

2001 OUTLOOK OF THE U.S. AND WORLD SUGAR MARKETS

Won W. Koo
Richard D. Taylor



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

Acknowledgments

The authors extend appreciation to Dr. William Nganje, Mr. Andrew Swenson, and Mr. Dean Bangsund for their constructive comments and suggestions. Special thanks go to Ms. Carol Jensen who helped to prepare the manuscript.

The authors assume responsibility for any errors of omission, logic, or otherwise.

We would be happy to provide a single copy of this publication free of charge. You can address your inquiry to: Carol Jensen, 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 cjensen@ndsuext.nodak.edu. This publication is also available electronically at this web site: <http://agecon.lib.umn.edu/>.

NDSU is an equal opportunity institution.

NOTICE:

The analyses and views reported in this paper are those of the author(s). They are not necessarily endorsed by the Department of Agribusiness and Applied Economics or by North Dakota State University.

North Dakota State University is committed to the policy that all persons shall have equal access to its programs, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

Information on other titles in this series may be obtained from: Department of Agribusiness and Applied Economics, North Dakota State University, P.O. Box 5636, Fargo, ND 58105. Telephone: 701-231-7441, Fax: 701-231-7400, or e-mail: cjensen@ndsuext.nodak.edu.

Copyright © 2001 by Won W. Koo and Richard D. Taylor. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Table of Contents

	<u>Page</u>
List of Tables	ii
List of Figures	ii
Abstract	iii
Highlights	iv
Introduction	1
Overview of the World Sugar Industry and Sugar Policies	1
The U.S. Sugar Programs and Policies	3
Domestic and Export Subsidies in the EU, South Africa, and Mexico	4
State Trading Enterprises in Australia, China, and India	5
An Econometric Simulation Model	5
Model Structure and Development	6
Assumptions and Data Collection	7
Outlook for the World Sugar Industry	8
United States	8
Exporters	10
Importers	13
Concluding Remarks	17
References	19
Appendix	21

List of Tables

<u>No.</u>		<u>Page</u>
1	World Sugar Supply and Utilization, 1996 to 2000 Average	2
2	U.S. Sugar Production, Consumption, Exports, and Carry-over Stocks, Various Years	9
3	Sugar Production, Consumption, Exports, and Carry-over Stocks in Exporting Countries	12
4	Sugar Production, Consumption, Imports, and Carry-over Stocks in Importing Countries	16

List of Figures

1	U.S. and World Sugar Price	8
2	U.S. Beet and Cane Sugar Production	9
3	U.S. Sugar Production and Imports	10
4	U.S. Sugar Consumption and Ending Stocks	10
5	World Sugar Exports by Country	11
6	World Sugar Imports by Country, Major Importers	14
7	World Sugar Imports by Country, Asian Countries	14
8	World Sugar Imports by Country, African Countries	15

Abstract

This report evaluates the U.S. and world sugar markets for 2000-2010 by 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 improve over the next ten years after the current over supply is reduced. World demand for sugar is expected to grow faster than world supply, resulting in gradually increasing Caribbean sugar prices from 8.51 cents/lb in 2000 to 12.67 cents/lb in 2010. The U.S. wholesale price of sugar is projected to increase from 22.5 cents/lb in 2000 to 26.6 cents/lb in 2010, if the United States maintains its sugar programs. World trade volumes of sugar are expected to expand slightly.

Key words: Sugar, Production, Exports, Consumption, Ending Stocks.

Highlights

Total world sugar trade is projected to increase by 4.6 percent between 2000 and 2010 from 23.8 million metric tons to 24.9 million metric tons. World sugar prices also are projected to increase from 8.51 cents/lb in 2000 to 12.67 cents/lb in 2010. The U.S. domestic wholesale price is expected to reach the lowest level in 2001 and recover slowly for the 2001-2010 period. Sugar price is projected to be 23 cents/lb in 2001, 25 cents/lb in 2002, and 26.6 cents/lb in 2010.

U.S. sugar imports are predicted to increase 37.8 percent for the 2000-2010 period due to increased sugar imports from Mexico. U.S. sugar consumption is projected to increase 8.5 percent. Ending stocks also are predicted to increase 68.7 percent.

Canada's production is predicted to increase 15.6 percent from 2000 to 2010. Canada's imports are expected to increase 13.5 percent. Consumption is predicted to increase 11.9 percent and ending stocks are predicted to increase 53.9 percent.

Mexico's production is expected to increase 23.7 percent, but exports are expected to increase 44.5 percent for the 2000-2010 period due to increases in exports to the United States under the North American Free Trade Agreement (NAFTA).

The European Union's (EU) exports are predicted to increase 4.1 percent. Their production and consumption are predicted to increase slightly.

Production in India is predicted to decrease 3.0 percent while consumption is predicted to increase 16.5 percent for the 2000-2010 period. As a result, India's imports are predicted to increase 39.7 percent.

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

Most importing countries, including Algeria, China, Japan, and Korea, are predicted to increase their imports for the 2000-2010 period.

2001 OUTLOOK OF THE U.S. AND WORLD SUGAR MARKETS

Won W. Koo and Richard D. Taylor*

INTRODUCTION

Sugar is produced in over 100 countries worldwide. In most years, over 70 percent 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 are very unstable in the world market.

This report evaluates the U.S. and world sugar industry for 2000-2010 by using the Global Sugar Policy Simulation Model developed by Benirschka et al. in 1996. 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 the fields. 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 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 is about 50 percent.

OVERVIEW OF THE WORLD SUGAR INDUSTRY AND SUGAR POLICIES

For the 1996-2000 period, annual global sugar production was approximately 139 million metric tons annually with 30 percent of production exported from its country of origin. The largest sugar producing region is the EU, followed by India and Brazil (Table 1).

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

Table 1. World Sugar Supply and Utilization, 1996 to 2000 Average

Country	Crop ²	Production	Consumption	Net Exports	Ending Stocks	Per Capita Consumption
		-----1,000 metric tons, raw value-----				pounds
Algeria	B	0	928	(940)	109	68
Australia	C	5,351	962	4,313	259	108
Brazil	C	16,490	8,720	7,770	730	114
Canada	B	128	1,230	(1,086)	114	90
China	B/C	7,856	8,664	(386)	2,326	15
Cuba	C	3,946	702	3,240	312	131
Egypt	B/C	1,172	1,873	(714)	413	64
European Union	B	29,012	22,999	5,747	4,244	87
Former Soviet Union	B	4,587	9,777	(5,657)	2,468	72
India	C	16,996	16,275	(216)	7,867	34
Indonesia	C	1,893	3,030	(1,312)	740	32
Japan	B/C	811	2,385	(1,591)	157	43
Mexico	C	4,989	4,300	692	654	96
South Africa	C	2,446	1,389	1,028	450	73
South Korea	-	0	1,139	(1,130)	121	53
Thailand	C	5,518	1,728	3,804	594	57
United States	B/C	7,260	8,913	(1,832)	1,547	71
Rest of the World	B/C	30,461	37,305	(7,564)	7,514	40
World Total	B/C	138,915	132,320	4,166	30,620	45

^a B = Sugarbeet; C = Sugarcane.

Source: USDA, *PS&D View*, 2001.

Per capita sugar consumption is highest in Cuba (59.55 kg), followed by Brazil and Australia. Per capita sugar consumption in the United States is 31.82 kg, which is above world average per capita consumption (19.96 kg). Per capita sugar consumption is lowest in China at 7.17 kg per capita, but that may increase substantially as per capita income increases. Annual global sugar consumption for the 1996-2000 period was 132 million metric tons.

The major sugar exporting countries are the EU, Brazil, Australia, Thailand, Cuba, and Ukraine. These countries accounted for 73 percent of global exports from 1996 to 2000. Relatively few countries dominate world sugar exports, but imports are less concentrated. Major

importing countries are the EU, Russia, China, the United States, Japan, Korea, Indonesia, and Canada. Their imports accounted for about 46 percent of all sugar imports from 1996 to 2000. Under the Lome Convention, the EU is required to import sugar under preferential terms from certain African, Caribbean, and Pacific countries.

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 is 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 \$0.23 and \$0.29 per pound. World market prices ranged between \$0.06 per pound and \$0.13 per pound (Figure 1). Both real Caribbean raw sugar prices and U.S. raw sugar import prices have long-term downward trends.

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.

The United States produces both beet and cane sugar. Cane sugar is produced mainly in Florida, Louisiana, Texas, and Hawaii. Beet sugar is produced largely in the Great Lakes region, Upper Midwest, Great Plains, and far western states. U.S. total sugar production increased about 45 percent from 5.6 million metric tons in 1985/86 to 8.1 million metric tons in 1999/2000. Beet sugar production increased 61.8 percent for the 1985 to 2000 period, while cane sugar production increased 30.0 percent (Figure 2).

U.S. consumption of sugar also increased 13.6 percent from 8.1 million metric tons in 1985/86 to 9.2 million metric tons in 1999/2000. The balance was imported from more than 40 countries. U.S. sugar imports were reduced 71 percent from 4.5 million metric tons to 1.3 million metric tons for the 1974 to 1987 period and then increased to 1.5 million metric tons for the 1988 to 2000 period. Under the North American Free Trade Agreement (NAFTA), Mexico can export 260,000 metric tons of sugar to the United States beginning in October 2000 and its exports to the United States will be unlimited from 2009 when implementation of NAFTA is completed.

