

Common support for local agriculture in two contrasting Oregon communities

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Abstract

One increasingly successful approach to enhancing small farm viability is for farmers to market their products directly to consumers and food-oriented businesses and institutions within their local area. This localized approach to food production and distribution is based on theoretical concepts often articulated as community, local or regional food systems. But is there sufficient consumer support to make local food systems viable? Do communities differ in their potential for developing a local food system based on their dominant socio-economic and/or political characteristics? This study reports on the results of a random mail survey of households in two Oregon communities. Although the two communities contrast socio-economically and politically, they show common but somewhat different support for local agriculture. The results demonstrate the potential for the development of more localized food systems in both communities. However, the type of products, their method of delivery and pricing will likely need to be tailored to fit each community.

Key words: local food systems, farm direct marketing, consumer preferences

Introduction

While the mainstream of the food and agriculture system continues to move toward the increasing ‘commodification’ of products within a fiercely competitive global marketplace, some producers and some consumers are developing new, attractive possibilities on the fringes of that system. The study presented here explores the potential for expanding profitable local market opportunities for small farmers through an assessment of the support for local agriculture in two communities with very different socio-economic and political characteristics, and by identifying a segment of the general population that is interested in purchasing local farm products.

It is well documented that the process of consolidation in US agriculture has reduced market opportunities for small farms^{1,2}. Innovative producers have developed niche markets that are profitable. While substantial research indicates that most US consumers want their food to come from sources within their region³, to date, only a minority are devoting the time and money needed to seek out the high quality and unique agricultural products and services that can foster profitable small farms.

A needs assessment of small farmers in one region of Oregon conducted during the late 1990s indicated that there

was a diminishing number of market outlets available to these farmers, and that the prices offered through the remaining markets were generally too low for their farms to be profitable⁴. These farmers maintained that although there were crop production issues that needed attention, their most pressing concerns were related to marketing. At about this time, the National Commission on Small Farms concluded that small farms were being forced out of business not by market forces but by the loss of market opportunities resulting from agribusiness consolidation and federal government policies that favored large farms².

One increasingly successful approach to enhancing small farm viability is for farmers to avoid wholesale markets completely by marketing farm products directly to consumers and food-oriented businesses within their local area. A local food economy, as Feenstra⁵ points out, creates profitable market niches for small farmers. This localized approach to food production and distribution is based on theoretical concepts, often articulated as ‘community, local, or regional food systems’ (hereafter referred to as local food systems). Local food systems are defined as ‘a collaborative effort to build more locally based, self-reliant food economies—one in which sustainable food production, processing, distribution, and consumption is integrated to enhance the economic, environmental, and social health

of a particular place'⁶. Some authors have applied the concept of 'bio-region' to food systems and utilize the term 'foodshed' to represent the region that supplies, or can potentially supply, a significant quantity of a community's food needs⁷. The 'ecological footprint' is another model incorporating similar concepts into a calculation of the land area necessary for communities to self-reliantly produce food and fiber, and to cycle wastes⁸.

While sustainable agriculture proponents broadly support these theoretical approaches, a number of practical questions remain to be answered. Is there sufficient consumer support to make local food systems viable? What are the barriers and opportunities for consumer purchases of locally produced food? The concept of a local food system generally utilizes single or multiple municipalities as its economic base for the sale of farm products within a region. Does this approach work in all communities? Do communities differ in their potential for developing a local food system based on their dominant socio-economic and/or political characteristics?

Background

A number of studies have been conducted during the past two decades focusing on consumer interest in locally produced food. Some studies have identified low or indifferent interest^{9,10}, but most have reported a general interest in locally produced food¹¹⁻¹³. A recent national survey of registered voters revealed: 81% want their food to come from within the USA and 52% want their food to come from their own state. In addition, 54% said they have purchased from a farmers' market and 40% reported buying from a farm stand during the previous year. The researchers concluded that these figures 'reflect a strong undercurrent in the American marketplace'³.

Several studies have identified demographic information related to consumers who purchase local products^{11,14-16}. However, these studies have focused on consumers at specific market outlets, such as farmers' markets or roadside stands, and not on consumers from the general population.

