
Farmers Markets: Producers Characteristics and Status of Their Businesses

Ramu Govindasamy
Marta Zurbruggen
John Italia
Adesoji Adelaja
Peter Nitzsche
Richard VanVranken

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

In cooperation with:
Agricultural Marketing Service, United States Department of Agriculture
Markets Division, New Jersey Department of Agriculture

Department of Agricultural, Food, and Resource Economics
Rutgers Cooperative Extension
New Jersey Agricultural Experiment Station
Cook College
Rutgers, The State University of New Jersey
New Brunswick, New Jersey 08901

Farmers Markets: Producers Characteristics and Status of Their Businesses

***Ramu Govindasamy
Marta Zurbruggen
John Italia
Adesoji Adelaja
Peter Nitzsche
Richard VanVranken***

THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

Ramu Govindasamy is an Extension Specialist in Marketing,
Marta Zurbruggen is a Graduate Assistant, John Italia is a Program Associate,
Adesoji Adelaja is an Associate Professor and Department Chair,
Department of Agricultural, Food, and Resource Economics,
Peter Nitzsche and Richard VanVranken are Agricultural Extension Agents,
Rutgers Cooperative Extension

Correspondence Address:

Ramu Govindasamy, Marketing Specialist and Assistant Professor
Department of Agricultural, Food, and Resource Economics,
Cook College, Rutgers, The State University of New Jersey,
55 Dudley Road, New Brunswick, New Jersey 08901-8520
Phone: (732) 932-9171 ext. 25

Acknowledgements

The completion of this report would not have been possible without the assistance and support by the members of the coalition made up of farmers, managers and personnel of the New Jersey Department of Agriculture, New Jersey Farmers' Direct Marketing and North Jersey Farmers' Market Council. The authors would also like to express their appreciation to AMS-USDA for making available the funds necessary to carry out this research project.

We are grateful to Barbara Wolf for her valuable input; to Ron Good, Peter Nitzsche, Rick Van Vranken, Barbara Stevenson, Steve Suskauer, Randy Brockway, Jeff O'Hara, Harvey Ort, Carol Kesler and Elaine Barbour for their comments on the questionnaire; to Peter Nitzsche and Rick VanVranken for reviewing the manuscript and to Randy Brockway for providing the list of New Jersey producers.

Appreciation is expressed to all North Jersey Farmers' Market Council members, advisors and volunteers who work hard to make community farmers' markets a "success story."

Special thanks and appreciation to all New Jersey producers who provided invaluable information by responding to the survey.

Table Of Contents

Executive Summary	<i>iv</i>
Introduction	1
Data Sources	2
Survey Results	3
Number of Years in the Business and Stage of Development	3
Number of Acres Farmed	4
Total Acres to Support all Retail Operations	5
Ownership Status	6
Number of Markets Attended	7
Location of Producers' Main Operations	7
Distance Traveled	8
Labor	9
Wholesale and Retail Sales	11
Reasons to Retail through Farmers' Markets	12
Other Retailing Channels	13
Profit Margin Satisfaction	13
Promotion Tools	14
Marketing Style	14
Gross Retail Sales	14
Percentage of Income from Farmers' Markets	16
Most Important Farm Products Sold (based on dollar value)	17
Value-Added Products	17
Prices	18
Percentage of Products Grown and Prepared on the Farm	19
Organic Produce	19
Future of Farmers' Markets as a Business	22
Problems as a Farmers' Market Participant	22
Comments and Suggestions	23
Demographics	24
Summary and Conclusions	25
References	27
Questionnaire.	28

List Of Tables

Table 1: Year When Producers Started to Retail Through Farmers' Markets	4
Table 2: Number of Acres To Support All Retailing Activities	6
Table 3: Number of Markets Attended by Producers Per Day in New Jersey and Out of State	7
Table 4: Location of Producers' Main Operations.	8
Table 5: Miles Traveled to Closest Farmers' Market	8
Table 6: Miles Traveled to Farthest Market	9

Table 7: Number of Family Member Employees That Work in Production and Retailing	9
Table 8: Number of Non-Family Member Employees That Work in Production and Retailing.	10
Table 9: Number of Family Member Employees That Go to the Farmers' Markets	10
Table 10: Number of Non-Family Member Employees That Go to The Farmers' Markets	10
Table 11: What Customers Like Best About the Producers' Marketing Styles . . .	15
Table 12: Demographic and Descriptive Characteristics of Farmers' Market Producers	24

List Of Figures

Figure 1: Business Cycle	5
Figure 2: Acreage Farmed to Support Farmers' Market Operations Compared With 5 Years Ago	5
Figure 3: Acreage Farmed to Support All Retail Operations Compared With 5 Years Ago.	6
Figure 4: Ownership Status	6
Figure 5: Percentage of Dollar Value of Produce Which is Wholesaled	11
Figure 6: Percentage of Dollar Value of Produce Which is Retailed	12
Figure 7: Other Retailing Channels	13
Figure 8: Profit Margin Satisfaction	14
Figure 9: Promotion Tools	14
Figure 10: Gross Retail Sales From All Facilities	15
Figure 11: Farmers' Markets Sales as a Percentage of Total Income	16
Figure 12: Most Important Farm Products Sold at Farmers' Markets	17
Figure 13: Do You Sell Value-Added Products Such as Baked Goods, Cider, Potted Flowers, Painted Pumpkins, Etc?	18
Figure 14: Value-Added Products as a Percent of Farmers' Market Gross Sales .	18
Figure 15: Percentage of Products Sold That Are Grown or Prepared on the Farm.	19
Figure 16: Do You Sell Organically Grown Produce in the Farmers' Market? . . .	20
Figure 17: Did You Grow Organic Products in 1996?	20
Figure 18: Are You Planning to Grow Organic Produce Next Year?	20
Figure 19: Dollar Value of Organic Products as a Percent of Total Farmers' Market Sales	20
Figure 20: Are Your Customers Requesting Organically Grown Produce?	21
Figure 21: Do Customers Complain About Blemishes or Insect Damage on the Produce?	21
Figure 22: Future of Farmers' Markets as a Business	22

Executive Summary

The purpose of this study was to provide an overview of the attributes of producers who participate in farmers' markets and to examine different aspects of their operations. In addition to demographics, the characteristics explored in this report include farm size, acreage grown, wholesale and retail activities, location, and personnel employed. Data related to business development, ownership status, days of operation, products sold, marketing and organic production was also collected.

The results show that the majority of New Jersey growers who retail through farmers' markets began this type of activity since 1990 and while their businesses were still in a state of growth. However, the average number of acres planted and workers employed characterized farmers' markets as small scale operations. The income from these facilities represented, in general, less than 40 percent of the total retail gross sales. Most producers indicated that they were satisfied with the profit margin obtained. Farmers usually attended 1 market per day and traveled an average of 54 miles daily. In particular, farmers chose farmers' markets as a retail channel because they could obtain higher prices, target a greater volume of people, interact with customers and lower overhead costs. Tomatoes, corn, herbs, peaches, flowers, apples and greens were the most important farm products sold based on dollar value. Although the majority of the farmers sold value-added products, only 23 percent of those surveyed offered organic produce. Prices were usually determined by comparison with chain stores or based on cost accounting, market reports or experience. In general, participants believed that their farmers' market operations would continue to expand over the next five years.

The descriptive results presented in this report help identify the characteristics that contribute towards growers' participation in the farmers' markets and the factors that make these operations a viable marketing alternative. These findings may be especially useful for those in charge of the planning and coordination of farmers' markets.

Introduction

The resurgence of farmers' markets has offered New Jersey farmers an alternative outlet for their produce. By selling directly to consumers, growers eliminate the reliance on middlemen, thus capturing a greater share of the consumers' food dollars. Furthermore, direct contact with consumers allows farmers to rapidly adjust production to meet consumers' ever-changing preferences.

In today's economy, New Jersey producers face strong national as well as international competition. But it is the farmers' ability "to stay flexible and responsive to new market niches" that will keep agriculture a viable economic activity in New Jersey (Critser, 8). In this respect, the small size of New Jersey farms relative to the national average works to their advantage. Additionally, New Jersey's heterogeneous and dense population provides a perfect environment for the development of farmers' markets which, unlike other direct marketing operations, can be readily moved to convenient locations.

The expansion and continued success of farmers' markets across the nation is supported by Americans' growing concerns with nutrition, which has led consumers to increase their consumption of fresh fruits and vegetables. Annual per capita expenditure for fresh produce measured in constant dollars has increased from \$59.28 in 1980 to \$102.78 in 1992 (Smallwood, et al.). New Jersey growers are well suited to capitalize on this trend, since the state's per capita income ranks among the highest in the country.

