

# Soaring Global Sugar Price: Causes and an Opportunity for the Local Sugar Industry Development

## Introduction

**S**ugar, one of the important food commodities in the diet of people round the world, is produced in 121 Countries. It can be produced from both cane and beet; about 72% of the total production and over 80% of sugar traded is cane sugar. Beet sugar is mainly produced by the European Union (EU), while cane sugar mainly by Brazil, India, Australia, South Africa, Cuba and Thailand (F.O. Licht, 2008).

Sugar is one of the most volatile and regulated commodities in the world trade. Price instability adversely affects both sugar producers and consumers, and hence, producing and importing countries have adopted various policies to insulate their sugar industries from the fluctuations of the world sugar prices. Such measures have caused further aggravation of the price instability.

This paper aims at analysing the existing situation of world sugar production and consumption in relation to the recent sharp increase of price and presenting how this situations should have been made used of for the development of the local sugar industry while protecting the consumer.

The article is organised into five sections. The second section briefly discusses the current situation of the world sugar production and consumption with some details on leading produces and consumers. An analysis on the causes of the current world sugar price boost with future forecast is presented in section three. Section four deals

with a brief discussion on the existing situation of the sugar industry in Sri Lanka, giving some views on how the price increase should have been used to develop the industry and to protect the consumer, and the final section contains a conclusion.

## World Sugar Production and Consumption

The world sugar market expected a deficit in 2009/10 for the second consecutive year after 2004/05. Total estimated output in 2009/10 was 159.7 million tonnes, up 6.4 million compared to last year, but 5.7 million short of demand (Table 1 and Figure 1).

Global sugar consumption has risen at an annual rate of about 2.5% during the last ten years, with the key drivers being both populations as well as the economic growth. The main contributors were the recent past growth of economies of India and China, respectively the largest and second largest sugar consumers in the world (Anon, 2009).

In 2009/10, Brazil, India, Thailand and China collectively account for

**K.A.D. Kodituwakku**

*Research Officer (Economics)  
Sugarcane Research Institute,  
Uda Walawe.*

50% of the world sugar production and 59% of the world exports. Brazil and Asia are responsible for 23% and 35% of the world production respectively (Table 2). The production of the above countries in 2009/10 are expected to be lower than that in 2008/09, except in the EU and Thailand. Sugar consumption in many countries around the world is price inelastic; consumers in these countries would not change their buying habit of sugar even the price increased much.

Production and consumption and their trend of main sugar producers and consumers are discussed below (F.O.Licht 2009) and Annex 1 gives production, consumption and trade data for other important countries:

### Brazil

Brazil is the main cane sugar as well as ethanol producer in the world.

**Table 1: World production, consumption and stocks of centrifugal sugar (1000 tonnes raw value), 2004 - 2010**

Year	Production	Consumption	Ending stock	Stock as a % of consumption
2004/05	141100	144598	61638	43
2005/06	151492	147161	64140	44
2006/07	167468	154117	72365	47
2007/08	166685	159506	73723	46
2008/09	153325	161169	63059	39
2009/10*	159697	165390	57037	34

\*Estimated

Source: F.O.Licht's International Sugar & Sweetener Report 2009, December.

