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Cuba's Agriculture: Collapse & Economic Reform

Cuba has responded in part to its current economic crisis by beginning to open the economy to market forces and to pursue more open trade with the other countries in the region. From the perspective of land area, population, and agricultural production, Cuba dominates the Caribbean. If Cuba chooses to join the global market economy, its economic influence could significantly increase. If U.S.-Cuba trade opens, Cuba has the potential to become a new source for U.S. agricultural and food imports, a destination for U.S. investment, a major market for U.S. exports as well as a competitor for U.S. producers (particularly those in Florida), and an attraction for U.S. tourists.

Collapse of the Cuban Economy

Cuba's recent economic history can be broken into three periods delineated by two major events: the 1959 communist revolution, and the collapse of the centrally planned economies of Eastern Europe in 1989 and of the Soviet Union in 1991.

In the pre-revolutionary period, Cuban resources were concentrated in the hands of a few. Eight percent of the landowners controlled more than 70 percent of the land, and U.S. owners controlled 25 percent of Cuban land. U.S. investments were diversified throughout the economy. In agriculture, many large U.S. companies had investments in sugar, cattle, and tobacco. In this era, the Cuban and U.S. sugar economies were tightly integrated, and over half of Cuban sugar exports went to the U.S., providing over one-third of U.S. sugar imports.

Castro's revolution broke up the concentration of resources and nationalized much of the economy. Relations with the U.S. deteriorated. The U.S. broke off diplomatic relations with Cuba in 1961 and imposed a trade and financial embargo in 1962. The embargo was tightened by the Cuban Democracy Act of 1992 and the Cuban Liberty and Democratic Solidarity Act of 1996 (Helms-Burton). The 1992 legislation penalized other countries if their ships stopped in Cuba. The 1996 Act limited trade by third-country subsidiaries of U.S. companies, allowed the President to impose sanctions on countries trading with Cuba, barred officials of companies doing business with Cuba from entering the U.S., and codified an Executive Order-based embargo into law.

The embargo forced Cuba to rely on the more distant suppliers and markets in Europe and Asia. Since ships engaged in Cuban trade were unable to enter U.S. ports, Cuba was also forced to use high-cost Cuban vessels or pay higher freight charges to cover empty back hauls to non-U.S. ports. All this led to increased import costs. This, in turn, led to higher costs and lower levels of production, high food prices, and chronic food shortages, exacerbated in 1998 by drought.

University of Florida's International Agricultural Trade and Development Center

Also following the revolution, Cuba's economy became heavily dependent on Soviet support. Cuba's sugar-dependent economy relied on Soviet economic assistance and on markets in the USSR and Central and Eastern European countries. The Soviets bartered crude oil and refined products at below-market prices in exchange for Cuban sugar at relatively high price levels (51 cents per pound in 1986 compared with a world market price of 6 cents). Cuban sugar production ranged from 4 to 8 million tons throughout the 1960's, 1970's, and 1980's. Soviet assistance served to offset most of the negative impacts of the U.S. embargo, and accounted for as much as one-fourth of Cuba's national income in some years.

With the 1989 collapse of the centrally planned economies of Eastern Europe and the 1991 dissolution of the Soviet Union, Cuba lost both its major markets and its primary source of foreign assistance. As a result, the Cuban economy collapsed, and the full effect of the U.S. embargo became evident. The loss of cheap Soviet oil also triggered a Cuban energy crisis. Cuban foreign trade fell 75 percent, and economic output fell 50 percent.

By 1994, agricultural production had fallen 54 percent from 1989 levels. Particularly hard hit were sugar and tobacco production. Food consumption fell 36 percent. Daily caloric intake fell from 2,908 calories per day in the 1980's to 1,863 calories per day in 1993. (The USDA-recommended minimum is 2,100-2,300 calories per day.) For those most dependent on state rations—the very old and the very young—consumption fell to 1,450 calories per day.