Comparisons of communities concerning consumer acceptance of regional and local food systems are not well developed in the literature. Lockeretz¹⁷ examined six communities considered to be 'working class to affluent' in eastern Massachusetts. Although, in general, he found support for local agriculture, his examination did not specify similarities or differences among the communities. In an Indiana study, Jekanowski and associates¹² included 'rural, small town and urban communities' in their study and found that the type of 'community' had no effect on the likelihood of purchasing local products. These examinations do not specify similarities or differences between communities in their interest in local agriculture. With the exception of the study by Eastwood and associates¹⁰ of consumers in Knoxville, Tennessee, research using the community as the unit of analysis related to consumer preference for local products is rare.

This study fills important gaps in the research related to consumer interest in locally produced food. It examines preference for local food based on age, income and education; documents consumer behaviors and product preferences; and compares consumers in two communities with different socio-economic and political characteristics. The questions asked and the variables analyzed were selected for an additional purpose beyond this academic goal: they also directly contributed to the informational needs of local producers.

Methods

This study was precipitated in part by the previously noted needs assessment of small farmers in one region of Oregon⁴. To maintain farmer involvement in this research, a nominal participatory approach was utilized. An advisory group of 10 farmers and local food advocates was assembled to provide guidance and input to the research process and to assist in formulating a questionnaire to be administered to consumers. The farmers produced a variety of products (vegetables, cheese, processed foods, meat) and were already engaged in marketing their products locally.

The process employed with the advisory group consisted of an initial brainstorming session, to identify questions for the consumer questionnaire, and a follow-up session several weeks later, to review a draft of the consumer questionnaire. After the survey was completed and the data analyzed, a workshop was conducted to present the findings to interested farmers. Some members of the advisory group acted as panelists interpreting the data during this workshop. The entire study was organized and conducted between September 1997 and June 1998. Although this project was not a fully participatory research project, it represents what van de Fliert and Braun¹⁸ regard as 'platform building', or partnerships between farmers and researchers that produce tangible, useful results on a topic generated by farmers.

The brainstorming session was facilitated to elicit from the advisory group their responses to the question: 'What do you want to know from consumers that could improve your business?' Farmers were primarily interested in the extent of consumer interest in local food products and what prices they would pay. Based on input from the advisory group, a review of the literature, and the research interests of the authors, a questionnaire utilizing both open-ended and closed-ended questions was constructed. This survey was just a first step in a longer-term effort to address producer research priorities. The questionnaire probed for respondent attitudes and behavior toward local products and demographic information. Respondents provided the following categories of information:

- shopping patterns;
- desired product characteristics;
- quality perceptions of local versus non-local food products;
- history of buying local food products;

- perceptions about relative safety, quality and price of food products;
- barriers to buying local farm products;
- attitudes toward and reasons for supporting local agriculture;
- age, income and education.

For the purposes of the survey, the term *local* was defined to be food products grown and/or processed within a 50-mile radius.

The survey was mailed to consumers in a random sample of 500 households in Albany and Corvallis, Oregon during the winter of 1997–98. The sample included 250 households in each community, based on postal zip codes. The survey sample was drawn by Survey Sampling, Inc. of Fairfield, Connecticut. The survey was conducted using the total design method^{19,20}. A total of 315 usable surveys were returned—half from each community—for a response rate of 63%. This high response rate allows confidence in extrapolating the results to the population of the two communities as a whole. The Survey Research Center at Oregon State University was consulted throughout this study regarding sample selection, final development of the survey instrument and data analysis. Chi-square tests were utilized to identify statistically significant differences.

The Communities

For ease of communication, we are defining a community as ‘a group of people living in the same locality and sharing some characteristics’, as per the International Fund for Agricultural Development²¹. We acknowledge that ‘individuals usually belong to many different communities that are contextually activated and provide different identities’²² and note that the two communities in our study are made up of many communities.

Albany and Corvallis are communities located 10 miles apart in Oregon’s Willamette Valley about 80 miles south of Portland. They have similar sized populations: Albany with approximately 40,000 residents and Corvallis with approximately 50,000. They both sit in the midst of thriving agricultural production areas, with most of the products being shipped out of state or out of the country. The dominant agricultural land uses are extremely large grass seed farms, Christmas tree plantations and private woodlands. Smaller, but still significant, acreages are in processed vegetables, mint and cereals. Even smaller in terms of acreage are the many small and/or part-time farms that produce a wide variety of agricultural products, with a focus on fresh fruits and vegetables, bedding plants and flowers.

