PENN STATE HEALTH COMMUNITY GARDEN TOOLKIT









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PARTNERS AND COLLABORATORS

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- Giant
- Penn State Health Community Health Team
- Penn State College of Medicine
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- Penn State Extension Master Gardener Program

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- Central Pennsylvania Food Bank
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- Discerning Eye Community Agriculture
- Borough of Steelton
- Steelton-Highspire School Garden
- Central Pennsylvania Youth Ministries and the Millerstown Kid's Garden Club
- Northern Dauphin Human Services Center
- Northern Dauphin Library, Lykens
- Millersburg Borough
- GoggleWorks Center for the Arts
- Lebanon County Christian Ministries

Food Access and Nutrition

at Penn State Health and Penn State College of Medicine







Penn State Health and Penn State College of Medicine's food access and nutrition programming works to address food insecurity with consideration for the challenges posed by social determinants of health at the individual, community, organizational, and policy levels.

Our goals are to:

- Establish a network of sustainable and responsive food access locations in low-food-access areas;
- Layer and co-locate food access and community health services at local organizations;
- Promote and facilitate community gardening opportunities and ensure equitable distribution of fruits and vegetables from gardening efforts;
- Provide hands-on learning experiences in cooking and gardening to increase consumption of vegetables;
- Integrate opportunities for health screenings, referrals, and health resources at food pantries;
- Increase participation in our produce prescription programs;
- Align state programs and services with our work;
- Evaluate food access interventions across our service area and advance research and knowledge around diverse solutions to food insecurity in Central PA.

Community gardening is critical to the advancement of Penn State Health's food access and nutrition objectives in Pennsylvania communities. In addition to community gardening, if we can be of assistance with any of the above items, please contact: communityhealthprogramming@pennstatehealth.psu.edu.

Introduction to Community Gardens



What are Community Gardens?

Community gardens are collaborative spaces where individuals, communities, and organizations come together to grow produce for their community. Unlike private gardens, which are typically managed by individual households or individuals, community gardens are tended collectively by groups of people who share responsibilities and benefits. Community gardens can be anywhere—on public or private lands, at schools, onsite at hospitals and community organizations, on repurposed lots, and more. These spaces are often used as a sustainable source of produce for members of the community in which they're located, and community members play an active role in the process of growing and maintaining the garden.



Community gardens can take various forms to serve the needs of their constituency:

- Neighborhood gardens: With a neighborhood garden, a group of individuals comes together to start a garden in their local community, which may offer single plots or shared plots for members to grow produce. These gardens may be on an individual's private property or in a shared neighborhood space. Members may take produce home for personal consumption, donate their harvests to a local organization, or sell crops at a farmers market.
- Educational gardens: These gardens are used for educational and demonstrative purposes. For example, a school may construct raised bed gardens to teach students about gardening and encourage fruit and vegetable consumption. Likewise, community organizations may plant gardens to host gardening classes, during and after which students can enjoy the fruits of their labors.
- Organizational gardens: Healthcare institutions and other organizations may choose to build community gardens for the benefit of the communities they serve. Institutional gardens may be run by a staff member or team at the sponsoring organization. Educational events, training, and volunteer shifts may be run to involve community members. Then, harvested produce is usually made available to the organization's constituents or distributed to a local organization promoting healthy nutrition and food security.

What are the Benefits of Community Gardens?

Community gardens offer physical, emotional, and social benefits to those who participate in their care. They have been shown to improve fruit and vegetable uptake, promote increased physical activity, and improve mental well-being and physical health outcomes (Booth et al., 2018; Park et al., 2014). Additionally, community gardens may help to improve food security, especially in areas with low food access (Hudson et al., 2023; Doustmohammadian et al., 2022). Aside from their health benefits, these spaces provide important forums for community organizing, empowerment, and advocacy as well as meaningful social connections between community members (Draper & Freedman, 2010; Lampert et al., 2021).

Getting Started





Assess Community Interest

New community gardens should be built on a foundation of trust and goodwill with your community. As a first step, consider hosting community stakeholder meetings to preview the benefits of gardening and to gauge interest in your project. Include both prospective participants as well as local organizations like food banks, governments/municipalities, schools, and health systems that might make for reliable partners in your efforts.

2 Define a Garden Mission

Define the purpose and scope of your garden's services by considering the essential items below. Involve your community in answering these questions. By surveying or interviewing your community members, you can get important feedback about who is most likely to participate, what types of produce they prefer, and more. Additionally, use local hospitals' Community Health Needs Assessments (CHNAs) to better understand your community's needs and the potential impact of a garden on community health.

