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Sugar and Sweeteners Outlook

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U.S. Sugar January 2011

In the *World Agricultural Demand and Supply Estimates* (WASDE) released on January 12, 2011, projected U.S. sugar supply for fiscal year (FY) 2011 is decreased 88,000 short tons, raw value (STRV) from last month. Cane sugar production in Florida is reduced 100,000 STRV to 1.6 million STRV, based on processor forecasts. In mid-December, the Florida sugarcane-producing area experienced a severe freeze. According to processor reports, this freeze resulted in widespread damage to existing sugarcane crops awaiting harvest and recently planted sugarcane meant for harvest next year.

Sugar imports in the WASDE are increased 12,000 STRV. On December 10, 2010, the U.S. Trade Representative determined that the Dominican Republic had a sugar trade surplus of 20,227 metric tons, raw value (MTRV) for 2009, the most recent year for which data are available. Therefore, the Dominican Republic has qualified for a 2011 allotment of 11,000 MTRV for export to the United States under the Dominican Republic-Central American Free Trade Agreement (DR-CAFTA). This is the first DR-CAFTA allotment for which the Dominican Republic has qualified.

No other supply or use changes were made in the WASDE. Sugar deliveries for human consumption are still projected at 10.875 million STRV, about the same as in FY 2010. Ending-year sugar stocks are projected at 1.409 million STRV, implying an ending stocks-to-use ratio of 12.6 percent.

Mexico sugar supply and use are unchanged in the WASDE. Production is forecast at 5.650 million STRV. Sugar production through the eighth of January has been strong at 1,126,658 metric tons, actual weight (1,194,257 MTRV). Sucrose recovery has been much higher than normal at 10.95 percent. Sugar exports, most of which are destined for the U.S. market, are projected at 1.138 MTRV, which is more than 50 percent above the FY 2010 level of 737,000 MTRV.

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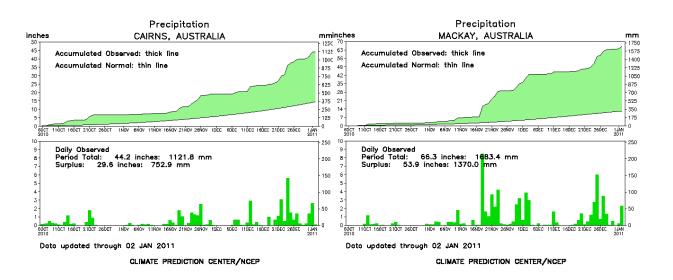
The next release is February 14, 2011

Approved by the World Agricultural Outlook Board.

International Sugar

Heavy rains in northeast Australia during the months of November and December have caused large floods, and estimates of economic damage are very high. While damage from these floods has not been entirely assessed, the floods are affecting the sugar industry. Australia is estimated to be the world's third largest exporter in 2011, according to U.S. Department of Agriculture (USDA) projections that were published prior to the rains. However, even as the third largest exporter, Australia still exports only 15 percent of the amount that Brazil does, by far the world's largest exporter.

Nearly all of Australian sugarcane production takes place in northeast Australia, predominantly in the State of Queensland. Queensland Sugar Limited accounts for about 90 percent of sugar exports from Australia. Their sugar mills, refineries, and bulk terminals are located on the eastern coast of the country, centered primarily around the cities of Cairns, Townsville, Mackay, and Bundaberg (about 200 miles north of Brisbane). This region received the brunt of the heavy rainfall, receiving more accumulated rainfall than normal of varying magnitudes over the past 3 months, according to the National Oceanic and Atmospheric Administration (NOAA).

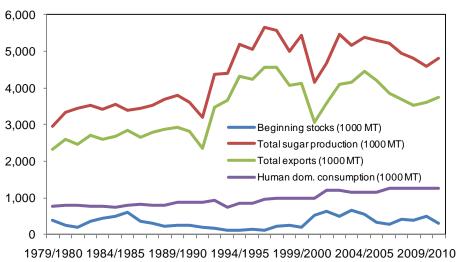


Australia has accounted for about 3 percent of production and between 7 and 8.5 percent of global exports over the past 5 years, according to the Foreign Agriculture Service (FAS). About 70-80 percent of Australian production is exported, as domestic consumption has remained constant and accounts for about a quarter of production. Since 1989, Australian sugar production has trended upward, with oscillations. Over the past 10 years, however, sugar production has fallen gradually. High sugar prices over the past 3 years have prompted increased exports from Australia, and initiated expansion in production. This crop year was expected to have higher planted area compared with the last year. Production was expected to increase 4 percent in the 2010/11 marketing year, according to the latest USDA estimates that were released in November before the significant amounts of rain.

Sugar prices have remained high into the new year, as potentially tight global supplies continue to weigh on the market. Since November, nearby contracts for raw sugar have traded between 26 and 34 cents per pound. Although prices have fallen since they reached 34 cents per pound just after Christmas, as of January 11, they still remain well above 30 cents per pound.

