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Consumer Characteristics and Views Regarding Farmers Markets: An Examination of On-Site Survey Data of Alabama Consumers

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This study examined the characteristics and views of farmers market consumers in Alabama using data generated from 222 consumers randomly selected from two farmers markets. The survey was designed to solicit relevant information necessary to facilitate the study and to provide information on socioeconomic and demographic characteristics of the clients. Data were summarized and tabulated using descriptive statistics. Results show that when buying fruits and vegetables, consumers are interested in freshness, appearance, variety and selection of produce, availability of locally grown items, price and atmosphere of the store. These results are consistent with the results using the general state sample.

Farmers markets are market outlets where farmers bring their produce for sale directly to consumers. In the past two decades, farmers markets have gained popularity, increasing by 63 percent between 1994 and 2000 (USDA - AMS 2000). *Practical Hydroponics* (2002) reported that over one million people visit farmers markets in the United States every week, with more than 20,000 farmers participating. This translates into more than \$1.2 billion sales of fresh fruit and vegetables through the farmers markets every year (Johnson et al. 1998).

By selling directly to consumers, producers benefit through enhanced profit (since the middlemen are eliminated) and increased interaction with customers, and new growers have better opportunity to sell produce and to learn the trade. Consumers benefit from having increased access to fresh produce at lower costs and from the interaction with the farmer, and society-at-large gains from increased access to fresh nutritious food.

In order to enhance services at farmers markets and ultimately increase market share, it is essential to understand the characteristics and views of consumers who patronize these markets. Consequently, a need exists to analyze and understand consumers, their purchasing habits, and their views and preferences regarding fresh produce.

This information will provide useful insights into the expectations of consumers and help producers efficiently allocate resources to better serve the consumers.

This study examined the characteristics of consumers in selected farmers markets in Alabama, characterized the views and preferences of the consumers who patronize farmers markets, and compared and contrasted consumers' views and preferences between farmers markets and supermarkets. The next section provides a review of related studies, followed by the data description and method of analysis. The results, conclusions, and recommendations are then presented.

Related Studies

Various studies have been conducted to help farmers take advantage of direct-marketing opportunities. The Kerr Center for Sustainable Agriculture in a study of farmers markets in Oklahoma entitled "Creating a Successful Farmers Market" (2002) examined information on the status of farmers markets in Oklahoma and customers' views and preferences, identified successful production and marketing practices and information needed by managers and producers, and disseminated the findings to market managers and producers through workshops and training manuals. The result identifies a typical customer to be a woman, 36 years older, highly educated, with a household income of \$40,000 or higher, and from a two-person household. Seventy percent of the respondents purchased vegetables and 41 percent purchased fruits regularly at the farmers

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The authors wish to acknowledge all anonymous reviewers. This research was supported by a grant from the CSREES/USDA. This is journal publication No. 590 of the Winfred Thomas Agricultural Research Station, Alabama A&M University.

market. Oklahoma consumers' shopping patterns suggest that the state has a good customer base that already patronizes farmers markets, and shoppers indicated that quality was an important factor affecting their decision to shop at the farmers market. Other factors influencing the decision to shop at the farmers markets were the availability of seasonal products and locally grown products.

In an overview of attitudes, preferences, and characteristics of consumers who shop at farmers markets in New Jersey, Govindasamy et al. (2002), using data on consumption, place, amount of purchase, preferences of products, characteristics affecting where to purchase and frequency of patronage, and consumers' views, found that consumers increased the quantity and the variety of fresh fruits and vegetables they consumed over 5 years. Eighty-seven percent of the consumers ranked the quality of produce at the farmers markets and vendors' attitudes as very good. Approximately half of the respondents were satisfied with the appearance of the farmers markets facilities, convenience of location, variety of produce, cleanliness of facilities, and parking facilities. The study observed that 99 percent of the consumers expected a higher quality of produce at farmers markets than at other retail facilities. Freshness and quality of produce were identified as the most important factors that influence where consumers buy produce.

Govindasamy and Nayga (1997) examined consumer characteristics affecting visits and purchases in different types of produce direct markets—PYO farms, roadside stands, farmers markets, and direct farm markets—using the Logit framework. The results indicate that those who buy produce for fresh consumption are 20 percent more likely to visit roadside stands than are those who do not buy for fresh consumption. Individuals who are sixty-five years old or less are more likely to visit roadside stands than those above sixty-five. Female customers are 18 percent more likely to visit direct farm markets than are male customers, while customers with incomes under \$40,000 are more likely to visit roadside stands and farmers markets. The results also indicate that those who reside in urban and suburban areas are more likely to visit farmers markets.

Gandee et al. (2003) used an econometric model to analyze the influence of consumer demographic and spatial and land characteristics upon direct farm-marketing sales in West Virginia. The study

adapted generalized least squares to estimate a single regression model. The results revealed that consumer demographics and land and spatial county characteristics significantly impact the amount of direct farm-marketing sales received by farm establishments in West Virginia counties. Education and income positively influenced marketing sales. An increase in the percentage of persons with a professional degree in a county increased the amount of sales in direct markets. Spatial factors were also found to influence sales. An increase in mileage away from the metropolitan area increased county direct farm-marketing sales.

