

Evaluation of the Saginaw County Family Gardening Project

Report of Findings from Project Director
Interviews

Presented by
David S. Conner, Ph.D.
C.S. Mott Group for Sustainable Food
Systems
Michigan State University



June 12, 2007

Executive Summary

This report presents findings of an evaluation of the Saginaw County Family Gardening Project, a series of efforts intended to promote family gardening as a means to improve individuals' diet, health and physical activity levels. Michigan State University Extension (MSUE) educators from twelve counties in the greater Saginaw Bay watershed received funds to purchase materials to promote gardening, nutrition and food preservation. This report is based on findings of a series of interviews with twelve project directors, and reflects their experiences and observations on the project's successes, impacts and lessons learned.

A total of 1423 individuals participated in one of 145 gardens. Overall, the directors believe the project fulfilled its objectives: (i) teach nutrition education principles around the importance of eating fresh fruits and vegetables, (ii) to increase the availability of and access to fruits and vegetables, (iii) to teach food preservation techniques, to encourage people to grow and try new varieties of produce, and (iv) to encourage physical activity through home gardening. The project also brought a broad array of secondary benefits to gardeners and also enhanced MSUE educators' efforts to collaborate across program areas with their Extension colleagues.

Keys to project success include the use of MSUE educators' network of partnerships, including community volunteers, local businesses and the media. The key difficulties faced included getting a late start and inadequate monitoring of gardeners; activities. Some perceived difficulties of working with the poor are also discussed.

A key strength of the project was its overall design. MSUE proved to be both a strength and weakness of the project: an asset due to its institutional strength, network of partners and the dedication of its employees, yet overtaxed. Recommendations focus on better time allocation and delegation, and closer, more frequent monitoring of gardens. Also suggested is the use of partnerships to better leverage project resources.

Introduction

This paper is a report on the findings of an evaluation of the Saginaw County Family Gardening Project, a series of efforts intended to promote family gardening as a means to improve individuals' diet, health and physical activity levels. The purpose of the evaluation is to draw upon experiences of the project directors in order to document impacts, success stories and lessons learned, and ultimately identify best practices in continuing efforts to encourage gardening.

The primary audience for this report is Michigan State University Extension (MSUE) educators and their community partners engaged in efforts to promote family gardening. These findings will also be of interest to the project's donors as well as individuals and groups in other states interested in pursuing similar projects.

The findings of this report are based on the comments of project directors, gathered via telephone interviews. Evidence on the project's impacts, including number of gardens and participants, improvements in participants consumption of vegetables and physical activity, and other benefits, result from self-reporting by the directors and have not been independently verified. While traditional diet assessments, such as intake recalls, were administered to many project participants, these data were not segregated from those of any meaningful control group; therefore, no statistical comparison is possible. Additionally this evaluation is limited to the gardening component. The concomitant nutrition education efforts are beyond the scope of this evaluation.

Discussion of participants' motivations and behaviors, the project's successes and challenges and similar findings again reflect the perceptions of project directors. Given the balance and mix of opinions expressed and lack of clear motive for deception, I am confident that the directors gave honest answers to the interview questions. Confidence in the findings' internal validity is reinforced by confidentiality of individual responses, and that this is a formative evaluation, intended to improve performance and provide lessons learned and best practices rather than allocate future funding. Finally, while directors of all county projects responded, no claim can be made that these respondents are representative of any larger group, therefore no generalization of findings to other groups or individuals is warranted.

Focus of Evaluation

The Food Security Through Family Gardening WIN Expansion Project was funded through the Saginaw Bay Watershed Initiative Network (WIN) and USDA Food Stamp Nutrition Education Program (FSNEP)/Michigan Department of Community Health Michigan (MDCH), and administered through MSUE. It had four main purposes: to teach nutrition education principles around the importance of eating fresh fruits and vegetables, to increase the availability of and access to fruits and vegetables, to teach food preservation techniques, to encourage people to grow and try new varieties of produce, and to encourage physical activity through home gardening.

