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Farmers Markets: Market Attributes, Market Managers and Other Factors Determining Success

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Abstract

The objective of the study is to examine factors affecting the organization and success of farmers markets. A survey was conducted among vendors and market managers in Missouri. The preliminary results indicated that location of the farmers market, absence of wholesalers, and degree of supervision by market managers, market managers household attribute including children in the household determined level of success. Level of success was represented by number of vendor participation at the peak of the season. Farmer market attributes including parking spaces and petting zoos played crucial role in bringing in patrons, therefore increasing vendor participation. Uniform pricing policy was important to attract more vendors.

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Introduction

Consumers' desire for fresh and locally produced food has led to an increased interest in farmers markets. In recent years, the total number of farmers market in the United States grew by more than 3% annually. In 2008, the total number was 4,685 including approximately 110 farmers markets within the state of Missouri. Foods sold at the farmers markets represent a significant portion of the direct food sales by farmers to household consumers which rose to $1.2 billion in 2007 from $812 million in 2002 (Census of Agriculture, 2002 and 2008), representing a growth of 49%. In addition to foods, sales at farmers market include crafts, flowers, and other farm products. Some farmers markets also provide family entertainments such as petting zoos. All these economic activities play an important role in collectively generating a significant economic stimulus in the local economy in the form of purchase of goods and services, and generation of employment. This form of direct marketing benefits both producers and the consumers. On one hand, it allows growers to capture a larger share of consumer's food expenditures; on the other hand, consumers can have access to fresh and high-quality produce as well as farm-based recreational experience. For the most part, the success of a farmers market depends on the market managers.

Farmers' markets experienced cyclic upturns and downturns, and by the early 1970s, some researchers foresaw the end of farmers' markets (Brown, 2001). In 1976, however, Public Law 94-463, the Farmer to Consumer Direct Marketing Act of 1976, was passed. This act of legislation was one of the leading points in the resurgence of

farmers' markets in the 1970s, a trend that continues today (Govindasamy et al., 1998; Roth, 1999; Brown, 2001; Thilmany and Watson, 2004). Other factors that led to this resurgence were increasing gasoline and food prices, the want for organically produced food, the want for fresher and higher quality foods, the want to support local farming economies, the environmental movement and trends in horticulture research (Roth, 1999; Andreatta and Wickliffe, 2002; Brown, 2002). The continued concentration and globalization of the food supply system will continue to create opportunities for farmers, who, unable to compete nationally or internationally, will be able to meet the needs of local and regional markets which might be overlooked by the large scale food supply network (Roth, 1999).

Market managers are responsible for the day-to-day operation of the farmers market. In most cases, market managers are individuals hired by market organizers. There are cases in which markets are managed by a group of people. While Hamilton (2002) has identified at least ten responsibilities of a farmers market manager, including daily operation, the list of responsibilities varies across farmers markets. Studies addressing role of market mangers (Govindasamy et al., 1997, Oberholzer and Grow, 2003) have reported the relationship between the attributes of market managers (e.g., experience) and the success of the farmers market. In this study, we identify the factors including the attributes of market managers and the market influencing the organization and success of farmers market.

Objectives

The overall objective of the study is to examine factors affecting the organization and success of farmers markets. The key factors that are hypothesized to play a major role are

the attributes of the market including location, services and facilities at the farmers markets including parking space, market layout, promotion and advertisement, days of operation, fees charged, and system of space allocation; management practices including daily presence of the manager, and farm visits for quality control.

Methodology

Data Collection: The primary source of data is the survey conducted among market masters (managers) and vendors. E-mails and regular mails were used to reach approximately 140 farmers market managers in the state of Missouri prior to starting the survey. Market managers were asked to complete either the on-line version of the survey or the paper survey. A little more than 50 managers completed the surveys. That is, more than a third of the managers participated in the survey.

The survey instruments to market managers and vendors were distributed to the farmers' markets in May and June 2009 through the United States Postal Service. Individualized packets were mailed out to farmers' market managers, who distributed the surveys to their vendors. The packets included the following: a unique number of vendor surveys with attached envelopes for privacy of information, a market manager survey, a cover letter, and a self-addressed stamped envelope. The cover letter explained the purpose and reasoning for the study as well as instructions on completion and return of the surveys. Market managers were requested to distribute the surveys to their vendors, who could then return the surveys, sealed in the provided envelope, to the market manager to be mailed en masse in the self-addressed stamped envelope, or the vendors could mail the surveys directly to the research institution if preferred. Those farmers' markets which were not able to be contacted in the beginning of the study were also

mailed out a packet in the middle of June 2009; these included the same as the previous packets but had a set number (10) of vendor surveys, instead of being individualized. This was to ensure the inclusion of all Missouri farmers' market vendors in the survey.

Completed surveys were received back from farmers' market vendors and managers through September 2009. The total returned was 260, a 20% total return rate for the entire state of Missouri. Return rates were also calculated for the seven economic regions. The Greater St. Louis, North and Central regions had the lowest return rates at 12%, 10% and 7%, respectively (32, 15 and 26 surveys returned out of 272, 149 and 369 surveys mailed out, respectively). The West and Greater Springfield regions had the highest return rates at 53% and 47%, respectively (81 and 47 surveys returned out of 152 and 101 surveys mailed out, respectively). The representation of farmers' markets across all the defined economic regions is presented in Table 1.

