An Integrated Approach to Supplying the Local Table: Perceptions of Consumers, Producers, and Restaurateurs

Abstract
The Local Table project compared results from parallel surveys of consumers and restaurateurs regarding local food purchasing and use. Results were also compared with producers’ perception of, capacity for and participation in direct marketing through local venues, on-farm outlets, and restaurants. The surveys found consumers' and restaurateurs' most common expectations of local foods are that they be environmentally safe and sustainably produced and distributed—all socially-conscious reasons for their purchases. The study informs Extension educators by providing a snapshot of supply and demand for local food products across three distinct groups—producers, restaurateurs and consumers.

Dena Wise
Professor & Extension Specialist
The University of Tennessee Extension
Knoxville, Tennessee
dkwise@utk.edu

Christopher Sneed
Extension Agent II
The University of Tennessee Extension, Blount County
Maryville, Tennessee
csneed@utk.edu

Margarita Velandia
Assistant Professor
The University of Tennessee
Knoxville, Tennessee
mvelandia@utk.edu

Ann Berry
Associate Professor & Extension Specialist
The University of Tennessee Extension
Knoxville, Tennessee
aaberry@utk.edu

Alice Rhea
Farm Management Specialist
The University of Tennessee Extension
Knoxville, Tennessee
arhea@utk.edu

Ann Fairhurst
Professor
The University of Tennessee
Knoxville, Tennessee
fairhurs@utk.edu

Introduction
Farmers who grow food products constantly struggle to find optimum market outlets for those products. In recent years, increasing interest in locally grown food has shown promise for small-scale, niche markets that bypass the traditional large-scale distribution system. Though significant demand exists among society in general for locally grown products, there is limited infrastructure for market exchange among producers, retail outlets, and consumers. As a first step toward integrating supply of and demand for locally grown products, the project reported here (1) assessed consumer attitudes toward and purchasing behavior; (2) assessed restaurateur attitudes and purchasing; and (3) compared the findings with data about producers’ attitudes toward and participation in direct marketing through local venues such as farmers’ markets, Community Supported Agriculture (CSAs), on-farm outlets, and restaurants. The major goal of the project was to develop a framework for a
more holistic and comprehensive approach to market development. Specifically, learning from the project may:

- Help commodity groups better understand the attributes of local foods that appeal to consumers and frame marketing around those attributes
- Help establish linkages that lead to new production outlets
- Identify potential for entrepreneurial and local market development
- Expand Extension’s traditional educational clientele base to include restaurateurs

The project is unique in bringing together researchers from several fields of study to investigate factors affecting direct market outlets for locally grown foods. Collaborators in the project included The University of Tennessee Extension Consumer Economics and MANAGE (farm financial management) programs and the University of Tennessee Knoxville Department of Retail, Hospitality, and Tourism Management (RHTM).

Consumer data from 507 respondents across the state of Tennessee was collected through an online consumer survey in May of 2011. During that same time period, the project team engaged Extension Agriculture and Family and Consumer Sciences agents in 15 Tennessee counties in collecting data from 81 local restaurateurs. Consumer and restaurateur data was compared with data that had been obtained from a producer survey conducted earlier by an additional University of Tennessee unit, the Department of Agricultural and Resource Economics.

Local Food Systems

Increased consumer demand for locally grown foods, heightened concern over the safety of the global food supply, and a desire for profit maximization by farmers through direct-to-consumer selling have resulted in a substantial rise in direct-to-consumer marketing of farm products across the United States (Sneed & Fairhurst, 2010). Likewise, recent years have seen growing interest in local foods among researchers. A number of studies have focused on consumer perceptions of, attitudes toward, and motivation for purchasing locally grown food (Onken, Bernard, & Pesek, 2011; Bond, Thilmany, & Keeling Bond, 2008; Thilmany & Bond, 2008; Tropp 2008; Perez & Howard, 2007; Feagan & Morris, 2009; Darby, Batte, Ernst, & Roe, 2008; Atwood 2008). These studies found that although consumers’ primary reasons for preferring locally-grown food have to do with their perceptions that food is safer and of better quality, they are also motivated by their perception that they are supporting the local economy and promoting sustainability.