Who?	 Who will be involved in gardening? Will community members and organizational staff work side by side in the garden?
What?	 What produce will your garden grow? Which fruits, vegetables, and herbs are most sought after or needed by your community members?
When?	 During which seasons will your garden operate? If you plan for year-round harvests, how will your garden operate during the winter months? When and how often will community members have access to the garden?
Where?	Where will your garden be planted? Onsite at your organization? At a partner site? Or elsewhere?
Why?	Will your garden target food insecurity or aim to improve chronic, diet-related health conditions?
How?	 How will you complement your garden's harvests with educational programming? How will your garden be set up? Will you use raised or in-ground garden beds? Will your garden be organic/pesticide free?

Summarize the most important information learned from this process in a simple, 1-2 sentence mission statement. Defining a mission statement will benefit both your organization and community members. As your garden evolves, staff members can revisit the mission statement to stay on track toward your goals—and prospective participants in the community can learn about what to expect from their participation.

3 Secure the Resources Needed to Make it Happen

Personnel

Plan to dedicate at least one staff member for management of garden activities, including garden maintenance and volunteer management, which we estimate to occupy approximately 5 to 10 hours per week. Additionally, be sure that enough community members have expressed interest to have sufficient hands for participation at kick-off. We recommend establishing a volunteer base of approximately 5 to 10 individuals across multiple organizations before getting started.

Start-Up Financial Resources

A community garden is a significant financial investment. As you begin planning, set aside funds to purchase or rent property where your garden will be located. Additionally, set aside funds for renovations or enhancements to the property as well as equipment and services associated with these tasks. Finally, plan to purchase liability insurance to cover potential incidents during activities onsite.

Funding for community gardens is available through a host of local, regional, state, and national grants. We have included potential funding sources on page 27.

Physical Start-Up Resources

You'll collect many tools and supplies as your garden grows and gains more participants. At the outset, however, there's a list of essentials you'll need to get going and run efficiently.

- Plot of land: Whether you erect raised beds onsite or partner with a local municipality or community organization to rent a public plot, you'll need a space to build your garden. Tips for selecting an appropriate garden location can be found in the next section.
- Equipment: For small gardens, hand tools, a tiller, and shovels will be enough to work the soil. For larger in-ground gardens, electric or gas-powered tillers may be needed. Other equipment may include hand trowels, transplanters, cultivators, digging shovels, hoes, racks, brooms, pruning shears, loppers for larger plants, weeding tools, and wheelbarrows.
- Soil, mulch, and compost for planting.
- Storage shed or storage area.
- Seed staring supplies—trays, seeds, lights, and heaters.
- Fencing to protect from large and small critters.
- Compost bin.
- Access to a water source(s).
- Rain barrel, watering or soaker hoses, sprinklers, and watering cans.

Selecting a Location

Community gardens can have success in any number of physical environments. There are, however, a list of factors to consider in selecting a garden location that will facilitate successful growing, easy access for visitors to the garden, and high rates of community engagement:

- Sun Exposure: Does the location you've selected for your garden get at least six hours of direct sunlight per day during the spring, summer, and fall months?
- Water Access: Is there a water source near your garden? Also, is there a way for runoff to drain efficiently from your site?
- Soil Quality: Test the soil at your prospective location(s) to assess fertility and to avoid site contamination and litter. Penn State's College of Agricultural Sciences' Agricultural Analytical Services Laboratory provides soil testing services at low cost. Visit agsci.psu.edu/aasl/soil-testing to learn more.
- Accessibility: Is the garden in a location that's accessible for walkers and cyclists? Or will members have to drive or take public transportation to your site? Is there parking and areas to unload garden supplies from a vehicle? Be sure to select a location that meets the transportation needs of those your garden plans to serve. Also, work to ensure that the garden space meets ADA standards for accessible design to remain welcoming and inclusive of all.
- Accessible Garden Designs: Universal Garden Concepts
 - Equitable Use Raised beds to the height of a wheelchair and children of all ages.
 - Flexibility in Use Can accommodate multiple people with layered beds that enable access by people with full range of movement.
 - Simple, Intuitive Use Signs in multiple languages that can include pictures for universal imagery.
 - Perceptible Information Wind chimes for people with limited sight, using textured pathways to show changes to terrain.
 - Low Physical Effort Move around the garden easily, no big obstructions, pathways wide enough with dedicated growing spaces.
 - Size and Scope for Approach Smooth and even pathways that are conducive to travel by stroller, wheelchair, and those with limited mobility.