Government Reforms Begin Economic Recovery

The Cuban Government responded to this economic crisis with a major program of reforms. Initiating market-oriented reforms, allowing foreign investment, and promoting a diversified export program have set the stage for Cuba's economic recovery.

In 1990, Cuba announced a "Special Period in Peacetime" economic austerity program to counter the loss of Soviet support. The program rationed food, fuel, and electricity and gave priority to domestic food production, development of tourism, and biotechnology. The collapse of the sugar sector and its poor prospects emphasized the need to diversify agricultural production.

In 1993, the Cuban Government established a new form of cooperative—the Basic Unit of Cooperative Production, or UBPC—initiating the process of breaking up large state farms. While land title remains with the state, these cooperatives have the right to use the land and make production and resource decisions. State enterprises still provide marketing, technical assistance, production services, and agricultural inputs. Producers are allowed to sell surplus production after delivering a contracted monthly quota to the state.

In 1994, the Government established farmers' markets, where producers' surplus production can be sold at free-market prices. Farmers' markets now handle 25-30 percent of the farm products available to Cuban consumers.

Cuba also fostered the establishment of foreign "economic associations" (joint ventures, international contracts) to allow increased foreign investment in the tourism, mining, telecommunications, manufacturing, and construction sectors of the Cuban economy. To date, foreign investment in agriculture is relatively small, although associations have been created for citrus, tobacco, sugar, and rice. Cuba is also encouraging foreign investment in nonexport crops to support its growing tourist industry.

Since the initiation of reforms, GDP growth, consumption, and production are showing signs of recovery. Major growth areas in the Cuban economy are tourism, nickel and ore production, fisheries, manufacturing, tobacco, and vegetables. Cuban exports are growing and becoming more diversified (50 percent to Europe, 25 percent to Canada and Latin America, and 20 percent to Asia). Seafood has become a major source of export earnings.

Growth in tourism has been rapid. Cuba has natural resource advantages that should continue to spur tourist industry expansion. Tourism is now Cuba's biggest source of gross foreign exchange, earning $1.4 billion in 1996, compared with $900 million earned by sugar, Cuba's largest export. However, about 70 percent of this tourism foreign exchange is used to purchase inputs needed by the tourist industry.

While Cuba's economic recovery has started, severe problems remain. The Cuban trade deficit continues, foreign exchange problems persist, and energy is still in short supply. Agricultural production has not completely returned to pre-crisis levels. Industry infrastructure remains in poor condition, and investment resources are still in short supply. Problems are still serious enough to keep Cuba's economic austerity program in place.

Cuba's Economic Geography

Cuba, the largest country in the Caribbean, is 90 miles south of Key West, Florida. It has a tropical climate, moderated by trade winds, with a landscape of flat to rolling plains and rugged hills and mountains in the southeast. The natural resource base includes cobalt, nickel, iron ore, copper, manganese, salt, timber, and silica. The leading sources of foreign exchange, in order of importance, are tourism, sugar, nickel, seafood, and tobacco.

Cuba has about 11 million people and its annual population growth rate is 0.4 percent. Sixty percent of the Cuban people were born after the 1959 revolution, and the average age is 23. The literacy rate is more than 95 percent.

Cuba has nearly as much land area as the rest of the Caribbean islands combined. Its 11 million hectares make Cuba about the same size as Ohio or about three-fourths the size of Florida. About 60 percent of the land is in agriculture. Seventy percent of the agricultural land is tilled and 20 percent of the tilled land is irrigated. Due to extensive deforestation, high freshwater withdrawal rates, heavy mineral concentrations, and pollution, Cuba faces problems with its water supply.

About 40 percent of the tilled land is planted to sugarcane and about 11 percent to vegetables. The sugar industry has been one of Cuba's major industries, particularly through the 1980's, employing about one-sixth of the population and consuming about one-third of Cuban resources (land, other inputs). Sugar products represent about 80 percent of the value of Cuban exports and contribute about 10 percent of Cuba's GDP.

