United States
Department of
Agriculture

Foreign
Agricultural
Service

Sugar: World Production Supply and Distribution

May 2010: Prices falling on higher 2010/11 production

Overview

World sugar production for the 2010/11 marketing year is forecast at 164 million tons, raw value, up 12 million from the revised 2009/10 estimate. Consumption is forecast at a record 158 million tons, up 4 million from a year earlier. Exports are forecast at record 54 million tons, up 3 million; and ending stocks are forecast at 27 million tons, up 500,000 tons.

Forecast changes in 2010/11 world production and trade are highlighted by higher production in Brazil, at 41 million tons, up 4 million. Brazil accounts for 25 percent of world production, but Asia accounts for 38 percent. Forecast production in Asia is up by 9 million tons to total 62 million. Production in India for 2010/11 is forecast at 25 million tons, up 5 million, China at 14 million tons, up 4, and Thailand at 7 million tons, up 300,000 tons. Production in the EU-27 is forecast at 14 million tons down from last year's output by 3 million tons. In 2010/11, the EU is forecast to be the world's largest net sugar importer at 4 million tons. Exports from Brazil for 2010/11 are forecast at 28 million tons, up 4 million from 2009/10. Thailand is forecast to export 5 million tons, up 200,000 from the previous year, and India may import 1 million tons, down 3 million tons from last year. Exports from Australia are forecast at 4 million tons, up 100,000 tons.

Last year fundamentals reasserted themselves. Short crops in the two largest producers Brazil and India, as well as in China, and Thailand, coupled with strong inelastic demand caused raw sugar prices to reach almost 30 cents/lb in February 2010, their highest level in twenty nine years. Prices started out fairly low in 2008/09, around 11.5 cents/lb, due to several preceding years of high production resulting in high stock levels. However as the 2008/09 crop year progressed, around May 2009, it became apparent that there would be a sharp downturn in production, but demand continued to increase. The devaluation of the US dollar, particularly against the Brazilian Real, exacerbated the price increase. By October, raw sugar prices ranged between 22 and 24 cents/lb. These strong prices were, in part, kept in check by the still fairly substantial stocks going into the season and by bright prospects for a production rebound by Brazil and India. However from November to February the market anticipated greater shortages and prices reached nearly 30 cents/lb. This price was the result of a large number of speculative positions predicated on continuing strong demand against a small supply of uncommitted sugar stocks. These February prices met resistance from buyers' world wide. The sticky prices pointed to larger stock holdings than estimated and a willingness by buyers to wait for the seasonally advance Brazilian production. As of mid-May prices were around 15 cents/lb.

Highlights of the Major Producers

Brazil, India, Thailand, and China account for 53 percent of 2010/11 forecast world production; and Brazil, Guatemala, Thailand, and Australia account for 73 percent of 2010/11 forecast world exports.

Brazil

Production

Total sugarcane production for marketing year (MY) 2009/10 (May-April) is revised upward, to 603 million tons due to the extension of the harvest period in the Center South (CS). Sugarcane production in the CS has been adjusted to 541 million tons, up 2 percent from the previous estimate. Sugarcane production in the North-Northeast region (NNE) should account for 62 million tons.

Excessive rainfall during the season has limited the number of crushing days for 2009/10, thus, restricting sugarcane crushing and the production of sugar and ethanol. Indeed, the Sugar and Alcohol Millers Association of São Paulo state (UNICA) reports that nearly 70 days were missed during April-December 2009, an increase of more than 40 percent compared to 2008/09.

Historically, the sugarcane harvest is virtually over in December. However, it is worth noting that a number of mills (42) have atypically crushed until February and some even extended the crushing through March to partially offset the number of missed days earlier in the year. Nevertheless, the sugarcane industry estimates that roughly 50 million tons of sugarcane has been left in the fields.

Total 2010/11 sugarcane production is projected at 660 million tons, up 9 percent vis-à-vis the 2009/10 crop. The Center South region is expected to harvest 596 million tons of sugarcane for 2010/11, a 10 percent increase over last season, primarily due to 1) the large volume of sugarcane left in the fields from the previous season, 2) good weather conditions, and 3) area expansion from new mills. Some units began the crushing as early as late February encouraged by high sugar and ethanol prices and good weather conditions which allowed for the harvest and hauling. North-Northeast production for 2010/11 is forecast at 64 million tons, a 2 million tons increase from the preceding year.

In 2010/11 total sugarcane area is forecast at 8.95 million hectares (ha), a 3 percent increase vis-à-vis 2009/10 (8.7 million ha). Total area harvested for 2010/11 is forecast at 8.31 million ha, up 260,000 ha from 2009/10 (8.05 million ha).

Investments and renewal of sugarcane fields were below average rates due to, the world financial crisis in October 2008, poor sugar and ethanol prices in 2007 and 2008, and restricted credit to mills. Only, ten new units are expected to start crushing in 2010 as opposed to 19 units in 2009.

The agricultural yield for 2010/11 is forecast at 82.31 metric tons per ha (mt/ha), similar to previous marketing year (81.11 mt/ha). Favorable conditions throughout 2009 will translate into positive agricultural yields in for 2010/11. Nonetheless, below average renewal rates in the CS led to the aging of sugarcane fields, therefore negatively affecting productivity. Note that 3rd to 6th cut sugarcane stocks are less productive that 1st – 2nd cut stocks.

The industrial yield is forecast at 138.25 kg TRS (total reducing sugars)/mt, up 7.25 kg TRS/mt from last season (131 kg TRS/mt) mainly due to expected good weather conditions in the CS during harvest, thus encouraging high sugar concentration in stocks. The large volume of sugarcane left in the fields in 2009 and the early start of the 2010/11 crush are likely to affect the overall quality of the raw material to some extent. The following table shows historical Brazilian yields measured in TRS per metric ton of sugarcane.

Sugarcane Industrial Yields (kg TRS/metric ton)					
	06/07	07/08	08/09	09/10	10/11*
TRS/ton	145.8	143.9	140.32	130.99	138.25
Source: USDA/FAS/ATO/Sao Paulo					
* 2010/11 – projection					

According to Sugar and Alcohol Millers Association (UNICA), the average industrial yield for the 2010/11 crop in the CS is 138.59 kg TRS/mt, up 8.23 kg TRS/mt relative to 2009/10 (130.36 kg TRS/mt).

Sugar and Ethanol

Total sucrose (total reducing sugar, TRS) content destined for sugar and ethanol production for 2010/11 is forecast at 44.65 and 55.35 percent, respectively, as opposed to 43.5 and 56.5 percent, respectively for the previous season. Although a higher volume of sugarcane is expected to be diverted to ethanol to guarantee the domestic market supply, sugar-ethanol mills are expected to increase sugar production due to continued steady demand from international markets.

Sugar production for 2010/11 is projected at 40.7 million tons, raw value, up 4.3 million tons compared to 2009/10 (36.4 million tons). The CS states should account for 35.5 million tons, raw value, up 14 percent from 2009/10 (31.2 million tons). The NNE should contribute 5.2 million tons of sugar, raw value, similar to 2009/10.

