

# **Impacts of the U.S.-Central America Free Trade Agreement on the U.S. Sugar Industry**



**Prepared for Senator Byron Dorgan**

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## HIGHLIGHTS

- The U.S.- Central American Free Trade Agreement (CAFTA) is a free trade agreement with five Central American Countries: Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.
- Because of differences in resource endowments, size, and income between the United States and the Central American countries, trade between the two regions has generally been complementary, inter-industry trade. The United States exports wheat, corn, soybeans, and rice, and imports coffee, bananas, and fruits and vegetables. CAFTA will enhance the U.S. trade volume with Central America through trade creation and diversion effects.
- One of the largest exports by the Central American countries is sugar. The region exports about 1.5 million tons of sugar annually, and currently exports less than 10% of its sugar exports to the United States.
- If the United States imports more than 500 thousand tons of additional sugar, a limited number of sugar producing regions in the United States would be able to remain viable. Wholesale price of sugar would be about 20 cents in the United States with an additional import of 500 thousand tons, and would decrease further as additional imports increase. For a sugar price less than 20 cents/pound, U.S. domestic sugar supply would become much more elastic. This implies that the U.S. domestic sugar supply would decrease much faster if the price of sugar was lower than 20 cents/pound: domestic supply would decrease 25% for sugar beets and 15% for sugar cane for every 10% decrease in price. Sugar beet processors could lose their economies of scale as a result of reduced supply of sugar beets and would be less competitive. However, this may not be a major problem for cane sugar refiners since the United States imports raw cane sugar for domestic processing.
- The current U.S. proposal on sugar under CAFTA could permit the Central American countries to export more than one million tons of sugar to the United States within a few years. Even if the second tier tariff is not included in the final agreement, incremental access, as requested by the CAFTA countries, could be in the range of 300,000 tons per year. In addition, with expected additional imports of sugar under various FTAs, such as NAFTA and FTAA, total additional U.S. imports of sugar could exceed one million tons, which would hurt the U.S. sugar industry significantly.
- If the United States imports more than 2 million tons of additional sugar from the CAFTA countries, the world price of sugar would increase from 8 cents/pound to 10 cents/pound and the U.S. domestic wholesale price would decrease to 13 cents/pound. At this price level, the United States would import more than 80% of its domestic consumption.
- CAFTA may be good for both the United States and the Central American countries. However, the U.S. sugar industry may become a victim of the agreement. U.S. sugar imports from the Central American countries should be limited to protect sugar beet and cane growers in the United States until worldwide, multilateral free trade for sugar is established.

# **Impacts of the U.S.-Central America Free Trade Agreement on the U.S. Sugar Industry**

**Won W. Koo, Richard D. Taylor, and Jeremy W. Mattson\***

## **INTRODUCTION**

On January 16, 2002, the Administration announced the initiation of a U.S.-Central American Free Trade Agreement (CAFTA). The purpose of CAFTA is to promote U.S. exports to the region, support democracy and economic reforms, and advance the Free Trade Area of the Americas. In 2000, the United States exported \$8.8 billion to Central America and imported \$11.8 billion. The countries included in the agreement are Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua.

Any free trade agreement provides for increased trade flows due to lower tariffs, increased access to markets, and increased foreign direct investment. However, there are gains and losses within certain sectors of the various economies. When several economies are linked together by free trade, efficient sectors prosper while less efficient sectors do not.

The Central American region is a major sugar producing area. Thus, CAFTA may affect the U.S. sugar industry if the United States allows limited or unlimited imports of sugar from the region.

The objective of this study is to analyze the effect of CAFTA on the U.S. sugar industry, particularly in the Red River Valley of North Dakota and Minnesota.

## **GENERAL ECONOMIC CHARACTERISTICS**

Table 1 shows the per capita income for the countries involved in CAFTA. There are substantial differences in the economies of the countries. The per capita income for the Central American countries range between \$459 per year (Nicaragua) and \$3,907 per year (Costa Rica), while the per capita income for the United States is \$35,891.

