Agribusiness & Applied Economics Report No. 614 September 2007

2007 Outlook of the U.S. and World Sugar Markets, 2006-2016

Won W. Koo
Richard D. Taylor

Center for Agricultural Policy and Trade Studies
Department of Agribusiness and Applied Economics
North Dakota State University
Fargo, North Dakota 58105-5636

ACKNOWLEDGMENTS

The authors extend appreciation to Andrew Swenson, and Jeremy Mattson for their constructive comments and suggestions. Special thanks go to Edie Nelson, who helped to prepare the manuscript**.** The authors assume responsibility for any errors of omission, logic, or otherwise.

This research is funded under a grant by the General Service Administration.

We would be happy to provide a single copy of this publication free of charge. You can address your inquiry to: Department of Agribusiness and Applied Economics, North Dakota State University, P.O. Box 5636, Fargo, ND, 58105-5636, Ph. 701-231-7441, Fax 701-231-7400, e-mail ndsu.agribusiness@ndsu.edu. This publication is also available electronically at this web site: http://agecon.lib.umn.edu/.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abstract

This report evaluates the U.S. and world sugar markets for 2006-2016 using the Global Sugar Policy Simulation Model. This analysis is based on assumptions about general economic conditions, agricultural policies, population growth, weather conditions, and technological changes.

Both the U.S. and world sugar economies are predicted to remain profitable over the next ten years mainly because higher world oil prices have increased the conversion of sugar into ethanol by Brazil, while other exporting countries have increased their production in response to those higher prices. Brazil is the largest exporter of sugar, and it is expected that the rate of increase in Brazilian sugar exports may be reduced due to high oil prices. World demand for sugar is expected to grow at a similar rate to world supply, resulting in Carribean sugar prices remaining near the 13.0 -15.0 cents /lb range throughout the forecast period. The U.S. wholesale price of sugar is projected to increase slightly from 29.5 cents/lb in 2006 to 29.8 cents/lb in 2016, if Brazil continues to convert sugar into ethanol. It is projected that Mexico will be able to export 416 thousand metric tons of sugar to the United States by 2016. World trade volumes of sugar are expected to increase throughout the forecast period.

Keywords: sugar, production, exports, consumption, ending stocks

Highlights

Total world sugar trade is projected to increase by 16.7% between 2006 and 2016 from 30.0 million metric tons to 35.0 million metric tons. Brazil's exports are projected to increase from 18.5 million metric tons in 2006 to 22.9 million metric tons in 2016 in spite of potential ethanol production from sugar cane. World sugar prices also are projected to decrease from 15.5 cents/lb in 2006 to 15.25 cents/lb in 2016. U.S. wholesale sugar price is projected to increase from 29.5 cents/lb in 2006 to 29.77 cents/lb in 2016.

U.S. sugar imports are predicted to decrease 18.0% over the 2006-2016 period because higher prices lead to increased domestic production assuming increased government allotments and limited exports by Mexico. U.S. sugar consumption is projected to increase 12.0% and ending stocks are predicted to increase 15.5%. However, the U.S. sugar industry could face some uncertainty, mainly because of the direction of the WTO negotiations, if the negotiations resumes and potential increases in sugar imports from Mexico.

Canada's production is predicted to increase slightly between 2006 to 2016. Canada's imports are expected to increase 22.5%. Consumption is predicted to increase 19.6%, and ending stocks are predicted to increase 17.4%.

Mexico's production is expected to increase by 14.6%, and exports are expected to increase to 0.4 million metric tons by 2016 due to increases in exports to the United States under the North American Free Trade Agreement (NAFTA).

The European Union's (EU) imports are predicted to increase to 3.1 million metric tons by 2016 due to the EU-25 sugar policy reform. Their production is predicted to decrease by 23.1% while consumption will increase 2.6%.

Production in India is predicted to increase 28.2%, while consumption is predicted to increase 20.1% for the 2006-2016 period. India should import about 2.3 million metric tons by 2016.

Exporting countries, such as Australia, Thailand, South Africa, and Brazil are predicted to increase their production and exports during the forecasting period.

Most importing countries, including Algeria, China, Egypt, and Indonesia are predicted to increase their imports for the 2006-2016 period.

2007 Outlook of the U.S. and World Sugar Markets, 2006-2016

Won W. Koo and Richard D. Taylor*

INTRODUCTION

Sugar is produced in over 100 countries worldwide. In most years, over 70% of world sugar production is consumed domestically, implying that only a small portion of production is traded internationally. A significant share of this trade takes place under bilateral long-term agreements or on preferential terms such as the European Union's (EU) Lome Agreement. Since only a small proportion of world production is traded freely, small changes in production and government policies tend to have large effects on world sugar markets. As a result, sugar prices have been very unstable in the world market.

During late 2005 and the first quarter of 2006, world sugar price increased from about $0.12/lb to over $0.18/lb because of increased use of sugarcane for ethanol production in Brazil. World sugar price fell to $0.12/lb in late 2006 and $0.11/lb by early 2007.

This report evaluates the U.S. and world sugar industry for 2006-2016 using the Global Sugar Policy Simulation Model developed by Benirschka et al. (1996). This model was run utilizing 2006 data. The outlook projection is based on an assumption that farm and trade policies adopted by sugar exporting and importing countries remain unchanged.

Sugarcane is a perennial grass that is produced in tropical and subtropical climate zones. It matures in 12 to 16 months. Once the cane is harvested, the sucrose starts breaking down. Thus, sugarcane mills are located close to the cane fields to minimize transport costs and sucrose losses. Mills convert sugarcane into raw sugar which is shipped to refineries for further processing. In contrast to raw sugar producing mills, refineries are unconstrained by seasonal production patterns and operate throughout the year. Unlike sugarcane, sugarbeets are an annual crop of temperate climate zones. Because of disease problems, sugarbeets are always grown in crop rotations. Since sugarbeets are bulky and costly to transport, beet processing facilities are located close to production. In contrast to sugarcane, sugarbeets are directly processed into refined sugar. Raw sugar is produced only from sugarcane.

Raw sugar and refined sugar are two different products. They are both traded internationally. Beet sugar producing countries export refined sugar, while cane sugar producing countries export either raw or refined sugar. In recent years, the share of raw sugar in total sugar exports has been about 50%.

---

*Professor of Agribusiness and Applied Economics and Director and Research Scientist, respectively, in the Center for Agricultural Policy and Trade Studies at North Dakota State University, Fargo.

OVERVIEW OF THE WORLD SUGAR INDUSTRY AND SUGAR POLICIES

For the 2002-2006 period, annual global sugar production was approximately 142 million metric tons with about 30% of production exported from its country of origin. The largest sugar producing region is Brazil, followed by the EU and India (Table 1).

Table 1. World Sugar Supply and Utilization, 2002 to 2006 Average

Country/ Region	Beet/ Cane	Consumption	Production	Net Exports	Ending Stocks	Per Capita Consumption
		----------1,000 metric tons, raw value-----------				Kg
Algeria	B	1,199	10	(1,117)	91	35
Australia	C	1,160	5,229	4,028	390	59
Brazil	C	10,490	27,367	16,920	383	57
Canada	B	1,391	103	(1,285)	195	42
China	B/C	11,430	11,011	(975)	1,872	9
Cuba	C	700	1,750	1,238	289	62
European Union	B	16,664	19,401	2,725	4,175	45
Eqypt	B/C	2,436	1,474	(443)	321	34
Former Soviet Union	B/C	6,030	2,282	(3,410)	596	20
India	C	20,006	20,006	313	8,309	17
Indonesia	C	3,660	1,907	(1,734)	1,238	17
Japan	B/C	2,238	895	(760)	382	18
Korea	-	1,205	0	(1,323)	142	25
Mexico	C	5,299	5,522	(42)	1,406	49
South Africa	C	1,575	2,540	971	713	36
Thailand	C	2,028	6,184	3,959	1,439	31
United States	B/C	8,318	6,865	(1,639)	1,396	58
Rest of World	B/C	43,944	29,602	(17,427)	13,152	19
World	B/C	139,772	142,149	46,545	36,491	21

Per capita sugar consumption was highest in Cuba followed by Australia, the United States, and Brazil. Per capita sugar consumption in the United States was 58 kg, which was above world average per capita consumption (21 kg). Per capita sugar consumption was lowest in China at 9 kg per capita, but that may increase substantially as per capita income increases. Annual global sugar consumption for the 2002-2006 period was 140 million metric tons.

The major sugar exporting countries were Brazil, Thailand, Australia, the EU, and Cuba. These countries accounted for 62% of global exports from 2002 to 2006. A relatively few number of countries dominate world sugar exports, but imports are less concentrated. Major importing countries were the Former Soviet Union (FSU), Indonesia, the United States, Canada, Korea, Algeria, and Japan. Imports by these countries accounted for about 44% of all sugar imports from 2002 to 2006. Under the Lome Convention, the EU was required to import sugar under preferential terms from certain African, Caribbean, and Pacific countries.