There are clear differences between the two communities, related to the occupations and educational levels of residents. Albany relies to a large degree on a diverse manufacturing industry, including exotic metals and wood products, while Corvallis is home to a major university and high-technology industry. Albany, therefore, has a higher percentage of jobs in the manufacturing sector and

Table 1. Occupation and educational attainment of Albany and Corvallis residents²³.

	Albany (%)	Corvallis (%)
Industry		
Education, health, social services	21	35
Professional and scientific	6	11
Manufacturing	21	14
Education attainment		
Did not finish high school	15	7
Bachelor’s degree or higher	18	53
Graduate or professional degrees	6	25

Corvallis has higher percentage of jobs in the high-technology and education sectors (Table 1). There are further differences in educational attainment as well. Residents of Albany who have a Bachelor’s degree or higher represent about 18% of the population, contrasting with 53% of Corvallis residents. The percentage of individuals who did not finish high school is 15% for Albany and 7% for Corvallis (Table 1).

The two communities also differ in income levels and age of residents. The median family income for Albany is \$US46,094, versus \$US53,208 for Corvallis. Median age for Albany is 34.6 years, as compared to 27.0 years for Corvallis²³.

Based on voting behavior, Albany tends to be more conservative politically while Corvallis is more liberal. The elected member to the Oregon House of Representatives for the district dominated by Albany is a Republican. The representative for the district dominated by Corvallis is a Democrat²⁴. Although both communities excel in providing a wide array of recreational and cultural events, the traditional character of each community may be best represented by their single largest community events. Corvallis hosts Da Vinci Days, a summertime celebration of Leonardo da Vinci, featuring art, music, science, and technology; while Albany hosts the World Championship Timber Carnival, the world’s largest outdoor timber sports competition. These popular events are indicative of Corvallis’ cerebral and highbrow tendencies that contrast with Albany’s appreciation of the physical skills of a locally esteemed occupation.

Results

Combined sample results

The combined sample results reveal where, how and why consumers in both communities access local agricultural products. Consumers indicated they purchase local agricultural products for a variety of social, economic and food quality reasons (Table 2). Social and economic reasons include a desire to keep farmers in the area, to support the local economy, and enjoyment of the experience of shopping for local farm products. Food quality reasons

Table 2. Why consumers buy local farm products.

Reason	Very important (%)	Somewhat important (%)
Keep farmers in the area	46	41
Support local economy	44	45
'Local' products are better	44	44
Confidence in 'local' products	42	45
Enjoy buying experience	30	42

Table 3. Type of outlet and frequency of shopping.

Outlet	10+ times per year (%)	1-9 times per year (%)
Supermarket	94	5
Farmers' market	13	46
Roadside stand	7	46
U-pick	3	36

include the belief that local products are better, and greater confidence in quality and safety of local products.

Tables 3 and 4 show the types of food outlets utilized and the frequency of shopping by respondents. Table 3 indicates that between approximately one-third and one-half of the population shopped at least once at each of the types of outlets that feature local products (farmers' markets, roadside stands and U-pick farms). Consequently, there is a high level of familiarity with these outlets. However, Table 3 also reveals that supermarkets are the only food distribution channels that are frequented on a routine basis by anything but a small minority of respondents, and Table 4 shows that 69% of the population shops only once a week or less. Further, when asked what barriers they perceived to buying local agricultural products, consumers indicated the primary reasons were that these products were not available where they shopped, and they were not available when they shopped (Table 5). This is a major barrier that would have to be overcome in order to greatly increase sales of local agricultural products.

An additional barrier for a small percentage of respondents was what they perceived as the high price for local agricultural products (Table 5). In their written comments from open-ended segments of the questionnaire, this latter group indicated they thought local farm products should be less expensive because transportation costs are lower.