To that end, thirteen counties in the greater Saginaw Bay watershed, received up to \$1,000 each from WIN and FNP/MCDH to purchase a combination of gardening, cooking and food preservation supplies and nutrition education materials. Project staff, consisting of MSUE educators and community volunteers, assisted families in creating and maintaining vegetable garden plots while also conducting six week nutrition education programs consisting of lesson on healthy eating, physical fitness and food preservation.

A total of twelve groups consisting of thirteen counties received funding and undertook activities for this project (see Figure 1, Appendix). Each county applied the funds, based on their commitment to the overall project goals; county leaders then attended an orientation session in Saginaw led by overall project co-directors Holly Tiret and Vickie Flynn of MSUE Saginaw County, and began the planning process. The specific activities, including choosing sites, recruiting gardeners, and assigning responsibilities were left to

the project leaders and staff; the approach was intentionally non-prescriptive to allow for flexibility and the unique abilities and relationships of MSUE staff and their network community volunteers.

A total of 888 people, including 320 adults, participated in the project, growing in one of 38 family or 19 community garden sites (see Table 1, Appendix). The participants were recruited in various ways, including clients in various MSUE programs (Food Stamp Nutrition Education Program, Better Kid Care and Building Strong Families), public service agencies (Head Start, housing commissions, food banks and distribution centers), plus youth and day care centers, job trainings and other locations where contact with food insecure people is likely.

The gardens came in a variety of locations and types. Locations for community gardens included a church, apartment complex, battered women shelter, youth center, school, head start facility, family center, and MSUE office. Home gardens included container gardens for those people without adequate land (e.g., apartment dwellers) and raised beds for easier access. The decision of what to plan was made in a number of ways including individual gardener choice, voting, specific theme (e.g., a pizza garden), a “try-it” garden (growing things gardeners had never tried), and emphasizing plants that were fairly low maintenance and had high probability of success.

The evaluation was guided by an overarching goal: to document and analyze project directors’ experience and perceptions in order to generate a set of best practices and guidelines to improve future performance and ensure future success. The directors were asked a series of questions on project planning and procedures, perceived impacts on participants, use and nature of community and MSUE partnerships, concluding with a query of successes, challenges and lessons learned.

Overview of Methods

Project directors from each of the twelve groups were interviewed; a community partner who helped organize a large community garden was also interviewed for a total of 13 interviewees. The interviews were conducted between November 2006 and February 2007, each taking about one hour. A handful of interviewees were initially contacted at a project wrap-up luncheon in Saginaw, where they shared highlights of the projects. They were told about the evaluation project, then were given and signed project consent forms. The remainder of interviewees were contacted by phone, told the purpose of the project, and sent a consent form. Upon receipt of the signed consent forms, participants were contacted by phone to set up an appointment for the phone interview. The interviews were structured by an interview guide, which is available as an Appendix.

Each interviewee was asked to share his or her experiences of the project, including: project planning and implementation; their perceptions of gardener motivations and impacts upon their diet and physical activity; partnerships within MSUE and the community; keys to success and lessons learned. I took extensive notes during each interview. Once all interviews were completed, these notes were re-examined several

times, with an eye toward both unique and common themes and experiences. Finally, each of the interviewees was sent a copy of a draft report and invited to comment (i.e., confirm or dispute findings or contribute further content). Nine of the twelve directors responded: none found any substantive errors or omissions, and all who shared lengthy comments agreed that the report was accurate and fairly represented their perspectives and experiences. The results of the interviews are discussed in the next few paragraphs.

Presentations of Findings

Summary

Gardeners Motivations

Gardeners had a variety of motivations for participating in the project. Many had gardened before, while others sought the opportunity to learn the basic skills. Access to lessons on food preservation techniques like canning and freezing were seen as key motivations by five project directors. Other common themes include wanting an activity to share with family members, saving money, having more fresh foods were also commonly voiced motivations. Other reasons included the opportunity to beautify their yards, or simply having access to “free stuff.”

Benefits of Project

The directors all said the project achieved its goals of increasing vegetable consumption and physical exercise. While it is difficult to quantify changes, the directors cited observations like that all produce was eaten, much of it was preserved, as evidence of improved diets. More than half related a story about children who believed they did not like certain vegetable, but after tending the garden and seeing it grow, then tried it and found they liked it. Children were particularly excited about seeing the vegetables they grew end up on the dinner table. Directors discussed seeing gardeners outdoors, weeding, hoeing and doing other tasks as evidence of physical activity.

