Briefs

World Agriculture & Trade

Cuba's Citrus Industry: Growth & Trade Prospects

Citrus is a major commercial crop and generates significant revenues for Cuba. The fourth largest agricultural and natural resource export, fresh and processed citrus contribute about 8 percent of Cuba's agricultural export earnings. Cuba is the world's third largest grapefruit producer, after the U.S. and Israel. Production currently consists primarily of oranges and grapefruit, but a longer term potential exists for developing a Persian lime industry.

Agriculture is a key component of the Cuban economy and if trade restrictions between Cuba and the U.S. were eased, the citrus sector has the potential to generate both Cuban markets for U.S. exports and U.S. markets for Cuban exports.

Cuba's citrus is well adapted for processing (fruit content is about 48 percent juice). Over half the oranges and about 90 percent of the grapefruit are processed (primarily for juice). Most of the processed citrus products are exported. A small amount of both grapefruit and oranges are exported fresh. Shipments currently go to the former USSR and the Council for Mutual Economic Assistance (COMECON or CMEA) Eastern European countries, although some shipments have recently moved into Western Europe and Japan. Much of this latter trade has been in processed citrus products. In European markets, Cuba faces tough competition from Israel and Spain on both quality and transportation cost grounds, particularly for fresh oranges.

Development of Citrus Industry

As with many areas of Cuban agriculture, the historic development of Cuba's citrus industry can be delineated by two major events: the 1959 communist revolution, and the collapse of the centrally planned economies of Eastern Europe in 1989 and the Soviet Union in 1991 (*AO*, October 1998).

Following the 1959 communist revolution, investment in citrus increased as part of an attempt to diversify from a sugar-dominated economy and to use Cuba's natural resources more efficiently. At the same time, Cuba expanded exports to new markets in the Soviet Union and Eastern Europe, replacing the embargoed U.S. market.

The Cuban citrus industry, like the rest of the Cuban economy, faced a major downturn with the collapse of the centrally planned economies of Eastern Europe in 1989 and of the Soviet Union in 1991. Cuba lost not only its major markets and its favorable terms of barter trade for citrus products, but also imports of CMEA machinery, oil, and other agricultural inputs. With no hard currency coming from their major export markets and a lack of available foreign exchange, loss of production inputs was as devastating to Cuba's citrus industry as the loss in citrus export demand.

In the first half of the 1990s, Cuban orange production fell by over 50 percent. Grapefruit production fell by 20 percent. Cuban fresh citrus exports fell more than 90 percent.

Citrus Is One of Cuba's Top 10 Exports

	Export value
	1,000 pesos
1. Sugar, raw	458,210
2. Cigars	172,115
3. Fish & shellfish	95,267
4. Citrus juices	58,176
5. Unmanufactured ag products	27,048
6. Coffee	15,862
7. Fresh citrus	14,926
8. Rum	13,014
9. Molasses	8,079
10. Honey	4,296

1999 data.
Note: The official *peso*:dollar exchange rate is 1:1.
Source: Institute for Cuban and Cuban-American Studies, University of Miami, 2001
Economic Research Service, USDA

Structural problems in the citrus industry made Cuba's ability to respond to these shocks even more difficult. Productivity in the large state farms was low. Limited processing capacity existed and, because processing consisted primarily of fresh-market-reject fruit, juice yield and quality were low.

The late-maturing Valencia oranges, which Cuba sold in the fresh market and made up over 80 percent of Cuba's production and exports, were not competitive in Western fresh markets. Cuba's warm climate keeps their Valencia orange from having the darker external color preferred in these markets. With the U.S. market closed, Cuba was forced to turn to Western Europe's fresh markets. However, high transportation costs and lower quality caused Cuban oranges to face tough competition from fresh orange exports from Spain and Israel.

Investment & Change

To better meet demand in their new markets, as well as try to capitalize on comparative advantage, the Cuban government increased its emphasis on grapefruit and expedited the expansion of the citrus processing industry that was already underway.

In 1993 Cuba established a new form of cooperative—the Basic Unit of Cooperative Production (Unidades Basicas de Produccion Cooperativa, or UBPC)—which broke up the large state farms that controlled about 90 percent of citrus production. Land title remained with the state, but these new cooperatives had the right to use the land and to make production and resource decisions. State enterprises still provided marketing, technical assistance, production services, and agricultural inputs. However, after delivering a contracted quota to the state, producers were allowed to sell surplus production. By 1999, the UBPCs controlled almost half of the citrus production area.

In 1994, farmers' markets were established which enabled producers to sell surplus production at free-market prices. These markets now handle 25-30 percent of 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 Cuban economy. As a result, Israel re-initiated investments in 1991 which increased productivity and product quality for a joint Cuban-Israeli production enterprise. By 1997 this joint venture produced over a third of Cuba’s citrus and controlled over a fourth of citrus area.