Other studies explored barriers faced by producers to local food marketing and distribution (Peterson, Selfa, & Janke, 2010; Eastwood, Brooker, Hall, Estes, Woods, Epperson, & Stegelin, 2004; Gregoire, Arendt, & Strohbehn, 2005). These studies found a variety of barriers, including market outlets and development, logistics, production volume, year-round supply, and pricing. In a 2005 survey (Gregoire, Arendt, & Strohbehn), Iowa producers identified support for local farmers, fresher food, shorter food miles, better quality, and knowledge of the food source as benefits of local food systems. In spite of the perceived benefits identified, the same study found that only 25% of
producers surveyed were actually selling to foodservice operations. According to the 2007 Census of Agriculture, farms selling directly to the consumer in Tennessee (where this project is being implemented) increased only slightly from 3,392 farms in 2002 to 3,582 farms in 2007. The value of Tennessee's consumer-direct products increased from $11,227,000 to $15,380,000 (USDA, 2007).

While some states have developed coordinated marketing channels on a regional level, other states continue to rely on local initiatives, independent site-selection and smaller volume outlet activities. Eastwood et al. (2004) found that Tennessee (where this project is being implemented) relied more heavily on wholesale markets than on direct sales. The Eastwood study also found that, relative to surrounding states, Tennessee produced less critical mass of grower activity in response to demand for local produce.

Within the restaurant industry, the role and scope of locally produced foods has also increased over recent years. In responding to demand from consumers, restaurants have moved beyond the supply chain benefits of local sourcing. They now create specific menu items highlighting local ingredients as a point of strategic competitive advantage. Ensuring that seasonal products are highlighted, chefs in restaurants are capitalizing on younger, more health-conscious guests by offering products that are fresh, of high quality, and perceived to have a lower environmental impact (Ruggless, 2008).

Of particular importance is the relationships established between the restaurants and the local farmers. With constant year-round demand by the restaurants, farmers can make changes to their growing practices, adding greenhouses and other techniques to extend fresh produce supply (Halweil, 2002). Finally, in support of these initiatives by restaurants, websites such as [http://eatwellguide.org](http://eatwellguide.org), [http://localharvest.org](http://localharvest.org), and [http://dinegreen.com](http://dinegreen.com) allow consumers to search, before dining out, for establishments that use locally produced food.

**Extension and Local Foods**

Extension professionals have taken leadership in efforts to integrate local food production and consumption in a number of states. Their efforts have included discussion of Extension's role in the local food movement (Raison, 2010) and research on attitudes and perceptions of Extension educators themselves (Thomson, Radhakrishna, Maretzki, & Inciong, 2006; Thomson, Radhakrishna, & Bagdonis, 2011). Researchers have used analytical tools to project the economic impacts of differing local food development scenarios (Sharp, Clark, Davis, Smith, & McCutcheon, 2011) and estimate capacity for local food marketing (Timmons, Wang, & Lass, 2008). Extension educators have developed restaurateur-producer networks (Curtis, Cowee, Haervcamp, Morris, & Gatzke, 2008); recruited local partners to develop action plans for community food systems (Conner, Cocciarelli, Mutch, & Hamm, 2008); and implemented neighborhood food equity programs (Ohri-Vachaspati, Masi, Taggart, Konen, & Kerrigan, 2009). In addition, Dougherty and Green (2011) surveyed restaurateurs, producers, and tourists to investigate the role of word-of-mouth information in food tourism.

In spite of growing interest, the field has yet to develop comprehensive frameworks and a methodical research approach. Regarding facilitation and program development, best practices for production, distribution, marketing, and consumer education are not yet well established. It does appear clear, however, that appropriate markets structures need to be developed at the local and/or
regional levels to coordinate and integrate production and distribution with retail and consumer demand. In view of creating a long-term sustainable market structure that would positively affect economic viability for farms, information is needed for benchmarking and educational needs assessment.

