

Economic Impact of Farmers' Markets in Mississippi



As the U.S. economy continues to struggle, so are many communities. Even when times are good, many communities, especially rural and small ones, face economic challenges. These and other challenges multiply and increase in magnitude during tough economic downturns.

Establishing farmers' markets is one rural development strategy that communities are implementing across the state. These facilities provide growers with an established place to sell locally grown produce directly to consumers. Farmers' markets are good for local economies, farmers, and consumers. They provide growers with extra income since many farmers and local citizens must work full-time either off the farm or outside the local area to support their families. Farmers' markets help producers to receive higher prices by removing the broker and selling directly to consumers.

Farmers' markets provide consumers more outlets to buy fresh produce and create local economic impacts. The communities in which these facilities operate benefit from more money spent in the local economy, creating spending, re-spending, and higher multiplier effects in the area. Besides retail spending by consumers, farmers' markets help promote business development and expansion in the local area.

The potential for fruit and vegetable sales from farmers' market facilities is strong since most consumers in the United States no longer grow their own produce. Mississippi food and beverage industries sold almost \$7.2 billion in fiscal year 2008. Many of these purchases left the state because a significant amount of the sales occurred in supermarket chains, which is where most consumers buy their farm produce.

Farmers' Markets in Mississippi

There currently are 54 active farmers' markets in Mississippi, with more starting each year. Most of these facilities are seasonal in operation, opening two to three times per week during a 3- to 4-month period. The operating periods of farmers' markets usually correspond to the growing season in the local area.

To understand the economic impact of farmers' markets in the state, Mississippi State University's Department of Agricultural Economics and MSU's chapter of the National Agricultural Marketing Association (NAMA) conducted a survey of these facilities in Mississippi in September 2009. During a 4-week period, NAMA students attempted to contact all 54 farmers' markets in Mississippi. The students obtained information from 26 facilities in the state. These facilities were further divided into three classes based on the size of the community they served—fifteen were small markets, nine were medium-size, and two markets were large (**Table 3**).

The MSU survey revealed that 446 vendors sold produce at the 26 farmers' markets surveyed in the study (see **Table 1**). About 127 vendors participated in the small farmers' markets, 207 vendors at medium-size markets, and 112 vendors at the large farmers' markets surveyed (**Figure 1**). These findings suggest farmers' markets in Mississippi met some of the marketing needs of growers and demands of consumers for fresh produce in those areas, especially in the small- to medium-size markets.



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Total sales among vendors exceeded \$1.4 million at these facilities in 2009 (Table 1). Sales by size of the facility were \$236,100 for small, \$665,781 for medium, and \$514,000 for large (Figure 2). Sales at medium-size markets were three times more than at smaller markets and about 130 percent higher than large markets in Mississippi. Sales at large markets were only 77 percent of sales at medium markets but 216 percent of sales at small markets.

The average sales per farmers' market by size in Mississippi were \$15,740 for small, \$73,976 for medium, and \$257,000 for large. Sales per vendor at these facilities were \$1,859 for small, \$3,216 for medium, and \$459 for large (Figure 3). These findings suggest that consumers patronize farmers markets more in small- and medium-size communities than in large communities in Mississippi; although sales per vendor were higher among larger markets in the state. This was not too surprising because, in general, larger communities have more outlets for consumers to purchase fresh produce.

Results from the survey confirm the authors' opinions that farmers' markets in small- and medium-size communities produce greater economic returns for vendors while filling a void in the demand for fresh produce in the area. Farmers' markets provide major benefits to local communities engaged in economic development. Both vendors and consumers will spend part of their weekly incomes in the immediate area before or after the farmers' market closes. Other businesses in the local community benefit because of increased customer traffic in the trade area.

Adjusting Gross Income

Gross income to farmers' market vendors (\$1,414,881) was adjusted to account for state income-only taxes (\$350 + 5 percent of income over \$10,000; no deductions). This produced a disposable income of \$1,259,781. Spending by farmers' market vendors was estimated at \$944,836, based on an assumed marginal propensity to consume of .75. Because vendors' disposable income has been adjusted to reflect local spending, the local purchase coefficients were set to 100 percent for the impact scenarios.

Benefits of Farmers' Markets

Farmers' markets provide consumers an opportunity to purchase fresh produce, which is about as close to growing it themselves as they can get. Most produce is grown within 25 miles of the market, and many growers harvest their produce the day before or the morning of the farmers' market. The money spent at a farmers' market stays in the community, helping both producers and consumers.