Total ethanol production for 2010/11 is forecast at 29.4 billion liters (8 billion liters of anhydrous ethanol and 21.4 billion liters of hydrated ethanol), up 3.7 billion liters compared to 2009/10 (7 billion liters of anhydrous ethanol and 18.7 billion liters of hydrated ethanol), as a consequence of the expected expansion in domestic consumption. Domestic demand for ethanol is projected at 27.3 billion liters, up 4.3 billion liters from 2009/10, due to steady sales of flex fuel cars and projected attractive ethanol prices at the pump.

The table below shows the sales of FFV and ethanol powered cars since 2004. Sales of FFV currently represent over 90 percent of total vehicle sales. According to the industry, flex fuel vehicles currently represent 40 percent of the light vehicles fleet, and the share is likely to reach close to 50 percent by the end of this season.

Domestic Sales of Alcohol Powered Vehicles (pure alcohol & flex fuel units)						
2004	2005	2006	2007	2008	2009	2010 1/
379,329	897,308	1,425,177	2,032.361	2,356,942	2,711,267	382,793
Source: National Association of Vehicle Manufacturers (ANFAVEA) 1/ January-February						
Note: flex fuel vehicles were introduced in March 2003.						

Fuel consumption in Brazil, as reported by the Petroleum, Natural Gas and Biofuels National Agency (ANP), follows. The figures take into account the product sales by distributors and do not include illegal sales, which were common in the past for hydrated ethanol due to tax differentiation between both types of ethanol.

Brazilian Fuel Consumption Matrix (million liters)						
	2004	2005	2006	2007	2008	2009
Diesel	39,226	39,167	39,008	41,558	44,764	44,298
Gasoline C**	23,174	23,553	24,008	24,325	25,175	25,409
Hydrated Ethanol	4,513	4,667	6,187	9,367	13,290	16,471
Source: ANP.						
** Gasoline C includes 20-25 % anhydrous ethanol						

The steady sales of flex-fuel vehicles do not solely guarantee a higher demand for ethanol given that consumers' decisions are driven by the ratio between ethanol and gasoline prices. The 70 percent ratio between ethanol and gasoline prices is the rule of thumb in determining whether flex car owners will choose to fill up with ethanol (price ratio below 70 percent) or gasoline (price ratio above 70 percent).

Sugarcane, sugar and ethanol prices in the Domestic Market

The State of Sao Paulo Sugarcane, Sugar and Alcohol Growers Council (CONSECANA) reports that the average sugarcane price (April 2009-March 2010) for the state of Sao Paulo for the 2009/10 crop is R$ 0.3492 per kg of TRS, or R$ 45.52 per ton of sugarcane, up R$ 6.30 per ton compared to the previous crop (R$ 0.2781 per kg of TRS, or approximately R$ 39.22 per ton of sugarcane), due to better sugar and ethanol prices during the crushing season compared to the previous year. CONSECANA's prices are based on both sugar and ethanol prices in domestic and international markets.

Excessive rainfall during the harvest season has negatively impacted the crushing of sugarcane, thus reducing the availability of the product in the domestic market. As a consequence, ethanol prices have escalated from R$ 0.70-0.80/liter during the peak of the harvest season (August-September) to R$ 1.20-1.30/liter in January-February due to reduced supply. Concurrently, sugar prices in the domestic market jumped from R$ 40 to 72 per 50-kg bags in the same period. Both sugar and ethanol prices decreased in March compared to February with the beginning of the new crop season.

As an attempt to avoid sharp price fluctuations in the ethanol market in the future, the Brazilian government should establish a credit line of R$ 2.5 billion (approximately US$1.39 billion) to create ethanol stocks. Funds are expected to be available in May-June and the requirements to be eligible for the loan would be less restrictive than those in 2009, thus guaranteeing larger use of the credit line.

Sugar Exports

Total sugar exports are forecast at 28.4 million tons, raw value, up 4.1 million tons compared to the previous year (24.3 million tons) as a consequence of an expected deficit in the world sugar supply, especially from India. Raw sugar should account for 22.2 million tons, raw value, whereas the remainder represents exports of refined sugar.

Ethanol Exports

Brazilian ethanol exports for 2010/11 are forecast at 2.5 billion liters, a 0.6 billion liter reduction compared to revised figure for 2009/10 (3.1 billion liters), mostly due to an expected decrease in direct exports to the U.S. and India.

Stocks

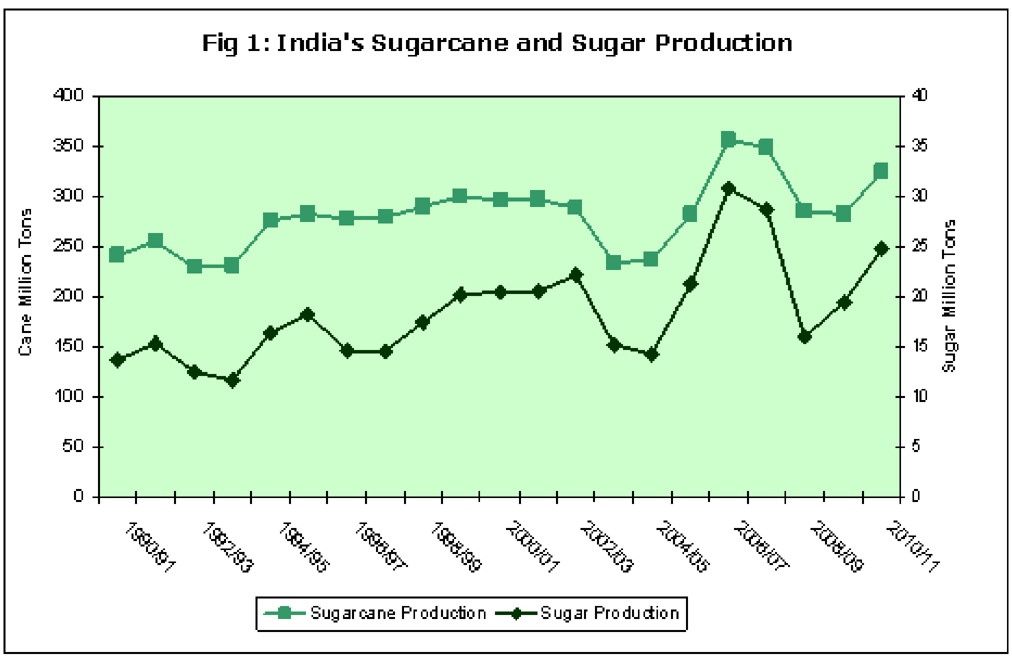
Forecast total sugar ending stocks for 2010/11 at negative 535,000 tons, up 300,000 tons compared to 2009/10 (- 835,000 tons). Note that negative stocks have been balanced by the early start of the crushing, March as opposed to May.

Policy

Current legislation requires gasoline sold in Brazil to have anhydrous ethanol content between 20 and 25 percent, with the executive branch having the flexibility to adjust within that band. The 25 percent blend that prevailed in the past couple of years has been reduced to 20 percent as of February 1, to decrease the domestic demand for ethanol due to the sharp rise of ethanol prices at the pump. The Brazilian Government's decision should last for 90 days, e.g, the blend is expected to return to 25 percent as of May 1.

India

Production:



Sugarcane and sugar production in India typically follow a 6 to 8 year cycle, wherein 3 to 4 years of higher production are followed by 2 to 3 years of lower production. After two consecutive years of declining sugar production (2007/08 and 2008/09), production surged in 2009/10, and is set to gain strongly in the upcoming 2010/11.