An additional question posed by Raison (2010) is the nature of Extension's role in the local foods movement. Is it appropriate for Extension educators to concern themselves only with traditional teacher-to-client program delivery, or should they also facilitate community capacity-building? In order to answer this question, Extension educators must have a clearer vision of where each path might lead them. Raison's conclusion implies we must do a little of both (p. 4). "We must continue to function as educators, but we don't simply impart data from on high. Instead, we need to become better partners. We need to come alongside and facilitate helping communities discover the knowledge and talent and expertise that exists within their group. Then, we need to help them develop it."

The project reported here is a next-step toward realizing Raison's vision of the dual role Extension educators can play as educators and facilitators. Results from the study will be used to inform the body of knowledge of direct-to-consumer and locally grown foods marketing. They can be used to devise educational strategy for facilitating inter-disciplinary development. Long term, however, the project team hopes that the findings will provide a framework to develop efficient market infrastructure for locally grown food products and increase profitability for Tennessee farms producing food products for the local market.

**Methods**

The decision to engage University of Tennessee Extension agents in data collection and dissemination within their own counties is based on the access agents have to local producers and restaurateurs and on the trust relationships already established within the local environment. In Tennessee, county-based Extension educators serve as important sources of research-based information in their communities. In addition, in many counties the agents have visible roles in local economic and small business development. According to Eastwood et al. (2004), 77% of producers use Extension as their primary source for information related to crop production. Tennessee agents reported market development was one of the top five topics on which producers solicit information, but Tennessee agents indicated they had provided limited information to clientele on direct selling to restaurants (Eastwood et al., 2004). Engaging Extension agents in the project leveraged their access and community visibility to improve survey response rates and will create credibility for their local networks for distribution of educational information and market development in the future.

The original intent of the project team was to solicit separate but parallel surveys for consumers, restaurateurs, and producers. However, after discovering colleagues in the University of Tennessee Department of Agricultural and Resource Economics had recently conducted a survey (with very similar objectives) of the population of fruit and vegetable producers across Tennessee, arrangements were made to access their data for producer information. Survey data came from the entire population of fruit and vegetable producers in Tennessee, as determined by the United States Department of Agriculture’s National Agricultural Statistics Service (USDA/NASS). The survey, a cover
letter explaining the importance of the survey, and a postage paid return envelope were mailed to Tennessee's 1,954 fruit and vegetable producers in early February and followed up with reminder post cards; a second wave of surveys was sent to those producers who had not responded in March. Of the surveys mailed, 587 were completed and returned, for a response rate of 30%. The survey included an array of questions regarding outlets used to market produce, how producers define a "local" market, barriers producers face when marketing their products, awareness and participation in state-sponsored marketing programs, and farmer/farm business characteristics. A number of parallel questions from the producer survey were incorporated into the consumer and restaurateur surveys.

Data was collected from Tennessee consumers using a consumer panel identified by a marketing research firm, with 569 respondents beginning and 507 completing the entire survey. A consumer panel is a pre-recruited group of consumers agreeing to participate in market research concerning either specific products or general spending patterns over time. Consumer panels are becoming increasingly used as an efficient way to collect consumer data. The consumer survey included the respondent's perception of the characteristics of locally produced food and its appeal to the respondent, under what circumstances the respondent might or might not want to purchase locally produced foods, respondent household's patterns regarding patronage of restaurants (frequency, type and pricing), specific food products at home or on a restaurant menu that the consumer might prefer to have locally produced, concerns about using specific local products, respondent's current patterns of local food purchasing, awareness of local food outlets, and demographic information on the respondent.

Restaurateur data was collected from 81 respondents through surveys administered face-to-face by Extension staff members or volunteers in 15 counties across the state. The restaurateur survey included information on the type and size of the establishment, the role of the respondent, the respondent's perception of the characteristics of locally produced food and its appeal to restaurant customers, under what circumstances the respondent might or might not want to purchase locally produced foods, specific food products the restaurateur might be interested in purchasing locally, concerns about using specific local products, awareness of local food outlets, and demographic information on the respondent.

Results

Findings from the surveys provide intriguing clues to what might be needed to achieve a more functional local food system.