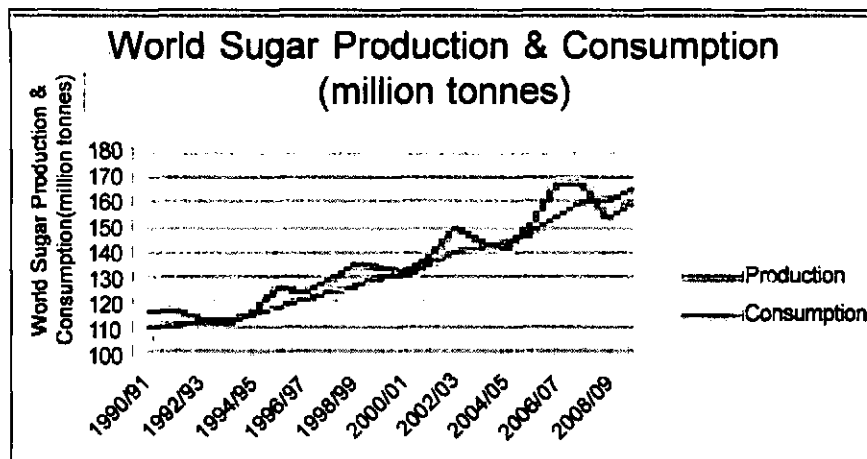


Figure 1: Variation of global sugar production and consumption, 1990 - 2009

Source: F.O.Licht's International Sugar & Sweetener Report 2009, December

**Cane production, Area and Yield:**

Total sugarcane area and sugarcane area for harvesting for 2009/10 remain unchanged at 8.7 and 8.05 million hectares (ha), respectively. The agricultural yield for 2009/10 is projected at 79.75 t/ha, slightly up from 2008/09 (78.95 t/ha), due to good weather conditions supporting stock development. On the other hand, above average rainfall during the June-September period has negatively impacted industrial yield which is estimated at 136.8 kg of TRS (total reducing sugars) per tonne of sugarcane, down 2.5 percent from previous (140.32 kg TRS/t).

**Sugarcane and Ethanol:** The sugarcane breakdown for sugar/ethanol has confirmed the trend towards sugar. Total sucrose (total reducing sugar, TRS) content destined for sugar and ethanol production is estimated at 44.65 and 55.35 percent, respectively, as opposed to 40.4 and 59.6 percent, respectively for the previous season. India is projected to become a net importer of sugar, thus encouraging Brazilian production. Sugar production for 2009/10 is estimated at 35.5 million tonnes, raw value, up by 3.65 million tonnes, raw value, from 2008/09. Total ethanol production for 2009/10 is estimated 25.5 billion

litres (7.5 billion litres of anhydrous ethanol and 18 billion litres of hydrated ethanol), down 2 billion litres from previous marketing year. Strong demand for sugar in international markets and the expected lower size of the sugarcane crop will likely limit ethanol production.

**Sugar Exports:** Brazilian sugar exports for marketing year 2009/10 are estimated at 23.85 million tonnes, raw value, up 2.3 million tonnes compared to the previous. Strong demand in India is a direct driver of the increase.

**Ethanol Exports:** Ethanol exports for 2009/10 are estimated at 3 billion litres, a 1.69 billion litre reduction compared to 2008/09 (4.69 billion litres), mostly due to an expected decrease in direct exports to the United States.

**Policies:** The Brazilian government has recently proposed a new bill to

the Congress that restricts the use of land for sugarcane plantation. If approved, sugarcane planting will not be permitted in the Amazon, the Brazilian Wetlands (Pantanal) and in the upper Paraguay River Basin regions, in addition to conservation land units and native Indian territories (adding up to 92 percent of the country's land availability). The Brazilian government has also proposed a phase out agenda to prohibit the burning of sugarcane nationwide. According to the proposal, the burning of sugarcane in all mechanised areas will be prohibited in 2017.

**Asia**

Asian sugar production is forecast to rise modestly in 2009/10, with an increase by 3 million tonnes to 51.6 million tonnes. Most of the increase will be due to India, while Chinese output is seen down slightly and Thai production may be flat this season. As the global downturn of economies are not much affected the Asia, consumption is also expected to be increase, despite sharply rising prices.

**India**

Forecast for 2009/10 sugar production is lowered to 17.3 million tonnes (including 400,000 tonnes of khandsari sugar).

**Slump Sugar Production in 2008/09:** After three consecutive years of bumper crops (2005/06 to 2007/08), sugar production in 2008/09 slumped by an unprecedented 44 percent over the previous year due to reduced cane availability. Most

Table 2 : Main Sugar producers and consumers (2009/10)

Country	Production (million tonnes)	Consumption (million tonnes)
Brazil	35.8	13.2
Asia	54.9	76.0
- India	17.3	25.6
-China	13.2	16.4
-Thailand	7.7	2.5
EU	15.4	18.6

Source: F.O.Licht's International Sugar & Sweetener Report 2009, December.

of the mills in the major cane-producing states closed 1-2 months earlier than normal due to the short cane supplies. The consecutive bumper production resulted in a market glut during 2006/07 and 2007/08, leading to low sugar prices and poor financial conditions for the sugar mills. Cash flow problems resulted in delayed cane payments to the farmers. Furthermore, the government significantly raised the minimum support price (MSP) of competing crops i.e., paddy rice and wheat, while keeping the sugarcane MSP stagnant. Due to stagnant cane prices and delayed cane payments, during 2006/07 and 2007/08, farmers shifted from sugarcane to the more profitable rice-wheat crop rotation. Thus, in 2008/09 harvested cane area declined by 13 percent over the previous year. Lower cane yield and sugar recovery adversely affected sugar production due to a higher share of the ratoon crop, lower input use, abnormally higher winter temperatures, and the lack of winter rains.