Most directors reported that fresh vegetables were generally available to the gardeners, but access was constrained by lack of money and transportation. The gardens likely increased vegetable availability by providing fresh vegetables for today, preserved ones for tomorrow and possibly saving money so that even more could be purchased.

Directors mentioned a wide array of secondary benefits as well. Gardening was mentioned as a practical skill, a stress reliever, and an opportunity for family time, and speech and language development for children. Seeing a project through from start to finish helped build self-esteem and perseverance. Gardening provided science education lessons as well, demonstrating the plants’ life cycles from seed to finish, and the ability to identify and distinguish vegetable plants from weeds.

The gardening project proved to be of benefit to MSUE efforts, especially nutrition education. It lent opportunity to present new material in non threatening ways, and

facilitated many new relationships. The garden and plants provided a number of avenues for learning, particularly “where vegetables come from,” but also including sites for hosting dinners and lessons, and concrete examples (for which gardeners had context and “buy in”) of cooking and food preservation lessons and vegetable taste testing.

The Importance of Partnerships

The gardens also benefited from, and created the context for development of beneficial relationships both within and outside of Extension. Within MSUE, it provided unique opportunity for cross programming, particularly among nutrition education and agriculture educators. It was commonly cited as having increased camaraderie within the office. In one case, when work with children was involved, MSUE performed background checks on volunteers to ensure children’s safety.

Perhaps even more importantly, many of the gardens’ success stories have critical components of partnerships between community volunteers, local businesses and the media. Community members donated both time and materials. One farmer donated composted manure while a Master Gardener tilled all the plots in one county. Another county partnered with the local Kiwanis club, which dug and prepared all the beds at one community garden site. Informal partnerships, especially between experienced senior and novice youth gardeners contributed to gardens’ success. The directors were also able to leverage project funds by seeking donations or discounts from local businesses. Excavators donated soil, contractors donated building supplies. Greenhouses gave away the previous year’s seed and the last of their inventory of transplants. Other greenhouses offered “rock bottom prices” on seeds and plants.

Publicizing the project in the local media served a number of purposes. First, it served as a way to publicly thank businesses who made donations; not coincidentally, the favorable publicity for these businesses often inspired their competitors to donate as well. Local newspaper articles also helped recruit families and generally provided favorable publicity for MSUE. In all, most respondents reported using the media (including local radio and television) in some regard, with the others saying they should have.

Difficulties Encountered

The responses discussed above are overwhelmingly positive, but it is misleading to imply that all went smoothly or without problems. Many of the problems can be traced to difficulties in coordinating the project and its various components in a timely manner. Two of the most commonly expressed issues were getting a late start and failing to adequately monitor the garden sites. These led, in part, to a number of biophysical problems which may have been avoided with better oversight.

In general, many directors felt like they did not have adequate time to devote to the project. Many mentioned how it was an add-on, a project that added to their work load without responsibilities being removed from their duties. As one respondent said, “it was difficult to keep up with my caseload and the gardens.” Many expressed feelings such as

“scrambling,” “flying by the seat of my pants,” and “running behind.” Getting the project started on time was another common theme. Also, many directors had to use their own personal or family resources, such as vehicles to pick up and deliver donations or purchases, or equipment for roto-tilling plots. Finally, summer vacation leave by MSUE staff often took place at crucial times for garden planning and oversight.

Similarly, there was a common theme of lack of coordination. Assistance from MSUE colleagues, especially Master Gardeners (MGs), was seen as crucial to success and sometimes lacking. In some cases, this project increased cross-programming and camaraderie in a fairly easy manner; in others it led to difficulties or even conflict. Some expressed fault in themselves for not making better use of agriculture personnel and MGs. Others felt as though these potential partners did not follow through as promised. At any rate, failure to adequately delegate tasks, resources and time was seen as a major obstacle and barrier to greater success.