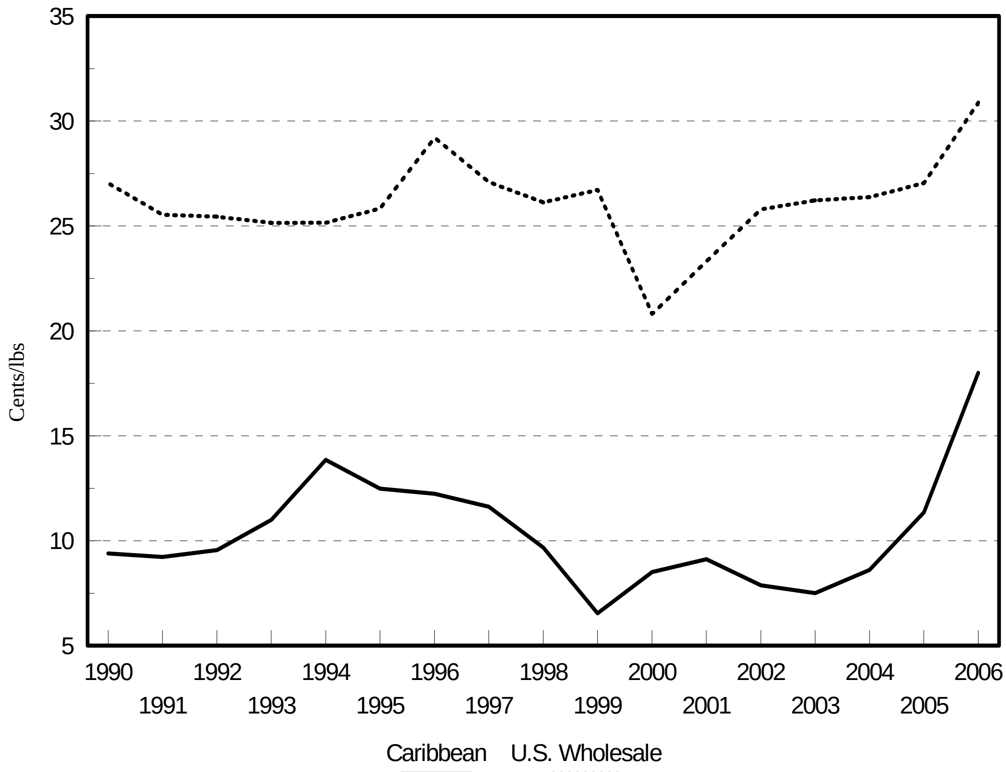

Figure 1. U.S. and World Sugar Prices

The Caribbean raw sugar price is usually considered to be the world market price for sugar. Except for years with high world market prices, there was a substantial wedge between the U.S. wholesale price of raw sugar and the world market price. Over the last decade, U.S. wholesale prices fluctuated between $0.22 and $0.29 per pound. World market prices ranged between $0.06 per pound and $0.18 per pound (Figure 1). Both real Caribbean raw sugar prices and U.S. raw sugar import prices had long-term downward trends but are increasing for the past 4-5 years. Figure 1 shows the dramatic price increase in Caribbean sugar price in late 2005 and 2006. In 2003, the price averaged $0.07/lb, but it had risen to $0.12/lb in 2005 and it was $0.18/lb in June 2006 before falling to $0.11/lb in 2007. The high Caribbean sugar price also increased the U.S. wholesale price to over $0.30/lb in 2006.

The volatility of world sugar prices could be due to the nature of supply response to price changes stemming from high fixed costs of sugar production. An increase in sugar production in response to rising sugar prices requires significant investments in processing facilities, and it takes some time until new production capacity becomes available. Once the facilities are in place, they tend to be used at full capacity to spread the fixed costs. Thus, when prices fall, production remains at full capacity. Sugar production is relatively unresponsive to price in the short run, however sugar price does respond to changes in consumption.

The United States produces both beet and cane sugar. Cane sugar is produced mainly in Florida, Louisiana, and Texas. Beet sugar is produced largely in the Great Lakes region, Upper Midwest, Great Plains, and far western states. Beet sugar production increased 19.6% from the 1990 to 2006, while cane sugar production increased 3.7% (Figure 2). U.S. total sugar production increased about 12.5% from 6.2 million metric tons in 1990 to 7.0 million metric tons in 2006 (Figure 3).

U.S. consumption of sugar increased 2.2% from 8.0 million metric tons in 1990 to 8.2 million metric tons in 2006 (Figure 4). The balance was imported from more than 40 countries. U.S. sugar imports decreased 71% from 4.5 million metric tons in 1974 to 1.3 million metric tons in 1987 and then increased to an average of 1.8 million metric tons during the 1990 to 2006 period. Under the North American Free Trade Agreement (NAFTA), Mexico currently is allowed to export 260,000 metric tons of sugar to the United States, and its exports to the United States will be unlimited beginning in 2008 when implementation of NAFTA is completed. Currently, Mexico has exported less than 100,000 metric tons of sugar into the United States for the last few years, due to production shortages. The U.S.-Central American Free Trade Agreement (CAFTA), which is a free trade agreement (FTA) currently with six Central American countries, provides additional sugar imports of 107,000 metric tons, with additional increases of 3,000 metric tons per year.

