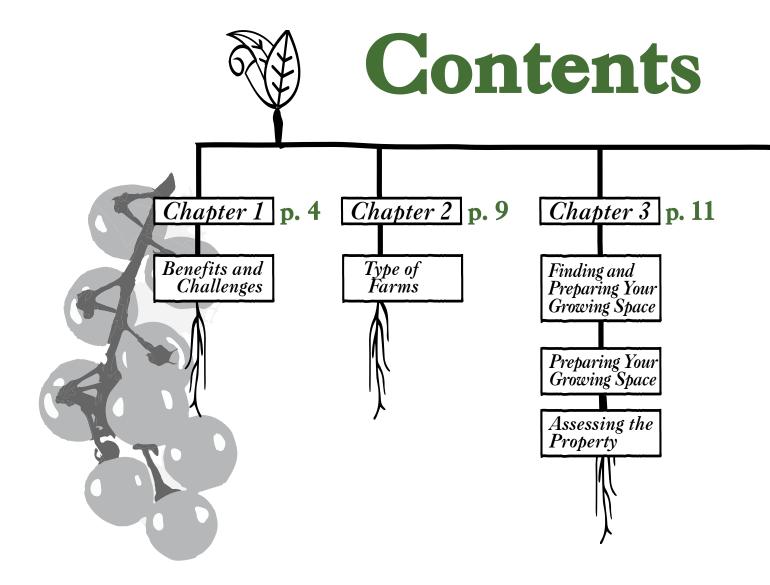
Urban Farming in Kansas City

A Guide for Decision Making



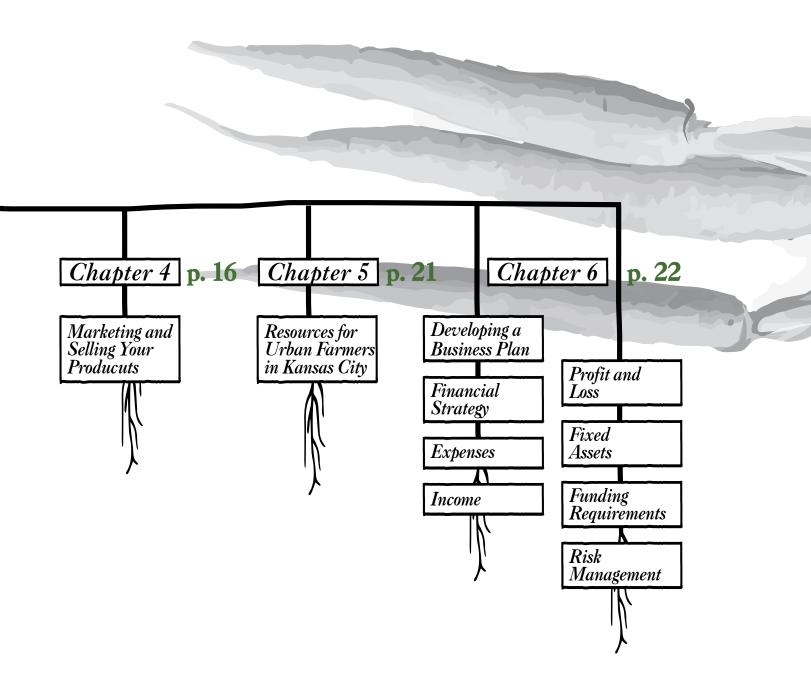
Urban Neighborhood Initiative Green Spaces and Urban Farms Action Group



Introduction

An urban farm business can have a substantial impact on a region by increasing accessibility to fresh produce. This impact can be particularly felt in low-income neighborhoods and areas known as "food deserts," which is a term used to describe parts of the community with limited access to affordable and nutritious food.

Though this guide is not intended to teach readers how to grow, its focus is to inform experienced growers who are seeking to start a farm business for supplemental income. If you are interested in learning how to grow produce and raise livestock, there are resources at the end of the guide with local organizations that can help you develop your skills.



This guide isn't a recipe for success. It is a guide to help you discover what you want to do and how to do it. It will be important for you to research your own neighborhood, identify your personal resources, and evaluate what your specific needs will be. We have compiled resources and useful information to help identify what type of farm business is best suited to you and your community. Throughout this booklet you will find worksheets from the **EPA Urban Farm Business Plan Handbook** that will ask questions to make you dig deeper on why you are farming and who you are farming for.

By the end of this process you should have the information you need to develop a business plan for success — however you measure it.

Benefits and Challenges

What is an urban farm?

An urban farm is city-based agriculture where food is cultivated, processed and distributed to the surrounding community. Part of what makes urban farming an attractive venture is its versatility in terms of what you can grow and how you can grow it. For example, the average urban farm may grow produce or raise livestock, while other urban farms may engage in beekeeping or aquaculture (fish farming). Interest in creating community gardens and urban farms is increasing as neighborhoods look for healthier food choices and productive uses for vacant lots. Urban farming is also becoming more popular on a global scale and is estimated to produce 15–20% of the world's food production¹.

An urban farm can be a nonprofit venture or a for-profit business providing the local community with access to fresh produce, job training, health education and neighborhood revitalization.

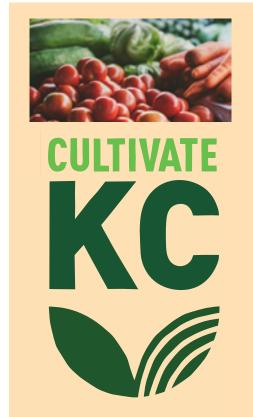


Urban farming in Kansas City

As a Midwestern city, Kansas City has strong cultural ties to agriculture and is extremely supportive of urban farming and local food systems. There are many organizations in the Kansas City area that work to increase food availability by encouraging and supporting urban farms:

In 2010, local food nonprofit Cultivate KC began working with the Kansas City, Missouri, **Urban Planning Department**, the city council and the mayor to pass codes that better support urban food production and access. They worked with the city to organize the first **KCMO Food Summit**, bringing together community leaders, city staff and elected officials to look at how the city is and should be involved in food production and access.