India's total centrifugal sugar production in 2010/11 is forecast at 24.7 million tons (including 435,000 tons of *khandsari* sugar), up 27 percent from the 2009/10, on expected improved sugarcane supplies due to higher cane planting and yields. *Gur* production is forecast lower at 5.6 million tons compared to 6.6 million tons last year on expected weak prices.

Relatively strong cane prices *vis-a-vis* last year and also compared to competing food crops (rice, wheat, pulses) during the ongoing 2009/10 will support higher cane acreage; 2010/11 is forecast to increase by 13 percent to 4.8 million hectares. Assuming normal monsoon and subsequent weather condition, yields are expected to improve over last year's adverse weather impacted crop. Consequently, 2010/11 sugarcane production is forecast higher at 325 million tons compared to 282 million tons in 2009/10.

The centrifugal sugar production estimate for 2009/10 is revised higher to 19.5 million tons due to lower diversion of cane for production of alternative sweeteners (*khandsari* and *gur)* and better than anticipated cane production. After drought like conditions in June through mid-August, most of the cane growing areas received adequate and well scattered rains from mid-August through October during the crop growth stage. Low winter temperature and scattered rains in December-January further contained expected crop damage due to early dry conditions. High sugar prices and 'speculation' on lower cane crop resulted in sugar mills offering substantial increase in cane prices to farmers compared to last year. The higher cane prices by the sugar mills coupled with relatively weak *gur* prices *vis-a-vis* sugar limited the diversion of sugarcane for production of *gur* during the peak crushing season.

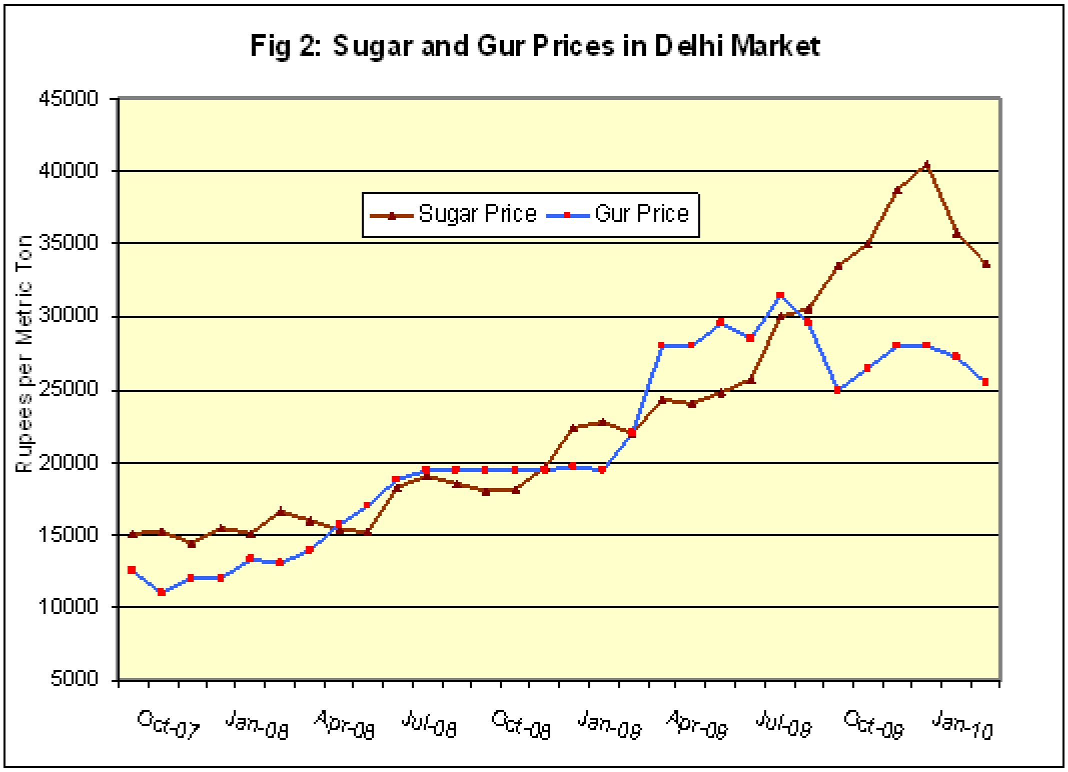
The mill sugar production for 2009/10 up to March 15, 2010 is estimated at 15.3 million tons (crystal weight basis) compared to 13.3 million tons for the corresponding period of 2008/09. The recent weakening of *gur* prices has lowered the prospects for late season diversion of cane for *gur* production. Crushing is going on in the major producing states of Maharashtra and Uttar Pradish, nearly 4 weeks longer than last year. Industry sources report the average crushing duration during the 2009/10 at 150 days (vs. 120 days last year) and average sugar recovery higher at 10.3 percent (vs. 10.0 percent last year). Consequently, 2009/10 centrifugal sugar production has been raised to 19.5 million tons against the earlier estimate of 17.3 million tons.

Consumption:

Sugar consumption in 2010/11 is forecast to increase to 24.5 million tons on forecast improved domestic supplies and strong demand – fueled by a growing population and continued economic growth. Bulk consumers such as bakeries, makers of candy and local sweets, and soft-drink manufacturers account for about 60 percent of mill sugar demand. Most of the *khandsari* sugar is consumed by local sweets manufacturers. *Gur* is mostly consumed in rural areas for household consumption and feed use.

Prices

Despite various measures taken by the Government of India (GOI) to control sugar prices, sugar prices escalated during calendar year 2009 on fears of short domestic supplies and strong international sugar prices. Sugar prices have eased significantly from February 2010 on improved expectations of domestic production in 2009/10 and forecast higher production in 2010/11.



End of March sugar prices in major domestic wholesale markets ranged from $685 to 745 per ton, about 17 percent lower than peak prices in January, 2010. However, sugar prices are still more than 50 percent higher than prices in March 2009. Prices are expected to continue to weaken further in the coming months on improved domestic supplies, although international price movements can impact domestic prices. *Gur* prices had been under pressure from the beginning of the 2009/10 due to record beginning stocks. However, gur prices are expected to remain stable relative to sugar prices in the coming months due to drawdown in the stocks and lower production in 2009/10 and 2010/11.

Stocks

The 2010/11 ending stocks are forecast higher at 5.36 million tons compared to 3.98 million tons for 2009/10 ending stocks, both well below the normal acceptable stock levels of the three-month consumption requirement.

Trade

India's 2010/11 imports are forecast lower at 1.2 million tons due to forecast improved domestic supplies. Industry sources expect imports mostly during the early part of the season. The GOI may withdraw the relaxed import policy on improving domestic supplies and lowering of sugar prices to more comfortable levels as the domestic crushing season progresses. Despite forecast higher sugar production, relatively tight domestic supplies preclude any significant commercial exports of sugar in 2010/11; exports will be largely limited to quota countries.