Most consumers were willing to pay a premium for local agricultural products. When asked, 'given two similar products, one grown locally the other grown elsewhere, and given the product grown elsewhere cost \$1.00, what would you be willing to pay for the local product?' by far the largest portion of the sample, 50%, responded that they would pay more for the local product. Only 16% said they would pay less for the local product (Table 6).

Table 4. Frequency of shopping at outlets featuring local products.

Frequency of shopping	Percent of sample
Every 2 weeks	11
Weekly	58
Several times per week	31

Table 5. Barriers to buying local.

Barrier	Greatly (%)	Somewhat (%)
Not where I shop	38	47
Not when I want it	35	53
Price too high	31	39

Additional analysis

In addition to analyzing the entire data set, Chi-square analyses were performed on data related to these variables: income, education, age and community, and an index variable for 'local' support. The 'local' variable is a composite variable based on responses to 17 questions. Eight of the 17 questions are behavioral. Three of the behavioral questions address whether the respondents had shopped in the previous year at marketing outlets that are dedicated to local products (farmers' markets, roadside stands and U-pick). The other five behavioral questions determine which broad categories of local food products (fruits, vegetables, protein products, wine and processed products) respondents had purchased in the previous year.

Nine of the 17 questions focused on attitudes toward local food products. Five of the attitudinal questions probed whether the respondent considered specific factors in deciding whether to buy local products:

- supporting the local economy;
- keeping farmers in local area;
- belief that local products are better;
- greater confidence in local products; and
- enjoyment of the local buying experience.

Three additional attitudinal questions examined whether the respondent valued knowing the producer, selected local products when given the choice, and believed that local products were generally of superior quality. The final attitudinal question asked respondents to quantify their willingness to pay a premium for a local product as compared to a similar non-local product.

Consumers formed an approximately normal distribution, ranging from those strongly supporting local farm products to those who were negative toward local farm products. The distribution was split into four segments based on breaks in frequencies. Table 7 shows the categories of the sample based on level of support for local farm products derived from the 'local' index variable.

Table 6. Price consumers are willing to pay for local food products.

Price (\$US)	Percent of consumers willing to pay:							
	Less		Same				More	
	0.50	0.67	0.75	1.00	1.10	1.25	1.33	1.50
%	6	1	9	35	24	18	3	6
Sum	16						50	

Table 7. Categories of support for 'local' farm products from 'local' index variable.

Level of support for 'local' farm products	% of sample
Strong support	18
Moderate support	26
Indifferent	31
Negative	26

The 'local' index variable provides a means of focusing on the sharp contrast between different consumer segments in this region (Table 8). Since all these are variables included in the calculation of the index, it is not appropriate to make statistical comparisons.

Income, education, age and support for 'local'

Income level and education level were not associated with support for local agricultural products. Comparing these two important socio-economic indicators to the index variable for local did not show a strong association. However, age was strongly associated with support for local food products (Table 9). Age categories for survey respondents were grouped based on the breaks occurring in the sample's frequency distribution. The age groups were: 21–29, 30–45, 46–64 and 65–86 years.

In order to simplify the analysis, in Table 9 the two middle age categories (30–45 and 46–64) are grouped together. The table then shows how the younger and older consumers differed from those in the middle age group. In the interest of brevity, the data from this table are not repeated in the text, but the basic differences are highlighted in the paragraphs that follow. Seventeen variables had significant differences related to age. Table 9 shows six of the most interesting.

In many ways the youngest consumers were the least supportive of local agricultural products. They had very different food buying habits and attitudes, shopping less frequently than other age groups and expressing less concern with food appearance, freshness, safety, and environmental friendliness (Table 9). They were least likely to buy local agricultural products and perceived these

Table 8. Comparison of strong and negative categories.

	Strong (%)	Negative (%)
Value knowing producer	33	4
Frequent farmers' market patron	24	0
Feel 'local' produce is superior	93	23
Buy 'local' to support economy	79	8
Enjoy 'buying experience'	58	0
Willing to pay 33% or more extra	31	2

products to have limited availability. Although not statistically significant at the 0.05 level, they were also less supportive of the local economy and local farmers than other age groups.