Cultivate KC was a partner in **Get Growing Kansas City**, a program launched in 2011, which put a multi-organizational team into neighborhoods to help promote urban farming businesses, and to work with communities and individuals to get food growing in their neighborhoods. They continue this mission today across our city's urban core.



Cultivate KC is a locally grown nonprofit working to grow food, farms and community in support of a sustainable and healthy local food system for all. Cultivate KC believes that growing and sharing local food nurtures our ability to care for each other and the world in which we live.

Cultivate KC works to create a democratic, just and sustainable food system that is resilient and adaptable, which entails:

- Viable farm and food businesses across the food region.
- Local food access for all.
- Local food integrated into the civic life of the community.



EPA Worksheet #1: Before You Begin

Think about the primary reasons why you want to start an urban farm and the expertise and resources needed to develop the business plan.

What are your primary reasons for starting an urban farm?
What expertise is needed on your planning team?
What resources will be needed to develop the business plan?
What values do you bring to this business that will help you define the success of the business?
of the business?

Why grow food locally?

There are many direct benefits to you and the community from growing food locally:

Income: Farming is a business that can create income for you and your household, but the amount of profit will depend on the type and size of your farm.

Food availability: Although a seasonal benefit, there is an immediate improvement in food availability. A wider variety of fresh fruits and vegetables than you might find at your local store is right outside your door and available to farmers and community members as soon as they are harvested.

Food nutrient density: Food taken straight from the garden tends to have higher nutrient value, since it doesn't have to be picked green to survive and shipped long distances.

Read about the health benefits at bit.ly/ kcurbanag.

Community building: People are attracted to urban gardens and farms. They want to know and be connected to the person who grows the food being provided to their community. You'll find that, over time, the people in your community will take interest in you and your farm business. If managed well, this can be the basis for strong social bonds.

Economic development: Through the creation of jobs, job training and increased access to fresh produce, your urban farm will play an important economic role in your area. When your farm purchases and hires locally, it benefits the local economy.

Transforming vacant lots: The Kansas City area has an abundance of lots that have sat vacant and unkempt for years. Purchasing a vacant lot for your urban farm benefits the community, natural environment and economy. Your urban farm may help revitalize a vacant or underused lot, and inspire others to do the same.

Environmental benefits: Your farm will attract honeybees and other pollinators which are necessary for healthy food crops. Small, organic farms can become safe havens for them to gather pollen and nectar. In fact, pollinators help roughly 30% of American crops to grow.²



Well-managed gardens hold carbon in the soil, preventing it from escaping into the atmosphere, where it adds to the greenhouse gases that are raising the temperature of our planet.

Like any business venture, urban farming is not without its challenges. Below you will find a list of some of the most common issues urban farmers encounter:

Zoning codes and city ordinances: A city's legal codes and ordinances often change over time, balancing the freedom to run your business the way you want, without disturbing the rights of your neighbors and fellow citizens.

For example, city codes dictate how tall you can let your lawn grow and how to eliminate weeds, but neighbors and enforcement officials cannot always tell the difference between a weed and a crop.

Fortunately, the **Zoning and Development** Code of Kansas City, Missouri was amended in 2010 to make it easier for urban farmers to grow and sell their crops. While a permit is not needed to sell fresh produce, a permit is needed to sell it on-site, as opposed to at a market or grocery store, and there are limits to the types and size of structures allowed on a property.

See a list of zoning laws pertaining to urban agriculture at bit.ly/kcurbanag2.

² "Importance of pollinators in changing landscapes for world crops," by Alexandra-Maria Klein, et al. https://royalsocietypublishing.org/doi/full/10.1098/rspb.2006.3721

Community engagement: This can be both an asset and a challenge as you may have some difficulty getting your surrounding neighbors to support living near an urban farm. Urban farming requires a willingness to engage with neighbors, municipalities, businesses and stakeholders. It won't always be easy. Not everyone sees the benefits of urban farming right away.

Labor: There is no way around it: farming is hard work and involves a significant amount of physical effort and repetitive motion. It is important to note that urban farming is usually done on a much smaller scale than conventional agriculture, which means most of the work is performed by hand rather than using farm machinery.

Weather: Urban farmers, like their rural counterparts, must expect the unexpected in terms of weather. Rainfall, temperature and sunlight amounts can vary considerably year to year. Considering this, it will be critical to be prepared. For example, having adequate water access in the event of drought conditions and methods for analyzing local weather trends are vital adaptations. Plant and harvest your crops accordingly.

Pests and disease: Contending with insects, disease and other forms of pests goes with the territory of being a farmer. Even if your urban farm is indoors, bugs, mold and fungi problems are a possibility. How you address these problems depends on whether you grow organically or conventionally.

Read more about organics at bit.ly/kcurbanag3.



However you go about it, integrated pest management (IPM) is the recommended approach, as it involves fewer risks to people and the environment, which is a priority for urban farms, as they are often located near residential areas.

More info on IPM is at bit.ly/kcurbanag4.

Soil quality: Healthy soil is a main component to a successful urban farm. Given that urban farms are often located on lots previously used for commercial or industrial purposes, there is a possibility of soil contamination, imbalanced pH or a lack of nutrients.

Learn more about soil quality and how to test your soil in **Chapter 3**.

Market fluctuation: A thorough market analysis is essential in the development of a successful urban farm. In order to cope with changing market trends and the possibility of market saturation of any single



crop, it will be necessary to regularly examine the factors that influence the market. For instance, the demographics and economic factors of your target customers will play a key role in your ability to make sales.