Accessibility tips courtesy of The ADA National Network (https://adata.org/universal-garden)

- Size: Is the space you've selected large enough to accommodate a harvest of the size needed to serve your population of interest? Is there enough space for community members to come to the site, walk about, and participate in gardening?
- Environmental context: What's located around the garden site? Will the garden be situated near other organizations and social services that will facilitate partnership and outreach? For example, plant a garden near a school or on the same block as a food pantry to involve different age groups and to reach those who could benefit most from free produce.
- Security: Is the garden in a highly visible location where all members will feel safe alone or in a small group? Is there lighting or cameras?
- Critter control: Consider selecting a location that will allow for construction of a fence to protect your garden from animals.
- **Topography:** For accessibility, optimal growing, and stormwater runoff, flat land is always preferable.

Partner Spotlight





Steelton Community Garden Steelton, PA





Responses provided by Tyler Vaupel, Community Relations Coordinator for the Borough of Steelton

What motivated you to begin a community garden?

The Borough of Steelton started its community garden program to address food security issues, provide residents with direct access to fresh produce, and foster positive lifestyle changes through nutrition education.

Which populations does your community garden serve?

The Steelton Community Garden serves all residents of our borough. We have 14 garden beds that are free for residents to reserve and grow any crop of their choosing. Those individuals and families harvest directly from their plots and take the produce home to cook. We also have nine borough plots, where all the produce grown is donated to the local food pantry at Mt. Zion Baptist Church in Steelton. We engage the public through community events by offering our youth and their families the opportunity to learn about the importance of urban agriculture, sustainable gardening, and healthy eating.

How do you involve community members in your gardening activities?

Residents are involved in almost every aspect of our garden, from seed sowing to harvesting and maintenance. We host planting days, an annual garden kickoff event, master gardener Q&A sessions, and many more activities. Our organizing team is led by resident gardeners, elected officials, and a staff member who has been a lifelong Steelton resident.

How do you market and promote your community garden?

We use social media, word of mouth, and our borough website as the main sources of information distribution and promotion. The borough mails a community newsletter to residents each quarter that markets the garden and encourages participation. We also connect with Penn State's network of local gardeners to promote our garden, collaborate on events, and partner for distribution.

How do you judge if your garden has been successful?

We judge the success of our garden through the overall satisfaction of our resident gardeners and the amount of produce distributed to the community. With this being our second year of gardening, we have almost tripled the number of residents involved from year one. We also measure success through attendance at public events such as our annual kickoff event, planting days, master gardener Q&A sessions, community cleanups, and much more.

Sustaining, Maintaining, and Uplifting



With strong leadership, clear guidelines, and support from the community, your garden will be set up for success in the immediate term and far into the future.

1

Member Guidelines & Agreements

Establishing ground rules for your community garden, including safety guidelines and membership expectations, is critical for reinforcing your mission and ensuring a rewarding experience for all staff, volunteers, and community members involved. Consider creating a garden guideline document that lays out:

- Rules for all garden members to follow. Be specific about what happens in the case of a rule violation, including any grounds for expulsion.
- Application and member fees.
- Expectations for involvement in planting and harvesting activities as well as garden upkeep and maintenance.
- Restrictions on what may be used in gardening (pesticides, etc.) and what may be brought into the garden (pets, etc.).
- Any age limits on who may be involved in gardening. If children are welcome, include a policy about supervision. Note that we suggest welcoming members of all ages.
- Allowances on the quantity of produce that may be taken home by community members upon harvest.

Consider formalizing your garden guidelines through a membership agreement or volunteer contract, which would be signed upon a new member's decision to join your community garden. In any official guideline agreement or contract, be sure to include a release of liability or "hold harmless" agreement. These clauses release your organization of liability for any injuries sustained during garden activities.

Be sure to reinforce garden rules and protocols via bulletin boards and other materials onsite. Also, include reminders of these guidelines in member newsletters and communications. Finally, establish a formal mechanism for members to report any safety or accessibility concerns. For example, you may create an online questionnaire or survey that remains on your website permanently and allows volunteers and community members to report any concerns.

2 Staffing and Personnel

As the formal garden sponsor and steward, your organization should designate at least one staff member to handle garden tasks, including upkeep, volunteer management, and promotion. Recruiting the efforts of your clientele, however, can help to alleviate the burden on your organization and promote a sense of inclusion and ownership among your community.