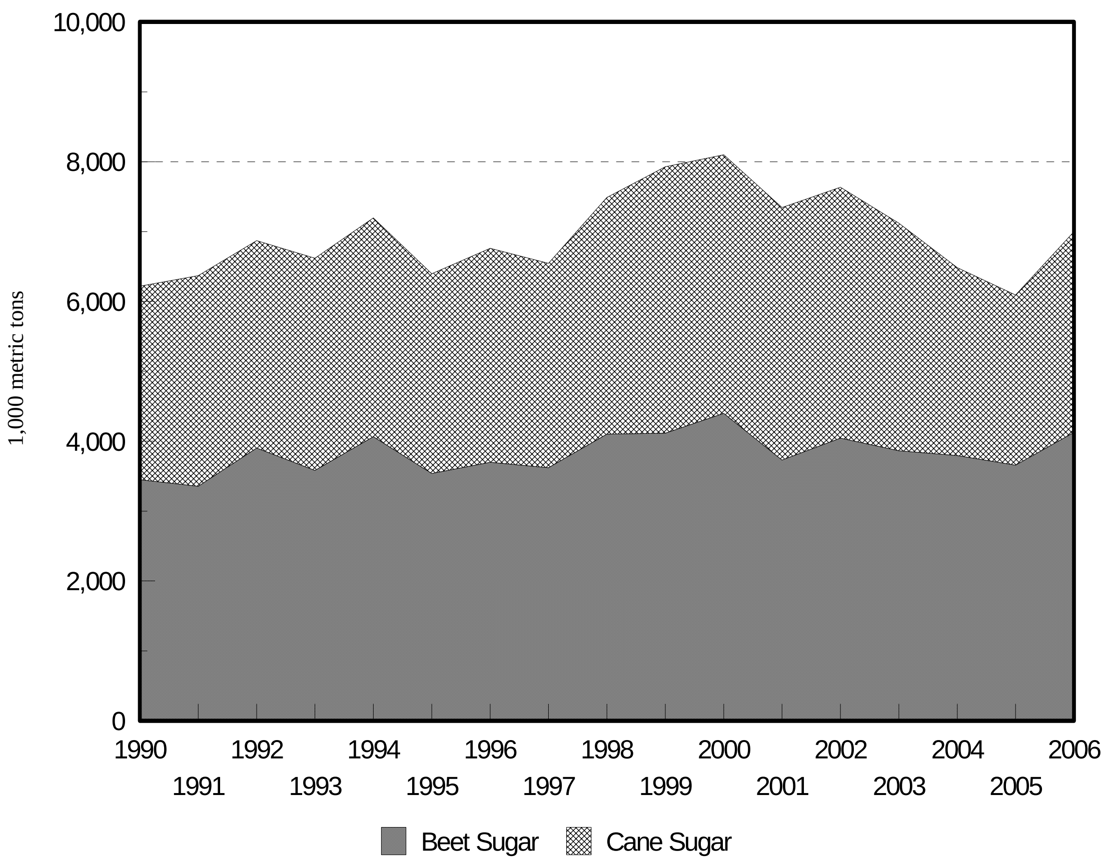

Figure 2. U.S. Beet and Cane Sugar Production

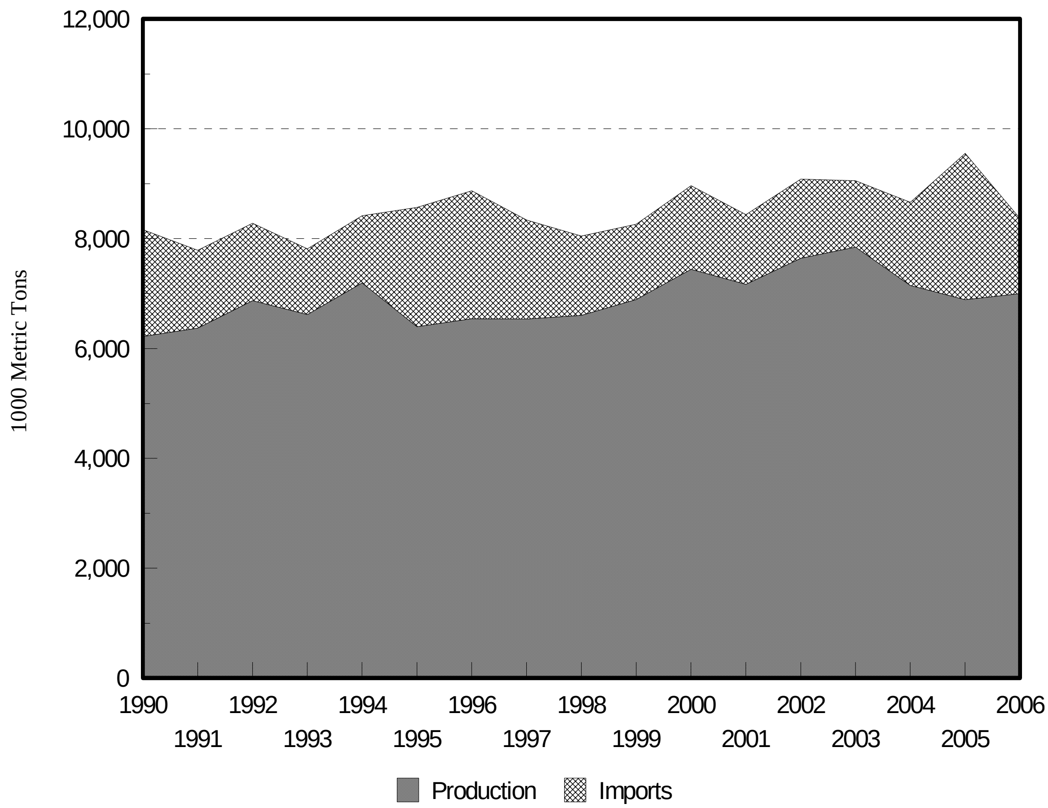

Figure 3. U.S. Sugar Production and Imports

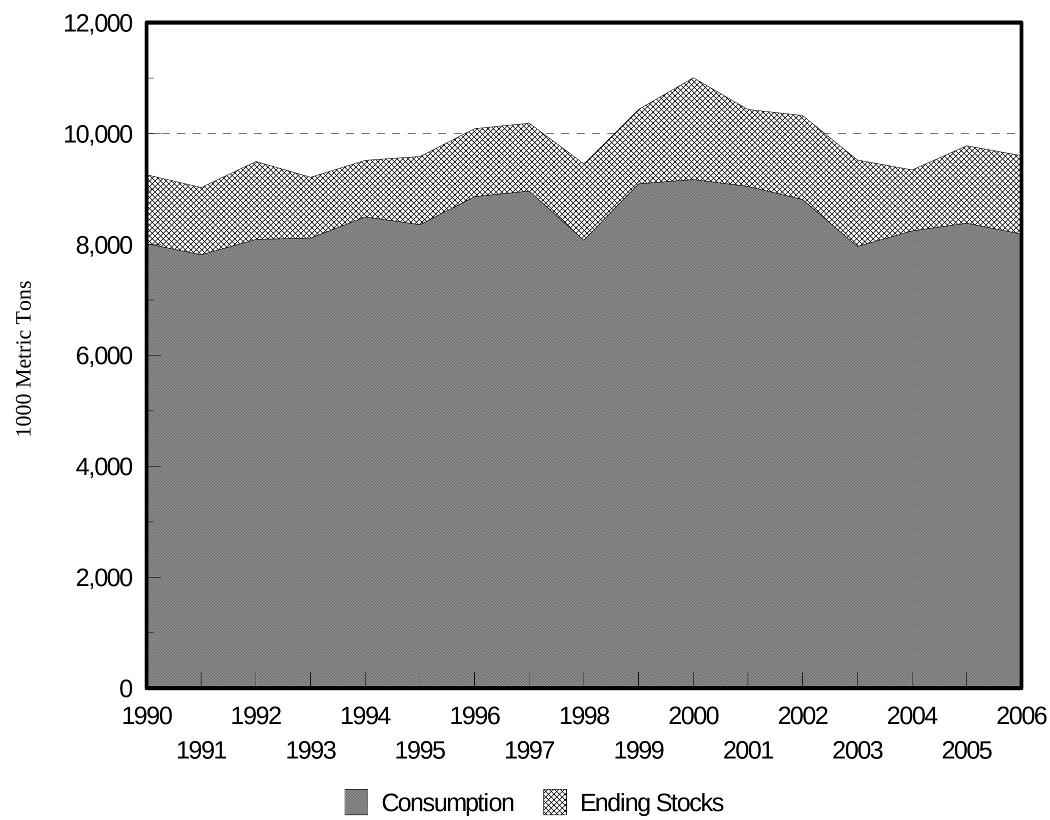

Figure 4. U.S. Consumption and Ending Stocks

U.S. Sugar Programs and Policies

The U.S. sugar program was established by the Food and Agricultural Act of 1981. Several modifications were made by the Food Security Act of 1985; the Food, Agriculture, Conservation, and Trade Act of 1990; the Federal Agriculture Improvement and Reform Act of 1996; and the Farm Security and Rural Investment (FSRI) Act of 2002.

The core policy tools in the program are the loan program, import restrictions, and production allotments. The main purpose of the loan program is to maintain a minimum market price for U.S. producers. Processors use sugar as collateral for loans from the U.S. Department of Agriculture (USDA). The program permits processors to store the sugar rather than sell it for lower than desired prices. Loans can be taken for up to nine months. Processors pay growers for delivered beets and cane, typically about 60% of the loan. Final payments are made and the loan is repaid after the sugar has been sold.

Under the FSRI Act, the sugar loan rate is set at 18 cents per pound for raw cane sugar and 22.9 cents per pound for refined beet sugar. Loans under the FSRI Act become recourse loans if the tariff rate quota (TRQ) is at 1.5 million metric tons or below, regardless of the price. When the TRQ is set above 1.5 million metric tons, the loans are nonrecourse. Under the nonrecourse loan, a processor can forfeit collateral (sugar) to the Commodity Credit Corporation (CCC) instead of loan repayment if market prices fall below the loan rates. Processors who obtain a nonrecourse loan must pay farmers an amount for their sugarbeets and sugarcane that is proportional to the loan value of sugar. This is the same as under previous legislation.

The Uruguay Round Agreement (URA) on agriculture made minor adjustments for sugar trade. U.S. import quotas on sugar were converted into TRQs, implying that a specified amount of sugar can be imported at the lower of two alternative duty rates. The amount of raw cane sugar subject to the lower duty rate must be no less than 1,117,195 metric tons in a fiscal year which was increased to 1,231,497 metric tons for 2005 due to production losses due to Hurricane Katrina. The minimum low-duty import of refined sugar is 22,000 metric tons. The minimum low-duty imports for raw and refined sugar add up to 1.256 million metric short tons raw value of sugar per year. The high duty (about 15.82 cents per pound) is imposed on the amount of sugar imported over the import quota. The first-tier duty ranges from zero to 0.625 cents per pound.

The second tier-duty for raw cane sugar was reduced from 17.62 cents per pound in 1995 to 15.82 cents per pound in 2000 under the URA. The duty for refined sugar was reduced from 18.6 cents per pound in 1995 to 16.21 cents per pound in 2000. The duties have remained constant since 2000.

The sugar quota has been allocated among more than 40 quota-holding countries, allowing imports of specific quantities of sugar at first-tier duty rates. The quota allocation is based on historical exports to the United States for the 1975 to 1985 period.

NAFTA allows a rapid reduction in the second-tier duty for Mexican sugar over the next several years. The second-tier duty for Mexican sugar will be reduced from 16.11 cents per pound in 1995 to zero in 2008. Duties for most countries will remain at 15.82 cents per pound for raw cane sugar and 16.21 cents per pound for refined sugar. This implies that Mexico is in a unique position to increase its exports of sugar to the United States above the allocated quota. Mexico produced 6.0 million metric tons of sugar in 2005 and consumed 5.4 million metric tons in the same year. Its net exports were 243 thousand metric tons for the year. If Mexico starts to use High Fructose Corn Sweetener (HFCS) for beverages, more of its sugar could be exported to the United States. Currently there are transportation and use taxes on HFCS in Mexico. Mexico has been declared an excess sugar producer which will allow additional exports into the United States.

The United States signed a trade agreement with the Central American countries of El Salvador, Guatemala, Honduras, Nicaragua, Costa Rica and the Dominican Republic. CAFTA allows 107,000 metric tons of additional sugar to be imported into the United States in the first year of implementation of the agreement, with additional increases of about 3,000 metric tons per year. This increase, however, does not have a significant impact on the price of U.S. sugar or world trade flows. Recent trade agreement and negotiations with Australia do not include increased sugar imports.

Domestic and Export Subsidies in the EU, South Africa, and Mexico

The basic tools of the EU's sugar policies are (1) import restrictions with limited free access for certain suppliers; (2) internal support prices that ensure returns to producers for fixed quantities of production and permit the maintenance of refining capacity; and (3) export subsidies for a quantity of domestically produced sugar.

EU member states allocate an "A" quota and a "B" quota to each sugar producing operation, each isoglucose producing operation, and each inulin syrup producing operation established in their territory. Current quota levels have been in place since the accession of Austria, Sweden, and Finland to the EU. The total EU sugar production quotas for A and B sugar are 11.98 million metric tons and 2.61 million metric tons, respectively. Any sugar that is produced by any member of the EU in excess of its yearly quota is considered "C-sugar." A and B sugar production is used for domestic consumption and for subsidized exports. C-sugar must be exported into the world market without subsidy or carried over into the next marketing year. In general, the EU's target price for white sugar is about 30 cents (Euro) per pound, and its intervention price is 28.72 cents (Euro) per pound. The EU's internal support is about 30% higher than that in the United States.

Since marketing year 1995, EU-subsidized exports of sugar to third-world countries have been limited, in volume and value, under the URA commitments of the EU. However, the EU did not make an export subsidy commitment on its subsidized exports of a quantity of sugar equal to its preferential imports under the Lome Convention. The EU has proposed to limit sugar production to about 14.9 million metric tons per year. Currently, the EU produces 17.9 million metric tons of sugar. If the EU limits sugar production to the stated level, the EU will become an importer.

South Africa has both internal price supports and export subsidies. South Africa reduced its subsidized exports by 200,000 tons to 702,208 tons although net exports for 2006 were 1.2 million metric tons. Mexico also has subsidized exports and is subsidizing raw sugar storage.

Brazil

Brazil is the largest sugar producing country in the world. The production of sugar has increased 300% since 1990. About 50% of Brazilian sugar consumed domestically is converted into ethanol for fuel. Exports have risen from 1.2 million metic tons in 1990 to 20.3 million metric tons in 2006. Sugar that is converted into ethanol is subsidized at prices higher than world price. Recent increases in world oil prices has increased the price of ethanol which in turn increased Brazil's conversion of sugar into ethanol, reducing potential sugar exports from Brazil. That reduction in the growth of exports has increased world sugar prices.

State Trading Enterprises in Australia, China, and India

Australia's sugar exports are handled by the Queensland Sugar Corporation (QSC), a statutory authority established under the Sugar Industry Act 1991. The QSC is responsible for the domestic marketing and export of 100% of the raw sugar produced in the state of Queensland, which produces 95% of the sugar produced in Australia. The QSC supports domestic producers through buyer-seller arrangements, marketing quotas, dual pricing arrangements, and other quasi-government mechanisms that isolate domestic producers from foreign competition. State trading enterprises (STEs) were not addressed in the URA. Other countries, including China and India, handle their sugar trade through STEs similar to the QSC.

OUTLOOK FOR THE WORLD SUGAR INDUSTRY

Total world sugar trade is projected to increase 16.7%, from 30.0 to 35.0 million metric tons over the 2006-2016 period. Exports of sugar in most countries will increase for 2006-2016. Exports will increase 28.0% for Thailand, and 18.0% for Australia.

World sugar price, referred to as the Caribbean price of sugar, is projected to decrease about 2% from 15.50 cents/lb in 2006 to 15.25 cents/lb in 2016 (Figure 5) because substantial diversion of sugar cane to ethanol production is offset by increases in production in most countries except the EU.

United States

Table 2 shows production, consumption, imports, and ending stocks of sugar for the United States. U.S. sugar production is predicted to increase to 8.6 million metric tons in 2016. The increase in sugar production is due mainly to a combination of higher world and U.S. sugar prices and increases in consumption for the time period. U.S. sugar consumption is predicted to increase 12.0% from 8.3 million metric tons (the 2004-2006 average) to 9.3 million metric tons in 2016. Ending stocks are also predicted to increase 15.5% (Table 2). Imports are predicted to decrease 18% from the 2004-06 average. However, the imports depend upon Mexico's sugar production and consumption.

Table 2. U.S. Sugar Production, Consumption, Imports, and Carry-over Stock, 2006-2016 Average

	Average (2004-2006)	2006	2016	% Change (2004-06) to 2016
	----------1,000 metric tons-----------			
Production	6,524	6,999	8,633	32.33
Beet	3,860	4,127	5,099	32.11
Cane	2,664	2,872	3,534	32.63
Net Imports	1,849	1,365	1,516	-18.01
Per capita Consumption	57	56	58	1.79
Consumption	8,272	8,189	9,265	12.01
Carry-over Stocks	1,302	1,412	1,503	15.47

Exporters

The EU has changed the internal sugar policy by restricting support which has reduced production. Because of that change, the EU has become a net importer of sugar. EU imports are predicted to increase from 2.2 million metric tons in 2006 to 3.1 million metric tons in 2016 (Figure 6). Sugar production in the EU is predicted to decrease 23.1% and consumption is predicted to increase from 18.0 million metric tons for the 2004-2006 average to 18.5 million tons in 2016 (Table 3). Most of the increase in consumption is due to the additional countries now included in the EU.