Inflation for most Central American countries is higher than that in the United States. Since 1995, prices have increased 148% in Honduras, 120% in Costa Rica, 91% in Nicaragua, 68% in Guatemala, and 28% in El Salvador, while prices increased 18% in the United States.

The CAFTA countries import and export a larger share of their GDP than the United States. Table 1 shows that Costa Rica's exports amount to 33% of their GDP, while exports by

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\*Koo is Professor and Director, Taylor is a Research Scientist, and Mattson is a Research Assistant, in the Center for Agricultural Policy and Trade Studies, NDSU.

Nicaragua and Honduras amount to 24% and 20%, respectively. U.S. exports equal 7% of GDP. Nicaragua's imports amount to 73% of its GDP, while imports by Honduras, Costa Rica, and El Salvador equal 47%, 45%, and 37 % of their GDP, respectively. U.S. imports amount to 12% of GDP. The Central American countries, overall, are net importers, but they are net exporters of agricultural products.

The education level in the United States is much higher than that in the CAFTA countries. The illiteracy level for 15 to 24 year olds is less than 1% in the United States, while it is 28% in Nicaragua, 21% in Guatemala, and 15% in Honduras. Costa Rica's illiteracy level, however, is only 2%. Nicaragua spends a larger portion of its GDP on education than does any other country, 5.7%. The United States spends 5%, while Honduras spends 4.2%, El Salvador and Costa Rica spend 2.4%, and Guatemala spends 1.4%.

The per capita land resource is much larger for the United States (1.43 ha per person) than for all countries except Nicaragua. El Salvador, Guatemala, and Honduras have per capita land resources of 0.27, 0.38, and 0.44 ha per person, respectively.

Based on the general economic characteristics, agricultural trade between the United States and Central America has been inter-industry trade: the United States imports coffee, bananas, and other fruits and vegetables, while it exports wheat, corn, soybeans, and rice. If CAFTA is established, the same trade pattern will be maintained, indicating trade between the two regions will generally be complementary.

**Table 1. Economic and Demographic Characteristics of the Central American Countries and the United States, 2000-2002**

		Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	United States
Per Capita Income	US\$	3,907	1,638	1,936	940	459	35,891
Consumer Price Index*		220.38	127.81	167.68	247.83	190.88	118.04
Exports	%GDP	33	12	10	20	24	7
Imports	%GDP	45	37	26	47	73	12
Illiteracy Rate	% 15-24 yrs	2	12	21	15	28	<1
Education Spending	%GDP	2.4	2.4	1.4	4.2	5.7	5.0
Total Land Area	1000 Ha	5,110	2,104	10,889	11,209	13,000	962,909
Agricultural Land	1000 Ha	2,865	1,704	4,507	2,936	6,986	411,259
Percent	(%)	0.56	0.81	0.41	0.26	0.54	0.43
Agricultural Per Capita Land	(Ha)	0.71	0.27	0.38	0.44	1.34	1.43

\* 1995=100

Source: FAO, IMF, UNESCO

## HISTORICAL TRADE FLOWS

The United States has an agricultural trade deficit with the CAFTA countries (Table 2). The trade deficit has remained relatively constant over time. In 2002, the United States exported a little over \$1 billion to CAFTA countries and imported \$1.9 billion. Guatemala is the largest market for U.S. agricultural products, and Costa Rica is the largest source of agricultural imports from Central America.

**Table 2. Total U.S. Agricultural Exports and Imports with CAFTA Countries (1000 \$)**

	2000	2001	2002
<b>Exports</b>			
Costa Rica	185,622	199,010	225,592
Guatemala	258,157	293,994	341,032
Honduras	195,147	198,075	183,800
Nicaragua	74,153	102,754	84,167
El Salvador	215,057	241,061	211,008
<b>Total</b>	<b>928,136</b>	<b>1,034,894</b>	<b>1,045,599</b>
<b>Imports</b>			
Costa Rica	812,470	804,490	802,966
Guatemala	709,714	609,093	684,511
Honduras	250,717	237,474	232,337
Nicaragua	109,010	92,445	96,962
El Salvador	167,492	87,319	74,440
<b>Total</b>	<b>2,049,403</b>	<b>1,830,821</b>	<b>1,891,216</b>

Source: FAS/USDA

Figure 1 shows U.S. exports and imports of agricultural products with Central America. The United States has maintained an agricultural trade deficit with Central America that has remained between \$796 million and \$1.1 billion per year.