Some plots suffered from factors related to their location, such as deer, shade and poor soil. Many directors who developed community gardens mentioned difficulty in locating sites which were easily accessible to families; difficult access led predictably to poorer garden maintenance or participation. At least one garden suffered vandalism. One landlord refused permission for a family garden. In another case, one would-be gardener’s boyfriend scuttled a proposed family site by refusing to mow around the plot. Failure to perform soil tests was mentioned as contributing to poor performance (as completed soil tests was linked to success); some gardens received transplants or seeds too late, resulting in low or no yields. One garden was over-watered to the point of growing algae and mold.

Directors also mentioned problems working with the gardeners themselves. One remarked on the transient nature of the gardeners, relating how some signed up to do gardens then moved away with no forwarding information midway through. Another expressed gardeners’ failure to keep appointments (for monitoring visits and nutrition lessons).

A common theme was that gardeners were not prepared for the duration and intensity of labor needed. One remarked that gardeners thought that once the garden was planted, the work was essentially over, not anticipating watering, weeding and other tasks. One director, however, said the gardeners found it was “not as big a deal” as originally thought. As a result, in many cases a few dedicated gardeners (or the MSUE personnel) performed most or all the work, leading to poor yields and/or unequal balance of work and reward.

Two other anecdotes illustrate difficulties the directors faced. One director working with family gardeners in an urban setting could not arrange monitoring visits by MGs due to perceptions of safety concerns in the gardeners’ neighborhoods. Another director found that some people refused to sign up because they believed doing so would threaten their eligibility for public assistance benefits.

Interpretation

Based on the interviews with project directors, the gardening project was generally successful. Not a single director deemed it a failure or expressed reluctance to continue this kind of work. Indeed, many believe they learned a great deal from the first project year and are eager to apply lessons learned this coming season. This is a testament to their belief in the project's benefits, as was their dedication and devotion the previous year, as evidenced by their willingness to use their own resources, work on their own time and expend their social and political capital in soliciting donors, volunteers and publicity.

With few exceptions, the project enhanced collaboration and created cross-programming synergy. The project drew interest from across the MSUE program areas, including agriculture, youth and family development, nutrition and health. The gardens themselves served as a medium for a number of important lessons and activities: nutrition, cooking and food preservation; modeling and practicing good family and interactions; senior-youth mentoring; hands-on science education; and participatory decision making.

While some of the difficulties may be attributed to inexperience in the project's first year, others will be more difficult to overcome. Better delegation and coordination will help address monitoring issues, but expecting busy professionals to devote adequate attention to this project without easing their case load elsewhere may be unrealistic. Add to this MSUE's chronic budget and staffing issues and it is difficult to see the benefits of this project spreading as broadly as is warranted.

Another chronic and difficult issue is the perceived difficulties in working with the neediest segments of our society. It is difficult to verify the degree to which the directors' negative perceptions of their clients are accurate. Some may well be transient, or unreliable, live in unsafe neighborhoods or dislike hard physical labor; in some cases these perceptions are no doubt exaggerated. While only a handful of respondents expressed these sentiments, I would be remiss in failing to acknowledge them as real issues faced by this project.

Conclusions and Recommendations

Criteria and Standards

The objectives of this project were rather broad, and in the opinion of directors were generally achieved. The gardens created opportunity for education around fruit and vegetable consumption and preservation; they increased access and consumption by directly providing them; those who actively cultivated gardens engaged in exercise. Evidence of this is based on project director's responses, anecdotes and analysis.

Judgment of Project

Strengths

One of the project's strengths is sound basic design, facilitating complementary activities that leverage existing human, institutional and financial resources. Another obvious strength is the MSUE educators themselves and their network of partners and contacts. The directors' dedication and perseverance in the face of adversity, their willingness to work extra hours and use their own resources must be applauded. Finally, the choice of gardening, given the broad array of direct and indirect benefits discussed above, helped this project achieve both its objectives and numerous other goals.

Weaknesses

The project's main weakness is reliance on an already overtaxed institution. Despite the willingness of MSUE educators to add these duties to their current ones, it is clear that greater attention would have improved the gardens' performance. The late start also hindered success, as did the lack of prescribed plans. While this was deliberate and intended to provide flexibility, some directors, especially those unfamiliar to gardening, made errors in site selection and also at times failed to monitor gardens and deliver timely advice which would likely have increased performance.

