

# chapter one

## Agriculture in the National Economy





## Agriculture

## in the National Economy



### Introduction

National income reached Rs 206,981 million in 2007, which represents a 5.4 per cent growth compared to 2006. The Mauritian economy thus maintained the growth momentum already experienced in 2006 when the rate of growth leaped from 2.3 per cent to 5.1 per cent. Exclusive of sugar, the 2007 growth rate worked out to 6.1 per cent.

This encouraging level of performance of the economy was mainly driven by an accelerated growth of 15.2 per cent in 'Construction', from 5.2 per cent, due to infrastructure and renovation projects of hotels and Integrated Resort Schemes (IRS), and by a recovery of 'Hotels and Restaurants', a major component of the tourism industry, which displayed a rate of growth of 14.0 per cent, against 3.5 per cent in 2006, based on 906,971 tourist arrivals for the year and earnings reaching Rs 40,687 million. Another industry group whose performance was encouraging is textile manufacturing which registered a rate of growth of 8.5 per cent against 2.9 per cent previously. Export-oriented activities grew at a higher rate of 8.0 per cent compared to 4.6 per cent in 2006.

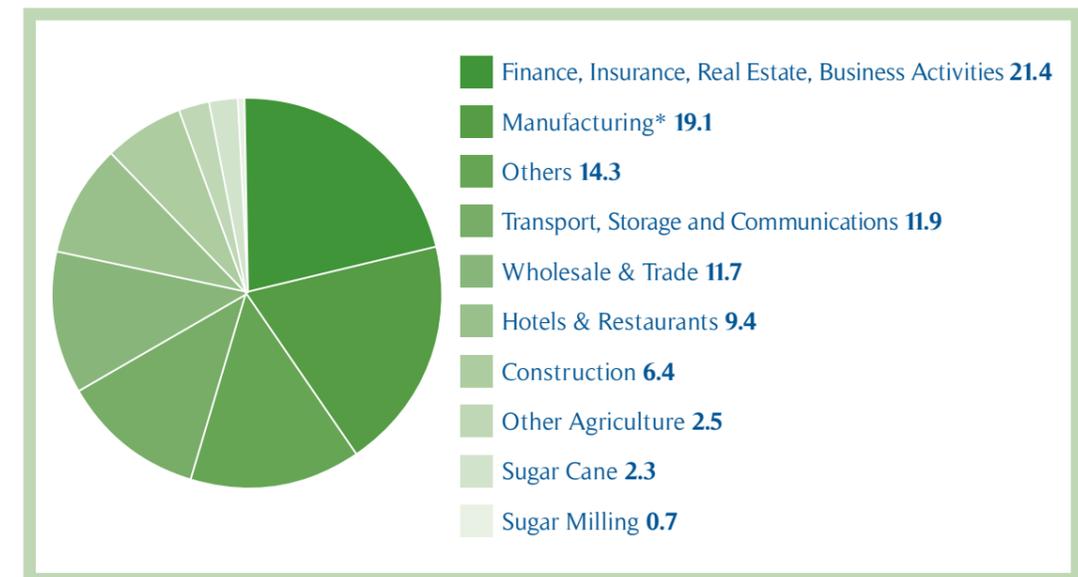
On the other hand, the agricultural sector fared poorly in 2007 and contracted by 7.4 per cent on account of a disappointing performance for sugar and food crop production, affected by heavy rainfall and the passage of cyclone Gamede in February 2007. The contribution of agriculture to GDP thus amounted to Rs 9,834 million against Rs 10,130 million previously, and represented 4.8 per cent of GDP against 5.5 per cent previously. It is estimated that for 2008, the share of agriculture would drop further down (4.2 per cent of GDP) with a projected contribution of Rs 9,748 million.

The contribution of sugar cane to GDP fell from Rs 5,137 million in 2006 to Rs 4,620 million in 2007, and is expected to drop to Rs 4,109 million in 2008. The growth rate for sugar cane went down to an unprecedented -13.6 per cent.