Farmers' markets can give producers the option of selling directly to consumers at retail prices rather than wholesale prices if they are properly set up and

Figure 1. Number of Vendors by Farmers' Market Size, 2009

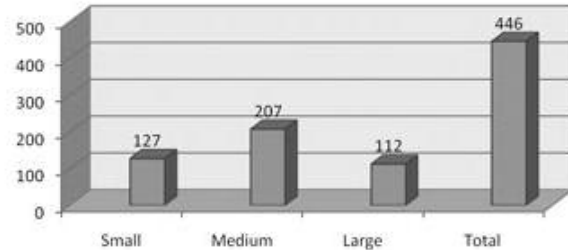


Figure 2. Total Sales by Farmers' Market Size, 2009

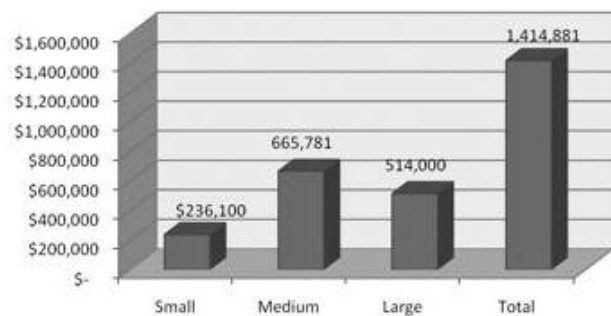
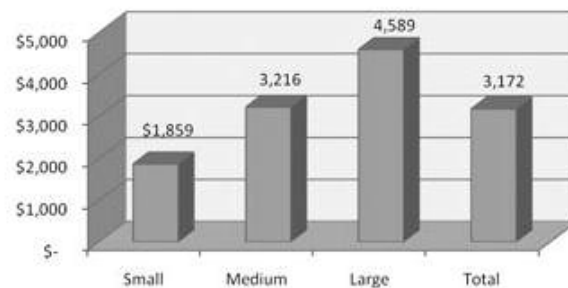


Figure 3. Per Vendor Sales by Farmers' Market Size, 2009



managed. Though similar to grocery store produce in price, foods bought at farmers' markets have the advantage of freshness. Everyone—producers, consumers, and the local economy—benefits where farmers' markets operate. Producers can make money and have an alternative to row cropping, consumers can get a better product, and farmers' markets can foster a sense of community. They also are beneficial to the local economy.

Since most producers work full time off the farm, farmers' markets give them an alternative to row cropping and an opportunity to sell their produce directly to consumers. Farmers' markets are ideal for growers who can't produce enough to meet the large demands of supermarkets that want to buy at least 40,000 pounds at once.

Methodology

A quantitative analysis of the potential economic impacts of farmers' markets in Mississippi was calculated using the IMPLAN 2.0 Input-Output model. The latest statewide dataset available for this modeling framework is the 2007 Mississippi dataset. After creating a state-level model for 26 farmers' markets in Mississippi, the impact scenario was created to assess the impact of \$948,640 of vendors' spending on the state's economy. The basic input-output model can be represented as:

$$X = (I - A)^{-1} \times Y$$

where: A = matrix of aij

I = identity matrix

X = vector of industry outputs

Y = vector of final demand

(I - A)⁻¹ is called Leontief Inverse.

The equation shows that output is equal to Leontief Inverse multiplied by final demands. This relationship is also held in the form of changes:

$$\Delta X = (I - A)^{-1} \times \Delta Y$$

Input data on the economic returns (i.e., income, sales, or revenues) from farmers' markets were used to model the economic impact of these facilities in Mississippi. By examining revenues generated by vendors at farmer' markets, spillover impacts on sales, employment, income, and local taxes can be determined.

Results

As **Table 1** illustrates, \$948,640 in adjusted direct farmers' market revenues will create additional jobs, business revenues, state and local taxes, and value-added effects on the economies in which these facilities operate in Mississippi.

Table 1. Economic Impact of 26 Farmers' Markets on Host Communities in Mississippi, 2009

Source	Direct	Indirect	Total	Multiplier
Business Sales	\$948,640	\$668,251	\$1,616,891	1.700
Employment*	9.58	6.3	15.88	1.660
Wages and Salaries	\$165,111	\$48,601	\$213,720	1.294
Tax Revenues			\$16,080	

* Employment is in terms of full-time and part-time jobs. However, these estimates are seasonal jobs based on operating schedules of selected farmers' markets in the study.

Sales

The direct spending of \$948,640 in farmers' market revenues generated a sizeable effect on the communities in which these facilities operate. Each dollar of direct sales added another 41.33 cents in secondary effects (mainly induced effects), yielding a total sales effect of more than \$1.6 million in the 26 communities in Mississippi.