Several studies indicate that price, freshness and social atmosphere are the main factors responsible for drawing consumers to these outlets. Sommer urges marketers to make use of this information in order to fill a niche in the produce market that mass manufacturers and marketers are unable to exploit. Generally, smaller growers have more latitude in meeting the demand for specialized products (Lyson, 108).

In addition, farmers' markets have a positive impact on downtown areas. Urban development strategies are sometimes tied in with the organization of these markets (Somer, 22). For example, the North Jersey Farmers' Market Council was formed to organize farmers' markets at prime consumer locations in the state. The council has already developed over 30 markets and more are expected to open next season. Due to the high demand for these markets among the communities, identification and recruitment of potential vendors are crucial for the development and expansion of these direct marketing outlets.

The purpose of this report is to document the attributes of growers who participate in farmers' markets and to examine different aspects of their operations. The insights provided by this study will help identify the factors that significantly contribute towards participation in the farmers' markets given producer characteristics.

Data Sources

A survey of New Jersey producers who retail through farmers' markets was conducted in 1997 to document key characteristics of the markets' participants as well as of their businesses. The survey included questions intended to draw demographic information such as age, ethnicity, education and household size of the growers. Other items were designed to generate data concerning different aspects of the farmers' markets operations such as size of the farm, sales volume, location and number of family members involved in the operation. In addition, data related to other characteristics such as stage of development, acreage grown, ownership status, days of operation, number of employees, products sold, and related products sold was also collected. A section of the survey was also devoted to examine trends in organic production.

The survey instrument was developed by the Rutgers University Department of Agricultural Economics and Marketing in cooperation with the New Jersey Department of Agriculture, New Jersey Agricultural experiment station, North Jersey Farmers'

Market Council and New Jersey Farmers' Direct Marketing Association. Reference to a previous study on farmer-to-consumer direct marketing in New Jersey (Nayga et al) was useful in designing the questionnaire.

The surveys were mailed to 144 growers in New Jersey. The purpose of this research effort was explained in a cover letter and a self-addressed stamped envelope was provided. A dollar bill was included in the package as a small recognition for the participant's time and as an incentive to increase the rate of responses.

Out of 144 questionnaires, 68 were returned (47 percent). However, ten of these 68 surveys were excluded from the analysis. Four were returned because of incorrect addresses. One respondent had retired; another had sold his farm; one grower was in the process of becoming a vendor; and two addressees were not farmers. One questionnaire was not included because it was received after the data had already been compiled and analyzed. Out of the 58 remaining surveys, 22 pertained to farmers who sold directly to consumers but not through farmers' markets. Therefore, the number of usable questionnaires was 36.

Survey Results

Number of Years in the Business and Stage of Development

Producers who retail through farmers' markets were asked to indicate when they started to utilize these marketing channels. Not surprisingly, the majority (70 percent) fell in the 1991-97 bracket, which coincides with the period when direct marketing operations became increasingly popular both among consumers and growers (Table 1).

Table 1: Year When Producers Started to Retail Through Farmers' Markets

<i>Year</i>	<i>Responses</i>	<i>Percentage</i>	<i>Year</i>	<i>Responses</i>	<i>Percentage</i>
1921	1	3%	1990	1	3%
1949	1	3%	1991	2	6%
1955	1	3%	1992	2	6%
1970	1	3%	1994	4	11%
1979	1	3%	1995	9	25%
1981	2	6%	1996	2	6%
1985	2	6%	1997	4	11%
1987	1	3%			

Nearly 63 percent of those who responded indicated that their businesses were growing. Conversely, 17 percent reported that their businesses were in the initial stages of growth, while 20 percent characterized their farmers' market operations as in the mature stage. However, none of the respondents indicated that their businesses were declining (Figure 1).

Number of Acres Farmed

With respect to the number of acres producers grew to support their market activities, the responses ranged from 0.2 to 150 acres, with a mean value of 30 acres. When asked how this number compared with 5 years ago, 50 percent indicated that, on average, the number of acres farmed increased by 7 acres with responses ranging between 0.5 and 50 acres. While in 47 percent of the cases surveyed acreage farmed remained constant compared with five years ago, only 2 participants reported that they experienced a decline (Figure 2). Furthermore, approximately 44 percent indicated that they farmed for their retailing operations in the same municipality as the farmers' market they attend. The average number of acres farmed in the same municipality was 21 ranging from 2 to 150 acres.

Figure 1
Business Cycle

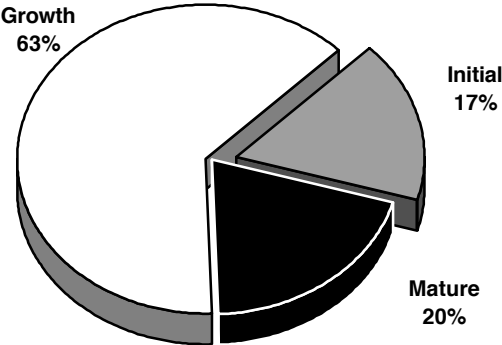
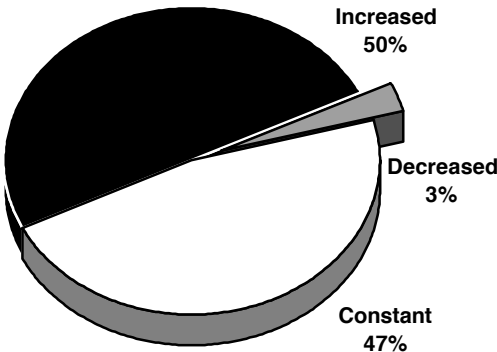


Figure 2
Acreage Farmed to Support Farmers' Markets Compared with 5 Years Ago



Total Acres to Support all Retail Operations

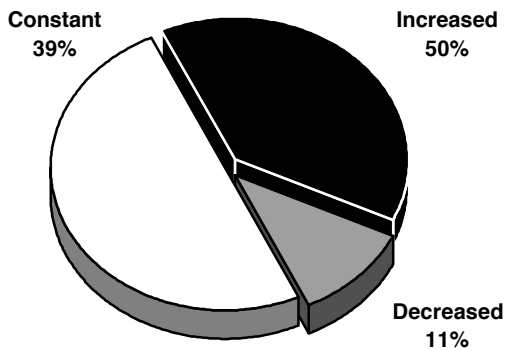
Producers farmed, on average, 49 acres to support their retail operations. The total number of acres ranged from 1 to 420 acres (Table 2). Half of the respondents who provided information indicated that the number of acres farmed had increased over the past five years. Approximately 7 percent of the producers surveyed increased the number of acres farmed by half an acre; almost 4 percent of the respondents experienced an increase of 3 acres; 7 percent had increased the production area by 5 acres; 4 percent had increased their farmland by 6 acres; 7 percent increased land by 10 acres; 14 percent by 20 acres and 4 percent of producers increased the number of acres farmed by 30 and 50 acres. Conversely, 4 percent of producers indicated that they decreased the number of acres farmed by 10 acres and 7 percent of producers reduced acreage farmed by 15 acres. On the other hand, 39 percent of the producers surveyed stated that the number of acres they farmed had remained constant over the past five years (Figure 3).

Table 2: Number of Acres to Support All Retailing Activities

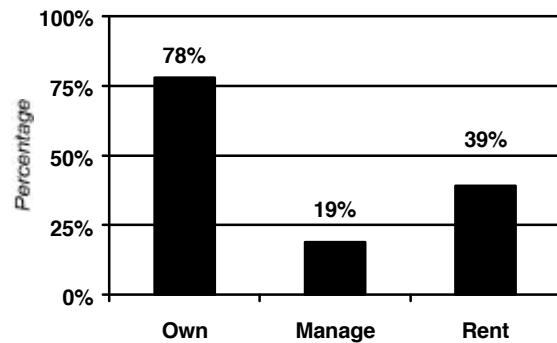
<i>Acres</i>	<i>Responses</i>	<i>Percentage</i>	<i>Acres</i>	<i>Responses</i>	<i>Percentage</i>
1	2	7	25	1	3
2	1	3	30	1	3
3	1	3	40	3	3
4	1	3	50	1	10
5	2	7	60	2	3
9	1	3	80	1	7
10	1	3	85	1	3
15	1	3	98	1	3
16	3	3	100	1	3
20	1	10	150	1	3
22	1	3	420	1	3

Based on 30 responses

**Figure 3
Acreage Farmed to Support All Retail Operations Compared to 5 Years Ago**



**Figure 4
Ownership Status**



Ownership Status

Regarding the farm, almost 78 percent of respondents indicated that they owned it; 19 percent of producers managed it and 39 percent rented it. These percentages do not add to 100 because some producers own as well as rent land (Figure 4).

