The State of the Jamaican Sugar Industry

Introduction

The Jamaican sugar industry is over 500 years old, dating back to 1509 when the island was under Spanish rule. Later under the British plantation system the island became the major producer and leading exporter of sugar in the world. The industry achieved its highest level of production in 1965 when 516,825 tonnes of sugar were produced from 4,731,943 tonnes of cane reaped from 59,773 hectares. At that time eighteen factories were in operation.

Because of the need to increase efficiency and benefit from economies of scale the number of factories operating on the island declined steadily from 140 in 1900 to the current number of 6.

Current Trends

Over the past ten years, apart from some minor spikes in production, the Jamaican Sugar Industry has experienced decline in cane and sugar production. Cane and sugar production over this period averaged 1,805,871 and 163,387 tonnes respectively. For the 2010 crop the industry produced 121,806 tonnes sugar from 1.4M tonnes cane.

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<tbody>
<tr>
<td>Cane Milled (tonnes)</td>
<td>1.4 M</td>
<td>1.3M</td>
<td>1.7M</td>
<td>2M</td>
<td>1.7M</td>
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<tr>
<td>Sugar Produced (tonnes)</td>
<td>121,806</td>
<td>125,818</td>
<td>140,872</td>
<td>164,387</td>
<td>146,882</td>
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<tr>
<td>TC/TS</td>
<td>11.41</td>
<td>10.61</td>
<td>11.73</td>
<td>11.97</td>
<td>11.88</td>
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<tr>
<td>Hectares Reaped</td>
<td>27,595</td>
<td>26,296</td>
<td>29,890</td>
<td>30,790</td>
<td>29,973</td>
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<tr>
<td>Tonnes sugar per hectares</td>
<td>4.4</td>
<td>4.78</td>
<td>4.71</td>
<td>5.34</td>
<td>4.9</td>
</tr>
<tr>
<td>Tonnes cane per hectares</td>
<td>50.4</td>
<td>50.7</td>
<td>55.27</td>
<td>63.9</td>
<td>58.22</td>
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Of the total cane supplied, independent cane farmers contributed 39% while estates produced 61%. The high costs of cane production, low cane yields and the relatively small margins have been driving cane production down particularly that of independent cane farmers.

The industry over the years has suffered from a number of structural and institutional weaknesses including run-down capital assets, a road network that places logistical constraints on the economic transportation of harvested cane, low capacity utilization and lack of maintenance of the factories, loss of time due to mechanical breakdowns at the factories and interruptions of cane supply. The industry is also affected by hurricanes, droughts, unseasonal weather and diseases.
Most recently the industry was affected by tropical storm Nicole and Richard which caused severe flooding in some cane areas.

All the above factors have resulted in low land productivity, relatively poor cane quality, inefficient field and factory operations, reduction in hectares reaped and a deterioration in the conversion ratio (TC/TS). Consequently, the industry could be classified as a high cost producer. It is important to note that the cost of production varies widely within the industry.

In spite of the above challenges the Government of Jamaica is desirous to have in place a viable, efficient, and competitive sugar industry which will contribute to rural development and social stability, and one which is sustainable in the new global environment.

**Economic and Social Contribution**

The sugar industry continues to be vital to the Jamaican economy and remains the country’s single most important crop, contributing just under two per cent to the nation’s G.D.P, and earns approximately US$74.5 million annually.

**It is the second largest single employer of labour,** employing approximately 38,000 persons directly during cropping season and 28,000 persons out of crop. It is estimated that some 200,000 persons (about 8 per cent of the population of 2.6 million) derive their income directly and indirectly from the industry.

Sugar cane is grown in almost every parish. It accounts for over 40,000 hectares or 40% of the land under permanent agriculture and about one-half of the population live in sugar dependent parishes.

**The importance of the industry cannot be assessed simply by its contribution to G.D.P. and its annual foreign exchange earnings** because it plays a central role in many other aspects of the Jamaican society. Jamaica’s rural economy, social stability and security in urban areas depend on the existence of a viable sugar cane industry. In the rural areas and around towns such as Frome and Sav-la-Mar in Westmoreland, Lionel Town in Clarendon, Duckenfield in St Thomas and Clark’s Town in Trelawny the growing of sugar cane and its processing into sugar is the major or only economic activity. In the out-of-crop period many people are given credit which is paid up during the cropping season.

Any assessment of the impact of the cessation of sugar cane related activities must take into account not just the loss of jobs of those directly employed in the industry but the negative spin-offs that will follow. Negative spin-offs will affect some
160,000 persons in and around the communities where the crop is grown and processed. It will intensify the rural/urban drift as people seek to find employment in adjacent communities and major towns such as Negril, Montego Bay, Portmore, Spanish Town, May Pen, Falmouth and Morant Bay. It therefore has significant implications for levels of crime in these towns and communities and for tourism in the resort areas.

**The industry has the highest level of vertical integration in Jamaica**, from agriculture to manufacturing, and employs a wide range of professionals at different levels.

The sugar industry integrates backward with sectors that supply and/or service farm machinery, tools, fertilizer, weedicides, pesticides, that provide transportation (field to factories) and finance. It integrates forward with sectors such as transportation (factories to warehouses and port), rum, finance, shipping, civil aviation and legal services.

**Professionals employed in the industry include:**
Accountants, agronomists, chemists, computer programmers/analysts, economists, electricians, engineers, entomologists, machinists, human resource personnel, research professionals, secretaries and technicians.

Currently, molasses, a by-product of sugar production, is utilized in the production of rum and another by-product, bagasse is used as fuel in the factories. The objective is to transform the industry from a single product to a multi-product one with the sugar cane plant being the base crop. The resultant sugar cane industry will see the production of other products such as refined sugar, ethanol, xanthan gum and electricity (cogeneration). Such a programme will generate significant increases in revenue and employment.