The 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; and the Federal Agriculture Improvement and Reform (FAIR) Act of 1996.

The core policy tools in the program are the loan program and import restrictions. The main purpose of the loan program is to maintain a minimum market price to 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 percent of the loan. Final payments are made and the loan is repaid after the sugar has been sold.

Under the FAIR 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 FAIR 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 forfeits collateral (sugar) to the Commodity Credit Corporation (CCC) if market prices fall below the loan rates. The processor must pay a penalty of about one cent per pound of sugar, effectively reducing the price support by the same. 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. The minimum low-duty imports 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 quota was the same level for the 1995 to 2000 period.

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 15.36 cents for raw cane sugar and 16.21 cents 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 5.1 million metric tons of sugar in 1998 and consumed 4.24 million metric tons in the same year. Its exports were 0.87 million metric tons in 1998. If Mexico starts to use High Fructose Corn Sweetener (HFCS) for beverages, more of its sugar could be exported to the United States.

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 placed since the accession of Austria, Sweden, and Finland to the EU and are currently legislated at these levels until 2000/01. 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, 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 percent 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.

South Africa has both internal price supports and export subsidies. South Africa reduced its subsidized exports by 200,000 tons to 702,208 tons by the year 2000 under the URA. Mexico also has subsidized exports and is subsidizing raw sugar storage.

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 percent of the raw sugar produced in the state of Queensland, which produces 95 percent 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 included in the URA. Other countries, including China and India, handle their sugar trade through STEs similar to the QSC.

AN ECONOMETRIC SIMULATION MODEL

The Global Sugar Policy Simulation Model was developed by dividing sugar into beet and cane sugar. This model includes 17 sugar producing and consuming countries. Some of these countries are beet sugar producing countries [Algeria, Canada, the EU, and the Former Soviet Union (FSU)] and some are cane sugar producing countries (Australia, Brazil, Cuba, India, Indonesia, Mexico, South Africa, and Thailand). The remaining countries (China, Egypt, Japan, and the United States) produce both beet and cane sugar. These two sugars are perfectly substitutable in consumption, but are differentiated in the production process.

Sugar production, consumption, and carry-over stock equations in major producing and consuming countries are estimated with time series data by using econometric techniques. The estimated equations are linked under a partial equilibrium condition in the world sugar industry. The market clearing condition requires that the sum of all countries’ excess demand for sugar,

which depends on the world price of sugar, is zero. This aggregate excess demand equation is solved for the equilibrium price.

Model Structure and Development

Area and yield equations determine the supply of sugar. Since sugar is divided into two classes (cane sugar and beet sugar), two separate supply equations are estimated in the United States, Egypt, Japan, and China, which produce both sugar classes. Other countries have either sugarcane or sugarbeet equations.

Sugar area depends upon expected prices of sugar and alternative crops. As a proxy for price expectations, lagged prices are used in the area equation. In addition to commodity prices, the lagged area variable is included to capture dynamics associated with producers' planting decisions. Area harvested is a function of lagged area, lagged prices of sugar and alternative crops, and government policies as follows:

$$a_{i,t}^s = f(a_{i,t-1}^s, p_{i,t-1}^s, p_{t-1}^c, g_t) \quad (1)$$

where a^s is the sugar area harvested, p^s is the world market price or domestic price of sugar, p^c is the prices of alternative crops, g is policy parameters, and i represents index for sugar type ($i=1$ for cane sugar and $i=2$ for beet sugar).

Since sugarcane and sugarbeets are not competing directly for land, area of each type is a function of price of the corresponding crop. Competing crops are cotton, in sugarcane producing regions, and wheat, barley, and oilseed crops in sugarbeet producing regions.

Assuming that sugar yields depend upon production practices and advancements in technology, the total quantity of sugar produced (qp) is the product of the area harvested and yield per hectare:

$$qp_{i,t}^s = a_{i,t}^s \cdot y_{i,t}^s \quad (2)$$

Per capita sugar consumption is a function of the price of sugar, income, and a time trend representing changes in consumers' tastes and preferences:

$$fd_t^s = f(p_t^s, cy_t, t) \quad (3)$$

where fd^s is per capita demand for sugar, p^s is the domestic price of sugar, cy is per capita disposable income, and t is a trend.

Total consumption of sugar is calculated by multiplying the per capita consumption by population in the country as

$$qd_t^s = fd_t^s * pop_t \quad (4)$$

where qd is the total demand for sugar and pop represents population.

Carry-out stocks (qs^s) are a precaution against unexpected shortfalls in production. These stocks, therefore, are likely related to the level of domestic production. However, since the

opportunity cost of holding sugar stocks depends on the price of sugar, the stocks should respond to price changes as

$$qs_t^s = f(qs_{t-1}^s, qp_t^s, p_t^s) \quad (5)$$

Net exports (qx^s) are the difference between domestic supply (domestic production plus carry-in stocks) and demand (domestic consumption plus carry-out stocks):

$$qx_t^s = qs_{t-1}^s + qp_{t-1}^s - qd_t^s - qs_t^s \quad (6)$$

If net export (qx^s) in a country is positive, the country is an exporting country. On the other hand, if net export (qx^s) in a country is negative, the country is an importing country.

A market equilibrium condition is expressed as:

$$\sum_{n=1}^n qx_t^{s,n} = 0 \quad (7)$$

The equilibrium condition is solved to determine market clearing prices of sugar. The equilibrium world price of sugar ($pm^{s,w}$) obtained from Equation 7 is converted into domestic prices ($pm^{s,n}$) using the official exchange rates (er^n) as follows:

$$pm_t^{s,n} = pm_t^{s,w} * er_t^n \quad (8)$$

Assumptions and Data Collection

The baseline simulation reported in this report is grounded on a series of assumptions about general economy, agricultural policies, and technological changes in exporting and importing countries for the simulation period (2000-2010). Macro assumptions are based on forecasts prepared by WEFA group and Project Link. Some of the macro variables are GDP growth rates, interest rates, exchange rates, and inflation rates in the countries. It is generally assumed that current agricultural policy will be continued in all countries in the baseline simulation. Average weather conditions and historical rates of technological change also are assumed in this simulation. The price of sugar in individual countries and the world market is endogenous, while the prices of other crops are exogenous. Thus, the baseline simulation is based on the forecasted world prices of other crops which have substitute and complementary relationships with sugarbeets and sugarcane. The forecasted prices were obtained from the Food and Agricultural Policy Institute (FAPRI) baseline solution.

OUTLOOK FOR THE WORLD SUGAR INDUSTRY

Total world sugar trade is projected to increase 4.6 percent from 23.8 to 24.9 million metric tons. Except for Brazil and Thailand, trade of sugar in most countries increases for 2000-2010. Sugar consumption in Brazil and Thailand is expected to increase faster than production.

World sugar prices, referred to as the Caribbean price of sugar, are projected to increase about 48.9 percent, from 8.51 cents/lb in 1999 to 12.67 cents/lb in 2010 (Figure 1), because of expected strong demand for sugar for the period. However, the price of sugar in 2010 is only 7.0 percent higher than the average price for the 1995-1998 period.

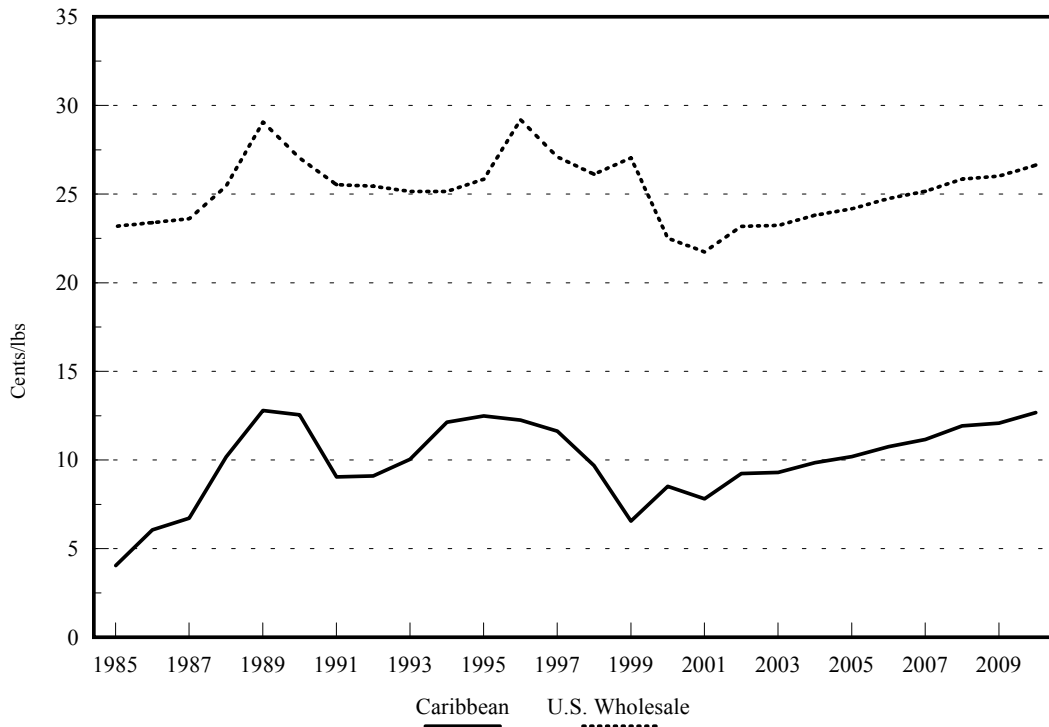


Figure 1. U.S. and World Sugar Price

United States

Table 2 shows production, consumption, imports, and ending stocks of sugar (Figure 2) for the United States. U.S. sugar production is predicted to remain at 8.9 million metric tons. Imports are predicted to increase 37.8 percent from 1.7 million metric tons in 2000 to 2.3 million metric tons in 2010 under an assumption that Mexico increases its exports to the United States at NAFTA levels (Figure 3).