The main U.S. agricultural exports are corn, wheat, rice, soybean meal, and soybeans (Table 3). U.S. exports of these commodities to the CAFTA countries grew from 2.3 million metric tons in 1998 to 3.8 million metric tons in 2002, an increase of 65% in five years. From 1998 to 2002, wheat exports increased from 623 thousand metric tons to 922 thousand metric tons, corn exports increased from 884 thousand metric tons to 1.6 million metric tons, rice exports increased from 297 thousand metric tons to 587 thousand metric tons, and soybean meal exports increased from 312 thousand metric tons to 395 thousand metric tons.

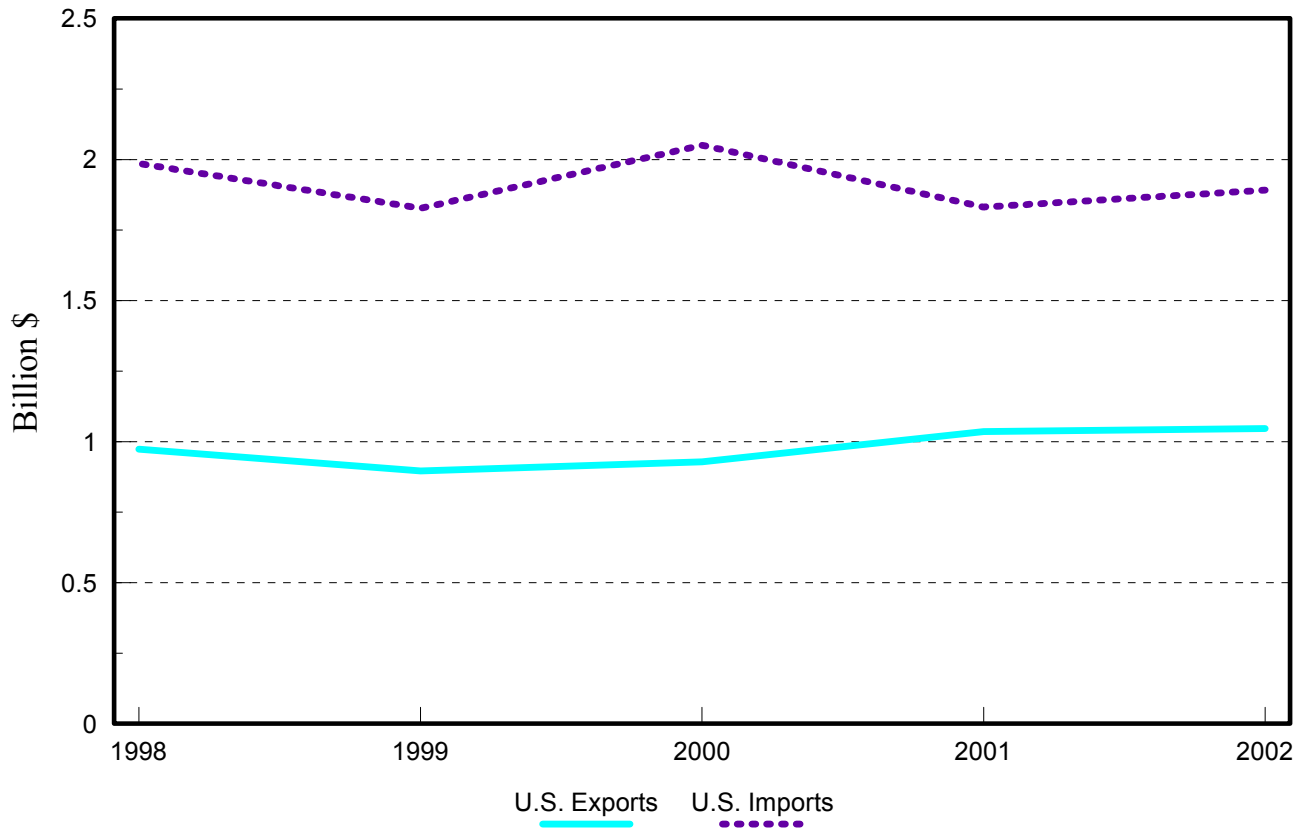


Figure 1. United States Imports and Exports of Agricultural Products with Central American Countries



**Table 3. U.S. Exports of Selected Commodities to CAFTA Countries (metric tons)**

	1998	1999	2000	2001	2002	% Change from 1998/2002
<i>Wheat, Unmilled</i>						
Guatemala	63,561	82,906	78,061	125,782	293,835	362
Honduras	156,235	182,002	231,226	171,699	204,144	31
Costa Rica	124,201	141,159	144,628	150,053	182,177	47
El Salvador	173,308	188,315	202,860	228,604	167,528	-3
Nicaragua	106,175	86,105	47,472	84,974	74,289	-30
<i>Total</i>	<i>623,480</i>	<i>680,487</i>	<i>704,247</i>	<i>761,112</i>	<i>921,973</i>	<i>48</i>
<i>Rice-Paddy, Milled</i>						
Honduras	63,137	72,675	111,684	135,573	145,442	130
Nicaragua	62,853	84,325	76,762	158,221	140,174	123
Costa Rica	101,607	59,315	67,983	57,648	123,360	21
El Salvador	36,462	36,195	42,002	103,646	109,567	200
Guatemala	32,829	23,343	46,496	47,066	68,230	108
<i>Total</i>	<i>296,889</i>	<i>275,853</i>	<i>344,926</i>	<i>502,154</i>	<i>586,773</i>	<i>98</i>
<i>Corn</i>						