See the worksheet in <u>Chapter 6</u> on how to perform a market analysis.

Packaging and selling products: Regardless of who you sell to, you must consider how to get your products to them. This includes the cost of packaging, transportation and your own time. These needs might change from year to year as food has trends. Kale is popular this year, but next season, customers might be more interested in collards. It can be hard to keep up with changing tastes — whether your customer is a chef or a mom cooking for her family.

Business management: Growing food is your passion, and sometimes that makes it harder to focus on the business side. But business operations and management are fundamental to the success of your urban farm and are equally important. As a small business operator, you will be responsible for many areas of the business: staffing and management, finances, daily operations, marketing and more. Planning how these areas will function within your business can be a challenge to starting your urban farm.



Some neighbors may appreciate the sight of your tomato plants growing and fruit ripening. They may like going out for a walk to check on what is happening in your garden and be open to some friendly conversation over the fence.

Those conversations provide great opportunities for starting new dialogue: about food, about health, about community and about digging in to improve your neighborhood.

Types of Farms

As an urban farmer, you have numerous options when deciding what type of farm to cultivate. Would you prefer to strictly grow produce? Or are you also interested in raising livestock or even fish?

Different types of farms have their own features, benefits and challenges. It's important to choose a model that you are passionate about. Here are some models for growing and raising food in the city to consider.

Produce: A produce farm includes growing vegetables, fruits and herbs. Crops are grown in the ground, or in raised beds, containers or what are known as "hugel" mounds. **Read more about hugels at** bit.ly/kcurbanag5.

Orchard: Given the right piece of land, a fruit and/or nut orchard may be a worthwhile option for your urban farm. Fruit and nut trees require a good amount of sun exposure, and will need plenty of water when first planted. It is important to keep in mind that trees are delicate when they are young and will require fencing or another form of protection. Learn more about Kansas City's largest urban orchard at bit.ly/kcurbanag6.

Controlled environment: This system includes crops grown within a greenhouse or high tunnel (also known as a hoop house) where a plastic roof and walls protect your crops from the elements, which will allow you to extend your growing season. Read more about high tunnel hoop houses at bit.ly/kcurbanag7.

Aquaculture: Aquaculture, also known as "fish farming," is the practice of raising fish for eating. This could be a year-round production setup. The fish are raised in a pond, or in tanks in a high tunnel or greenhouse.

Hydroponics: A hydroponic operation grows plants in water using mineral nutrient solutions to help the plants grow instead of traditional media like soil. These systems can be expensive to set up and maintain, but because they are indoors, you have more control over the environment.

Aquaponics: Aquaponics, a combination of A\ aquaculture and hydroponics, is a self-sustaining ecosystem where water flows between an aqua culture fish tank and a plant growing bed. The fish waste in the water is used to supply nutrients to the plants. In high density systems, particularly where the fish are routed to different tanks, that waste can be sold as a nutrient as well.

Livestock: Though livestock options may be limited in an urban environment, Kansas City does allow residents to engage in small-scale animal husbandry, such as the raising of animals for fur, chickens, goats, and beekeeping. Zoning and code ordinances must be strictly adhered to when raising livestock, not only to avoid a fine from the city, but also to maintain courteous and respectful relationships with the surrounding community. **Read about these ordinances at** bit.ly/kcurbanag8.

Nurseries: Urban farmers can also run a nursery. Nursery farmers grow young trees and plants in an indoor or greenhouse setting for customers to use in their own gardens and landscaping.

Who is my customer?

In addition to understanding the benefits and challenges of starting an urban farm, understanding your customer base and community needs are also an important part of shaping your business. This will determine how you will communicate with them, and package and transport food, depending on your business model.



Here are some questions to consider that can help you to think about who your customer base is and what your community needs.

Who do you want to sell to?	How often do they shop for food or eat out?
Immediate neighbors.Entire neighborhood.Entire city/any customer I can reach.	Daily.Weekly.Monthly.
Where do your potential customers get their food from and how much does it generally cost?	Do they cook with fresh produce? Do they have access to the foods they want versus what is available?
 Restaurants. (Cost?: \$) Grocery stores. (Cost?: \$) Food pantries. (Cost?: \$) Farmers markets. (Cost?: \$) 	 Near produce markets. Near supermarkets. "Food desert" (i.e. only near convenience stores).
What form of payment do they use?	What kind of transportation do they use to get their food?
Cash.Debit/credit cards.SNAP card (food stamps).	Car.Carpool/rideshare.Public transportation.Walk.

What is most important to your customers?

- Price: They don't have much budgeted for food and want it to stretch.
- Quality: They want the produce to be fresh and clean.
- Selection: They like to eat different kinds of fruits and vegetables.
- Local: They like to support local businesses.
- Health: They struggle with medical issues such as diabetes, heart disease and obesity.

What community needs will your urban agriculture business fill?

- Geographic Access: Increased access to fresh produce.
- Quality and Selection: Improved produce quality and variety of selection.
- Personal service: High quality customer service.
- Education: Workshops on affordable and nutritious food options that make tasty meals.

Finding and Preparing Your Growing Space

One of the first steps to establishing your urban farm will be to figure out where that farm will be located. Is there enough space for what you want to do? Is it suitable for planting? Most importantly, is it available for purchase? In an urban setting, one option is to purchase a **vacant lot**. Urban growers will find an abundance of vacant and unused land in Kansas City.

There are various online tools at your disposal that can help you narrow down your search for a growing space:

Kansas city parcel viewer: Another way to find out more information on a property is through Kansas City's "Parcel Viewer" tool. By searching for a property by address, parcel number, or by simply locating and selecting it on the map; you can learn who owns the property, the property size, whether any construction or demolition occurred and much more. It is important to learn whatever you can about how the lot was used in the past in order to determine if the soil may have been contaminated.

Learn more about Kansas City Parcel Viewer at bit.ly/kcurbanag9.