Cuba's Agricultural Export Prospects

A number of Cuban-produced commodities have been identified as likely candidates for export and/or investment once commercial relations between Cuba and the U.S. resume. The commodities are sugar, citrus, vegetables, tropical fruits, and fisheries, according to a University of Florida-University of Havana study of Cuba's agricultural and fisheries economy. The work of this ongoing study was reported at a workshop sponsored by the University of Florida's International Agricultural Trade and Development Center and the National Center for Food and Agricultural Policy. Held on March 31, 1998, the workshop addressed the *Role of the Agricultural Sector in Cuba's Integration into the Global Economy and its Future Economic Structures: Implications for Florida and U.S. Agriculture.*

Sugar. For most of this century, the Cuban sugar industry has been subsidized by foreign countries. Until 1960, the U.S. received more than 33 percent of its sugar needs from Cuba

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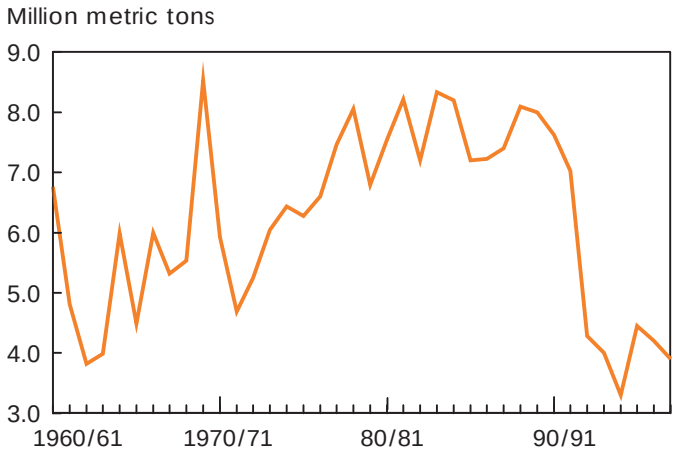
Cuban Sugar Production Plunged in the Early 1990's



1996/97 preliminary; 1997/98 forecast.
Source: University of Florida.
Economic Research Service, USDA

under the U.S. Sugar Act. From 1960 through 1991, the Soviet Union bartered low-priced oil for high-priced sugar. Thus, until 1992, the Cuban sugar economy enjoyed guaranteed markets at premium prices—with little incentive to improve efficiency.

After the 1959 revolution, Cuban leadership blamed the sugar industry for the country's underdevelopment. When the Government abandoned care of sugarcane fields and shifted land to other agricultural products, the sugar industry infrastructure deteriorated. Sugar production fell from an average annual volume of 5.6 million metric tons in the 1950's to 5.2 million metric tons in the 1960's. In the 1969-70 sugar season, a policy change declared sugar to be the backbone of the economy. Sugar production rebounded to an annual average of 6.4 million metric tons in the 1970's and 7.7 million metric tons in the 1980's. After the loss of Soviet support, sugar production collapsed from 8.1 million metric tons in 1989 to 4 million metric tons in 1993-96. *CubaNews* (May 1998) reports that 1998 may bring one of the poorest sugar harvests ever, with production at about 3 million metric tons.

Cuba's sugar market problem is an issue of production, not export demand. Most Cuban sugar is produced as raw sugar for further refining in the countries that import it. Cuba has historically been a low-yield, high-cost sugar producer and an inefficient manager. Production costs averaged 90 percent above world market prices in 1986-90 and 50-70 percent above in 1996-97. The industry is characterized by small, inefficient mills. Ninety percent of the sugar mills were built before 1925.

The sugar industry has been particularly hard hit by the lack of foreign exchange to purchase needed production inputs (fertilizer, oil, parts and equipment). The related energy crisis has also led to a breakdown of the transportation system, which causes a further reduction in sugar refining.