**Industry Structure**

The industry is currently structured around six estates with operation factories which process the sugar cane into raw sugar and molasses. Four of the factories are directly associated with distillation.

Two of the factories Appleton and Worthy Park have been privately owned for generations and have performed more efficiently when compared to the other factories.
The government recognised that it was unable to maintain adequate funding to refurbish the existing publicly owned factories so that they could operate efficiently. Consequently, these factories have been divested to private operators.

The government of Jamaica following the reform of the EU Sugar Regime commenced a re-examination of the sector in Jamaica. Following the 36% cut in the price of sugar exported to the EU. It was felt then that the sector could only survive this price cut if there was fundamental changes to the way sugar production was organized in Jamaica. It became evident that the Government was not able to provide the necessary re-tooling of factories and improvements in cane yields, as well as full utilization of all the possible bi-products that this industry could produce.

**The Country Strategy**

The Government of Jamaica consequently drafted a strategy, which foresees the transition of the industry until 2015. According to the “Country Strategy” the future of the industry will be based on three main products: namely raw sugar, molasses, and ethanol. The annual production targets are 200,000 tonnes of raw sugar and up to 130,000 tonnes of molasses. In addition the strategy envisages production of up to 70 million litres per annum of hydrated ethanol from sugar cane grown in Jamaica.

**Private Sector lead Industry**

In order to achieve the above targets, the Country Strategy is based on a private sector led sugar industry; improving efficiency of production; diversifying the sources of revenue; and strengthening the human resources available to the industry.

The private sector would be able to provide key inputs required for the sustainable future of the industry, including capital investment in field improvement and new factory equipment, efficient management, and entrepreneurial approach to problem solving. Private sector ownership and management also provide the appropriate conditions for the achievement of sustainable productivity gains and cost reductions within the industry. In order to achieve these goals several task forces have been established to formulate a series of integrated measures encompassing all major activities of cane production including soil preparation, planting, fertilization, irrigation and harvesting.

All the factories have now been privatised with the sale of the three remaining government owned factories to Complant International of China which will
commence operating at the end of the upcoming crop. The company is expected to construct a 200,000 tonnes refinery and an ethanol plant.

Other private producers will be strengthened by providing them with access to additional sugar lands. They are expected to expand their output of sugar cane based products including rum. In addition the private cane farmers will receive assistance under the country strategy to become more competitive. Some farmers are already benefiting from this programme and a significant increase in hectares has already been replanted. The country strategy calls for accelerated replanting of some cane lands totalling about 22,000 hectares. A special maintenance programme for ratoons resulting from the accelerated replanting programme is also been pursued. The cane replanting effort will be supported by a series of supplementary activities, including supply of adequate amount of seed cane from cane nurseries with a combination of high-sucrose and high-fibre varieties. The Government continues to provide support to cane farmers through the Cane Expansion Fund supported by the EU resources under the Accompanying Measures. This year, it is expected that an injection of J$200 Million, in addition to the J$210 Million disbursed so far, will provide great assistance to farmers.

**Pre-shipment Financing Agreement**

Following the termination of the Sugar Protocol Jamaica entered into a Pre-shipment Financing Agreement with Eridania, which allowed the continued operations of the then Government -owned factories, Frome, Monymusk and Bernard Lodge estates.. With the $15 Million pre-payment obtained, the industry was able to secure some 2,700 jobs, and replant some 1,300 hectares of cane, rehabilitate over 24 irrigation deep wells, and properly retrofit the factories for the existing crop. These improvements in field and factory operations have resulted in significant improvements in factory efficiency and labour productivity overall. Overall confidence in the sector has improved significantly, evidenced by the over 400 percent decline in illicit fires at Frome.

The pre-financing agreement with Eridania ended with the last crop, and new two (2) year Partial Pre-shipment Financing Agreement was signed with Tate & Lyle of Britain. Under this Agreement Jamaica will supply a minimum of 100,000 tonnes of raw sugar to Tate & Lyle in exchange for pre-shipment financing of approximately US$46 Million over the two (2) years. The guaranteed price per tonne of raw sugar under this Agreement is 370 euros plus Pol premium and a share in profit. Tate & Lyle has also given a commitment to collaborate with the Jamaica Cane Growers to facilitate Fair Trade Certification. With Fair Trade
Certification, the sugar sold to Tate & Lyle could earn an additional US$60.00 per tonne sugar as Fair Trade premium.

With the pre-financing resources, some additional 3,200 hectares of cane were replanted with the upgrading of irrigation systems and preparation of fields and factories for another timely start of the sugar harvest. This will preserve 2,900 jobs which might have been lost owing to the Government in ability to fund the industry.

At the end of the pre-financing arrangement with Tate & Lyle, Complant International will assume full responsibility of Frome and Monymusk factories and Bernard Lodge estates. At that time the operations of the industry will be fully privatized.

**Commission of Inquiry**

Given the fundamental changes in the sector a comprehensive review of the regulatory, marketing, pricing and institutional arrangements was pursued by a Commission of Inquiry to examine and recommend changes, if necessary, to these current arrangements. This Commission of Inquiry concluded its deliberations in September of this year. The recommendations of the Commissioners are now being perused and a final decision will be made regarding its findings. The previous commission of enquiry on the industry was in 1987 out of which the current pricing mechanism is now based.

**Conclusion**

The sugar industry continues to be vital to the Jamaican economy, providing both significant economic and social support. There are still several opportunities for the industry to exploit. It is envisaged that with the necessary capital and technology, which can be generated from private sources, the transformation of the industry from a single product to a multi-product one will result in significant increases in revenue and employment.

The industry has played a significant role on our national development and still has an important contribution to make.

*Sugar Industry Authority*
*November 2010*