Brazil's production is predicted to increase 21.5% from 28.9 million metric tons in 2004-2006 to 35.1 million metric tons in 2016 (Table 3). Brazil's exports are predicted to increase from 18.4 million metric tons in 2004-2006 to 22.9 million metric tons in 2016.

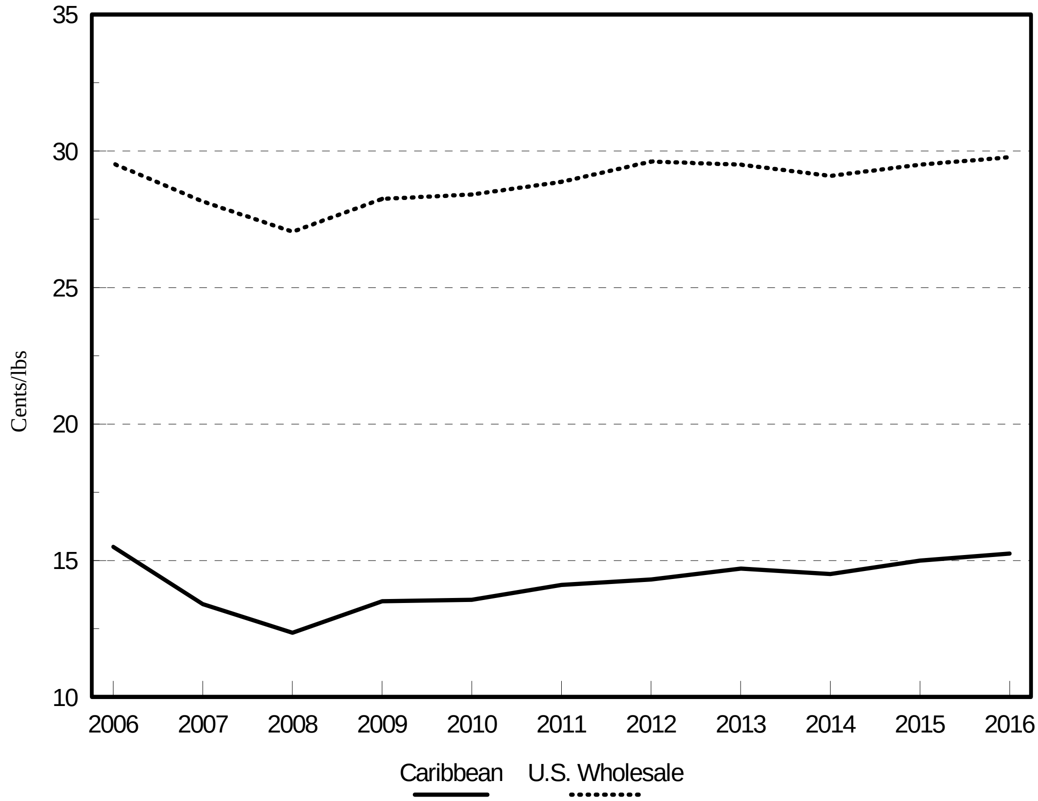

Figure 5. Estimated U.S. and World Sugar Prices

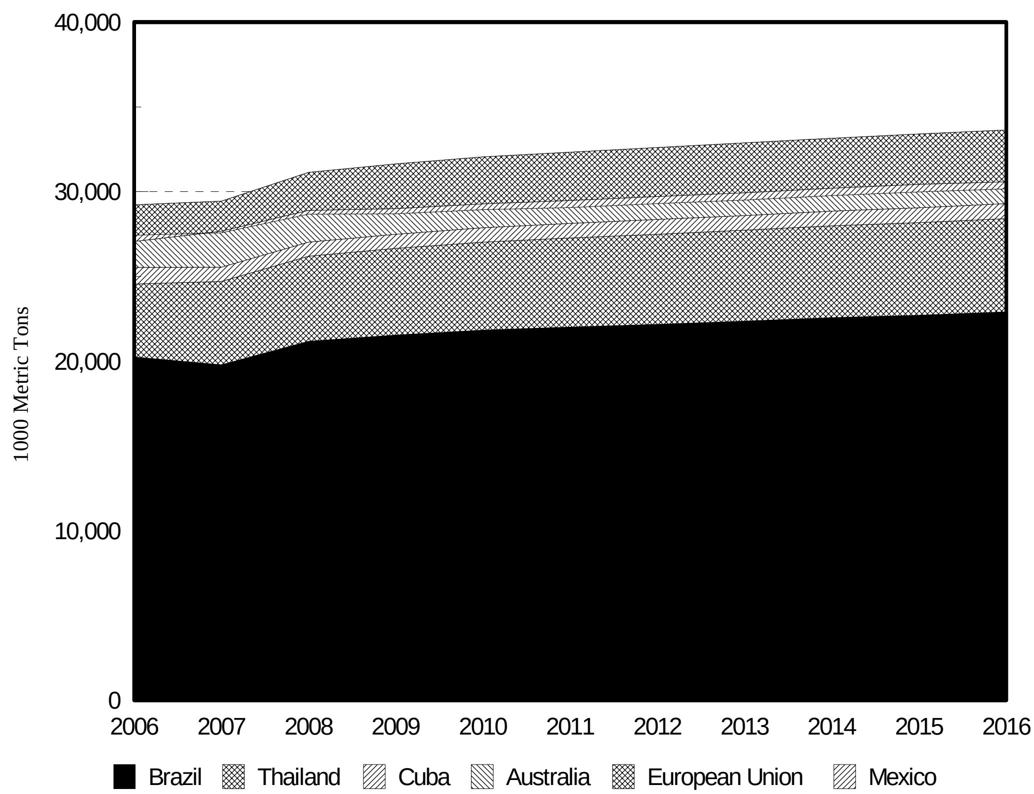

Figure 6. World Sugar Export by Country

Its domestic consumption is predicted to increase 14.2% from 10.7 million metric tons in 2004-2006 to 12.2 million metric tons in 2016. Much of the increase in consumption is due to ethanol production.

Thailand's exports are predicted to increase 71.0% from the 2004-2006 average of 3.2 million metric tons for the 2004-2006 average to 5.5 million metric tons in 2016 (Table 3). Most of the increase is due to small exports in 2005. Exports are predicted to increase by 28.0% from the 2006 level. Consumption increases from 2.1 million metric tons for the 2004-2006 average to 2.4 million metric tons in 2016. Sugar production in the country also is predicted to increase 43.1% from 5.5 million metric tons to 7.8 million metric tons in 2016. However, the increase in production would be only 19% compared to the 2006 production.

Australia's exports are predicted to increase 8.6% from 4.0 million metric tons for the 2004-2006 average to 4.4 million metric tons in 2016 (Table 3), due mainly to increased sugar production, which is predicted to increase 9.4% from 5.2 million metric tons to 5.7 million metric tons in 2016. Sugar consumption is expected to increase 13.1% from 1.2 million metric tons to 1.3 million metric tons in 2016.

Cuba's exports are predicted to increase 1.2% from the 2004-2006 level to 2016 (Table 3). It is predicted that Cuba will increase its sugar production 25.2%, while consumption is predicted to increase by 11.6%. These projections are based on the assumption that the political situation remains the same between the United States and Cuba.

Mexico's production is predicted to increase 14.6% from 5.7 million metric tons in 2004-2006 to 6.5 million metric tons in 2016. Mexico is expected to export 416 thousand metric tons by 2016, mainly to the United States under NAFTA. Sugar consumption is predicted to increase 14.9% from 5.3 million metric tons in 2004-2006 to 6.1 million metric tons in 2016 under the assumption that Mexico does not convert to HFCS in their soft drink industry. Ending stocks are predicted to decrease 6.2%. If Mexico replaces the sugar that is used in soft drinks with HFCS, the excess sugar will likely be exported to the United States under NAFTA.

South Africa's production is predicted to increase 18.1% from 2.4 million metric tons in 2004-2006 to 2.8 million metric tons in 2016. South Africa's exports are predicted to increase 17.9% from 1.0 million metric tons in 2004-2006 to 1.2 million metric tons in 2016, due mainly to increased production. Sugar consumption is predicted to increase 5.8% and ending stocks are predicted to increase 34.3%.

Table 3. Sugar Production, Consumption, Exports, and Carry-over Stocks in Exporting Countries

	Average (2004-2006)	2006	2016	% change (2004-06) to 2016
	----------1,000 metric tons--------			
European Union				
Production	20,070	17,757	15,435	-23.1
Net Exports	2,342	(2,168)	(3,057)	NA
Consumption	18,007	19,716	18,481	2.6
Carry-over	4,630	4,377	4,430	-4.3
Brazil				
Production	28,875	31,600	35,097	21.5
Net Exports	18,453	20,250	22,899	24.1
Consumption	10,677	10,800	12,198	14.2
Carry-over	205	265	248	21.0
Thailand				
Production	5,541	6,600	7,872	42.1
Net Exports	3,219	4,300	5,505	71.0
Consumption	2,073	2,100	2,355	13.6
Carry-over	1,646	1,960	2,067	25.6
Australia				
Production	5,169	4,822	5,657	9.4
Net Exports	4,006	3,691	4,351	8.6
Consumption	1,150	1,150	1,301	13.1
Carry-over	249	112	260	4.6
Cuba				
Production	1,317	1,450	1,648	25.2
Net Exports	867	980	877	1.2
Consumption	700	700	781	11.6
Carry-over	335	275	241	-28.1
Mexico				
Production	5,684	5,300	6,514	14.6
Net Exports	(43)	(360)	416	NA
Consumption	5,294	5,350	6,085	14.9
Carry-over	1,533	1,257	1,438	-6.2
South Africa				
Production	2,403	2,300	2,839	18.1
Net Exports	997	1,175	1,175	17.9
Consumption	1,558	1,570	1,649	5.8
Carry-over	703	400	462	34.3

Importers

Figures 7 through 9 show sugar imports by the major sugar importing countries. Sugar imports of selected Asian and African countries are expected to increase 53.4% and 37.4%, respectively, for the 2006-2016 period. The FSU is the largest importer for the period, followed by Indonesia and India.