Heartland Conservation Alliance vacant lot mapping tool: Available on their website, this tool has ten layers of information and instructions on how to use and understand this information. For instance, the map displays watershed and floodplain boundaries, reported sites of illegal dumping, vacant lots larger than 0.7 acres and much more.

Learn more about HCA's vacant lot mapping tool at bit.ly/kcurbanag10.

If you find that a lot you are interested in purchasing is privately owned, you can use the Kansas City Parcel Viewer tool to find out who currently owns the lot and reach out to them.



Preparing Your Growing Space

A healthy growing space is essential to any successful urban farm. Unless you are utilizing an aquaponic/hydroponic growing system, you will need to ensure that you have healthy soil. When shopping around for a growing space, you can request permission from the lot owners to have the soil tested prior to purchasing.

There are three main components to healthy soil³:

Soil pH: Soil pH affects the amount of nutrients available to plants through their roots. The pH scale goes from 0–14, with a pH of 7 being neutral. A lower number means a more acidic soil, while a higher number means a more basic or alkaline soil. When a soil's pH is near neutral, nutrients are more readily available to plants, and microbial populations in the soil increase.

A soil test will tell you the pH of your soil. Based on this information, you can determine whether additions called "soil amendments" are needed to change the pH to meet your gardening needs. Lime or wood ash additions raises the pH. Fertilizers containing ammonium-nitrate, ammonium sulfate or sulfur-coated urea will lower the pH for acid-loving plants.

Nutrients: A healthy balance of nitrogen, phosphorous, potassium and calcium is important and can be added to soil in various forms, including: fertilizer and lime (available in most gardening stores) and organic matter such as grass clippings, leaves and compost.

Physical properties: The ratio of sand, rock, silt, clay and organic matter that your soil contains affects its ability to hold nutrients and water. For instance, soil with too much clay (a common issue in Kansas City's soil) does not drain well. You can improve the physical quality of your soil by adding organic matter such as compost or manure.







Now that you know what to look for in your soil, you will need to get it tested. University extensions, such as the University of Missouri Extension, offer soil testing for a small fee.

Not only can you find out the nutrient content, physical properties and pH of your soil, but you can also request an Environmental Soil Analysis that checks for contaminants such as, arsenic, lead, chromium and several others. Soil contamination, especially if your lot is located near a commercial or industrial property, is a possibility.

Download the MU Extension sample request form at bit.ly/kcurbanag11.

The sample form contains detailed instructions on how to obtain your soil sample.

You can still grow crops if a soil test reveals inadequate quality or contamination within your growing space. Though improving overall soil quality can be a long process, you may be able to speed up the process with the addition of soil amendments, like compost, lime or wood ash. These amendments can stabilize contaminants or bind them so that they are no longer mobile or bioavailable.

If your environment doesn't provide these conditions, other possible solutions include:

Raised beds: By building raised beds, you can create a physical barrier between your crops and possible contamination in ground soils. Built for permanent or seasonal use, raised beds are relatively easy to build and will allow you to have more control over your soil quality. Even so, contamination from airborne contaminants, soil dust or soil splashback is a possibility. It is recommended that you consider covering walkways with mulch, grass, or other ground cover to protect the soil within your raised beds.

Soil removal: Another option is to have the soil removed and replaced with clean soil. If taking this route, it will be necessary to ensure that the supplier provides proof that the new soil has been tested to be contaminant-free.

Phytotechnologies: These are methods that utilize plants to extract, degrade, contain or immobilize pollutants in soil and groundwater. There are many benefits to phytotechnology, including reduced risk of soil erosion, improved air quality and environmental improvements. This process is not a quick-fix and may, in fact, take many years. It is also not appropriate for every contaminant. For instance, lead cannot be removed in this way, because plant roots will not absorb it.



Assessing the Property

Looking beyond soil quality, there are other equally important considerations when preparing your growing space. Once you have narrowed your list of potential locations for your urban farm, you will need to do a thorough assessment of each property to determine where the water would come from, if you will need to install a barrier for security, or any other potential start-up costs you will have to address.



Important items to assess include:

Access to water: In some parts of the country, it is possible to farm without regular access to water, but it doesn't work well here in the Kansas City area, where rain is not consistent. You will need water for washing your vegetables and rinsing your tools and muddy boots.



This issue is especially relevant when purchasing lots that have been vacant for an extended period. If water lines have been disconnected, a permit is required to reconnect. Check to see if your property has ever been granted a permit to do so on the KC Parcel Viewer.

You can view all current rules and regulations for service lines at bit.ly/kcurbanag12.

The most direct route to getting water is connecting to the public water supply. It is also the most expensive route, with a lot of variation in costs from one county or municipality to another. Costs include tap and meter fee to the water company and a city-certified plumber to install the meter and line. If the supply line is across the street, it may be cost-prohibitive to run a line under the street to your property. This can quickly turn an inexpensive piece of land into an unprofitable proposition.

If you want to farm on land that is owned by a business or non-profit, or that is next to a cooperative neighbor with an outside tap, you can purchase an inline water meter that will keep track of your usage. Meters can be purchased online. You can also negotiate an agreement to pay a percentage of their water bill based on their previous usage, or offer vegetables in exchange for water. Some may even see urban farming as a benefit to the neighborhood and will pay for your water themselves.

Here are links to Kansas City, Kansas, and Kansas City, Missouri water providers.

Board of Public Utilities, Kansas City, Kansas: http://www.bpu.com

The City of Kansas City, Missouri: http://www.kcwater.us

Site security: As with any business, it is necessary to make sure your inventory and equipment are secure. Vandalism and/or theft tend to be higher when an urban farm is first



established. There are times when people will take food from your farm without paying. Tools and equipment could be stolen and your property may be vandalized.