Guatemala	244,886	406,328	487,874	483,047	556,133	127
Costa Rica	353,612	370,530	491,957	488,347	492,179	39
El Salvador	175,200	316,301	404,501	436,337	285,454	63
Honduras	99,228	83,282	168,639	223,382	212,998	115
Nicaragua	11,001	64,475	69,116	71,745	54,189	393
<i>Total</i>	<i>883,927</i>	<i>1,240,916</i>	<i>1,622,087</i>	<i>1,702,858</i>	<i>1,600,953</i>	<i>81</i>
<i>Soybeans</i>						
Costa Rica	159,489	169,994	191,724	205,001	239,599	50
Guatemala	132	1,261	234	13,198	7,356	5473
Nicaragua	0	10,326	0	420	2,557	
El Salvador	0	1,098	0	550	0	
Honduras	0	0	18	0	0	
<i>Total</i>	<i>159,621</i>	<i>182,679</i>	<i>191,976</i>	<i>219,169</i>	<i>249,512</i>	<i>56</i>
<i>Soybean Meal</i>						
Guatemala	122,868	174,277	175,598	148,422	175,511	43
El Salvador	106,488	128,792	140,430	131,437	122,321	15
Honduras	68,391	71,062	69,584	72,710	70,997	4
Nicaragua	14,421	18,812	26,535	24,743	26,299	82
Costa Rica	91	58	17	208	0	
<i>Total</i>	<i>312,259</i>	<i>393,000</i>	<i>412,164</i>	<i>377,520</i>	<i>395,128</i>	<i>27</i>

Source: FAS/USDA

U.S. market shares for wheat, corn, and rice exported to the countries is high (Table 4). Data in Table 4 differ somewhat from data in Table 3 because they are from different sources, but these sources are helpful in estimating U.S. market share. The share of U.S. wheat imported by CAFTA countries is 97% in Honduras, 90% in El Salvador, 81% in Nicaragua, 69% in Costa Rica, and 25% in Guatemala. Guatemala imports more wheat from Canada than from the United States. The U.S. market share for corn and rice is above 70% for all countries. CAFTA will enhance U.S. exports of corn, rice, and especially wheat exports to Guatemala and Costa Rica.