Import estimates for 2009/10 are revised lower to 4.5 million tons based on the current pace of imports reported by industry sources. Trade sources estimate India's sugar imports during the October 2009 to February 2010 at 2.9 million tons; of which about 2.3 million tons is raw sugar mostly from Brazil, and rest white sugar from Thailand, Brazil, and the U.A.E. An additional 500,000 tons, mostly white sugar, have been contracted for delivery through June/July, 2010. Despite weakening domestic sugar prices, industry sources expect additional imports of raw sugar in August/September before the beginning of the next crushing season. Consequently, 2009/10 imports are forecast to reach a record level of 4.5 million tons.

Trade Policy

Forced by the severe domestic shortages and abnormally high sugar prices since beginning of 2009, the GOI took several measures to relax import restrictions to augment domestic supplies.

On February 17, 2009, the government relaxed the norms for duty free imports of raw sugar under the advance licensing scheme (ALS) exempting future export commitments from actual user conditions for raw sugar imports during February 17, 2009 to September 30, 2009. On April 17, 2009, the government allowed mills to import raw sugar at zero duty under the open general license (no future export commitments). The government also allowed select state trading enterprises (STEs) to import white sugar at zero duty. Subsequently, on July 31, 2009 the government allowed duty free imports of white sugar by traders and processors until November 31, 2009.

Through a series of notifications the GOI has extended the duty free imports of raw sugar and white sugar up to December 31, 2010. The GOI has also exempted imported sugar, both raw sugar and white sugar, from the levy sugar obligation and the market quota release system, applicable to domestic sugar. With the sugar prices easing, there is an increasing pressure from the local industry to re-impose the import duties on white and raw sugar, and reverting back to the old import policy regime. Currently, the GOI does not allow exports of sugar nor provide any export incentive (transport subsidy) for sugar.

Sugarcane Production and Pricing Policy

The Government of India supports research, development, training of farmers and transfer of new varieties and improved production technologies (seed, implements, pest management) to growers in its endeavor to raise cane yields and sugar recovery rates. The Indian Council of Agricultural Research (ICAR) conducts sugarcane research and development at the national level. State agricultural universities, regional research institutions, and state agricultural extension agencies support these efforts at the regional and state levels. The central and state governments also support sugarcane growers by ensuring finances and input supplies at affordable prices.

The GOI establishes a minimum support price (MSP) for sugarcane on the basis of recommendations by the Commission for Agricultural Costs and Prices (CACP) and after consulting State Governments and associations of the sugar industry and cane growers. Last year, the GOI announced a new system of Fair and Remunerative Price (FRP) that would link the cane prices with sugar price realization by the sugar mills. Several state governments further augment the MSP/FRP, typically by 20-25 percent, due to political compulsions rather than market pricing.

Sugar mills are required to pay the “state advised price (SAP)” to sugarcane farmers irrespective of the market price of sugar. However, high sugar prices coupled with ‘fears’ of lower cane crop encouraged the sugar mills to pay much higher prices than the FRP or SAP in most of the growing states. Although the local industry has been advocating rationalization of cane pricing policy by linking it with domestic/world sugar prices, industry sources do not expect any downward revision of FRP in the coming years if the sugar prices decline given the political clout of the farmers lobby.

Sugar Production and Marketing Policy

The GOI levies a fee of Rs. 240 ($5.33) per ton of sugar produced by mills to raise a Sugarcane Development Fund (SDF), which is used to support research, extension, and technological improvement in the sugar sector. The SDF is also often used to support sugar buffer-stocks operations, provide a transport subsidy for sugar exports, and provide an interest subsidy on loans for the installation of power generation and ethanol production plants. In March 2008, the GOI enacted the Sugar Development Fund (Amendment) Bill, 2008 that enables the government to include the use of the funds for debt restructuring and soft loans to the sugar mills.

The GOI follow a policy of partial market control and dual pricing for sugar. The local sugar mills are required to supply 20 percent of their production to the government as 'levy sugar' at below-market prices, which the government distributes through the Public Distribution System (PDS) to its below-poverty line population at subsidized rates. Mills are allowed to sell the balance of their production as 'free sugar' at market prices. However, the sale of free-sale sugar and levy sugar is administered by the government through periodic quotas, designed to maintain price stability in the market.

On March 12, 2009 the central government advised the state governments to impose stock and turnover limits on traders to prevent hoarding of sugar. Khandsari sugar has also been brought under the ambit of stockholding and turnover limit from July 17, 2009. Most state governments imposed stock and turnover control orders in their respective states. On August 22, 2009, the government imposed stock holding limits on large consumers (food and beverage companies) who consume more than 1.0 ton of sugar per month. Initially these consumers were asked to maintain stock necessary to meet not more than 20 days requirement; which was further lowered to 10 days requirements in February 2010. These limits are effective up to Sept 30, 2010. With the improvement in domestic sugar supplies, there is growing pressure from the domestic sugar mills and traders to remove these stock limits.

In May 2001 the government allowed futures trading in sugar, and three national exchanges have been given permission to engage in sugar futures trading. However, in May 2009, the government suspended futures trading in sugar until December 2009, which has been subsequently extended till September end 2010.

Ethanol Program

India's ethanol program is based on producing ethanol from sugar molasses, a by-product of the sugar industry and not directly from sugarcane or corn as in most countries.

Thailand

Sugarcane

Sugarcane production for 2009/10 is lower than expected at 69.0 million tons due to drier-than-expected weather condition in major growing area. Average yield is revised down to 65.7 tons/hectare but is still higher than the previous year. Also, 2009/10 sugarcane production is larger than the previous year's due to acreage expansion. However, the dry weather affected sugar content, which is down significantly - by 7.0 percent from the previous year - to 100.6 kg/ton of cane.

Sugarcane production for 2010/11 is forecast to increase by approximately 3.0 percent in anticipation of acreage expansion. Farmers will likely shift to sugarcane as current farm-gate prices surged to record 1,200 baht/ton ($38/ton), up 26.0 percent from the support prices, particularly in the northeast.

However, some farmers cannot shift to sugarcane due to limited supplies of sugarcane seed. Meanwhile, average yield and sugar content will likely remain unchanged in anticipation of continued unusual weather conditions during the early stages of cultivation until late May 2010 due to the El Nino phenomenon.

Sugar

Sugar production for 2009/10 is revised downward to 6.9 million tons and down 3.6 percent from the previous year due to lower-than-expected sugarcane production. In addition, sugar content declined significantly to around 100.6 kg/ton of cane, as compared to 108.13 kg/ton of cane in the previous year.

Sugar production for 2010/11 is forecast to recover to 7.2 million tons, up 3 percent from the previous year, in anticipation of bumper sugarcane crop.

Consumption

Sugarcane in both 2009/10 and 2010/11 will be primarily used for sugar production despite continued increase in gasohol consumption (a mixture of regular gasoline and ethanol). Sugar prices remain attractive, as compared to ethanol. Presently, there are 17 ethanol plants with production capacity of 2.9 million liters per day. They are primarily molasses-based ethanol. Only one of them is sugarcane-based ethanol plant which came on line last year. Presently, it is working at less than its full capacity of 200,000 liters/day (30 million liters/year). This plant has a daily milling volume of 5,000 tons of sugarcane that comes from contracted farming of 9,600 hectares in the northern region. Meanwhile, tapioca-based ethanol plants increased to five plants with a production capacity of 780,000 liters/day, accounting for approximately 30 percent of total ethanol production capacity.

