

Suburbanites' Perceptions About Agriculture: The Challenge for Media

Joan S. Thomson
Rochelle E. Kelvin

As urban dwellers become more isolated from the original sources of their food, their dependence on agriculture becomes less vivid. Information from a recent study documented how consumers in Southeastern Pennsylvania view themselves in the context of their food system and the importance they place on sustaining regional agriculture. This article then discusses the role of mass media in helping the public understand issues relating to regional and sustainable agriculture at the rural/urban interface.

Introduction

The concept of "sustainable agriculture," in which food and fiber can be produced indefinitely and justly while regenerating the natural environment, is the subject of much discussion in the agricultural and research communities. Little, if any, evidence exists, however, that the general public identifies with the principles of sustainable agriculture, let alone the relationship of specific production practices to future agricultural productivity or availability of food.

Today, as urban dwellers become more and more isolated from the original sources of their food, their dependence on

Joan S. Thomson, an ACE member, is associate professor of rural sociology, Department of Agricultural and Extension Education at The Pennsylvania State University; Rochelle E. Kelvin was project leader, Metro-Farmer Networks, Rodale Institute. This research was funded by the Cooperative State Research Service through the Penn State/Rodale Institute SANRUE (Sustaining Agriculture and Natural Resources in Urbanizing Environments) Center and RISA (Regional Infrastructure for Sustaining Agriculture), a collaborative project funded by the W.K. Kellogg Foundation. Information in this article was presented at the 1996 U.S. Agricultural Communicators' Congress in Washington, D.C.

agriculture becomes less vivid, and agriculture becomes of peripheral importance to their own, more immediate needs (Merrill, 1988). Despite this change in perception, urban communities do, in fact, depend on agriculture. Consequently, a change in the availability of land and natural resources, skilled farmers, viable rural communities, and agricultural support services may have long-term implications for the quality of urban life.

Individuals must perceive an issue is important to them personally before they decide to become involved with it. As the public has less first-hand knowledge and experience with an issue, the more likely they are to look to generalized mass media for information about that issue (Ball-Rokeach and DeFleur, 1976). Through the media, the public acquires its understanding of such issues. Once individuals begin to understand issues, they can then seek the knowledge, skills, and capabilities to address topics of concern. At the community level, media will be a necessary, but not sufficient, condition in whether or not agriculture is retained at the rural-urban interface. Access to information does not ensure attention to an issue. However, such information is essential if the public is to become aware of an issue and wants to understand and address it within the community. Nevertheless, only a relatively small proportion of the general population participates regularly in the policy process (Dietz and Rycroft, 1987). Thus, those involved should reflect local interests and trends. Understanding the interconnectedness of the issues of a sustainable food system from the field to the consumer is one challenge which media can help the public understand.

The objective of this study was to understand how consumers in Southeastern Pennsylvania view themselves in the context of their food system and the importance they place on sustaining regional agriculture. Southeastern Pennsylvania reflects the delicate balance unique to areas that combine a rural atmosphere with urban convenience. The amenities of both environments make the region an attractive place to live and work.

Documenting Consumer Perspectives

During a four-week period between mid-September and mid-October, 1993, 1,214 consumers were interviewed in 23 different markets in 8 counties in Southeastern Pennsylvania.

Interviews were conducted in three different types of markets— independent supermarkets, chain supermarkets, and farmers' markets. At each market, interviews were conducted in-store during two different time blocks in the same week. The intent was to maximize the mix of shoppers surveyed, yet minimize the likelihood of reinterviewing the same individual. Interviews were carried out in or near the produce section of the market; each interview took from 5 to 15 minutes. For each store visit, two interviewers conducted up to 18 interviews each.

The survey consisted of three major components. The first questions consumers were asked were structured to provide respondents with multiple opportunities to mention a preference for locally grown foods and/or an interest in knowing how the fresh fruits and vegetables (produce) they purchase were grown. The second component involved a series of "agree or disagree" statements regarding various economic, social, and environmental issues relating to farming and the food system in Southeastern Pennsylvania. In the final section, respondents were asked to provide demographic information. Although the results of this study are limited to the population interviewed, this project provides the first systematic information on perceptions about regional agriculture in Southeastern Pennsylvania from those who live in Southeastern Pennsylvania. And the number of consumers interviewed is substantially greater than that for previously conducted similar studies in other regions of the United States (Bruhn, Vossen, Chapman, and Vaupel, 1992; Lockeretz, 1986).

