A publication of the Agricultural & Applied Economics Association



U.S. Agricultural Exports to Cuba: Composition, Trends, and Prospects for the Future

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JEL Classifications: Q17, Q18 Keywords: Agricultural Exports, International Trade

The magazine of food, farm, and resource issues

4th Quarter 2013 • 28(4)

T he approval of the Trade Sanction Reform and Export Enhancement Act (TSRA) in October 2000 marked the beginning of a new era of U.S. —Cuba relations. Prior to the approval of TSRA, the United States barely figured as one of Cuba's trading partners; since then, despite existing Cold War tensions between the two countries, U.S. agricultural and food exports has turned the "Colossus of the North" into one of Cuba's principal trading partners.

The Cold War

Before the 1959 revolution, Cuba and the United States enjoyed strong economic ties. Approximately 67% of Cuba's exports were destined for the U.S. market, and U.S products accounted for 70% of the island's imports in 1958 (Ross, 2004). Geographical proximity, close cultural and political ties, U.S. investment in strategic sectors of the Cuban economy, the structural characteristics of both countries' economies, and reduced transportation costs were among the principal reasons for close economic ties between Cuba and the United States in the 1950s.

Relations between the United States and Cuba deteriorated significantly after 1959. In 1961, the United States ended diplomatic relations with the island, and, in 1962, the United States imposed a unilateral trade embargo, which severed economic ties between the two countries for most of the Cold War. While the analysis of unilateral U.S. economic sanctions with respect to Cuba is beyond the scope of this article, it is worth mentioning a few historical highlights in the context of U.S–Cuba agricultural trade:

• On July 8, 1963, the Cuban Assets Control Regulations were introduced under the "Trading with the Enemy Act."

- In 1992, the U.S Congress approved the Cuban Democracy Act (CDA), also known as the "Torricelli Act," which tightened the U.S. embargo by limiting trade between foreign-based subsidiaries of U.S. multi-national corporations (MNCs), and banning vessels that had docked in Cuban ports from docking in U.S. ports for a period of 180 days (Ross, 2004).
- In 1996, the approval of the Cuban Liberty and Democratic Solidarity Act, also known as the "Helms-Burton Act," further tightened the U.S. embargo by requiring the U.S. President to prepare a plan for proving economic assistance to transition in Cuba, creating the legal mechanisms to sanction U.S. nationals who may be "trafficking" in confiscated property in Cuba, and by authorizing the U.S. government to deny visas and exclude from the United States persons who "traffic" in confiscated property claimed by U.S nationals in Cuba (after 1996) (U.S. Department of the Treasury, 2013).
- In 1999, President Clinton approved changes in U.S. commercial policy towards Cuba, which allowed sales of U.S. food and agricultural products to private farmers; cooperatives; privately owned, small-scale restaurants known as *paladares*; and nongovernmental organizations (NGOs) (Ross, 2004).

The "Special Period"

The intensification of U.S economic sanctions, combined with the disintegration of the Socialist Camp (1989), and the disappearance of the Soviet Union (1991) dealt a severe blow to the Cuban economy, particularly the agricultural sector. As an agricultural producer, and despite incurring

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notable merchandise trade deficits, Cuba maintained positive agricultural trade balances during the 1990s. At the onset of the "Special Period" in 1990, Cuban agricultural exports, which consisted of food, live animals, beverages, tobacco, vegetable oil, and animal fat, totaled \$4.8 billion (USD). However, the total value of agricultural exports, as well as total merchandise exports, declined significantly during this period (Table 1). This was mostly the result of the loss of its traditional "Socialist Bloc" export markets, and the severe economic crisis resulting from the collapse of the Socialist Camp (Nova González, 2006; Ritter, 1994; and Mesa-Lago, 1993). In 1990, agricultural exports accounted for 87.5% of total merchandise exports; by 2002, this figure had fallen to 53.2%.

The economic crisis of the 1990s also affected Cuba's capacity to import food and agricultural products. The value of agricultural imports declined quite notably during the most difficult years of the Special Period (1990-1993), and never recovered to 1990 levels. Paradoxically, as a share of total merchandise imports, agricultural imports increased significantly during this period. Cuba's agricultural production and trade were also impacted by natural disasters, particularly Hurricane Michelle in 2001, declining levels of investment, lower total factor productivity, insufficient inputs such as fertilizer and pesticides, and existing regulatory constraints and prohibitions (Comisión Económica Para América Latina y el Caribe, 2000).