Wolf (1997), in a case study of targeted consumer profiles and positioning for promotion of direct marketing of fresh produce, examined consumers in San Luis Obispo County, California. Shoppers and non-shoppers were identified to compare the target market of consumers who shopped at farmers markets with those who did not. The demographic profile of farmers market shoppers indicates that they tend to be older, married, and are less likely to be employed than are non-shoppers. In terms of income, farmers market shoppers are generally in the middle and higher ends of the income distribution. There was no significant difference with regard to education and gender between farmers market shoppers and non-shoppers.

Wolf and Berrenson (2003) examined the profile of consumers in a farmers market in San Luis Obispo. The study compared primary shoppers with non-primary shoppers. Primary shoppers are those who come to the farmers market to shop for produce, while non-primary shoppers are those who come for all other reasons, including eating, socializing, shopping at downtown stores, and entertainment. Results revealed that primary shoppers of produce tend to be older and are more likely to be married than are non-primary shoppers. Primary shoppers are more likely to be middle-income consumers.

Data Description and Analysis

Consumers were randomly selected and interviewed in two selected farmers markets—one in Huntsville and one in Birmingham, Alabama—in summer, 2004. The data for this study were obtained through face-to-face interviews. The survey used was designed to provide pertinent information necessary to facilitate the study and was administered on weekends over a three-month period. A total of

222 surveys were completed and summarized for the study, 105 from the Huntsville farmers market and 117 from the Birmingham farmers market.

Descriptive statistics were employed to summarize and analyze the data using the Statistical Packages for the Social Sciences (SPSS).

Results

Table 1 presents the descriptive statistics of farmers market consumers in the sample. The table shows that the respondents have an average age of 41 years. About 28 percent were males, and 49 percent were Whites.

The table also shows that a majority (80 percent) of the respondents had above a high school education. Seventy percent were married, while about 48 percent of the respondents have children in their households. Most of the respondents (90 percent)

earn \$25,000 and above annually.

Table 2 shows how consumers became aware of farmers markets. A majority of the respondents (69%) knew about farmers markets through word of mouth, 11 percent became aware of farmers markets when they drove by, 5 percent became aware of the markets through advertisements, and about 11 percent got the information from other sources.

The respondents were also asked to indicate the distance between their homes and the closest farmers market, the number of times they visited the markets, and the amount spent on the last visit. Table 3 shows the mean distance, mean frequency of visits per year and the mean dollars spent during the last visit. The mean distance from the farmers market was about 17 miles, with the highest distance being 150 miles. On average, farmers market consumers visited the farmers market about 12 times a year and spent an average of \$22 per visit. This same set of

Table 1. Descriptive Statistics of Farmers Market Shoppers (n= 222).

	Definition	Mean	Standard deviation
Age	Continuous	41.41	21.43
Gender	1 = male; 0 = female	0.2757	0.4479
Race	1 = white; 0 = non-white	0.4910	0.5011
Education levels	1 = above high school; 0 = high school graduate and less	0.8019	0.3995
Marital status	1 = married; 0 = single	0.7028	0.4581
Family status	1 = with children; 0 = without children	0.4764	0.5006
Household income	1 = \$25,000 and above; 0 = under \$25,000	0.9027	0.2972

Table 2. Consumers' Source of Awareness.

Source of awareness	%
Word of mouth	68.8
Drive by the road	11.0
Roadside sign	1.4
Alabama Farmers Market directory	1.4
Advertisement	5.4
Other	10.6
Do not know	1.4

Table 3. Mean Distance from the Market, Frequency of Visit, and Amount Spent by Respondents (n=222).

	Mean	Minimum	Maximum	Standard deviation
Distance from the nearest market (miles)				
Farmers market	16.54	0	150	22.401
Frequency of visit (in the past 12 months)				
Farmers market	11.97	0	104	15.611
Supermarket	36.85	0	300	39.037
Average amount spent (\$) in the last visit				
Farmers market	22.1	0	200	23.628
Supermarket	31.57	0	300	42.126

Table 4. Preferences of Product Attributes between Supermarkets and Farmers Markets, % (n=222).

Attributes	Supermar- kets	Farmers markets	Indifferent	Do not know
Freshness	6.5	79.9	12.1	1.4
Appearance of produce	14.6	62.1	21	1.8
Variety and selection of produce	23.4	55.5	19.7	1.4
Price	6.4	70.8	21	1.8
Convenience of shopping	43.6	30.3	24.8	1.4
Fast check-out service	15.1	51.8	30.7	2.3
Atmosphere of the store/market	27.2	42.3	28.2	2.3
Location of the store/market	42.9	30.2	24.5	2.4
Availability of locally grown produce	4.6	74.7	15.7	5.1
Money back guarantee	41.8	18.3	23.5	16
Availability of unique/uncommon items	33.3	41.7	20.8	4.2
Availability of organically-grown produce	17.9	44	21.1	17

consumers visited supermarkets about 37 times a year and spent an average of \$32 per visit.