Number of Markets Attended

Table 3 provides the number of farmers' markets that producers attended per day both in New Jersey and out of state. Overall, respondents retailed mainly in New Jersey with only a few growers doing business out of state. Further, although one respondent sold produce at 3 different farmers' markets daily, the vast majority attended only one market per day. In terms of the day chosen by marketers to retail their products within the state, Monday proved to be the least popular day, while Saturday had the most responses. This preference reflects the fact that most consumers do not work on Saturdays making it easier to draw them to the markets.

Table 3: Number of Markets Attended by Producers Per Day in New Jersey and Out of State

<i>Day</i>	<i>NEW JERSEY</i>		<i>OUT OF STATE</i>	
	<i>Attended</i>	<i>Respondents</i>	<i>Attended</i>	<i>Respondents</i>
<i>Monday</i>	1	4	1	2
	2	1		
<i>Tuesday</i>	1	9	1	3
	2	2	2	1
<i>Wednesday</i>	1	10	1	4
	3	1	2	1
<i>Thursday</i>	1	15	1	1
	2	1		
<i>Friday</i>	1	10	1	2
	2	4	2	1
<i>Saturday</i>	1	18	1	4
	2	3	2	1
<i>Sunday</i>	1	11	1	1
	2	2		

Location of Producers' Main Operations

Growers were asked to indicate the location of their main operations (Table 4). The breakdown based on 35 responses is as follows: Atlantic County (6 percent); Bergen County (3 percent); Essex County (6 percent); Hunterdon County (17 percent); Mercer County (9 percent); Middlesex County (14 percent); Monmouth County (6 percent); Morris County (20 percent); New York City (3 percent); Somerset County (6 percent) and Warren County (11 percent).

Table 4: Location of Producers' Main Operations

<i>Location</i>	<i>Percentage</i>	<i>Location</i>	<i>Percentage</i>
Atlantic County	6	Monmouth County	6
Bergen County	3	Morris County	20
Essex County	6	New York City	3
Hunterdon County	17	Somerset County	6
Mercer County	9	Warren County	11
Middlesex County	14		

Based on 35 responses

Distance Traveled

Tables 5 and 6 show the number of miles traveled by producers to attend the closest and farthest farmers' markets respectively. On average, each farmer traveled 27 miles to the closest market and 42 miles to arrive at the farthest one. The ranges were 1 to 70 miles in the first case and 5 to 75 miles in the second. Thus overall, producers had to spend at least one hour (round trip) on the road to market their commodities. If the time taken to load and unload their vehicles is considered, the opportunity costs of going to the markets could be substantial, since producers have to harvest and retail on the same day.

Table 5: Miles Traveled to Closest Farmers' Market

<i>Miles</i>	<i>Responses</i>	<i>Miles</i>	<i>Responses</i>
1	1	30	5
4	2	35	1
5	1	40	1
7	1	45	1
10	3	48	1
15	3	50	3
17	1	53	1
18	1	60	1
20	4	70	1
25	1	MEAN: 27 miles	

Table 6: Miles Traveled to Farthest Market

<i>Miles</i>	<i>Responses</i>	<i>Miles</i>	<i>Responses</i>
5	1	48	1
12	2	50	5
18	2	55	1
25	2	60	2
30	3	64	1
35	2	67	1
40	3	70	2
43	1	75	1
45	1	MEAN: 42 MILES	

Labor

Tables 7 and 8 provide the number of employees that work in production and retailing. These results indicate that the majority of the farms employed no more than 2 full-time family members and 2 full-time non-family members. In general, they relied on extra help coming from no more than 2 part-time family members as well as from no more than 2 part-time non-family member employees. These figures indicate that farmers' markets are mainly small scale operations, which is also implied by the average number of acres farmed (30) to support this type of business.

Table 7: Number of Family Member Employees That Work in Production and Retailing

<i>Full-Time Family Members</i>	<i>Responses</i>	<i>Part-Time Family Members</i>	<i>Responses</i>
0	3	0	10
1	15	1	11
2	7	2	5
3	6	3	4
4	1	4	1
5	1	5	2

Table 8: Number of Non-Family Member Employees That Work in Production and Retailing

<i>Full-Time Non-Family Members</i>	<i>Responses</i>	<i>Part-Time Non-Family Members</i>	<i>Responses</i>
0	16	0	13
1	4	1	2
2	3	2	7
3	2	3	1
4	4	4	3
5	2	5	4
6	1	6	1
7	1	10	1
		12	1

Tables 9 and 10 show the information related to the employees that only attend farmers' markets to sell produce. These results suggest that, overall, full-time family member employees are more likely to attend the markets than non-family member workers.

Table 9: Number of Family Member Employees That Go to the Farmers' Markets

<i>Full-Time Family Members</i>	<i>Responses</i>	<i>Part-Time Family Members</i>	<i>Responses</i>
0	12	0	16
1	12	1	10
2	7	2	5
3	1	3	1

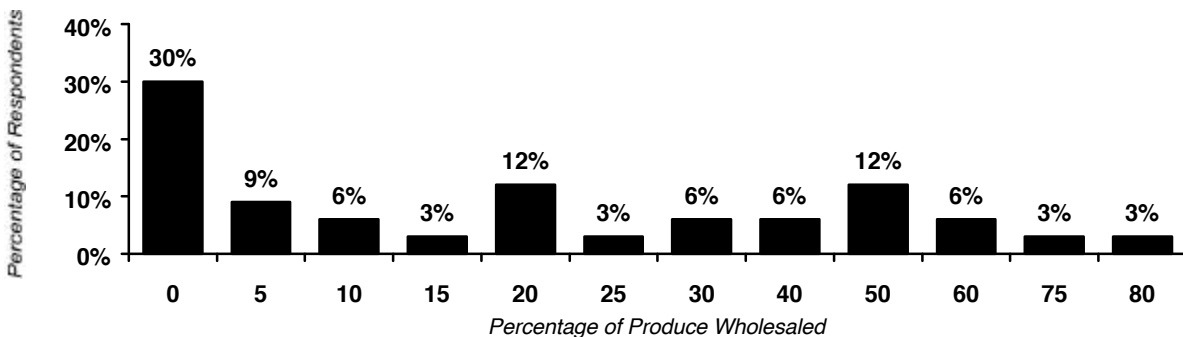
Table 10: Number of Non-Family Member Employees That Go to the Farmers' Markets

<i>Full-Time Non-Family Members</i>	<i>Responses</i>	<i>Part-Time Non-Family Members</i>	<i>Responses</i>
0	25	0	16
1	3	1	4
2	2	2	7
3	1	3	2
4	1	5	2
		8	1

Wholesale and Retail Sales

Approximately 4 percent of those who responded wholesaled 40 percent or less of the dollar value of products which they produced; about 12 percent indicated they wholesaled 50 percent of their produce; 6 percent of respondents sold 60 percent at wholesale; 3 percent wholesaled 75 percent of their produce and 3 percent reported wholesaling 80 percent of the dollar value of the commodities produced (Figure 5). Approximately 30 percent of growers surveyed indicated that they did not wholesale any of their produce.

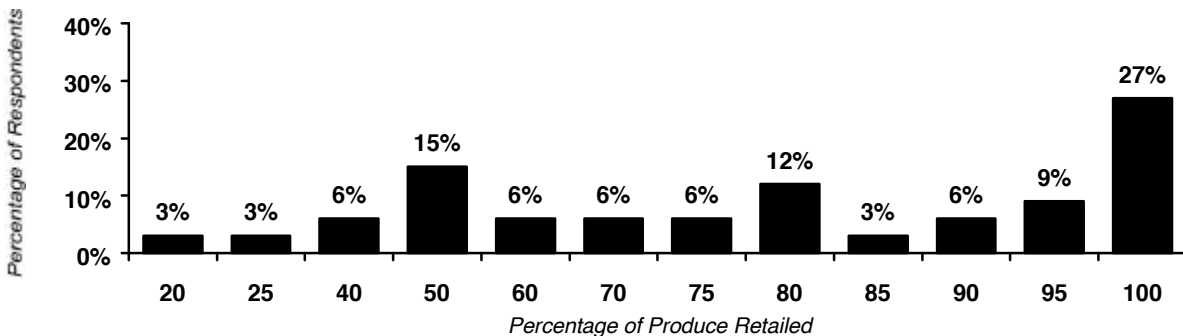
Figure 5
Percentage of Dollar Value of Produce Which is Wholesaled



In terms of the percentage of dollar value of the products which they produced and were marketed through retailing channels, 27 percent reported they retailed 100 percent of their products; 29 percent indicated selling at retail between 80 and 95 percent; 18 percent retailed between 60 and 75 percent; 15 percent sold at retail 50 percent and 12 percent sold at retail between 20 and 40 percent of the dollar value of the items produced (Figure 6).