It may be helpful to build a fence or other type of barrier in order to protect your farm. In Kansas City, Missouri, the maximum height allowed for front-yard and side-yard fences (only if they are street-side) is four feet, while interior side and rear fences may be above six feet. A permit may be requested if a higher fence is needed.

Another security measure is the neighborhood watch. As the neighbors get to know you, as your farm becomes part of the daily landscape and less of an novelty, security will become less of an issue.

If neighbors know you and understand that you are trying to improve the neighborhood and do something positive, they are more likely to keep an eye out for unwanted activity around the farm. Give them your contact information and share extra vegetables when you can. Host get-togethers or potlucks at the farm to develop relationships with neighbors.

Storage: You will also need an area to store your



produce, tools and other farm equipment. In Kansas City, Missouri, a building permit is not required for a detached accessory structure, like a storage shed or garage, if it does

not exceed 200 square feet and is not more than one-story high. There is always an expectation of code compliance, even when the structure does not require a building permit, so be sure to review the necessary codes at bit.ly/kcurbanag13.

In addition, a way to keep your produce cool and fresh in between harvest and sale will be necessary.

If your farm has a garage available, that is the easiest option for produce storage. You can adapt a corner of the garage for tool/equipment storage and install a walk-in cooler to keep your produce cool and fresh. Others use small shipping containers or build their own sheds.

Read up on building permits at bit.ly/kcurbanag14.

You can sometimes find second-hand commercial refrigerators (no freezer, just cold space), walkin coolers, or consider buying new equipment to install in your garage, walk-in basement or other structure.

Organic farming: There is a strong movement in urban farming toward sustainable, organic production practices. Organic certification is only the beginning of the relationship a farmer has to the soil and to the community the vegetables feed. While there are barriers to pursuing organic certification, growers are encouraged to consider organic agricultural practices.

Some states have Organic Certification cost-share programs funded through the USDA:

Kansas: bit.ly/kcurbanag15

Missouri: bit.ly/kcurbanag16

Other resources include:

Alternative Technology Transfer for Rural Areas

(ATTRA): bit.ly/kcurbanag17

National Organic Program: bit.ly/kcurbanag18

Organic Materials Review Institute (OMRI):

www.omri.org

Midwest Organic and Sustainable Education Services (MOSES): www.mosesorganic.org

Missouri Organic Association:

www.missouriorganic.org

Structures and additional startup costs:

If the costs are too high to make a site usable, then it may be best to walk away and keep looking for another property. One example might be that the lot has an abundance of trees that would have to be removed prior to establishing your farm.

Hoop houses or high tunnels are a valuable addition to any farm. They allow you to start growing early

and keep your crops growing later, extending the growing season and the profitability of your farm business.

It is important to note that some urban farmers are running into

issues with installing high tunnels or greenhouses. For many farmers, high tunnels are allowed because they aren't considered to be permanent structures, but that interpretation varies by city and county. Consider asking your local government before you install a high tunnel.

Organics Certifying Agencies that cover KS & MO:

Indiana Certified Organic

www.indianacertifiedorganic.com/

8364 S. SR. 39

Clayton, Indiana 46118 Phone: 317-539-4317

Email: icollc@earthlink.net

One Cert

www.onecert.net/ 2811 Tennyson Street Lincoln, NE 68516 USA phone: 402-420-6080 Email: info@onecert.net

Organic Crop Improvement Association

www.ocia.org/

Kansas contact: Jacki Keller

2222 SW Glick Road

Topeka, KS 66614

Phone: 785-633-4621

Email: keller7@hotmail.com

Missouri contact: Kathy Calwson

110 Webster Street

Green Castle, MO 63544 Phone: 660-216-4717

Email: kathyc@nemr.net

Marketing and selling your products

One distinct advantage to urban farming is the proximity to your customers, which can range from residents to commercial businesses and/or restaurants. As an urban farmer, you will have a variety of options in terms of sales outlets. In fact, you may find that it is more profitable to use multiple sales channels. Read below to learn more about how you can make your product available to the local community.

Branding and communications

For some farmers, growing the food is the easy part. Selling it is the challenge. It can be difficult to familiarize customers with your farm and the quality food you grow. More local farm businesses start up every year, creating a crowded marketplace. You need to stand out to sell your produce and make a profit.

Name: Selecting a name for your business that is easy to remember and pronounce will help distinguish your business from others.

Logo: A distinct logo will also help your business stand out and visually communicate your mission and values. Developing a logo takes time and often involves hiring a graphic designer. If you don't have a designer, you can design your own logo, go to a print shop that has basic design services, or use what is called a "word treatment" where the style of lettering is the logo.

Social media: Many businesses only market through social media, such as Facebook, Twitter, and Instagram. Think about how your customers use social media and if they get information from other sources. It might take paid ads to reach customers on these platforms, even if they follow your posts.

Website: A good, well-organized website will help you sell to a wider audience. You want a site that appears when someone searches for "urban farms" on the internet (search engine optimization, or SEO). Additional expenses come with creating your a website, such as hosting and domain registration.





Selling

The decisions you make on which customers, organizations or wholesalers to sell to must be a good fit for your growing capacity, time commitment and network of potential buyers.

On-site stand: Selling at your home or on your farm site is the easiest and least expensive option for your business. Refer to your local zoning and planning codes to learn the guidelines. In Kansas City, Missouri, you do not need a permit to sell produce on-site. This can be accomplished with something as simple as a table and a few signs. It will be important to pick the most advantageous time of day or week in order to maximize profits. You can't generally sell at any time of the day because of how your commercial activity might interfere with the character of the neighborhood in which your farm is located. Considering this, pay attention to traffic patterns, available parking and other factors that will help or hinder sales productivity.