The middle age groups (30 to 45 and 46 to 64 years old) were the most supportive of local agricultural products. They were more likely to support these products for reasons of quality, social consciousness and the enjoyable experience associated with shopping for and buying fresh food.

Comparison of the two communities

Comparison of the communities of Albany and Corvallis revealed that although they clearly differ in terms of affluence, education and other social and political traits, there were only a few differences between the two communities in their support for local agricultural products. The communities were compared for more than 50 different variables (summarized in the Methods section). There were statistically significant differences in only 11 (Table 10). Most strikingly, the index variable for 'local' did not differ between the two communities, indicating a common and fairly high level of support for local farm products in both communities.

For the two communities, there were no differences in reasons for preferring local products, attitudes toward the environment and organic food, perceived barriers to buying local products or the perception of relative quality of 'local' products. In addition, there were few differences in the factors respondents considered in buying products, buying habits both in terms of outlets and types of products, and in perceptions of local product availability.

Table 10 highlights the areas of food attitude and consumption differences between Albany and Corvallis. An additional 7% (95% versus 88%) of Albany consumers expressed a preference for US as compared to imported food products. This could be linked to greater interest in imported gourmet food products by Corvallis residents. More Albany consumers patronized a roadside stand in 1997 (66% versus 46%). Also, 81% of Albany consumers had purchased local dairy and/or meat products in the past year, compared to 67% of the Corvallis consumers. Albany consumers were more discriminating in selecting food products. A higher percentage of Albany consumers placed an emphasis on food appearance (64% versus 46%). They

Table 9. Significant age-related differences in food buying habits and priorities.

	Age groups			Chi-square*
	20–29	30–64	65–86	
	----- % -----			
Shopping frequency (several times/week)	8	37	30	0.013
Appearance of food	33	55	66	0.017
Freshness of food	83	92	98	0.034
Safety of food	43	71	75	0.012
Environmental friendliness of food	11	31	39	0.025
Bought 'local' food in 1997	64	88	85	0.005

* Significant at $P \leq 0.05$.

Table 10. Food sourcing patterns: contrasts between Albany and Corvallis residents.

	Albany (%)	Corvallis (%)	Chi-square*
Prefer US to imported products	95	88	0.027
Roadside stand patron	66	46	0.003
Aware 'local' dairy/meat are available	81	67	0.031
Food cooperative patron	22	39	0.001
Believe 'local' more expensive	15	32	0.001
Willing to pay at least 10% more for local	43	57	0.047
Appearance of food products	64	46	0.013
Concerned about quality of 'local'	65	42	0.001
Concerned about safety of 'local'	62	43	0.009
Concerned about packaging of 'local'	58	41	0.017
Purchased 'local' fruit	90	97	0.031

* Significant at $P \leq 0.05$.

were also more likely to state that their purchases of local food products were at least somewhat limited by quality concerns (65% versus 42% for Corvallis consumers), safety concerns (62% versus 43%), and packaging concerns (58% versus 41%).

What stands out for the Corvallis consumers is that more than twice as many (32% versus 15%) perceived local product prices to be higher, and 57% of Corvallis consumers versus 43% of Albany consumers were willing to pay 10% or more in addition for local products. A greater number of Corvallis consumers (39%) than Albany consumers (22%) had shopped at least once in a food cooperative in 1997.

We interpret these data to indicate that Albany residents may have ties with local food products via the practices of freezing and canning foods (obtaining locker meats and utilizing roadside stands). Conversely, Corvallis residents may be developing a link with local food products through other local food outlets, such as food cooperatives and community-supported agriculture farms.

Discussion and Implications

Consumers indicated that they purchase local agricultural products for a variety of social, economic and food-quality

reasons. The majority (87%) said the purchase of local foods to support local farmers was very important or somewhat important. This is consistent with findings from a survey of households in four midwestern states, where 70% of the respondents said it was very or extremely important that their food purchase supported a local family farm¹³. Less support for local farmers was found by Bruhn and associates⁹, where 40% of respondents in their California study purchased local food products to support local agriculture. Only 30% of Delaware residents surveyed by Gallons and associates¹¹ listed support for local farmers as very important.

Most Albany and Corvallis consumers are willing to pay a premium for local agricultural products. This is consistent with findings from a New Jersey study that revealed 75% of consumers were willing to pay a premium for locally grown produce²⁵.