Perceptions and Circumstances

Consumers and restaurateurs had similar perceptions regarding the growing region encompassed in the term "local." Thirty-three percent of restaurateurs and 37% of consumers surveyed agreed that "local" best fit food produced within 50 miles of their location or residence. More commonly, producers defined local as produced in the county where the produce is sold (52%), but of the 24% of producers who specified a number of miles produce should be sold from where it is grown to be called "local," the average number of miles was 56.
Likewise, consumers and restaurateurs agreed on their most significant expectations of locally-produced foods: That it be environmentally safe (restaurateurs 69%, consumers 68%), that it be produced and distributed in a sustainable way (restaurateurs 53%, consumers 61%), and that it be produced in a socially responsible manner (restaurateurs 59%, consumers 58%).

Although they differed somewhat in degree, both restaurateurs and consumers generally agreed on their most important reasons for purchasing local food. (Table 1.) The most important reasons appeared to be related to social responsibility. (Factors were not included in the table below if less than 70% of either restaurateurs or consumers somewhat or strongly agreed. Those less important factors were generally related to convenience and cost.) The most obvious exception to the parallel responses from restaurateurs and consumers is that restaurateurs are much more likely than consumers to perceive that purchasing locally grown products can help build a more sustainable economy. Rather than disagreeing with that statement, many consumers (41.5) were apathetic—indicating that they neither agreed nor disagreed. That “sustainability” itself may be an ambiguous concept to many consumers could help explain that difference.

Table 1.
Restaurateurs’ and Consumers’ Primary Reasons for Purchasing Locally Grown Food

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<th>Percent of Restaurateurs Who Somewhat or Strongly Agree</th>
<th>Percent of Consumers Who Somewhat or Strongly Agree</th>
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<tbody>
<tr>
<td>Purchasing locally grown products can help build a more sustainable economy.</td>
<td>87.7</td>
<td>44.0</td>
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<td>It is important that more locally grown food products be made available for purchase.</td>
<td>85.2</td>
<td>77.6</td>
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<td>I can have a positive effect on society by purchasing from retailers selling food produced in a socially responsible way.</td>
<td>81.5</td>
<td>71.9</td>
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<td>I believe the use of locally grown food is healthy for the environment.</td>
<td>77.8</td>
<td>78.5</td>
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<td>I am worried that local farms are going out of business because most food purchased in grocery stores is grown on larger, faraway farms.</td>
<td>72.8</td>
<td>74.5</td>
</tr>
<tr>
<td>I believe that locally grown food is healthier to eat.</td>
<td>70.4</td>
<td>69.2</td>
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In addition, 85.2% of restaurateurs somewhat or strongly agreed that they would use more local food products if there were an easy way to get them; 82.7 indicated they would use more local food products if someone would deliver them to their door; 81.5% said that they would use more local food products if they could be assured of a consistent supply; 79.0% agreed that they would use more local food products if they had a connection with a farmer or supplier; 75.3% somewhat or strongly agreed that to save time, they would need to be able to purchase most of their food at one time and in one location; and 70.4% somewhat or strongly agreed that they were always on the lookout for local food products to use at their restaurants.

Consumers also indicated that to save time they needed to be able to purchase most of their food at one time and in one location (72.8% agreeing). Consumer responses indicated they were slightly more likely to purchase locally grown foods from a farmers' market or roadside stand if it were on their way home from work (69.0% agreeing this was likely) than making those purchases on weekends or on vacation (64.4% agreeing this was likely). In addition, 74.1% of consumers surveyed agreed that they would like for their favorite local restaurants to use locally produced foods.

**Locally Grown Product Purchases and Preferences**

The most often mentioned products that consumers would be more likely to order at a restaurant if they were locally produced were fresh salad ingredients, vegetables, and fresh fruit. Likewise, restaurateurs most often responded that they either currently purchased fresh salad ingredients, vegetables, and fresh fruit locally or would serve more of those ingredients if they could purchase them locally. Other products that restaurateurs indicated that they would serve more if they could purchase them locally included chicken, ham, pork roast or chops, eggs, bacon or sausage, cheese, and dessert items.