Relaxing the Embargo through Agricultural Trade

Within this context, and in an effort to improve relations with Cuba, President Clinton signed into law TSRA in October 2000. This law lifted the existing restrictions on U.S. food and agricultural exports to Cuba, which were in place since the 1962 U.S. embargo was instituted. The TSRA terminated any existing unilateral U.S. sanctions with respect to food, agricultural products, and medicine, and prohibited the U.S. President from imposing any new sanctions unless he or she informs Congress 60 days in advance of doing so, and Congress enacted a joint resolution stating its approval (American Society of International Law, 2001). According to the TSRA, exports of food, agricultural products, and medicines to states considered supporters of terrorism are to be controlled through one-year licenses issued by the U.S government and exporters will not

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Table 1. Cuba Agricultural Trade:1990-2002(in Thousand Pesos)										
		Imports			Exports	Trade Balance				
Year	Total Imports	Agricultu ral Imports	% of Total Imports	Total Exports	Agricultura I Exports	% of Total Exports	Total Trade Balance	Agricultural Trade Balance		
1990	7,416,525	903,799	12.2%	5,414,949	4,738,431	87.5%	-2,001,576	3,834,632		
1991	4,233,752	879,035	20.8%	2,979,512	2,628,771	88.2%	-1,254,240	1,749,736		
1992	2,314,916	530,247	22.9%	1,794,424	1,485,639	82.8%	-520,492	955,392		
1993	2,008,215	496,521	24.7%	1,156,663	947,010	81.9%	-851,552	450,489		
1994	2,016,821	491,378	24.4%	1,330,756	993,231	74.6%	-686,065	501,853		
1995	2,882,530	651,086	22.6%	1,491,634	1,011,679	67.8%	-1,390,896	360,593		
1996	3,568,997	763,986	21.4%	1,865,526	1,290,540	69.2%	-1,703,471	526,554		
1997	3,987,256	800,511	20.1%	1,819,127	1,217,646	66.9%	-2,168,129	417,135		
1998	4,181,192	777,438	18.6%	1,512,197	978,835	64.7%	-2,668,995	201,397		
1999	4,349,090	818,864	18.8%	1,495,783	878,473	58.7%	-2,853,307	59,609		
2000	4,795,613	744,167	15.5%	1,675,259	837,154	50.0%	-3,120,354	92,987		
2001	4,793,235	823,553	17.2%	1,621,891	943,357	58.2%	-3,171,344	119,804		
2002	4,129,453	793,631	19.2%	1,402,268	745,656	53.2%	-2,727,185	-47,975		
Source: Ro	oss, 2004									

receive direct U.S. government assistance (American Society of International Law, 2001).

In the case of Cuba, no U.S. person or citizen may provide payment or financing for exports of food, agricultural products, and medicines from the United States; sales of these products may only take place through advanced cash payments or through financing provided by third-country intermediaries (American Society of International Law, 2001). Under the TSRA, the Secretary of the U.S. Treasury can approve travel to Cuba for sales of authorized agricultural products, food, and medicines, and other related purposes (American Society of International Law, 2001).

Impact and Recent Trends

Since the approval of the TSRA in 2000, U.S. food and agricultural exports to Cuba have increased significantly. In 2001, the year when the TSRA became effective, the total value of U.S. agricultural and food exports to Cuba was \$4.6 million. This figure reached \$460 million in 2012. In 2001, U.S. agricultural and food exports to Cuba represented a negligible fraction of the island's total imports in these categories. At the present time, the U.S. accounts for close to 40% of Cuba's agricultural and food imports, followed by imports from the European Union, Brazil, and Canada.