Figure 6

Percentage of Dollar Value of Produce Which is Retailed



Reasons to Retail through Farmers' Markets

When asked why they selected a farmers' market as a retailing channel to market their produce, the following reasons were mentioned:

- | | |
|-------------------------------------------------------|------------------------------------------------------|
| 1) Better prices received | 14) More fun |
| 2) Better exposure, greater volume of people targeted | 15) Can sell produce in short term period |
| 3) Personal interaction | 16) Access to different markets |
| 4) Better profit margin | 17) Elimination of middlemen |
| 5) Convenience | 18) Additional market area |
| 6) Low overhead costs | 19) Business leveled off at roadstand |
| 7) Good way to move excess supply | 20) Desire to serve an urban market |
| 8) Better control of amount grown versus amount sold | 21) To increase consumers' interest in fresh produce |
| 9) Cash flow | 22) Networking |
| 10) Good means of advertisement for other outlets | 23) Support from local government agencies |
| 11) Possibility of gaining profits from growth | 24) Recruited by market manager (certified organic) |
| 12) High demand for high quality products | 25) Permission for a roadside stand was denied |
| 13) Customers come to the growers | |

Other Retailing Channels

The majority of the producers surveyed indicated that they used other retailing channels besides farmers’ markets. About 33 percent reported that they sold produce in temporary facilities such as stands, wagons and on tables; 53 percent retailed in permanent roadside stands or markets and only 6 percent sold produce from their farmhouse. Further, almost 28 percent retailed through greenhouses; 8 percent sold produce through a packinghouse or from a farm building. About 11 percent sold their commodities in nurseries or garden centers; 25 percent sold directly to consumers through pick your own operations, 14 percent favored self-service or honor systems and two respondents (6 percent) grew commodities for Community Supported Agriculture organizations (Figure 7).

Profit Margin Satisfaction

Participants were asked to indicate how satisfied they were with the profit margin obtained from farmers’ market operations. Of the 33 marketers who responded, 34 percent were very satisfied, 27 percent were satisfied, 33 percent were somewhat satisfied, and only 6 percent were not at all satisfied with the profit margin obtained (Figure 8).

Figure 7
Other Retailing Channels

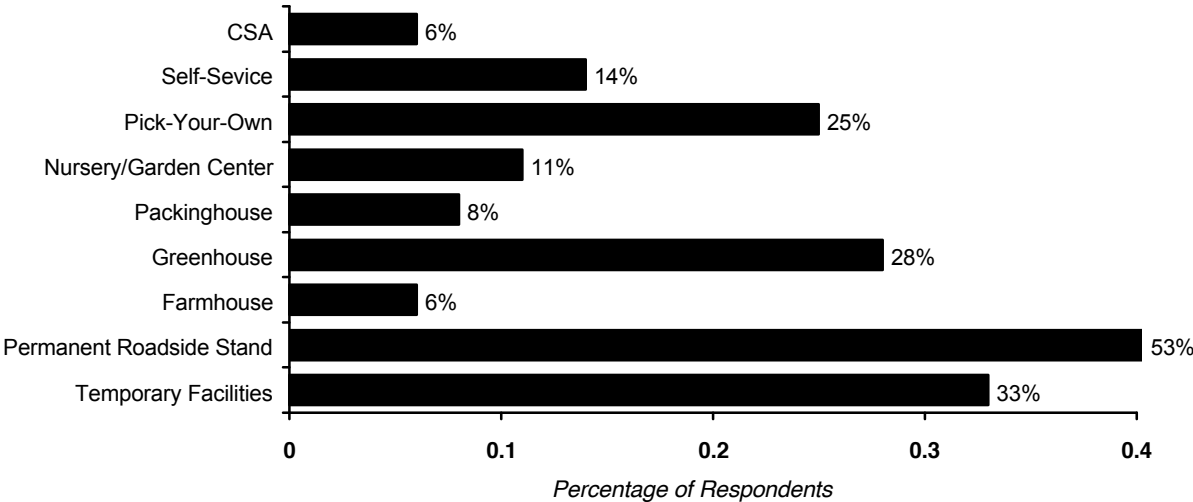


Figure 8
Profit Margin Satisfaction

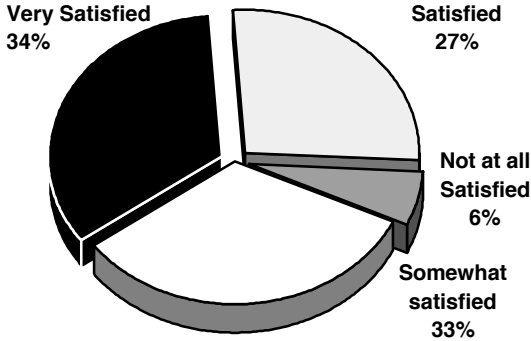
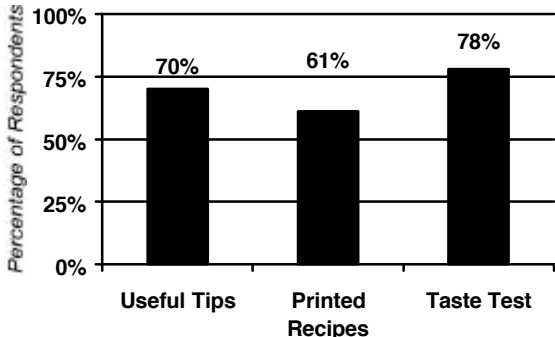


Figure 9
Promotional Tools



Promotional Tools

Although farmers’ markets managers are in charge of most of the promotional and advertisement aspects of these outlets, vendors made use of different techniques to draw customers to their own stands (Figure 9). Almost 69 percent indicated that they promoted the sale of their produce by offering information on how to freeze, can, preserve or cook the produce; 61 percent offered printed recipes for the preparation of the produce and 78 percent enticed their customers to taste their products. However, this practice is somewhat restricted by Health Department regulations.

Marketing Style

When asked what they felt customers liked best about their marketing style, freshness/quality of the produce and friendly personal service were the reasons cited most often, with 14 and 8 responses, respectively. Table 11 exhibits these and other reasons mentioned.

Gross Retail Sales

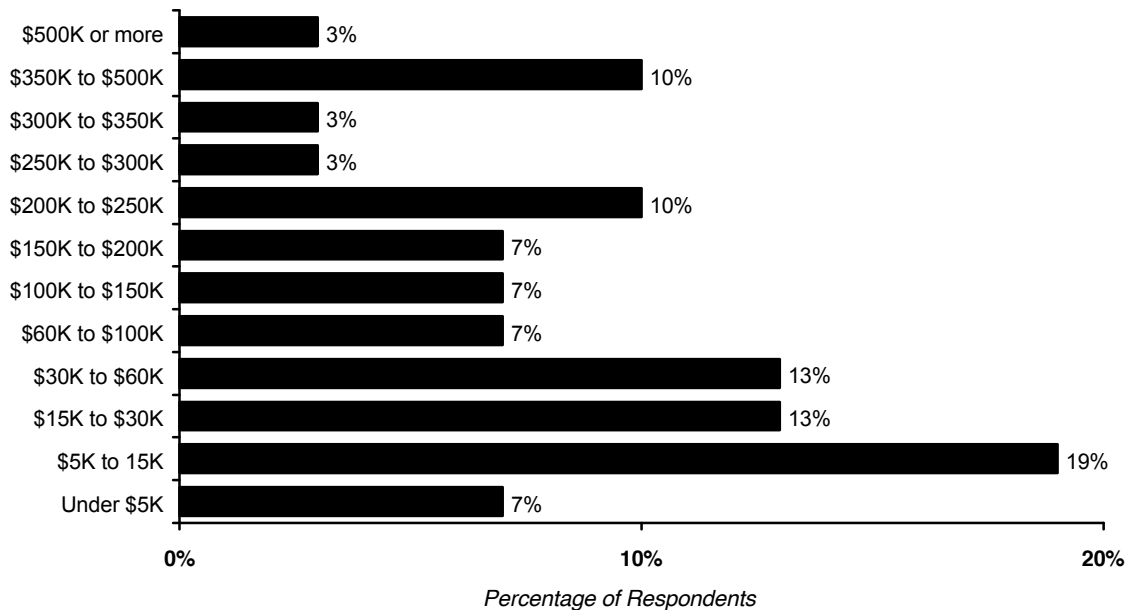
Gross sales from all retail facilities in 1996 of 7 percent of the 31 respondents who revealed this information was less than \$5,000, while 19 percent reported sales between \$5,000 and \$14,999. Sales between \$15,000 and \$29,999 and between

\$30,000 and \$59,999 were each reported by 13 percent of the respondents, while the categories \$60,000-\$99,999, \$100,000-\$149,999 and \$150,000-199,999 had 7 percent responses each. About 10 percent fell in the \$200,000-\$249,999 bracket while the \$250,000-\$299,999 and \$300,000-349,999 claimed 3 percent each. The \$350,000-499,999 bracket accounted for 10 percent and 3 percent had retail sales of \$500,000 and over (Figure 10).