*Bright Prospects in 2010/11:* The expected strong sweetener prices during the forthcoming season will result in a higher cane price payment by the sugar mills and 'gur' manufacturers. Cane prices may range from Rs. 1800 to 2400 per tonne, significantly higher than previous years, which should encourage farmers to revert back to sugarcane in 2010. Thus, 2010/11 cane acreage is expected to recover from the current low. However, the quantum of new planting during 2009/10 may be tempered by relative prices of competing crops (rice and wheat). India's sugarcane and sugar production is expected to recover from the last two years' low levels.

*Trade:* India emerged as a net sugar importer in 2008/09 due to the sharp shortfall in domestic sugar production, and will be a major importer in 2009/10. Due to

forecast tight domestic supplies, forecast for 2009/10 imports has been revised higher to a record 6.0 million tonnes. Exports of sugar have come to a virtual halt since January 2009 and there are no prospects for any sugar exports in 2009/10.

*Trade Policy:* The government has taken various steps to relax restrictions on imports of sugar to ameliorate the current sugar shortage. On February 17, 2009, the government relaxed the norms for duty free imports of raw sugar under the advance licence scheme. This allowed local mills to import raw sugar, refine it, and then sell refined sugar in the domestic market, and meet the future export commitments for re-export of refined sugar when sugarcane and sugar supplies improve in the next two years. On April 17, 2009, the government allowed mills to import raw sugar at zero duty under an open general licence (OGL) until August 1, 2009. Thus, the mills can import raw sugar for refining and sale in the domestic market without any re-export obligations. Further, the government allowed select state trading entities (STEs) to import white sugar at zero duty up to an aggregate quantity of 1.0 million tons (crystal weight basis). On July 31, 2009, the government extended the period for imports of raw sugar at zero duty under an OGL until April 1, 2010. The government also allowed imports of white sugar under an OGL by private trade up to an aggregate of 1.0 million tonnes until November 30, 2009. The importers have to register the contracts with Agricultural and Processed Foods Export Development Authority, with the 1.0 million tons allocation on first-sum-first serve basis. Given concerns on tight domestic supplies, the government is likely to extend the deadline for imports of raw sugar and white sugar under an OGL until the end of 2010, and may enhance the quota for imports

of white sugar from the current 1.0 million tonnes limit.

## **Thailand**

*Production:* Sugar production for 2009/10 has been raised up to 7.7 million tonnes due to better than expected sugarcane production at 72 million tonnes due to average yield improvements following favourable weather conditions. Also, attractive farm-gate prices during the growing period resulted in more fertiliser usage, particularly in the northern and the central plains.

*Trade:* Sugar exports for 2008/09 and 2009/10 have been revised up to a record 5 – 6 million tonnes due to tight sugar supplies of major producing countries, particularly in India. White and refined sugar exports increased significantly in the first half of this year and are expected to continue for the remainder of 2009/10. Anticipated increase in white and refined sugar exports to India and other countries in the region are expected to offset a reduction in sugar exports (both raw sugar and refined sugar) to Indonesia due to a recovery in domestic production. Sugar imports will remain marginal in 2009/10 in anticipation of bumper sugarcane crops. The government's import policy follows WTO (World Trade Organisation) commitments, which maintains a 65 percent tariff rate under a quota for 13,760 tons. Meanwhile, the out-of-quota tariff is 94 percent.

*Policy:* Sugarcane support prices for 2009/10 are expected to be at 900 – 1,000 baht/tonne (\$27-30/tonne), up significantly from the previous year level of 830 baht/tonne (\$23/tonne). The increase reflects a surge in international sugar prices driven by drought in major producing countries. Meanwhile, domestic sugar prices will likely to remain unchanged due to government price controls from

current levels set on May 1, 2008, however this is still higher than current export prices.