Sugar milling reached a lower level than in 2006, i.e. Rs 1,426 million against Rs 1,586 million. As a percentage of GDP, sugar cane and sugar milling represented respectively 2.3 and 0.7 per cent in 2007.

The growth rate in the sugar cane and milling sector is forecast at 5.5 per cent in 2008, on account of an improved sugar production, estimated at 460,000 tonnes, against 435,972 tonnes previously.

Figure 1: Breakdown of GDP and Contribution of Agriculture, 2007 (%)



\*excluding sugar

(Source: Central Statistics Office)

## Agriculture in the National Economy

Table 1: Main Agricultural Indicators, 2005 - 2008

	2005	2006	2007 <sup>1</sup>	2008 <sup>2</sup>
(Rs million)				
<b>Gross Domestic Product at Basic Prices</b>	<b>162,171</b>	<b>182,009</b>	<b>206,981</b>	<b>232,264</b>
<b>Value Added at Basic Prices</b>				
Agriculture and Fishing	9,790	10,130	9,834	9,748
<i>Sugar Cane</i>	<i>5,212</i>	<i>5,137</i>	<i>4,620</i>	<i>4,109</i>
<i>Other Agricultural Products</i>	<i>4,578</i>	<i>4,993</i>	<i>5,214</i>	<i>5,639</i>
Sugar (Milling)	1,609	1,586	1,426	1,269
(% Over Previous Year)				
<b>Annual Real Growth Rate</b>				
Gross Domestic Product at basic prices	2.3	5.1	5.4	5.6
Agriculture and Fishing	-5.4	0.6	-7.4	4.2
<i>Sugar Cane</i>	<i>-9.2</i>	<i>-2.9</i>	<i>-13.6</i>	<i>5.5</i>
<i>Other Agricultural Products</i>	<i>-1.1</i>	<i>4.5</i>	<i>-1.1</i>	<i>3.0</i>
Sugar (Milling)	-9.2	-2.9	-13.6	5.5
(%)				
<b>Percentage distribution in Gross Domestic Product</b>				
Agriculture and Fishing	6.0	5.5	4.8	4.2
<i>Sugar Cane</i>	<i>3.2</i>	<i>2.8</i>	<i>2.3</i>	<i>1.8</i>
<i>Other Agricultural Products</i>	<i>2.8</i>	<i>2.7</i>	<i>2.5</i>	<i>2.4</i>
Sugar (Milling)	1.0	0.9	0.7	0.5
(Rs million)				
<b>Investment in Agriculture in total GDFCF at Current Prices</b>	<b>2,225</b>	<b>2,764</b>	<b>2,508</b>	<b>2,587</b>
(% Over Previous Year)				
<b>Annual Real Growth Rate</b>				
Gross Domestic Fixed Capital Formation (GDFCF)	-1.9	19.2	8.6	6.5
Agriculture and Fishing	56.9	16.8	-17.0	-2.5
(Rs million)				
<b>Sugar Exports</b>	<b>10,536</b>	<b>11,198</b>	<b>9,264</b>	<b>n/a</b>
As a percentage of domestic exports	25.0	23.5	18.3	n/a
As a percentage of domestic agricultural exports	67.8	62.2	53.9	n/a
As a percentage of total exports	17.8	16.2	14.4	n/a
('000)				
<b>Total Employment – Including Foreign Workers</b>	<b>507.2</b>	<b>515.3</b>	<b>523.7</b>	<b>n/a</b>
(%)				
<b>Share in Total Employment</b>				
Agriculture and Fishing	9.6	9.3	9.0	n/a
<i>Sugar Cane</i>	<i>3.6</i>	<i>3.5</i>	<i>3.4</i>	<i>n/a</i>
<i>Other Agricultural Products</i>	<i>5.9</i>	<i>5.8</i>	<i>5.6</i>	<i>n/a</i>

<sup>1</sup>Revised estimates <sup>2</sup>Forecast

(Source: Central Statistics Office)

## Sectoral Analysis

### Sugar

The 2007 crop ended with another disappointing sugar output of 435,972 tonnes, which is the third consecutive year of below-average performance since the 2004 crop when production reached 572,316 tonnes. The crop was adversely affected by cyclone Gamede and by alternative periods of excessive and deficit rainfall during the elongation phase and was further disrupted by inclement weather conditions during the maturation period.