Community-Supported Agriculture (CSA):

A CSA is a model where you sell "shares" in your farm's harvests to your customers. Typically, your customers either pay you in advance for a full season's worth of produce, or another payment arrangement can be agreed upon, which could be weekly or monthly, depending on the produce drop-off/pick-up schedule and the needs of your customers. In addition, you will have to decide which option to offer your customers: pick-up, delivery or both. A truck or other large vehicle will be required for deliveries and the added costs of providing delivery service will need to be factored into your business plan. The added cost may be worth it, as you would be expanding your customer base to a broader area. Some CSAs in Kansas City even offer "work shares," where customers can work on the farm in exchange for fresh produce. Perhaps the most significant factor of a CSA is that the customer takes the risk of whether your farm is successful. They also risk not being given a large variety of produce depending on how productive your farm is season to season. For example, if it is a terrible year for tomatoes, but a great one for zucchini, your customers will only get a few tomatoes and a lot of zucchini. It is also important to note that a CSA model may not make the most sense for a newly established farm where a certain level of output consistency has yet to be achieved.

Farmers markets: More flexible than a CSA, farmers markets allow you to bring what you have on hand to market, regardless of crop failure or abundance/shortfall in any single crop. When you set up your table and open for business to the community, you are doing so among other farmers. This can be useful, as shoppers tend to flock to the variety and convenience found in that setting. Conversely, this high traffic also means high competition, particularly with those selling the same types of produce. To counter this, it will be beneficial to develop a niche or something that sets your produce apart from those around you. That could be anything from how you decide to design your table set-up to selling your produce in bundles or kits. It is also important to consider the added cost of selling in a market setting as opposed to an on-site stand, such as vendor fees, signage and transportation.

Restaurants: "Farm-to-table" restaurants and chefs interested in using locally grown produce may be a worthwhile sales channel. In fact, a little research on popular menu items offered at local restaurants may help you decide which produce would be best to grow. Restaurants benefit by receiving fresh produce consistently without having to pay to have it transported over long distances. Kansas City has several restaurants that purchase their ingredients locally and they use this fact as a selling-point to attract customers. Added costs involved in this type of selling would come from transportation alone.

Grocery stores: In order to sell to a grocery store, your farm would need to have the capacity to produce several cases of any one type of produce, otherwise, it would not be worthwhile for the grocery store to purchase from you. Grocery stores look for quality, reliability and low prices that are competitive. It can be a tough market, particularly for newly established urban farmers that don't have the yield volume that justifies the lower prices grocery stores are looking for. Even so, small corner stores remain an option if your farm isn't large enough to provide the quantities that large grocery stores are after.

How ready are you?

Like any small business, becoming a for-profit urban farmer is a big commitment.

There are many different ways to be an urban farmer, as seen on the previous page. Use the scorecard below to gauge how prepared you are to get into the business of urban farming. Score a 1 through 5 on each question based upon your confidence, skills and available resources for each important consideration.

A score of "1", for instance, would mean you have a low confidence or little resources in this area. A "5" would mean you have mastery over a certain skill, or are absolutely sure about your ability to acquire resources in that particular category. Add up your total at the bottom and proceed to the next page.

	1	2	3	4	5
Growing food for myself as a home gardener.					
Growing food in large quantities as a farmer.					
Marketing and sales.					
Budget planning and management.					
Communications (social media, website, email, etc.)					
Design and merchandising.					
Network of potential labor volunteers.					



	1	2	3	4	5
Network of service providers (graphic design, marketing, book-keeping, etc.)					
Network of potential customers					
Financial (and in-kind) resources					
Credit availability and/or risk tolerance towards going into debt to finance operations					
Network of people who could make personal loans					
Network of potential providers of equipment, supplies, tools and other resources					
(Add up all your scores here and see the next page to find out how to use your score as a starting point:)					

Total:

points

Score:	Suggested starting point:
13-26	Surplus produce farm: You may have less experience or available resources than other potential farmers, but with discipline and consistency, you can expect to make a couple hundred dollars a month (depending on how successful your outreach is with customers). At the very least, you will save money on produce and trips to the store, even after expenses are factored in.
27-39	Supplemental income farm: You are ready to make farming a significant part of your household income. With proper planning, you can expect to make a reasonable amount of money for the work you put into your farm. On that note, you will have some significant startup costs that either your family, partners or the bank will have to incur. Be sure to look at <u>Chapter 6</u> to get started on a prudent business plan to achieve success.
40-52	Family Farm: You are prepared to take farming to the next level and make it your primary source of income. Like all entrepreneurs, this decision to go all in should not be taken lightly. It will likely take several years for you to reach profitability, and so you must be financially comfortable enough — whether it's through side-gigs, a spouse's income or a quick start to your sales — to cover your household expenses and/or debt payments as you make this your full-time job. You will likely require over an acre of land to produce what is needed to sustain full-time farming operations.
53-65	Production Farm: Not only are you ready to formulate a full-time business around farming, you feel your managerial skills, resources and available land are large enough to support the salaries of additional paid laborers, as well as the proactive marketing and advertising needed to bring in enough revenue to support a larger operation. You will likely require more than two acres to run a full-scale production farm.

Characteristics	Gross revenue	Time frame	Labor needed	Typical size
Surplus Produce Farm	Under \$5,000	Can happen quickly and inexpensively because the customer base is smaller.	1–2 people	Less than 1/8 acre
Supplemental Income Farm	\$5,000-\$30,000	Will take some start-up costs, depending on the model, and will take some time to build a customer base.	2-4 people	1/8-1 acre
Family Farm	\$33,000-\$80,000	Higher start-up costs, and multiple years to profitability.	4-6 people	1–2 acres
Production Farm	\$80,000 +	Higher start-up costs, and multiple years to profitability.	6+ people	2+ acres

Disclaimer: Information contained in this guide is provided for general information and assessment purposes and does not constitute any legally binding professional advice on the subject matter.

