

6-16-2022

## Facilitators and Barriers to Farmers' Market Use in a Rural Area

Soghra Jarvandi

*University of Tennessee Extension*, sjarvand@utk.edu

Kristen Johnson

kristen.johnson@utk.edu

Karen Franck

kfranck@utk.edu



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

---

### Recommended Citation

Jarvandi, S., Johnson, K., & Franck, K. (2022). Facilitators and Barriers to Farmers' Market Use in a Rural Area. *The Journal of Extension*, 60(2), Article 8. <https://doi.org/10.34068/joe.60.02.08>

This Research in Brief is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact [kokeefe@clemson.edu](mailto:kokeefe@clemson.edu).

---

## Facilitators and Barriers to Farmers' Market Use in a Rural Area

### Cover Page Footnote

This publication was supported by cooperative agreement no. NU58DP006558 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the US Department of Health and Human Services. Authors thank the project team, especially County Extension staff for their work. We also thank county residents who participated in this study for their contributions and insights.

# Facilitators and Barriers to Farmers' Market Use in a Rural Area

SOGHRA JARVANDI<sup>1</sup>, KRISTEN JOHNSON<sup>1</sup>, AND KAREN FRANCK<sup>1</sup>

AUTHORS: <sup>1</sup>University of Tennessee Extension

**Abstract.** Farmers' markets may improve access to healthful foods in rural areas. Our objective was to identify facilitators and barriers to farmers' market use in a rural county. We collected data via surveys, focus group sessions, and key informant interviews. Study participants identified the two existing farmers' markets as community assets. Barriers to use farmers' markets included inconvenient market hours, not accepting nutrition assistance program benefits, limited transportation, and limited variety. Interventions to improve food access should include ways to meet the needs of specific populations such as low-income residents and residents living in outlying areas without farmers' markets.

## INTRODUCTION

Consuming a healthful diet and engaging in physical activity are critical for prevention and management of obesity and chronic conditions. Factors that influence dietary choices include individual, social, physical, and environmental (Story et al., 2008). Examples of environmental influences associated with obesity include areas with limited access to grocery stores (food deserts) and areas with a high presence of fast food and junk food (food swamps) (Cooksey-Stowers et al., 2017).

The use of farmers' markets offers a promising strategy for improving food environments to increase access to healthful foods. Previous studies have shown that farmers' market use is associated with increased intake of fruits and vegetables both among different populations (AbuSabha et al., 2011; Freedman et al., 2013) and in rural communities (Pitts et al., 2014). A systematic review of facilitators and barriers to farmers' market use found several influences on shoppers' decision to utilize markets, including economic, spatial, social, and personal factors as well as factors in service delivery (Freedman et al., 2016). Some consumers view farmers' markets as opportunities to socialize and support local communities and as a source of good quality foods. However, other consumers identify barriers to using markets, such as inconvenient locations and hours of operation (Freedman et al., 2016).

The benefits of farmers' markets extend beyond the consumer to communities and producers (Abel, et al., 1999). Despite these benefits, questions remain about whether farmers' markets are accessible to all individuals (Byker

et al., 2013). An analysis of farmers' markets in the United States found that markets are not frequently located within food deserts, but are located in geographic areas with higher socioeconomic status and a higher proportion of white residents (Schupp, 2019). In addition, limited income consumers experience several barriers to use farmers' markets, including not being able to use nutrition assistance program benefits at farmers' markets and limited transportation (Freedman et al., 2016).

With expertise in family and consumer sciences, agriculture and natural resources, and community economic development, Extension is well-poised to engage community members to identify needs and employ interventions that increase accessibility to farmers' markets for all (Civittolo, 2012). Extension's broad reach and community connections within rural and urban areas ensure that existing and newly formed farmers' markets meet the needs of communities, producers, and all community residents (Abel et al., 1999). The objective of the study described in this article was to utilize Extension's expertise and partnerships in a rural Tennessee county to identify facilitators and barriers to farmers' market use among residents.

## METHODS, STUDY, POPULATION, AND SETTING

We used data collected in an obesity prevention program, Hardeman Healthy Outreach (H2O) for Healthy Weight, led by University of Tennessee Extension in Hardeman County, Tennessee. We refer to this program as "H2O" in short. H2O is a community-based project funded by the Centers for Dis-

ease Control and Prevention (CDC) High Obesity Program (HOP). HOP projects target counties with adult obesity rates of 40% or higher using environmental and systems level changes to improve access to healthful foods and increase physical activity.