Table 11: What Customers Like Best About the Producers' Marketing Styles

Reason	Responses
Freshness/quality of produce	14
Friendly personal service	8
Presentation/display of produce	7
Personal contact with farmer	6
Large variety of produce	5
Better prices	3
Dependable	2
Unique items (fresh and dried flowers/herbal plants)	2
Cleanliness	2
Taste testing	2

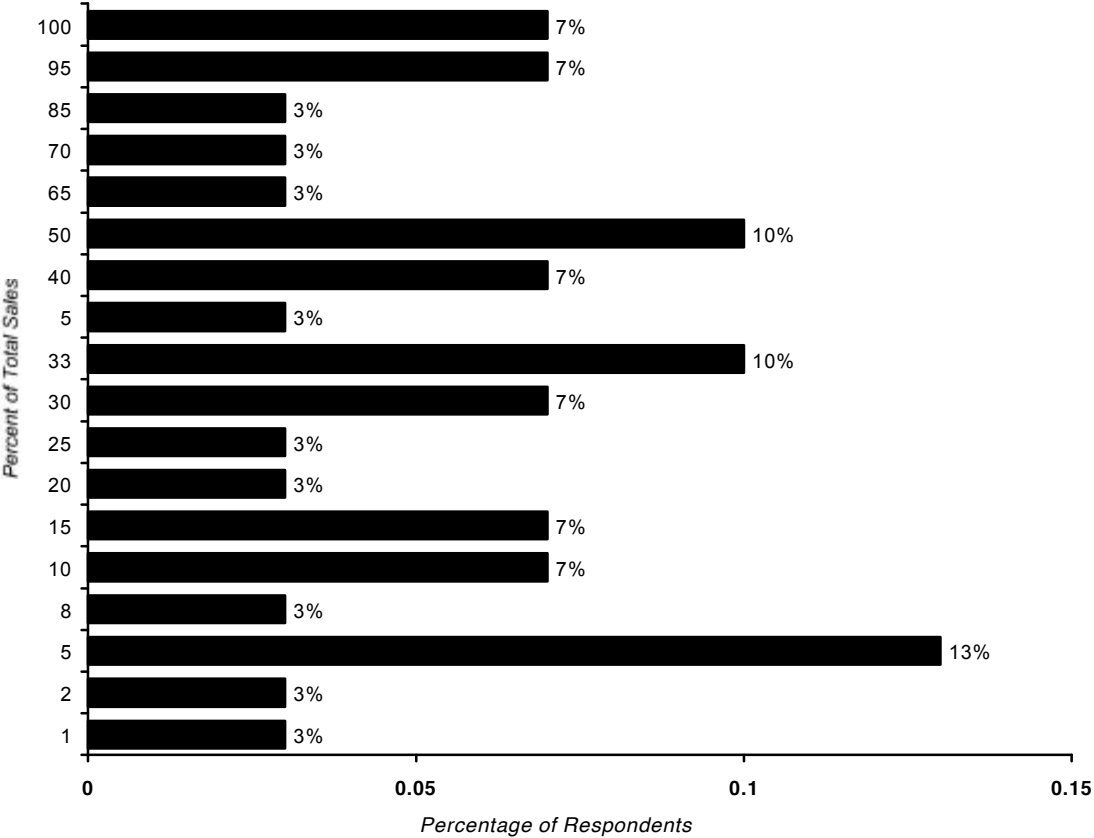
**Figure 10
Gross Retail Sales From All Facilities**



Percentage of Income from Farmers' Markets

Respondents were asked to indicate what percentage of total income came from farmers' market sales. As shown on Figure 11, the percentages ranged from 1 to 100. Roughly 39 percent indicated that sales from these operations accounted for 20 percent or less of total income; farmers' markets income represented between 25 and 40 percent of total sales for 30 percent of respondents; between 50 and 95 percent of total gross income for 27 percent of respondents and almost 7 percent of respondents indicated that 100 percent of their retail sales came from their farmers' market operations.

Figure 11
Farmers' Market Sales as a Percentage of Total Income

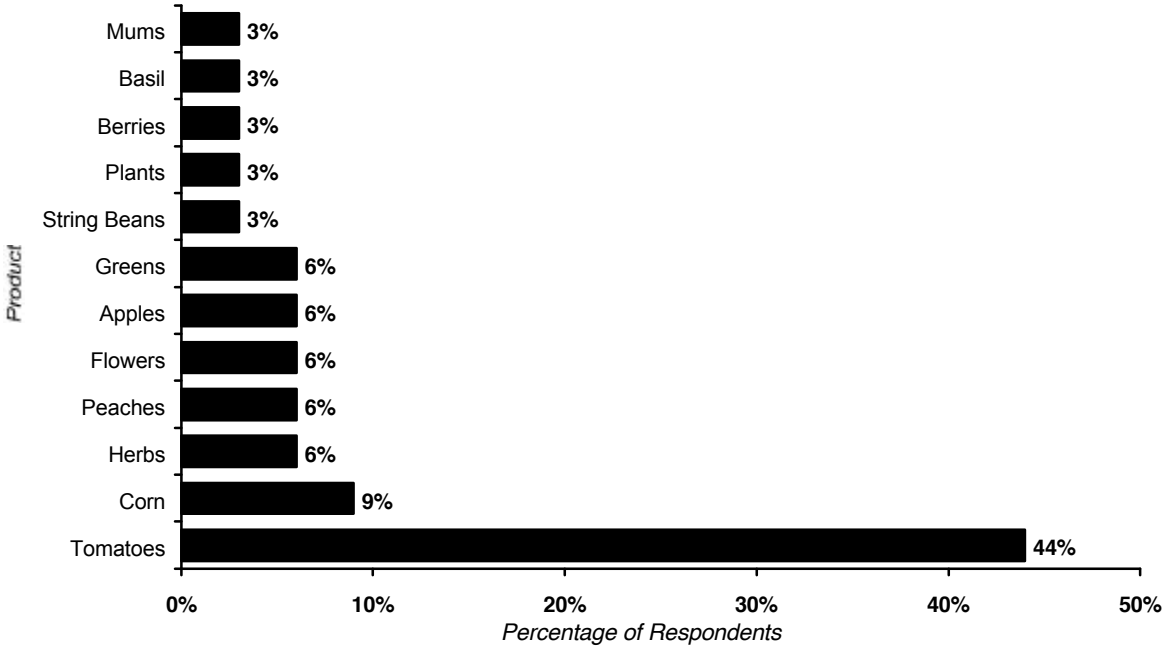


Although the overall mean is 37 percent of total gross income, the considerable deviation of 32 percent and a 5 percent mode indicate that farmers' markets are not the main source of profits for the majority of the farmers surveyed.

Most Important Farm Products Sold (based on dollar value)

Regarding the products that generate the most revenue, tomatoes (44 percent), corn (9 percent), herbs (6 percent), peaches (6 percent), flowers (6 percent), apples (6 percent), greens (6 percent), string beans (3 percent), plants (3 percent), berries (3 percent), basil (3 percent) and mums (3 percent) received the most responses (Figure 12). Other products mentioned were the following: peppers (n=18), squash (n=11), eggplants (n=8), plants (n=7), potatoes (n=7), cucumber (n=5), pumpkins (n=5) and cider (n=5).

Figure 12
Most Important Farm Products Sold at Farmers' Markets



Value-Added Products

Most producers (63 percent) sold valued-added products such as baked goods, cider, potted flowers and painted pumpkins (Figure 13). Of those who sold value-added products, about 5 percent indicated that these items represented 1 percent of total farmers' markets gross sales. For about 9 percent of those who responded, value-added products accounted for 2 percent of total farmers' markets income, while for 27 percent value-added items made up 5 percent of their farmers' markets business. For

about 5 percent of respondents, the sale of value-added items accounted for 8 percent of farmers' market gross sales; it represented 10 percent of farmers' market income for 14 percent and 15 percent of sales for 9 percent of respondents. In each case, 5 percent of respondents reported that sales of value added products were 25, 40, 50 and 100 percent of farmers' markets gross sales (Figure 14).