The value of U.S. agricultural and food exports to Cuba has shown notable fluctuations since 2001. Grains and feeds represent the largest category, in terms of value, followed by poultry, oilseeds, livestock and meats, dairy products, horticultural products, sugar, tropical products, and seeds. Corn, wheat, and rice account for the bulk of U.S. grains and feeds exports to Cuba. While corn exports have increased substantially since 2001, wheat and rice exports have declined since 2008. U.S. rice exports to Cuba have basically disappeared since

2

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2008 due to increased competition from Vietnam, which has replaced the United States as Cuba's principal rice supplier. Increased wheat imports from Canada and the EU have displaced U.S. exports since 2010.

In the poultry category, broiler meat and turkey exports to Cuba have grown significantly since 2001. U.S. exports represent an estimated 80% of total Cuban poultry imports. This remarkable growth can be attributed to three principal factors: (1) increases in the demand for poultry as a principal source of protein, (2) the competitive advantage enjoyed by U.S. producers, and (3) the inability of domestic producers to satisfy national demand. In more recent years, increases in household incomes associated with the expansion of selfemployment in the non-state (government) sector has also contributed to higher demand for agricultural and food imports.

U.S. exports of oilseeds, particularly soybean, have also increased notably since 2001. Soybean patties, *picadillo de soya*, have emerged as one of the principal sources of protein distributed to the Cuban population (at subsidized prices) through a rationing system. In 2002, soybean exports to Cuba were valued at \$20.9 million, accounting for 15% of the total. In 2012, soybean exports reached \$62.3 million, accounting for 12.7% of total U.S. agricultural and food exports to Cuba, and representing an increase of 198% during the 2002-2012 period.

Exports of livestock and meats, excluding poultry, to Cuba have also increased significantly since 2001, particularly after 2004. Even though they only accounted for 2% of the total value of U.S. agricultural and food exports to Cuba in 2012, the value of exports in this category increased by 375%—from \$1.9 million in 2002 to \$9.5 million in 2012. Historically, pork has dominated this category. In 2002, pork exports to Cuba represented 73.7% of total livestock and Table 2:

Table 2. U.S Agricultural	and Food	Exports to	Cuba: 20	00-2012									
Product	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Grains & Feeds	26	2,327	51,879	92,220	186,733	148,970	128,392	224,127	369,367	218,004	131,794	150,666	172,38
Corn	0	2,327	22,739	35,571	57,492	54,914	40,100	109,019	189,949	119,135	90,803	122,789	134,42
Feed, Ingrd & Fod	0	0	0	0	13	4,018	6,196	20,252	35,170	25,990	23,198	25,835	37,94
Rice	26	0	6,266	10,778	64,048	39,204	39,415	24,006	6,892	0	0	0	13
Grn & Feed Misc	0	0	85	8,983	6,622	12	0	5	0	0	0	0	4
Oats	0	0	0	0	0	0	0	0	0	0	0	0	3
Wheat	0	0	22,789	36,676	57,516	50,705	39,904	70,175	135,237	72,879	17,793	1,694	0
Wheat Flour	0	0	0	60	0	0	0	0	0	0	0	0	0
Wheat Products	0	0	0	152	531	117	151	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	30	0	0	0	0
Crs Grn Products	0	0	0	0	512	0	2,626	670	2,088	0	0	348	0
		1.959				58,563	44,840	78.079		144,565	108,919	100,162	160.49
Poultry & Products	0		23,713	37,755	62,192				139,431				
Broiler Meat	0	1,959	22,473	34,844	59,031	56,538	43,981	76,353	137,218	140,727	105,708	96,554	157,41
Turkey Meat	0	0	301	1,514	1,418	801	638	1,718	2,212	3,837	3,212	3,608	3,083
Other Poultry Meat	0	0	172	624	760	937	222	7	0	0	0	0	0
Egg and Egg Products	0	0	767	772	983	288	0	0	0	0	0	0	0
Oilseeds & Products	0	0	61,952	113,010	89,421	80,406	89,609	114,620	141,170	135,215	83,692	69,843	104,12
Soybeans	0	0	20,922	34,475	27,933	32,723	31,742	40,515	66,624	61,508	41,887	58,722	62,26
Soybean Cake & Meal	0	0	19,281	25,281	33,057	18,527	34,075	53,397	46,197	49,164	12,159	9,866	41,44
Other Oilseed Prod.	0	0	170	376	188	265	436	603	192	68	442	553	326
Other Oils	0	0	129	523	327	917	182	32	341	1,981	2,170	635	64
Peanut Butter	0	0	0	0	6	0	0	0	0	0	0	0	23
	0	0	0	0	0	0	5	0	0	0	0	0	0
Peanuts Olive Oil											-		
Olive Oil	0	0	0	0	9	16	0	0	0	0	0	0	0
Corn Oil	0	0	11	171	0	0	0	0	5,899	97	0	0	0
Soybean Oil	0	0	21,438	50,825	23,323	25,738	20,942	20,074	21,916	22,396	27,034	0	0
Other Cake & Meal	0	0	0	602	3,024	1,309	0	0	0	0	0	67	0
Corn Gluten Feed&MI	0	0	0	0	0	3	2,227	0	0	0	0	0	0
Flours, Isolates, Conc	0	0	0	757	1,555	908	0	0	0	0	0	0	0
Livestock & Meats	0	0	721	652	1,999	10,129	15,408	8,181	13,198	13,432	16,070	10,248	9,49
Pork, Fr/Ch/Fz	0	0	91	0	1,474	4,319	12,392	5,972	12,521	9,067	14,767	7,680	7,80
Variety Meats, Pork	0	0	0	0	0	0	432	18	129	55	0	1,395	1,15
Pork, Bacon, Cured	0	0	0	0	0	0	0	0	0	770	532	131	295
	0	0		0	0	0		636	488	377	381	423	124
Variety Meats, Beef	-		162				71						
Beef & Veal,Fr/Ch/Fz	0	0	0	0	209	0	0	18	22	34	210	506	123
Pork,Hams/Shldrs,Crd	0	0	0	0	34	0	0	0	0	0	0	0	0
Pork, Prep/Pres, Nt/Cn	0	0	0	0	0	3,121	1,470	0	0	799	0	0	0
Pork, Prep/Pres, Cannd	0	0	0	0	110	25	0	0	0	0	0	0	0
Lamb&Mutton,Fr/Ch/F:	0	0	0	0	0	0	0	30	0	0	0	0	0
Sausages & Bologna	0	0	0	32	0	0	0	0	0	162	0	0	0
Variety Meats, Other	0	0	0	0	0	0	0	73	0	0	0	0	0
Lard	0	0	428	0	107	0	0	0	38	48	181	0	0
Inedible Tallow, Cwg	0	0	0	0	0	961	924	1,354	0	2,037	0	0	0
Oth Ined an Fats&Oil	0	0	0	0	22	166	105	75	0	81	0	0	0
BeefCattle,Brdg Bull	0	0	0	5	17	0	0	0	0	0	0	0	0
						294							
BeefCattle,Brd Femal	0	0	0	18	26		0	0	0	0	0	0	0
DairyCattle,Brd Bull				3	-	0							-
DairyCattle,Brd Fema	0	0	3	595	0	1,196	0	0	0	0	0	0	0
Sheep, Lambs & Goats	0	0	0	0	0	48	0	0	0	0	0	0	0
Bull Semen	0	0	0	0	0	0	0	0	0	0	0	114	0
Other Livestck Prods	0	0	25	0	0	0	0	0	0	0	0	0	0
Non Dlp Comm	0	0	11	0	0	0	14	5	0	0	0	0	0
Dairy & Products	0	288	336	341	28,951	30,284	13,156	711	15,665	2,946	2,645	3,965	5,632
Other Dairy Products	0	288	278	109	1,688	554	587	711	959	2,604	1,646	1,830	3,35
Butter And Milkfat	0	0	51	17	0	0	0	0	1,402	310	518	1,953	2,28
Condensed & Evap Milk	0	0	0	0	0	39	0	0	0	0	0	89	0
Non-Fat Dry Milk	0	0	0	0	26,653	29,691	12,561	0	13,305	0	481	0	0
Dry Whole Milk&Cream	0	0	0	0	20,033	29,691	12,301	0			481	0	0
				_		-			0	32		_	
Fluid Milk And Cream	0	0	0	21	0	0	3	0	0	0	0	0	0
Yogrt&Othr Ferm Milk	0	0	4	0	0	0	0	0	0	0	0	0	0
Ice Cream	0	0	0	146	0	0	0	0	0	0	0	93	0
Cheese And Curd	0	0	3	0	79	0	0	0	0	0	0	0	0
Whey	0	0	0	48	531	0	4	0	0	0	0	0	0
Iorticultural Products	0	0	1,067	2,760	10,218	11,286	23,858	4,677	4,727	9,683	9,812	12,253	4,97
Fruits and Preparations	0	0	441	1,161	885	2,442	1,277	1,926	2,649	2,793	2,160	2,492	2,40
Other Hort Products	0	0	413	155	481	95	168	365	1,735	2,524	2,099	1,883	2,30
Vegetables and Prepara	0	0	203	1,405	8,844	8,741	22,274	2,333	342	4,366	5,554	7,878	271
Tree Nuts And Preparat	0	0	11	38	9	8	139	53	0	0	0	0	0
Cotton, Linters & Waste	0	0	0	572	2,922	1,593	394	664	1.855	562	0	4,038	3,11
Cotton Other > 1 1/8	0	0	0	0	0	0	0	0	0	0	0	3,370	3,11
Cotton <1	0	0	0	0	0	0	140	27	0	0	0	0	3,11
Cotton > 1 < 1 1/8	0	0	0	572	2,922	1,593	254	638	1,855	562	0	668	0
Sugar & Tropical Produc	0	0	146	261	1,085	565	149	128	40	852	1,116	1,606	189
Cocoa & Cocoa Prod.	0	0	47	0	250	172	39	3	0	0	0	519	175
Sugr & Rel Pdt, X Hon	0	0	85	124	334	304	68	125	20	852	1,116	1,087	14
Coffee & Coffee Prod	0	0	0	0	0	0	5	0	0	0	0	0	0
Tea, Incl Herbl Tea	0	0	0	0	36	0	0	0	20	0	0	0	0
Spices	0	0	0	15	420	78	0	0	0	0	0	0	0
	0	0	14	122	420	12	36	0	0	0	0	0	0
Sugar & Troo Atles						4,249	5,043	6					
Sugar & Trop, Misc.													
Planting Seeds	0	0	0	0	348				0	0	0	0	0
Planting Seeds Grass Seeds	0	0	0	0	0	0	0	6	0	0	0	0	0
Planting Seeds Grass Seeds Leguminous Veg Seeds	0	0	0	0	0 348	0 4,249	0 808	6	0	0	0	0	0
Planting Seeds Grass Seeds	0	0	0	0	0	0	0	6	0	0	0	0	0