Cane production amounted to 4,235,849 tonnes, representing a 16 per cent drop compared to the average of the past five years (5,017,337 tonnes). The area harvested fell from 66,732 hectares in 2006 to 65,259 this year, corresponding thus to a loss of 1,473 hectares against 1,619 previously, but well above the average area lost each year since 2002, i.e. 1,293 hectares.

Sugar recovery reached 10.31 per cent, against the 2002-06 average of 10.59 per cent and represented the lowest rate achieved since 1960.

The 2007 crop year has been declared an event year by the Sugar Insurance Fund Board on account of cyclonic conditions, drought and excessive rainfall in the eight factory areas that were in operation during this crop.

Sugar exports during the 2007-08 delivery period consisted of 368,948 tonnes of bulk raw sugar for refining and 67,601 tonnes of special sugars. The local market requirements were sourced through imports and total sales amounted to 41,480 tonnes of which 37,995 tonnes of white refined sugar and 3,485 tonnes of raw sugar for direct consumption. Earnings from 2007-08 sugar exports reached Rs 9,393 million, against Rs 10,495 million, representing a decrease of Rs 1,102 million due mainly to the severe reduction in production output.

Molasses production in 2007 reached 130,917 tonnes compared to 139,621 tonnes in 2006 and proceeds from 41,002 tonnes of exported molasses amounted to Rs 54 million, against Rs 153 million for 68,982 tonnes in 2006. The sharp fall in the tonnage exported resulted mainly from higher volumes being sold on the local market towards ethanol production, while on the other hand, export earnings suffered from the unfavourable exchange rate of the US dollar.

It is worth noting that 8,765,866 litres of alcohol were produced from 35,991 tonnes of molasses and 947 tonnes of canes by local distilleries. Alcohol produced from cane registered a 35.8 per cent increase, from 16,833 litres to 22,870 litres. 39.3 per cent of total alcohol produced was destined to the production of rectified spirit and 35 per cent for alcohol exports (against 18.3 per cent previously).

The production of bagasse registered a slight 3.7 per cent decrease, from 1,494,896 tonnes in 2006 to 1,438,933 tonnes. Total electricity generated in Mauritius amounted to 2,464.6 GWh, of which 19.0 per cent from bagasse, 40.3 per cent from coal and 37.2 per cent from diesel and fuel oil. Electricity produced by Independent Power Producers (IPPs) represented 59.3 per cent of total electricity generated in Mauritius and amounted to 1,461.5 GWh. About 84 per cent of the electricity produced by IPPs was exported to the national grid (1,226.7 GWh), representing 55.8 per cent of the total units generated for sales.

## Agriculture in the National Economy

**Table 2: Crop Results, 2006 and 2007**

Region	2006			2007		
	Cane Production (Tonnes)	Extraction Rate (%)	Sugar Production (Tonnes)	Cane Production (Tonnes)	Extraction Rate (%)	Sugar Production (Tonnes)
North	1,126,455	10.74	121,004	805,160	10.13	81,548
South	1,582,750	10.26	162,411	1,393,615	10.03	139,770
East	1,191,512	10.89	129,801	1,205,686	10.56	127,301
West	427,668	11.10	47,484	398,869	10.83	43,180
Centre	417,913	10.57	44,158	427,299	10.34	44,173
<b>Island</b>	<b>4,746,299</b>	<b>10.64</b>	<b>504,857</b>	<b>4,230,629</b>	<b>10.31</b>	<b>435,972</b>

### Other Agricultural Products

A general picture of the non-sugar agricultural sector is provided in Tables 3 and 4, while Chapter 3 of the report gives a more detailed analysis of this sector. Value added generated by this sector increased slightly from Rs 3,905.2 million in 2006 to Rs 4,091.2 million in 2007, representing in nominal terms an increase of only 4.8 per cent. Its share in the agricultural sector rose from 39 per cent in 2006 to 42 per cent in 2007.