In reaction to the severe production drop, Cuba created sugar UBPC's and opened the sector to foreign capital investment to help modernize and expand crushing capacity (principal, interest, and a portion of profit are paid in sugar). Given economic incentives and increased investments in the industry, Cuban sugar production, and therefore exports, could rebound. However, current world market conditions and the unsettled situation in Cuba make the likelihood of major, long-term investment flows into Cuba's sugar industry remote.

Citrus. Cuba is the third major grapefruit producer in the world, behind the U.S. and Israel. Cuban citrus is sent to both fresh and processed export markets. Fifty percent of processed fruit in Cuba is grapefruit. Oranges (60 percent) and grapefruit (36 percent) comprise nearly all of Cuba's citrus production.

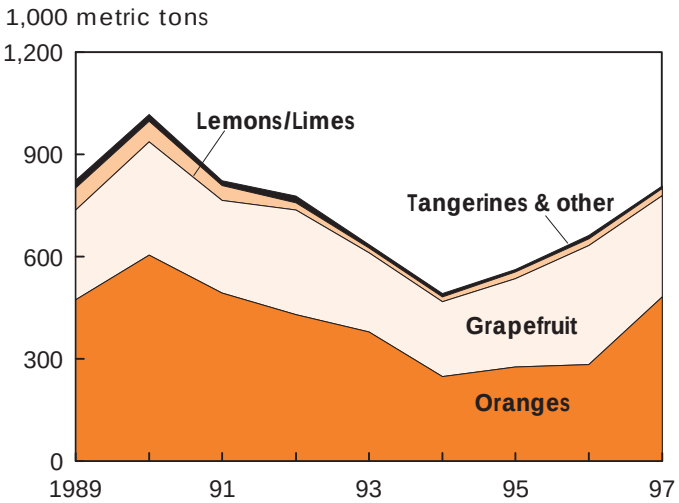
The Cuban grapefruit harvest starts in mid-August. If the embargo is lifted, this early harvest could put grapefruit (particularly red seedless grapefruit) in U.S. markets in August-September when U.S. supply is small.

Cuban oranges are Valencia (like Florida's) and, because of seed content and external appearance, would not compete in the U.S. fresh market with either California varieties or even Florida Valencias. Most are exported to Western Europe.

Cuba also produces Persian limes, for which U.S. fresh demand is growing and U.S. production is small. Mexico is the current major U.S. supplier, but Cuban Persian limes could be competitive in the U.S. market if U.S.-Cuba trade were initiated.

In addition, processing industry byproducts—such as essential oils, lime juice, and pectin—could enter and compete in an opened U.S. market. Conversely, Florida has the potential for becoming a major supplier of inputs and technology to Cuba's citrus industry.

Citrus Production Has Risen From Low Level of 1994



1997 preliminary.
Source: University of Florida.

Vegetables and tropical fruits. Fruits and vegetables are a key component of Cuban agricultural production. Much of the produce is consumed fresh in the domestic market. However, the seasonality of production creates demand for processed products.

Production fell in 1993, and that year the large state farms were converted to UBPC's and the cooperatives were allowed to sell a portion of their production in farmers' markets at market prices. This improved environment for potential earnings is resulting in increased production.

Nevertheless, the processing industry has been hampered by production declines of the 1990's, as well as by diminished investment, reduced energy supplies, and lack of foreign exchange to support purchase of imported inputs (particularly containers).

There is some potential to expand tropical fruit and fresh vegetable production for export, particularly to fill niche markets. However, lack of storage and transportation infrastructure are significant limiting factors. Because of resource constraints, Cuba has had to rely on organic methods of production rather than agrochemical inputs. As a result, Cuban agriculture is already heavily organic and could supply a significant part of the U.S. niche market for organic products.

Any exports to the U.S. would be subject to compliance with U.S. sanitary and phytosanitary regulations. Organic products would have to satisfy U.S. guidelines for organic certification.