Resources for Urban Farmers in Kansas City

There is a well-rounded support system for urban farmers in Kansas City, including several organizations and farming extensions that can provide you with information, support and advice essential to becoming an urban farmer.

These organizations include:

Cultivate KC: This nonprofit organization provides a multitude of resources for urban farmers and is actively engaged in municipal policy relating to urban farming in general. Cultivate KC's goal is to support a "sustainable and healthy local food system for all." To accomplish this, they manage three urban food-growing sites and provide direct information relating to establishing and maintaining an urban farm. For instance, the Cultivate KC website contains important information on how to obtain a farming mini grant, water access funding, city codes relating to urban agriculture and much more.

www.cultivatekc.org/

Kansas City Food Circle: This organization connects "eaters" with local organic farmers. There are approximately 100 sustainable farmers within the Kansas City Food Circle network. If you become part of the Kansas City Food Circle, there is a stipulation that your produce would have to be grown organically. By doing so, your farm would be added to the directory of farmers, CSAs and restaurants that constitutes the Kansas City Food Circle. This is by no means a requirement for urban farming in Kansas City, however, it is a valuable resource where you can acquire customers, connect with other local farmers and stay informed about urban farming news.

www.kcfoodcircle.org/

Missouri Department of Agriculture: The Missouri Department of Agriculture's (MDA) website includes a helpful farmers market map for the entire state of Missouri where you can find all the information needed to locate established farmers markets closest to you and reach out to the organizers. In addition, the MDA website contains information on a variety of topics, including farming news, pests and resources on how to acquire funding through government grants.

agriculture.mo.gov/







Developing a Business Plan

For your urban farm to be successful, it is crucial to develop a comprehensive business plan. Fortunately, the Environmental Protection Agency (EPA) has put together a series of worksheets in their **Urban Farm Business Plan Handbook** to help potential urban farmers develop their own business plan and financial strategy. Below you will find a portion of the EPA's handbook with full worksheet excerpts and sample answers on the next several pages.

A Financial Strategy is divided into seven sections:

Introduction: Summarize your plan and the things you took into consideration in its development.

Expenses: Develop a five-year projection for your farm's annual expenses, including adjustments for inflation using information such as the consumer price index.

This should include all of your farm's start up and ongoing operation expenses, human resources and marketing expenses. Do not forget to include expenses related to site cleanup, testing and environmental remediation. Discuss any research you conducted, and methods used to make estimates and projections.

Use Worksheet #23 (Expenses) on the next page to calculate and document annual expenses.

Income: Develop a five-year projection for the annual income for the farm. This should include any sales receipts for farm products sold, subtracted by **loss** due to spoilage or unsold products. Be sure to include all other income including grants, donations or rent.

Project your sales income by market segment in order to measure the performance of each. Discuss any research you conducted, and methods used to make estimates and projections.

Use Worksheet #24 (Income) on the next page to calculate and document the annual income.

Profit and loss: Develop a five-year projection for the annual profit or loss for the farm. The annual profit or loss is the difference between the estimated annual expense and the estimated annual income.

Use Worksheet #25 (Profit and Loss) on page 24 to calculate and document the annual profit or loss.

Fixed assets: Develop a five-year projection for the fixed assets that will require initial purchase or construction costs. Fixed assets normally include items such as land and buildings, motor vehicles, furniture, office equipment, computers, fixtures and fittings, and plant and machinery. These are items that are normally depreciated over time for tax purposes.

Use Worksheet #26 (Fixed Assets) on page 24 to calculate and document the fixed assets and estimated costs to purchase and install.

Funding requirements: Describe the sources and amount of funding (capital) required to purchase and install the fixed assets needed to start up the farm and achieve the five-year goals of the business plan. Consider the plans for obtaining the needed funding for the farm. Donations of equipment, such as vertical gardens or hoop houses, should be discussed along with the value associated with the donation. Any associated expenses should be included in the projected expenses for the farm (See Worksheet # 23).

Use Worksheet #27 (Funding) on page 25 to calculate and document the sources of funding, the anticipated amount of funding that will be obtained from each source, and what, if any, are the limitations on the use of the funding. Use Worksheet #28 (Funding Information) on the same page to document information concerning your funding needs and sources.

Risk management: Identify and evaluate potential risks that can impact the financial strategy and the success of the business plan.

Use Worksheet #29 (Risk Management) on page 26 to document information on the potential risks that can impact your financial strategy.



EPA Worksheet #23: Annual Expenses

Estimate the annual expenses for the farm. The following **sample** shows an example of one farmer's annual expenses.

						Assumption for annual adjustment for inflation percentage.
Direct Farm Operating Costs						Identify any additional assumptions used to develop the expense estimates.
Annual setup and removal						
Hoop house-temporary	-	-	-	-	-	Hoop houses to be permanent - One-time cost for installation.
Vertical garden	100	100	100	100	100	Vertical gardens will be installed by volunteers or farm manager, cost for
Vertical garden	100	100	100	100	100	miscellaneous items for set-up.
Other						_
Total annual setup and removal	100	100	100	100	100	
Repairs and Maintenance						
Repairs and Maintenance	1,000	1,000	1,000	2,000	2,000	Minor repairs to hoop houses and raised beds.
Total repairs and maintenance	1,000	1,000	1,000	2,000	2,000	
Equipment and Tools						
Fuel	-	-	-	-	-	No fuel use is anticipated.
Equipment leases (long-term)	-	-	-	-	-	No leases anticipated.
Rentals (short-term or daily)	-	-			-	No rentals anticipated.
Processing equipment	-	-	-	-	-	No processing equipment anticipated.
Tools	100	100	100	100	100	Annual expenditure to replaced worn or broken tools.
Tractor	-	-	-	-	-	No tractor anticipated.