Consumers were asked to compare the attributes for fresh fruits and vegetables between supermarkets and farmers markets (Table 4). With regard to freshness, about 80 percent of the consumers preferred farmers markets, while only about seven percent preferred the supermarkets. For the appearance of produce, 62 percent of the respondents chose

farmers markets, while about 15 percent chose the supermarkets. Fifty-six percent of the respondents preferred farmers markets over supermarkets for variety and selection of produce, while 23 percent prefer the supermarkets. With regard to price, a majority of the respondents (71 percent) preferred the farmers markets. About 52 percent of the respondents like the farmers markets for fast checkout service, while 15 percent prefer the supermarkets.

In terms of convenience, about 44 percent prefer the supermarkets, as opposed to 30 percent that prefer the farmers markets. Similarly, about 42 percent of the respondents prefer the farmers markets when it comes to the store's atmosphere, while only 27 percent prefer the supermarket. In contrast, about 43 percent prefer the supermarket in terms of location, 42 percent because of money back guarantee, and 33 percent because of the availability of unique items. Conversely, 30 percent prefer farmers markets due to location, 75 percent like farmers markets because of availability of locally grown produce, 42 percent because of availability of unique items, 44 percent because of availability of organically grown produce, and only 18 percent the farmers market due to money-back guarantee.

Consumers were asked to rate the attributes of produce in terms of importance on a scale of 1 to 5, with 1 being "not at all important" and 5 being "extremely important." The results in Table 5 show that consumers rated freshness, appearance of produce, variety and selection of produce, availability of locally grown produce, price, and atmosphere of the store the highest, between very important and extremely important. Freshness was rated

highest with a mean of 4.77. This was followed by appearance (4.60), variety and selection (4.34), availability of locally grown produce (4.20), price (4.19), and store atmosphere (4.05). The other variables, although important, were rated below 4.0. Fast checkout service, convenience of shopping, location of the store, availability of unique items, availability of organically grown produce, and money back guarantee were rated as somewhat important to very important.

Consumers were asked if they had ever been disappointed with the quality of produce purchased at the farmers markets (Table 6). About 34 percent have never been disappointed with the quality of produce bought at a farmers market, 59 percent were seldom disappointed, and only 2 percent indicated that they have often been disappointed with the quality of produce purchased at farmers markets.

Respondents were also asked to identify the types of problems they encountered (Table 7). About 24 percent of the respondents indicated poor flavor, 21 percent indicated that the produce was bruised, 11 percent said the produce was not fresh, and 7 percent had problems with the appearance. About 15 percent had encountered other types of problems.

Table 5. Rating of Factors Affecting the Decision of Where to Buy Produce (n=222).

Attributes	Minimum	Maximum	Mean	Standard deviation
Freshness	3	5	4.77	0.43
Appearance of produce	2	5	4.6	0.609
Variety and selection of produce	1	5	4.34	0.681
Availability of locally grown produce	0	5	4.2	1.078
Price	2	5	4.19	0.846
Atmosphere of the store/market	1	5	4.05	0.901
Fast check-out service	0	5	3.96	1.035
Convenience of shopping	1	5	3.9	0.899
Location of the store/market	1	5	3.76	1.011
Availability of unique/uncommon items	0	5	3.53	1.229
Availability of organically-grown produce	0	5	3.26	1.514
Money back guarantee	0	5	3.07	1.526

Table 6. Disappointments with Quality of Produce Purchased at Farmers Markets.

Occurrence of disappointment	#	%
Often	4	2
Seldom	121	59
Never	69	33.7
Do not know	11	5.3
Total	205	100

Table 7. Types of Problems Encountered by Consumers with Produce Bought at Farmers Markets.

Problems	#	%
Appearance	10	6.6
Poor flavor	36	23.8
Bruised	31	20.5
Not fresh	17	11.3
Other	22	14.6
Do not know	35	23.2
Missing	71	31.98
Total	222	100

Conclusion

This study summarizes the characteristics and views of farmers market consumers using on-site data collected from two markets in Alabama. The results reveal that the respondents were 41 years old on the average, 28 percent were males, about 49 percent were Whites, 60 percent had above a high school education, 70 percent were married, about 48 percent were families with children, and 90 percent had household income of \$25,000 and above. Word of mouth is the most common way that consumers find out about farmers markets. Consumers generally prefer farmers markets over supermarkets because of the freshness of the products, price, appearance of products, and variety and selection of produce.

When it comes to the deciding attributes on

where to buy fruits and vegetables, freshness, appearance, variety and selection of produce, availability of locally grown items, price, and atmosphere of the store were the most important and highly rated attributes. The results revealed that about 34 percent of the consumers interviewed were never disappointed with the quality of produce purchased at farmers markets. About 24 percent cited "poor flavor" and about 21 percent mentioned "bruised" as problems encountered.

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