Both restaurateurs (56.8%) and consumers (70.4%) reported most often making local food purchases at farmers' markets. Restaurateurs and consumers reported also purchasing local food products at national grocery stores (restaurateurs 28.4%, consumers 66.5%) and warehouse clubs (restaurateurs 24.7%, consumers 15.6%). In addition, restaurateurs reported making local food purchases directly from the farmer (53.1%) and through food brokers (18.5%).

**Marketing**

In spite of the enthusiastic support indicated for locally grown foods by both consumers and restaurateurs, there was little evidence of awareness generated through deliberate market channels, including those by state government and commodity groups. Consumers indicated that they preferred to know which restaurants serve locally grown food by (1) indication on the menu and (2) signs outside the restaurant. The third choice was seeing paid advertisements in print or broadcast media. In spite of the consumer survey being conducted online, only 25% of the online respondents preferred to receive information about where to purchase local foods through electronic or social media. Though a number of restaurateurs—more than 25%—were aware of current farm to table programs, only about one in 10 use those services to locate locally grown food products. About the
same number of restaurateurs use newspaper advertisements to locate locally grown products. Even fewer use social networks and producer websites. These findings support those of Dougherty and Green (2011)—that word of mouth is key in interlinking local food producers and market outlets.

**Implications**

The project emphasizes the complex nature of the local food system and the need for Extension professionals to engage a wide cross-section of stakeholders in addressing local foods issues. These include not only traditional stakeholders such as commodity and agricultural groups and consumers, but also restaurateurs and food broker/distributors—groups typically not included in direct marketing models.

The project also illustrates the advantages of an integrated research-Extension approach to local food issues. A team of both research and Extension professionals were involved in project planning, with researchers contributing theoretical frameworks and Extension professionals focusing on applied components. Local Extension educators assisted with data collection.

Findings listed below allow Extension educators to more precisely target and focus educational efforts. The results discussed in this article make it evident that there is untapped market enthusiasm among both restaurateurs and consumers for locally produced foods. Extension educators may capitalize on this enthusiasm. Restaurateurs are eager to access locally grown food and incorporate it into their menus, particularly if they can conveniently obtain those food products. Restaurant patrons are eager for their favorite restaurants to add locally produced products to their menus. Marketing messages need to reinforce the strongly held positive perceptions among restaurateurs and consumers regarding local foods. Knowing that consumers may use signs and printed media to locate restaurants serving local foods may help restaurateurs prioritize advertising and use advertising money more efficiently. Additionally, understanding what information sources are more effective when connecting restaurateurs and local farmers may help Extension to improve current farm to table programs.

There is evidence that such product preference assessments as were conducted with restaurateurs in the survey may be helpful in identifying marketing niches for specific locally grown products and connecting suppliers with outlets. Extension educators may facilitate these connections by performing similar assessments of product demand with restaurateurs in their own communities.

The results also indicate that more appropriate distribution models are critical for tapping into the market enthusiasm for local foods on an appropriate scale. Both restaurateurs and consumers indicated that they wanted more convenient ways to purchase locally grown foods. Because producers also indicated concerns about the quantities they produced being too small to market through direct sales to consumers (31.8%) or to retail outlets (25.6%), some cooperative arrangements for sales and distribution are needed. Although very few restaurateurs used food foragers, that option—more prevalent in urban areas—may need to be made available on a wider basis. (A food forager is an individual responsible for searching for local food producers and connecting these producers with buyers such as restaurateurs or retail outlets.) Extension educators may facilitate these more targeted and precise distribution models.
Finally, it is important for Extension educators to reinforce relevant traditional marketing tools to increase awareness about locally grown foods among consumers and restaurateurs. Knowing that consumers may use signs and printed media to locate restaurants serving local foods may help restaurants to use advertising more efficiently. Additionally, understanding what information sources are more effective when connecting restaurateurs and local farmers may help stakeholders to improve current farm to table programs to better accomplish this goal.

Presentations are being prepared for county Extension educators to deliver to producers and restaurateurs across Tennessee on the findings of the study and implications for their businesses. Through a partnership with professional food marketers and distributors, more effective local and regional distribution options are being explored. Much additional data to that discussed in this article was collected in the project reported here, and as it is analyzed, researchers will continue to make it available to the Extension community.

References


