

NEWSLETTER

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Potential for Agricultural Trade With Cuba Under a Liberalized Environment

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The United States blocked trade with Cuba for many years, but the situation has recently changed. The United States imposed an embargo on Cuba in 1960 with the intent of weakening Castro's communist regime, and additional legislative acts further tightened the embargo. However, U.S. congressional and popular attitudes towards policies on Cuba have been changing. The Trade Sanctions Reform and Export Enhancement Act of 2000 altered the U.S. - Cuba trade relationship by allowing certain exceptions from U.S. sanctions on agricultural and medical exports. The legislation loosens U.S. sanctions on agricultural exports to Cuba, but a number of strict laws remain in place. U.S. law prohibits any U.S. person or company from providing credit to anyone in Cuba, meaning Cubans can only buy from the United States using cash up front. The legislation did not reverse the U.S. ban on imports from Cuba.

Prior to 1960, Cuba was a major trading partner for the United States. Since the Trade Sanctions Reform and Export Enhancement Act of 2000, the United States has started to export agricultural goods to Cuba. According to USDA data, U.S. agricultural exports to Cuba equaled \$138 million in 2002. These exports included \$23 million of wheat, \$23 million of coarse grains, \$21 million of soybeans, \$21 million of soybean oil, \$19 million of soybean meal, and \$21 million of poultry. In the first five months of 2003, the United States exported \$89 million of agricultural products to Cuba. Cuba is likely to continue importing agricultural products from the United States, but it is unlikely that the country will significantly increase imports from the United States unless laws change allowing Cuba to purchase goods on credit or the ban on travel is lifted. Many U.S. producers and agribusinesses are interested in the increased market opportunities that Cuba presents.

There is growing support among business interests and some politicians to further ease or end the embargo. However, there still remains political support for continuing the embargo. This study examines Cuba's agricultural trade and analyzes the potential for trade with the United States that could result if the embargo were to be lifted. It does not deal with the domestic or international political costs or benefits of lifting the embargo.

Cuba could be a significant market for U.S. exports of wheat, wheat flour, rice, corn, pulses, poultry, and dairy products. The United States could also export agricultural inputs that are needed in Cuba. The United States would have to compete with the EU and Canada in supplying wheat to Cuba and with Argentina in supplying corn to the country, since they are currently the major suppliers of wheat and corn to Cuba. In recent years, Cuba has imported about 1 million metric tons of wheat and wheat flour per year, and over 80% of Cuba's wheat imports are supplied by the EU. Cuban corn imports during the last decade have ranged from 52 to 319 thousand metric tons per year, with the majority supplied by Argentina.

Cuba imported greater amounts of agricultural goods, especially wheat and corn, during the 1980s. Wheat imports averaged about 1.4 million metric tons per year during the 1980s, while corn imports were about 0.5 million metric tons per year. The Cuban economy declined sharply in the early 1990s with the fall of the Soviet Union. Cuba had enjoyed preferential export markets in the USSR and Eastern Europe, and the sugar and citrus industries were essentially subsidized by the Soviet Union. When this support disappeared, Cuban exports and production dropped considerably. Cuban real GDP (in 1981 terms) dropped from 19.0 billion pesos in 1990 to 12.8 billion pesos in 1993. Due to a decline in purchasing power, Cuban agricultural imports also decreased. The Cuban economy has been slowly recovering since the mid-1990s, and an increase in Cuban income would likely result in a rise in the level of agricultural imports. An increase in income could also result in an increase in demand for higher quality wheat that could be supplied by the United States or Canada. Canada had been the major wheat exporter to Cuba in the 1980s before the country switched to the EU as their major supplier.

Table 1. Projected Imports by Cuba Resulting from Increased Income, and Potential Imports from the United States

Income	Cuban Imports			Potential Imports from United States
	% increase	Per Capita	Total	
		-kilograms-	-metric tons-	
<i>Wheat</i>				
2001 levels	0%	67	750,000	742,500
10% increase	9%	73	818,311	810,128
30% increase	27%	85	954,934	945,384
50% increase	46%	98	1,091,556	1,080,640
<i>Wheat Flour</i>				
2001 levels	0%	23	260,000	257,400
10% increase	15%	27	297,874	294,895
30% increase	44%	33	373,621	369,885
50% increase	73%	40	449,369	444,875
<i>Rice</i>				
2001 levels	0%	43	483,000	159,390
10% increase	5%	45	507,753	167,559
30% increase	15%	50	557,260	183,896
50% increase	26%	54	606,767	200,233
<i>Corn</i>				
2001 levels	0%	12	136,000	134,640
10% increase	29%	16	176,053	174,292
30% increase	88%	23	256,158	253,597
50% increase	147%	30	336,264	332,901
<i>Poultry</i>				
2001 levels	0%	5	52,700	48,484
10% increase	25%	6	65,832	60,566
30% increase	75%	8	92,097	84,730
50% increase	125%	11	118,362	108,893

