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Walter Hugo Anez
University of Arkansas, Fayetteville

Michael R. Thomsen
University of Arkansas, Fayetteville

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The characteristics of consumers and producers using farmers' markets

Walter H. Añez^{} and Michael R. Thomsen[†]*

ABSTRACT

This study examines the perceptions of both consumers and producers towards farmers' markets. Consumer perceptions are generalized from several previous studies conducted throughout the United States. Producer information was gathered through a survey of members of one farmers' market in Arkansas. Previous studies, conducted in both rural and urban areas, indicate that the typical farmers' market customer is well educated and is of higher than average income. These consumers place great importance on quality of produce, knowledge that produce is grown locally, and the social interaction obtained through the farmers' market experience. For producers, the farmers' market is an important outlet for produce and in many cases accounts for all of their produce sales. The survey results suggest that there is an interest in expansion on the part of many producers and that additional acreage is available for growing produce crops. In addition to providing a market outlet, producers also benefit from the social dimension of the market.

^{*} Walter Hugo Añez graduated in May 2003 with a B.S. in agricultural business.

[†] Michael R. Thomsen, faculty sponsor, is an assistant professor in the Department of Agricultural Economics and Agribusiness.

MEET THE STUDENT-AUTHOR



Walter H. Añez

After two years in a private university in Santa Cruz, Bolivia, I came across the opportunity to attend the University of Arkansas thanks to a State of Arkansas-Bolivia partnership agreement. I chose the agricultural business and economics undergraduate program, a program that gave me the tools I needed to conduct research and expand my perspective in the study of agricultural economics.

After the first year at the U of A, I started working with Dr. Michael Thomsen. I first worked on a market case study for a private company in Fayetteville, after which I was hired by the company for an 8-month internship that I completed during the fall and spring semesters of my senior year. During the internship, I had the opportunity to conduct economic research on a variety of issues in several different agricultural industries, both in the U.S. and worldwide.

The second project I became involved in was the one that motivated this paper. This project has allowed me to study another aspect of economics, that being the economics of small farmers.

The practical experience I have gained while working with Dr. Thomsen and on the internship has allowed me to use the knowledge obtained in the classroom and apply it to real world situations. These experiences will be invaluable

when I begin the M.S. program in agricultural economics at the University of Arkansas in Fall 2003. I thank Dr. Thomsen for these opportunities, and for his support and encouragement.

INTRODUCTION

Increasingly, small farms are relying on direct-marketing options as an outlet for their horticultural crops. Direct marketing encompasses several venues, the most common being roadside stands, direct-farm markets, pick-your-own operations (PYO), and farmers' markets. Roadside stands are usually temporary structures erected by farmers for the purpose of selling seasonal farm produce. In PYO operations, consumers harvest the produce from the farmer's field. On-farm markets are permanent structures located at the farm gate to sell the farm's own produce. Farmers' markets are operations where farmers transport their products to consumers. Among the most popular items sold through such direct-marketing venues are fruits, vegetables, flowers, nursery products, eggs, and dairy products (Govindasamy and Nayga, 1997).

Direct marketing has become increasingly important for small farms over the past several years. Improvements in transportation, refrigeration, and communication technology have consolidated marketing outlets within the retail food industry and have

changed the fresh-fruit and vegetables industry from regional markets to a national market. One advantage of this is that a wider variety of fresh fruits and vegetables are available to the population as a whole (Fjeld and Sommer, 1982). However, these changes have created both economic and non-economic complications for small farms. Large farmers have been able to set the pace regarding standardization of products and better supply-management practices. Moreover, marketing firms have turned to large farms in order to be able to deliver products throughout the U.S. and abroad. This has created a complex marketing system that makes it difficult for small farmers to compete because they often lack the technical efficiency, access to capital, and other vital components that are more readily available to larger producers (Epperson and Estes, 1999; Gebremedhin and Christy, 1996).

In response to these changes in the marketing structure, small farms are increasingly relying on direct markets as an outlet for their produce. At the national level, the number of farmers' markets has grown by 79 percent during the past seven years and farmers' markets are the

only market outlet for 19,000 farms (USDA Agricultural Marketing Service, 2002). Direct-marketing outlets are of even more importance in states such as Arkansas given the predominance of small, family-owned operations. Detailed information about the importance of direct marketing regionally is unavailable; however, a study of fruit and vegetable growers in Oklahoma conducted in the late 1980s found that nearly 90% used some form of direct marketing (Henneberry and Willoghby, 1989).