Canada's production is predicted to increase above the 2004-2006 average of 122 thousand metric tons to 125 thousand tons by the year 2016, and consumption is predicted to increase from 1.4 million metric tons to 1.7 million metric tons in 2016 (Table 4). As a result, Canada's imports are predicted to increase 22.5% from 1.2 million metric tons to 1.5 million metric tons in 2016.

The FSU's production is predicted to increase 28.3% from the 2004-2006 average of 2.6 million metric tons to 3.4 million metric tons in 2016, and consumption is predicted to increase 6.2% from 5.9 million metric tons to 6.2 million metric tons for the same period. Imports are predicted to decrease 11.8% from the 2004-2006 average (Table 4).

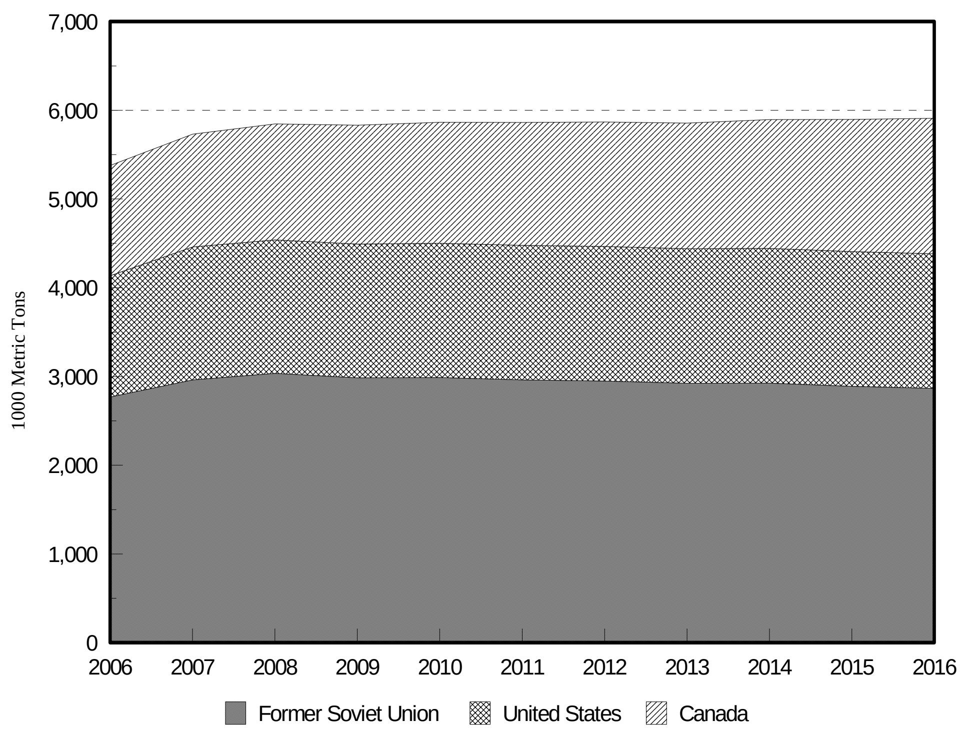

Figure 7. World Sugar Imports by Country, Major Importers

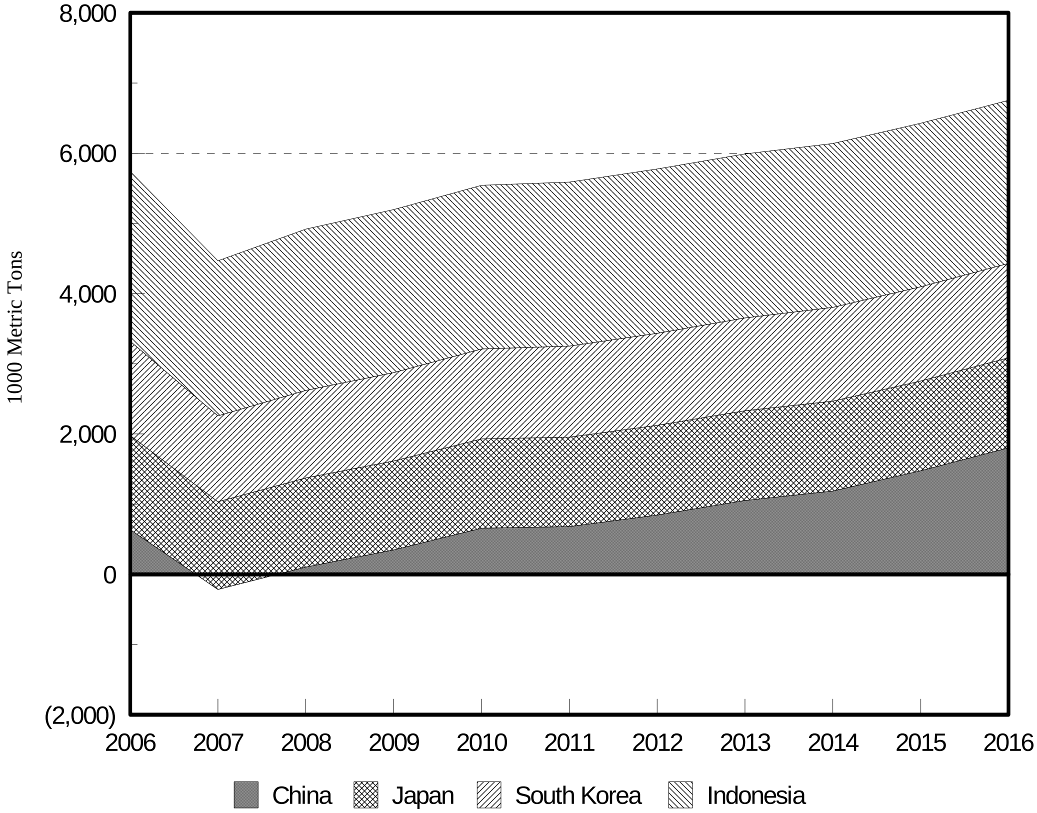

Figure 8. World Sugar Imports by Country, Asian Countries

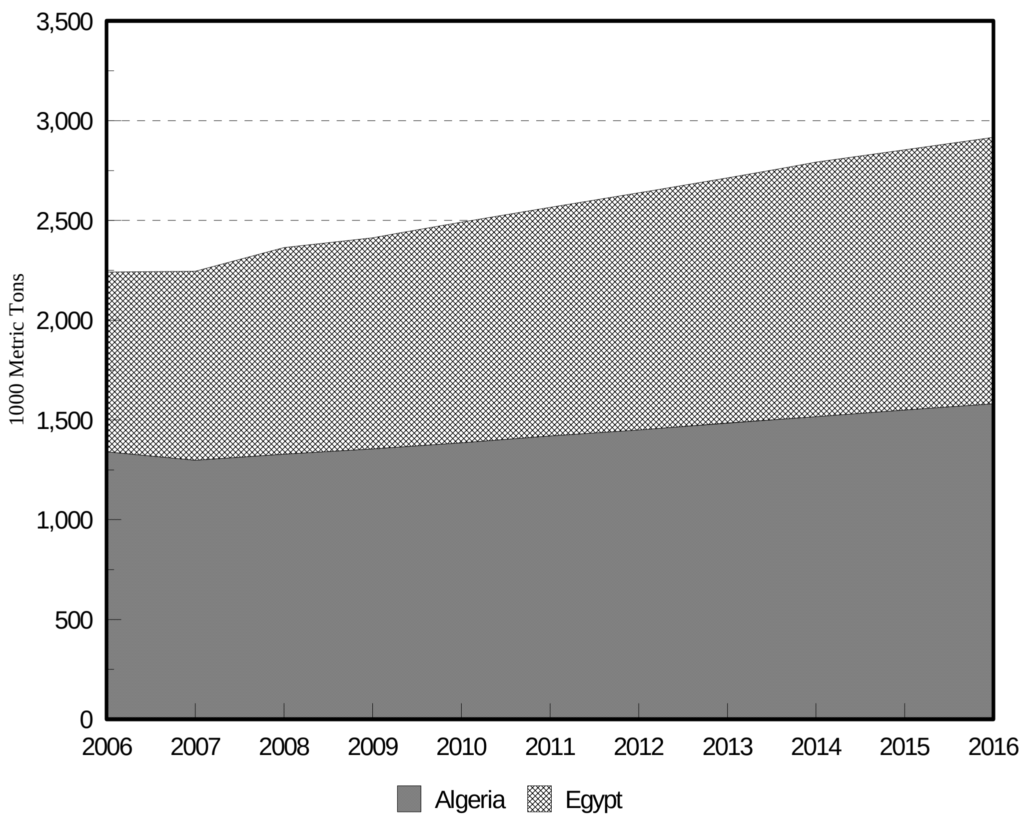

Figure 9. World Sugar Imports by Country, African Countries

China is expected to increase its imports about 104.4% from 0.9 million metric tons in 2004-2006 to 1.8 million metric tons in 2016 (Table 4). China's production is predicted to increase 21.3% from 11.0 million metric tons for the 2004-2006 average to 13.3 million metric tons in 2016, and consumption is predicted to increase 30.8% from 11.5 million metric tons to 15.1 million metric tons for the period.

India's production is predicted to increase 28.2% from 20.9 million metric tons in 2004-2006 to 26.8 million metric tons in 2016. However, India is predicted to import 2.3 million metric tons of sugar by 2016 mainly because of higher consumption.

Japan's imports are predicted to decrease 4.0% from the 2004-2006 average to 1.3 million metric tons in 2016, due to a slight decrease in domestic consumption and a slight increase in production (Table 4).

In South Korea, consumption is predicted to increase 12.1% for the time period. As a result, South Korea's imports are predicted to increase 0.8% for the period. There is no domestic production of either sugar cane or sugar beets in South Korea.

In Algeria, consumption is predicted to increase 26.7% from 1.3 million metric tons in 2004-2006 to 1.6 million metric tons in 2016. This increase in consumption results in imports increasing from 1.2 million metric tons for the 2004-2006 average to 1.6 million metric tons in 2016.

Egypt's imports are predicted to increase 48.0% from 0.9 million metric tons in 2004-2006 to 1.3 million metric tons in 2016, due mainly to increased consumption. Consumption is predicted to increase 27.5% from 2.5 million metric tons to 3.2 million metric tons in 2016.