Figure 1

Australia exports most of its sugar production



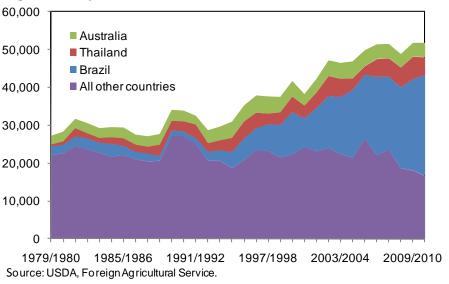
Source: USDA, Foreign Agriculgtural Service

Australia is expected to supply just over 7 percent of the export market in 2010/11, again according to estimates done before the rain, which represents approximately 3.75 million metric tons. Most exports are destined for Asia, Pacific nations, and the Middle East. Most of the exports are sent to Singapore, typically over 75 percent of total Australian exports.

The overall impact of the potential damage to lower sugar production in Australia is important in the context of a tight sugar balance throughout the globe. Brazilian production was very strong in the beginning of their harvest season (March), but the final stretch (October to December) of their production season has not been as robust. Indian production has recovered enough to allow Indian officials to allow a temporary removal of the 60-percent tariff on sugar lapse. India is unlikely to become the large net importer that they have been the past few years, which contributed to the recent price volatility. However, few signs point to India becoming a significant net exporter, either. As a result, production in countries with expansion potential, such as Australia, will be important in helping meet the rising global demand for sugar. The potential damage due to the rains in Queensland will continue to affect global sugar prices as a result. The extent of the impact will be determined once the damages are fully assessed.

Figure 2

Australia's share of global exports if relatively minor, despite being third largest Country



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Sugar Prices At-A-Glance

Figure A Raw sugar nearby ICE futures prices, No. 11 and No. 16 contracts, Oct. 2009-Jan. 2011

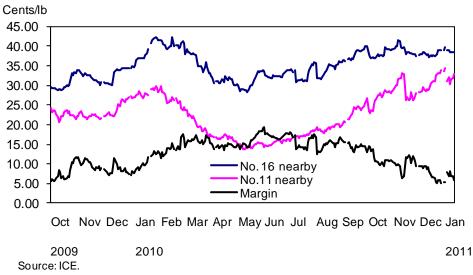
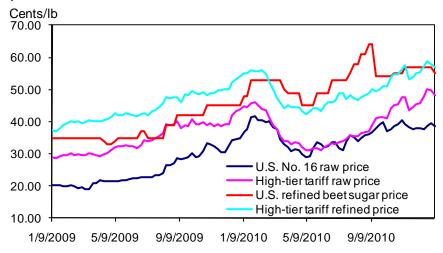
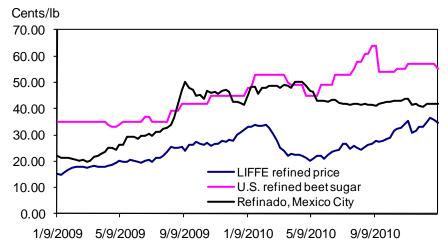


Figure B
U.S. raw and refined sugar prices and corresponding high-tier tariff prices



Sources: ICE, Milling and Baking News.

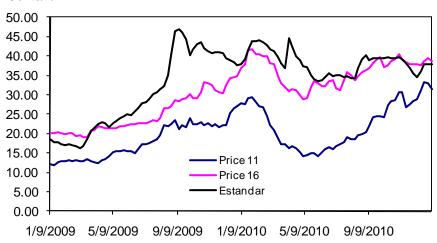
Figure C
Refined sugar prices: World, U.S. Midwest, Mexico City



Sources: LIFFE; Milling and Baking News; Sagarpa, SNIIC.

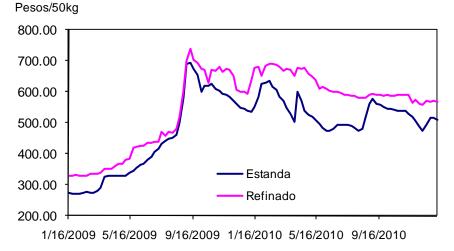
Figure D

Raw sugar prices: World No. 11, U.S. No. 16, Estandar - Mexico City
Cents/lb



Sources: ICE; Sagarpa, SNIIC.

Figure E
Sugar prices, estandar and refinado, Mexico City

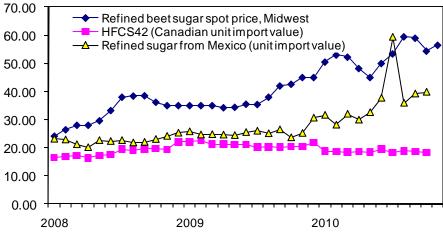


Sources: Economia, SNIIC.

Figure F

Monthly refined sugar and HFCS42 pricing, 2008-11

Cents/lb (HFCS42 - dry weight basis)



Sources: Milling and Baking News, U.S. Census Bureau.

