

Economic Impact of the Mississippi Blueberry Industry



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 especially 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. 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 impacts 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 this study, the estimated economic impact of the Mississippi blueberry industry relied on data concerning the total value of industry output, total industry production costs, and the 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 impacts 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

Mississippi blueberry growers' greatest economic concern is 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 Impact

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 impact of \$12.32 million. This figure does not include the economic impact of taxes paid by producers, workers, and input suppliers in the industry. Table 1 displays a breakdown of the total dollar value of economic impacts produced by the Mississippi blueberry industry.

	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

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 impacts 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 impact 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 impact 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

For more information, consult *Economic Impact of Florida's Citrus Industry* by the University of Florida Cooperative Extension Service, *Blueberries* by the Mississippi Department of Agriculture and Commerce, and Mississippi State University Extension Service Publication 2159 *Costs and Returns Associated with Producing Commercial Blueberries*.



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