

Critical Considerations when Establishing an Urban Farm

While urban farming allows for the development of a variety of environmental, economic, and social benefits to the surrounding communities, there are several considerations to be made to ensure that your urban farm is purposeful and successful.

TEACHING OBJECTIVES: WHY DO THIS?

- Educating about the broader food system, including food production, distribution, and consumption, as well as promoting healthy eating habits
- Fostering a connection between urban dwellers and the natural environment through farming and gardening activities
- Raising awareness about local community issues and promoting engagement in social justice initiatives related to food security and sustainability

BEST LOCATION

Any comfortable space!

- Classroom
- On-farm space with tables and chairs, such as a hoop house or on picnic tables under a shade tree.
- Online
- Other? Be creative!

LEARNING OBJECTIVES: WHAT CAN PARTICIPANTS LEARN?

- Developing basic knowledge of the applied science behind urban farming systems.
- Gaining awareness of practices and procedures that can be utilized in urban farm operations.
- Understanding the financial and marketing tools needed to manage a profitable farm.
- Other objectives encompass creating access to learning about organic, regenerative urban farming, improving crosscommunity pollination of farming initiatives, increasing access to nutrition education on food systems, promoting food security, and developing and strengthening partnerships within the community.



IMPORTANCE FOR BEGINNING FARMERS

Operating an urban farm requires compliance with state or local zoning, permitting licensing, and other regulatory requirements. Zoning is a critical issue in urban agriculture, dictating what type of growing is allowed and whether animal farming is permitted. Additionally, when starting an urban farm, ongoing soil management, high start-up and operating costs, and the need to establish plans to sell and distribute food are important factors. Furthermore, getting products to the market, addressing security issues, and identifying the market early is crucial to establishing an urban farm.

UNIQUE ASPECTS OF THE CURRICULUM

Farming in urban and peri-urban spaces requires a unique set of skills and an awareness of community engagement that other types of farming do not address. This curriculum will address a lack of opportunity to really examine these unique characteristics of urban farming.

Facilitator Planning & Preparation

Activity	Est. Instructional Time
Learn from & Tour with an Urban Farmer	3 Hours
Seeding Your Vision	2 Hours
Plotting Your Urban Farm	1.5 Hours



Technical Content

KEY WORDS:

Urban Agriculture An industry that produces, processes, and markets food and fuel within a town, city, or metropolis, on land and water dispersed throughout the urban and peri-urban area, applying intensive production methods

Urban Farm

Land within a city used for the cultivation of fruits, vegetables, plants, flowers, herbs, bees, or animals with the primary purpose of growing food for distribution

Vertical Farming

The practice of growing crops in vertically stacked layers. It often incorporates controlled-environment agriculture, which aims to optimize plant growth, and soilless farming techniques such as hydroponics, aquaponics, and aeroponics

Rooftop Farming

The practice of cultivating crops and raising livestock on the roofs of buildings. It makes use of underutilized space in urban areas for food production

Hydroponics

A method of growing plants without soil, using mineral nutrient solutions in a water solvent. It is a subset of hydroculture, which is a method of growing plants without soil by instead using mineral nutrient solutions in a water solvent

Aquaponics

A system that combines aquaculture (raising fish) with hydroponics (growing plants without soil). In an aquaponic system, fish produce waste in the water, which contains nutrients. Beneficial bacteria break this waste down into forms of nitrogen, like nitrates, that plants can absorb and use to grow. The plants help clean the water, which is then recirculated back to the fish.



KEY WORDS (cont.):

Urban Garden A lot managed and maintained for growing and harvesting, farming, community gardening, or any other use that contributes to producing agricultural products within metropolitan areas.

Peri-Urban Agriculture (UPA) The production, distribution, and marketing of food and other products within the urban and peri-urban area, applying intensive production methods and using natural resources and urban wastes.

Controlled-Environment Agriculture A way of growing plants indoors where temperature, light, and water are carefully managed to help plants grow better.

Soilless

Growing plants without using dirt or soil, often with water or special materials instead.

Aeroponics

A way of growing plants where their roots hang in the air and are sprayed with water and nutrients.

Solvent

A liquid that can dissolve or mix with other substances, like water dissolving sugar.

Hydroculture

Growing plants in water instead of soil, with nutrients added to the water to help them grow.