Due to its proximity to Cuba and lower transportation costs, the United States should have an advantage over its competitors in exporting to the country. Nearly all wheat and corn imports by other Caribbean countries are supplied by the United States, while the U.S. held about one-third of the market for rice exports to these countries in 2000. Table 1 shows current and possible future Cuban imports of wheat, wheat flour, rice, corn, and poultry. This table also shows potential U.S. exports to Cuba under each scenario. Potential U.S. exports are based on the potential market shares of 99% for wheat, wheat flour, and corn; 92% for poultry meat; and 33% for rice. These are the market shares the United States holds in other Caribbean countries according to most recent data, though they may be too optimistic for Cuba and may take years to achieve.

The first row for each commodity in Table 1 shows the current level of imports, measured both in kilograms per capita and total metric tons. The next three rows show the projected imports that could result if Cuban real per capita GDP increased by 10%, 30%, and 50%. These projections are based on estimated income elasticities. A 30% increase would return real per capita GDP to late-1980s levels. These results show that if real per capita GDP increased by 30%, Cuban imports of wheat, wheat flour, rice, corn, and poultry could increase by 27%, 44%, 15%, 88%, and 75%, respectively. If the embargo is lifted and the United States achieved the maximum potential market shares, U.S. exports to Cuba could be 945 thousand metric tons of wheat, 370 thousand metric tons of wheat flour, 184 thousand metric tons of rice, 254 thousand metric tons of corn, and 85 thousand metric tons of poultry. Even at less optimistic market shares, Cuba could become an important market for U.S. wheat or wheat flour.

Much of the increased trade with Cuba would depend on much-needed investment in the country. Current production constraints in Cuba limit their ability to export, and without increased exports, foreign exchange constraints limit their ability to import. The products that Cuba would most likely export to the United States include sugar, grapefruit, grapefruit juice, orange juice, and tobacco. Political considerations in the United States and Cuba could also influence trade between the two countries, even with the sanctions lifted.

North Dakota Agricultural Outlook, 2003 - 2012

Richard Taylor and Won Koo

Representative farms are developed from the North Dakota Farm and Ranch Business Management Education Program farm records to forecast changes in farm income over the 2003 to 2012 period under the Farm Security and Rural Investment Act (FSRIA) of 2002, the Uruguay Round Agreement, and the Canada - United States Free Trade Agreement (CUSTA). The reaction of cropland prices and cash rental rates to changes in farm income was also estimated.

The North Dakota agricultural outlook for the 2003-2012 period is based on the baseline results produced by the Food and Agricultural Policy Research Institute (FAPRI) global model and the North Dakota Global Wheat

Policy Simulation Model. The North Dakota Representative Farm Model is a deterministic simulation model designed to analyze the impacts of policy changes on farm income. The model projects average net farm incomes, debt-to-asset ratios, cash rents, and cropland prices for representative farms producing five major crops: wheat, barley, corn, soybeans, and sunflowers. The base model assumes an average trend yield based on historical data and average predicted prices received by farmers based on the historical relationships between FAPRI prices and North Dakota prices received by farmers. In addition, macro policies and assumptions, trade policies, and agricultural policies are incorporated into the model directly or indirectly by the assumptions made by FAPRI in their price series.

The model has 24 representative farms: six farms in each of the four regions of North Dakota. These regions are the Red River Valley (RRV), North Central (NC), South Central (SC), and Western (West). The farms in each region are representative of the average-, high-, and low-profit farms and small-, medium-, and large-size farms enrolled in the North Dakota Farm and Ranch Business Management Education Program.