Figure 13

Do You Sell Value-Added Products Such As Baked Goods, Cider, Potted Flowers, Painted Pumpkins, Etc.?

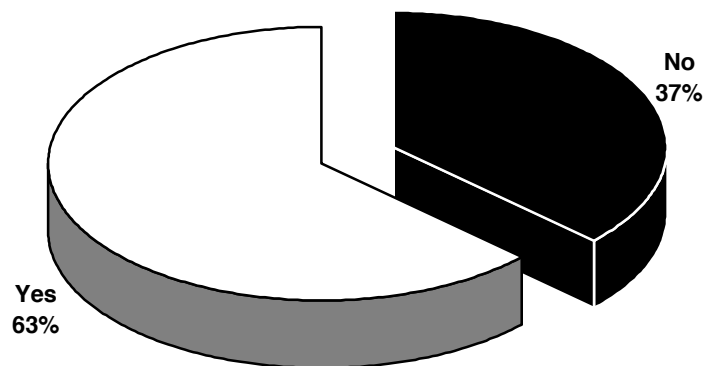
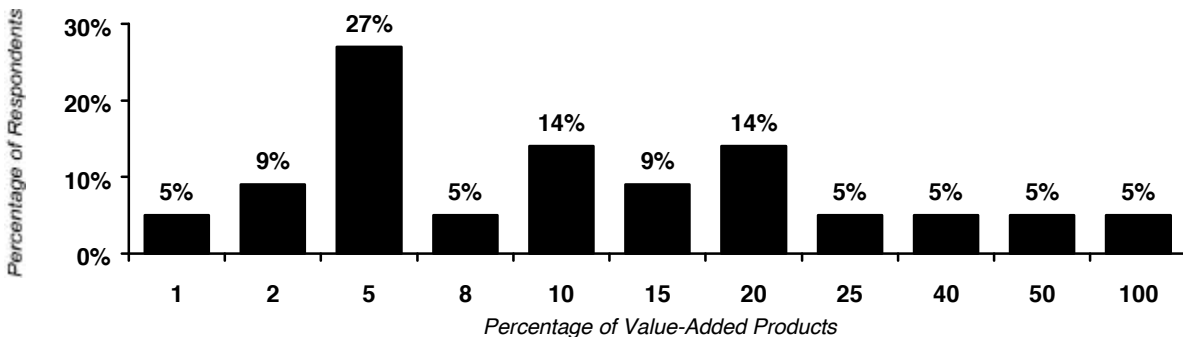


Figure 14

Value-Added Products as a Percent of Farmers' Market Gross Sales



Prices

Producers were asked to indicate how they determined prices on the products they sold in the farmers' markets. The following were the methods mentioned:

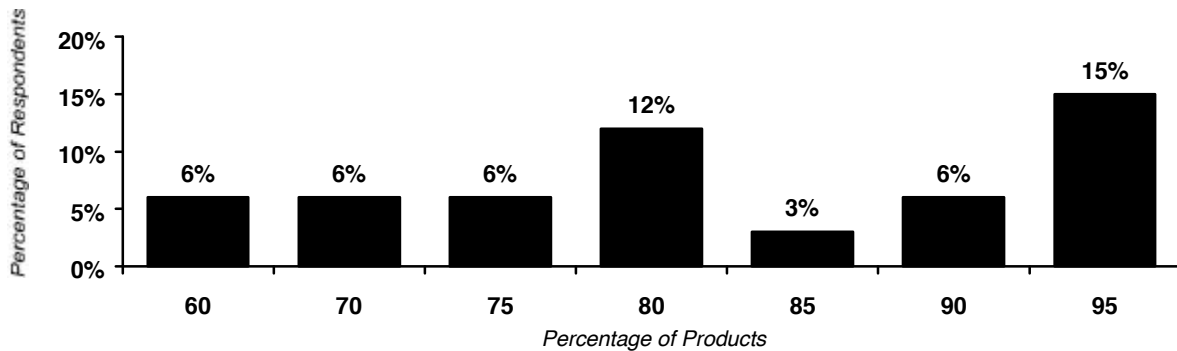
- 1) Comparison with chain stores, wholesale and other farmers' prices
- 2) Cost accounting

- 3) Same as greenhouse and farm
- 4) Estimation of a fair price (which is definitely higher than supermarket prices)
- 5) Double cost of production of a crop or double cost of item purchased
- 6) Market reports
- 7) Forty years of experience
- 8) 50 to 100 percent markup on listed wholesale prices of comparable produce depending on actual cost of production

Percentage of Products Grown and Prepared on the Farm

At least 60 percent of the products sold in farmers’ markets were grown or prepared on the farms. Furthermore, about 62 percent of respondents grew and prepared between 95 and 100 percent of the products sold; 60, 70 and 75 percent of products sold were grown and prepared by close to 6 percent of respondents in each case. About 12 percent sold 80 percent of products they grew or prepared, while almost 3 percent grew or prepared 85 percent of their products (Figure 15).

Figure 15
Percentage of Products Sold That Are Grown or Prepared on the Farm



Organic Produce

Due to the increasing concern about the use of synthetic chemicals in agriculture, a series of questions related to production and sale of organic produce was included in the questionnaire. Participants were reminded that organic meant, “grown without the use of man-made or synthetic pesticides and food additives.” Approximately 23

percent indicated that they sold organic produce at farmers' markets (Figure 16) and 26 percent reported that they had produced organic commodities in 1996 (Figure 17). Of those who did not produce organically, 15 percent said that they were planning to do so this year or the following (Figure 18).

Figure 16
Do You Sell Organically Grown Produce at the Farmers' Market?

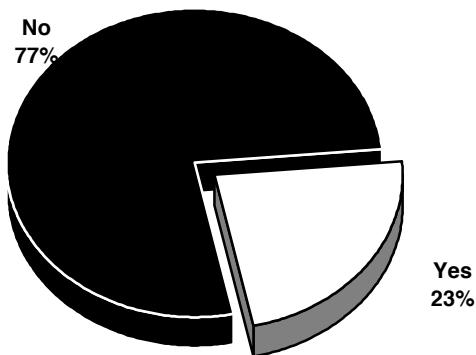


Figure 17
Did You Grow Organic Products in 1996?

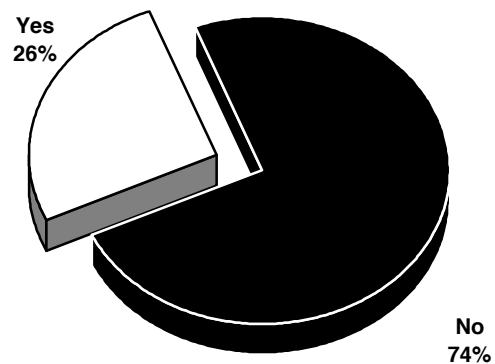


Figure 18
Are you planning to grow organic Produce next year?

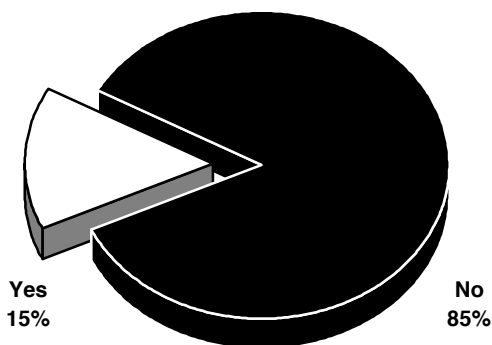
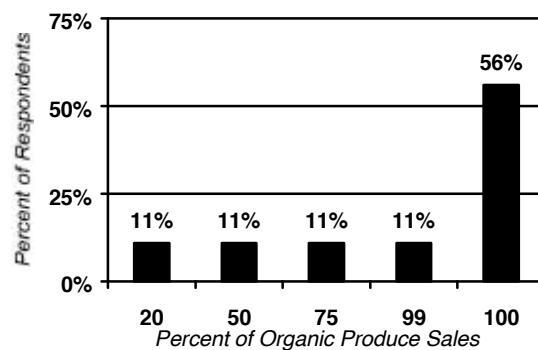


Figure 19
Dollar Value of Organic Products as a Percent of Total Farmers' Market Sales



Nine respondents provided the dollar value of organically grown produce with respect to total farmers' market sales. For almost 56 percent, sales from organic products accounted for 100 percent of gross sales, while 11 percent indicated that organic sales

represented, in each case, 20, 50, 75 and 99 percent of total farmers' market gross sales (Figure 19).

When asked if consumers were requesting organically grown products, 64 percent of those who responded said yes (Figure 20). However, the majority of the participants (61 percent) reported that customers complained about blemishes or insect damage on the produce, both conventional and organically produced (Figure 21). Although consumers believe that organic products are healthier, it seems they value produce appearance more than its nutritional content. This incongruence about what consumers believe and how they behave is a drawback for those producers who would like to switch to organic practices.