FACILITATOR BACKGROUND INFORMATION:

Facilitators who are urban farmers or who work directly with urban growers are best prepared to lead these activities. If you do not have this background, try to find someone with experience to cofacilitate. At the very least, be sure to visit some urban farms and talk to farmers about their experiences.

Facilitators should:

- Center the experience and knowledge of participants
- Prioritize participants' needs and questions
- Respect participants of all backgrounds
- Educate themselves on the impacts of systemic racism, economic oppression, and patriarchy on individuals, neighborhoods, cities, and the food and farm system.
- Educate themselves on local resources for urban farming
- Be ready to learn from participants and guest speakers

FACILITATOR BACKGROUND INFORMATION (cont.):

Several critical considerations should be considered to ensure its success when establishing an urban farm. These considerations include:

- **Cost Management:** To avoid financial difficulties, understanding the costs involved in operating the farm is essential.
- Market Security: Securing a market for your produce before investing heavily in crop growth is important.
- **Customer Value:** Focus on providing value that the customer defines to ensure market success.
- Land Agreements: Clear and formalized land agreements, whether buying, renting, or leasing, are crucial for the long-term stability of the farm.
- **Security and Compatibility:** Address security issues for crops, buildings, and tools, and consider the compatibility of farm operations with residential and commercial neighbors.
- **Legal Compliance:** Compliance with state or local zoning, permitting licensing, and other regulatory requirements is necessary to operate an urban farm.
- Location and Climate: Consider the climate, proximity to markets, access to water, soil quality, and sunlight availability when choosing the farm's location. Get to know your neighbors and the history of the land use.
- **Community Engagement:** Determine if the farm will involve community members, be a for-profit or non-profit business, or provide produce for other businesses.
- **Environmental Regulations:** Urban farms often face specific environmental regulations due to their location in densely populated areas, so understanding and complying with them is crucial.
- **Efficient Land Use:** Urban farming techniques should use land efficiently, such as hydroponic systems and vertical or rooftop gardens, to maximize food production in limited urban space.

By considering these factors, urban farmers can establish and operate their farms more effectively and sustainably.



KWL Process

Know, Want to Know, Learn



Suggested prompting questions for farmers to share from their experience:

- What is your current farm or organization?
- What types of spaces have you grown in (urban, rural, periurban)?
- What challenges did you face?
- How did you get support?
- What do you wish you knew when you started that you now know?
- In what ways have you maximized space while farming?
- How have you used farming to engage your community?



Suggested prompting questions to find out what participants want to learn:

- What barriers do you expect to face in an urban setting?
- Have you assessed soil quality and water access?
- What kind of farm do you plan to start? Will there be animals?
- How will you get your produce to the customer?
- Are there other urban farms in your community?
- Have you identified land that you will farm on?
- Have you developed or considered your urban farm's business plan?

Primary Activities

Overview of the main activities in this module

Activity 1

Learn from & Tour with an Urban Farmer

Visit an urban farm and schedule a guided tour with time for participants to ask questions about the operations.

Alternatively, invite an urban farmer or panel of urban farmers to share their experience, success, and challenges in building their farm.

Activity 3

Plotting Your Urban Farm

This activity will focus on plotting out the use of the farm space to maximize its use, along participants vision and goals.

Activity 2

Seeding Your Vision

Developing a meaningful vision is important for any farm, but especially for an urban farm because you will interact with the community in ways other farmers will not.



1. Learn from & Tour with an Urban Farmer

OVERVIEW

Visit an urban farm and schedule a guided tour with time for participants to ask questions about the operations.

Alternatively, invite an urban farmer or panel of urban farmers to share their experience, success and challenges in building their farm.

MATERIALS NEEDED

- Schedule a time and location that works for your guest speaker(s) and participants
- Projector and A/V Equipment
- If funds are available, consider an honorarium for the farmer.
 Paying farmers for their time ensures equity by valuing their labor and expertise, which are essential for a just and sustainable food system.

PROCEDURE

Invite an urban farmer or panel. Participants in the session might also be a good choice to speak with the class or join the panel if they have relevant experience.

- Have the group independently think about their own farming goals and develop a list of questions or challenges they'd like to workshop
- Then have them partner up or make a small group to discuss challenges and questions.
- Share and compare your questions and challenges together and with the visiting farmer(s)

1. Learn from & Tour with an Urban Farmer (cont.)

DIVE DEEPER

- Additional Resources: Regional Urban Farms
- Coordinate farm tours at three or four urban farms.