Sugar Production Costs in the United States and Mexico, 2000/01-2009/10

LMC International provides estimates of worldwide production costs for sugar and high fructose corn syrup (HFCS). The data go back to 1979/80 and currently extend through 2008/09, with a preliminary estimate of costs for 2009/10. Field, factory, and administrative costs are detailed for 35 beet-producing countries and 61 cane-producing countries. HFCS production costs are presented for 18 countries. Production costs in regions within certain important sugar-producing countries, including the United States, Mexico, Brazil, China, Thailand, South Africa, and others, are presented as well.

Dating back to 1987, the U.S. Department of Agriculture's Economic Research Service (ERS) has conducted six studies that draw on proprietary LMC International sugar and HFCS production cost data (Hoff, Angelo, and Fry, 1987; Lord, Barry, and Fry, 1989; Haley, 1998, 2001, 2004, and 2007). The ERS studies focus on reporting yearly trends in costs for various categories of raw cane, beet, and HFCS producers and distinguishes between low- and high-cost groupings, different geographical regions, and major exporters. The studies also distinguish between field and factory costs for sugar production.

ERS's Sugar and Sweetener Team has updated these earlier studies and plans to publish the full results on a wide range of production cost trends covering the period 2000/01-2009/10. This article is drawn from the study and focuses specifically on costs of sugar production in the North American Free Trade Agreement (NAFTA) area—cane sugar in the United States and Mexico and beet sugar in the United States. NAFTA production costs are also compared with corresponding world production costs.

Competitiveness Analysis and Cost of Production

Production cost estimates and cross-country comparisons serve a number of goals. They form the basis for comparing competitiveness in production and aid in the calculation of Government support to sugar and sweetener industries in many countries. In addition, trends in production costs can be compared with long-term trends in world prices to evaluate the viability of production in markets that may be liberalized. Production cost estimates are also useful in analyzing the consequences to sugar and sweetener industries of changing Government support (such as recent reforms in the European Union), and of the formation of regional preferential trading areas, such as NAFTA and the Dominican Republic-Central American Free Trade Area (CAFTA/DR). Finally, information on the contribution of particular cost components to total production and marketing costs can be used to interpret the impact of various factors, such as changing exchange rates or input prices, on production incentives in different countries. All of this information can support decisions on production, investment, and policy alternatives and guide expectations of future market developments.

U.S. cane and beet sugar producers argue that they are cost efficient even though their production costs sometimes exceed the world price of sugar. They say the world sugar market is sufficiently distorted by other producing and consuming countries' policies that the world price is a biased measure against which to compare domestic costs. The producers claim, therefore, that other producing countries' production costs relative to their own provide a more valid comparison of cost efficiency.

Sugar Production in the NAFTA Region

Sugar production is sizable in both the United States and Mexico. In the United States, sugar is produced from both sugar beets and sugarcane, whereas in Mexico, sugar comes from only sugarcane. Table 1 lists the areas where sugar crops are grown in each country, and figure 3 shows producing areas in Mexico. Figure 4 shows the relative size of production in both countries.

Florida is the largest cane-sugar-producing State in the United States, followed by Louisiana. Production in Hawaii has been declining for a number of years but still tends to be more than in Texas. For beet sugar, the Red River Valley area is the largest sugar beet producer, with more than 50 percent share of total production. The next largest area is the Northwest, averaging about 20 percent. Production in California has dwindled to less than 5 percent of production. In Mexico, the largest producing area is the Gulf region, with more than 40 percent of production, followed by the Pacific area (about 20 percent) and the Northeast (about 17 percent).

Production Cost Trends

Table 2 shows annual average cost ranges for U.S. and Mexican producing regions during two periods: 2000/01-2004/05 and 2005/06-2009/10. The cost ranges within producing categories tend to be wide, reflecting differing levels of competitiveness between regions and the effect of weather-related events in some cases. In both periods, the low end of U.S. beet sugar production costs was lower than the low end of cane sugar costs, white value basis, in both the United States and Mexico. Between 2000/01-2004/05 and 2005/06-2009/10, the low end of the U.S. beet sugar range increased only 0.25 cents per pound. In Mexico, the low end of cane sugar costs increased less than 1 cent per pound, whereas the low end of U.S. cane sugar costs increased more than 3 cents per pound between periods.

U.S. beet costs are very competitive because of the dominant share of production coming from production in the Red River Valley. The region's processing costs particularly benefit from large-scale factories and a long processing season. Cold winter weather allows frozen beets to be stored between harvesting and processing. The area also does not rely on irrigation, which is another source of lower costs, especially when compared with other U.S. western beet-producing areas.

Figure 5 and 6 expand the data analysis by focusing on changes in the sugar sectors' production cost averages. Figure 5 shows 16.9 percent growth in U.S. cane sector costs between periods, little change in U.S. beet costs, and a 12.8-percent increase in Mexican cane costs. Although some U.S. beet sugar regions produce at lower costs, Mexican cane sugar costs are lower overall than U.S. beet and cane costs in both periods.