Recommendations

The first two recommendations are obvious: start earlier and plan better. Better planning would entail items like delegation of time, setting up regular scheduled monitoring visits to gardens (e.g., from MGs). In particular, assign MGs or other volunteers to gardens and have them make regular (every other week) visits. Better planning also implies using MSUE agriculture educators and their expertise, whenever possible, and conducting soil tests. Another suggestion is the develop calendars for both gardeners and directors to outline necessary project tasks and give planting dates for various vegetables.

Another recommendation is to make full use of community contacts, especially potential business donors and the media. A handful of counties proved very adept at stretching and leveraging grant funds by soliciting supplies from local businesses: soil from excavators, plants, seeds and tools from greenhouses, home improvement and general retailers. The media can be valuable allies in this endeavor: mentioning the names of donors encourages their competitors to get their names mentioned by donating too. Donations of labor, materials and expertise from various groups and individuals also proved to be invaluable to many counties efforts. Utilizing experienced gardeners as mentors for less experienced ones is a promising suggestion. Pairing seniors and youth has particular potential. A possible addendum to the aforementioned project director calendar could include guides for soliciting help from partners and donors, including pairings of likely businesses and donations, and talking points for contacting community volunteer groups and the media.

Good communication with gardeners and their families also helps smooth the way. It is important to be clear and honest about the time and effort needed to grow a successful garden. As noted above one unsupportive person in a family can really hinder efforts.

To conclude this section, I present two suggestions that arose during the interviews. These ideas were only mentioned once, so may not represent a broadly felt need.

- ✓ Develop gardening materials for low literacy people, with pictures and other visual representations.
- ✓ Develop high raised bed gardens for people in wheelchairs, seniors or other people who need accommodations.

Appendix.