VARIATIONS

Guest speakers are a great option for online learning. Be sure to allow screen sharing if the guest speaker. Ask guest speakers if they allow recording of their talk and create a catalogue of farmers.

CONNECTIONS TO OTHER MODULES

This activity is also found within the Urban Land Access and Peerto-Peer Organizer's Guide - Learning On Land Module. For this Module, it is highly recommended that the learning experience happen on site, at an urban farm.

2. Seeding Your Vision

OVERVIEW

Developing a meaningful vision is important for any farm, but especially important for an urban farm because you will interact with the community in ways that other farmers will not. Whether it is through city council meetings, farmers markets, or your neighbors; it will be critical that you are able to communicate your why and provide boundaries for how folks are to interact with your farm.

MATERIALS NEEDED

- Lined paper or journals for each participant
- Working pens and pencils
- Soft, non-distracting music (optional)

FACILITATOR BACKGROUND INFORMATION

A vision is a picture of what success looks like at a particular point in the future—described with enough richness of detail that you'll know when you've arrived. It is a strong plan for future growth!

Participants should aim to develop a vision of their farm that is:

- Inspiring
- · Strategically sound
- Documented
- Communicated

This activity requires time to prepare the mindset of the participants, along with guided discussion with pairs or small groups. Participants should leave with a vision of their farm that they will share with the rest of their team and community.

2. Seeding Your Vision (cont.)

PROCEDURE

*Remember, there are no wrong answers!

Step 1: Pick your topic

Step 2: Pick your time frame

Be specific!

Step 3: Put together a list of "Prouds"

A list of "prouds" is a technique used to help a group articulate their positive achievements or aspects. It involves individuals or groups reflecting on and sharing what they are proud of. This technique can be used to summarize the feelings of a group and is especially helpful with large groups or groups with long-term goals and objectives for the future.

Step 4: Write the first draft of the vision

Set a 15-minute timer and instruct participants to write about their vision of their farm. It is important that participants write without stopping to overthink or edit. This is known as the hot pen technique. When using the hot pen technique, the individual keeps writing without stopping for a set period of time, regardless of the content or quality of the writing. This approach is aimed at overcoming self-editing and allowing ideas to flow freely.

As participants write the vision of their farm, they should consider the following prompts:

- Where in the community is my farm located?
- How will you grow on your urban farm?
- · How does the community interact with the community?

2. Seeding Your Vision (cont.)

PROCEDURE

Step 5: Review and re-draft

Pair participants and give them 20 minutes to share their vision and provide feedback to one another. This process could be repeated two or three times, depending on the number of participants.

Step 6: Get input from Advisory Content Experts

- Start with the people you trust the most
- May be outside your organization, or other farmers
- People who can provide perspective on whether the vision is "strategically sound."

Ask the following questions:

- What do you find most compelling?
- · Is anything unclear/needs fleshing out?
- · Anything missing?

Step 7: Start sharing the vision!



2. Seeding Your Vision (cont.)

DIVE DEEPER

- Create an opportunity for a series of guided revisions that take place at various local urban farms
- Coordinate urban farmers to provide feedback and/or questions to the visions the participants created (this could be virtual or in person)

VARIATIONS

Feel free to be creative with the location for this activity. If done on site, at an urban farm, it might provide greater inspiration and more critical thought as participants consider what their farm will look like and how it will interacted with the community.

CONNECTIONS TO OTHER MODULES

- Engaging Black Farmers
- Farmer Peer to Peer Network

3. Plotting Your Urban Farm

OVERVIEW

This activity will focus on plotting how participants will use their space of their farm to maximize use for their defined vision and goals.

MATERIALS NEEDED

- Graph Paper
- Computer Paper
- Pencils
- Erasers
- Colored Pencils

FACILITATOR BACKGROUND INFORMATION

This creative exercise will allow participants to start thinking about what their farm will look like and how they will incorporate the lessons from this module.

You'll instruct participants to work individually, in pairs, or in groups to map out what their farm will look like. If they have land already or have land in mind, they should use the plot size that is available to them. Otherwise, participants should use an ideal but realistic size and shape parcel to begin drawing their farm. In addition to what's been discussed in the module, a few considerations should be:

- What and who is around your farm? Are their neighbors, businesses, or both?
- · How will you access water?
- Will you, or someone else, live on the land you are farming?