Figure 6 shows yearly costs and trends. U.S. cane costs increased over 10 percent in 2004/05 and remain well above 2000/01-2003/04 levels. Starting in 2004/05, production fell in both Louisiana and Florida because of weather events and disease problems with the sugarcane variety that makes up the predominant share of Louisiana's plantings. Mexican sugar producers were unable to follow through on strong 2004/05 production. Production levels in both 2008/09 and 2009/10 have been particularly weak. Lower throughput has increased unit costs.

Costs spiked in all sectors in 2008/09 due to exogenous increases in fuel and chemical costs. From 2000/01-2004/05 to 2005/06-2009/10, fuel and chemical costs for cane production increased 83.2 percent in the United States (fig. 7) and 72.4 percent in Mexico (fig. 8). Although fuel and chemical costs constitute a higher share of U.S. beet production costs, the increase was only 37.4 percent between periods (fig. 9).

Relative U.S. and Mexican Field and Factory Costs of Production

Figures 10-13 focus on U.S. and Mexican regional field and factory costs relative to corresponding average world costs for 2000/01-2004/05 and 2005/06-2009/10. The data are presented in terms of regional costs (field and factory) divided by corresponding average 2000/01-2004/05 world costs. In figure 10, average world field costs were indexed at 100 for 2000/01-2004/05 compared with 136.2 for 2005/06-2009/10, indicating an increase of 36.2 percent between periods. As an illustration, field costs in Florida were 128.5 for 2000/01-2004/05, 28.5 percent above the 2000/01-2004/05 world average. Florida's costs were 176.0 for 2005/06-2009/10, 76.0 percent above the 2000/01-2004/05 world average and 29.2 percent above the 2005/06-2009/10 world average—(176.0 - 136.2) / 136.2).

Relative to the world average, Florida's field costs stayed about the same between periods—128.5 compared with 129.2 ((176.0/136.2)*100). Florida's costs increased 37.0 percent between periods—(176.0 - 128.5) / 128.5)— slightly more than the world average at 36.2 percent. Similar analyses for both field and factory costs can be performed for the three other U.S. cane-producing States, the six cane-producing areas of Mexico (figs. 10 and 11), and the six beet-producing areas of the United States (figs. 12 and 13).

During 2000/01-2004/05, average field costs for U.S. cane production were 44 percent above the world average and field costs for Mexican cane production were 21 percent higher than the world average (fig. 10). Average world field costs for cane production increased about 36 percent between periods, as mentioned earlier, compared with U.S. and Mexican cost increases of about 29 percent for the United States and 26 percent for Mexico. In 2005/06-2009/10, field costs for U.S. cane production were about 36 percent higher than the 2005/06-2009/10 world average. Field costs for Mexican cane production were 12 percent higher than the world average. These comparisons with world costs indicate that field costs in both regions became relatively more competitive. Field costs in Hawaii deviated from those in the other three States, increasing about 50 percent between periods.

Figure 11 highlights regional changes in cane factory costs between 2000/01-2004/05 and 2005/06-2009/10. Compared with world average field costs, both U.S. and Mexican factory costs are more competitive (lower cost). U.S. factory costs were 6 percent higher than the world average in 2000/01-2004/05, and Mexican factory costs were 15 percent higher. Between periods, world factory costs increased 7 percent, whereas U.S. and Mexican factory costs both decreased about 7 percent. Reduced costs in Louisiana (about 29 percent overall) offset increases in the other three U.S. producing areas. Unlike the other States, Louisiana saw a decrease in both factory labor and capital costs between periods. Overall, in 2005/06-2009/10, U.S. factory costs were 7 percent below average world factory costs and Mexican factory costs were 1 percent higher than the world average.

Figure 12 shows field cost averages for U.S. beet sugar regions compared with corresponding world averages. U.S. field costs for sugar beet production were about 3 percent below the corresponding world average for 2000/01-2004/05 and 10 percent below the world average for 2004/05-2009/10. Whereas world field costs increased about 22 percent between periods, U.S. costs grew only about 13 percent. Average U.S. field costs are reduced by the large share of production coming from the low-cost Red River Valley.

Figure 13 extends the analysis to beet-production factory costs. Most U.S. regions rank far below the world average in both periods, which is partly attributable to LMC International's allocation of byproduct credits against factory costs. In the LMC International methodology, the value of sugar produced from the desugaring of molasses is a large proportion of the credit. The desugaring process is little used outside of U.S. beet-producing factories, thus giving the U.S. regions a cost advantage. U.S. beet regions' average factory costs were 48 percent below the world average in 2000/01-2004/05 and 64 percent below in 2005/06-2009/10. Although average fuel and chemical costs increased about 44 percent between periods, labor costs decreased about 19 percent and capital costs decreased about 3 percent. Along with a 49-percent growth in the value of byproduct credits, total beet factory costs decreased 34 percent.