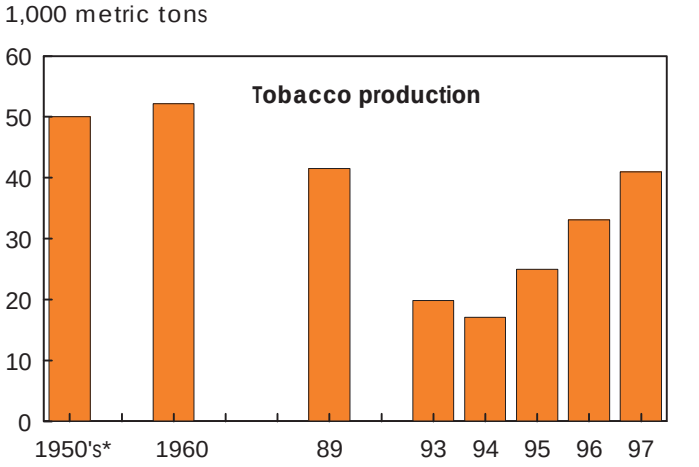
Fisheries. The fishing industry, which also suffered serious declines in the early 1990's, is now making a comeback and is an important source of foreign exchange for Cuba.

In the late 1970's, most nations in the hemisphere imposed 200-mile limits for territorial waters and denied Cuba access to these waters. Cuban fleets, which were designed to ply these waters, were forced to operate in more costly open-ocean waters. This left Cuba with a high-cost fleet that had to target the low-value fish from distant waters. This fleet was highly dependent on subsidized, low-cost Soviet oil, and the collapse of the Soviet Union caused a virtual shutdown of Cuba's high-seas fishing fleet.

Cuba's remaining fisheries industry has primarily targeted nearshore high-value species. As with agriculture, Cuba's post-collapse policy reduced government oversight of fishing operations. Fishery cooperatives were formed, in which the Government continued to own the vessels and set budget and production quotas, but excess production could generate monthly bonuses.

Cuba has a production and shipping cost advantage compared with other Caribbean Basin countries that trade with the U.S. Growing U.S. demand offers a potential market for Cuban seafood, such as spiny lobster, pink shrimp, and reef fish (snapper, grouper).

Cuban Tobacco Industry Has Begun Recovering



*Annual average. 1997 preliminary.
Source: University of Florida.
Economic Research Service, USDA

Cuban spiny lobster production averages 19.7 million pounds annually, compared with Florida's of 7.2 million pounds. Currently, Cuban spiny lobsters are exported to Japan and the European Union. Since 40 percent of Cuban spiny lobster production occurs during Florida's closed season, Cuba could readily capture a significant portion of the U.S. lobster tail market without directly competing with Florida's industry. In addition, the U.S. market could easily absorb Cuban shrimp and reef fish production.

Tobacco. Tobacco is Cuba's fifth leading foreign exchange earner. Cuban tobacco is famous for its quality and aroma. It is used extensively in cigar manufacturing. As with other agricultural commodities, both tobacco production and cigar output fell drastically after the collapse of the Soviet Union. Continuing shortages of inputs and energy have restricted recovery. Cuba estimates that it now meets only about one-fourth of world demand for Havana cigars.

Spain, France, and the United Kingdom currently have investments in the Cuban tobacco industry. Opening the U.S. market would create a new, large, high-income market for both Cuban cigars and Cuban unmanufactured tobacco for blending with U.S. tobacco in the manufacture of cigars.

Potential U.S.-Cuba Agricultural Trade

Once Cuba has a transition government committed to economic and political reform and the establishment of a fully democratic, pluralistic society, the U.S. will begin normalizing relations and providing assistance to support Cuba's transition. Economic sanctions would then be suspended and negotiations would be initiated to promote bilateral trade.