Employment

The impact on employment was marginal. Because farmers' markets operate seasonally, the jobs created are expected to be seasonal and based on the success of the farmers' markets. The results in **Table 1** suggest that about 9.58 jobs were created as a direct result of farmers' market vendors spending \$948,640 in the communities in which these facilities operate. An additional 6.3 jobs were created as business spending increased revenues. Combined, about 15.88 seasonal jobs were created during the times these farmers' markets operated in the state.

Wages

Personal income (wage) is a measure of the income benefit to residents of the 26 farmers' markets in the study. The direct and indirect effects of revenues generated by farmers' markets produced a total impact on

wages of more than \$213,720 in the surveyed communities. Of this total, \$165,111 is direct wages associated with the spending by farmers' market vendors and \$48,601 is indirect wages. Although these impacts also are seasonal, the impacts on workers may last long after the farmers' markets have closed.

State and Local Revenues

The impact of vendors spending \$948,640 reaches far beyond the increases in employment, sales, and wages; it affects the local and state tax bases, as well. **Table 2** contains the tax impacts associated with the 26 farmers' markets surveyed in the study. The results show that retail spending by farmers' market vendors produced \$16,000 in tax revenues for local and state officials. About \$5,152 of this was sales taxes, \$2,668 was property taxes, and \$8,260 consisted of other charges such as fees, licenses, and others. These added revenues no doubt helped support existing facilities and services and promote farmers' market development in the state.

Summary

Rural areas, in general, continue to experience tough economic times and lag behind their urban counterparts in poverty levels, income, employment, education, and other indicators of well-being. Farmers' mar-

Table 2. Economic Impact of 26 Farmers' Markets on Local and State Government Finances in Mississippi, 2009

Source	Total
Sales taxes	\$7,689
Property taxes	3,892
Subtotal	11,671
Other taxes	12,329
Total	24,000

Note: Total tax estimates represent the direct and indirect effects of vendors' spending on local and state government finances.

kets offer a community economic development tool to help close those gaps. The initial impact of \$948,640 in direct farmers' market revenues created a total economic impact of \$1.6 million in business revenues, 15.88 part-time jobs, \$213,720 in wages, and \$16,000 in state and local taxes on the economies in which these farmers' markets operated in Mississippi in 2009.

While farmers' markets are not the only source for economic growth, local development officials can play a major part in supporting these facilities. For example, economic developers can set up networks and

marketing strategies, communicate with chambers of commerce, and explain the economic benefits of farmers' markets to others in the community.

Economic and government officials can help to develop farmers' markets by giving a rent-free period during initial start-up and seek funds (donations and grants) to help defray the costs for air conditioning and refrigeration equipment to help reduce spoilage of farm products at the facility. Such assistance from local officials can improve the economic and social plight of rural communities in Mississippi.

Table 3. Survey Results of 26 Farmers' Markets in Mississippi, 2009

Business	Location	County	Vendors	Income	Class
Charles R Hedgewood FM	Biloxi	Harrison	40	\$460,000	Large
Corinth FM	Corinth	Alcorn	72	54,000	Large
Adams Country FM	Natchez	Adams	20	70,000	Medium
Choctaw FM	Choctaw	Choctaw	30	41,781	Medium
Crystal Springs FM	Crystal Springs	Copiah	18		Medium
Forrest County FM	Hattiesburg	Forrest	18		Medium
McComb FM	McComb	Pike	30	17,500	Medium
Seventy-four (74)	Oxford	Lafayette	17	74,000	Medium
Mississippi FM	Jackson	Hinds	28	450,000	Medium
Tupelo FM	Tupelo	Lee	26		Medium
Tylertown FM	Tylertown	Tylertown	20	12,500	Medium
City of Gulfport FM	Gulfport	Harrison	15		Small
Clarksdale FM	Clarksdale	Coahoma	8		Small
Cleveland FM	Cleveland	Bolivar	7		Small
Courtstreet FM/New Albany FM	New Albany	Union	5		Small
D'Iberville FM	D'Iberville	Harrison	6		Small
Greenwood FM	Greenwood	Leflore	11	55,000	Small
Jackson County FM	Pascagoula	Jackson	10	3,000	Small
Neshoba Co FM	Philadelphia	Neshoba	14	90,000	Small
Pass Christian Mkt ltp	Pass Christian	Hancock	12	6,400	Small
Pine Belt F&A Mkt	Hattiesburg	Forrest	9	56,700	Small
Saucier FM	Saucier	Harrison	8	\$ ≤ 0	Small
Southaven FM	Southaven	Desoto	8	20,000	Small
Vaden FM	Vaden	Carroll	5	5,000	Small
Old Towne Mkt	Clinton	Hinds	5		Small
Waveland FM	Waveland	Hancock	4		Small

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