Internally, you should designate at least one staff member to either complete or manage volunteer involvement in the following:

- Garden maintenance, including planting, watering, weeding, pest control, and harvesting produce.
- Volunteer coordination and membership.
- Repairs and renovations.
- Events.
- Outreach and community relations.
- Budget and finances.
- Internal and external communications, including newsletters and social media.



We estimate that your organization should be prepared to invest between two to five hours per week in garden activities.

If you choose to include community members in the maintenance and management of your garden, every individual should be made to feel like an equally valued partner in the endeavor. You may consider, however, establishing volunteer leadership positions to lead or assist in certain garden functions. One such option is to recruit "garden champions" who take the lead in coordinating certain aspects of garden management. For example, you may recruit a garden champion to handle outreach and communications with local community food pantries or facilitate educational events onsite. When formalizing leadership positions among your clientele, be clear about your expectations and the purview of their responsibilities and decision-making power. Have regular check-ins with these individuals and find opportunities to express gratitude and publicly recognize their efforts.

3

Community Partnerships and Alliances

Your garden's success will depend on the strength of your relationships with other organizations that can support, amplify, and multiply the impact of your work. When it comes to community gardens, partnerships serve an array of purposes. Some organizations may be willing to donate supplies to your endeavor. Others may offer to promote your garden and its services among their members. And others may even offer to help distribute your harvests to community members who could benefit from them most.

In establishing community partnerships and alliances, cast a wide net and vet your options for a shared commitment to community well-being. Potential partners include:

- Local gardening or agricultural clubs and organizations with a passion for gardening and that are willing to share their skills with others.
- Small, family-owned farms with a vested interest in the community and who may be willing to donate supplies or lend their expertise on occasion.
- Local businesses like hardware or gardening stores that may be willing to donate supplies.
- Extension offices, which can provide research-based technical assistance and informal guidance on agricultural practices. You can use Penn State's Extension locator tool to find an office near you: https://extension.psu.edu/county-offices.
- Churches, which often have a pulse on the social needs of community members and the services that will benefit them most.
- Libraries, which often seek to host, promote, or otherwise uplift educational events benefiting their clientele.
- Social service organizations, including food pantries, that can promote your services and distribute your harvests.
- Health systems that have a vested interest in community well-being.
- Local government, which can ease the process of navigating laws, ordinances, and local policies impacting garden operations.
- School systems, which may be open to promoting services and educational opportunities that benefit students and their families.

Network with your community members to identify organizations that are willing to support your garden's mission. For example, perhaps one of your members is a lawyer, whose organization can provide pro bono legal advice on membership contracts or local zoning ordinances. Another member may be able to connect you with the leadership of a food pantry where they volunteer. Be genuine in connecting with potential partners and be open to finding a path forward with any organization that expresses a sincere interest in supporting your community garden.

Additionally, consider formally introducing your garden to organizations that neighbor your physical plot. Informing them of the garden's presence, its purpose, and the role of community members in the process can help to ensure their cooperation with garden policies (not taking food without a formal request, etc.) and potentially garner their partnership.

Marketing and Promotion

Establishing a robust marketing and communications strategy will help to keep your members on the same page and expand community interest in your offerings. Consider the following marketing and promotions tips below:

- Maintain a robust digital presence: Create an entire website or webpage for your community garden and keep it updated with background information on your garden and its mission, your community, and upcoming events, including pictures of the space and events held within.
 - Additionally, create social media channels for your garden. Alternatively, ask your organization to post garden content to their main social handles. Consider creating a page or group on Facebook, where community members can gather digitally to ask questions, share successes, learn about upcoming events, and otherwise connect with one another.
- 2 Utilize existing organizational communication channels, and create new channels as needed: Does your organization already send out a listserv or newsletter to community members, partners, and clients? And, if so, can you make garden announcements and updates through these channels? If not, consider establishing a garden listserv or newsletter for your clientele.
 - In physical spaces, make use of bulletin boards and other print promotions. For example, health clinics may consider placing print brochures in waiting rooms to promote their garden and its services to clients.
- Provider recommendations: Health systems should encourage care providers to promote their gardens to patients with diet-related chronic conditions and those who may be food insecure. Organizations without employed physicians can partner with health systems to encourage referrals.
- Amplify engagement via community partners: Schools, health centers, service organizations, and other community partners will likely be willing to promote your services and make announcements about your garden via their existing communication channels. Also, partner with these organizations to deliver information sessions or to host joint events that will attract attention and drum up interest in your garden.