**Table 4. CAFTA Imports of Wheat, Corn, Rice and U.S. Market Share**

	Wheat				Corn			Rice		
	Imports from U.S.	Imports from Canada	Total Imports	U.S. Market Share	Imports from U.S.	Total Imports	U.S. Market Share	Imports from U.S.	Total Imports	U.S. Market Share
-----metric tons-----										
-										
<i>Costa Rica</i>										
2000	166,234	65,748	239,756	69%	424,444	483,451	88%	66,252	66,317	100%
2001	143,950	57,257	209,113	69%	476,682	508,507	94%	80,036	80,037	100%
<i>El Salvador</i>										
1999	177,829	33,423	214,094	83%	309,598	361,294	86%	32,204	33,007	98%
2000	214,060	22,695	237,225	90%	386,611	398,997	97%	52,392	57,404	91%
<i>Guatemala</i>										
1999	71,206	267,261	341,674	21%	324,508	326,846	99%	23,491	25,372	93%
2000	68,501	180,268	271,343	25%	318,912	333,054	96%	41,618	43,076	97%
<i>Honduras</i>										
1999	227,851	0	227,851	100%	99,492	114,765	87%	74,652	81,739	91%
2000	157,788	2405	162,373	97%	171,069	176,004	97%	116,149	117,287	99%
<i>Nicaragua</i>										
2000	43,001	23,187	66,188	65%	26,243	37,206	71%	84,123	88,471	95%
2001	79,506	18123	97,628	81%	15,971	18,464	86%	41,068	58,711	70%

Source: FTAA Hemispheric Trade and Tariff Database for Market Access

The two major agricultural products imported by the United States from the CAFTA countries are bananas and coffee. These countries are major producers and exporters of these two commodities, and the United States is their most important export market. Bananas and coffee are non-competitive imports. That is, the two commodities are not produced competitively in the United States. The major competitive imports from the countries include pineapples from Costa Rica; melons from Costa Rica, Guatemala, and Honduras; orange juice from Costa Rica; tobacco from Honduras and Nicaragua; beef from Nicaragua; and sugar from Guatemala and El Salvador. Forty-five percent of imports from the five countries in 2002 were competitive imports, which is an increase over previous years. CAFTA may likely increase U.S. imports of competing commodities from these five Central American countries. Increased imports of the competing commodities could hurt U.S. domestic producers. This is especially true in regard to the likely increases in sugar imports.

#### **REGION'S SUGAR PRODUCTION, CONSUMPTION, AND EXPORTS**

U.S. imports of sugar have been reduced from 2.5 million metric tons in 1995/96 to 1.5 million metric ton in 2002/03, while production has increased from 6.7 million metric tons in 1995/96 to 7.6 million metric tons in 2002/03 (Table 5). Domestic consumption of sugar has remained relatively constant in the 8.6 to 9.4 million metric ton range. Less than 10% of U.S. sugar imports are from the Central American countries. The amount of sugar imports from the CAFTA countries has also fallen 52% during the same time period.

The largest sugar producer in Central America is Guatemala (1.8 million metric tons), followed by El Salvador (453 thousand metric tons), Costa Rica (379 thousand metric tons), and Nicaragua (370 thousand metric tons). The Central American countries exported 2 million metric tons of sugar worldwide in 2002/03, with 127 thousand metric tons going to the United States. The free trade agreement, if it included sugar, could substantially increase the exports of sugar to the United States from these countries.