Indonesia's imports are predicted to increase 25.1% from 1.9 million metric tons in 2004-2006 to 2.3 million metric tons in 2016. Consumption is predicted to increase from 3.8 million metric tons for the 2004-2006 average to 4.6 million metric tons in 2016.

Table 4. Sugar Production, Consumption, Imports, and Carry-over Stocks in Importing Countries

	Average (2004-06)	2006	2016	% Change (2004-06) to 2016
	-----------1,000 metric tons------------			
Algeria				
Production	10	10	11	6.5
Net Imports	1,203	1,110	1,581	31.4
Consumption	1,257	1,160	1,592	26.7
Carry-over	61	134	28	-53.8
Canada				
Production	122	120	125	2.7
Net Imports	1,246	1,227	1,526	22.5
Consumption	1,375	1,385	1,645	19.6
Carry-over	169	160	198	17.4
China				
Production	10,980	9,826	13,319	21.3
Net Imports	883	1,008	1,804	104.4
Consumption	11,533	11,400	15,089	30.8
Carry-over	1,673	1,757	2,975	77.9
Egypt				
Production	1,579	1,510	1,835	16.2
Net Imports	903	905	1,336	48.0
Consumption	2,483	2,485	3,167	27.5
Carry-over	336	293	402	19.5
Former Soviet Union				
Production	2,633	2,250	3,379	28.3
Net Imports	3,250	4,190	2,867	-11.8
Consumption	5,883	6,300	6,249	6.2
Carry-over	497	580	572	15.2
India				
Production	20,913	14,170	26,821	28.2
Net Imports	155	-2,095	2,266	1361.9
Consumption	20,413	20,170	24,508	20.1
Carry-over	6,682	5,165	10,378	55.3
Indonesia				
Production	2,017	1,900	2,265	12.3
Net Imports	1,857	2,420	2,323	25.1
Consumption	3,833	4,100	4,588	19.7
Carry-over	1,227	1,390	1,321	7.7
Japan				
Production	905	905	933	3.1
Net Imports	1,333	1,318	1,280	-4.0
Consumption	2,226	2,238	2,212	-0.6
Carry-over	389	372	434	11.7
Korea				
Production	0	0	0	NA
Net Imports	1,336	1,338	1,347	0.8
Consumption	1,200	1,198	1,345	12.1
Carry-over	150	150	203	35.3

CONCLUDING REMARKS

This report provides an overview of the U.S. and world sugar markets for 2006-2016 using the Global Sugar Policy Simulation Model. The baseline projections are based on a series of assumptions about general economic conditions, agricultural policies, weather conditions, and technological change.

Total world sugar trade is projected to increase by 16.7% from 30.0 million metric tons in 2006 to 35.0 million metric tons in 2016. The price of Caribbean sugar is expected to decrease about 2% from 15.50 cents/lb in 2006 to 15.25 cents/lb in 2016, because the substantial increases in ethanol production from sugar cane in Brazil is offset by increases in production in other countries.

Exports are predicted to increase for Brazil, Australia, South Africa, and Thailand, due to the increased sugar price.

Imports by most importing countries are predicted to increase from the 2004-06 average to 2016. China's imports are predicted to increase 104%, while Japan's imports are predicted to decrease 4.0%. Imports by Egypt and Algeria are predicted to increase 48.0% and 31.4%, respectively.

U.S. sugar consumption is predicted to increase 12.01% for the forecasting period, while production is expected to increase 32.3%. Imports are predicted to decrease 18.0% for the period because of recent high world sugar prices. Mexico could have an impact on the U.S. sugar industry if the country uses HFCS in its soft drink industry. Otherwise Mexico's exports to the United States could be relatively small, even though NAFTA allows unlimited exports beginning in 2008.

The large price increase in world sugar that occurred in late 2005 and 2006 will not be maintained. In the first half of 2007, Caribbean sugar price fell to 11 cents per pound from a high of 15.5 cents per pound in late 2006. The increased ethanol production in Brazil for 2005 and 2006 caused increases in the world price of sugar, which resulted in a production increase in other sugar exporting countries. Those production increases will continue to offset Brazil's ethanol production requirements.

References

Andino, Jose, Richard D. Taylor, and Won W. Koo. *The Mexican Sweeteners Market and Sugar Exports to the United States.* Agribusiness & Applied Economics Report No. 579.Center for Agricultural Policy and Trade Studies. North Dakota State University, Fargo, 2006.

Benirschka, M., W.W. Koo, and J. Lou. *World Sugar Policy Simulation Model: Description and Computer Program Documentation*. Agricultural Economics Report No. 356. Department of Agricultural Economics, North Dakota State University, Fargo, 1996.

Food and Agricultural Policy Research Institute, FAPRI. *2007 World Agricultural Briefing Book*, Iowa State University and University of Missouri-Columbia. February 2007.

Henneberry, P.D., and S.L. Haley. "Implications of NAFTA Duty Reductions for the U.S. Sugar Market." *Sugar and Sweetener: Situation and Outlook Report*, U.S. Department of Agriculture, Economic Research Service, SSS-224, Washington, DC, 1998.

Koo, Won W., Richard Taylor and Jeremy W. Mattson. " Impacts of the U.S. Central American Free Trade Agreement on the U.S. Sugar Industry." Special Report 03-3. Center for Agricultural Policy and Trade Studies. North Dakota State University, Fargo, 2003.

McElroy, R.C., and M. Ali. "U.S. Sugarbeet and Sugar Cane Per-acre Costs of Production: Revisions of 1992 and New 1993 and 1994 Crop Estimates." *Sugar and Sweetener Situation and Outlook*, U.S. Department of Agriculture, Economic Research Service, Washington, DC, 1995.

Normile, M., and M. Simone. *Agriculture in the Uruguay Round*. U.S. Department of Agriculture, Economic Research Service, WTO Briefing Room, http://www.econ.ag.gov/briefing/wto/issues/uraa.htm, 1999.

U.S. Department of Agriculture, Economic Research Service, U.S. Agricultural Trade Update, Monthly Spreadsheet Files, http://usda.mannlib.cornell.edu/usda/usda.html, 2007.

————. Sugar and Sweeteners Outlook. *EU-25 Sugar and Sweetener Policy Reform.* January 31, 2006.

————. *PS&D View*. (Computer Files). Washington, DC, 2007.

————. *Sugar and Sweetener: Situation and Outlook Report*. Washington, DC, various issues.

Appendix

World Sugar Policy Simulation Model

2007 Baseline Solution

United States - Nominal Sugar Beet and Sugarcane Farm Prices (dollars/short ton)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	40.00	41.37	40.09	38.83	40.21	40.39	40.93	41.77	41.65	41.17	41.65	41.95
Sugarcane	27.00	28.96	28.57	27.27	28.69	28.88	29.44	30.30	30.18	29.69	30.18	30.49

United States - Nominal Sugar Prices (U.S. cents/pound)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Caribbean Price	11.35	15.50	13.40	12.35	13.50	13.55	14.10	14.30	14.70	14.50	15.00	15.25
TRQ Status	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota
Implicit Tariff	10.07	6.64	6.00	6.00	6.00	6.10	6.00	6.50	6.00	5.80	5.70	5.70
Import Price	21.28	22.14	19.40	18.35	19.50	19.65	20.10	20.80	20.70	20.30	20.70	20.95
Wholesale Price	27.04	29.54	28.14	27.04	28.24	28.40	28.87	29.61	29.50	29.08	29.50	29.77
Retail Price	43.54	49.58	46.11	44.61	46.25	46.46	47.10	48.10	47.96	47.39	47.96	48.32

United States - Area Harvested (1000 acres)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	1243	1304	1322	1331	1339	1345	1351	1360	1370	1381	1396	1413
Sugarcane	858	847	861	869	867	867	869	873	879	885	894	905
Total Area	2101	2151	2183	2200	2206	2211	2220	2233	2250	2266	2290	2318

United States - Yields (short tons/acre)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	22.10	26.10	25.99	26.01	26.06	26.18	26.26	26.39	26.47	26.65	26.85	27.05
Sugarcane	28.80	33.00	33.42	33.73	33.97	34.07	34.19	34.33	34.48	34.63	34.79	34.94

United States - Sugar Beet and Sugarcane Production (1000 short tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	27470	34034	34354	34629	34897	35201	35483	35878	36277	36789	37474	38239
Sugarcane	24716	27938	28773	29294	29455	29521	29698	29980	30318	30654	31105	31612

United States - Sugar Extraction Rates (percent)

Variable	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	16.20	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70	14.70
Sugarcane	12.10	12.32	12.32	12.32	12.32	12.32	12.32	12.32	12.32	12.32	12.32	12.32

United States - Sugar Production (1000 short tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Beet Sugar	4032	4549	5050	5090	5130	5174	5216	5274	5333	5408	5509	5621
Cane Sugar	2681	3166	3545	3609	3629	3637	3659	3694	3735	3777	3832	3895
All Sugar	6713	7715	8595	8699	8759	8811	8875	8968	9068	9185	9341	9516

United States - Sugar Import Quotas (1000 short tons, raw value) and Tariffs (U.S. cents/pound, raw sugar, most countries)

Variable	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Tariff Rate Quota	1256	1256	1256	1256	1256	1256	1256	1256	1256	1256	1256	1256
Below Quota Tariff	0	0	0	0	0	0	0	0	0	0	0	0
Above Quota Tariff	15.36	15.36	15.36	15.36	15.36	15.36	15.36	15.36	15.36	15.36	15.36	15.36

United States - Implicit Tariff (U.S. cents/pound) and Sugar Trade (1000 short tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
TRQ Status	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota
Implicit Tariff	7.00	4.00	6.00	6.00	6.00	6.10	6.00	6.50	6.00	5.80	5.70	5.70
Total Imports	2100	2066	1771	1776	1781	1786	1791	1791	1791	1791	1791	1791
Quota-sugar Imports	1600	1566	1571	1576	1581	1586	1591	1591	1591	1591	1591	1591
Other Sugar Imports	500	500	500	200	200	200	200	200	200	200	200	200
Total Exports	120	120	120	120	120	120	120	120	120	120	120	120
Net Imports	1980	1946	1651	1656	1661	1666	1671	1671	1671	1671	1671	1671

United States - Sugar Supply and Utilization (1000 short tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	1208	1540	1557	1569	1590	1596	1662	1636	1627	1632	1642	1648
Production	7593	7715	8595	8699	8759	8811	8875	8968	9068	9185	9341	9516
Net Imports	2939	1505	1651	1656	1661	1666	1671	1671	1671	1671	1671	1671
Consumption	9239	9027	9279	9528	9533	9652	9732	9794	9924	10039	10084	10213
Carry-out Stocks	1540	1557	1569	1590	1596	1662	1636	1627	1632	1642	1648	1657

