

# Stakeholder-Identified Community Garden Program Outcomes<sup>1</sup>

Susan Webb and John Diaz<sup>2</sup>

## Introduction

Extension clientele often contact agents for expertise on starting or maintaining a community garden. Agents assist these clientele in a variety of ways; they provide on-site technical assistance, workshops, and volunteers, and connect with organizations and municipalities. However, agents' ability to collect meaningful, reportable data from these activities can be a challenge. To address this deficit, the authors conducted a statewide Delphi study to identify community garden outcomes through a consensus-style process with 53 stakeholders. This publication outlines the outcomes that were identified through the study as the most important to include in program evaluation.

## The Delphi Process

The Delphi technique is an iterative study designed to document consensus among a group of key stakeholders (Warner, 2015). For this study, community garden stakeholders from across Florida completed three surveys between February to May of 2017. The first survey asked participants to list all of the outcomes that result from a successful community garden program, including short-, medium-, and long-term outcomes. The authors defined the outcomes as short-term knowledge, attitudes, skills, and aspirations; medium-term behavior change of adoption of best practices; and long-term social, economic, and environmental conditions. Participant responses were

categorized into these outcome definitions and used in the second survey. Participants were asked to rate their agreement with how meaningful each outcome is in the evaluation of a successful community garden program. These responses were then used to further condense the list to items that two-thirds of the participants strongly agreed or agreed were important outcomes for evaluation. This process was repeated for the third survey in which participants achieved consensus on all the items listed except for two items starred in the table below. The authors categorized the final results based on outcome level (short-, medium-, or long-term) into a comprehensive logic model framework.

## Findings and Implementation

Participants identified short-, medium-, and long-term outcomes that they felt were most important to evaluate in community garden programs. The results create the infrastructure for a logic model that agents can utilize in program planning. Agents can utilize the results to select outcomes that align with objectives for specific learning activities. For example, if an agent's activities focus on teaching vegetable gardening to community gardeners, the short-term outcome 'knowledge of organic gardening' and the medium-term outcome 'gardeners are able to supplement their diet with the food that they grow' can be reported under objectives that seek to demonstrate knowledge gain and behavior change, respectively (Figure 1).

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2. Susan Webb, regional specialized agent, UF/IFAS Extension Polk County; and John Diaz, assistant professor, Department of Agricultural Education and Communication; UF/IFAS Extension, Gainesville, FL 32611.

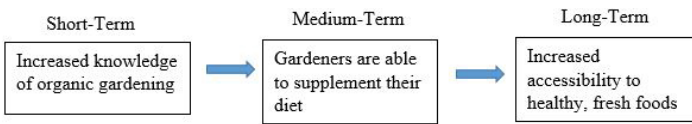


Figure 1. Example outcome portion of logic model for program development and evaluation of community garden programs based on Delphi study results.

Agents and program coordinators and assistants can use these results to develop programs that include activities to meet the intended outcomes. Figure 2 shows how they can develop a full logic model through the development and design process that connects with the results of this study.

Future work will include the development of evaluation tools to collect information on these outcomes from program participants.

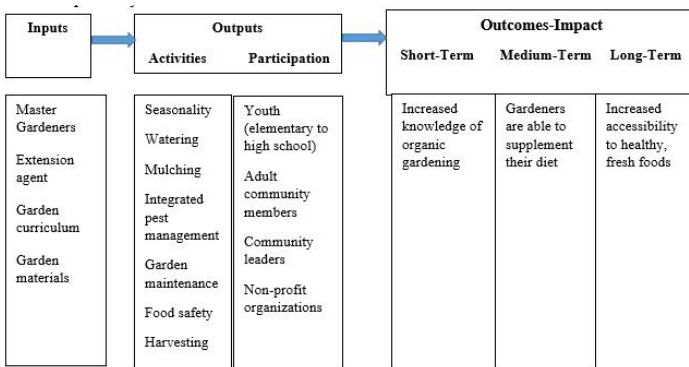


Figure 2. Basic example of full logic model that connects program inputs, processes, and outputs to the Delphi study results.

## Summary

While evaluating the success of Extension-related community garden programs can be challenging, it is paramount to stay in tune with the outcomes of such efforts for the sustainability of the gardens themselves. The results of the Delphi study presented in this paper represent consensus among key stakeholders across the state that outlines a shared vision of success for community gardens. These results provide a set of key indicators that can be integrated into a framework for program evaluation that will allow Extension to understand how its educational and technical assistance promotes garden success. They also provide an opportunity to create synergy across gardens by outlining key outcomes during the development process that will allow for the opportunity for aggregate impacts across the state, because gardens are working towards the same end.

## References

Warner, L. A. (2015). *Using the Delphi technique to achieve consensus: A tool for guiding extension programs*. WC183.

Table 1. Summary of the Delphi study round three results showing the percentage of participants that chose “strongly agree” or “agree” for the importance of the inclusion of each item in the evaluation of community garden programs.

Outcome	%
<b>Short-Term Outcomes</b>	
Increased appreciation and knowledge for local foods systems (e.g., where food comes from)	83.70
Increased connection to community (awareness, appreciation, and respect)	83.70
Gardeners understand and appreciate the benefits of growing their own food	81.80
Gardeners increase their ability to teach others and share what they have learned about gardening	79.10
Garden members attitudes change towards healthy foods and are more willing to include more vegetables into their diet	79.10
Gardeners increase their knowledge in preparing healthy meals from the garden	79.10
Gardeners enjoy and exhibit an appreciation for nature	76.20
Gardeners demonstrate increased knowledge and skills for best practices in gardening (ornamental and edible)	75.00
Gardeners perceptions of well-being improves	72.10
*Gardeners increase their knowledge of organic gardening and understand the best practices to grow organic produce	65.10
*Gardeners demonstrate increased leadership and problem solving skills	58.10
<b>Medium-Term Outcomes</b>	
Gardeners are able to supplement their diets with the food that they grow	86.00
Increase in healthy food consumption (e.g., fruits and vegetables)	83.70
Garden and community members spend more time outdoors	81.40
Gardeners share knowledge and experiences with each other	81.40
Community gardens develop organizational management practices and policies (rules and regulations, garden workday plans, conflict resolution processes, etc.)	79.10
Gardeners implement best management practices for gardening	79.10
Gardeners share the value of growing foods to get others interested in gardening	76.20
Gardeners mentor newer and future gardeners	74.40
Garden members increase their level of physical activity and exercise	72.10
<b>Long-Term Outcomes</b>	
Gardens serve as places for inclusive interactions and engagement (e.g., diversity of generations, ethnicity, races, etc.)	90.90
Increased accessibility to healthy, fresh foods	88.60
Gardens improve the mental health among its participants	84.10
Gardens sustained over multiple seasons	79.50
Provides educational opportunities to lifelong learners	79.50
Increase in the number of community gardens	77.30
Provides educational opportunities to lifelong learners	76.70
Increase in the number of all garden type (school, community, and backyard gardens)	76.70
* Denotes outcomes that did not achieve consensus among expert panel.	