Table 2. U.S. Sugar Production, Consumption, Exports, and Carry-over Stocks, Various Years

	Average (1998-2000)	2000	2010	% Change (2000-2010)
-----thousand metric tons-----				
Production	7,838	8,925	8,873	-0.6
Beet Sugar	4,205	4,846	4,815	-0.6
Cane Sugar	3,634	4,080	4,058	-0.5
Net Imports	1,447	1,678	2,312	37.8
Per Capita Consumption (kg)	32.24	33.40	33.28	-0.4
Consumption	8,781	9,173	9,956	8.5
Carry-over Stocks	1,518	1,833	3,091	68.7

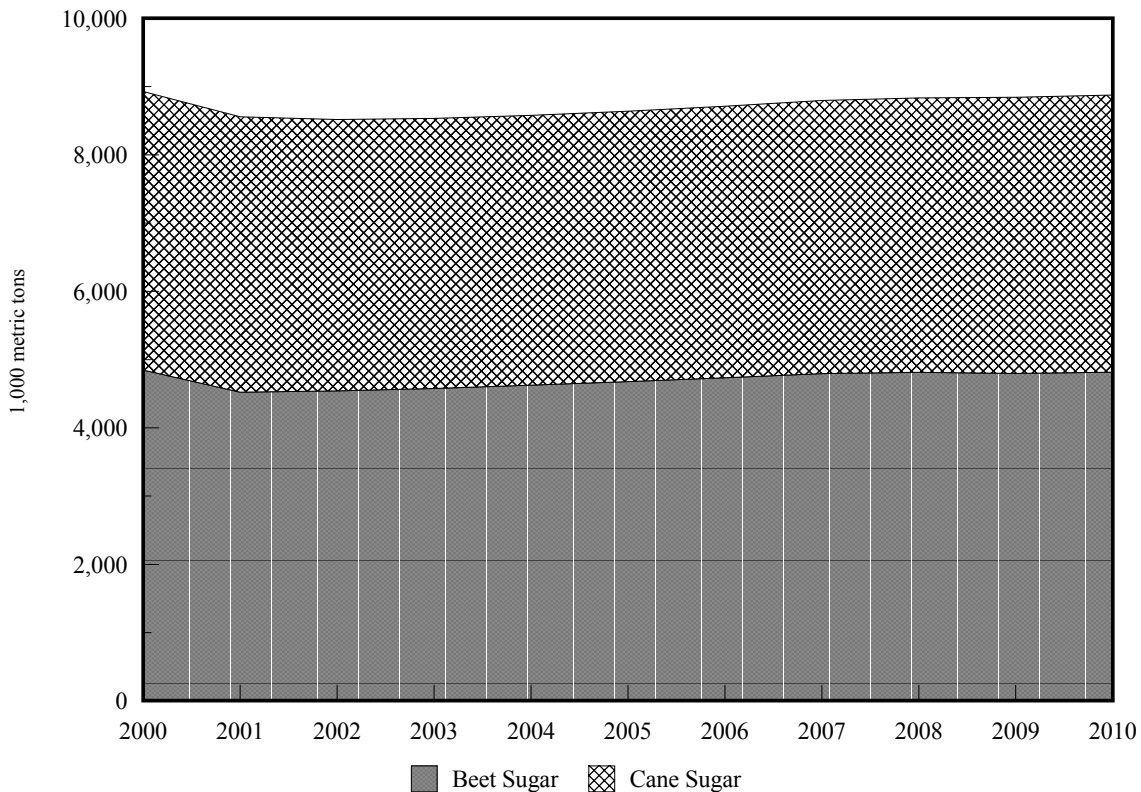


Figure 2. U.S. Beet and Cane Sugar Production

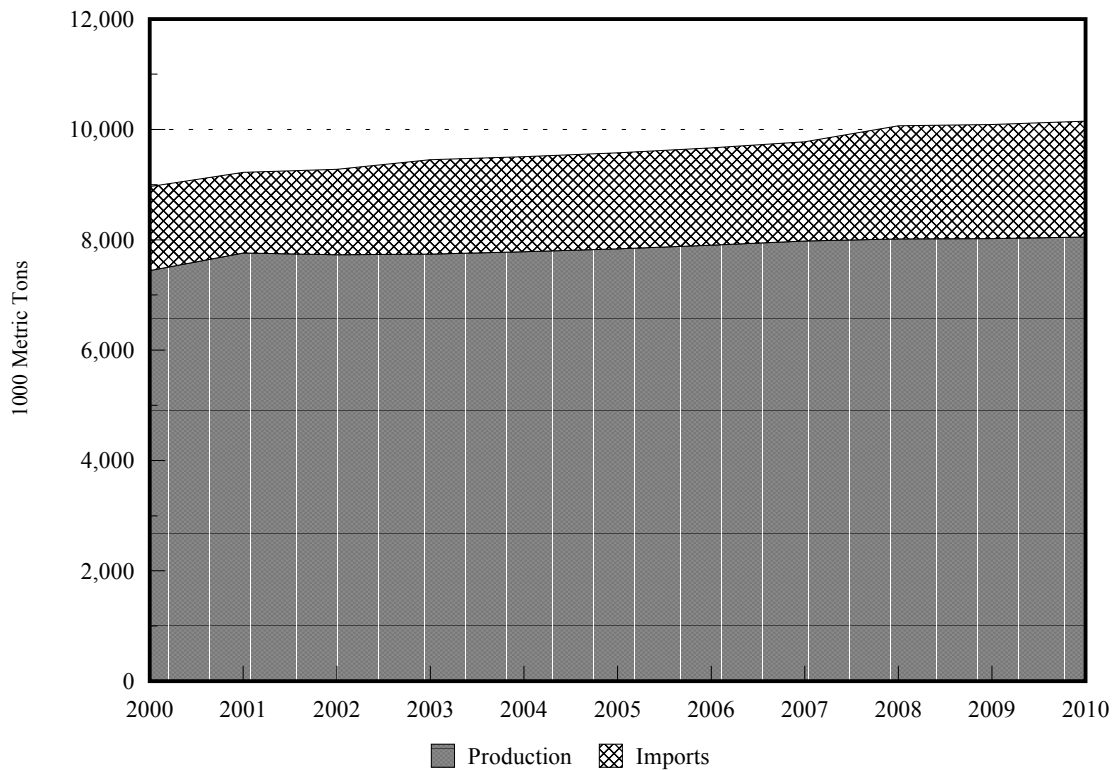


Figure 3. U.S. Sugar Production and Imports

The domestic wholesale price for U.S. sugar is projected to increase from 22.5 cents/lb in 2000 to 26.6 cents/lb in 2010. However, the sugar price is expected to reach the lowest level (21 cents/lb) in 2001 and then recover slowly. The United States imports will increase imports to over 23 percent of its domestic sugar consumption. U.S. sugar consumption is predicted to increase 8.5 percent from 9.2 million metric tons in 2000 to 9.9 million metric tons in 2010. Ending stocks are also predicted to increase (Figure 4).

Exporters

The EU's exports are predicted to increase 4.1 percent from 5.0 million metric tons in 2000 to 5.2 million metric tons in 2010 (Figure 5). Sugar production in the EU is predicted to increase slightly and consumption increases from 15.6 million metric tons in 2000 to 16.1 million tons in 2010 (Table 3).

Brazil's production is predicted to decrease 0.78 percent from 20.1 million metric tons in 2000 to 19.9 million metric tons in 2010 (Table 3). However, Brazil's exports are predicted to decrease 15.6 percent from 11.3 million metric tons in 2000 to 9.5 million metric tons in 2010, due mainly to increased domestic consumption, which is predicted to increase 14.4 percent from 9.1 million metric tons in 2000 to 10.4 million metric tons in 2010.

Thailand's exports are predicted to decrease 7.0 percent from 4.1 million metric tons in 2000 to 3.8 million metric tons in 2010 (Table 3) because of predicted increases in domestic consumption from 1.85 million metric tons in 2000 to 2.1 million metric tons in 2010. Sugar production in the country also is predicted to increase 3.3 percent from 5.7 million metric tons in 2000 to 5.9 million metric tons in 2010.