In 2019, H2O conducted a comprehensive needs assessment to identify community challenges and facilitators for healthful behaviors within each of the nine communities (eight incorporated and one unincorporated towns) in the county, which has a total population of 25,050. For this paper, we included only data related to farmers' market use in the county.

### PROCEDURE

The institutional review board for human subjects at the University of Tennessee approved the study protocol. We used several methods to collect data, including surveys, focus groups with county residents, and interviews with key informants. County Extension staff worked to identify, engage, and convene a steering committee consisting of leaders from each community and representatives from the county hospital, the health department, and the school system. Steering committee members helped recruit adults to complete the survey and to participate in focus group sessions. Extension staff identified and recruited professionals for key informant interviews. Focus group sessions lasted for about one hour, and key informant interviews lasted for about 30 minutes.

### MEASURES

The survey consisted of questions about access to healthful foods, including a question about whether or not respondents shopped at farmers' markets located in the county. If

respondents answered "no," a follow-up question was asked about the reasons for not shopping at farmers markets. For the focus group sessions and key informant interviews, we developed open-ended questions to engage participants and promote discussions about healthful behaviors.

### DATA ANALYSIS

We analyzed survey data using descriptive analysis. We audiotaped and transcribed focus group sessions and made detailed notes for the key informant interviews. We analyzed qualitative data through content analysis, using NVivo version 10 to mine the data, create categories, and tag the data (Cresswell, 1998). We used an open coding approach to create and then aggregate the categories (Cresswell, 1998; Krueger, 2014). Two authors (SJ and KF) independently coded the transcripts, then jointly reviewed their findings and discussed any discrepancies to reach consensus.

## RESULTS SURVEYS

Table 1 shows the demographics of respondents. Of 1,085 surveys collected, 990 were complete and included in this analysis. Most respondents were female (79%), White (77%), and aged 18–64 years (78%). Demographic compositions in the study sample were different from those of the county (U.S. Census Bureau). Also, 7% of participants reported receiving Supplemental Nutrition Assistant Program (SNAP) benefits, which was less than half of the rate in the county (TN Department of Human Services).

More than half of participants reported that they buy fruits and vegetables at the farmers' markets (Figure 1). Regarding the reasons for not shopping at farmers' mar-

**Table 1.** Demographics of Survey Participants Compared with the County

	Surveys	Focus Groups	Hardeman County
<b>n</b>	990	61	25,050
<b>Gender, percent</b>			
Female	79%	67%	45%
Male	21%	33%	55%
<b>Age group, percent</b>			
18–64 years	78%	62%	62%
≥ 65 years	22%	38%	19%
<b>Race, percent</b>			
Black	21%	21%	42%
White	77%	77%	55%
Other	2%	2%	3%
Individuals who reported receiving SNAP benefits, percent	7%	–	18%

## Facilitators and Barriers to Farmers' Market Use in a Rural Area

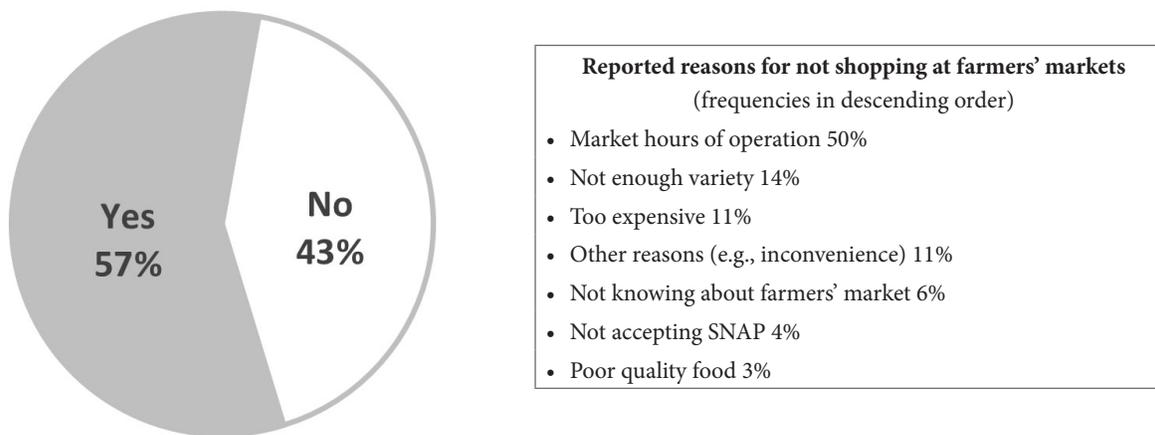


Figure 1. Shopping at the farmers' markets.

kets, the most common reported reason was that “they are not open during the hours I usually shop,” followed by “not enough variety” (Figure 1).