Preliminary Results:

Vendor Characteristics: Vendors (producers) were statistically characterized as equally either gender, college educated, satisfied with their business profit margin, producing on one or less acres and in the growth stage of business (Table 2). While fruits and vegetables constituted nearly 50% of the total revenue for a typical farmers market, tomato was the number one seller with 10% of the revenue. Value added activities including freezing and canning, recipe, and taste taking were significantly correlated with business stages. Nearly half of the vendors in the growth stage of business had adopted somewhat to a high level of value added (Table 3).

Factors Influencing Market organization and success: Success of the farmers markets was measured by the level of vendor participation. Number of vendors participating in the farmers market varied. The highest number of vendors were during the late summer and early fall, therefore, defined as peak of the season. A Chi-square test rejected the null hypothesis of no association between each of the attributes and vendor participation. This implies manager's success may be attributable to some of these attributes. Table 4 shows that location of farmers' market was important predictor in managers' success. The manager policy of restricted entry seemed to play well towards encouraging vendor's participation. The fact that vendors know that there will be no wholesalers in market ensured a level playing ground for the vendors.

The manager's presence during the market operating hours and uniformity of prices during the day has a bearing on vendor participation, which somehow explains managers' success. In the study it was hypothesized that services offered such as parking eating places, rest rooms may enhance the manager's success. The results show little or no relationship at all with a manager's success. In terms, of socioeconomic variables, having children, could be a relevant predictor of a manager's success; whereas their level of income, education, gender did not.

Table 1: Completed vendor survey across economic regions

Economic Regions	Estimated Number of Vendors	Completed Survey	Percentage of Vendors
North	149	15	10%
Greater Kansas City	146	32	22%
Greater Springfield	101	47	47%
Great St. Louis	272	32	12%
West	152	81	53%
Central	369	26	7%
East	97	27	28%
Total	1286	260	20%

Table 2: Descriptive Statistics of Vendors (producers) at Missouri Farmers Markets

Characteristic	Representative Group	Percentage
Gender	Male	51%
Education	College	24.8%
Business Development Stage	Growth	52.5%
Profit Margin Satisfaction	Satisfied	43%
Operation Size	One acre or less	32%
Change in acreage (5 yrs)	Same	60%
Number of Years in Farmers' Market	One year or less	36.2%
Highest Sales Revenue	Fruits And Vegetables	48.05%
Product Most Sold	Tomatoes	10%

Table 3: Value added and stages of business development (*Chi-squared value significant at less than 5%)

Degree of Value Added	Initial		Growth		Mature		Decline		Total	
Least Value Added	(7%)	17	(14%)	35	(6%)	15	(1%)	3	(29%)	70
Most Value Added	(1%)	3	(7%)	16	(3%)	8	(0%)	1	(12%)	28
No Value Added	(11%)	26	(15%)	37	(6%)	14	(1%)	3	(33%)	80
Somewhat Value Added	(4%)	10	(16%)	39	(5%)	13	(1%)	2	(26%)	64
Total	(23%)	56	(52%)	127	(21%)	50	(4%)	9	(100%)	242

Table 4: Relationships between a farmers' market attribute and Peak season vendor participation*

Attribute	Vendor Participation	Percentage	Chi-square	P-value
Market Location	**Urban**	**28**	**17.761***	**.007**
	Suburban	**22**		
	Rural	**50**		
Space Allocation	**Seniority**	**33**	**4.973**	**.200**
	First come first serve	**56**		
	Other	**11**		
Separation of similar produce	**NO**	**46**	**.198**	**.90**
	YES	**54**		
Wholesalers Participation	**NO**	**78.4**	**5.298***	**.007**
	YES	**21.6**		
Vendor Rivalry	**NO**	**90.2**	**2.963**	**.220**
	YES	**9.8**		
Competition with retail stores	**NO**	**90.2**	**1.698**	**.428**
	YES	**9.8**		
Managers presence	**NO**	**15.7**	**3.445***	**.117**
	YES	**84.3**		
Daily uniform prices	**NO**	**2.0**	**5.483***	**.006**
	YES	**98.0**		
Farm visits for quality assurance	**NO**	**61.2**	**44.99**	**.218**
	YES	**38.8**		
Services: Petting zoo**	**NO**	**93.8**	**3.478**	**.176**
	YES	**6.3**		
Parking space availability	**NO**	**12.2**	**41.031**	**.190**
	YES	**87.8**	**17.394***	**.008**
Children under 18 years**	**NO**	**59.4**		
	YES	**40.6**		

Note: The Chi Square statistic tests the null hypothesis of no association between the attribute and vendor participation. Asterisk denotes that the test statistic is significant at ten or less level of significance.

** Chi-square test could not reject the null hypothesis of no association between a number of services, as well as socio economic variables such as gender, education race and income with vendor participation. Hence, their excision from this analysis.

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