 Total
 26
 4,574
 139,014
 247,571
 383,870
 346,044
 320,847
 431,194
 685,453
 525,258
 354,047
 352,780
 460,413

 Source: U.S. Department of Agriculture, Global Agricultural Trade System (GATS), 2013
 501
 502,528
 54,047
 352,780
 460,413

meats exports; this figure increased to 82% in 2012 primarily due to pentup demand and insufficient domestic production.

Finally, the value of exports of dairy products has also risen significantly since 2001, despite fluctuating

widely as Table 2 demonstrates. It is worth noting that, in 2004 and 2005, the value of dairy products exports represented 7.5% and 8.8%, respectively, of the total value of U.S. agricultural and food exports to Cuba. This ratio declined to 1.2% in 2012

3

due to the changing composition of U.S. agricultural and food exports to Cuba, even though between 2001 and 2012 the value of U.S. exports to Cuba in this category grew significantly.

Contributing Factors

The increases in the value of U.S agricultural and food exports to Cuba shown in Table 2 can be attributed to several factors. One obvious factor was the approval of the TSRA in 2000, which permitted, for the first time in almost four decades, direct sales of U.S. agricultural and food products to Cuba. Another major factor has been the notable increases in global agricultural commodity prices, particularly in 2007 and 2008, driven by population and income growth in emerging markets, higher energy prices, subsidized bio-fuel production, greater demand for agricultural products, and the global financial crisis (von Braun, 2008). More importantly, Cuba's demand for U.S. agricultural and food products has been driven by the insufficient performance of its own non-sugar agricultural sector, which has been affected by declining output levels, falling agricultural yields, decreases in productivity, lower levels of investment, insufficient access to inputs, bureaucratic constraints, natural disasters, and a growing dependency on food imports (González-Corzo, 2011).