Concluding Summary

This article has summarized sugar cost developments in the United States and Mexico over the period 2000-10, based on a review of extensive production cost estimates undertaken by the international consultancy LMC International.

Costs in the NAFTA area for U.S. and Mexico raw cane sugar and U.S. beet sugar saw increases in the 2000s due to increased fuel, chemical, and fertilizer costs, affecting primarily field costs. However, these increases were much lower than in other world regions, and only modest changes in factory costs kept the relationship between U.S. and world costs relatively stable between the two periods. U.S. beet sugar production retained much of its competitiveness throughout the 2000s.

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Table 1--U.S. and Mexican sugar-producing areas

Producing area	Symbol	States
U.S. beet sugar areas: Great Lakes Northern Great Plains Northwest Red River Valley Southwest	CGP GL NGP NW RRV SW	Colorado, Nebraska, SE Wyoming Michigan Montana, NE Wyoming, western North Dakota Idaho, Oregon, Washington Minnesota, eastern North Dakota California
U.S. cane sugar areas:		
Florida	FL	
Louisiana	LA	
Texas	TX	
Hawaii	HI	
Mexican cane sugar areas	s: 1/	
Central	CE	Morelos (2), Puebla (2)
Gulf	GF	Oaxaca (3), Tabasco (2), Veracruz (20)
Northeast	NE	San LuisPotosi (4), Tamalispas (2), NE Veracruz (2)
Northwest	NW	Sinaloa (3)
Pacific	PC	Colima (1), Jalisco (6), Michoacan (4), Nayarit (2)
South	SO	Campeche (1), Chiapas (2), Oaxaca (1), Tabasco (1),
4/7		Quintana Roo (1)

^{1/} The numbers in parenthese indicate the number of factories in the Mexican States in the regional categories.

Source: LMC International.

Table 2--Regional ranges of average production costs: U.S. raw cane sugar, U.S. refined beet sugar, and Mexican raw cane sugar

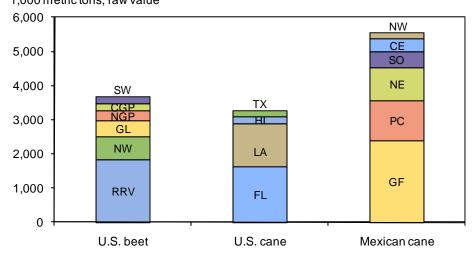
ltem	2000/01 - 2004/05	2005/06 - 2009/10				
	Cei	nts/pound				
Raw cane sugar:						
U.S. cane	11.54 - 21.46	14.70 - 33.24				
Mexican cane	12.17 - 21.14	13.08 - 19.61				
Weighted world average	10.19 - 11.64	12.28 - 16.05				
Raw cane sugar, white value:						
U.S. cane	15.29 - 25.91	18.68 - 38.52				
Mexican cane	15.97 - 25.56	16.94 - 23.93				
Weighted world average	13.85 - 15.40	16.09 - 20.12				
Beet sugar, refined value:						
U.S. beet	14.98 - 33.36	15.24 - 33.70				
Weighted world average	23.48 - 26.28	26.74 - 31.63				

Source: LMC International.



Figure 3
Source: LMC International.

Figure 4 **Average NAFTA sugar production, by producing region, 2000/01-2009/10**1,000 metric tons, raw value



Source: LMC International. Note: See table 1 for key to abbreviations.

Figure 5
U.S. and Mexican sugar production cost, 2000/01-2004/05 and 2005/06-2009/10, compared with U.S. average cane sugar production costs, 2000/01-2004/05

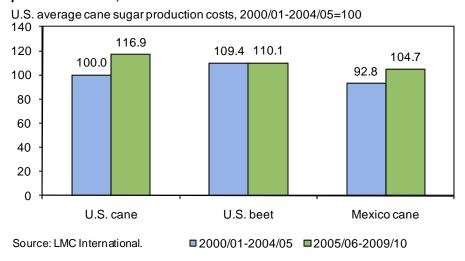
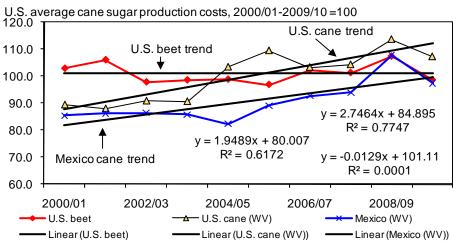
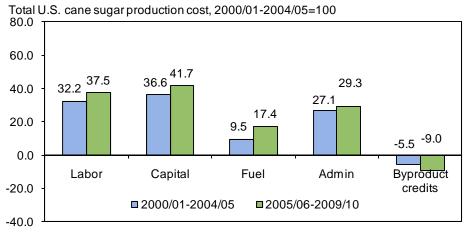


Figure 6
Annual NAFTA sugar production costs compared with U.S. average cane sugar production costs, white value (WV), 2000/01-2009/10



Source: LMC International.