**Table 3: Value Added at Basic Prices of Non-Sugar Agricultural Products (Rs million)**

	2004	2005	2006 <sup>1</sup>	2007 <sup>2</sup>
Tea (green leaf)	63.6	58.4	65.8	75.1
Tobacco leaf	24.5	20.9	22.9	26.1
Foodcrops	1,364.9	1,281.3	1,563.6	1,546.6
Fruits, flowers & forestry	294.4	227.4	232.5	278.5
Livestock & poultry products	1,136.2	1,283.1	1,363.4	1,710.0
Fishing	400.0	406.7	420.0	265.1
Others	252.2	229.3	237.0	189.8
<b>Total*</b>	<b>3,535.8</b>	<b>3,507.1</b>	<b>3,905.2</b>	<b>4,091.2</b>

<sup>1</sup> Revised <sup>2</sup> Provisional \* Excluding Government Services

(Source: Central Statistics Office)

### Food Crops

Food crop production in 2007 whittled down to 99,129 tonnes, representing a fall of 7.3 per cent from 106,902 tonnes in 2006 and of 5.1 per cent compared to the average of the past five years. The area under food crop cultivation also registered a decrease of 6.4 per cent, from 7,205 hectares to 6,740 hectares.

Fresh vegetables production amounted to 58,070 tonnes against 67,864 tonnes in 2006, representing a decrease of 14.4 per cent. The production of 'Other Vegetables' such as potato, onion, ginger, groundnut etc. rose by 15.8 per cent, from 22,138 tonnes to 25,635 tonnes. Over the past five years, whilst the production of fresh vegetables had been erratic, with a marked downtrend, that of 'Other Vegetables' had kept on increasing, from 18,849 tonnes in 2003 to its current figure.

The value added of this sub-sector decreased slightly from Rs 1,563.6 million to Rs 1,546.6 million in 2007. It also represented 15.7 per cent of total value added generated by the agricultural sector.

### Tea

Value addition for the tea sector amounted to Rs 75.1 million in 2007 against Rs 65.8 million previously. Indeed, production of tea leaves rose by 4.9 per cent, from 7,649 tonnes to 8,027 tonnes in 2007. The area under tea plantation also increased by 3.1 per cent, from 688 hectares to 709 hectares. However production of manufactured black tea remained close to that of last year, i.e. 1,563 tonnes against 1,567 tonnes in 2006.

Regarding distribution and sales, the predominant share of the local market destination (97.7 per cent) persists, with a slight 1.4 per cent increase in the tonnage consumed compared to last year. The remaining 2.3 per cent was destined for exports, which registered a decrease of 5.7 per cent, from 36.6 tonnes to 34.2 tonnes in 2007.

### Tobacco

The tobacco sector generated a value-addition of Rs 26.1 million as against Rs 22.9 million in 2006, representing an increase of 12.3 per cent. The area harvested (258 hectares) was slightly higher (+ 3.6 per cent) than that of last year. Hence the production of tobacco leaves increased by 8 per cent from 298 tonnes to 322 tonnes.

The quantity of tobacco used in cigarette manufacture registered, however, a decrease of 16.7 per cent, from 581 tonnes during calendar year 2006 to 484 tonnes only in 2007, with domestic leaf registering a sharp decrease of 29 per cent while imported leaf increased by 21.2 per cent against 19 per cent previously.

It is to be noted that with the decision of British American Tobacco, the sole tobacco manufacturer in the island, to cease its tobacco manufacturing operations in the country as from 2007 and to focus on the commercial supply of imported cigarettes in Mauritius and other countries of the region, planters of tobacco leaves can rely on a formal arrangement whereby they can still sell their production to the BAT up to 2009.

### Fruit, Flowers and Forestry

Value added derived from fruit, flowers and forestry stood at Rs 278.5 million as against Rs 232.8 million in 2006, representing an increase of 19.6 per cent.