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The most likely candidates for Cuban export to the U.S. are sugar, citrus, vegetables and tropical fruits, seafood, and tobacco. While Cuba is a potential competitor in some of these commodities, particularly those produced in Florida, many Cuban exports would be either complementary or seasonally noncompetitive.

Cuba continues to import a significant amount of agricultural products. Its foreign food needs are primarily temperate-zone products that have become staples in their diet and cannot be easily produced domestically. The general consensus is that U.S. agricultural exports to Cuba could be about $1 billion annually. This estimate takes into account U.S.-Cuba trade before the revolution, U.S. trade with other Caribbean countries with comparable resources, and Cuba's production potential.

The bulk of U.S. food exports would be rice, coarse grains, beans, wheat flour, and animal products. Before the revolution, Cuba had a livestock sector with substantial U.S. investment, and there is potential for relatively large-scale livestock production to resume. A recent U.S. Grains Council study concluded that Cuba would import about 500,000 tons of feed grains annually if U.S. sanctions on trade were lifted.

Cuba's sugar, rice, and tobacco crops are dependent on imported inputs in order to sustain yields. Fuel and petroleum imports are also critical for maintaining Cuba's productive capacity. Potential U.S. agricultural input exports to Cuba include fertilizer, herbicides, pesticides, agricultural machinery, and other technology.

Increased trade is, in part, dependent on increased foreign investment in the Cuban economy. In addition to providing opportunities to the firms that invest, this would increase Cuba's economic growth, generating greater consumption and a corresponding growth in Cuban import demand.

During the 1990's, Cuba significantly increased the number of foreign economic associations. These associations consisted of one or more national investors and one or more foreign investors forming either joint production ventures or joint international economic association contracts to produce goods or provide services for profit. Over $5 billion in foreign investments in Cuba have been announced since the policy reforms, but only about $1 billion has been invested. More than 90 percent of this investment has come from Mexico, Canada, Australia, Spain, South Africa, the Netherlands, Brazil, and Chile. Major areas of investment are tourism, mining, telecommunications, and basic manufacturing.

Foreign investment in agriculture has been relatively small to date. Only about 10 percent of all foreign investment in Cuba has been in agriculture. Lifting U.S. sanctions on trade and financial relations could lead to a significant amount of U.S. capital investment flowing into Cuba, particularly from Florida. U.S. foreign investment in Cuba's agriculture would most likely target Cuba's export industries and its vegetable production activities. In addition to direct investments, imports of agricultural inputs would likely generate a significant amount of financial credit to Cuba and Cuban industry, with much of it likely provided by U.S. sources.

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October Releases—USDA's Agricultural Statistics Board

The following reports are issued electronically at 3 p.m. (ET) unless otherwise indicated.

October

2	*Cheddar Cheese Prices (8:30 a.m.)*
	Dairy Products
	Poultry Slaughter
5	*Egg Products*
	Crop Progress (after 4 p.m.)
7	*Broiler Hatchery*
8	*Vegetables*
9	*Cheddar Cheese Prices (8:30 a.m.)*
	Cotton Ginnings (8:30 a.m.)
	Crop Production (8:30 a.m.)
13	*Crop Progress (after 4 p.m.)*
14	*Broiler Hatchery*
15	*Milk Production*
	Turkey Hatchery
16	*Cheddar Cheese Prices (8:30 a.m.)*
	Cattle on Feed
19	*Crop Progress (after 4:00 p.m.)*
20	*Cold Storage*
21	*Broiler Hatchery*
23	*Cheddar Cheese Prices (8:30 a.m.)*
	Cotton Ginnings (8:30 a.m.)
	Catfish Processing
	Chickens and Eggs
	Livestock Slaughter
26	*Crop Progress (after 4 p.m.)*
28	*Broiler Hatchery*
29	*Catfish Production*
	Peanut Stocks and Processing
30	*Cheddar Cheese Prices (8:30 a.m.)*
	Rice Stocks (8:30 a.m.)
	Agricultural Prices