The growing role for direct-marketing outlets suggests that there are some consumer preferences that are not being met by the complex marketing chain (retail grocery stores) that has emerged for produce crops. Over the years, several studies have addressed the characteristics of direct-marketing outlets that consumers perceive to be important. Equally important is an understanding of the characteristics of small farmers that use them. This type of information is useful for those involved in rural development policy and extension work in addition to those more directly involved in direct marketing.

In this study, the focus is specifically on farmers' markets. The research objectives are twofold:

(1) To summarize information about the characteristics and preferences of consumers who use direct-marketing facilities, with a particular emphasis on farmers' markets;

(2) To gather information about the characteristics of producers selling through a farmers' market in Arkansas.

MATERIALS AND METHODS

Over the past two decades, several studies were conducted that examined the characteristics of consumers who visit farmers' markets and the aspects of the market that they perceive to be of value. Objective 1 was accomplished by a review of these studies and generalization of main findings about farmers' market consumers. These studies examined farmers' markets in Maine (Buitenhuis et al., 1983; Kezis et al., 1998); Tennessee (Eastwood et al., 1999); New Jersey (Govindasamy and Nayga, 1997); Delaware (Gallons et al., 1997); and California (Fjeld and Sommer, 1982). The location of the studies provides geographically diverse information about consumers, and generalizations can be made from the findings. Moreover, several of the studies address markets in rural as well as metropolitan areas, giving a broader sample of people from different socioeconomic environments. For instance, Eastwood et al. (1999) examined six farmers' markets located throughout Tennessee. Also, Gallons' et al. (1997) study involved surveys sent to 10,000 consumers and represented all of the counties in Delaware.

Very few studies address the characteristics of producers that sell through farmers' markets. The only study to date was conducted over 20 years ago (Brooker and Taylor, 1977). Hence, to accomplish Objective 2, a survey of producers selling through a farmers' market in the city of Fayetteville, Ark. was conducted. The survey instrument was distributed to producers at a membership meeting in fall 2002. The main goals of this survey were to collect information on the members' motivations to participate in the farmers' market and the importance of the local farmers' market as an outlet for fruits and vegetables. The survey also elicited information on member interest in expansion of production activities. Twenty-seven surveys were completed by producers at the membership meeting; only producers that sold crop produce were asked to complete the survey.

RESULTS AND DISCUSSION

Consumer Characteristics

In all of the studies reviewed descriptive statistics were provided; these were analyzed and inferences were drawn about the typical characteristics of consumers at farmers' markets. The goals stated in the six studies were focused on how to improve services at farmers' markets and make better promotion decisions. Some of the goals were to:

- Determine consumer perception of, expectations of, and preferences for direct markets.
- Determine consumer socioeconomic characteristics and their influence on purchasing habits, attendance at direct-marketing outlets, and patronage trends.
- Evaluate consumer's recognition of in-state produce.
- Study the effects of regional produce characteristics on consumers' eating habits.

Eastwood et al. (1999) found that the typical shopper at Tennessee farmers' markets is a white female who is over 45 years of age, has above average income, and high education level. Gallons et al. (1997) indicated that the typical shopper at Delaware farmers' markets had almost exactly the same characteristics. Similar characteristics were also found in the 1981 and 1995 surveys conducted in Maine (Buitenhuis et al., 1983; Kezis et al., 1998). Govindasamy and Nayga (1997) used a logit analysis to estimate the likelihood that people with certain socioeconomic characteristics would visit a farmers' market. They found that higher-income, higher-educated shoppers were more likely to visit and spend more money than people with other socioeconomic characteristics. Fjeld and Sommer (1982) noted similar results in their survey of California consumers.

When comparing the survey data from the six consumer studies, it appeared that shoppers at farmers' markets, regardless of location, had the same general charac-

teristics including greater-than-average income levels and higher education levels. This conclusion is corroborated by Kezis et al. (1998) who stated that the higher education and income levels were found "...among farmers' market patrons that have been consistently noted in most studies of other markets conducted over the years" (Kezis, et al., 1998).

Consumer Perceptions

The studies reviewed also provide information about factors that drive frequency of visits and aspects of farmers' markets that consumers perceive to be of importance. Eastwood et al. (1999) found that shoppers who place more importance on (a) quality selection, (b) desire to help local farmers, (c) nutrition, (d) freshness, (e) knowledge that produce is locally grown, and (f) atmosphere, were more frequent visitors to farmers' markets. Descriptive statistics drawn from Gallons et al. (1997) suggest that most shoppers perceive (a) produce selection, (b) knowledge that produce is locally grown, and (c) helping local farmers as the most important reasons for purchasing at farmers' markets. In their study a greater percentage of shoppers (65%) visited the market with family members; although not stated in the study, this suggests that people perceive shopping at farmers' markets as a social recreational activity.