### Livestock and Poultry Products

The livestock and poultry sector displayed a 25.4 per cent growth in 2007. Value added stood at Rs 1,710 million against Rs 1,363.4 million previously, mainly driven by an increase of 11.1 per cent in poultry production, from 36,000 tonnes to 40,000 tonnes.

On the other hand, beef production from live cattle (local and imported) registered a marked 15.6 per cent fall, from 2,188 tonnes in 2006 to 1,847 tonnes in 2007, which is 23.4 per cent lower than the average production of the past five years. Over that period, production has kept on decreasing in spite of a hike of 2,505 tonnes in 2003. In 2007, local beef production fell by 10 per cent from 100 tonnes to 90 tonnes and accounted for 4.9 per cent of total production. The remaining percentage consisted of imported cattle which also registered a decrease of 15.8 per cent, from 2,088 tonnes to 1,757 tonnes.

Production of goat meat and mutton also fell by 24.2 per cent, from 99 tonnes in 2006 to 75 tonnes in 2007. On account of the African Swine Fever which devastated the local pig population during the last trimester of 2007, pork production fell by 25 per cent, from 681 tonnes to 511 tonnes.

## Agriculture in the National Economy

### Fishing

Value added generated by the fishing sector dropped by 36.9 per cent, from Rs 420 million to Rs 265.1 million. Indeed production of fresh fish went down by 29.4 per cent from 8,845 tonnes previously to 6,244 tonnes, mainly due to a shortage of fish in the region. This tonnage represented a fall of 32.1 per cent compared to the average production of 9,200 tonnes during the past five years.

### Agricultural Exports

The value of domestic agricultural exports (Rs 17,462.4 million) was slightly lower than that of 2006 (Rs 17,991.5 million) and represented 34.6 cent of total domestic exports (Rs 50,487 million) and 27.1 per cent of total exports (Rs 64,265 million). Revenue yielded from sugar and molasses exports underwent a 17.7 per cent decrease, from Rs 11,350.7 million to Rs 9,632 million, representing 55.1 per cent of total domestic agricultural exports, 19.1 per cent of total domestic exports and 15 per cent of total exports.

It is worth noting that apart from sugar and molasses, all other agricultural domestic exports registered growth in revenue in 2007, such as '*Fish and Fish Preparations*' exports which rose by 21.5 per cent, as well as exports of '*Vegetables and Fruit*' (31.7 per cent). Revenue from exports of '*Cut Flowers and Foliages*' also picked up by 10.8 per cent compared to the past three years when revenue remained at about Rs 100 million.

**Table 4: Exports of Agricultural Products (FOB Value, Rs million)**

	2004	2005	2006 <sup>1</sup>	2007 <sup>2</sup>
Sugar	9,631.4	10,536.4	11,198	9,578
Molasses	189.8	173.0	153.0	54.0
Tea	4.1	2.3	2.1	2.9
Fish and fish preparations	2,250.4	3,168.4	5,016	6,104
Vegetables and fruit	60.2	82.8	92.0	118.2
Cut flowers and foliage	99.8	100.3	101	111.5
Other agricultural and food products	1,144.9	1,482.9	1,433.2	1,493.5
<b>Total</b>	<b>13,380.6</b>	<b>15,546.1</b>	<b>17,970.2</b>	<b>17,462.4</b>

<sup>1</sup> Revised <sup>2</sup> Provisional

(Source: Central Statistics Office)