Sugar consumption for both 2009/10 and 2010/11 are forecast to continue to increase in anticipation of strong economic recovery in 2010 and 2011 with annual growth of 3.0 – 5.0 percent. In addition, domestic sugar prices will likely ease in the second half of 2010 driven down by shrink global sugar prices. Presently, world sugar prices are trending downward in anticipation of production recovery in India and Brazil. Global raw sugar prices have dropped significantly back to normal averages of 16-17 cents/lb in April 2010, as compared to record 30 cents/lb in February 2010. Per capita consumption of sugar is considerably high at 30 kilogram/year.

Trade

Sugar exports for 2008/09 increased to 5.3 million tons, up 8 percent from the previous year. The increase reflected a surge in white and refined sugar exports, up 35 percent from the previous year due to tight exportable supplies of major exporting countries, India in particularly. India also imported record 327,560 tons of Thai white and refined sugar due to insufficient domestic supplies resulting from drought.

Sugar exports for 2009/10 are revised down to 5 million tons, down 6 percent from the previous year due to a contraction in sugar production. Raw and refine sugar exports are expected to decline significantly in anticipation of a recovery of sugarcane crops in major exporting countries including India. However, Thailand is able to fulfill the 2010 US tariff quota of 14,743 metric tons (raw value) and probably fulfill an additional allocation of 1,214 metric tons.

Sugar exports for 2010/11 are forecast to recover, anticipating an increase of 4-5 percent due to a bumper sugarcane crop. Sugar exports to Asian countries, which are Thailand's primary markets, will continue to increase driven by the implementation of new trade agreements. Some of these agreements allow sugar to enter duty free, particularly for South Korea and Malaysia. Meanwhile, Indonesia will likely remain the largest market for Thai sugar exports despite the fact that sugar is on the highly sensitive list under the ASEAN Free Trade Agreement (AFTA), due to transportation cost advantage. Presently, the tariff rate for sugar imports into Indonesia is 30 percent for raw sugar and 40 percent for refined sugar and will be cut to 5 and 10 percent respectively by 2015. In addition, in the Philippines sugar is also under the sensitive list under AFTA, with a 38-percent tariff rate which will be reduced to 5 percent in 2015.

Sugar imports into Thailand are duty free under AFTA, effective January 1, 2010. Meanwhile, imports from WTO member countries are at 65 percent tariff rate with a quota of 13,760 tons. The out-of-quota tariff is 94 percent. However, Thailand's imports of sugar will remain marginal in 2009/2010 and 2010/2011 due to sufficient domestic supplies.

China

Sugar Cane

Sugar cane area for 2010/11 is forecast at 1.85 million hectares, up 8 percent from 2009/10. Sugar cane area is estimated to account for 86 percent of the total sugar crop area in 2010/11. Guangxi remains the dominant sugar cane producing province, followed by Yunnan, Guangdong, and Hainan provinces. Guangxi's output is estimated to account for 65 percent of China's sugar production in 2009/10.

The 2009/10 average sugar price rose 40 percent from the previous year due to a 13 percent drop in domestic sugar production. In 2008/09 and 2009/10, the purchase price was unchanged because sugar prices declined due to record production in 2007/08. Consequently, the total cane acreage in 2009/10 is estimated two percent lower than the previous year. During crushing season, beginning in November 2009, mills were concerned by the short supply of cane due to drought damage. To encourage the expansion of the sugar cane area or competing for sourcing more cane sugar, the sugar mills in Guangxi raised the cane price by 18 percent during the late stages of 2009/10 in comparison to the previous year.

Sugar crop production (including cane and beet) is all located in interior, less economic prosperous provinces. Using Guangxi as an example, cane sugar production is a pillar industry in the province, a major contributor for provincial revenue and remains a stable source of income for farmers. As farmers in Guangxi do not own the sugar mills or have long term contracts, farmers have the freedom to plant the crop they deem most profitable. Thus, sugar mills must remain cognizant of competing crops and relative crop returns in order to maintain planted area. Sugar cane is a more drought resistant crop compared with grains or tubers, therefore many local farmers favor it for this reason. As local governments benefit from taxation on sugar mills but not from most other crops, there is an incentive for local governments to lend more support for local cane production. To ensure a reasonable income for cane farmers, the provincial government sets a guidance price for cane purchase. Due to a government guidance price for cane sugar purchase, the sugar cane price is less volatile than other crops. Additionally, most cane is produced in remote and poverty-stricken regions in the province where other crops are not an option due to transportation issues.

In 2009/10, the price for inputs, such as agricultural chemicals and fuel, is estimated to be 10 percent higher than the previous year. However, labor costs are expected to see the steepest rise as farmers report an average rise of 35 percent in labor cost for harvesting and even a 100 percent increase for labor costs during the prime harvest time. The labor cost for harvest ranges from RMB 60/day to RMB 90/day in 2009/10, while it averaged about RMB 45/day in Guangxi province in 2008/09. The cane is planted and harvested manually in China. Due to the small size of the land plots, mechanized planting or harvest is not practical for sugar cane production except on a few large state farms. The normal workload of one laborer for manually harvesting is one ton/day. Before harvest, to boost the yield, labor is also needed to manually peel off the cane leaves to reduce the damage of leaf borne diseases and increase exposure to sunshine.

China Sugar Cane/Beet/Starch Sweetener Production Regions

Given the limited arable land in China, the sector now focuses more on yield improvement rather than relying on unrealistic acreage expansion. According to local agricultural departments, this is also becoming imperative for the sector because the dominant cane varieties have degraded over the past decade due to bad or no rotation. For example, in Guangxi the “Tai (Taiwan) 22” variety has been the dominant variety for a decade and now the variety covers more than 90 percent of total cane acreage in the province. According to industry sources, the variety recently became more prone to disease and pest damage.

At the beginning of each marketing year, provincial governments in the southern sugar cane production regions announce a pre-set (floor) purchase price for cane. The pre-set purchase price is guidance for millers when they purchase cane from the farmers. If the sugar price increases during the marketing year, sugar mills might raise the cane price voluntarily or pay their contracted cane farmers a bonus. In 2009/10, the average cane price in four major producing provinces was $46.8/ton (RMB 319/ton). In Guangxi province, the final cane purchase price received by cane farmers is estimated at $47.8/ton (RMB 325/to) in 2009/10, 18 percent higher than the previous year.

In addition, the mills, if anticipating a smaller crop and higher sugar price, will voluntarily offer more assistance to cane farmers, such as offering discounted fertilizer, a subsidy on machinery used for plowing before planting or more investment for water irrigation facilities.

The yield in 2009/10 for cane is estimated at 65 tons/ha, down 8 percent from the previous year, due to drought damage to yield. In 2009/10, adverse weather patterns such as prolonged drought in southern China reduced yield for cane For 2010/11; the extended dry season delayed the planting progress for sugar cane. However, the concern is diminishing as the cane producing areas in the southern provinces received repeated rains since April.

