. Cane productivity recorded to-date in sectors North, South and West lagged behind that of the corresponding period last year by 5.8 TCH, 3.4 TCH and 6.0 TCH, respectively. In the other two sectors, cane productivity at the end of October 2012 exceeded that of 2011 with an advantage of 2.7 TCH in the East and 6.4 TCH in the Centre.

Table 5a Cane productivity (TCH) as at end September and October for the 2011 and 2012 crops

	End September		End October	
Sectors	**2011**	**2012**	**2011**	**2012**
North	83.6	77.1	81.0	75.2
East	73.7	78.1	75.7	78.4
South	80.7	77.7	81.0	77.6
West	88.8	80.1	88.4	82.4
Centre	69.9	77.7	70.9	77.3
Island	**78.5**	**78.0**	**79.1**	**77.9**

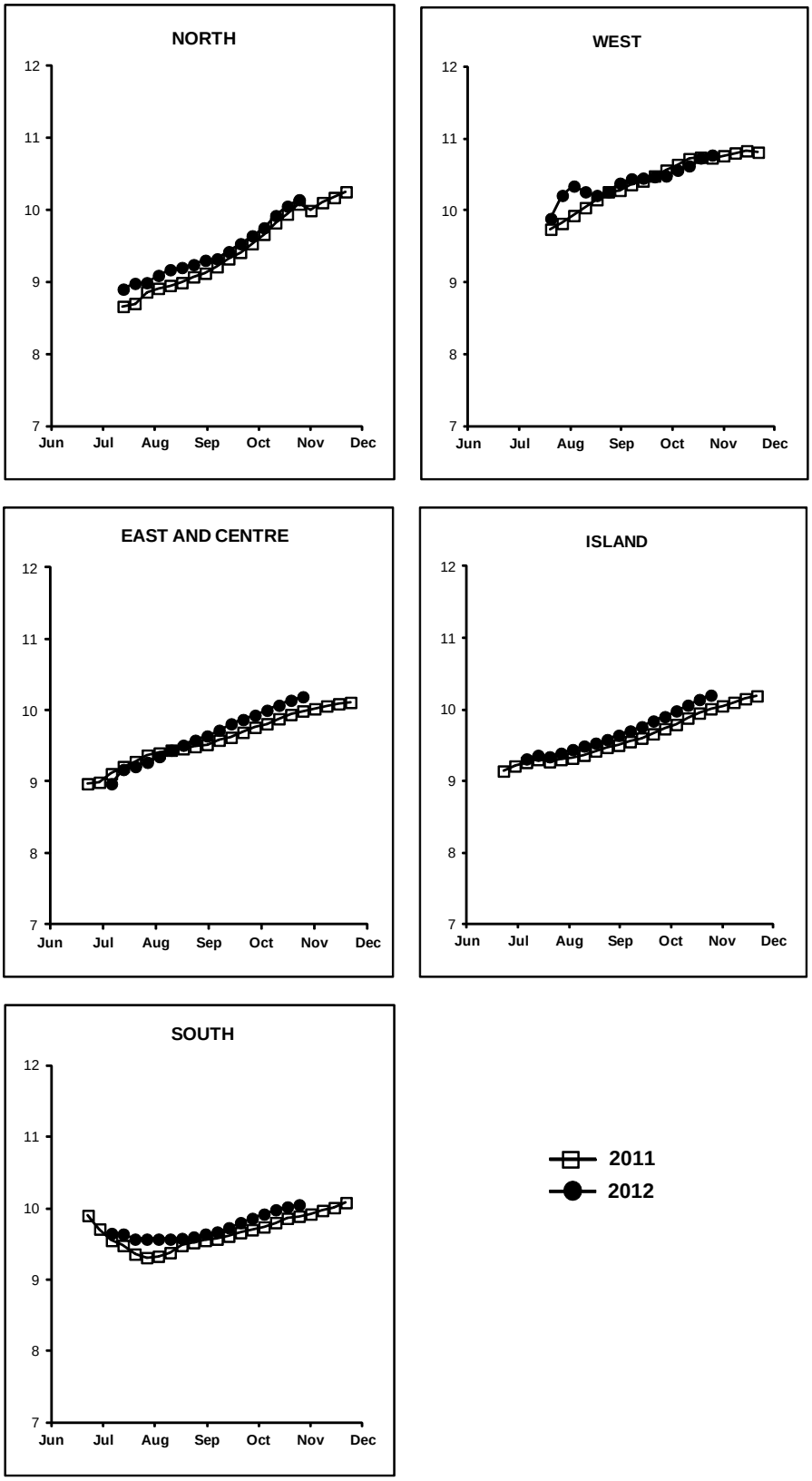
3.2 Extraction (Table 5b, Figure 1)