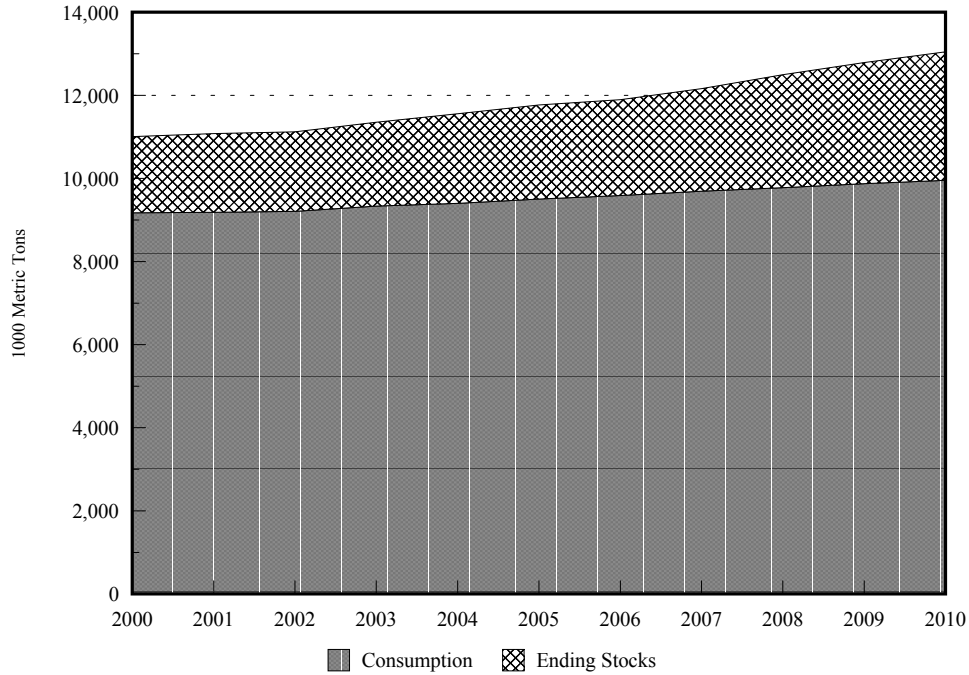


Figure 4. U.S. Sugar Consumption and Ending Stocks

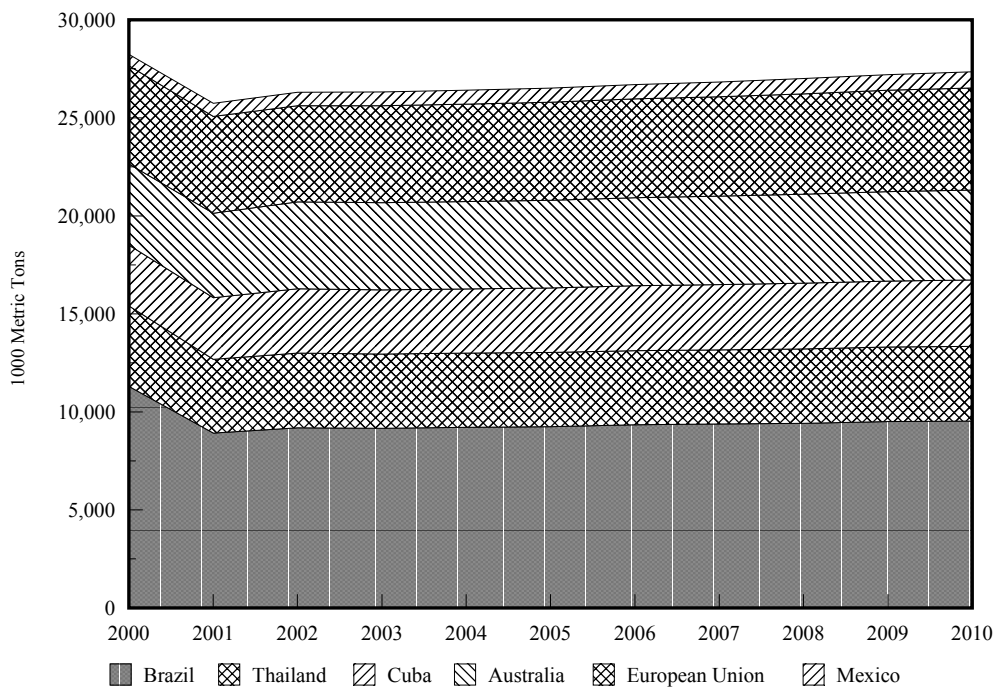


Figure 5. World Sugar Exports by Country

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

	Average (1998-2000)	2000	2010	% Change (2000-2010)
-----thousand metric tons-----				
<u>European Union</u>				
Production	25,539	20,955	21,275	1.53
Net Exports	5,540	5,012	5,219	4.13
Consumption	19,761	15,558	16,055	3.19
Carry-over Stocks	4,039	3,752	3,561	-5.09
<u>Brazil</u>				
Production	18,033	20,100	19,944	-0.78
Net Exports	9,083	11,300	9,535	-15.62
Consumption	9,000	9,100	10,410	14.40
Carry-over Stocks	760	710	1,009	42.11
<u>Thailand</u>				
Production	5,117	5,721	5,911	3.32
Net Exports	3,430	4,100	3,813	-7.00
Consumption	1,810	1,850	2,083	12.59
Carry-over Stocks	513	430	528	22.79
<u>Australia</u>				
Production	5,348	5,481	5,716	4.29
Net Exports	4,254	4,138	4,579	10.66
Consumption	993	995	1,137	14.27
Carry-over Stocks	322	531	400	-24.67
<u>Cuba</u>				
Production	3,693	4,100	4,185	2.07
Net Exports	3,033	3,100	3,387	9.26
Consumption	720	730	815	11.64
Carry-over Stocks	287	420	405	-3.57
<u>Mexico</u>				
Production	5,151	4,977	6,156	23.69
Net Exports	793	575	831	44.52
Consumption	4,374	4,482	5,343	19.21
Carry-over Stocks	640	585	604	3.25
<u>South Africa</u>				
Production	2,684	2,685	3,008	12.03
Net Exports	1,254	1,355	1,649	21.70
Consumption	1,382	1,370	1,363	-0.51
Carry-over Stocks	500	520	504	-3.08

Australia's exports are predicted to increase 10.7 percent from 4.1 million metric tons in 2000 to 4.6 million metric tons in 2010 (Table 3), due mainly to increased sugar production, which is predicted to increase 4.3 percent from 5.5 million metric tons in 2000 to 5.7 million metric tons in 2010. Sugar consumption also is expected to increase 14.3 percent from 1.0 million metric tons in 2000 to 1.1 million metric tons in 2010.

Cuba's exports are predicted to increase 9.3 percent from 3.1 million metric tons in 2000 to 3.4 million metric tons in 2010 (Table 3). It is predicted that Cuba will increase its sugar production from 4.1 million metric tons in 2000 to 4.2 million metric tons in 2010. Cuba's consumption is predicted to increase 11.6 percent from 0.73 million metric tons in 2000 to 0.82 million metric tons in 2010.

Mexico's production is predicted to increase 23.7 percent from 5.0 million metric tons in 2000 to 6.2 million metric tons in 2010. Mexico's exports are predicted to increase 44.5 percent from 0.6 million metric tons in 2000 to 0.8 million metric tons in 2010, due mainly to its exports to the United States under NAFTA. Sugar consumption is predicted to increase 19.2 percent from 4.5 million metric tons in 2000 to 5.3 million metric tons in 2010. Ending stocks are predicted to increase 3.3 percent. If Mexico replaces the sugar that is used in soft drinks with HFCS, the excess sugar will be exported into the United States under NAFTA.

South Africa's production is predicted to increase 12.0 percent from 2.7 million metric tons in 2000 to 3.0 million metric tons in 2010. South Africa's exports are predicted to increase 21.7 percent from 1.4 million metric tons in 2000 to 1.6 million metric tons in 2010 due mainly to increased production. Sugar consumption is predicted to decrease 0.5 percent. Ending stocks are predicted to decrease 3.1 percent.

Importers

Figures 6, 7, and 8 show sugar imports by the major sugar importing countries. Sugar imports of selected Asian and African countries are expected to increase 9 percent and 41 percent, respectively, for the 2000 to 2010 period. The FSU is the largest importer, followed by Japan and Indonesia for the period.

Canada's production is predicted to increase 15.6 percent between 2000 and 2010 and consumption is predicted to increase from 1.3 million metric tons in 2000 to 1.4 million metric tons in 2010 (Table 4). As a result, Canada's imports are predicted to increase 13.5 percent from 1.1 million metric tons in 2000 to 1.3 million metric tons in 2010.

The FSU's production is predicted to increase 12.6 percent from 3.8 million metric tons to 4.3 million metric tons for the 2000-2010 period, and consumption is predicted to increase 2.3 percent from 10.7 million metric tons to 11.0 million metric tons for the same period. Its imports are predicted to decrease 9.7 percent from 7.4 million metric tons in 2000 to 6.7 million metric tons in 2010 (Table 4).