Sugar Beet

Sugar beet area for 2010/11 is forecast at 280,000 hectares, up 51 percent from 2009/10. The key determining factor in sugar beet production is that there is no government set purchase price for sugar beets, while competing grain and oilseed crops are supported by government floor prices or purchase programs. When the sugar price fell in the beginning of 2008/09, mills lowered their purchase price for beet accordingly. This made sugar beets less attractive to farmers in 2009/10. An estimated 25 percent drop in acreage in 2009/10, combined with reduced yields by adverse weather pattern, has resulted in a 35 percent drop in sugar beet production in 2009/10. Due to lack of beets to utilize, several beet sugar mills in Heilongjiang and Inner Mongolia stopped operations in 2009/10. In 2010/11, prompted by the rising sugar price, sugar mills announced a higher beet price before the planting season to contracting more land for beet production. The contracting price for 2010/11 averages $55.2/ton, (or RMB 376/ton), 20 percent higher than the previous year. For this reason, the planted area in 2010/11 is forecast to rebound to 34 percent above the abnormal 2009/10 planted area and 13 percent above the 2008/09 area.

In Xinjiang province, the largest beet sugar producer in China, the beet price in 2010/11 is set at $48.50/ton (or RMB 330/ton), 18 percent higher than the previous year. The beet price in 2009/10 averaged about $41.20/ton (RMB 280/ton), seven percent lower than the previous year.

Sugar production

Total sugar output for 2010/11 is forecast to reach 14 million tons (raw value), 21 percent higher than 2009/10. Cane sugar output for 2010/11 is forecast at 12.9 million tons, 18 percent higher than 2009/10 due to an estimated eight percent increases in cane acreage and close to average yield. Assuming a normal beet yield, beet sugar output is forecast at 1.07 million tons in 2010/11, 79 percent higher than 2009/10 due to a forecast 51 percent rise in acreage. The top five producing provinces are: Guangxi, Yunnan, Guangdong, Hainan and Xinjiang. Their output is estimated to account for 95 percent of national total sugar output in 2009/10. Production in 2009/10 is estimated at 11.6 million tons (raw value), 13 percent lower than the previous year due to a drop in both cane and beet yield.

The normal crushing season in Xinjiang and Heilongjiang Provinces started in October and cane sugar mills will start operation in November. Due to the shortfall in beet and cane production, the crushing season in 2009/10 was about one month shorter than a normal year. According to industry sources, the normal length of the crushing season spans 120 days. Most of the sugar mills ended their operation by the end of March in 2010, while their operation ended in late April in 2008/09 and in May in 2007/08, respectively.

The average production cost for cane sugar in Guangxi was estimated at $566/ton (RMB 3,850/ton) in 2009/10, while it was $478/ton (RMB 3,250/ton) in 2008/09. Higher prices for cane, fuel and labor are the major factors that boosted the production cost in 2009/10.

To stabilize the market prices and ensure adequate supply, either at the central or provincial level, the government manages a reserve program to adjust the market price movement. The National Development and Reform Commission is the leading agency in making the decision on the scale of the program and the timing of the purchase and auction of sugar reserves. For example, in 2009/10, at the beginning of the crushing season, the National Development & Reform Commission and People's Bank of China jointly announced the plan to extend short term loans for the industry to purchase 2.3 million tons of refined sugar from the market to store as a temporary industrial reserve in December 2009. Among the total industrial reserve, 1 million tons was allocated to Guangxi province, while the rest was allocated to other eight producing provinces including Yunnan, Guangdong, Hainan, Xinjiang, Heilongjiang, Inner Mongolia, Fujian and Hunan. In 2008/09 the industrial reserve totaled 2.8 million tons. The loan normally lasts six months and in a sluggish marketing situation it can help alleviate the sector's need to pay cash to cane farmers and maintain smooth production operations.

In 2009/10, due to a shortfall in production and rising domestic sugar price, few mills applied for the short term loan to join the temporary industrial reserve program. Instead, to curb the rising sugar price, the central government released a total of 1.12 million tons white sugar from state reserves during four auctions starting in December 2009.

Consumption

Sugar consumption for 2010/11 is forecast at 15.5 million tons (raw value), 4 percent higher than 2009/10. Total per capita natural sugar consumption in 2009/10 is estimated at about 11 Kg (raw value). According to an estimate by China Sugar Association, food processing, beverage, and pharmaceutical industries are the largest consumers of sugar, accounting for 65 percent of total sugar consumption in 2009/10. The remaining 35 percent of consumption is at a household level or in food service. Growth in sugar consumption is mostly attributed to the rapidly growing processed food and beverage sectors and catering services. The growth rate of these sectors is estimated to exceed 10 percent every year.

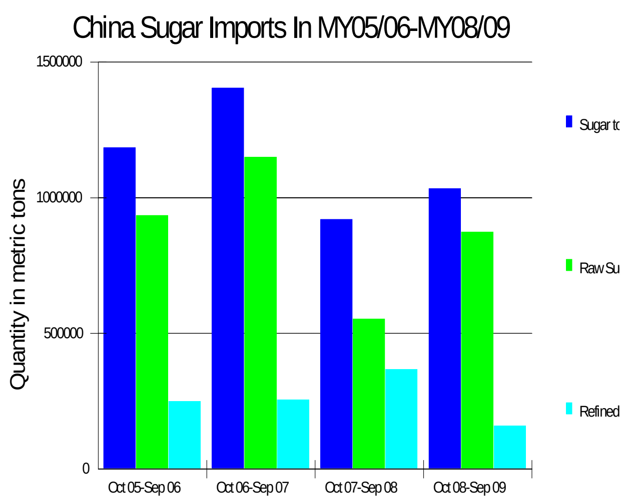
Starch sweeteners are often used in beverage, confectionary, and bakery production as a substitute for sugar. In 2009/10, due to the 40 percent rise in sugar price, starch sweeteners became competitive versus cane and beet sugar. According to industry sources, starch sugar output in 2009 is estimated to have risen 15 percent over the previous year. During the marketing year, sugar use in the food processing and beverage sector is periodically substituted by starch sweeteners when a favorable price appears for corn.

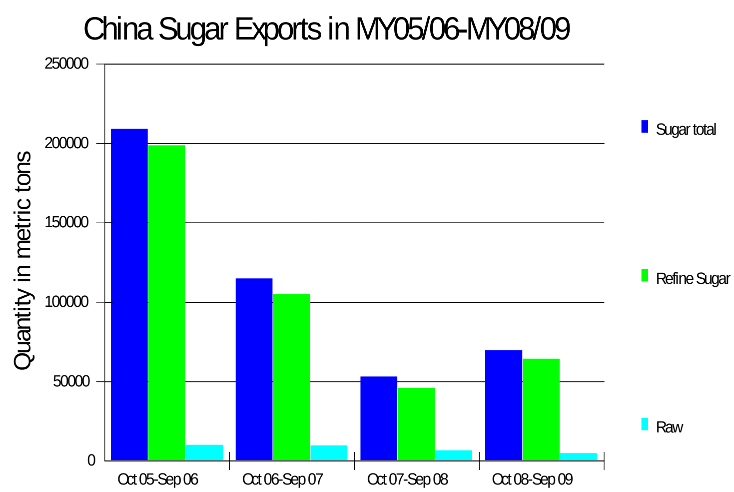
Trade

Imports for 2010/11 are forecast at 1.5 million tons, 400,000 tons higher than estimated 2009/10 imports. Imports usually start to arrive after the crushing season ends and the domestic price starts to increase. If there appears a favorable price for international raw sugar, private traders will use their Tariff Rate Quota (TRQ) allocations. In timing of their imports, the private traders also need to consider the government timing of state sugar reserve auctions. As these auctions sometime function to set a price ceiling on domestic sugar prices, while making sugar imports less price competitive. China's sugar imports have averaged about 1.0 million tons in recent years. The TRQ for 2009 is 1.95 million tons, 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 World Trade Organization (WTO) obligations.