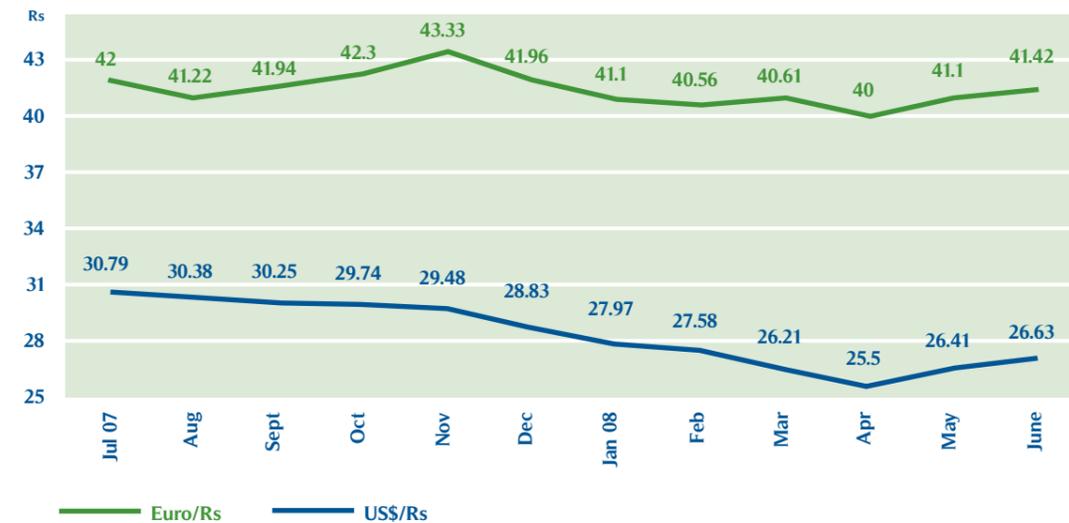
### Exchange Rates

The evolution of the monthly average exchange rate of the Euro and of the US dollar (buying) is illustrated in Figure 2. These exchange rates have a direct bearing on export proceeds, namely from sugar, and on sugar price.

Over the period July 2007 to June 2008, the Mauritian rupee appreciated against these currencies, namely the US dollar which fell consistently from its highest point in July 2007 (Rs 30.79) to reach a low Rs 25.5 in April 2008. Many reasons are put forward to account for this downtrend, among which the increased inflows of foreign currency through more direct investment (mainly in the tourism sector), investment in the Mauritian stock exchange, grants to sustain reform in the sugar sector and, above all, the general downtrend of the US dollar against major currencies. The US dollar however slightly gained ground against the rupee lately and was trading at Rs 26.63 in June 2008.

As for the European single currency, it remained above the Rs 40 mark over the whole period July 2007 to June 2008, reaching its highest level at Rs 43 in November 2007 to a low Rs 40 in April 2008.

**Figure 2: Evolution of the US\$/Rs and the Euro/Rs Exchange Rate (average buying)**



### Government Budget

The 2008-09 budget speech was delivered by the Deputy Prime Minister and Minister of Finance and Economic Development, Dr. The Hon Rama Sithanen, on 6 June 2008.

As was the case for the previous budget, emphasis is being placed on employment creation, on further opening the Mauritian economy through improved ease of doing business, on the consolidation of productive sectors and on developing new pillars.

The main focus of this year's budget is built around several strategic themes, namely building an Attractive, Modern, Inclusive, Green and Open economy, whereby the impact of the global energy and food supply crisis, the need to transform the country into an attractive and modern place for business, through namely massive investment in infrastructure, and the eradication and alleviation of absolute poverty, are fully addressed.

### Building Inclusive Mauritius through Food Security

With a view to increasing food self-sufficiency and improving food security, and to giving a boost to the non-sugar sector, a five-pronged strategy has been elaborated whereby (i) land, human resources, technology and financial resources would be mobilised; (ii) surpluses in food production for exports would be encouraged; (iii) partnership with countries in the region would be strengthened; (iv) the support of regional blocs and development partners would be sought; and (v) a sensitisation campaign to promote healthy eating would be launched.

## Agriculture in the National Economy

A host of measures have thus been provided in the 2008-09 budget, as follows:

- A Rs 1 billion Food Security Fund to help Mauritius increase its food self-sufficiency, namely in potato and onion. Special emphasis will be placed on potato seed availability, on the regrouping of small and medium planters, on the maximum use of interline and rotational plantation on sugar estate lands for potato cultivation, on mechanisation and warehousing.
- Rs 10 million will be provided to MSIRI and AREU for developing new higher-yielding varieties of potato, onion and tomato.
- 1,000 hectares of land will be prepared for small planters under the Project Implementation Committee (PIC) for foodcrop production, including 50 hectares in the North with complete mechanisation and irrigation facilities.
- Rs 25 million will be provided as grant and soft loan for the financing of the acquisition of shares by planters, labourers, artisans and other employees in new sugar ventures, as provided in the December 2007 Government/MSPA deal.
- 1,000 arpents, out of the 2,000 arpents acquired by Government under the Government/MSPA deal, will be leased to food production companies consisting of regrouped small and medium planters.
- Financial schemes will be set up for derocking the regrouped plots, irrigation, mechanisation and harvest, conditioning, packaging, marketing, technical assistance, training and research, as well as other measures to meet international standards.
- Waiving of land transfer tax and registration duty to facilitate sale of agricultural land to *métayers*, as well as registration charges on new *métayer* lease contracts.
- Removal of VAT on certain fertilisers, used as nutrients in specialised cultures like hydroponics.
- Training facilities will be provided by AREU, the Empowerment Programme, SEHDA and the Regional Training Centre to build greater capacity in hydroponics production.
- Agricultural and related activities will be part of the vocational training curriculum. Research and extension will focus on food security and biomass.
- Amendments will be brought to the new Fisheries and Marine Resources Act.
- Setting up of a Regional Food Security Company to negotiate for land acquisition/lease in countries of the region for foodcrop cultivation.
- Removal of import duty on single and double cabin vehicles used for agricultural activities.
- A credit line of Rs 100 million will be set up to finance the acquisition of farm vehicles and equipment.
- Writing off of late interest payments and penalties on loans contracted before April 2003 by small planters and other food producers, under certain conditions.

### Building Green Mauritius *Maurice Ile Durable*

It is also worth mentioning that, for the first time, the National Budget makes provision for bold measures in order to build energy security. As a country that relies on around 80 per cent of its energy requirements on imported fossil fuel, Mauritius is extremely vulnerable faced with the energy crisis that has driven the price of crude oil to all-time highs in 2007 and 2008.

Efforts will be focused towards environment protection through recycling, the more efficient use of energy and the increased reliance on renewable energy. In this context, Government has set up a *Maurice Ile Durable (MID) Fund*, worth Rs 1.3 million, which will support these efforts.

## Conclusion

The Mauritian economy in 2007 witnessed strong growth in the main sectors; textile manufacturing (8.5 per cent), construction (15.2 per cent) and tourism (14.0 per cent) recorded indeed their highest annual growth rates in 20 years. Encouraging results were also obtained with regard to growth rates in GDP (5.4 per cent against 5.1 per cent previously), investment (17 per cent against 5.5 per cent in 2006 – exclusive of the acquisition of aircraft) and private sector investment (24 per cent growth mainly on account of high investment in hotels and IRS/RES projects), and in tourist arrivals (15 per cent increase).

However, the economic consolidation observed since 2006 remains fragile on account of a combination of exogenous factors which could well slow down the Mauritian economy, among which escalating costs of imported petroleum products and of basic foodstuffs which impact severely on trade balance, inflation and purchasing power, and the turmoil in global financial markets which could have a negative spillover on local industries geared towards foreign markets.

Whereas reduced growth rates are expected for textile manufacturing and tourism in 2008, a better growth rate for agriculture is forecast (4.2 per cent), based on a sugar production of 460,000 tonnes compared to 435,972 tonnes previously. A growth of 5.5 per cent for sugar cane and sugar milling, compared to negative growth rates for the past three years, is thus projected.

In spite of a reduced share in the economy over the years, the agricultural sector contributes valuably to foreign export earnings; from 2002 to 2006, sugar exports revenue has averaged 17 per cent of total export earnings and 22.5 per cent of total domestic exports. Beyond these economic considerations, the importance of agriculture for a net food importing developing state like Mauritius has been heightened as never before during the year under review with the soaring prices of basic foodstuffs. Such a situation has called for bold measures for boosting the local agricultural sector and improving food security and food self-sufficiency.

It is estimated that the expected benefits from these efforts will only be reaped in the next two years, namely a significant improvement of our food security for some strategic crops (potato, onion, pulses, maize), a reduction of the food import bill and the alleviation of the impact of rising food prices on the average household budget.