5 Seasonality

Garden activities ebb and flow with the seasons. In general, winter months should be used for reflection on the prior year's efforts and for planning the next growing season. Spring, summer, and fall are busier, with activities centered around growing, maintaining, harvesting, and distributing the fruits of your labor. During the offseason, consider how to keep your community engaged through educational events and new member recruitment drives. Also, assess your resources and order new or source donated supplies for the forthcoming season. Throughout the year, consider how holidays like Earth Day, Memorial Day, and Thanksgiving can be used to generate interest and involvement.

Additionally, familiarize yourself with crop calendars and growing schedules, which indicate the times of year during which different fruits and vegetables should be planted or harvested. A summary of these growing schedules as well as suggestions for garden-related activities are organized by month below.

January	Host planning meetings; assemble a garden plan for the upcoming growing season; clean and sanitize tools.	
February	Start seeds indoors; order seeds and growing supplies; recruit volunteers for the season; make needed repairs to garden structures.	
March	Complete soil test, and enrich soil as needed; plant early crops later in the month, including spinach, peas, potatoes, beets, carrots, and radishes.	
April	Plant more early seedlings, including broccoli, cabbage, collards, kale, and chard; engage the community as spring weather emerges and gather for celebrations around Earth Day; prepare your compost area for the upcoming season.	
May	After Mother's Day, plant summer crops like tomatoes, peppers, melons, cucumbers, basil, and other herbs; plant flowers to invite pollinators; hold a plant sale.	
June	Monitor for pests and mitigate as needed; maintain growing environment with trellises and regular watering.	
July	Harvest potatoes; monitor crops for extra watering needs due to heat; begin sowing seeds for the fall growing season.	
August	Harvest crops and store for winter months; invite extra volunteers to participate in harvest activities; begin planning fall crops.	
September	Continue fall harvest; plant cover crops as needed to preserve the soil.	
October	Continue fall harvest; monitor for frost and cover crops as needed; at the end of the month, host a garden closing party; clear beds and cover with straw or leaves for the winter	
November	Assess your efforts and make notes for the following year.	
December	Rest and distribute remaining or preserved produce from the garden.	

6 Policy and Advocacy

Many of our garden partners do not expect advocacy to become a significant part of their work. Over time, however, you will come to learn that the success of a community garden is tied closely to supportive local and state officials and the ordinances and bylaws that govern land use and agriculture in your area.

At first, a responsive approach may suit your interests best—engage with issues as they arise and to the degree needed to facilitate the immediate success of your garden's mission. Over time, you may wish to engage in more proactive forms of advocacy, which will secure your long-term interests and promote the future success of gardens in your area.

Policy- and advocacy-related efforts around your community garden may include:

- Preservation of green spaces: Especially in urban areas, the preservation and protection of green spaces will define the long-term success of community gardens. One option is to create a conservation easement, or a voluntary legal agreement between a landowner and land trust or government agency that permanently ensures that land continues to provide public benefits in perpetuity (Land Trust Alliance, 2024). Individually or collectively with another organization, you may also choose to pursue a land trust, which creates a nonprofit organization that—through at least a portion of its efforts—actively conserves land by acquiring land or conservation easements and/ or stewarding and managing lands or conservation easements (Land Trust Alliance, 2024).
- Lobbying for favorable state and local ordinances: State and local ordinances often dictate how vacant lots are allotted and allowed to be used. Likewise, these ordinances determine whether community gardens are classified as public lands. Ordinances like these can have a bearing on the operations of your garden, and remaining aware of changes in local policy will help you to determine whether lobbying local and state officials will be an important part of your efforts.
- Coalition building: Alongside other organizations focused on food access and nutrition, you may choose to build a community coalition whose mission is to create and sustain an environment conducive to your community garden's longevity. Such a coalition may already exist in your area. National coalitions that share your interests may also be worth investigating.

7

Record Keeping and Tracking Success

Keeping track of your garden's activities is crucial to annual growth and improvement. This process can include formal and informal measures and will depend upon the requirements of your community, organization, and current and prospective funders. No matter which methods you select, be diligent about keeping regular tabs on your numbers and tracking your success.