### China

Total Chinese centrifugal sugar output is forecast to decrease one percent to 13.2 million tonnes (raw value) in marketing year 2009/10. However, the total sugar forecast production is down nine percent from the original forecast due to dry conditions. Dry conditions in both the sugar cane and sugar beet production areas caused a reduction of seven percent and 39 percent, respectively, from the original 2009/10 forecast. Due to the acreage reduction and drought damage to the yield, beet sugar production is forecast to drop 31 percent from the previous year. Both beet and cane acreage declined in 2009/10 due to competition from other crops.

**Production:** Overall sugar output for 2009/10 is forecast to reach 13.2 million tonnes (raw value), one percent lower than 2008/09. Cane sugar output for 2009/10 is forecast at 12.5 million tonnes, one percent higher than 2008/09 due to an estimated one percent rise in cane yield. Beet sugar output is forecast at 674,000 tonnes in 2009/10, 31 percent lower than 2008/09.

**Trade:** Imports for 2009/10 are forecast at 900,000 tonnes, 170,000 tonnes lower than the estimate for 2008/09. The current landed price for imported raw sugar is about 35 percent higher than domestic sugar. Imports usually start to arrive in China after the crushing season ends and the domestic price starts to increase. The TRQ (tariff rate quota) for the year 2009 is 1.95 million tonnes, with an in-quota-tariff of 15 percent. The 2009 out-of-quota tariff rate is 50 percent. The amounts of the quota and the tariff rate have been unchanged since 2005 and will remain the same in the coming years in line with China's WTO obligations.

### EU

**Production:** EU sugar production is seen reaching 16.7 million tonnes up from 15.2 million last year. Favourable weather conditions of this year play a major role to rise the output. Russia's beet sugar output may fall to 3.4 million tonnes from the recorded 3.8 million last year due to fall in the beet area. Consumption of EU is estimated at 18.6 million tonnes in 2009/10 up slightly from 18.3 million tonnes from last season.

**Policy:** The EU published a regulation confirming that it raised the limit for 2009/10 out of quota white sugar exports to 1.35 million tonnes, from the previous limit of 650,000. The European commission said EU out of quota sugar output in 2009/10 was estimated at 3-4 million tonnes due to exceptionally favourable weather conditions. But the now agreed volume still falls 24000 tonnes short of maximum volume of EU sugar exports allowed by WTO commitments.

### World Sugar Price

The world market price of white sugar (London market) in December 2009 increased to US\$ 595 /tonne, and shot up over US\$ 700 by early 2010, after the last peak of sugar price, nearly 28 years ago. Variation of the sugar price during last 19 years are shown in Figure 2.

The main reason for this price increase is the deficit of production compared to consumption. The deficit of 2009/10 is estimated at 6.0 million tonnes, compared to 10.7 million in 2008/09. The main reasons for this low supply are bad weather conditions in sugarcane-growing countries and low input use with the global financial crisis. Eventhough, 2008/09 was a deficit year in the sugar market for the first time in four years, there was no physical shortage of sugar in 2008/09 due to surplus stock from past years. In 2009/10, the situation was changed due to stock depletion in top consumers such as India (F.O.Litch, 2009).

The market clearly has potential to rise further as the data indicate that global sugar supplies will not sufficient to cover global demand at any given time during the 2009/10 season. The weather-reduced Brazilian and Indian harvest would not be able to compensate for the increased cane sugar production in response to high prices. As such, prices moved up strongly in 2009 and moved up further in January/February 2010. This situation will continue until 2012 or further, according to the forecasts (Food and Agriculture Organisation (FAO), 2009).

### Current Situation of the Local Sugar Industry

The total domestic sugar production of Sri Lanka in 2008 was 38,000 tonnes which was sufficient to meet less than 10% of the total requirement. In 2008, 575,000 tonnes of

Changes in London sugar price (US \$/tonne)

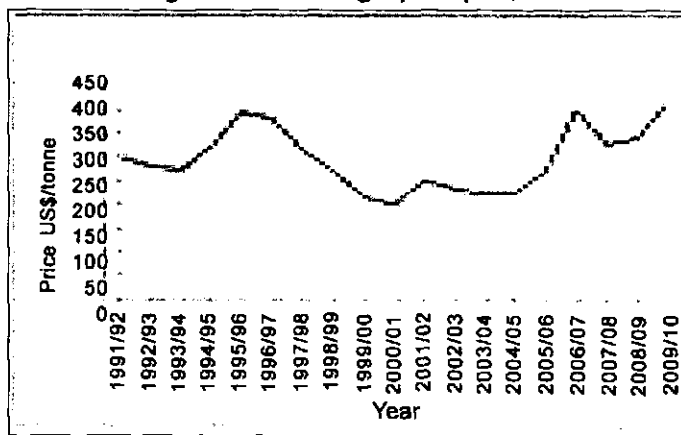


Figure 2 : Variation of London sugar prices (1991- 2009)

Source : Sugar and sweetner outlook, 2009

sugar have been imported at a cost of Rs. 22.3 billions (Table 3) which was nearly 8.1% of the total import cost for the year (Central Bank of Sri Lanka, 2009). Main origins of import of sugar to Sri Lanka are India, Thailand and the EU.