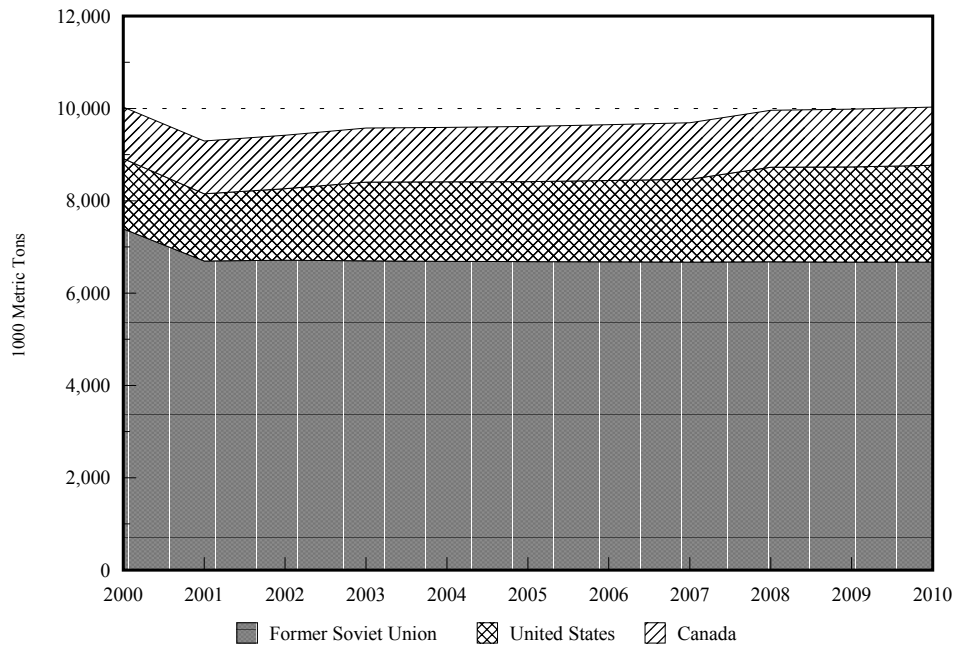


Figure 6. World Sugar Imports by Country, Major Importers

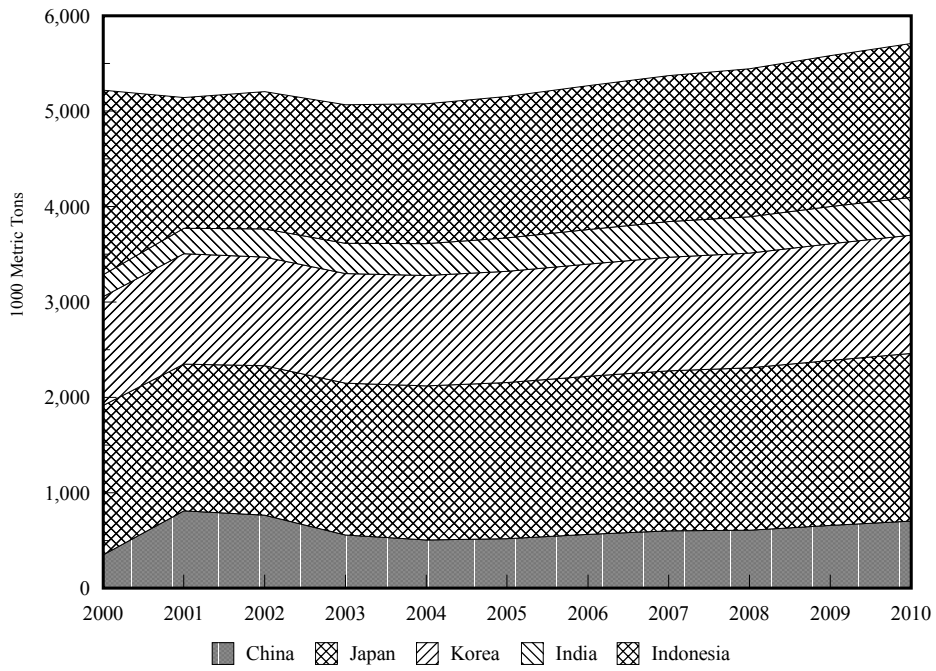


Figure 7. World Sugar Imports by Country, Asian Countries

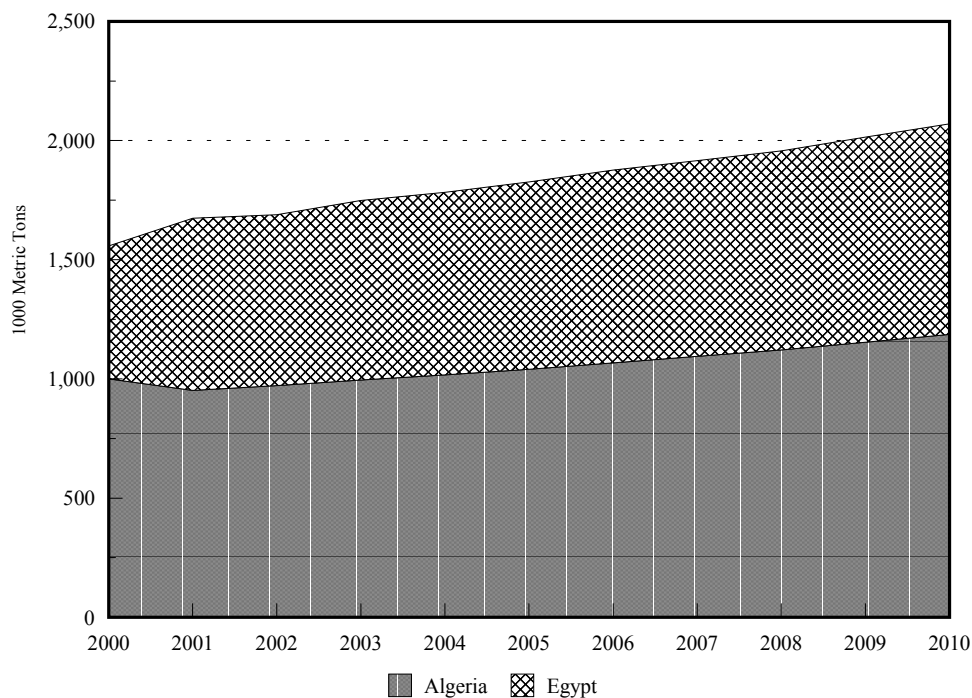


Figure 8. World Sugar Imports by Country, African Countries

China is expected to increase its imports about 100 percent from 0.4 million metric tons in 2000 to 0.7 million metric tons in 2010 (Table 4). China’s production is predicted to increase 29.9% from 7.2 million metric tons in 2000 to 9.4 million metric tons in 2010, and consumption is predicted to increase 11.7 percent from 9.0 million metric tons to 10 million metric tons for the period.

India’s production is predicted to decrease 3.0 percent from 20.1 million metric tons in 2000 to 19.5 million metric tons in 2010. However, its imports are predicted to increase 39.7 percent from 0.4 million metric tons in 2000 to 0.5 million metric tons in 2010, mainly because consumption is expected to increase faster than production at forecasted prices.

Japan’s imports are predicted to increase 12.2 percent from 1.6 million metric tons in 2000 to 1.8 million metric tons in 2010, due mainly to increased domestic consumption. Its consumption is predicted to increase 11.9 percent from 2.3 million metric tons to 2.6 million metric tons for the period (Table 4).

In South Korea, consumption is predicted to increase 8.0 percent for the time period. As a result, South Korea’s imports are predicted to increase 8.7 percent from 1.1 million metric tons to 1.2 million metric tons for the period.

In Algeria, consumption is predicted to increase 27.5 percent from 0.9 million metric tons in 2000 to 1.2 million metric tons in 2010. This increase in consumption resulted in increased imports from 1.0 million metric tons in 2000 to 1.2 million metric tons in 2010.

Egypt’s imports are predicted to increase 58.2 percent from 0.6 million metric tons in 2000 to 0.9 million metric tons in 2010, due mainly to increased consumption. Consumption is

predicted to increase 17.5 percent from 2.0 million metric tons in 2000 to 2.3 million metric tons in 2010.

Indonesia's imports are predicted to decrease 16.5 percent from 1.9 million metric tons in 2000 to 1.6 million metric tons in 2010. Its consumption is predicted to increase 23.3 percent from 3.2 million metric tons in 2000 to 3.9 million metric tons in 2010.