Figure 1. Participating Counties

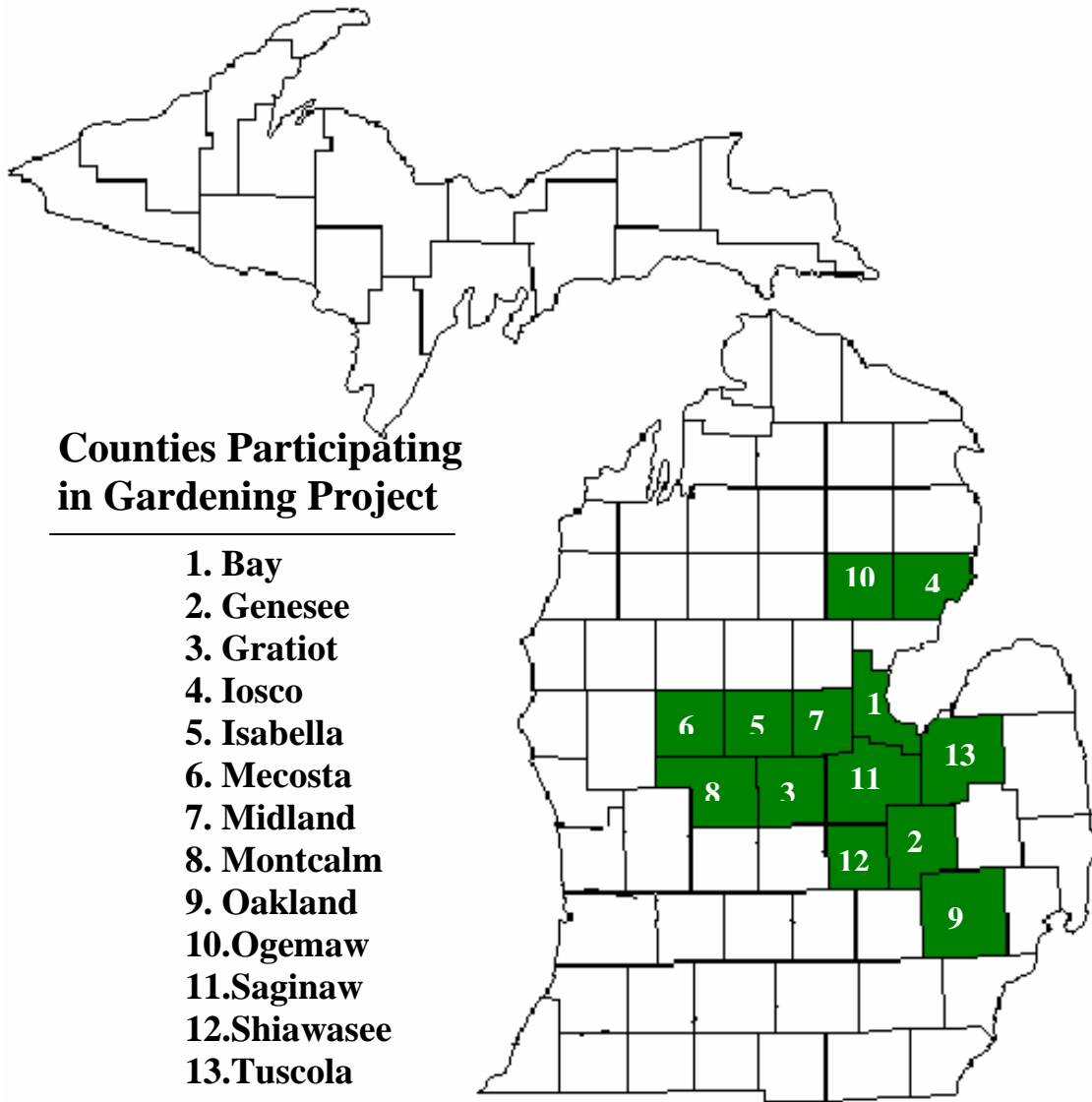


Table 1. Numbers of Gardens and Participants

County	Home Gardens	Group Gardens	Adults	Children
Bay	10	0	20	50
Genesee	0	7	40	66
Gratiot and Montclam	4	0	7	9
Iosco	0	3	17	3
Isabella	3	1	28	31
Mecosta	9	1	16	26
Midland	0	1	10	14
Oakland	0	1	75	270
Ogemaw	0	2	6	12
Saginaw	75	13	240	295
Shiawasee	0	1	3	6
Tuscola	12	2	99	81
Total	113	32	560	863

Interview Guide

1. How did you get involved in this project?
2. Please describe your planning and operation processes.
3. Please describe the garden site(s)? How did you select it? Why?
4. Please (generally) describe the participating families (number, socio-economic and demographic attributes)
5. How did you recruit them?
6. What do you believe motivated them to participate?
7. To what extent do you think participating in this project increased their **access** to fresh fruits and vegetables? (E.g., what percentage of participants experienced a positive impact)? Why do you say so?
8. To what extent do you think participating in this project increased their **consumption** of fresh fruits and vegetables? (E.g., what percentage of participants experienced a positive impact)? Why do you say so?
9. To what extent do you think participating in this project increased their level of physical activity and/or fitness? Why do you say so?
10. What factors can you identify that explain an individual's behavior change? Is there any common link between those who experienced benefit as opposed to those who did not?
11. Who were your partners in this project? How did you come to work with them?
12. What if any new contacts did you make as a result of this project? How were you able to engage them?

13. Did you publicize this program in your community (to the press, etc.)? If so, how did you go about it? What were your strategies?
14. Were you able to receive any new donations for this project? (think of both money and materials). How did that work? How important were the donations? What did they allow you to accomplish? How will you approach to this change next year? What do you think would help you do better at this (information, training, suggestions, etc.)
15. Did you involve volunteers from community groups? If so, whom? What was your experience with their involvement?
16. What kind of training support did you receive for this work? How would you describe the role of this help in the project's outcome? Why do you say so?
17. To what extent did this project allow you to engage in cross-programming with other colleagues? How did that go? What did they contribute? What did you learn?
18. What if any challenges did you face in working with colleagues from other programs? What did you learn from these encounters?
19. What aspects of the overall project were successful? What worked? Why do you say so?
20. What was less successful, what did not work, or what would you have done differently? Why?
21. What did you learn that you think would help this program more successful in future years?
22. Are there any other experiences or perceptions you can share that would help me better understand this project?