Cuba's Recent Agricultural Reforms

To confront these challenges, and to stimulate domestic production and reduce imports, Cuba has implemented a series of agricultural reforms since 2007. The most notable include: increasing the prices paid by the state to agricultural producers, transfers of idle state-owned lands to cooperatives and private farmers, decentralization of ministries and government agencies engaged in agricultural policy and management, the authorization of direct sales of selected agricultural products to the tourism sector and to the population, and the expansion of agricultural microloans (González-Corzo, 2011).

Despite these measures, Cuba's agricultural sector has not produced the expected results (Nova González, 2012). Figures 1, 2, and 3 show physical output levels for selected crops in Cuba between 2001 and 2011.

Output levels and yields in many crop categories have continued to decline even after the introduction of agricultural reforms, forcing Cuba to rely on imported food primarily from the United States. This situation, in turn, has contributed to higher prices for agricultural products, which have adversely impacted the purchasing power (and consumption levels) of the Cuban population (Nova González, 2012).

Even though recent declines in Cuba's non-sugar agricultural production can be partially attributed to natural disasters such as hurricanes and droughts, Nova González (2012)





Figure 2: Cuba: Agricultural Output, Selected Products, 2001 - 2011, (Tons)





identified several structural and organizational factors that have also contributed to this situation. These include delays in the transfer of idle, state-owned lands to non-state agricultural producers, insufficient inputs (for example: fertilizer, pesticides, machinery, equipment and fuel), excessive centralization, regulatory constraints, price rigidity, and limited financial and technological assistance for agricultural producers.

The Road Ahead

Existing material, regulatory, and financial constraints, combined with the other factors already mentioned, have limited the effectiveness of Cuba's recent agricultural reforms and its efforts to achieve agricultural and food self-sufficiency. This represents an opportunity for expanded U.S. agricultural and food exports to Cuba. Ironically, this opportunity is hindered by existing U.S. economic sanctions with respect to Cuba. U.S. restrictions such as prohibitions against granting credit to Cuba for purchases of U.S. agricultural and food products--- "cash in advance" payment terms-require Cuba to obtain third-country letters of credit to finance such purchases, regulations with respect to business travel to

Cuba by U.S. citizens, and other provisions of the Torricelli and Helms-Burton acts weaken the competitive position of the United States and increase the total cost of doing business with Cuba. U.S economic sanctions also impose significant costs and inefficiencies on the Cuban economy by forcing it to obtain imports from distant countries, and to accumulate excess inventories in order to ensure the availability of domestic supplies.

Permitting full bilateral trade by eliminating U.S. economic sanctions with respect to Cuba would improve the attractiveness of U.S. agricultural and food products for the Cuban economy, and would allow Cuba to earn hard currency by exporting goods and services to the United States simultaneously benefiting producers and consumers on both sides of the Florida Straits.

Under a scenario of normalized relations, U.S. agricultural and food exports to Cuba would be driven by several key supply and demand factors. On the supply side, U.S. producers enjoy a competitive advantage derived from high quality products, lower production costs, and competitive pricing (Coleman, 2009). U.S. exports benefit from geographical closeness to Cuba (Coleman, 2009). Unlike competitors, U.S. exporters can offer smaller, customized, shipments on a "just-in-time" basis (Coleman, 2009). The elimination of the U.S. trade embargo would improve the competitive advantage of U.S. agricultural and food exports to Cuba, contributing to substantial increases in value and volume over time.

On the demand side, barring any drastic policy reversals and any major economic crisis, U.S. agricultural and food exports to Cuba are poised to continue to increase. As Cuba continues to "update" its economic model, the non-state sector's share of the economy is bound to increase. More activity in the non-state sector is expected to result in higher household income (at least for some sectors of the Cuban economy) (Kornai, 2008). This will increase the country's demand for imported food and agricultural products. The expansion of international tourism, including American visitors in the not too distant future, will also contribute to increases in Cuba's demand for food and agricultural imports.

Until Cuba is able to successfully address the challenges confronting its agricultural sector, and for the foreseeable future, the United States is likely to remain among its principal suppliers of imported food and agricultural products.

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