**Table 5. Supply, Production, and Distribution of Sugar in the United States and Central American Countries**

	Beginning Stock	Production	Total Imports	Total Supply	Exports*	Domestic Consumption	Ending Stocks
-----1,000 metric tons, Raw value-----							
United States							
2002/2003 Avg	1,718	7,501	1,478	10,697	126	9,111	1,459
Costa Rica							
2000/2003 Avg	78	379	0	457	166 (16)	220	74
El Salvador							
2000/2003 Avg	22	453	0	475	232 (27)	225	21
Guatemala							
2000/2003 Avg	84	1,696	2	1,782	1,238 (51)	479	79
Honduras							
2000/2003 Avg	83	313	1	398	81 (11)	256	68
Nicaragua							
2000/2003 Avg	103	370	0	473	200 (22)	190	90
Cen Am							
2000/2003 Avg	370	3,211	3	3,585	1,917 (127)	1,369	331

Source: Sugar Year Book, ERS

\*Numbers in Parentheses indicate exports to the United States.

The United States maintains its imports with a Tariff Rate Quota (TRQ) on sugar (Table 6). Because of NAFTA, Mexico and Canada receive a quota outside the traditional TRQ. The TRQ has been reduced in recent years from 2.2 million metric tons in 1995/96 to 1.1 million metric tons in 2002/03. The Mexican quota has increased from 25 thousand metric tons in 1996/97 to 153 thousand metric tons in 2002/03. The Canadian quota has remained at 10 thousand metric tons per year.

### THE U.S. PROPOSAL UNDER CAFTA

The current U.S. proposal on sugar in CAFTA would allow additional import above the current access amount of 127 thousand tons under an expanded TRQ. These additional imports could eventually equal or exceed 100 thousand tons annually. There would be no tariff on the additional sugar imports. If the CAFTA countries' sugar export exceeds the tariff-free quantities, a second tier tariff of 15 cents/pound will be imposed for the first year and reduced one cent per year for the 15-year period, according to our understanding of the U.S. proposal. The second tier tariff will be 10 cents/pound 5 years after the implementation of CAFTA, 5 cents

after 10 years, and zero after 15 years, implying that the Central American countries could export much more than 100 thousand tons with the second tier tariff of less than 10 cents after 4-5 years from the implementation of CAFTA.

**Table 6. United States Tariff Rate Quotas (TRQ) for Sugar Imports**

	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03
	-----1,000 Metric tons-----							
Total TRQ cane sugar	2,167	2,100	1,600	1,113	1,025	1,117	1,117	1,117
Mexico (CAFTA)	---	25	25	25	25	106	138	150*
Mexico 1997-2003 allocation	---	---	3	3	3	3	3	3
Canada 1997- 2003 allocation	---	---	10	10	10	10	10	10
Grand total	2,167	2,125	1,638	1,151	1,063	1,236	1,268	1,280
Grand total (short tons)	2,389	2,342	1,806	1,269	1,172	1,363	1,421	1,438

\*Estimated  
Source: ERS

### IMPACTS ON THE U.S. SUGAR INDUSTRY

The Global Sugar Policy Simulation Model was used to estimate the impacts of various levels of sugar imports from Central America under CAFTA. Levels were chosen to evaluate the impacts of different levels of imports under the free trade agreement on the U.S. sugar industry. It is assumed that world production, consumption, and technology in production and processing remain constant.

As additional sugar is imported into the United States, the wholesale price of sugar falls, along with the prices for sugar beets and sugar cane. Domestic consumption increases, responding to lower sugar prices. The number of sugar beet and sugar cane acres falls in response to lower farm prices. However, reductions in sugar beet and sugar cane acres are not significant, mainly because sugar beet and sugar cane production historically have not been sensitive to prices.

Without additional imports from the Central American countries, the United States imports 1.6 million metric tons of sugar, which is about 15% of U.S. domestic consumption. The prices of sugar beets and cane will be \$39.80/ton and \$29/ton, respectively. The wholesale price of sugar is expected to be 25.8 cents/pound. If the United States imports an additional 500 thousand metric tons of sugar, sugar beet price is reduced from \$39.80/ton to \$34.77/ton and sugar cane price is reduced from \$29/ton to \$24.20/ton. The wholesale price of sugar would be 20.51 cents/pound, about a 17% decrease. Domestic consumption increases 3.6% to 11 million tons. Beet acres are reduced by 22,000 acres, and cane acres are reduced by 8,000 acres. U.S.

production responds insignificantly to the lower price because the supply elasticities are 0.22 for sugar beets and 0.11 for sugar cane. The elasticity for domestic consumption is -0.39.