Figure 7
Components of U.S. average cane sugar production costs, 2000/01-2004/05 and 2005/06-2009/10, compared with total U.S. cane sugar costs, 2000/01-2004/05



Source: LMC International.

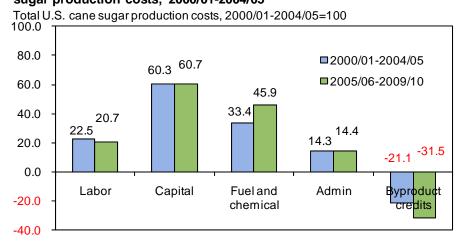
Figure 8

Components of average Mexico cane sugar costs of production, 2000/01-2004/05 and 2005/06-2009/10 compared, relative to U.S. total cane sugar costs 2000/01-2004/05

Cane sugar cost of production in 2000/01-2004/05=100 80.0 60.0 34.7 40.0 27.7 24.0 26.0 26.2 18.8 20.0 10.9 -7.3 -2.9 0.0 By Product Labor Capital Fuel and Admin -20.0 chemical credits -40.0 **2000/01-2004/05** Source: LMC International. **2005/06-2009/10**

Figure 9

Components of average U.S. beet sugar production costs, 2000/01-2004/05 and 2005/06-2009/10, compared with total U.S. cane sugar production costs, 2000/01-2004/05



Source: LMC International.

Figure 10
U.S. and Mexican field production costs for cane sugar, 2000/01-2004/05 and 2005/06-2009/10, compared with world average field production costs,

World average field production costs for cane sugar, 2000/01-2004/05=100 350.0 291.6 300.0 250.0 200.0 148.2 194.2 159.2 150.3 156.3 181.4 176.0 200.0 136.9 134.2 120.3 159.2 128.3 155 6 147.9 150.0 120.2 114.9 100.0 50.0 0.0 CEGF FL LA TX CE GF U.S. Mexico U.S. Mexico 2000/01-2004/05 2005/06-2009/10 ■ U.S. regions Source: LMC International. World averages

Figure 11
U.S. and Mexican factory production costs for cane sugar, 2000/01-2004/05 and 2005/06-2009/10, compared with world average factory production costs for cane sugar, 2000/01-2004/05

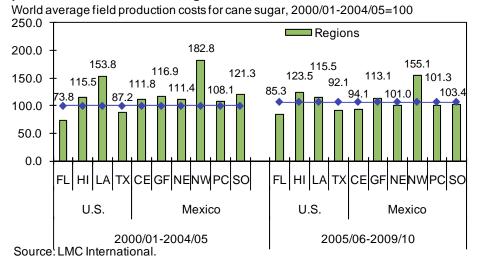


Figure 12
U.S. field production cost for U.S. beet sugar, 2000/01-2004/05 and 2005/06-2009/10, compared with world average field production costs for beet sugar, 2000/01-2004/05

World average field production costs for beet sugar, 2000/01-2004/05=100

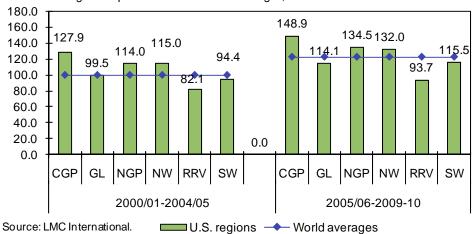


Figure 13

U.S. factory production costs for beet sugar, 2000/01-2004/05 and 2005/06-2009/10 compared with world average factory production costs for beet sugar, 2000/01-2004/05