The recorded cumulative island extraction rate of 10.20% exceeded that of the corresponding period in 2011 (10.01%) by 0.19^{o}. Sector-wise, the cumulative extraction rates recorded to-date were 10.14% in the North, 10.19% in the East-Centre, 10.05% in the South and 10.77% in the West. Compared to the corresponding period last year, extraction rate to-date was superior by 0.06^{o} in the North, 0.20^{o} in the East-Centre, 0.16 ^{o} in the South and 0.04^{o} in the West.

Table 5b Cumulative extraction rate (%) as at end September and October for the 2011 and 2012 crops

	End September		End October	
Sectors	**2011**	**2012**	**2011**	**2012**
North	9.53	9.64	10.08	10.14
East /Centre	9.76	9.93	9.99	10.19
South	9.70	9.86	9.89	10.05
West	10.56	10.48	10.73	10.77
Island	**9.73**	**9.90**	**10.01**	**10.20**

Figure 1 Evolution of extraction rate (%) for the 2011 and 2012 crops.



3.3 Sugar productivity (Table 5c)

Island-wise, the recorded sugar productivity of 7.95 TSH was higher than at the corresponding period in 2011 (7.92 TSH) by 0.03 tonne (0.4%). Sector-wise sugar productivity stood at 7.63 TSH in the North, 7.97 TSH in the East-Centre, 7.80 TSH in the South and 8.87 TSH in the West. Sugar productivity to-date was higher than at the corresponding period in 2011 in the East-Centre only by 0.51 TSH. In the other three sectors sugar productivity at end-October 2012 was lagging behind that of the corresponding period last year by 0.53 TSH in the North, 0.21 TSH in the South and 0.62 TSH in the West.

Table 5c Sugar productivity (TSH) as at end September and October for the 2011 and 2012 crops

	End September		End October	
Sectors	**2011**	**2012**	**2011**	**2012**
North	7.97	7.43	8.16	7.63
East / Centre	7.12	7.75	7.46	7.97
South	7.83	7.66	8.01	7.80
West	9.38	8.39	9.49	8.87
Island	**7.64**	**7.72**	**7.92**	**7.95**

4. CROP 2012

Weather during the month of October has generally favoured ripening on account of the overall dry and hot weather conditions. This is reflected in the better *richesse* obtained during October 2012 compared to the corresponding month of the two previous years. Moreover, an increasing trend in extraction rate has been noted since end September which at the end of October 2012 was better than that of last year by 0.19^{o}. On the other hand cane productivity over the island during the month of October has decreased marginally and at the end of October 2012 it was still lagging behind that of 2011 by 1.2 TCH. Sugar productivity has thus increased during the month of October 2012 by 0.23 TSH compared to 0.28 TSH in sugar productivity during October 2011. It is encouraging that the sugar productivity at end-October 2012 is better than that of last year with nearly 70% of the area harvested. The production level for 2012 remains dependent on the forthcoming weather, a persisting dry hot weather as experienced during October being potentially detrimental to the standing crop.