Results

Demographic Profile of Population

Among the 1,214 consumers interviewed, 7 of 10 (71.6% of 1,183) had the primary responsibility for buying food for their households and 7 out of 10 were female (70.5% of 1,183), similar to other findings (Progressive Grocers, 1992). Respondents reflected a mix of educational attainment. Over 54% had some education beyond high school; approximately one-third had completed high school; another 15% had less than a high school education.

The income distribution among consumers surveyed covered a wide range; one in five lived in a family earning less than \$20,000 in before tax income during 1993 while one in four was part of a family whose income totaled \$50,000 or

more during the same year. Most of the consumers surveyed ranged in age from 30 to 49 (46.8% of 1,187); one-fourth were 60 or older.

More than 16% of those surveyed identified themselves as a racial minority. In fact, the study population was more diverse than the population of the Commonwealth. Pennsylvania's population is 87.7% white non-Hispanic and 9% is Black non-Hispanic (U.S. Department of Commerce, 1992).

Consumer Preference for Locally-Grown Produce

After agreeing to be interviewed, the first question each consumer was asked was: When buying fresh fruits and vegetables, what is important to you? As an open-ended question, no prompts or other cues were provided. Consequently, responses reflected the first thoughts that the respondents verbalized. Regardless of the market-type in which consumers were interviewed, freshness was the most frequently mentioned characteristic, 29% of all responses. The intent of this initial question was to ascertain if, and with what frequency, respondents would, on their own, indicate locally grown as an important characteristic—few among them did but those who did so were more often interviewed at farmers' markets.

In the second open-ended question, respondents were asked to identify where they most often buy their fresh fruits and vegetables and their reasons for doing so. Respondents were considered to have indicated a strong preference (9.9% of 1,214) for locally grown produce if "locally grown" or "Pennsylvania grown" or "want to support local growers/farmers" was mentioned when asked either of these two initial open-ended questions (Table 1).

TABLE 1:

Preference for locally grown produce (N=1,214).

Opportunity	N	Percent	Preference
Opp 1: No prompt	50		
Opp 2: No prompt	70	9.9%	Strong
Opp 3: Indirect prompt	308		
Opp 4: Direct prompt	490	25.4	Moderate
		40.3	Weak
Total expressing preference	918	75.6%	

A third question introduced the concept of origin in their purchasing decisions. This question asked, Does it make any difference to you where the fresh fruits and vegetables you buy are grown? If yes, What difference does it make? Respondents were considered to have a moderate preference (25.4% of 1,214) for locally grown produce if they mentioned "locally grown" after being prompted about the importance of origin.

Finally, respondents were given a direct opportunity to mention a preference for locally grown foods. They were asked, "If you knew the markets where you shop sold locally grown fresh fruits and vegetables, would you be more interested or less interested in shopping there, or would it not make a difference?" At this point, respondents were considered to have a weak preference (40.3% of 1,214) for locally grown produce if they responded "more." Respondents were considered to have no preference if they indicated that it would make no difference to them if a market at which they shopped sold locally grown produce or that they would, in fact, be less interested in shopping there, or they did not respond to the question (296 respondents; 24.4% of 1,214).

Although three-quarters of the population interviewed expressed some preference for locally grown produce, the preference was generally weak. Less than 10% volunteered in open-ended questions that purchasing locally grown produce was an important factor in their decision-making process. Yet most consumers offered no reasons (78% of 1,299 responses) why they would not buy locally grown produce.

Preference for Knowing How Produce Is Grown

A similar strategy was used to determine if a preference existed among consumers for knowing how the produce they buy was grown. This time respondents were given three opportunities to express a preference. Even fewer expressed any preference for knowing how their food was grown (Table 2).