United States - Per Capita Sugar Consumption (pounds) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	63.82	61.80	62.96	64.07	63.53	63.75	63.70	63.54	63.81	64.04	63.81	64.12
Stocks/Consumption	16.67	17.25	16.90	16.69	16.74	17.22	16.81	16.62	16.44	16.35	16.34	16.22

Canada - Sugar Beet Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	21	25	22	22	21	21	21	21	21	21	21	21
Yield	45.00	49.50	49.89	50.33	50.75	51.18	51.61	52.03	52.46	52.89	53.31	53.74
Production	932	1238	1121	1088	1078	1083	1087	1092	1097	1102	1105	1109

Canada - Sugar Beet Exogenous Variables

Variable	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Extraction Rate (%)	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30

Canada - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	160	171	175	166	166	169	172	176	179	182	187	192
Production	105	140	127	123	122	122	123	123	124	125	125	125
Net Imports	1266	1244	1270	1309	1342	1363	1384	1402	1416	1453	1490	1526
Imports	1366	1314	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Exports	100	70	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1360	1380	1405	1432	1460	1482	1503	1522	1537	1573	1609	1645
Carry-out Stocks	171	175	166	166	169	172	176	179	182	187	192	198

Canada - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	41.41	41.65	42.02	42.45	42.91	43.19	43.47	43.66	43.73	44.41	45.06	45.72
Stocks/Consumption	12.57	12.68	11.84	11.58	11.55	11.61	11.68	11.75	11.82	11.86	11.95	12.05

Mexico - Sugarcane Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	650	625	650	667	680	689	697	704	711	716	722	727
Yield	73.00	72.00	72.70	73.08	73.38	73.66	73.93	74.20	74.47	74.74	75.01	75.28
Production	47450	45000	47286	48752	49876	50770	51551	52257	52917	53527	54138	54741

Mexico - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarcane	11.80	11.80	11.80	11.80	11.80	11.80	11.90	11.90	11.90	11.90	11.90	11.90

Mexico - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	2045	1297	1257	1297	1326	1346	1362	1375	1388	1401	1413	1424
Production	5604	5300	5580	5753	5885	5991	6135	6219	6297	6370	6442	6514
Net Imports	-629	360	-98	-216	-300	-338	-413	-419	-427	-436	-443	-416
Exports	871	90	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	242	450	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	5333	5350	5441	5507	5566	5637	5707	5786	5858	5921	5988	6085
Carry-out Stocks	1297	1257	1297	1326	1346	1362	1375	1388	1401	1413	1424	1438

Mexico - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	48.35	47.93	48.16	48.17	48.16	48.24	48.31	48.45	48.51	48.50	48.57	48.86
Stocks/Consumption	24.32	23.50	23.84	24.08	24.18	24.16	24.10	24.00	23.91	23.86	23.78	23.62

Algeria - Sugar Beet Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	7	7	7	7	7	7	7	7	7	7	7	7
Yield	20	20	20	20	20	20	20	20	20	21	21	21
Production	138	138	144	147	149	150	151	152	152	153	154	155

Algeria - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarbeet	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41	7.41

Algeria - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	134	24	24	24	24	24	25	25	26	26	27	28
Production	10	11	11	11	11	11	11	11	11	11	11	11
Net Imports	1160	1340	1298	1328	1355	1386	1419	1450	1484	1516	1550	1581
Exports	30	50	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1190	1390	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1270	1340	1309	1338	1365	1397	1430	1461	1495	1527	1561	1592
Carry-out Stocks	24	24	24	24	24	25	25	26	26	27	28	28

Algeria - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	35.99	37.16	35.51	35.53	35.50	35.57	35.67	35.68	35.77	35.78	35.86	35.85
Stocks/Consumption	1.89	1.79	1.80	1.79	1.77	1.77	1.76	1.76	1.76	1.77	1.77	1.78

Australia - Sugarcane Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	428	421	432	435	436	438	439	441	442	443	444	445
Yield	93	86	90	91	92	93	93	94	94	95	95	96
Production	39633	36206	38985	39793	40182	40584	40911	41248	41573	41904	42209	42537

Australia - Sugar Extraction Rate (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarcane	13.30	13.30	13.30	13.30	13.30	13.30	13.30	13.30	13.30	13.30	13.30	13.30

Australia - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	343	291	112	234	237	240	243	247	249	251	253	255
Production	5297	4822	5185	5293	5344	5398	5441	5486	5529	5573	5614	5657
Net Exports	4030	3691	3890	4104	4140	4177	4205	4239	4271	4306	4338	4351
Exports	4039	3700	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	9	9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1150	1150	1172	1186	1201	1217	1233	1244	1255	1265	1274	1301
Carry-out Stocks	291	112	234	237	240	243	247	249	251	253	255	260

Australia - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	58.33	57.81	58.47	58.68	58.96	59.27	59.57	59.69	59.81	59.84	59.86	60.68
Stocks/Consumption	25.30	9.74	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Brazil - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	585	-285	265	254	255	253	254	252	252	251	250	249
Production	26850	31600	31085	32615	33125	33395	33680	33963	34247	34530	34813	35097
Net Exports	17090	20250	19785	21170	21533	21830	22009	22171	22361	22571	22714	22899
Exports	17090	20250	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	10630	10800	11311	11444	11594	11565	11672	11793	11886	11960	12100	12198
Carry-out Stocks	-235	265	254	255	253	254	252	252	251	250	249	248

Brazil - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	56.77	57.05	59.16	59.27	59.45	58.77	58.79	58.86	58.80	58.69	58.91	58.92
Stocks/Consumption	-2.21	2.45	2.24	2.23	2.18	2.19	2.16	2.13	2.11	2.09	2.06	2.03

China - Area Harvested (1000 hectares)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	234	368	319	322	308	325	319	329	328	334	332	340
Sugarcane	1500	1700	1705	1701	1699	1710	1719	1729	1739	1749	1757	1766
Total Area	1734	2068	2024	2022	2007	2035	2038	2058	2067	2083	2089	2106

China - Yields (metric tons/hectare)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	37.00	37.00	36.98	37.01	37.17	37.35	37.53	37.73	37.94	38.15	38.37	38.59
Sugarcane	65.00	72.00	72.24	72.47	72.69	72.91	73.12	73.34	73.55	73.76	73.97	74.18

China - Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	8658	13616	11798	11898	11466	12140	11976	12411	12436	12751	12756	13110
Sugarcane	97500	122400	123127	123240	123485	124683	125713	126834	127890	128988	129935	131021

China - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarbeets	10.15	10.15	10.15	10.15	10.15	10.15	10.15	10.15	10.15	10.15	10.15	10.15
Sugarcane	9.15	9.15	9.15	9.15	9.15	9.15	9.15	9.15	9.15	9.15	9.15	9.15

China - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	1671	1003	2258	2544	2729	2741	2791	2807	2841	2864	2917	2941
Production	10500	12615	12464	12484	12463	12641	12718	12865	12964	13097	13184	13319
Beet Sugar	877	1380	1198	1208	1164	1232	1216	1260	1262	1294	1295	1331
Cane Sugar	8569	11235	11266	11276	11299	11409	11503	11605	11702	11802	11889	11988
Net Imports	1000	640	-216	106	348	658	681	846	1053	1188	1476	1804
Exports	234	310	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1234	950	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	11200	12000	11962	12405	12798	13249	13383	13677	13994	14231	14636	15089
Carry-out Stocks	1003	2258	2544	2729	2741	2791	2807	2841	2864	2917	2941	2975

China - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	8.51	9.06	8.98	9.26	9.49	9.76	9.79	9.93	10.09	10.19	10.42	10.68
Stocks/Consumption	8.96	18.82	21.27	22.00	21.42	21.06	20.97	20.77	20.47	20.50	20.09	19.71

Cuba - Sugarcane Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	410	465	484	479	476	479	479	481	481	483	482	483
Yield	29	30	31	31	31	32	32	32	32	33	33	33
Production	11890	13997	14888	14942	14996	15209	15324	15473	15589	15721	15801	15939

Cuba - Sugar Extraction Rate (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarcane	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34	10.34

Cuba - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	400	330	275	287	293	297	294	287	278	268	260	250
Production	1200	1450	1539	1545	1551	1573	1585	1600	1612	1626	1634	1648
Net Exports	850	980	841	830	837	853	863	869	873	870	873	877
Consumption	700	700	686	710	710	722	729	740	748	763	771	781
Carry-out Stocks	330	275	287	293	297	294	287	278	268	260	250	241

Cuba - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	60.53	60.24	58.76	60.50	60.27	61.03	61.34	61.96	62.40	63.38	63.74	64.31
Stocks/Consumption	47.14	39.29	41.89	41.24	41.77	40.71	39.30	37.59	35.87	34.11	32.49	30.80

Egypt - Area Harvested (1000 hectares)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	72	75	76	76	76	77	77	77	77	77	77	78
Sugarcane	125	126	126	127	128	130	131	133	134	136	138	140
Total Area	197	201	202	203	205	206	208	209	211	213	215	218

Egypt - Yields (metric tons/hectare)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	54.50	55.00	55.19	55.54	55.84	56.15	56.46	56.77	57.08	57.39	57.70	58.01
Sugarcane	103.90	103.27	102.86	102.63	102.55	102.61	102.77	103.03	103.38	103.79	104.26	104.78

Egypt - Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	3924	4125	4180	4210	4251	4303	4324	4349	4371	4424	4467	4516
Sugarcane	12988	12961	12994	13058	13174	13320	13490	13684	13898	14130	14380	14645

Egypt - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75	12.75
Sugarcane	8.50	8.50	8.60	8.60	8.60	8.60	8.60	8.60	8.60	8.60	8.60	8.60

Egypt - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	293	356	360	364	369	373	377	381	385	389	394	398
Production	1601	1627	1650	1660	1675	1694	1711	1731	1753	1779	1806	1835
Beet Sugar	499	525	533	537	542	549	551	554	557	564	569	576
Cane Sugar	1102	1102	1117	1123	1133	1146	1160	1177	1195	1215	1237	1259
Net Imports	903	900	947	1035	1058	1105	1145	1190	1227	1276	1303	1336
Exports	100	150	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1003	1050	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	2441	2523	2593	2690	2729	2795	2852	2917	2975	3051	3105	3167
Carry-out Stocks	356	360	364	369	373	377	381	385	389	394	398	402