### FOCUS GROUP SESSIONS AND INTERVIEWS

A total of 61 residents participated in nine focus group sessions conducted in different locations across the county. Table 1 shows the demographics of participants. Most participants were female (67%), White (77%), and aged 18–64 years (62%). In addition, a total of 25 professionals and community leaders participated in the key informant interviews, including civic leaders, health care professionals, educators from public schools and Head Start, faith-based leaders, business owners, and volunteers. About half of interview participants were female (48%) and about one fourth were African American (28%).

### COMMUNITY ASSETS

This rural county has two farmers' markets located in two different incorporated towns—one in the middle of the county with over 5,000 residents and the other in the southwest corner of the county with almost 500 residents. Participants from six of the nine communities identified the two existing farmers' markets as assets that increased access to healthful foods for residents. Overall, there were 19 positive comments about the farmers' markets. Most of these positive comments (13 of the 19) were made by participants who resided in the two communities where the markets were located.

Positive comments included basic statements about the value of the markets such as: “The farmers' market is good,” and “Great farmers' market in [town].” Other positive comments were related to the number of customers: “[Town's] got [a farmers' market] and they do pretty good. I mean they draw a lot of people in.”

Participants also commented about the importance of being able to buy fresh produce from local producers. Typical comments included:

“I try to buy [at the farmers' market] to support the community.”

“I will go to [community name] for the farmer's market because those are our neighbors, so to speak.”

### BARRIERS

Participants from five of the nine communities identified challenges related to shopping at farmers' markets located in the county. Overall, there were 13 comments related to barriers. Neither of the two farmers' markets accepted SNAP Electronic Benefit Transfer (EBT) and participants identified this as a barrier for low-income customers. Comments included:

“The new farmers' market is open one day a week . . . but does not accept EBT.”

“Most people here use an EBT card and they can't take that to the farmers' market.”

Another barrier was distance to the markets for people who lived outside of the two communities where the markets were located. Comments included: “I am not driving [15 miles away],” and “That's a long way away.” However, some commented that they would be willing to drive farther away for markets that had a better variety such as, “[Market outside of the county] is further mileage, but it's just more to get when you're there.”

Lack of variety was identified as another barrier. This included markets that focused more on crafts and other

goods than food and markets that did not have enough vendors to provide produce. Typical comments included:

“The farmers’ markets here are getting very distracted away from food.”

“The struggle is to get people to bring the food that they do grow that they have left over.”

## DISCUSSION

The objective of our study was to identify facilitators and barriers to farmers’ market usage among residents of a rural county with a high obesity rate. Survey results indicate that over half of respondents shopped at the local markets. Our qualitative findings support the survey results, with several participants identifying the markets as community assets and an important means to support local producers and businesses.

Similar to previous studies (Freedman et al., 2016), we found that farmers’ markets are perceived as important sources for healthful foods, and shopping at local farmers’ markets is viewed as an opportunity to support local communities. With regards to barriers for not using farmers’ markets, survey findings and qualitative findings were different. Survey respondents identified inconvenient market hours as the top barrier. However, participants in focus group sessions and interviews identified additional barriers that are especially relevant for low-income residents, including not being able to use EBT and lack of transportation. Given that only 7% of our survey sample reported participating in SNAP, this may explain why financial and transportation challenges were not highlighted in the survey’s findings.

One important aspect to keep in mind is that farmers’ markets have to compete with other food retailers and other markets. A struggle in rural farmers’ markets can be finding vendors who provide enough produce with a wide variety to entice customers. Our study illustrates that some people are willing to go farther to buy produce from markets in other counties, but residents would prefer to shop nearby to support their farmers and communities.