Table 2. North Dakota Net Farm Income for Size and Profit Representative Farms under the Base Scenario

	Size			Profitability		
	Large	Medium	Small	High	Average	Low
	-----thousand \$-----					
2002	118.7	68.8	39.7	136.6	45.2	13.6
2003	147.7	83.9	42.0	167.0	74.3	32.7
2004	143.7	82.8	41.1	170.2	75.5	33.2
2005	136.6	77.5	38.4	168.9	73.9	31.3
2006	130.0	74.6	37.1	160.6	67.3	27.4
2007	127.7	73.0	36.1	153.4	64.5	25.5
2008	124.7	71.7	35.2	150.1	61.7	23.6
2009	121.4	70.0	34.2	145.4	58.6	22.0
2010	118.1	68.3	33.2	140.9	53.9	21.3
2011	115.3	66.8	32.2	133.6	47.8	15.6
2012	110.6	64.4	30.7	128.3	44.0	12.1

Table 2 presents net farm income for farms by size and profit under the FSRIA and various price scenarios. The optimistic scenario represents a 10% increase in the prices of all commodities except sugar. Likewise, the pessimistic scenario represents a 10% decrease in all prices. Under the base scenario, the net income for the large-size farm will increase from \$119 thousand in 2002 to \$148 thousand in 2003 and then fall slowly to \$111 thousand by 2012. The net income in 2012 will be 6% lower than that in 2002. Net farm income for the medium-size farm is \$69 thousand in 2002, increasing to \$84 thousand in 2003 and then decreasing to \$64 thousand in 2012. Net farm income for the small-size farm is \$40 thousand in 2002 and will increase to \$42 thousand in 2003 before decreasing to \$31 thousand in 2012. State average net farm income over the 10-year, 2003-2012 period is \$128 thousand for the large-size farm, \$73

thousand for the medium-size farm, and \$36 thousand for the small-size farm. With 10% higher prices, net farm income is 4.9% higher for the large-size farm, 2.7% higher for the medium-size farm, and 1.0% higher for the small-size farm. With 10% lower prices, net farm income is 3.7% lower for the large-size farm, 2.0% lower for the medium-size farm, and almost unchanged for the small-size farm.

The decreases in net farm income from 2003 to 2012 are mainly due to the nature of the counter-cyclical payments. Counter-cyclical payments are de-coupled from production; however, any price increase up to the target price level, based on program acres and base yields, is offset by decreases in government spending. Increases in future yields do not make up for increases in expenses.

Net farm income for the high-profit farm is projected to equal \$167 thousand in 2003 and decrease to \$128 thousand in 2012. The income in 2012 is 23% lower than that in 2003. Net farm income for the average-profit farm is projected to rise to \$74 thousand in 2003 and decrease to \$44 thousand in 2012. Net farm income for the low-profit farm increases to \$33 thousand in 2003 before decreasing to \$12 thousand by 2012. The low-profit farm may not have the financial resiliency to survive without outside income. State average net farm income over the 2003-2012 period is \$152 thousand for the high-profit farm, \$62 thousand for the average-profit farm, and \$24 thousand for the low-profit farm. Under the optimistic scenario, net farm income is 4.2% higher for the high-profit farm, 4.3% higher for the average-profit farm, and 0.9% higher for the low-profit farm. Under the pessimistic scenario, net farm income is 3.7% lower for the high-profit farm, 3.6% lower for the average-profit farm, and almost unchanged for the low-profit farm.

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Net farm income for 2003 is expected to be higher than in 2002 because crop yields for spring and durum wheat, barley, and canola were substantially lower in 2002 than average. It is expected that crop yields return to normal in 2003. The higher prices received in 2002 were partially offset by lower government payments.

After increasing in 2003, net farm income for all representative farms is projected to fall slowly throughout the forecast period. Crop production in the United States and around the world is assumed to be normal with annual trend-line increases, while demand is predicted to increase faster than supply due mainly to the expected increases in income and slow but steady growth in population in developing countries. However, price levels will not rise above target price levels in the United States.

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New Addition to Center for Agricultural Policy and Trade Studies

Dr. Hamid Beladi has just joined the center as a Senior Research Fellow and Research Professor of Economics. Dr. Beladi most recently held the Niehaus Chair in Business Administration at the University of Dayton. He received his Ph.D. in Economics from Utah State University in 1983, taught at Central Michigan University from 1983 to 1988, and was on faculty at the University of Dayton from 1988 until coming to CAPTS. He has published over 130 peer-reviewed articles in such journals as *Economic Inquiry*, the *European Journal of Political Economy*, the *Journal of Environmental Economics and Management*, the *Southern Economic Journal*, the *Manchester School of Economic and Social Studies*, *Economics Letters*, and the *Review of Economics and Statistics*. In addition, he is co-editor of the prestigious *International Review of Economics and Finance*, and he also serves as associate editor for the *Review of International Economics*.

For more information on the *International Review of Economics and Finance*, please visit the journal's website (<http://www.udayton.edu/~iref/>).