Kezis et al. (1998) provided similar evidence on consumer attitudes toward farmers' markets. In their study, quality of produce was selected as a key attraction, followed by supporting local farmers and a friendly atmosphere. Furthermore, the 1981 Maine survey presented largely the same consumer perceptions about farmers' markets (Buitenhuys et al., 1983).

According to the responses given by consumers at direct-marketing outlets, they expect to find good-quality produce, wide variety, fresh fruits and vegetables, and a friendly atmosphere. These were some of the reasons these consumers gave for visiting the farmers' market.

Producer Characteristics

In evaluating the importance that producers placed on reasons for participation in an Arkansas farmers' market, the average of the importance ratings fell between (3) important, and (4) very important. The one exception -- that farmers' market participation is a good family activity -- rated at 2.8 on average, just below important (Table 1). One implication of these results is that non-economic reasons -- i.e., providing the community with access to locally grown products -- are considered to be very important by many producers who use the market.

Those answering the participation frequency survey

were quite active in the market with the majority (58%) participating in the market throughout all or most of the season (Table 2). Furthermore, 69% of the respondents attended the market more than once each week during the portion of the season they were active in the market. The survey requested information about (1) the acreage that was suitable for cultivation of produce crops, and (2) acreage that was currently in use to produce these crops. Twenty-five respondents answered these questions. The responses indicated that on average there are 9.8 acres per operation that were currently suitable for cultivation of fruits, vegetables, or other produce crops. On average, 3.6 acres were currently in production. Thus, if one were to consider the hypothetical case of one large operation comprising the acreage of all respondents, then $(3.6 \div 9.8) \times 100 = 37\%$ of available land to producers was being used to grow produce crops.

Another way to examine the responses is to see what percentage of available land on average is being used to grow produce crops. If AP = acreage currently in use to grow produce crops and AT = total acres suitable for production of these crops, the average ratio of $AP \div AT$ was 0.60 indicating that, on average, respondents were using 60% of available land for production of produce crops.

The calculation of this 60% value weights each respondent equally regardless of size. A weighted average of the ratio $AP \div AT$ that gives more influence to operations with large available acres was only 26%.¹ The difference between the simple average number of 60% and the weighted average of 26% suggests that land use percentages were substantially lower on the larger acreage operations.

It should be noted that available land not used to produce fruit and vegetable crops could have already been in use for non-edible crops that were sold through the market; i.e., flowers. Also, land may have been generating a return through an alternative use. However, responses (n=26) indicated, that over 60% of respondents had a strong interest in expansion, and 93% indicated they were at least somewhat interested (data not shown).

The importance of farmers' market revenue in total family income varied considerably among respondents (Table 3). The farmers' market accounted for the vast majority of revenues (over 80%) generated from the sale of fruit and vegetable crops by producers (Table 4).

Opinions on the seriousness of several fresh-market problems indicated that on average, respondents rated each problem somewhere between a minor problem and a somewhat serious problem (Table 5). A concern that existing market outlets were inadequate was the only

¹In this case the weight used for a respondent is the acreage suitable for produce crops divided by the sum of suitable acreages from all respondents.

problem that received a somewhat serious to serious rating from the majority.

The highest-frequency response to disposition of produce that was not sold was giving excess produce away or preserving it for home use (Table 6). One interpretation of these responses is that respondents have fairly good forecasts of what can be sold through the farmers' market and thus grow produce in quantities adequate to meet but not exceed this demand.

From the results of both the consumer studies and the producer survey, one conclusion is that farmers' markets are of great importance to both consumers and producers. From the consumer side, farmers' markets provide social interaction with farmers and access to products perceived to be of high quality; thus, consumers place relatively low importance on price. From the producers' side, farmers' markets are important outlets for produce, with the survey results suggesting that farmers' markets account for most and often all of total produce sales. Furthermore, farmers' markets sales can be important to producers' household income.

From a social standpoint, farmers' market operations are promoters of social interaction among buyers and sellers -- an interaction that is not experienced by shoppers at "super-centers" or "supermarkets" (Hinrichs, 2000). The studies reviewed to reach Objective 1 in this paper support Hinrichs' assertion regarding the social benefits provided to consumers by farmers' markets. Many of the positive consumer perceptions involve not only benefits that concern exchange of commodities, but also those related to social interaction caused by the congregation and association of producers and consumers. Producers also rated non-economic benefits highly. This shows the importance of peripheral benefits to both consumers and producers. These preferences provide farmers' markets with advantages over other retail outlets and can be used to develop potential marketing ideas that can improve profits in farmers' markets in Arkansas.