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

	Average (1998-2000)	2000	2010	% Change (2000-2010)
-----thousand metric tons-----				
<u>Canada</u>				
Production	107	122	141	15.57
Net Imports	1,084	1,114	1,264	13.46
Consumption	1,263	1,253	1,402	11.89
Carry-over Stocks	59	39	60	53.85
<u>Former Soviet Union</u>				
Production	3,934	3,842	4,324	12.55
Net Imports	6,870	7,391	6,673	-9.71
Consumption	9,877	10,747	10,994	2.30
Carry-over Stocks	3,039	3,920	4,010	2.30
<u>China</u>				
Production	8,268	7,203	9,358	29.92
Net Imports	175	350	703	100.86
Consumption	9,004	9,000	10,051	11.68
Carry-over Stocks	2,055	1,101	1,316	19.53
<u>India</u>				
Production	17,380	20,112	19,504	-3.02
Net Imports	(805)	(370)	(517)	39.73
Consumption	16,952	17,180	20,009	16.47
Carry-over Stocks	7,967	10,676	10,083	-5.55
<u>Japan</u>				
Production	815	795	816	2.64
Net Imports	1,555	1,566	1,757	12.20
Consumption	2,344	2,300	2,574	11.91
Carry-over Stocks	159	225	127	-43.56

- Continued -

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

	Average (1998-2000)	2000	2010	% Change (2000-2010)
-----thousand metric tons-----				
<u>South Korea</u>				
Carry-in Stocks	94	93	94	1.08
Net Imports	1,097	1,140	1,239	8.68
Consumption	1,120	1,150	1,242	8.00
Carry-over Stocks	104	83	92	10.84
<u>Algeria</u>				
Production	7	6	11	83.33
Net Imports	955	1,000	1,187	18.70
Consumption	935	940	1,198	27.45
Carry-over Stocks	116	157	165	5.10
<u>Egypt</u>				
Production	1,203	1,260	1,426	13.17
Net Imports	548	558	883	58.24
Consumption	1,943	1,960	2,302	17.45
Carry-over Stocks	415	231	397	71.86
<u>Indonesia</u>				
Production	1,761	1,600	2,330	45.63
Net Imports	1,516	1,932	1,614	-16.46
Consumption	3,050	3,200	3,946	23.31
Carry-over Stocks	889	1,240	930	-25.00

CONCLUDING REMARKS

This report evaluates the U.S. and world sugar markets for 2000-2010 by 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 4.6 percent from 23.8 million metric tons in 2000 to 24.9 million metric tons in 2010. The price of Caribbean sugar also is expected to increase about 48.9 percent from 8.51 cents/lb in 2000 to 12.67 cents/lb in 2010 because of faster growth in world consumption of sugar compared to world production. The wholesale price of U.S. sugar is projected to increase from 22.5 cents/lb in 2000 to 26.6 cents/lb in 2010.

Exports are predicted to increase for the EU, Australia, Mexico, South Africa, and Cuba, while exports are predicted to decrease for Brazil and Thailand. Production in the EU is predicted to increase slightly over the forecasting period.

It is predicted that imports from all importing countries except the FSU and Indonesia will increase over the forecasting period. China's imports are predicted to increase 100.86 percent, while Japan's imports are predicted to increase only 12.2 percent. South Korea's imports are predicted to increase 8.68 percent and Algeria's imports are predicted to increase 18.7 percent. The imports for the FSU will decrease 9.71 percent.

U.S. sugar consumption and ending stocks are predicted to increase for the forecasting period. Imports are predicted to increase 37.8 percent for the period because of increased sugar from Mexico.

References

- 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.
- Borremans, Danielle. "Sugar Market Country Report: EU." U.S. Mission to the EU, Office of Agricultural Affairs, http://www.sugarinfo.co.uk/sugar_report_eu.htm, 1999.
- Food and Agricultural Policy Research Institute, *FAPRI*. *2000 U.S. Agricultural Outlook*, Staff Report 00-1, Iowa State University and University of Missouri-Columbia. January 2000.
- 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.
- Ingco, M., and F. Ng. *Distortionary Effects of State Trading in Agriculture: Issues for the Next Round of Multilateral Trade Negotiations*. The World Bank, Washington, DC, 1998.
- Lord, R. "Sugar." *Provisions of the Federal Agriculture Improvement and Reform Act of 1996, AIB-729*. U.S. Department of Agriculture, Economic Research Service, Washington, DC, December 1996.
- 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.
- Steel, P.M. Comments from the U.S. Department of Agriculture on GAO Report *Sugar Program, Changing the Method for Setting Import Quotas Could Reduce Cost to Users*, GAO/RCED-99-209, Washington, DC, 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>, 2000.
- . *PS&D View*. (Computer Files). Washington, DC, 2001.
- . *Sugar and Sweetener: Situation and Outlook Report*. Washington, DC, various issues.
- U.S. General Accounting Office (U.S. GAO). *Sugar Program: Changing the Method for Setting Import Quotas Could Reduce Cost to Users*. GAO/RCED-99-209, Washington, DC, 1999.
- Blank page for duplicating.

Appendix

World Sugar Policy Simulation Model

2001 Baseline Solution

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	38.45	32.79	31.73	33.70	33.76	34.55	35.03	35.81	36.36	37.28	37.51	38.34
Sugarcane	27.11	21.95	21.03	22.74	22.80	23.49	23.91	24.59	25.08	25.88	26.08	26.81

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Caribbean Price	6.55	8.51	7.81	9.23	9.29	9.85	10.19	10.75	11.15	11.92	12.08	12.67
TRQ Status	#N/A	#N/A	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota
Implicit Tariff	12.01	12.01	11.96	11.92	11.91	11.91	11.90	11.90	11.89	11.76	11.77	11.77
Import Price	22.12	20.52	19.77	21.15	21.20	21.76	22.09	22.65	23.04	23.68	23.85	24.44
Wholesale Price	26.71	22.51	21.73	23.18	23.23	23.81	24.17	24.75	25.16	25.84	26.01	26.63
Retail Price	43.27	34.70	33.63	35.61	35.67	36.47	36.94	37.73	38.29	39.21	39.44	40.28

United States - Area Harvested (1000 acres)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	1527	1378	1363	1362	1362	1365	1368	1373	1379	1378	1369	1365
Sugarcane	949	975	965	960	958	957	957	957	958	960	961	963
Total Area	2477	2353	2328	2322	2320	2322	2325	2330	2338	2338	2331	2328

United States - Yields (short tons/acre)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	21.90	23.60	23.48	23.59	23.77	23.98	24.18	24.39	24.60	24.71	24.79	24.97
Sugarcane	36.70	35.20	34.52	34.21	34.11	34.13	34.21	34.32	34.45	34.60	34.75	34.80

United States - Sugarbeet and Sugarcane Production (1000 short tons)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	33448	32523	31989	32135	32390	32735	33091	33491	33933	34061	33948	34078
Sugarcane	34843	33521	33312	32850	32665	32649	32725	32859	33023	33210	33402	33507

United States - Sugar Extraction Rates (percent)

Variable	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	13.56	14.90	14.13	14.13	14.13	14.13	14.13	14.13	14.13	14.13	14.13	14.13
Sugarcane	12.06	12.17	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11

United States - Sugar Production (1000 short tons)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Beet Sugar	4536	4846	4520	4541	4577	4625	4676	4732	4795	4813	4797	4815
Cane Sugar	4202	4080	4034	3978	3956	3954	3963	3979	3999	4022	4045	4058
All Sugar	8738	8925	8554	8519	8532	8579	8639	8712	8794	8835	8842	8873

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

Variable	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Tariff Rate Quota	1800	994	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	15.82	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)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
TRQ Status	#N/A	#N/A	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota
Implicit Tariff	12.01	12.01	11.96	11.92	11.91	11.91	11.90	11.90	11.89	11.76	11.77	11.77
Total Imports	1636	1790	1784	1883	2060	2072	2089	2119	2154	2434	2452	2487
Quota-sugar Imports	1124	1275	1384	1483	1532	1544	1561	1591	1626	2034	2052	2087
Other Sugar Imports	512	464	400	400	528	528	528	528	528	528	400	400
Total Exports	124	113	175	175	175	175	175	175	175	175	175	175
Net Imports	1512	1678	1609	1708	1885	1897	1914	1944	1979	2259	2277	2312

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	1523	1478	2020	2086	2110	2228	2378	2495	2546	2723	2998	3215
Production	7597	8203	8554	8519	8532	8579	8639	8712	8794	8835	8842	8873
Net Imports	1512	1678	1609	1708	1885	1897	1914	1944	1979	2259	2277	2312
Consumption	10025	10111	10126	10150	10285	10360	10477	10565	10684	10777	10881	10974
Carry-out Stocks	1478	2020	2086	2110	2228	2378	2495	2546	2723	2998	3215	3407

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	73.49	73.47	72.91	72.43	72.75	72.65	72.84	72.83	73.04	73.07	73.18	73.21
Stocks/Consumption	14.74	19.98	20.60	20.79	21.66	22.96	23.81	24.10	25.49	27.82	29.55	31.04

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	16	20	21	21	21	21	21	21	21	21	21	21
Yield	42.50	43.80	44.03	44.50	44.92	45.35	45.77	46.20	46.62	47.05	47.48	47.90
Production	680	876	936	951	964	970	977	983	991	998	1007	1013

Canada - Sugarbeet Exogenous Variables

Variable	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Extraction Rate (%)	13.90	13.90	13.90	13.90	13.90	13.90	13.90	13.90	13.90	13.90	13.90	13.90

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	95	43	39	40	41	44	46	48	51	53	56	58
Production	93	122	130	132	134	135	136	137	138	139	140	141
Net Imports	1095	1114	1142	1158	1170	1182	1197	1211	1224	1237	1250	1264
Imports	1110	1130	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Exports	15	16	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1240	1253	1272	1288	1302	1315	1330	1345	1359	1373	1387	1402
Carry-out Stocks	43	39	40	41	44	46	48	51	53	56	58	60