Figure 20
Are Your Customers Requesting Organically Grown Produce?

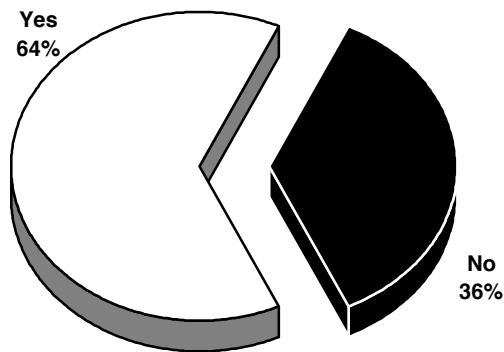
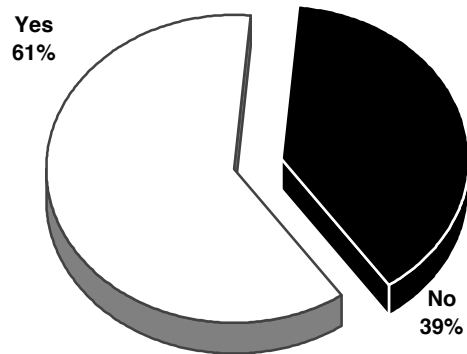


Figure 21
Do Customers Complain About Blemishes or Insect Damage on the Produce?

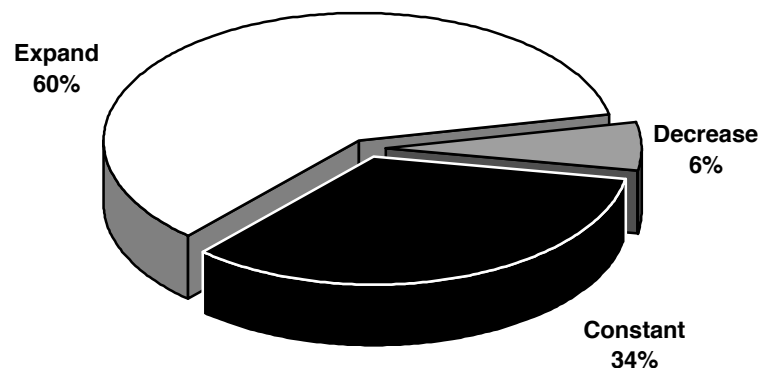


Producers of organic commodities were also asked how they determined prices. Some of the methods used were cost and competition; retail prices during the previous week; markup of current wholesale prices for organic produce with adjustments for uniqueness, characteristics of consumers, time of day and what else is available at the market.

Future of Farmers' Markets as a Business

Generally, producers (60 percent) believed their farmers' markets would expand in the next five years, while 34 percent indicated that business would stay constant. Conversely, only 6 percent thought their farmers' market business would decrease (Figure 22).

Figure 22
Future of Farmers' Markets as a Business



While some farmers indicated that they have grown over the past years and have reached the limit as far as how many markets they can serve; those who still have the resources to expand see farmers' markets as a great potential for increasing profits.

Problems as a Farmers' Market Participant

Producers were given the opportunity to voice their main concerns and sources of frustration when asked to mention the major problems they had to deal with as participants of farmers' markets. Although some farmers were so pleased with these marketing outlets that had nothing negative to report, others had complaints about management, other participants, own coordination and logistics, the weather and county and local governments.

With regard to management, some farmers felt that insufficient publicity, particularly at the start of the season, delayed consumers' attendance; that there was preferential treatment by people running the markets; that too many farmers were allowed in the

markets before they had a chance to become popular among shoppers and that some managers could not fully understand agricultural issues.

Moreover, participants reported that some producers violate market rules by selling produce they buy from auction markets and from out of state outlets. Also, at some markets, there seems to be price competition among farmers and resentment against those participants who undersell the market price.

Although the majority of the farmers were satisfied with the profit margin obtained from farmers' markets, selling directly to the consumer at an off-farm location can become complicated. Farmers need enough produce to take to the markets in order to justify the considerable investment in labor, time and equipment they have to incur in order to get to these facilities. Reliable workers, both at the farm site and at the markets, are crucial for this type of enterprise to become lucrative. Harvesting, packing, loading, transporting and selling the produce could become very chaotic without adequate personnel. Further, keeping the produce fresh in the open air is an extra challenge vendors have to face.

Weather is another factor that could be detrimental for the well functioning of these markets since it affects both the production and retailing ends of the marketing channel. Extreme weather conditions could ruin farmers' produce in the field and/or prevent customers from attending the markets. Also, survey participants indicated that they lack a feeling of permanence, since the local government could cancel the market, change its location or modify the rules without consulting the farmers.

Comments and Suggestions

The respondents were asked how they believed the New Jersey Agricultural Experiment Station/Rutgers Cooperative Extension could best assist them with farm marketing. Most of the comments were related to increasing advertisement of the markets and increased promotion of the Jersey Fresh logo in order to raise public

awareness. They also suggested that the organization of seminars on marketing techniques, packing and on how to deal with the public would be helpful. Moreover, producers would like State Extension to be involved in setting up new markets, conducting studies on the productivity of crops other than corn and tomatoes and assisting in uniting growers.

Overall, any initiative by Agricultural Extension to keep farmers informed about new produce varieties and growing techniques and to educate the public about the benefits of consuming fresh New Jersey grown produce would be greatly appreciated by the farm community.

Demographics

The age of the producers that retail through farmers' markets ranged from 24 to 68 years old, with a mean age of 43 years. The majority of the sample was male and had at least a High School diploma. With respect to college level achieved, 37 percent of respondents who provided this information had some college background; 34 percent had graduated from college; almost 3 percent had some graduate education and almost 6 percent had completed a masters degree. The ethnicity of 97 percent of the 34 respondents was Caucasian.

Table 12: Demographic and Descriptive Characteristics of Farmers' Markets Producers

<i>Characteristics</i>	<i>Percentage</i>	<i>Mean</i>	<i>Standard Deviation</i>
Age		43	11
Number of adults		2	1.4
Number of children under 18		1	1.2
Male	82%		
College graduate	34%		
Caucasian	97%		

The producers' household consisted mainly of two adults (68 percent). Over half (55 percent) of the respondents indicated that there were no children under 18 living with

them. The single-adult households and three-adult households represented, in each case, almost 12 percent. Conversely, four, six and nine-adult households accounted for almost 3 percent each. Regarding the number of children living in the producers' households, 12 percent of the sample reported to have only one child; 24 percent had two children and 3 percent had four children (Table 12).

Summary and Conclusions

The purpose of this research was to document the attributes of farmers who participate in farmers' markets and to examine different aspects of these operations. The characteristics explored in this report are farmers' demographics, farm size, acreage grown, wholesale and retail activities, location and number of family members involved in the operation. Data related to the business stage of development, ownership status, days of operation, produce and value-added products sold, marketing style, prices and organic production was also collected.

A survey of 36 New Jersey growers who retail through farmers' markets indicated that the average age of the producers was 43, most were Caucasian and had at least graduated from high school. The respondent's household mostly consisted of 2 adults and 1 child under 18 years old. The majority started this type of activity in the 1990's and was still growing. However, the average number of acres planted and workers employed characterized farmers' markets as small scale operations. Further, although most producers were at least satisfied with the profit margin obtained, their income from these marketing outlets represented, in general, less than 40 percent of gross sales from all retail facilities.

The survey also showed that farmers usually attended 1 market per day and traveled an average of 54 miles (round trip) daily. Overall, producers preferred to retail than wholesale their produce. In particular, they chose to use farmers' markets as a retail channel because they could get better prices, target a greater volume of people,

interact with customers and lower their overhead costs. Producers believed that high quality of produce and friendly personal service were the reasons that attracted customers the most.

Based on dollar value, tomatoes, corn, herbs, peaches, flowers, apples and greens ranked among the most important. With respect to price estimation, comparison with chain stores, cost accounting, market reports and experience were some of the methods used. The majority sold value-added items and grew and prepared the products sold on their farms. Only 23 percent of those surveyed offered organic produce. Generally, producers believed that their farmers' market businesses would expand in the next five years.

The descriptive results presented in this report identify the characteristics that significantly contribute towards growers' likelihood of participation in farmers' markets and the factors that make these operations a viable marketing alternative. Those in charge of organizing and coordinating farmers' markets can use these findings to target new farmer vendors most likely to participate.

References

Critser, Greg. "Small Potatoes." *Inc.* June 1985:7(6):85-88.