3. Plotting Your Urban Farm (cont.)

PROCEDURE

While this activity focuses on the design phase (step 6), it is important to consider these crucial steps to assess your urban farm:

Step 1: Understand the site's historic use

Discuss the site history with individuals familiar with prior uses, and search public records such as tax assessment records to provide clues to prior use.

Step 2: Survey the property history

Identify the types of contaminants that may be present based on the property's history and previous uses.

Step 3: Test the soil

Assess the soil for potential contaminants such as lead, cadmium, and arsenic, which are of particular concern in urban soils (there is a soil testing activity for lead in. the Produce Safety curriculum and general soil testing information in the Soil Health Curriculum).

Step 4: Consider land suitability and climate

Evaluate the acreage, soil quality, and proximity to markets and other structures.

Step 5: Assess regional and neighborhood characteristics

Consider zoning regulations, distance to markets, and available utilities in the area.

Step 6: Consider design development and construction documents

Refine the conceptual design and create drawings and plans suitable for construction purposes and regulatory review. Participants should use this time to sketch out their farm using graph paper and make sure they consider the items reviewed throughout this module as they plan out their space.



3. Plotting Your Urban Farm (cont.)

DIVE DEEPER

- Once participants have finished, have they present their plan to the group for feedback
- Invite an urban farmer in who can provide direct feedback about the participants plans
- Invite a local city planner and/or realtor in to provide feedback and guidance about their farm plans

VARIATIONS

Feel free to be creative with the location for this activity. If done on site, at an urban farm, it might provide greater inspiration and more critical thought as participants consider what their farm will look like and how it will interacted with the community.

CONNECTIONS TO OTHER MODULES

- Soil Health
- Urban Land Access
- Civic Engagement for Urban Farmers
- Values & Goals for Land Access
- Produce Safety Risks
- · Soil Sampling for Lead
- Water Sampling

Additional Resources/Activities

Resource 1

Central Michigan Urban Farms

Allen Neighborhood Center*

Edible Flint*

Half Barn Farmstand

Magnolia Ave. Farm

Phoenix Community Farm

Port Huron Urban Farming Initiative

Resource 2

Northern Michigan Small/Community Farms

Forest & Farm
Little Parsley Farm
Marquette Community Garden
Roscommon Community Garden
TC Community Garden

Resource 3

West Michigan Urban Farms

McLaughlin Grows
New City Neighbors
Rooted Luv Farm
Sunlight Gardens
Superbloom Farms
Square Roots

Resource 4

Southeast Michigan Urban Farms

Cadillac Urban Gardens
D-Town Farm
Growing Hope*
Keep Growing Detroit*
Oakland Avenue Urban Farm
Pingree Farms

^{*}Denotes an organization committed to providing additional resources to building your urban farm in the area.

Review and Encouraging Further Learning

Module Review and Evaluation Questions:

- Do you have further questions about urban land access? Have you reviewed the Urban Land Access Module?
- What considerations have you already made when planning your urban farm?
- What do you need to research more about your own context?
- What questions do you have about urban agriculture?
- Which activities were most useful to you?
 - Community Assessment
 - Mapping Your Urban Farm
 - Case study videos and profiles

Activities for Review:

- What questions do you still have about urban agriculture and urban farming?
 - Write them down
 - o Talk them out with another participant in the workshop
- Research what urban farms or organizations are in your area and reach out to them and ask!
 - An urban farmer
 - A non-profit that works with urban farmers
 - o Businesses or non-profits that own vacant land
 - Your local food policy council



Review and Encouraging Further Learning (cont.)

Taking your knowledge back to the farm:

- Ask the group what next actions they plan to take. If they need prompts to begin brainstorming, try some of the following:
 - Find a farm site
 - Review the urban land access module
 - Make a site plan
 - Identify potential disruptions in your community (i.e., pests)
 - Discuss. different ways of engaging the community
 - Consider market opportunities in your context
 - o Discuss why it is important for you to have an urban farm
 - Create a map or list of other urban farms in your community
- · Other useful actions might be.....
 - Draft a vision or mission for your farm.
 - Discussing my farm values and goals with friends, family, mentors, and local farmers
 - Build growing skills by working or volunteering on a local farm or by starting or expanding a garden.
 - Find a mentor
 - Visit with local officials or present your plan to the city council to determine potential obstacles.