As stipulated in China's WTO accession agreement, 30 percent of the TRQ (585,000 tons) is reserved for non-state trading enterprises and the remaining 70 percent is assigned to state trading enterprises. Each year, China imports about 450,000 tons of raw sugar (state trade) from Cuba under a longstanding bilateral agreement signed in the 1950's.

Regarding the 30 percent of the TRQ (585,000) for non-state trading enterprises, trade sources report that the allocation of amounts they receive in most cases is not commercially viable for a Panamax vessel shipment. Trade sources complain that this practice has functioned to discourage the use of the TRQ. Only when a substantial price difference appears between Chinese and international markets do the private traders start to consider imports. For state trading, NDRC decides on the use of State TRQ and the decision will be based on NDRC's evaluation of the domestic market situation in terms of supply and prices movement.





Source: WTA

Contact
Robert Knapp
USDA/FAS/OGA/ISAD
robert.knapp@fas.usda.gov
202-720-4620

World Centrifugal Sugar Production, Supply and Distribution - (Oct/Sept Marketing Year)

1,000 Metric Tons, Raw Value

Country Mktg Year	Beginning Stocks	Total Sugar Production	Total Imports	Total Supply	Total Exports	Total Use	Ending Stocks
SUG - North America							
Canada							
2008/09	346	50	1,350	1,746	60	1,330	356
2009/10	356	125	1,300	1,781	70	1,350	361
2010/11	361	125	1,300	1,786	70	1,350	366
Mexico							
2008/09	1,975	5,260	160	7,395	1,367	5,540	488
2009/10	488	4,900	970	6,358	490	5,000	868
2010/11	868	5,450	150	6,468	500	4,950	1,018
United States							
2008/09	1,506	6,833	2,796	11,135	123	9,652	1,360
2009/10	1,360	7,118	2,286	10,764	136	9,512	1,116
2010/11	1,116	7,407	1,891	10,414	136	9,512	766
Total SUG - North America							
2008/09	3,827	12,143	4,306	20,276	1,550	16,522	2,204
2009/10	2,204	12,143	4,556	18,903	696	15,862	2,345
2010/11	2,345	12,982	3,341	18,668	706	15,812	2,150
SUG - Caribbean							
Cuba							
2008/09	223	1,250	100	1,573	725	710	138
2009/10	138	1,000	132	1,270	490	700	80
2010/11	80	1,100	110	1,290	500	700	90
Dominican Republic							
2008/09	35	510	12	557	217	330	10
2009/10	10	520	70	600	244	332	24
2010/11	24	500	30	554	202	335	17
Other SUG - Caribbean							
2008/09	134	235	454	823	212	468	143
2009/10	143	185	445	773	173	469	131
2010/11	131	186	460	777	165	477	135
Total SUG - Caribbean							
2008/09	392	1,995	566	2,953	1,154	1,508	291
2009/10	291	1,705	647	2,643	907	1,501	235
2010/11	235	1,786	600	2,621	867	1,512	242
SUG - Central America							
Guatemala							
2008/09	609	2,381	0	2,990	1,654	744	592
2009/10	592	2,415	0	3,007	1,654	807	546
2010/11	546	2,474	0	3,020	1,680	750	590
Other SUG - Central America							
2008/09	384	2,084	2	2,470	1,004	1,108	358
2009/10	358	2,167	11	2,536	1,028	1,148	360
2010/11	360	2,209	124	2,693	1,066	1,183	444
Total SUG - Central America							
2008/09	993	4,465	2	5,460	2,658	1,852	950
2009/10	950	4,582	11	5,543	2,682	1,955	906
2010/11	906	4,683	124	5,713	2,746	1,933	1,034
SUG - South America							
Brazil							
2008/09	215	31,850	0	32,065	21,550	11,650	-1,135
2009/10	-1,135	36,400	0	35,265	24,300	11,800	-835
2010/11	-835	40,700	0	39,865	28,400	12,000	-535

World Centrifugal Sugar Production, Supply and Distribution - (Oct/Sept Marketing Year) (Continued)

1,000 Metric Tons, Raw Value

Country Mktg Year	Beginning Stocks	Total Sugar Production	Total Imports	Total Supply	Total Exports	Total Use	Ending Stocks
Colombia							
2008/09	170	2,277	139	2,586	585	1,585	416
2009/10	416	2,200	40	2,656	730	1,605	321
2010/11	321	2,200	40	2,561	740	1,625	196
Argentina							
2008/09	105	2,420	21	2,546	580	1,740	226
2009/10	226	2,230	10	2,466	760	1,740	-34
2010/11	-34	2,260	5	2,231	340	1,770	121
Other SUG - South America							
2008/09	1,313	3,336	1,487	6,136	512	4,104	1,520
2009/10	1,520	3,482	1,513	6,515	541	4,386	1,588
2010/11	1,588	3,506	1,464	6,558	475	4,479	1,604
Total SUG - South America							
2008/09	1,803	39,883	1,647	43,333	23,227	19,079	1,027
2009/10	1,027	44,312	1,563	46,902	26,331	19,531	1,040
2010/11	1,040	48,666	1,509	51,215	29,955	19,874	1,386
SUG - Western Europe							
EU-27							
2008/09	3,130	14,014	3,173	20,317	1,331	16,754	2,232
2009/10	2,232	16,683	3,450	22,365	2,200	16,800	3,365
2010/11	3,365	13,885	3,700	20,950	1,460	16,900	2,590
Other SUG - Western Europe							
2008/09	330	275	389	994	45	640	309
2009/10	309	300	395	1,004	4	651	349
2010/11	349	240	382	971	45	641	285
Total SUG - Western Europe							
2008/09	3,460	14,289	3,562	21,311	1,376	17,394	2,541
2009/10	2,541	16,983	3,845	23,369	2,204	17,451	3,714
2010/11	3,714	14,125	4,082	21,921	1,505	17,541	2,875
SUG - Eastern Europe							
Russia							
2008/09	550	3,200	3,100	6,850	200	5,990	660
2009/10	660	3,500	2,110	6,270	200	5,560	510
2010/11	510	3,315	2,800	6,625	200	5,865	560
Ukraine							
2008/09	580	1,710	78	2,368	37	2,100	231
2009/10	231	1,380	480	2,091	5	1,950	136
2010/11	136	1,700	360	2,196	5	2,000	191
Other SUG - Eastern Europe							
2008/09	501	1,321	1,295	3,117	1,012	1,738	367
2009/10	367	1,275	1,413	3,055	833	1,781	441
2010/11	441	1,252	1,361	3,054	746	1,784	524
Total SUG - Eastern Europe							
2008/09	1,631	6,231	4,473	12,335	1,249	9,828	1,258
2009/10	1,258	6,155	4,003	11,416	1,038	9,291	1,087
2010/11	1,087	6,267	4,521	11,875	951	9,649	1,275
SUG - Africa							
South Africa							
2008/09	227	2,350	168	2,745	1,185	1,530	30
2009/10	30	2,254	200	2,484	870	1,565	49
2010/11	49	2,250	230	2,529	800	1,595	134
Other SUG - Africa							
2008/09	2,602	6,042	7,446	16,090	2,854	10,410	2,826