Of significance, income and education levels were not associated with support for local agricultural products. Interest in local food cut across educational and income levels. This is not consistent with findings from New Jersey, where farm-direct market patrons were identified as having higher levels of education and higher incomes¹⁴.

Age was strongly associated with support for local food products. Middle age groups (30–45 and 46–64) were the

strongest supporters. Younger (21–29) and older (65–86) groups were the least supportive of local agriculture. This is similar to findings by Govindasamy and Nayga¹⁴, where most New Jersey farm-direct patrons were middle aged (36–50 years).

Although between one-third and one-half of the population shopped at some type of farm-direct market outlet at least once during the year, most consumers (94%) shop at supermarkets and shop once, or less, per week (69%). This presents a major challenge to marketers of local agricultural products. Buying local agricultural products generally involves an extra shopping trip, perhaps on a specific day of the week, to a specialized outlet. The expansion of the sales of these products does not represent the mere substitution of one good for another. It requires instead a change in shopping habits—a conscious decision by consumers to spend more time and probably more money on food.

In fact, consumers in this study indicated that the primary reasons they didn't buy local agricultural products were that these products were not available where they shopped or when they shopped. These findings are consistent with those of Kezis and associates²⁶, where inconvenience and 'none nearby' were the primary reasons consumers did not frequent farm-direct outlets. Lehman and associates¹⁶ found that as travel distance increases, the likelihood of frequenting a farm-direct market decreases. An Indiana study revealed, 'despite the desire to purchase local products expressed in our survey, consumers appear to be unwilling to incur the search and time costs involved in purchasing some of their food directly from the farm, or from and organized farmers' market'¹². In addition, The Hartman Group²⁷ demonstrated that consumers are interested in environmentally friendly food but desire products to be available conveniently.

How much support is there for local farm products? About 44% of the sample, according to the index variable for 'local' support, are strong or moderate supporters of local agriculture. As noted above, this group also cuts across education and income categories. This number is equally distributed between the study communities.

A key message for farmers is that within the 44% of consumers who support local agriculture, there are 18% of consumers who seem to be highly committed to accessing local food products. This means they are willing to forgo some convenience. However, the balance (26%) has a lower level of commitment to accessing local food. Increasing local food sales to this population may require new marketing strategies, such as increasing the level of convenience.

Although Albany and Corvallis are different socio-economically and politically, the two communities show equal support for local agriculture. The results indicate that there is potential for the development of more localized food systems in both communities. The high percentage of consumers who support local agriculture far exceeds the percent of consumers who currently patronize available

venues for purchasing local food, indicating potential for expansion of local farm-product markets. However, the type of products, their method of delivery and perhaps pricing will likely need to be tailored to fit the desires of each community.