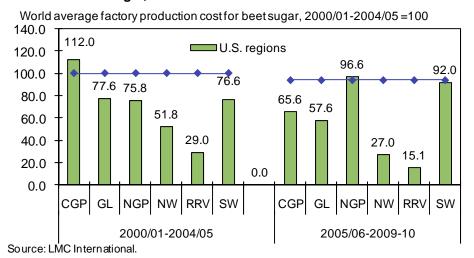


Table 3--U.S. sugar: supply and use, by fiscal year 1/, 1/18/11

Items	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
	1,000 short tons, raw value										
Beginning stocks 2/	2,216	2,180	1,528	1,670	1,897	1,332	1,698	1,799	1,664	1,534	1,503
Total production 3/4/	8,769	7,900	8,426	8,649	7,876	7,399	8,445	8,152	7,531	7,968	8,110
Beet sugar	4,680	3,915	4,462	4,692	4,611	4,444	5,008	4,721	4,214	4,575	4,800
Cane sugar	4,089	3,985	3,964	3,957	3,265	2,955	3,438	3,431	3,317	3,392	3,310
Florida	2,057	1,980	2,129	2,154	1,693	1,367	1,719	1,645	1,577	1,638	1,600
Louisiana	1,585	1,580	1,367	1,377	1,157	1,190	1,320	1,446	1,397	1,481	1,400
Texas	206	174	191	175	158	175	177	158	152	112	140
Hawaii	241	251	276	251	258	223	222	182	192	161	170
Puerto Rico	0	0	0	0	0	0	0	0	0	0	
Total imports	1,590	1,535	1,730	1,750	2,100	3,443	2,080	2,620	3,082	3,319	3,006
Tariff-rate quota imports 5/	1,277	1,158	1,210	1,226	1,408	2,588	1,624	1,354	1,370	1,854	1,421
Other program imports	238	296	488	464	500	349	390	565	308	450	300
Nonprogram imports	76	81	32	60	192	506	66	701	1,404	1,014	1,285
Mexico 6/							60	694	1,402	807	1,245
Total supply	12,575	11,615	11,684	12,070	11,873	12,174	12,223	12,571	12,277	12,821	12,619
Total exports 3/	141	137	142	288	259	203	422	203	136	211	150
Quota-exempt for re-export	141	137	142	288	259	203	422	203	136	211	150
Other exports	0	0	0	0	0	0					
CCC disposal, for export	0	0	0	0	0	0					
Miscellaneous	123	-24	161	23	94	-67	-132	0	0	-46	0
CCC disposal, for domestic non-food use	10	0	0	0	0	0	0	0	0	0	0
Refining loss adjustment	0	0	0	0	0	0	0	0	0	-46	0
Statistical adjustment 7/	113	-24	161	23	94	-67	-132	0	0	0	0
Deliveries for domestic use	10,132	9,974	9,711	9,862	10,188	10,340	10,135	10,704	10,607	11,152	11,060
Transfer to sugar-cont. products											
for exports under re-export program	98	156	183	142	121	106	169	141	120	201	145
Transfer to polyhydric alcohol, feed	33	33	24	41	48	51	53	61	46	35	40
Deliveries for domestic food and beverage use 8/	10,000	9,785	9,504	9,678	10,019	10,184	9,913	10,501	10,441	10,917	10,875
Total use	10,396	10,087	10,014	10,172	10,542	10,476	10,424	10,907	10,743	11,318	11,210
Ending stocks 2/	2,180	1,528	1,670	1,897	1,332	1,698	1,799	1,664	1,534	1,503	1,409
Privately owned	1,395	1,316									
ccc	784	212									
					F	Percent					
Stocks-to-use ratio	20.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.28	12.57
Note: Numbers may not add due to rounding.											

CCC=Commodity Credit Corporation.

^{1/} Fiscal year beginning October 1. 2/ Stocks in hands of primary distributors and CCC. 3/ Historical data are from USDA Farm Service Agency (FSA) (formerly Agricultural Stabilization and Conservation Service) for Sweetener Market Data (SMD) and USDA, National Agricultural Statistics prior to 1992. 4/ Production reflects processors' projection compiled by FSA. 5/ Actual arrivals under the tariff-rate quota (TRQ) with late entries, early entries, and TRQ overfills assigned to the fiscal year in which they actually arrived.. The 2010/11 available TRQ assumes shortfall of 60,257 tons. 6/ Starting in 2007/08, total includes imports under Mexico's World Trade Organization TRQ allocation for raw and refined sugar. 7/ Calculated as a residual. Largely consists of invisible stocks change. 8/For FY 2008-09, combines SMD deliveries for domestic human use, SMD miscellaneous uses, and the difference between SMD imports and World Agricultural Supply and Demand Estimates imports.

Table 4--U.S. sugar: Supply and use (including Puerto Rico), by fiscal year, 1/ metric tonnes, 1/18/11