Again, when asked the initial two open-ended questions regarding what is important to them when buying produce, the opportunity existed for respondents to mention that they wanted to know "how produce is grown." In the first open-ended opportunity, 5.8% of respondents mentioned this preference. In the second open-ended opportunity, an additional

TABLE 2:*Preference for knowing how food was grown (N=1,214).*

Opportunity	N	Percent	Preference
Opp 1: No prompt	70	7.0%	Strong
Opp 2: No prompt	15		
Opp 3: Indirect prompt (citing actual production practices)	611		
Direct prompt (uncertain as to production practices)	18	1.0	Weak
Total expressing preference	714		58.8%

1.2% mentioned this preference. In total, only 7% percent of the study population had a strong preference for knowing how the produce they purchased was grown. Most often, these responses were in reference to the use of or lack of use of agrichemicals by farmers.

The third opportunity was a direct prompt, asking "Is it important to you to know how the fresh fruits and vegetables you are buying were grown?" When asked directly, an additional 51.8% of the respondents answered "yes." When a follow-up question, "What information are you interested in knowing?" was asked to gauge the strength of this preference, two types of answers resulted and were categorized as moderate or weak preferences. A respondent that cited an actual production practice was considered to have a moderate preference (50.8%). Respondents that expressed they were uncertain as to what type of information they would like were considered to have a weak preference for knowing how their food was grown (18 respondents).

Perceptions about Agriculture in Southeastern Pennsylvania

When asked, most consumers indicated that yes, they are concerned about keeping farms in Southeastern Pennsylvania (95% of 1,207). Respondents next expressed the extent of their concern. Most indicated that they were "somewhat" or "very" concerned (90.5% of 1,144). Among these individuals, "don't want more housing development" was the concern most

frequently voiced (33.4% of 1,569 concerns expressed). Almost as many indicated that they considered keeping profitable farms, family farms, and farmland important (31% of 1,569 concerns expressed).

Consumers were then asked a series of questions about farming in Southeastern Pennsylvania. Their responses reflect the dilemmas facing agriculture today. Although consumers perceived that "farming creates many jobs" (78% of 1,205), they did not perceive that the "children of today's farmers...are likely to continue farming," (29% of 1,201) (Table 3). Yet their responses implied that farming should be retained, for they perceived that we can't (57% of 1,198) always rely on getting "food from other places." They also perceived that their purchasing patterns do influence farming (81% of 1,204) as well as the food choices available in the market (82% of 1,205).

Close to two-thirds of those interviewed perceived that the produce available in the store "is safe to eat." However, a majority did not agree (53.3% of 1,200), that "pesticides are necessary to grow food." For these statements as well as for the statements on the effect farming has on "drinking water quality" and the role of the government in regulating the environmental impact of farming, anywhere from 10 to 20% did not choose to respond to the statement (Table 3). Such significant numbers of nonrespondents as well as the lack of specificity in the terminology respondents used to articulate their perspectives suggest that today's consumers have limited knowledge about the food system and how it may or may not impact on their individual lives. Although they indicated that their choices influence what food is available, it seems as though they really didn't know how.

The Challenge for Media

Media can be most effective when they understand their targeted audiences. Today's consumers have increasingly moved away from the intimate relationship their forefathers had with the land. This study suggests that many consumers:

- Are not knowledgeable about the relationship between the food and the land; for example, the difference between valuing land for the open space it provides vs. the goods it produces;