Egypt - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	33.95	34.47	34.84	35.54	35.45	35.74	35.89	36.14	36.31	36.68	36.81	37.03
Stocks/Consumption	14.58	14.27	14.03	13.70	13.65	13.48	13.35	13.20	13.08	12.90	12.81	12.69

European Union - Sugar Quota (1000 metric tons, white sugar equivalent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
A-Quota	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
B-Quota	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
A plus B Quota	13669	13669	13669	13669	13669	13669	13669	13669	13669	13669	13669	13669
Raw Sugar Equivalent	14626	14626	14626	14626	14626	14626	14626	14626	14626	14626	14626	14626

European Union - Sugar Beet Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	2400	2065	1816	1771	1735	1730	1731	1734	1735	1736	1734	1733
Yield	57.02	56.00	56.52	56.80	57.00	57.17	57.33	57.48	57.64	57.79	57.94	58.10
Production	136839	115640	102622	100605	98899	98918	99224	99666	100015	100329	100457	100696

European Union - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04

European Union - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	5339	5088	4377	4349	4363	4373	4384	4393	4401	4410	4417	4419
Production	21104	17757	15724	15421	15164	15167	15213	15280	15332	15379	15399	15435
Net Exports	5715	-2168	-1778	-2242	-2633	-2768	-2858	-2891	-2941	-2958	-2964	-3057
Exports	8345	2162	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	2630	4330	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	16800	19716	17531	17649	17787	17924	18061	18163	18265	18330	18360	18481
Carry-out Stocks	4173	4377	4349	4363	4373	4384	4393	4401	4410	4417	4419	4430

European Union - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	46.92	48.44	48.77	49.00	49.33	49.67	50.00	50.23	50.46	50.59	50.62	50.95
Stocks/Consumption	24.84	22.20	24.80	24.72	24.59	24.46	24.33	24.23	24.14	24.09	24.07	23.97

India - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	5165	4775	10105	10999	10296	10125	10129	10156	10197	10236	10293	10332
Production	21140	27430	24498	23494	23563	23782	24089	24538	25068	25630	26220	26821
Net Exports	1460	1100	2256	2496	1672	1374	1308	1389	1562	1763	2026	2266
Exports	1510	1100	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	50	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	20070	21000	21348	21702	22061	22405	22754	23108	23468	23810	24156	24508
Carry-out Stocks	4775	10105	10999	10296	10125	10129	10156	10197	10236	10293	10332	10378

India - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	17.29	17.79	17.80	17.81	17.82	17.83	17.84	17.85	17.86	17.87	17.88	17.89
Stocks/Consumption	23.79	48.12	51.52	47.44	45.90	45.21	44.63	44.13	43.62	43.23	42.77	42.34

Indonesia - Sugarcane Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	380	376	376	374	373	374	375	377	380	383	385	388
Yield	69.00	63.00	63.12	64.22	65.32	66.42	67.52	68.62	69.72	70.82	71.92	73.02
Production	26220	23688	23752	24038	24338	24813	25326	25895	26481	27092	27683	28307

Indonesia - Sugar Extraction Rate

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarcane	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00

Indonesia - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	1120	1170	1390	1331	1331	1328	1327	1326	1324	1323	1323	1322
Production	2100	1900	1900	1923	1947	1985	2026	2072	2118	2167	2215	2265
Net Imports	1800	2420	2210	2297	2320	2332	2337	2340	2337	2334	2331	2323
Exports	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1800	2420	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	3850	4100	4169	4220	4270	4318	4365	4413	4457	4502	4547	4588
Carry-out Stocks	1170	1390	1331	1331	1328	1327	1326	1324	1323	1323	1322	1321

Indonesia - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	17.03	17.90	17.99	17.99	17.99	17.99	17.99	17.99	17.99	17.99	17.99	17.99
Stocks/Consumption	30.39	33.90	31.92	31.53	31.10	30.74	30.37	30.01	29.69	29.38	29.06	28.78

Japan - Area Harvested (1000 hectares)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	87	84	83	82	81	80	79	78	76	75	74	72
Sugarcane	19	19	19	18	19	18	19	19	19	19	19	19
Total Area	106	104	102	100	100	98	98	97	95	94	93	91

Japan - Yields (metric tons/hectare)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	54.00	54.00	54.53	54.98	55.39	55.78	56.16	56.54	56.92	57.29	57.67	58.04
Sugarcane	60.31	60.30	60.40	60.44	60.48	60.53	60.57	60.61	60.66	60.70	60.75	60.79

Japan - Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	4000	4200	4531	4514	4491	4462	4428	4387	4342	4293	4242	4188
Sugarcane	1100	1100	1130	1104	1142	1106	1135	1152	1160	1162	1158	1151

Japan - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94
Sugarcane	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13

Japan - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	372	372	422	424	428	429	431	431	432	432	433	433
Production	880	930	995	989	989	979	976	971	963	954	944	933
Beet Sugar	750	800	858	855	851	845	839	831	822	813	803	793
Cane Sugar	130	130	137	134	139	134	138	140	141	141	140	140
Net Imports	1340	1340	1249	1269	1265	1273	1275	1278	1279	1280	1279	1280
Exports	10	10	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1350	1350	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	2220	2220	2243	2254	2253	2251	2250	2248	2241	2233	2222	2212
Carry-out Stocks	372	422	424	428	429	431	431	432	432	433	433	434

Japan - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	17.46	17.66	17.64	17.72	17.73	17.74	17.75	17.77	17.75	17.74	17.70	17.68
Stocks/Consumption	16.76	19.01	18.88	18.97	19.05	19.12	19.16	19.20	19.27	19.38	19.50	19.62

Korea - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	150	150	150	163	176	182	187	190	193	195	199	201
Net Imports	1331	1340	1223	1247	1260	1281	1295	1310	1321	1335	1342	1347
Exports	338	340	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1669	1680	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1196	1205	1210	1234	1254	1276	1292	1307	1319	1331	1339	1345
Carry-out Stocks	150	150	163	176	182	187	190	193	195	199	201	203

Korea - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	24.50	24.58	24.59	24.97	25.28	25.64	25.89	26.11	26.30	26.48	26.60	26.66
Stocks/Consumption	12.54	12.45	13.47	14.30	14.51	14.69	14.74	14.80	14.82	14.98	15.04	15.12

South Africa - Sugarcane Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	325	295	296	299	304	310	317	324	331	338	346	353
Yield	72.00	71.00	71.26	71.41	71.56	71.71	71.86	72.01	72.16	72.31	72.46	72.61
Production	23400	20945	21090	21376	21771	22254	22777	23330	23898	24477	25058	25648

South Africa - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarcane	11.07	11.07	11.07	11.07	11.07	11.07	11.07	11.07	11.07	11.07	11.07	11.07

South Africa - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	860	850	400	428	421	411	408	396	407	419	434	447
Production	2595	2300	2335	2366	2410	2463	2521	2583	2645	2710	2774	2839
Net Exports	1050	1175	803	907	972	1028	1127	1123	1139	1150	1167	1175
Exports	1230	1300	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	180	125	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1550	1570	1503	1467	1448	1439	1406	1449	1495	1545	1594	1649
Carry-out Stocks	850	400	428	421	411	408	396	407	419	434	447	462

South Africa - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	35.04	35.63	34.25	33.59	33.33	33.29	32.69	33.85	35.10	36.47	37.82	39.31
Stocks/Consumption	54.84	25.48	28.49	28.70	28.41	28.33	28.19	28.11	28.06	28.11	28.04	28.04

Former Soviet Union - Sugar Beet Area Harvested (1000 hectares), Yield (metric tons/acre), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	1400	1700	1701	1693	1685	1688	1695	1705	1717	1731	1743	1758
Yield	15.20	16.00	15.98	16.02	16.07	16.14	16.22	16.30	16.38	16.46	16.54	16.63
Production	21280	27200	27194	27121	27079	27258	27486	27796	28131	28503	28844	29231

Former Soviet Union - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugar Beets	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56

Former Soviet Union - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	580	470	440	499	559	571	580	578	577	572	578	575
Production	2500	3150	3144	3135	3130	3151	3177	3213	3252	3295	3334	3379
Net Imports	2790	2770	2962	3035	2983	2988	2961	2949	2922	2926	2890	2867
Exports	110	180	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	2900	2950	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	5400	5950	6046	6111	6102	6129	6140	6163	6179	6215	6228	6249
Carry-out Stocks	470	440	499	559	571	580	578	577	572	578	575	572

Former Soviet Union - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	18.32	20.21	20.56	20.78	20.75	20.84	20.88	20.95	21.01	21.13	21.18	21.25
Stocks/Consumption	8.70	7.39	8.26	9.14	9.35	9.47	9.42	9.36	9.26	9.30	9.23	9.16

Thailand - Sugar Cane Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Area Harvested	760	1060	1072	1080	1087	1091	1095	1097	1099	1100	1101	1102
Yield	58.00	58.00	59.42	60.25	60.90	61.50	62.08	62.66	63.24	63.81	64.39	64.96
Production	44080	61480	63713	65061	66177	67118	67987	68769	69499	70187	70881	71566

Thailand - Sugar Extraction Rates (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sugarcane	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00

Thailand - Sugar Supply and Utilization (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carry-in Stocks	1217	1760	1960	1964	1975	1985	1996	2007	2019	2031	2043	2054
Production	4835	6600	7008	7157	7279	7383	7479	7565	7645	7721	7797	7872
Net Exports	2242	4300	4909	5020	5113	5186	5254	5310	5364	5413	5462	5505
Exports	2242	4300	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	2050	2100	2095	2126	2157	2185	2214	2242	2269	2296	2324	2355
Carry-out Stocks	1760	1960	1964	1975	1985	1996	2007	2019	2031	2043	2054	2067

Thailand - Per Capita Sugar Consumption (kilograms) and Stocks to Use Ratio (percent)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per Capita Consumption	30.85	31.38	31.09	31.33	31.59	31.82	32.04	32.26	32.48	32.70	32.93	33.22
Stocks/Consumption	85.85	93.33	93.74	92.86	92.02	91.34	90.68	90.06	89.52	89.00	88.42	87.74

Rest of the World - Sugar Net Exports (1000 metric tons, raw value)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Net Exports	-18537	-15469	-18181	-19200	-18333	-17931	-18122	-18189	-18297	-18536	-18757	-18719

World - Sugar Prices (U.S. cents/pound)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
0	11.35	15.50	13.40	12.35	13.50	13.55	14.10	14.30	14.70	14.50	15.00	15.25