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	40.01	40.01	40.20	40.32	40.37	40.39	40.49	40.58	40.66	40.71	40.79	40.88
Stocks/Consumption	3.47	3.11	3.11	3.22	3.35	3.49	3.63	3.77	3.92	4.05	4.18	4.32

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	622	615	618	623	629	636	643	650	658	665	673	681
Yield	73.70	73.50	73.99	74.49	75.01	75.52	76.03	76.55	77.06	77.57	78.09	78.60
Production	45812	45203	45725	46396	47167	47997	48868	49767	50686	51619	52568	53527

Mexico - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarcane	11.00	11.00	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	670	665	585	626	646	653	653	650	645	638	630	622
Production	4985	4977	5258	5336	5424	5520	5620	5723	5829	5936	6045	6156
Net Imports	-590	-575	-661	-689	-705	-718	-726	-730	-753	-778	-796	-831
Exports	590	575	#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	4400	4482	4556	4626	4712	4802	4897	4998	5083	5166	5257	5343
Carry-out Stocks	665	585	626	646	653	653	650	645	638	630	622	604

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	43.18	43.31	43.37	43.39	43.56	43.77	44.03	44.34	44.50	44.66	44.88	45.06
Stocks/Consumption	15.11	13.05	13.74	13.96	13.86	13.60	13.27	12.90	12.55	12.19	11.83	11.30

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	5	4	6	7	7	7	7	7	8	8	8	8
Yield	19	19	19	19	20	20	20	20	20	20	20	20
Production	95	76	110	129	139	144	147	149	150	151	151	152

Algeria - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeet	7.41	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56	7.56

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	93	97	157	157	158	159	160	161	162	162	163	164
Production	7	6	8	10	10	11	11	11	11	11	11	11
Net Imports	940	1000	952	972	995	1017	1040	1067	1094	1121	1154	1187
Exports	1	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	941	1000	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	935	940	960	981	1005	1027	1050	1078	1105	1131	1165	1198
Carry-out Stocks	97	157	157	158	159	160	161	162	162	163	164	165

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	29.74	29.38	29.49	29.63	29.86	30.02	30.22	30.52	30.80	31.07	31.51	31.92
Stocks/Consumption	10.37	16.70	16.38	16.13	15.82	15.56	15.29	14.99	14.70	14.44	14.10	13.80

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	400	420	420	420	421	422	423	424	425	426	427	428
Yield	94	97	97	97	97	98	98	99	99	99	100	100
Production	37600	40740	40698	40791	41052	41256	41502	41752	42019	42280	42565	42817

Australia - Sugar Extraction Rate (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarcane	13.30	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	253	183	531	400	400	400	400	400	400	400	400	400
Production	4997	5481	5183	5446	5480	5508	5540	5574	5610	5644	5682	5716
Net Exports	4072	4138	4308	4425	4445	4456	4473	4492	4513	4534	4559	4579
Exports	4076	4141	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	4	3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	995	995	1006	1020	1036	1051	1067	1082	1096	1110	1124	1137
Carry-out Stocks	183	531	400	400	400	400	400	400	400	400	400	400

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	53.06	52.51	52.58	52.80	53.08	53.40	53.72	54.00	54.26	54.51	54.74	54.95
Stocks/Consumption	18.39	53.37	39.74	39.20	38.62	38.05	37.48	36.97	36.48	36.03	35.59	35.18

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	560	1010	710	906	974	1003	1011	1014	1014	1013	1009	1010
Production	18300	20100	18196	18491	18570	18755	18935	19168	19349	19534	19762	19944
Net Exports	8750	11300	8913	9184	9162	9213	9247	9343	9378	9416	9501	9535
Exports	8750	11300	#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	9100	9100	9087	9239	9379	9533	9685	9827	9972	10121	10260	10410
Carry-out Stocks	1010	710	906	974	1003	1011	1014	1014	1013	1009	1010	1009

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	52.29	51.77	51.22	51.62	51.96	52.38	52.80	53.18	53.57	53.99	54.37	54.80
Stocks/Consumption	11.10	7.80	9.97	10.54	10.69	10.61	10.48	10.32	10.16	9.97	9.84	9.69

China - Area Harvested (1000 hectares)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	670	656	684	652	699	688	708	709	722	727	740	743
Sugarcane	1170	1020	1114	1138	1155	1162	1165	1169	1173	1178	1184	1187
Total Area	1840	1676	1798	1790	1854	1850	1873	1878	1895	1905	1924	1930

China - Yields (metric tons/hectare)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	25.30	22.70	23.44	23.99	24.38	24.64	24.79	24.85	24.92	25.01	25.02	25.06
Sugarcane	68.40	62.50	64.95	66.70	67.92	68.75	69.28	69.58	69.70	69.90	70.04	70.16

China - Production (1000 metric tons)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	16951	14891	16028	15641	17036	16953	17555	17606	17990	18188	18524	18618
Sugarcane	80028	63750	72350	75897	78451	79874	80723	81328	81746	82347	82922	83296

China - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Sugarcane	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	2515	2548	1101	1227	1299	1305	1280	1282	1288	1294	1286	1305
Production	8969	7203	8414	8495	8764	8884	9021	9080	9156	9230	9315	9358
Beet Sugar	1869	1489	1603	1564	1704	1695	1756	1761	1799	1819	1852	1862
Cane Sugar	7140	5738	6511	6831	7061	7189	7265	7319	7357	7411	7463	7497
Net Imports	64	350	810	764	557	505	519	564	599	608	658	703
Exports	453	205	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	517	555	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	9000	9000	9098	9187	9316	9414	9537	9638	9750	9845	9954	10051
Carry-out Stocks	2548	1101	1227	1299	1305	1280	1282	1288	1294	1286	1305	1316

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	7.11	7.05	7.06	7.07	7.11	7.13	7.16	7.19	7.22	7.25	7.28	7.31
Stocks/Consumption	28.31	12.23	13.49	14.14	14.00	13.59	13.44	13.36	13.27	13.06	13.11	13.10

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	1300	1400	1405	1455	1456	1456	1455	1455	1454	1454	1453	1453
Yield	28	28	27	27	27	27	27	27	27	27	28	28
Production	36400	39760	38375	39140	38990	39054	39216	39439	39682	39943	40200	40477

Cuba - Sugar Extraction Rate (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	290	150	420	488	510	511	502	488	473	456	439	422
Production	3780	4100	3968	4047	4032	4038	4055	4078	4103	4130	4157	4185
Net Exports	2600	3100	3152	3279	3273	3282	3293	3311	3328	3351	3366	3387
Consumption	720	730	747	746	758	766	775	782	791	796	808	815
Carry-out Stocks	150	420	488	510	511	502	488	473	456	439	422	405

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	64.24	64.76	65.95	65.48	66.23	66.53	67.03	67.33	67.77	67.88	68.54	68.81
Stocks/Consumption	20.83	57.53	65.34	68.42	67.39	65.57	63.02	60.45	57.67	55.17	52.23	49.63

Egypt - Area Harvested (1000 hectares)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	38	40	37	38	38	38	38	39	39	39	39	40
Sugarcane	125	128	130	132	134	136	138	139	141	142	144	145
Total Area	163	168	167	171	172	174	176	178	180	181	183	184

Egypt - Yields (metric tons/hectare)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	44.20	44.90	44.73	45.48	45.96	46.52	47.06	47.60	48.14	48.68	49.33	49.84
Sugarcane	95.50	99.00	98.31	97.85	97.58	97.49	97.54	97.72	98.00	98.36	98.80	99.31

Egypt - Production (1000 metric tons)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	1680	1792	1658	1737	1727	1777	1801	1836	1865	1901	1929	1973
Sugarcane	11938	12672	12806	12951	13108	13272	13442	13618	13798	13981	14186	14391

Egypt - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45
Sugarcane	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	640	373	231	266	294	316	335	350	363	373	382	390
Production	1180	1260	1257	1278	1290	1310	1326	1345	1364	1383	1403	1426
Beet Sugar	209	223	206	216	215	221	224	229	232	237	240	246
Cane Sugar	979	1039	1050	1062	1075	1088	1102	1117	1131	1146	1163	1180
Net Imports	485	558	722	717	753	766	786	809	822	835	860	883
Exports	150	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	653	558	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1950	1960	1944	1968	2020	2057	2097	2142	2176	2209	2256	2302
Carry-out Stocks	373	231	266	294	316	335	350	363	373	382	390	397

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	30.53	30.15	29.40	29.27	29.56	29.62	29.73	29.90	29.93	29.95	30.15	30.33
Stocks/Consumption	19.13	11.79	13.67	14.92	15.66	16.28	16.69	16.94	17.16	17.30	17.28	17.24

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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 - Sugarbeet Area Harvested (1000 hectares), Yield (metric tons/hectare), and Production (1000 metric tons)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	2266	2375	2391	2390	2395	2397	2399	2400	2400	2401	2404	2405
Yield	57.10	57.00	57.35	57.53	57.70	57.86	58.02	58.18	58.34	58.50	58.66	58.83
Production	#####	#####	#####	#####	138194	#####	#####	#####	#####	#####	141008	141455