For a sugar price less than 20 cents/pound, U.S. domestic sugar supply would become much more elastic. This implies that the U.S. domestic sugar supply would decrease much faster if the price of sugar was lower than 20 cents/pound. It is assumed that domestic supply would decrease 25% for sugar beets and 15% for sugar cane for every 10% decrease in price.<sup>1</sup> Sugar beet processors could lose their economies of scale as a result of a reduced supply of sugar beets and would be less competitive.<sup>2</sup> However, this may not be a major problem for cane sugar refiners since the United States imports raw sugar cane and processes it to produce refined sugar.

If 1 million metric tons of additional sugar is imported, the prices drop to \$29.56/ton for sugar beets and \$19.22/ton for sugar cane. The wholesale price of sugar would be 15.7 cents/pound. Sugar beet acres would decrease 75%, from 1,015 thousand to 335 thousand acres, on the basis of the assumed supply elasticity of 2.5; sugar cane acres would decrease 45%, from 1,015 thousand to 558 thousand acres on the basis of the assumed supply elasticity of 1.5. With the reduced supply of sugar beets, beet sugar processors would decrease their processing scale, which could result in their operation being less-efficient. Conversely, sugar cane processors would not face this problem because their refineries process both domestically-produced and imported raw sugar.

Increases in U.S. sugar imports will gradually increase the world price of sugar, while lowering the U.S. domestic price. If 2 million tons of additional sugar are imported by the United States, sugar beet prices would drop to \$17.68/ton, and sugar cane prices would drop to \$10.52/ton. The wholesale price of sugar would be bound to 14 cents/pound. At this price level, U.S. sugar beet production would cease, and cane sugar would be produced in only limited amounts in the United States. The United States would import more than 80% of its domestic consumption. The world price of sugar would increase from about 8 cents/pound to 10 cents/pound, and U.S. domestic wholesale price would be about 13 cents/pound.<sup>3</sup>

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<sup>1</sup>Since the data on sugar beet and sugar cane acres with wholesale prices lower than 20 cents/pound do not exist, estimating price elasticities of sugar beets and sugar cane is not possible. Because the sugar beet growing area has more alternative crops, it is assumed that sugar beet production is more price elastic than sugar cane.

<sup>2</sup>Processing costs start to increase.

<sup>3</sup> Import demand is inelastic for a wholesale price of sugar higher than 18 cents, but becomes very elastic when the price drops below that level.

**Table 7. Impacts of Additional Sugar Imports from the Central American Countries**

Additional CA Imports	U.S. Imports	U.S. Consumption	Sugar Beet Price	Sugar Cane Price	Sugar Beet Acres	Sugar Cane Acres	Wholesale Price
-----1,000 tons-----			-----\$/ton-----		----1,000 acres----		-cents/lb-
0	1,584	10,650	39.80	29.00	1,362	1,023	25.79
500	2,084	11,035	34.77	24.20	1,340	1,015	20.51
1,000	7,089	11,434	29.56	19.22	335	558	15.76
2,000	9,570	11,967	17.68	10.52	0	0	14.00

Table 8 shows the estimated cost and returns for sugar beets in the Red River Valley. The data are from the ARMS<sup>4</sup> survey conducted by the ERS/USDA. The break-even price for sugar beets was \$38.73/ton in 2001 and \$36.44/ton in 2002. If all costs except for unpaid labor are covered, the break-even prices were \$35.76/ton in 2001 and \$33.61/ton in 2002. As indicated in Table 7, with additional sugar imports of 500 thousand tons, the price of sugar beets drops to \$34.77. Beyond 500 thousand tons, the average producer would not cover cash production costs. If land costs were removed, the break-even price falls to \$29.07/ton, which is lower than the price with additional imports of 500 thousand tons and is much higher than the price with additional imports of 1 million tons of sugar. No producers would produce sugar beet or sugar cane if the price does not cover production costs. A very limited number of producers would be able to remain in business under the last two scenarios.

