

The Florida Sugar Industry ¹

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This is part of the Sugar Policy series, which discusses policy issues facing the U.S. sweetener industry in general and Florida's sweetener industry in particular. Several articles have been developed to discuss economic and policy issues that have, or will have, an impact on Florida's sweetener industry. The objective of this article is to summarize the developments and current status of the industry as an introduction to more complex topics.

Historical Background

Sugarcane was brought to the St. Augustine area by the Spanish colonial governor Menendez in about 1565, but commercial production of sugarcane did not begin until 1767 in the New Smyrna colony and was disrupted by the American Revolution. Several new attempts at developing commercial operations in central Florida failed in the 1800s because of unsuitable soils and inclement weather. This forced the pioneer growers to move south during the late 1800s and early 1900s. The industry was finally established around the southeastern shore of Lake Okeechobee during the 1920s. Two events account

for the growth experienced in the following decades: (1) the development of varieties suitable for the semi-tropical climate of the area and (2) the establishment of a water management system built to remove flood waters from agricultural lands during the wet season. Prior to 1960, there were three raw sugar mills, producing up to 175,000 tons of raw sugar annually from about 50,000 acres. The opportunity for further expansion came in 1960, when the United States stopped the importation of Cuban sugar and acreage restrictions on domestic cane were lifted by the federal government. In the following four years, acreage increased to 223,000, sugar mills to eleven, and sugar production to 572,000 tons. The acreage restrictions imposed again in 1965 were responsible for the closing of three mills, halting the industry's growth. With the expiration of the Sugar Act at the end of 1974 and the elimination of production controls, the Florida sugar industry continued its expansion trend (Abbitt and Morton, 1980; Zepp, 1976).

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Industry Organization

Most of today's industry is vertically integrated, but independent growers and grower-owned cooperatives produce some of the output. There are six raw sugar mills, with an average daily processing capacity of 20,750 tons of sugarcane per 24 hours, or a total of 124,500 tons. Five of these mills are owned by corporations and one is cooperatively-owned by growers. There are two sugar refineries adjacent to two corporate mills. In addition, the cooperative and one corporation own jointly four refineries located outside Florida. The refining expansion signals the trend toward increased vertical integration and the production of a product (refined sugar) with a higher value than raw sugar.

Production and Consumption

Sugarcane production has continued the expansion trend started in the 1960s. For example, in 1980, an average yield of 31.1 tons per acre on 320,000 acres produced 10 million tons of sugarcane. In the last years of that decade, sugarcane production averaged 32 tons per acre on over 400,000 acres, or a total production of 13 million tons. During the 2000-01 season, an average yield of 38.3 tons per acre on over 420,000 acres produced more than 16 million tons of sugarcane.

Raw sugar production has experienced a similar growth pattern. Florida's 1.1 million tons of output in 1980 represented 41 percent of the total U.S. cane sugar production. That figure increased to around 1.5 million tons in the last years of the 1980s, with Florida accounting for about one-half of the total U.S. cane sugar production. During the 2000-01 season, Florida surpassed slightly two million tons to maintain its share of one-half of the total domestic cane sugar output. Since the 1970s, Florida has been the leader in cane sugar production.

The net flow of sugar that Florida acquired during the 1970s and 1980s remained unchanged during the 1990s, and it appears that this will be maintained during the 2000 decade as well. According to Polopolus and Alvarez (1990), the positive balance of production over consumption, which exceeds one million tons of sugar, indicates that Florida is a net exporter of sugar. Mulkey and

Clouser (1988) have already indicated that the net exporter status makes sugar a basic Florida industry because the product is mainly sold outside the region, channeling outside dollars into the area and generating direct, indirect, and induced impacts on the regional economy.

Economic Importance and Impact

The Florida sugar industry is a major component of the state's agricultural economy. Cash receipts from the sale of raw sugar and molasses have exceeded \$800 million per year in the last years of the 1990s and first seasons of the 2000 decade. The revenue generated by the sugar industry has a significant impact on southern Florida and the state's economy. When the multiplier effect is taken into account, the Florida raw sugar industry generates gross sales of over \$2 billion in the state and creates several thousand full-time equivalent jobs in Florida.

After establishing the contribution of the raw sugar industry to the regional and state economies, Mulkey and Gordon (1979) made some important statements in the first economic impact study conducted by the Department of Food and Resource Economics at the University of Florida. More than 20 years later, those statements are still true:

At present there are uncertainties regarding United States and international sugar policies. Potential changes in policy are likely to have important implications for the Florida sugar industry and for the economy of the four-county sugar producing area. Information on the contribution of the sugar industry to the regional economy is a necessary input into policy decisions which affect the sugar industry and, subsequently, the entire regional economy (p. 2)... Any public policy then which affects the size of the sugar industry has important implications for total economic activity in the sugar producing region, implications extending far beyond the sugar industry itself. These implications would seem to warrant serious considerations in the sugar policy arena (p. 27).

This clearly indicates the need for developing information on the potential impact of different policy decisions on the regional and state economies. For that reason, this series has been developed and will be updated periodically.

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