European Union - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	15.09	15.50	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)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	4815	3550	3752	3648	3595	3568	3557	3554	3555	3557	3557	3560
Production	19551	20955	20619	20676	20784	20859	20932	20999	21061	21129	21208	21275
Net Exports	3603	5012	4941	4906	4948	4971	5001	5035	5068	5115	5170	5219
Exports	5825	7220	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	2222	2208	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	15817	15558	15782	15824	15863	15899	15933	15963	15990	16014	16035	16055
Carry-out Stocks	3550	3752	3648	3595	3568	3557	3554	3555	3557	3557	3560	3561

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	44.87	44.02	44.55	44.56	44.57	44.59	44.60	44.61	44.63	44.64	44.65	44.67
Stocks/Consumption	22.44	24.12	23.12	22.72	22.49	22.37	22.31	22.27	22.24	22.21	22.20	22.18

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	5850	7374	10676	10210	10048	10030	10023	10030	10034	10047	10046	10071
Production	17436	20112	17376	17098	17400	17722	18049	18282	18560	18869	19181	19504
Net Exports	-1065	-370	254	-610	-719	-686	-636	-674	-665	-614	-584	-517
Exports	10	10	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1075	380	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	16977	17180	17587	17869	18137	18415	18679	18952	19212	19483	19740	20009
Carry-out Stocks	7374	10676	10210	10048	10030	10023	10030	10034	10047	10046	10071	10083

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	16.04	15.98	16.10	16.11	16.11	16.12	16.12	16.13	16.13	16.14	16.14	16.15
Stocks/Consumption	43.44	62.14	58.05	56.23	55.30	54.43	53.70	52.94	52.30	51.57	51.02	50.39

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	295	320	342	358	369	377	384	391	396	401	406	411
Yield	64.00	65.00	65.02	65.67	66.32	66.97	67.62	68.27	68.92	69.57	70.22	70.87
Production	18880	20800	21238	23485	24451	25276	25998	26661	27290	27907	28513	29124

Indonesia - Sugar Extraction Rate

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
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)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	520	908	1240	955	943	942	940	938	936	935	933	932
Production	1492	1600	1699	1879	1956	2022	2080	2133	2183	2233	2281	2330
Net Imports	1696	1932	1371	1439	1453	1465	1484	1507	1531	1551	1583	1614
Exports	6	17	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1702	1949	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	2800	3200	3255	3330	3410	3489	3566	3642	3715	3785	3865	3946
Carry-out Stocks	908	1240	955	943	942	940	938	936	935	933	932	930

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	13.61	15.30	15.31	15.42	15.54	15.67	15.78	15.89	15.98	16.06	16.19	16.32
Stocks/Consumption	32.43	38.75	29.34	28.30	27.62	26.93	26.29	25.69	25.15	24.65	24.12	23.57

Japan - Area Harvested (1000 hectares)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	67	65	65	64	64	63	62	61	60	59	58	57
Sugarcane	23	22	23	24	24	25	25	25	25	25	25	24
Total Area	90	87	88	88	88	88	87	86	85	84	83	81

Japan - Yields (metric tons/hectare)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	53.60	53.00	54.77	55.79	56.47	56.98	57.42	57.83	58.22	58.60	58.98	59.35
Sugarcane	59.60	58.00	60.30	60.16	60.22	60.26	60.31	60.35	60.40	60.44	60.48	60.53

Japan - Production (1000 metric tons)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	3591	3445	3549	3597	3607	3595	3570	3538	3503	3462	3416	3365
Sugarcane	1371	1276	1394	1438	1470	1488	1498	1501	1500	1496	1488	1477

Japan - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	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)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	87	164	225	177	154	141	135	132	130	129	128	128
Production	852	795	841	856	861	861	858	852	845	837	827	816
Beet Sugar	680	652	672	681	683	681	676	670	663	656	647	637
Cane Sugar	166	155	169	174	178	180	182	182	182	181	180	179
Net Imports	1535	1566	1538	1567	1592	1615	1636	1655	1678	1702	1729	1757
Exports	4	7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1542	1573	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	2313	2300	2428	2446	2466	2482	2497	2509	2524	2540	2557	2574
Carry-out Stocks	164	225	177	154	141	135	132	130	129	128	128	127

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	18.33	18.19	19.16	19.28	19.41	19.52	19.61	19.70	19.81	19.94	20.09	20.24
Stocks/Consumption	7.09	9.78	7.28	6.29	5.74	5.45	5.28	5.18	5.11	5.06	4.99	4.93

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	136	93	83	100	103	105	104	104	102	100	96	94
Net Imports	1075	1140	1158	1139	1149	1155	1166	1176	1190	1202	1222	1239
Exports	328	300	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	1403	1440	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1118	1150	1141	1136	1147	1156	1167	1178	1192	1206	1223	1242
Carry-out Stocks	93	83	100	103	105	104	104	102	100	96	94	92

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	23.94	24.39	23.98	23.67	23.70	23.69	23.73	23.80	23.91	24.03	24.24	24.47
Stocks/Consumption	8.32	7.22	8.75	9.05	9.13	9.01	8.88	8.63	8.38	7.98	7.71	7.38

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	338	330	327	328	330	334	338	342	347	352	357	362
Yield	75.10	73.06	73.26	73.46	73.66	73.86	74.06	74.26	74.46	74.66	74.86	75.06
Production	25384	24087	23965	24063	24313	24639	25015	25419	25843	26279	26725	27173

South Africa - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarcane	11.06	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)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	420	560	520	521	519	519	519	518	515	513	510	507
Production	2808	2685	2653	2664	2691	2727	2769	2814	2861	2909	2958	3008
Net Exports	1293	1355	1269	1272	1299	1334	1378	1430	1478	1534	1590	1649
Exports	1355	1410	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	62	55	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	1375	1370	1383	1393	1392	1394	1392	1387	1385	1379	1371	1363
Carry-out Stocks	560	520	521	519	519	519	518	515	513	510	507	504

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	31.38	31.08	31.26	31.44	31.45	31.61	31.75	31.86	32.10	32.28	32.45	32.66
Stocks/Consumption	40.73	37.96	37.66	37.30	37.31	37.21	37.18	37.13	37.09	36.99	37.02	36.98

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	2200	2200	2205	2208	2222	2237	2255	2273	2294	2315	2338	2359
Yield	15.70	15.10	15.08	15.11	15.18	15.27	15.36	15.46	15.55	15.65	15.75	15.85
Production	34540	33220	33236	33367	33740	34153	34631	35136	35678	36232	36831	37406

Former Soviet Union - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarbeets	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)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	1764	3434	3920	3969	3982	3992	3996	3999	4000	4002	4001	4006
Production	3983	3842	3842	3857	3900	3948	4003	4062	4124	4188	4258	4324
Net Imports	7247	7391	6694	6714	6696	6690	6679	6676	6670	6676	6669	6673
Exports	484	360	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Imports	7731	7751	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Consumption	9560	10747	10488	10558	10586	10634	10680	10736	10792	10865	10921	10994
Carry-out Stocks	3434	3920	3969	3982	3992	3996	3999	4000	4002	4001	4006	4010

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	32.31	36.36	35.52	35.78	35.89	36.05	36.19	36.36	36.50	36.69	36.81	36.98
Stocks/Consumption	35.92	36.48	37.84	37.72	37.71	37.58	37.44	37.25	37.08	36.82	36.68	36.47

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Area Harvested	950	990	990	1011	1007	1005	1005	1005	1005	1007	1008	1010
Yield	56.00	58.00	56.22	55.93	56.09	56.39	56.73	57.08	57.44	57.80	58.16	58.52
Production	53200	57420	55634	56544	56503	56694	56986	57347	57746	58194	58640	59111

Thailand - Sugar Extraction Rates (percent)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sugarcane	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Carry-in Stocks	450	659	430	430	436	444	453	463	475	487	500	514
Production	5386	5721	5563	5654	5650	5669	5699	5735	5775	5819	5864	5911
Net Exports	3352	4100	3760	3820	3788	3778	3778	3782	3788	3797	3805	3813
Exports	3352	4100	#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	1825	1850	1804	1828	1855	1882	1910	1941	1974	2009	2045	2083
Carry-out Stocks	659	430	430	436	444	453	463	475	487	500	514	528

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Per Capita Consumption	29.12	29.25	28.25	28.38	28.54	28.72	28.92	29.15	29.42	29.72	30.06	30.42
Stocks/Consumption	36.11	23.24	23.83	23.84	23.92	24.07	24.25	24.46	24.67	24.91	25.12	25.35

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net Exports	-9587	#####	#####	-10793	-10645	-10780	#####	#####	#####	-10724	-10795	-10868

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
0	6.55	8.51	7.81	9.23	9.29	9.85	10.19	10.75	11.15	11.92	12.08	12.67
\$/ton	144.40	187.61	172.18	203.48	204.81	217.15	224.65	236.99	245.81	262.79	266.32	279.32

World Exp	30244	37112	33316	33463	33317	33561	33728	33935	34101	34134	34413	34663
-----------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------