World Centrifugal Sugar Production, Supply and Distribution - (Oct/Sept Marketing Year) (Continued)

1,000 Metric Tons, Raw Value

Country Mktg Year	Beginning Stocks	Total Sugar Production	Total Imports	Total Supply	Total Exports	Total Use	Ending Stocks
2009/10	2,826	6,257	7,166	16,249	2,913	10,831	2,505
2010/11	2,505	6,511	7,411	16,427	2,893	10,999	2,535
Total SUG - Africa							
2008/09	2,829	8,392	7,614	18,835	4,039	11,940	2,856
2009/10	2,856	8,511	7,366	18,733	3,783	12,396	2,554
2010/11	2,554	8,761	7,641	18,956	3,693	12,594	2,669
SUG - MiddleEast							
Turkey							
2008/09	405	2,100	5	2,510	5	2,000	505
2009/10	505	2,260	5	2,770	40	2,000	730
2010/11	730	2,000	5	2,735	40	2,000	695
Egypt							
2008/09	544	1,612	1,382	3,538	100	2,748	690
2009/10	690	1,820	978	3,488	0	2,629	859
2010/11	859	1,830	1,120	3,809	0	2,800	1,009
Other SUG - MiddleEast							
2008/09	2,284	735	8,140	11,159	3,061	6,531	1,567
2009/10	1,567	1,010	8,418	10,995	2,866	6,576	1,553
2010/11	1,553	1,020	8,341	10,914	2,916	6,716	1,282
Total SUG - MiddleEast							
2008/09	3,233	4,447	9,527	17,207	3,166	11,279	2,762
2009/10	2,762	5,090	9,401	17,253	2,906	11,205	3,142
2010/11	3,142	4,850	9,466	17,458	2,956	11,516	2,986
SUG - Asia - Oceania							
Japan							
2008/09	340	950	1,452	2,742	2	2,375	365
2009/10	365	920	1,416	2,701	2	2,400	299
2010/11	299	920	1,502	2,721	2	2,400	319
India							
2008/09	9,150	15,960	2,786	27,896	176	24,200	3,520
2009/10	3,520	19,460	4,500	27,480	5	23,500	3,975
2010/11	3,975	24,700	1,200	29,875	20	24,500	5,355
China							
2008/09	3,965	13,317	1,077	18,359	75	14,500	3,784
2009/10	3,784	11,566	1,100	16,450	65	14,900	1,485
2010/11	1,485	14,020	1,500	17,005	78	15,500	1,427
Thailand							
2008/09	2,651	7,200	0	9,851	5,295	2,000	2,556
2009/10	2,556	6,940	0	9,496	5,000	2,100	2,396
2010/11	2,396	7,150	0	9,546	5,200	2,200	2,146
Australia							
2008/09	400	4,814	9	5,223	3,522	1,250	451
2009/10	451	4,700	9	5,160	3,600	1,250	310
2010/11	310	4,980	9	5,299	3,700	1,250	349
Pakistan							
2008/09	1,163	3,512	125	4,800	75	4,175	550
2009/10	550	3,420	1,030	5,000	70	4,200	730
2010/11	730	3,770	700	5,200	70	4,280	850
Indonesia							
2008/09	590	2,053	2,197	4,840	0	4,500	340
2009/10	340	1,910	2,600	4,850	0	4,400	450
2010/11	450	1,911	2,910	5,271	0	4,900	371
Philippines							
2008/09	547	2,100	0	2,647	225	2,100	322

World Centrifugal Sugar Production, Supply and Distribution - (Oct/Sept Marketing Year) (Continued)

1,000 Metric Tons, Raw Value

Country Mktg Year	Beginning Stocks	Total Sugar Production	Total Imports	Total Supply	Total Exports	Total Use	Ending Stocks
2009/10	322	2,000	150	2,472	154	2,150	168
2010/11	168	2,200	0	2,368	142	2,150	76
Other SUG - Asia - Oceania							
2008/09	2,242	1,789	8,826	12,857	1,071	9,869	1,917
2009/10	1,917	1,791	9,101	12,809	1,075	10,053	1,681
2010/11	1,681	2,065	8,876	12,622	1,048	10,063	1,511
Total SUG - Asia - Oceania							
2008/09	21,048	51,695	16,472	89,215	10,441	64,969	13,805
2009/10	13,805	52,707	19,906	86,418	9,971	64,953	11,494
2010/11	11,494	61,716	16,697	89,907	10,260	67,243	12,404
World							
World							
2008/09	39,216	143,540	48,169	230,925	48,860	154,371	27,694
2009/10	27,694	152,188	51,298	231,180	50,518	154,145	26,517
2010/11	26,517	163,836	47,981	238,334	53,639	157,674	27,021
Unrecorded							
2008/09				691			
2009/10				-780			
2010/11				5,658			

5/21/2010 12:23:31 PM

Footnotes

1/ The U.S. PS&D estimates conform to those released in the World Agricultural Supply and Demand Estimates (WASDE) 'miscellaneous' category allocated to domestic consumption. The U.S. PS&D includes Puerto Rico.

2/ The European Union (EU) includes French Overseas Departments of Reunion, Guadeloupe, and Martinique. EU trade data does not include intra-EU trade. Beginning 2004/05 the PS&D reflects the EU enlargement by accession of the following ten countries. Latvia, Lithuania, Estonia, Poland, Hungary, Czech Republic, Slovakia, Slovenia, Malta, and Cyprus. As a result of this enlargement, from 15 countries to 25 countries, the ending stock figure for 2003/04 will not carry over to the beginning stock figure for 2004/05. Data prior to 2004/05 reflects the countries comprising the EU at that time. The PSD for the EU-25 ends with marketing year 2005/06. The series picks up with the EU-27 beginning marketing year 2006/07. The EU-27 contains two new countries Bulgaria and Romania.

3/ Includes traditional Eastern European countries, Hungary, Czech Republic, Slovakia, Balkans, Baltic's, Armenia, and Georgia. Beginning 2004/05 the following countries are removed from this list upon their accession to the EU: Latvia, Lithuania, Estonia, Poland, Hungary, Slovakia, and Slovenia. Note that data for Poland is zeroed out for 2004/05 because it is included in the European Union.

4/ Includes all of continental Africa except Egypt.

5/ Includes Bahrain, Kuwait, Oman, Qatar, and the United Arab Emirates.

6/ Indian data includes production of khandsari sugar, a native type, semi-white centrifugal sugar. Estimated output of Khandsari sugar in thousand of metric tons (raw value equivalent) is as follows: 2002/03 - 590; 2003/04 - 620; 2004/05 - 683; 2005/06 - 683; 2006/07 - 500; 2007/08 - 425; 2008/09 - 435; 2009/10 -343; 2010/11- 435

7/ Includes Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

8/ The 'Unrecorded' category is a balancing mechanism to equalize world exports and imports. It is assumed there is a certain quantity of trade that will not be recorded, with the result that imports and exports will differ by a certain amount.

To view country crop years click on the following URL:
http://www.fas.usda.gov/htp/sugar/tmarketingyears.pdf