EPA Worksheet #24: Projected Income

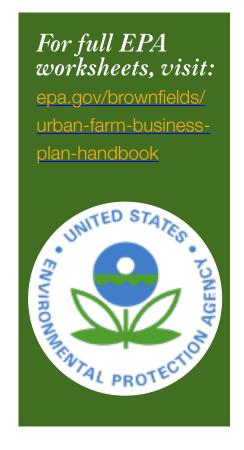
Estimate your annual income from farming. See the attached sample.

Detailed Income	Year 1	Year 2	Year 3	Year 4	Year 5	Assumptions and Limitations
Farm Sales						
Retail	10,315	19,275	28,877	32,658	27,170	Assumed 100%, 100%, 85%, 75%, 65% of sales in year 1, 2, 3, 4, 5, respectively.
						Assumed 0%, 0%, 15%, 25%, 35% of sales in year 1, 2,
Wholesale	-	-	5,096	11,219	15,707	3, 4, 5, respectively.
Other programs	-	-	-	2,000	2,000	CSA Income from retail sales.
Less: Spoilage	103	193	340	459	449	Assumed to be 1% of crop.
Net Projected Sales	10,419	19,468	34,313	46,336	45,326	
Other sources of Income						
Grants						
						Initial year based on Market Research proposal.
USDA Grant	35,000	30,000	25,000	20,000	15,000	Assumed reduce funding in subsequent years.
						Initial year based on Market Research proposal.
Local Grants	10,000	5,000	5,000	5,000	5,000	Assumed reduce funding in subsequent years.
Donations						
Special Events (Source)	3,000	3,000	3,000	3,000	3,000	Initial year based on Market Research proposal.

EPA Worksheet #25: Profit & Loss

Estimate the annual profit or loss for the farm. See the attached sample below.

Profit & Loss Projection	Year 1	Year 2	Year 3	Year 4	Year 5
Income					
Projected Sales	10,419	19,468	34,313	46,336	45,326
Grants and other income	48,000	38,000	33,000	28,000	23,000
Total Income	58,419	57,468	67,313	74,336	68,326
Direct Operating Expenses					
Annual setup and removal	100	100	100	100	100
Total repairs and maintenance	1,000	1,000	1,000	2,000	2,000
Equipment and Tools	100	100	100	100	100
Seed & Soil Materials	1,100	2,400	3,100	3,100	3,300
Human Resources & Personnel	43,372	43,372	44,372	44,372	44,372
subtotal	45,672	46,972	48,672	49,672	49,872
Indirect Operating Expenses					
Sales and Distribution	1,300	1,300	1,800	2,400	2,400
Marketing and Advertising	2,050	2,050	2,050	2,050	2,050
Utilities	5,300	6,200	6,350	6,400	6,400
Total Operating Expenses	54,322	46,850	49,200	50,850	51,050
Total Operating Expenses	34,322	10,000	13,200	30,030	31,030
Net Operating Income(Loss)	4,097	946	8,441	13,814	7,604



EPA Worksheet #26: Fixed Assets

Estimate the fixed assets for the farm.

Fixed Assets	Year 1	Year 2	Year 3	Year 4	Year 5	Assumptions Identify any assumptions used to develop the expense estimates. (Building and site prep estimates based
Initial Cash Outlay for Fixed Asset						on January 2011 preliminary project cost estimate.)
Land (Purchase or Lease)	-	-	-	-	-	
Site preparation Hoop house (including construction	188,000					Labor assumed to be performed by
labor) ³	16,000	16,000	16,000	16,000	-	volunteers. Labor assumed to be performed by
Raised beds/planters	2,250	2,250	2,250	2,250	-	volunteers. Labor assumed to be performed by
Vertical garden hardware Buildings and other structures	4,500	-	-	-	-	volunteers.
(Itemize)	297,000					Educational Facility.
Sales shed or farmstand Equipment (Itemize)			40,000	162,000		Enclosed farm stand, Shed.
						Installation of electric and water for hoop houses, repair of fences and
Other	5,000	1,000	1,000	1,000		installation of gates.
Total outlays for fixed assets	512,750	19,250	59,250	181,250	-	

EPA Worksheet #27: Funding

Estimate the funding sources for the farm. The attached example shows a farm receiving grants and donations.

Available Capital	Year 1	Year 2	Year 3	Year 4	Year 5	Assumptions and Limitations
						Identify any assumptions used to develop the expense estimates or limitations on th use of grants, donations or other funds.
Grants						
County Port Authority	28,500		10,000	10,000		Development and Administration grant.
State Community Development Finance Fund	20,000		10,000	20,000		Received – Site preparation, building construction, storage building.
Local Foundation Grant	35,000					Potential – Purchase of hoop houses.
CDBG	437,000			106,000		Potential – Site development, education center, farm stand.
USDA Grant: Community Food Project		10,000	15,000	20,000		Potential – Provide funding for capital improvements, hoop houses.
Donations						
Nonprofit Food Technology	7,000		15,000	15,000		Donation of vertical garden equipment, hoop houses.
Local donations and Fund raising events	10,000	10,000	10,000	10,000	10,000	Offset portion of farm manger salary.
Loans						
Investment						
Financing						
Other sources of capital						
Total available capital	537,500	20,000	60,000	181,000	10,000	

EPA Worksheet #28: Funding Information

What are the potential sources of funding?
Are there specific limitations on the funding?
What are the critical assumptions concerning the funding? Will there be expenses associated with it?
What is the timing of the funding and how will it impact the achievement of the business plan?
How will the funding be obtained?

EPA Worksheet #29: Risk Management

Identify and evaluate potential risks that can impact the financial strategy and the success of the business plan.

What are the potential risks that may need to be managed?	How likely is the risk to occur, high, medium or low?	What is planned to minimize potential risks if they occur?
Production:		
Marketing:		
Financial:		
Labor:		
Other:		



Acknowledgments

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