

Economic Contribution of the Mississippi Blueberry Industry, 2002



Production Information

Information on blueberry production is limited because statistics on this industry are not readily available in the Census of Agriculture. Blueberries grown in Mississippi are primarily of the rabbiteye variety, although the state climate is also conducive to growing

another popular variety called southern highbush.

Production concerns include water source and quality, soil characteristics, and variety. Blueberries need well-drained soils, so irrigation is necessary for commercial yields. Drip irrigation is most commonly used.

Blueberries are planted during the dormant season, mid-November through February. Fruit must be harvested every 5 to 7 days, and, depending on the variety and method of harvesting, three to five harvests per season are possible. Blueberries can be harvested mechanically or by hand. Historical yield data are difficult to establish; however, some yield information at the state level is published annually in the Noncitrus Fruits and Nuts summary report by the National Agricultural Statistics Service (NASS). Experimental yields are often based on production per plant and are expanded to a per-acre basis.

Industry Overview

In 2002, Mississippi's blueberry industry had 365 growers and employed 193 full-time employees. The industry produced more than 9.6 million pounds of blueberries, with a retail value of \$6.88 million.

Sales revenue defines the value of the industry's total output. Sales represent a gross measure of economic contributions because they include materials and services purchased from other firms, as well as wages paid to workers and taxes paid to the government.

Approximately 50 percent of Mississippi blueberries are sold wholesale through a marketing cooperative. The remaining blueberries are sold independently through farmers' markets, small stores, and pick-your-own operations.

The majority of blueberry acreage is planted in southwest Mississippi. The state ranked seventh in the

nation in blueberry production in 2002, with more than 1,600 acres and a production yield of 6,000 pounds per acre.

Assessing the Industry

In the study, the estimated economic contribution of the Mississippi blueberry industry in 2002 relied on data concerning the total value of industry output, total industry production costs, and number of people employed in the blueberry industry.

The volume of blueberry production was determined by multiplying the number of acres in production (1,600) by the average yield per acre (6,000 pounds).

Previously developed enterprise budgets for blueberry production provided an estimate of production costs. The average production cost of blueberries in Mississippi was \$4,096 per acre in 2002.

In assessing the blueberry industry, economic contributions are measured in terms of sales/output, income, employment, and taxes generated for state and federal governments. A standard input/output model (IMPLAN) calculated the indirect and induced impacts and multiplier effects. The model calculations yielded conservative multipliers for the state.

Economic Concerns

In 2002, Mississippi blueberry growers' greatest economic concern was the high custom rates for grading and harvesting fresh fruit. Charges for these services typically leave about 31 cents per pound for production costs and profits to the grower. Avoiding or reducing these grading and harvesting costs is important because they represent a significant proportion of the grower's production expenses. Mechanical harvesting reduces the harvesting cost per pound but increases the packing cost per pound. Mechanical harvesting also increases the proportion of the crop sold in frozen form, which reduces per-acre revenue.

Production and Marketing

Many factors must be considered to estimate the cost of blueberry production. Irrigation, which is critical in blueberry production, represents a major portion of

the establishment costs. The ideal season for marketing blueberries in Mississippi is late May through early July. A majority of blueberries grown in Mississippi are sold through the Miss-Lou Blueberry Growers Association. In 2002, the average farm price was \$1 per pound of blueberries sold in Mississippi. According to the U.S. Census of Agriculture, most Mississippi blueberry farms are small, with annual crop sales of less than \$25,000.

Economic Contribution

Sales by the Mississippi blueberry industry totaled \$6.88 million in 2002. Adding this to indirect and induced effects, which totaled \$5.44 million, resulted in a total contribution of \$12.32 million. This figure does not include the economic contribution of taxes paid by producers, workers, and input suppliers in the industry. **Table 1** displays a breakdown of the total dollar value of economic contributions produced by the Mississippi blueberry industry.

The blueberry industry produced an income of \$3.84 million for workers in the state. More than 55 percent of the income payment came directly from the blueberry industry. In addition to the 193 people employed directly by the blueberry industry, purchases and other transactions supported the employment of another 84 individuals.

Multipliers describe how expenses and economic contributions are allocated in the state. A multiplier of 1.79 means that for every dollar of sales within the blueberry industry, another 79 cents of economic activity is generated within Mississippi. The multiplier for employment

describes the total number of employees impacted by the blueberry industry. An employment multiplier of 1.44 suggests that for every full-time position in the blueberry industry, one additional part-time job is created in the state's economy.

Employment, sales, payroll, and taxes describe the scope of business activity in the Mississippi blueberry industry. Showing the economic value of an industry on a region's economic base improves the understanding of how an industry connects within the regional economy.

The total economic contribution of the Mississippi blueberry industry extends beyond its initial sales, employment, and payroll. These activities create income for state workers and taxes (income, sales, property, etc.) for local, state, and federal governments. These economic statistics create secondary impacts in the form of indirect and induced effects. Adding these effects and about \$1.3 million in taxes raised the total economic contribution of the Mississippi blueberry industry to \$13.62 million. Overall, the blueberry industry influences the state's economy significantly. Given today's economic climate, there are few places where producers can receive this kind of return on their money.

Additional Resources

Economic Impact of Florida's Citrus Industry, University of Florida Cooperative Extension Service

Blueberries, Mississippi Department of Agriculture and Commerce

Table 1. Total economic contribution of the Mississippi blueberry industry in 2002.

	Direct	Indirect	Induced	Total	Multiplier
Output	\$6,880,000	\$3,496,790	\$1,945,468	\$12,322,258	1.79
Income	\$2,133,000	\$1,047,751	\$663,317	\$3,844,069	1.80
Employment	193	56	28	277	1.44

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