Table 3 also shows the retail price of sugar, from 2007, it has been increasing, and by early 2010, it jumped to about Rs 90-100/kg due to increased world market price.

Even with the increasing sugar price, Sri Lankan sugar producers and responsible authorities still have not taken effective measures to increase local sugar production. Rather than increasing, production has dropped during the past few years. As a result, a large quantity

of sugar had to be imported, spending large sums of foreign exchange, which in turn badly affecting the balance of payments of the country. Recent global sugar price increase will lead to worsen this situation further.

A major problem facing the sugar industry in Sri Lanka earlier was its higher cost of production relative to import price of sugar. This is mainly due to depressed prices in the world market for sugar, subsidised production by exporting countries and the relative inefficiency of the local industry. But, the recent price boost of sugar has automatically solved the problem. As such, Sri Lankan sugar producers have a great opportunity to capitalise.

Other sugar-producing and importing/exporting countries adopt various policies to minimise the effect of fluctuations of international sugar prices on their producers and consumers. Domestic sugar price stability is one of their main policy goals. Absence of such policy in Sri Lanka affects both consumers and producers. But, the effect on the consumer has been minimised to some extent by reducing the import tariffs imposed on sugar to Rs. 1.00 per kg recently. However, the unfortunate situation is that still the Sri Lankan sugar companies and higher authorities are not seen to be taking action to get advantage of world sugar price boost for the development of the industry and to adopt a price stabilisation policy to protect both sugar producers and consumers from the expected future price fluctuations.

**Table 3 : Changes of the local sugar industry during 2006-2008**

	2006	2007	2008
Total Sugar Requirement (Production+imports) (000' tonnes)	581	510	613
Local Production (tonnes)	56000	29000	38000
Imports (000' tonnes)	525	481	575
Import Cost (Rs. Billion)	23.2	17.0	22.3
Average Retail Price (Rs./Kg)	60.20	54.30	63.58

Source : Annual Report, Central Bank Sri Lanka. 2008.

**Annex 1: Sugar production, consumption and trade data of some important countries**

Country	Production (Tonne 000')	Consumption (Tonne 000')	Import (Tonne 000')	Export (Tonne 000')
EU-27	15485	16500	3500	1475
Russia	3350	5850	2400	200
Ukraine	1625	1900	275	50
USA	6998	9412	2200	181
Canada	100	1454	1450	42
Mexico	5400	5300	710	690
Guatemala	2250	745	-	1515
Cuba	1250	710	290	800
Argentina	2250	1720	4	600
Colombia	2575	1605	110	1035
Egypt	1750	2720	1410	250
Turkey	2100	2000	5	10
South Africa	2380	1685	200	900
Indonesia	2960	4400	1500	0
Japan	939	2220	1313	0
Pakistan	3520	4250	800	70
Philippines	2200	2150	0	160
Australia	4900	1250	9	3700

Source: F.O.Licht's International Sugar & Sweetener Report 2009, December.

### Conclusion

Cheap imported sugar has been a major problem which affected local sugar producers due to high cost of production. However, the recent rise of price in the world market has reversed the situation while badly affecting the consumer. Nevertheless, the local sugar producers have not been responsive to sugar price variation, and as a result, they have failed to get the benefit of this price increase. Further, had the relevant authorities adopted a price stabilisation policy, producers would have been protected during price drops and consumers during price boosts. Absence of such a policy in Sri Lanka has been one of the main constraints for development of the local sugar industry.

### References:

- Anon. (2009). *Industry News, International Sugar Journal, December 2009.*
- Central Bank of Sri Lanka, *Annual Report, various issues.*
- F.O. Licht (2009). *International Sugar & Sweetener Report, December, 2009.*
- FAO (2009). *Food Outlook, December, 2009.*