Table 3.*Consumers' perceptions about agriculture in Southeastern Pennsylvania.*

	N ¹	SA/A ²	D/SD ³	DK ⁴
Socio-economic issues				
• Farming creates many jobs, both on and off the farm, in SE PA.	1205	78.0%	12.5	9.5
• Children of today's farmers in SE PA are likely to continue farming.	1201	28.7%	59.5	11.7
• I influence what is in the grocery store by what I buy.	1205	81.9%	13.8	4.4
• I influence farming in SE PA by the foods I buy.	1204	81.4%	11.7	6.9
• I think the fruits and vegetables available in stores are safe to eat.	1205	65.1%	16.7	18.1
Perceptions about regional agriculture				
• I enjoy seeing open farmland in SE PA.	1202	98.4%	0.8	0.8
• I have a say in the way land is used and developed in my community.	1206	49.0%	43.4	7.7
• We don't need to rely on farms in SE PA for food because we can always get food from other places.	1198	40.7%	57.2	2.1
• Most of the fruits and vegetables we eat in PA are grown in PA.	1195	20.8%	61.7	17.6
Environmental issues				
• Price we pay for food includes the impact of farming on the environment.	1189	63.5%	15.9	20.5
• Farming affects the quality of drinking water.	1204	61.4%	18.3	20.2
• Government agencies regulate farming in order to protect the the environment for future generations.	1202	44.0%	39.3	16.6
• Pesticides are necessary to grow food.	1200	36.4%	53.3	10.3

¹N=Number of consumers responding²SA/A=Strongly agree/agree responses combined³D/SD=Disagree/strongly disagree responses combined⁴DK=Don't know or undecided

- Lack language to discuss the complex issues associated with sustaining a food system;
- Express a diversity of perspectives regarding issues related to farming and the food system;
- Do not express strongly held opinions about locally grown produce or how such produce is grown; yet
- Believe their buying practices influence farming in the region and what is available to purchase.

Agriculture is changing. But if it is to remain at the rural/urban interface will be determined by those within the region. The development of a marketing infrastructure to support a sustainable food system within a region is contingent upon communications among all of those involved in the production, processing, distribution, and consumption of food. Yet the reality is that when the public has less knowledge and experience regarding an issue, they are more likely to rely on general mass media for information on that issue (Ball-Rokeach and DeFleur, 1976). As such, media, particularly mass media within the region, will be among the public's primary sources of information about the relationship between the food they purchase and issues relating to regional agriculture. It is both a challenge and opportunity for the media as well as for those who supply the media information to use.

Communities at the rural/urban interface will often have multiple local general media outlets—radio and magazines as well as newspapers. To attract market share, the primary focus of each will be local people and issues. For these media to become involved in a community issue, they must perceive that maintaining a sustainable food system locally is an issue in which the public wants them to be involved.

Yet to maintain a sustainable food system within a region, the public must see beyond the value of open space to the "value-added" for themselves as well as for the grower through an economically viable food system. All issues have a local impact. Consumers, as individuals, will more likely become engaged in an issue when they perceive it is important to them personally; that implies understanding.

Media can introduce the public to the words and issues involved.

Specifically, mass media can:

- Explore the tenuous connection between land and food, including the natural resource costs of production;
- Explore the complexity of issues, exploding the paradox of different perspectives;
- Help the public acquire the language to discuss the issues; and
- Move the community to action, providing the forum through which the community can determine its desired future.

Media, particularly mass media, can assure that the dialogue begins.

References

- Ball-Rokeach, S. J. & DeFleur, M. L. (1976). "A dependency model of mass-media effects." *Communication Research*, 3(1), 3-21.
- Bruhn, Christine M., Vossen, Paul M., Chapman, Erin, and Vaupel, Suzanne (1992). Consumer attitudes toward locally grown produce. *California Agriculture*, 46(4), 13-16.
- Dietz, T. M., & Rycroft, R. W. (1987). *The Risk Professionals*. New York: Russell Sage Foundation.
- Lockeretz, William (1986). Urban consumers' attitudes towards locally grown produce. *American Journal of Alternative Agriculture*, 1(2), 83-88.
- Merrill, Margaret (1988, January). Some philosophical prerequisites for a sustainable agriculture. In P. Allen & D. Van Dusen (ed.), 83-91. *Proceedings of the Sixth International Conference of International Federation of Organic Agriculture Movements*. University of California at Santa Cruz.
- Progressive Grocers (1992). *Marketing Guidebook*. New York: Grocers Association.
- U. S. Department of Commerce (1992). *1990 U.S. Census of Population and Housing Area Classifications*. Economics and Statistics Administration, Bureau of the Census, U. S. Government Printing Office, Washington, DC.