Items	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
					1,000	metric tons	, raw value	Э			
Beginning stocks 2/	2,010	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,364
Total production 3/ 4/	7,955	7,167	7,644	7,846	7,145	6,712	7,662	7,396	6,832	7,228	7,357
Beet sugar	4,245	3,552	4,048	4,257	4,183	4,032	4,543	4,283	3,822	4,151	4,354
Cane sugar	3,710	3,615	3,596	3,590	2,962	2,681	3,119	3,113	3,009	3,078	3,003
Florida	1,866	1,796	1,932	1,954	1,536	1,240	1,559	1,492	1,431	1,486	1,451
Louisiana	1,438	1,433	1,240	1,249	1,049	1,079	1,198	1,312	1,267	1,344	1,270
Texas	187	158	173	159	143	159	161	143	138	101	127
Hawaii	219	227	251	228	234	202	201	165	174	146	154
Puerto Rico	0	0	0	0	0	0	0	0	0	0	(
Total imports	1,443	1,393	1,570	1,588	1,905	3,124	1,887	2,377	2,796	3,011	2,727
Tariff-rate quota imports 5/	1,158	1,051	1,098	1,113	1,277	2,348	1,473	1,229	1,243	1,682	1,289
Other program imports	216	269	443	421	454	317	354	513	279	408	272
Nonprogram imports	69	73	29	54	174	459	60	636	1,274	920	1,166
Mexico 6/							54	630	1,272	732	930
Total supply	11,408	10,537	10,599	10,950	10,771	11,044	11,088	11,404	11,138	11,632	11,317
Total exports 3/	128	125	129	261	235	184	383	184	123	191	136
Quota-exempt for reexport	128	125	129	261	235	184	383	184	123	191	136
Other exports	0	0	0	0	0	0	0	0	0	0	C
CCC disposal, for export	0	0	0	0	0	0	0	0	0	0	C
Miscellaneous	112	-22	146	20	85	-61	-120	0	0	-41	0
CCC disposal, for domestic nonfood use	9	0	0	0	0	0	0	0	0	0	C
Refining loss adjustment	0	0	0	0	0	0	0	0	0	-41	C
Statistical adjustment 7/	103	-22	146	20	85	-61	-120	0	0	0	C
Deliveries for domestic use	9,191	9,048	8,810	8,946	9,243	9,381	9,194	9,710	9,623	10,117	10,033
Transfer to sugar-cont. products	00	4.44	400	400	440	00	450	400	400	400	400
for exports under re-export program	89	141	166	129	110	96 46	153	128	109	183	132
Transfer to polyhydric alcohol, feed	30	30	22	38	44	46	48	56	42	31	36
Deliveries for domestic food and beverage use 8/	9,072	8,877	8,622	8,780	9,089	9,239	8,993	9,527	9,472	9,903	9,866
Total use	9,431	9,151	9,084	9,228	9,563	9,504	9,457	9,895	9,746	10,267	10,170
Ending stocks 2/	1,977	1,386	1,515	1,721	1,208	1,540	1,632	1,510	1,392	1,364	1,278
Privately owned	1,266	1,194									
CCC	711	192				Percent					
						reiceiil					
Stocks-to-use ratio CCC = Commodity Credit Corporation	20.97	15.15	16.68	18.65	12.63	16.21	17.25	15.26	14.28	13.28	12.57

CCC = Commodity Credit Corporation.

Note: Numbers may not add due to rounding.

^{1/} Fiscal year beginning October 1. 2/ Stocks in hands of primary distributors and CCC. 3/ Historical data are from USDA, Farm Service Agency (FSA) formerly Agricultural Stabilization and Conservation Service Sweetener Market Data (SMD), and USDA, National Agricultural Statistics Service, Sugar Market Statistics prior to 1992. 4/ Production reflects processors' projections compiled by the FSA. 5/ Actual arrivals under the tariff-rate quota (TRQ) with late entries, and TRQ overfills assigned to the fiscal year in which they actually arrive. The 2010/11 available TRQ assumes shortfall of 54,664 tonnes. 6/ Starting in 2007/08, total includes imports under Mexico's World Trade Organization TRQ allocation for raw and refined sugar. 7/ Calculated as a residual. Largely consists of invisible stocks change. 8/ For FY 2008-09, combines SMD deliveries for domestic and human use, SMD miscellaneous uses, and the difference between SMD imports and World Agricultural Supply and Demand Estimates imports.

Table 5--Mexico: sugar production and supply, and sugar and High Fructose Corn Syrup utilization, 1/18/2011

Fiscal year (Oct/Sept)	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10 2	010/11 1/
Beginning stocks	1,063	1,548	1,172	1,194	1,237	1,965	1,294	1,718	1,975	624	973
Production	5,220	5,169	5,229	5,330	6,149	5,604	5,633	5,852	5,260	5,115	5,650
Imports	43	52	63	327	268	240	474	226	160	861	225
Supply	6,326	6,769	6,464	6,851	7,654	7,809	7,401	7,796	7,395	6,600	6,848
Disappearance											
Human consumption	4,481	5,004	5,097	5,380	5,279	5,326	5,133	5,090	5,065	4,615	4,435
Other cons.	142	180	135	220	282	323	390	414	475	302	300
Miscellaneous								-360	-136	-27	
Total	4,623	5,184	5,232	5,600	5,561	5,649	5,523	5,144	5,404	4,890	4,735
Exports	155	413	38	14	128	866	160	677	1,367	737	1,138
Total use	4,778	5,597	5,270	5,614	5,689	6,515	5,683	5,821	6,771	5,627	5,873
Ending stocks	1,548	1,172	1,194	1,237	1,965	1,294	1,718	1,975	624	973	975
Stocks-to-human cons.	34.5	23.4	23.4	23.0	37.2	24.3	33.5	38.8	12.3	21.1	22.0
Stocks-to-use	32.4	20.9	22.7	22.0	34.6	19.9	30.2	33.9	9.2	17.3	16.6
HFCS cons. (dry weight)	600	263	130	135	355	667	698	782	653	1,418	1,650

Source: USDA, Foreign Agricultural Service, Production, Supply and Distribution online (historical data); USDA, World Agricultural Supply and Demand Estimates (forecast data). 1/ Forecast.



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