- Divide your garden journal into sections and record the location of crops in your space; timelines for planting and harvesting; lists and proof of purchases, including receipts and seed packages; an activity log; weather events; and challenges you faced and how you overcame them, among other topics. When possible, include photos of your crops, harvests, and garden events. Also, be sure to include reflections about what went well and what you would change next season. Essentially, your garden journal should aim to include enough detail that an outsider could reproduce your efforts on their own.
- Produce Tracking: Keep track of which plants and how much of each item your garden renders to ensure that your project is meeting the needs of your community. Some partners choose to track how many pounds of each produce item is produced and distributed. This process will help you to understand your garden's capacity for impact and can also help to determine which fruits and vegetables are most highly sought among your community. This method may also be helpful in earning grant funding for future years.
- Volunteer Participation: Tracking volunteer participation is helpful for understanding your garden's reach. We recommend tracking how many individuals participate in your garden's activities and how many hours they collectively contribute to each activity. These numbers will help to demonstrate your garden's impact to potential community partners and funders and will help your organization to understand how many people and how much of their time are contributing to the garden's success.

Partner Spotlight



Millerstown Community Garden Millerstown, PA



Responses provided by Mallory McClure, Garden Club Director for Central Pennsylvania Youth Ministries

What motivated you to begin a community garden?

I really wanted to help children understand where food comes from, how it grows, and how food can empower them to improve their health and well-being. In my experience, there are so many beautiful life lessons to be learned in the garden, and I felt led to share that with others.

How does your community garden complement or intersect with other community programs you offer?

I work with our local youth ministry, and we have been able to have our groups volunteer alongside youth groups of older ages. We also work closely with local churches, primarily by recruiting leaders for our Kid's Garden Club, which meets once a month to teach children and their families about gardening. We also work closely with the Millerstown Community Park, where our garden is located, to keep the space updated, bring more people in, and even offer a pumpkin picking and painting activity for their yearly Parktoberfest celebration.

How do you involve community members in your gardening activities?

At each Kid's Garden Club meeting, more than 30 volunteers give of their time to teach or be group leaders. Families from the club also sign up to help care for the garden throughout the growing season. We also invite the community to pick produce and join us for the Parktoberfest activities. Later this year, we will start hosting some nutrition education classes that we hope to continue well into the future.

What are your policies around produce sharing and distribution? How do community members access the produce harvested in your garden?

Our garden is an open pick-your-own model, meaning that community members can take produce from the garden whenever they'd like by self-harvesting. We give produce in bulk to Bread of Life Outreach for distribution at their local food pantry in Newport, about 5 minutes from the garden.

How has Penn State's partnership helped to facilitate your garden's success?

Without Penn State we would have never been able to create the expansive beautiful space we have today and would not be able to grow as much produce as we do. Not only have they been our main financial partnership, they have also provided a great amount of knowledge, education, and community that we have been able to draw from and help grow our programs.

Finances and Expenses



1 Funding



Fundraising

Fundraising is a straightforward and conveniently promotional method of securing funds for your garden to grow. For example, hosting a plant sale or pop-up farmers market can be an effective way to both raise money and advertise the garden and its services. Additionally, rely on your organization's community connections to secure donations. Do existing partners already provide your organization with funds or resources to carry out community impact projects, and can those funds be expanded or redirected to help cover garden expenses? Rotary clubs, schools, conservation organizations, food pantries, and churches are just a few examples of organizations that may be interested in supporting your work. Collaborate with your organization's fundraising staff to explore these and other options.

Grants

As community gardening rises in popularity, grantmaking organizations at the local, state, and national levels have grown increasingly keen to support these initiatives. Before applying for a grant, however, assess your organizational readiness for preparing an application and, if successful, grant reporting duties.

For a list of national grants, visit <u>grants.gov.</u> Pennsylvania state grants from the Department of Agriculture can be found at <u>agriculture.pa.gov/Funding.</u>

Also, be sure to utilize lists and repositories of funders compiled by gardening organizations like KidsGardening (kidsgardening.org/grant-opportunities).



2 Expenses

Compared to other community health interventions and improvement projects, community gardens are relatively cost effective and, once established, affordable to maintain. Below we have listed potential budget items for gardens at three expense levels: cost effective, mid budget, and high budget.



Cost Effective (Under \$5,000 in startup expenses) gardens will get the job done and provide your organization with everything needed to make an impact in your community. Resources may include:

- Pre-existing land that only needs to be tilled.
- Donated seeds from an exchange or seedlings you start on your own.
- Tools borrowed from volunteers or community partners.
- Volunteer-led staff.

Mid budget gardens (\$5,000-\$10,000 in startup expenses) have all the qualities of cost-effective gardens plus a few flourishes that require additional funds. Expenses include:

- Raised beds constructed from recycled lumber, plastic decking, or stock tanks.
- Donated soil.
- A mix of donated or exchanged seeds and plants purchased from a gardening center.
- Donated tools or tools found at yard sales, thrift stores, or retailers for reasonable prices.
- Part-time garden coordinator, either hired directly or recruited from a partner organization, who can lead gardening efforts and coordinate volunteers.