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LITERATURE CITED

- Brooker, J.R. and E. G. Taylor. 1977. Direct marketing of produce: The Shelby County Farmers' Market case. University of Tennessee Agric. Experiment Station Bull. No. 569.
- Buitenhuys, N. C., A. S. Kezis, and H.R. Kerr Jr. 1983. Consumer purchasing habits, acceptance, and preferences for direct marketed small farms' horticultural commodities in Maine. Maine Agric. Experiment Station Bull. No. 797.
- Eastwood, D. B., J. R. Brooker, and M.D. Gray. 1999. Location and other market attributes affecting farmer's market patronage: The case of Tennessee. Food Distribution Res. 30:63-72.
- Epperson J.E. and E.A. Estes. 1999. Fruit and vegetable supply-chain management, innovations, and competitiveness: Cooperative Regional Research Project S-222. Food Distribution Res. 30:38-43.
- Fjeld, C. R. and R. Sommer 1982. Regional-seasonal patterns in produce consumption at farmers' markets and supermarkets. Ecology of Food Nutrition 12: 109-115.
- Gallons, J., U. C. Toensmeyer, J.R. Bacon, and C.L. German. 1997. An analysis of consumer characteristics concerning direct marketing of fresh produce in Delaware: A case study. Food Distribution Res. 28: 98-106.
- Gebremedhin, T. G. and R. D. Christy 1996. Structural changes in U.S. agriculture: Implications for small farms. Agric. and Applied Econ. 28: 57-66.
- Govindasamy, R. and R. M. J. Nayga 1997. Determinants of farmer-to-consumer direct market visits by type of facility: A logit analysis. Agricultural and Resource Econ. Rev. 26:31-38.
- Henneberry, S. R., and C. V. Willoughby. 1989. Marketing inefficiencies in Oklahoma's produce industry: Grower and buyer perceptions. Food Distribution Res. 20:97-109.
- Hinrichs, C. C. 2000. Embeddedness and local food systems: notes on two types of direct agricultural market. Rural Studies 16:295-303.
- Kezis, A., T. Gnebu, S. Peavey H. Cheng. 1998. A study of consumers at a small farmer's market in Maine: Results from a 1995 survey. Food Distribution Res. 29:91-99.
- USDA Agricultural Marketing Service 2002. AMS Farmers Markets. Available online: <http://www.ams.usda.gov/farmersmarkets/>, accessed Jan. 9, 2002.

Table 1. Producer reasons and importance for selling at an Arkansas farmers' market.

Reason	(1)Not important %	(2)Somewhat important %	(3)Important %	(4)Very important %	N	Mean
Interaction with customers and other vendors	0	8	46	46	26	3.4
Stay involved in agriculture	0	4	40	56	25	3.5
A good family activity	8	23	46	23	26	2.8
Provide community access to locally grown produce items	0	4	23	73	26	3.7
Rely on income	0	20	32	48	25	3.3
Limited access to other market outlets	8	19	19	54	26	3.2

N = Number of responses

Table 2. Producer frequency of selling at the farmers' market (N = 26).

Frequency	Percent of respondents
Once a week through all or most of the market season	8
More than once a week through all or most of the market season	50
Once a week for a portion of the market season	23
More than once a week for a portion of the market season	19

Table 3. Percent of total household income derived through farmers' market sales (N = 26).

Response	Percentage of respondents
Less than 5 percent	35
5 to 15 percent	15
16 to 30 percent	15
31 to 50 percent	12
More than 50 percent	23

Table 4. Market outlets used to sell produce crops, average percent of revenues (N = 23).

Market outlet	Percent of revenues
Farmers' market	81.3
Other direct marketing	0.0
Wholesalers	4.8
Retailers (grocery stores)	4.2
Restaurants or other food service	5.0
Other market outlets	4.8

Table 5. Importance of marketing problems for farmers' market producers.

Problem	(1)Not a problem %	(2)A minor problem %	(3)A somewhat serious problem %	(4)A very serious problem %	N	Mean
Existing market outlets are inadequate	33	13	33	21	24	2.4
No outlet for produce cosmetically unsuitable for fresh market	23	41	23	14	22	2.3
Surplus produce is wasted or salvaged at low value	28	28	28	16	25	2.3

N = Number of responses

Table 6. Disposition of produce that doesn't sell at farmers' market.

Disposition	(1)Almost never %	(2)Infrequent %	(3)Sometimes %	(4)Often %	(5)Almost always %	N	Mean
Discarded	27	23	36	5	9	22	2.5
Preserved for own use	0	32	36	27	5	22	3.0
Given it away	8	17	25	42	8	24	3.3
Sell elsewhere	33	22	6	33	6	18	2.6

N = Number of responses