Eastwood, D.B. "Using Customer Surveys to Promote Farmers' Markets: A Case Study." *Journal of Food Distribution Research* October 1996:27:23-30.

Govindasamy, R. and R. M. Nayga, Jr. "Characteristics of Farmer-To-Consumer Direct Market Customers: An Overview." *Journal of Extension* August 1996:4(34).

Lyson, T.A., G.W. Gillespie, Jr. and D. Hilchey. "Farmers' Markets and the Local Community Bridging the Formal and Informal Economy." *American Journal Alternative Agriculture* 1995:10(3):108-112.

Nayga R., M. Fabian, D. Thatch and M. Wanzala. "New Jersey Farmer-to-Consumer Direct Marketing Operations: Sales, Advertising, and Other Issues." New Jersey Agricultural Experiment Station, P-02453-2-94, 1994.

Smallwood, D. , N. Blissard, J. Blaylock, and S. Lutz. "Food Spending in American Households, 1980-92." USDA/ERS Statistical Bulletin 888 (1994).

Sommer, Robert. "The Case for Farmers' Markets: Satisfying Unfulfilled Consumer Needs Breeds Success." *Marketing News* 1 March 1985:22.

Sommer R., Margot Stumpf and H. Bennet. "Quality of Farmers' Market Produce: Flavor and Pesticide Residues." *The Journal of Consumer Affairs* 16(1):130-136. Summer 1982.

Survey of Farmers' Market Producers

1. Do you retail farm products through any of the following marketing channels?
(Check all that apply)

- Urban or rural community farmers' market.
- Temporary facilities (stand, wagon, tables, etc.)
- Permanent roadside stand/market.
- Farmhouse.
- Greenhouse.
- Packinghouse or part of a farm building.
- Nursery/garden center.
- Pick-your-own, U-Pick, Choose & Cut, U-Dig, etc.
- Rent-a-garden or rent-a-tree.
- Self-service or honor system.
- Other (describe _____).

If any of boxes above are checked, please indicate the county in which your main operation is located _____.

2. If you selected temporary facilities or permanent roadside stand, is it (Please check one option)
- on a farm?
 - off the farm?
 - both?

If you do **not** sell your produce through an urban or rural community farmers' market, please skip to item 26.

QUESTIONS 3 THROUGH 25 PERTAIN ONLY TO FARMERS' (TAILGATE) MARKET PRODUCERS.

3. I. In what year did you begin marketing farm products through urban or rural community farmers' markets? _____.

II. Without regard to the number of years you have been in the farmers' market business, which of the following terms do you think best characterizes your stage of business development?

- "initial" "mature"
- "growth" "decline"

3. What percent of the dollar value of products which you market do you
- a wholesale? _____%
 - b retail? _____%

5. List several reasons why you selected a farmers' market as a retail channel.

6 What do you feel customers like best about your marketing style?

7 Do you promote the sale of your produce by offering
a information on how to freeze, can, preserve or cook the produce?

- Yes No

b printed recipe(s) for their preparation?

- Yes No

c taste testing?

- Yes No

8 How satisfied are you with the profit margin from this type of operation?

- Very Satisfied Satisfied
 Somewhat satisfied Not at all satisfied

9 I. How many acres do you farm to support your urban or community (tailgate) farmers' market? _____

II. How does this compare with five years ago?

- an increase of _____ acres.
 a decrease of _____ acres.
 the same.

III. At this time, how many of the acres on which you grow for retail are in the same municipality as your farmers' market? _____

10 How many farmers' markets do you attend per day in New Jersey and out of state?

New Jersey		Out of State	
Monday	_____	Monday	_____
Tuesday	_____	Tuesday	_____
Wednesday	_____	Wednesday	_____
Thursday	_____	Thursday	_____
Friday	_____	Friday	_____
Saturday	_____	Saturday	_____

11 Please indicate the **number of employees** that fit into each group (include yourself as appropriate).

I. Regarding the total number of employees (production and retailing)

Family members		Non-family members	
a Full-time*	_____		_____
b Part-time**	_____		_____

* 40 hours/week or more
** less than 40 hours/week

II. Regarding only the employees that go to the farmers' market

Family members		Non-family members	
a Full-time	_____		_____
b Part-time	_____		_____

12 In miles,

I. What is the closest farmers' (tailgate) market you attend? _____

II. What is the farthest farmers' (tailgate) market you attend? _____

13 List in order of importance (as measured in dollar value of sales) the 10 principal farm products you sell in the farmers' market. (Please be specific such as - strawberries, tomatoes, cider, apples, honey, bedding plants, cut flowers, etc.)

a	_____	f	_____
b	_____	g	_____
c	_____	h	_____
d	_____	i	_____
e	_____	j	_____

14 Do you sell value added products such as baked goods, cider, potted flowers, painted pumpkins, etc.?

Yes No

If yes, what percent of your farmers' market gross dollar sales does this represent? _____%

15 How do you determine prices on products you sell in the farmers' (tailgate) market?

16 Do customers complain about blemishes or insect damage on the produce?
 Yes No
Comments?

17 Do you sell organically grown* produce in the farmers' market?
*(grown without the use of synthetic fertilizers, synthetic pesticides and food additives)
 Yes No

18 Did you produce organic products in 1996?
 Yes No
If no, are you planning to do so this year or next?
 Yes No

19 If you sell organically grown produce,
a what percent of your total farmers' market sales is this activity? _____
b how do you determine prices?

20 Are your customers requesting organically grown produce?
 Yes No
Comments? _____

21 What percent of all the agricultural products you sell in the farmers' market is grown or prepared on your farm (not purchased)? _____%

- 22 How do you see your farmers' market as a business in the next five years?
- Expanding
 - Staying constant
 - Decreasing

Please elaborate:

- 23 Please indicate your gross retail sales (from all retail facilities) in 1996?

- | | |
|---------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Under \$ 5,000 | <input type="checkbox"/> \$ 150,000-199,000 |
| <input type="checkbox"/> \$ 5,000-14,999 | <input type="checkbox"/> \$ 200,000-249,999 |
| <input type="checkbox"/> \$ 15,000-29,999 | <input type="checkbox"/> \$ 250,000-299,999 |
| <input type="checkbox"/> \$ 30,000-59,999 | <input type="checkbox"/> \$ 300,000-349,999 |
| <input type="checkbox"/> \$ 60,000-99,999 | <input type="checkbox"/> \$ 350,000-499,999 |
| <input type="checkbox"/> \$ 100,000-149,999 | <input type="checkbox"/> \$ 500,00 or more |

- 24 Please indicate what percentage of your total gross income comes from your farmers' market sales. _____%

- 25 What are the major problems you have as a participant of a farmers' market operation? (List in order of importance)

a _____

b _____

c _____

d _____

- 26 I. How many acres do you farm to support your retail operations? _____
 II. How does this compare with five years ago? (indicate acres if appropriate)

- an increase of _____ acres.
- a decrease of _____ acres.
- the same.

- 27 Regarding the farm, do you (indicate all that applies)

- own it?
- manage it?
- rent it from someone?

28 How do you believe the N.J. Agricultural Experiment Station/Rutgers Cooperative Extension can best assist you with farm marketing?

29 Other comments/recommendations, etc.

YOUR ANSWERS TO THE FOLLOWING QUESTIONS WILL HELP US INTERPRET THE RESULTS OF THIS SURVEY.

30 Age _____

31 Gender Male Female

32 Which of the following best represents your level of education?

- Some grade school
- Grade school graduate
- Some High School
- High School graduate
- Some college
- College graduate
- Some graduate school
- Masters degree
- Doctoral degree

33 Your ethnicity

- African American American Indian
- Asian/Pacific Islander Caucasian
- Hispanic Other (specify) _____

34 Regarding your household,

- a number of adults _____
- b number of children under 18 _____

**THE INFORMATION PROVIDED WILL BE USED TO PREPARE A REPORT
IN WHICH STRICT CONFIDENTIALITY WILL BE OBSERVED.
MANY THANKS FOR YOUR INTEREST AND TIME IN THIS RESEARCH PROJECT**



**Rutgers Cooperative Extension
N.J. Agricultural Experiment Station
Rutgers, The State University of New Jersey, New Brunswick**

Cooperating Agencies: Rutgers the State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders.
Distribution In cooperation with the U.S. Department of Agriculture in furtherance of the Acts of Congress of May 8th, and June 30th, 1914.
Cooperative Extension work in agriculture, home economics, and 4-H, Zane Helsel, Director of Extension. Rutgers Cooperative Extension provides information and educational services to all people without regard to sex, race, color, national origin, handicap, or age. Rutgers Cooperative Extension is an Equal Opportunity Employer.