A study conducted by Koo and Taylor, "Competitiveness of Regional Sugar Production under Alternative Production Conditions and Policies," indicated that the Red River Valley region was one of the lowest-cost producers of sugar in the United States. With additional imports of 500 thousand tons of sugar, the Red River Valley would continue to produce sugar at historical levels, but the price of sugar beets would be much lower, near the break-even price. Some other regions within the United States, both beet and cane areas, would leave the industry, thereby reducing supply.

## CONCLUSION

The Central American countries differ from the United States in size, resource endowments, and income. Per capita income in the United States is almost 10 times greater than that in Costa Rica. All the Central American economies are agriculture-based while the United States is industry-based. Inflation is higher in Central America than in the United States. Land resources are greater in the United States than in Central America, and the education system is substantially more developed in the United States.

All countries in Central America are net exporters of agricultural products, and all import and export a larger share of their GDP than does the United States. Many of the commodities

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<sup>4</sup>Annual producer survey conducted by the Economic Research Service (ERS) in the U.S. Department of Agriculture (USDA).

that Central America produces are non-competitive products; they are not grown in the United States. However, one of the largest exports is sugar. Central America imports wheat, corn, rice, and soybeans from the United States and exports bananas, coffee, fruits, vegetables, and sugar. Less than 10% of U.S. sugar imports are from Central America, and less than 10% of Central America's sugar exports are to the United States. Central America has about 1.5 million metric tons of sugar to export each year. CAFTA could substantially enhance U.S. trade volume with Central America through trade creation and trade diversion effects.

This study showed that if additional imported sugar from Central America is brought into the United States, the largest impact will be on price. If the United States imports more than 500 thousand tons of sugar from Central America, some of the less efficient regions will start to leave the industry. The Red River Valley would continue to produce sugar, but the returns would be much smaller.

The current U.S. proposal on sugar under CAFTA could permit the Central American countries to export more than one million tons of sugar to the United States within a few years. Even if the second tier tariff proposal is not included in the final agreement, incremental access, as requested by the CAFTA countries, could be in the range of 300,000 tons per year. If a finalized CAFTA were to be used as a template for subsequent trade deals, the cumulative level of additional imports would very likely exceed one million tons, which could significantly hurt the U.S. sugar industry.

If the United States imports more than 2 million tons of additional sugar from the CAFTA countries, the world price of sugar would increase from about 8 cents/pound to 10 cents/pound and the U.S. domestic wholesale price would be about 13 cents/pound. At this price level, the United States would import more than 80% of its domestic consumption.

**Table 8. Sugar Beet Production Cost and Returns Per Planted Acre, Red River Valley**

	2001	2002
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Gross value	752.49	803.93
<i>Cash Expenses</i>		
Seed	45.01	48.02
Fertilizer	37.21	29.79
Chemicals	109.80	109.72
Custom operations	23.02	23.53
Fuel and lube	24.55	23.07
Repairs	34.59	37.00
Freight and hauling	13.91	13.88
Miscellaneous	13.81	13.71
Hauling allowance	-10.44	-10.45
Interest	4.96	2.44
Total operating costs	296.42	290.71
<i>Overhead</i>		
Hired labor	55.21	55.95
Unpaid labor	52.87	53.70
Capital cost, machinery	117.22	123.34
Land	86.16	86.27
Taxes and insurance	12.59	12.84
General overhead	28.30	28.92
Coop share	40.68	40.64
Total overhead	393.03	401.66
Total costs listed	689.45	692.37
Net return	63.04	111.56
Breakeven	38.73	36.44
Yield (ton/acre)	17.80	19.00
Season-average price (\$/ton)	42.27	42.25

Source: ERS ARMS Survey



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