Other investments in citrus production have come from Greece, Great Britain, Chile, and Italy. Over half of Cuba’s citrus area now is covered by international economic associations. The processing industry has also benefited from both cooperative investment from these sources and improved processing equipment imported from Western Europe.

As a result of these changes and improved incentives, citrus yields and production have rebounded to 1980s levels. However, Cuba’s economic problems constrain future expansion. Infrastructure remains in poor condition, investment resources and production inputs continue in short supply, foreign exchange remains limited, the trade deficit continues, and foreign debt remains high.

The citrus industry was hit by another devastating blow in November 2001 as Hurricane Michelle swept across the major citrus plantations in central Cuba. These plantations produce about half of the country’s citrus. The hurricane hit as the fruit was ripening—over 80 percent of the crop was estimated to have been blown down. Not all the fruit blown down was lost, though fruit recovery and processing were further obstructed by severe flooding and road damage. Downed power lines took processing plants out of production during their peak season.

Potential Commercial Relationships

If bilateral trade between the U.S. and Cuba resumed, processed citrus products would be the most likely export opportunity for Cuba. The newer Cuban processing facilities are capable of producing the juice qualities demanded by U.S. consumers. With U.S. orange juice demand exceeding U.S. supply, Cuba might be able to compete with Brazil in the U.S. orange juice import market. With any significant increase in U.S. demand for grapefruit juice, Cuba could become a major grapefruit juice supplier.

Cuban fresh grapefruit, particularly red seedless grapefruit, could also find a niche market in the U.S. Cuban grapefruit for the export market is harvested in late August and September. The U.S. fresh grapefruit market is supplied primarily by Florida, whose major harvest starts in late September.

It is unlikely that Cuban fresh oranges could compete in the U.S. market. California and Florida dominate the U.S. fresh orange market, and only a small amount of fresh oranges is imported during the U.S. off-season. Furthermore, the Cuban Valencia’s many seeds and pale, less-desirable external appearance would find little demand in U.S. markets.

In the longer term, Cuba’s best prospects for citrus exports to the U.S. would most likely be Persian limes since U.S. demand for Persian limes is growing and U.S. production is small. Historically, Persian limes were produced primarily in south Florida, but the combination of the recent citrus canker infestation and the 1992 Hurricane Andrew decimated Florida Persian lime groves. These groves are not being replaced. This leaves Mexico as the major supplier to the U.S. market. With excellent growing conditions and a competitive location advantage, Cuba could expand Persian lime production and capture a significant portion of the U.S. East Coast market. With an efficient processing industry, Cuba could likely find a U.S. market for lime juice.

On the other side of the trade coin, the U.S. might find the Cuban citrus industry a market for U.S. exports. The U.S. has a highly developed, technically advanced citrus industry, a large part of which is in Florida. Florida has similar climate, is geographically close, and has cultural ties to Cuba. The U.S. is well positioned to supply technology, citrus rootstock and other inputs, a market-economy oriented management, and capital (all of which are currently in short supply in Cuba) to the Cuban citrus industry. AO

William E. Kost (202) 694-5246
Wekost@ers.usda.gov

Cuban Agriculture on the Internet:

An excellent starting point for finding out more about Cuban agriculture is the Food and Resource Economics Department and International Agricultural Trade and Development Center, University of Florida Cuban Agriculture website:
www.cubanag.ifas.ufl.edu/default.htm

Want to read more?

Armando Nova González, Thomas Spreen & Carlos Jáuregui, “The Citrus Industry in Cuba 1994-1999”, International Working Paper Series IW01-4, International Agricultural Trade & Development Center, Food & Resource Economics Department, University of Florida, March 2001.

Armando Nova González, Thomas H. Spreen & Ronald P. Muraro, “The Citrus Industries in Cuba and Florida”, International Working Paper Series IW96-2r, International Agricultural Trade & Development Center, Food & Resource Economics Department, University of Florida, June 1996.

Cuba in Transition, Volume 11, Proceedings of the 11th Annual Meeting of the Association for the Study of the Cuban Economy, Institute for Cuban and Cuban-American Studies, University of Miami, 2001.

Thomas H. Spreen, Armando Nova González & Ronald P. Muraro, “The Cuban Citrus Industry: An Assessment of Potential Market Opportunities After Lifting of U.S. Economic Sanctions”, 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 Conference, Washington D.C., March 31, 1998.

Foreign Agricultural Organization, FAOSTAT Agricultural Data database, http://www.fao.org/ag/guides/resource/data.htm