High budget gardens (\$10,000+ in startup expenses) are well-funded.

While these gardens are not necessarily more successful than others, budgets are more robust, permitting choices that are most likely to lead to high-quality gardening and successful community engagement.

- Raised beds with cedar and other hardwoods or metal raised beds.
- Soil from a garden center enriched with compost.
- Seeds and plants from a garden center.
- Tools bought online or from a garden center.
- Shed for storage.
- Greenhouse for climate-controlled gardening.
- With additional funding, a full-time garden coordinator committed to maintenance, volunteer engagement, and tracking and securing funding.

Ongoing Expenses. All gardens, regardless of their budget, will have ongoing expenses needed to keep produce growing, maintain involvement, and support year-round planning. Depending on your activities, these costs may be annual or seasonal. Small gardens may require as little as \$500 or less in maintenance each year, and larger gardens may require more depending on size and organizational context.

- Soil testing each year with necessary follow-up measures.
- New tools as needed and oil for current tools.
- New seeds and plants.
- Compost or soil amendments.
- Straw to mulch garden beds.
- Repairs and maintenance on the garden beds.
- Mulch in between beds (typically only every other year).
- Event costs as needed.
- Pest management measures like neem oil or deterrents.
- Water and irrigation.
- Liability insurance.
- Land costs (leasing fees, if applicable).

Common Challenges



With the efforts of your team and the interest of your volunteers, your garden will be well-positioned for success. Even so, it is important to anticipate common challenges associated with community gardens. Penn State is here to help you in the event of any issue, but the below list can be used to anticipate and proactively address potential hiccups or missteps.

Finding Land

Need and interest alone will not be enough to start a community garden. You will need a space—either a plot of land or dedicated space for raised beds—to build and sustain your crops and related activities. If you do not have available space onsite, consider whether neighboring organizations like schools, churches, libraries, or other community organizations would be willing to share or offer you a plot of land.

Garden Design

Our partners utilize two main garden setups: traditional in-ground garden plots and raised beds. Which option you select will depend on your space and your available finances. For example, if your organization has a vacant outdoor lot with good soil, an in-ground garden makes sense. In urban areas with little green space, raised beds may be a better choice, but these options often come with a slightly steeper price tag due to the materials needed to construct and maintain raised-bed structures.

Sustainability

Consider the long-term sustainability of your community garden from the outset. This includes establishing mechanisms and processes to secure long-term funding and maintain strong and consistent community interest. If your garden is located on land that you do not own, you should also develop a long-term strategy to ensure that your garden can carry on in case a partnership is dissolved or a lease is terminated. Tips for handling issues of sustainability are included throughout this document.

Community Interest & Engagement

Regularly advertise your garden and its services, even when engagement is high. Refer to page 20 for ideas on garden marketing and promotion.

Wildlife, Animals, & Pests

Use fencing and row covers to prevent wildlife and pests from entering your garden and invest in traps for when invasive species do become problematic. Also, regularly surveil for weeds and other unwanted growth that should be removed.

Organic vs. Conventional Gardening

Conventional gardening makes use of chemicals to prevent pests and promote crop health while organic farming relies on natural processes to achieve the same effect. Both methods of gardening have pros and cons. When you build your garden, decide which approach you will take and stick with it for the season. Inform and remind your community members of this policy and establish clear protocols that maintain the integrity of your approach.

Soil Health

The soil you use to garden must be free of heavy metals and toxins, maintain nutrient balance, and be well structured for water filtration and retention. These qualities must be reevaluated over time. Many of these issues can be resolved through the addition of compost, mulch, and other nutrient-rich soils to your garden. Other strategies may help, too. For example, planting flowers can help to neutralize preexisting herbicides.

Irrigation

A reliable water source can be difficult to establish. And, if you're using rented land, you may not be able to build an irrigation system in-ground. Consult with Penn State if you anticipate watering and irrigating your garden to be a problem.

Safety & Security

Regularly monitor your space to ensure that physical safety threats are neutralized (clean up regularly, do not leave sharp tools lying about, etc.). Also, take necessary precautions to avoid theft and vandalism at your garden, including fencing, proper lighting, and security cameras, depending on your location and hours of operation. Finally, be sure to educate the public on garden harvesting and lending protocols; to avoid theft of produce, remind your community that, indeed, these resources are free, but there is an established protocol to request and obtain the garden's harvests. Consider posting physical signage about the process community members may take to obtain produce from your garden onsite.