References

- 1 Heffernan, W., Hendrickson, M., and Gronski, R. 1999. Consolidation in the Food and Agriculture System. Department of Rural Sociology, University of Missouri Columbia. Available at Web site <http://nfu.org/images/heffernan_1999.pdf> (verified 9 April 2004).
- 2 USDA. 1998. A Time to Act: A Report of the USDA National Commission on Small Farms. USDA, Washington, DC.
- 3 American Farmland Trust. 2001. Summary of Findings from a Nationwide Survey. Available at Web site <http://www.farmland.org/news_2001/survey_summary_statistics.pdf> (verified 17 May 2004).
- 4 Stephenson, G. 1997. Summary of a Needs Assessment of Southern Willamette Valley Small Farmers. Oregon State University Extension Service, Benton County.
- 5 Feenstra, G.W. 1997. Local food systems and sustainable communities. *American Journal of Alternative Agriculture* 12:28–36.
- 6 Feenstra, G.W. 2002. Creating space for sustainable food systems: lessons from the field. *Agriculture and Human Values* 19:99–106.
- 7 Kloppenburg, J.J., Hendrickson, J., and Stevenson, G.W. 1996. Coming in to the foodshed. *Agriculture and Human Values* 13:33–42.
- 8 Wackernagel, M. and Rees, W. 1996. *Our Ecological Footprint: Reducing Human Impact on Earth*. New Society Publishers, Gabriola Island.
- 9 Bruhn, C., Chapman, E., Vaupel, S., and Vossen, P. 1992. Consumer attitudes toward locally grown produce. *California Agriculture* 46:13–18.
- 10 Eastwood, D.B., Brooker, J.R., and Orr, R.H. 1987. Consumer preferences for local versus out-of-state grown selected fresh produce: the case of Knoxville, Tennessee. *Southern Journal of Agricultural Economics* 19:183–194.
- 11 Gallons, J., Toensmeyer, U., Bacon, R.J., and German, C.L. 1997. An analysis of consumer characteristics concerning direct marketing of fresh produce in Delaware: a case study. *Journal of Food Distribution Research* 28:98–106.
- 12 Jekanowski, M.D., Williams, D.R. II, and Schiek, W.A. 2000. Customers' willingness to purchase locally produced agricultural products: an analysis of an Indiana survey. *Agricultural and Resource Economics Review* 29:43–53.
- 13 North Central Initiative for Small Farm Profitability. 2001. *Attracting Consumers with Locally Grown Products*. University of Nebraska (Food Processing Center and Institute of Agriculture and Natural Resources), Lincoln, NE.
- 14 Govindasamy, R. and Nayga, R.M., Jr. 1996. Characteristics of farmer-to-consumer direct market customers: an overview. *Journal of Extension* 34(4). Available at Web site <www.joe.org> (verified 9 April 2004).
- 15 Rhodus, T., Schwartz, J., and Hopkins, J. 1994. Ohio Consumer Opinions of Roadside Markets and Farmers'

- Markets. Report of the Ohio Rural Rehabilitation Program. Ohio Department of Agriculture, Columbus, OH.
- 16 Lehman, J., Bacon, J.R., Toensmeyer, U., Pesek, J., and German, C. 1998. An analysis of consumer preferences for Delaware farmer direct markets. *Journal of Food Distribution Research* 29:84–90.
 - 17 Lockeretz, W. 1986. Urban consumers' attitudes toward locally grown produce. *American Journal of Alternative Agriculture* 1:83–88.
 - 18 van de Fliert, E. and Braun, A.R. 2002. Conceptualizing integrative, farmer participatory research for sustainable agriculture: from opportunities to impact. *Agriculture and Human Values* 19:25–38.
 - 19 Dillman, D.A. 1978. *Mail and Telephone Surveys—The Total Design Method*. John Wiley & Sons, New York.
 - 20 Salant, P. and Dillman, D.A. 1994. *How to Conduct Your Own Survey*. John Wiley & Sons, New York.
 - 21 International Fund for Agricultural Development. 2004. *Managing for Impact in Rural Development, A Guide for Project Monitoring and Evaluation—Glossary*. United Nations. Available at Web site <<http://www.ifad.org/evaluation/guide/annexa/a.htm#c>> (verified 25 May 2004).
 - 22 Gudeman, S. 2001. *The Anthropology of Economy, Community, Market, and Culture*. Blackwell Publishers, Inc., Malden, MA.
 - 23 US Census Bureau. 2000. 2000 Census Profiles for Oregon. Available at Web site <<http://factfinder.census.gov/servlet/BasicFactsServlet>> (verified 9 April 2004).
 - 24 State of Oregon Elections Division. 2000. 2000 General Election Statistical Summary. Oregon Secretary of State Office. Available at Web site <<http://www.sos.state.or.us/elections/elechp.htm>> (verified 17 May 2004).
 - 25 Govindasamy, R., Italia, J., and Thatch, D. 1999. Consumer Attitudes and Response Toward State-Sponsored Agriculture Promotion: An Evaluation of the Jersey Fresh Program. *Journal of Extension* 37(3). Available at Web site <www.joe.org> (verified 9 April 2004).
 - 26 Kezis, A., King, R., Toensmeyer, U., Jack, R., and Kerr, H. 1984. Consumer acceptance and preference for direct marketing in the Northeast. *Journal of Food Distribution Research* 15:38–46.
 - 27 Hartman Group. 1996. *Food and the Environment: A Consumer's Perspective. Phase I*. The Hartman Group, Bellevue, WA.