Findings of our study indicate the importance of conducting needs assessments that include multiple methods, when possible, to provide a more comprehensive understanding of community needs. The demographic characteristics of survey respondents and focus group participants differed from the county population in terms of race and gender, and so, our findings may not be representative of all Hardeman County residents. Future studies should include low-income populations to capture their specific challenges related to healthful foods access. Our findings also highlight the importance of identifying community assets and facilitators for healthful behaviors rather than focusing only on

needs and barriers. In initiatives that target health issues like obesity, a strengths-based approach to needs assessment allows community members to focus both on positive aspects of where they live as well as to identify potential solutions to challenges. Furthermore, these results indicate the importance of tailoring food access interventions to address challenges for specific populations such as low-income residents as well as residents living in outlying areas without farmers’ markets.

## LESSONS LEARNED AND IMPLICATIONS FOR PRACTICE

The results showed that farmers’ markets are perceived as community assets. However, barriers may limit usage by certain community members. Extension personnel may benefit from using multiple assessment methods, including surveys, focus group sessions, and key informant interviews, to understand the role of farmers’ markets in rural communities. Extension can play an important role in convening multi-sector partnerships to address barriers for farmers’ market usage to help ensure accessibility to healthful foods for all community members.

## REFERENCES

- Abel, J., Thomson, J., & Maretzki, A. (1999). Extension’s role with farmers’ markets: Working with farmers, consumers, and communities. *Journal of Extension*, 37(5). <https://archives.joe.org/joe/1999october/a4.php>
- AbuSaba, R., Namjoshi, D., & Klein, A. (2011). Increasing access and affordability of produce improves perceived consumption of vegetables in low-income seniors. *Journal of the American Dietetic Association*, 111(10), 1549–1555.
- Byker, C. J., Misyak, S., Shanks, J., & Serrano, E. L. (2013). Do farmers’ markets improve diet of participants using federal nutrition assistance programs? A literature review. *Journal of Extension*, 51(6). <https://archives.joe.org/joe/2013december/a5.php>
- Civittolo, D. (2012). Extension’s role in developing a farmers’ market. *Journal of Extension*, 50(1). <https://tigerprints.clemson.edu/joe/vol50/iss1/15/>
- Cooksey-Stowers, K., Schwartz, M. B., & Brownell, K. D. (2017). Food swamps predict obesity rates better than food deserts in the United States. *International Journal of Environmental Research and Public Health*, 14(11), 1366.
- Cresswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Sage.
- Freedman, D. A., Choi, S. K., Hurley, T., Anadu, E., & Hébert, J. R. (2013). A farmers’ market at a federally qualified health center improves fruit and vegetable

## Facilitators and Barriers to Farmers' Market Use in a Rural Area

intake among low-income diabetics. *Preventive Medicine*, 56(5), 288–292.

- Freedman, D. A., Vaudrin, N., Schneider, C., Trapl, E., Ohri-Vachaspati, P., Taggart, M., Cascio, M. A., Walsh, C., Flocke, S. (2016). Systematic review of factors influencing farmers' market use overall and among low-income populations. *Journal of the Academy of Nutrition and Dietetics*, 116(7), 1136–1155.
- Krueger, R. A. (2014). *Focus groups: A practical guide for applied research*. Sage.
- Pitts, S. B. J., Gustafson, A., Wu, Q., Mayo, M. L., Ward, R. K., McGuirt, J. T., Rafferty, A. P., Lancaster, M. F., Evenson, K. R., Keyserling, T. C., Ammerman, A. S. (2014). Farmers' market use is associated with fruit and vegetable consumption in diverse southern rural communities. *Nutrition Journal*, 13(1), 1.
- Schupp, J. (2019). Wish you were here? The prevalence of farmers' markets in food deserts: An examination of the United States. *Food, Culture & Society*, 22(1), 111–130.
- Story, M., Kaphingst, K. M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating healthy food and eating environments: Policy and environmental approaches. *Annual Review of Public Health*, 29, 253–272.
- TN Department of Human Services. (2021). *SNAP-Statistical Information*. TN Department of Human Services. <https://www.tn.gov/humanservices/for-families/supplemental-nutrition-assistance-programsnap/snap-statistical-information.html>
- U.S. Census Bureau. (2020). *QuickFacts: Hardeman County, Tennessee*. U.S. Census Bureau. <https://www.census.gov/quickfacts/hardemancountytennessee>