Garden Expertise

Many community members and volunteers will not have preexisting knowledge of gardening practices. Likewise, they may not know how to prepare produce rendered by your garden. Either designate staff members to educate your volunteer base, or, better yet, recruit other volunteers to educate their peers and lead with their expertise. Likewise, before beginning your community garden, ensure that at least one staff member already considers themselves or plans to pursue the education necessary to consider themselves a gardening expert. Penn State Extension's Master Gardener Program offers outstanding support in this area. Visit https://extension.psu.edu/programs/master-gardener to learn more.

Programming





On their own, community gardens are powerful resources for community members—and paired with appropriate programming, these shared spaces transform into sites of lifelong exploration, discovery, and celebration. Below we've listed programs that have been successful in gaining community traction for other garden partners.

Work Days

On work days, garden organizers invite community members to participate in a focused effort to clean, prepare, and tend the garden or harvest produce as a collective. Work days are wonderful opportunities to create a sense of inclusion and self-efficacy among your community members. They also provide more experienced gardeners an opportunity to share their expertise with newer gardeners. Be sure to make a specific plan going into work days. Ask yourself which tasks will need to be completed and how many people should be assigned to each task. Also, decide who will be leading or teaching each task to volunteers.

Gardening Tutorials

Offer 30- to 60-minute interactive lessons on garden topics like seed preparation, harvesting, and bed preparation. Get community members moving and involved in completing these tasks. Choose topics that will both benefit your garden space and equip your community members with skills to take gardening into their own hands.

Nutrition, Education, & Cooking Demonstrations

Teach your community members the kitchen and decision-making skills needed to make successful and efficient use of your garden's harvests. Select culturally and individually relevant fruits and vegetables to feature, and give away recipe cards at the end of each session. You may even consider surveying community members to better understand their preferences and needs. Also, be sure to teach your community members how to season and flavor food with herbs and spices instead of excess salt. And, of course, always end with a taste test! Penn State Extension can help you to plan and execute nutrition, diet, and cooking education.

Visit https://extension.psu.edu/youth-family-and-health to learn more.

Community Gatherings

Fun is reason enough to host an event in your space! Consider an open house to show off your garden or to solicit new volunteers and partners. Also, celebrate spring, summer, and fall holidays like Earth Day, Fourth of July, or Halloween by hosting an event with food from the garden or even incorporating garden work. Take every opportunity to use the garden as a community-building space.

Other Programming Tips

Build community self-efficacy. Whenever possible, empower your community members by teaching them new skills. Rely on more experienced staff or community members to share their gardening knowledge and cooking skills with those who may be less experienced.

Partner with other organizations. Double the reach of your events by collaborating with community partners with common interests. For example, you may work with a local elementary school to help young children get active and learn about nutrition.

Bridge age groups. Involve community members of all ages and make necessary accommodations for those with different needs. For example, encourage parents to bring their children to the garden to learn about gardening and nutrition.

Maintain an online events calendar. Keep your community up to date on the latest happenings by maintaining a garden events calendar on your organization's website.

Create programming that is linguistically and culturally appropriate. Consider the cultural and linguistic backgrounds of your community members and, when possible, create bilingual offerings and programs that incorporate or address cultural norms.

Additional Resources

Below is a list of other resources that may be helpful in establishing your community garden.

Other Community Gardening Toolkits:

- Penn State Extension: https://extension.psu.edu/
- University of Missouri Extension: https://extension.missouri.edu/publications/mp906
- University of Maine Extension: https://extension.umaine.edu/publications/4311e/1-2/
- NC State Extension: https://content.ces.ncsu.edu/how-to-organize-a-community-garden
- AARP Community Garden Guide: https://www.aarp.org/livable-communities/tool-kits-resources/info-2023/creating-community-gardens.html
- Food In Neighborhoods: https://foodinneighborhoods.org/getinvolved/resources/

Practical Tips and Education on Gardening:

- Farmer's Almanac: https://www.almanac.com/
- Vegetable gardening from Penn State Extension: https://extension.psu.edu/vegetable-gardening
- Penn State Extension Master Gardener Program: https://extension.psu.edu/programs/master-gardener/
- Conserve PA: Legal Toolkit for Community Gardens: https://library.weconservepa.org/library items/1846
- Garden Planner: https://www.motherearthnews.com/garden-planner/vegetable-garden-planner/
- Soil Testing with Penn State College of Agricultural Sciences: https://agsci.psu.edu/aasl/soil-testing
- Epic Gardening: https://www.youtube.com/@epicgardening

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