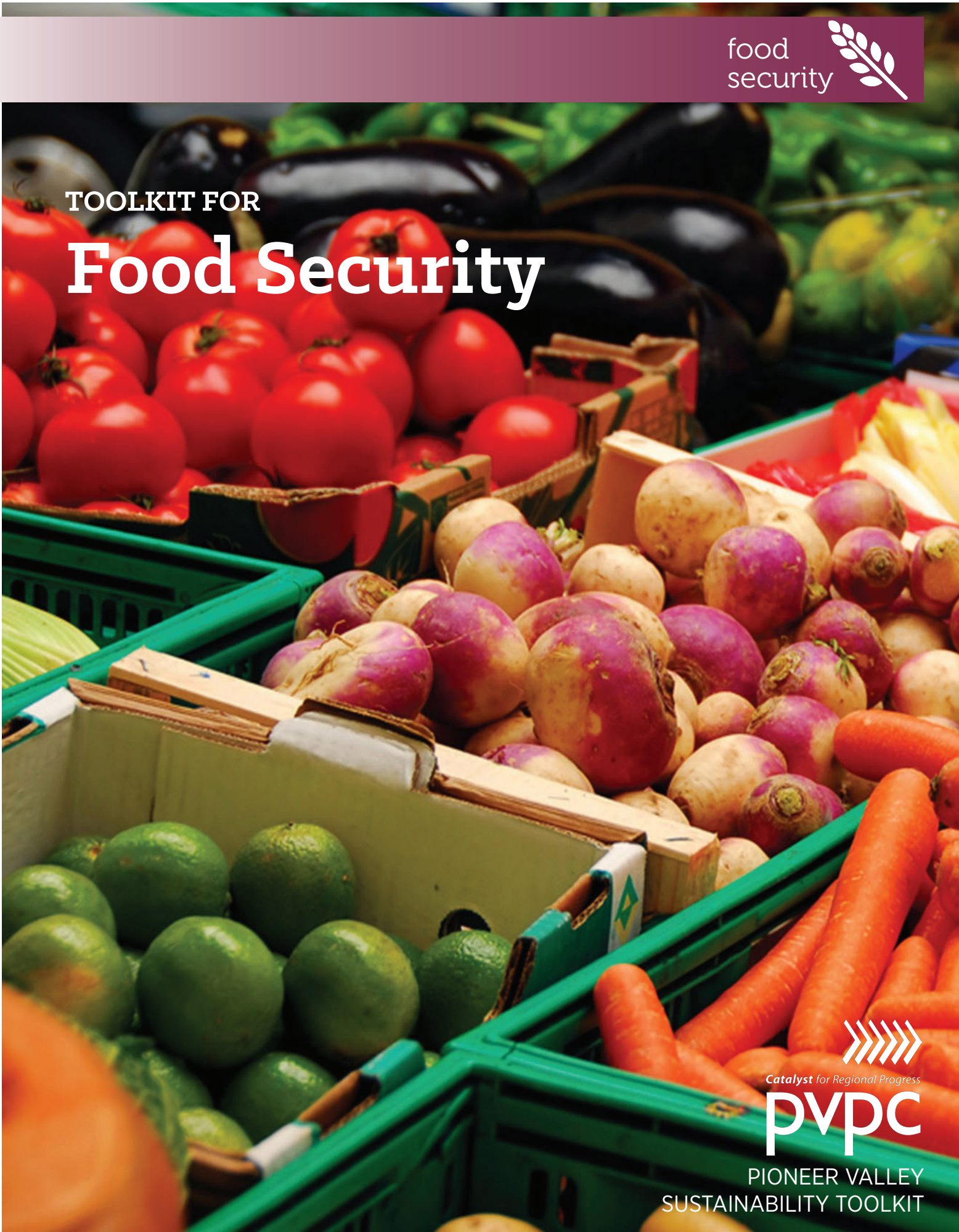
food security

TOOLKIT FOR

Food Security



Catalyst for Regional Progress

PVPC

PIONEER VALLEY
SUSTAINABILITY TOOLKIT

TABLE OF CONTENTS

food security

Catalyst for Regional Progress

PVPC

PIONEER VALLEY SUSTAINABILITY TOOLKIT

UNDERSTANDING

Community Gardens

Community gardens are a resource that many cities and towns use to increase access to healthy food. These gardens not only are a way to provide local produce, but they increase social interactions and bring about other benefits. They may also assist in reducing blighted areas by creating an active use in an area that may be run down or vacant. Community gardens are run and managed in a variety of different ways. Some are municipally sponsored, some are organized by non-profits, others are associated with schools or daycare facilities. Food grown can be consumed by those associated with the garden, given to those in need, or be sold at local farmers markets. Community gardens can be either temporary or permanent. They can be used as an educational tool to teach community members and youth about the importance of local, healthy food.

HOW CAN THIS BE IMPLEMENTED?

Research your local zoning code to ensure that your targeted community allows community gardens.

Determine if a local community garden ordinance exists, and if so, follow it. If not, check out the City of Springfield's ordinance as a model to replicate:

https://www3.springfield-ma.gov/planning/fileadmin/Planning_files/Community_Gardens2-FINAL__2_x.pdf

Assessing best locations to create community gardens is a good next step. Some areas that should be considered are: low income neighborhoods, blighted areas, and schools zones. Pocket parks may be good locations for community gardens since a garden can bring more people to the area, and those already in the vicinity can learn about the community garden.

It is important that the land has access to water and adequate sun (at least six hours per day in summer). Water may be provided by a connection to municipal or household supply, rainwater catchment (typically off of a roof), or a new well (typically prohibitively expensive). It is best to locate a community garden in a location that has access to public water. Check with the local government to determine how to access water.

The quality of soil is a key factor in garden success. Soil should be assessed for fertility and prior contamination. Soil tests can be performed by UMASS. See their webpage at:

http://soiltest.umass.edu/

In urban locations that have previously been developed, clean soil is typically brought into the garden and placed in raised beds. In areas with clean soil, follow the recommendations of soil tests and begin building fertility as soon as possible.

Plot sizes vary from garden to garden. 20x20' is a typical size for a plot intended to feed a family in a location with plentiful land and adequate native soil. Raised beds are typically about 8'x4' or smaller.

CHALLENGES COMMUNITY GARDENS ENCOUNTER

Management

Community gardens are management intensive. They demand patience, time and the capacity to work with and organize people and projects. They also typically require systems to enforce rules and resolve conflicts.

Maintenance

Community gardens are maintenance intensive. Grass will need to be mowed, gardens weeded, equipment will need to be repaired, and plant debris will need to be composted, among other things.

Participation

From year to year, gardeners and garden leaders come and go from community gardens for a variety of reasons. Because of this, it can be challenging to maintain a sense of community and consistency at gardens.

Theft and vandalism

Theft and vandalism are commonplace at many community gardens. If the garden has a toolshed, it may need to be locked and the garden may need to be fenced.

Gardening skills

Many new and some returning gardeners don't know a lot about gardening. Gardeners who lack gardening skills and have poor gardening experiences may be more likely to give up. Successful community gardens partner beginning gardeners with more experienced gardeners and/or provide training.

Leadership skills

Like any community-based effort, community gardens require effective leadership. Successful gardens actively cultivate new leaders so that the organization can sustain itself.

Services and supplies

Plowing, tilling and the delivery of compost and mulch can be challenging and/or expensive services for gardeners to arrange for themselves, but their may be not-for-profit organizations or municipal services available to help.

Site tenure

Most community gardens are located on borrowed land that has been temporarily made available for garden use. Be sure that investments made in garden infrastructure are appropriate to the amount of time that the garden is guaranteed to exist. Gardens can negotiate leases or other agreements that ensure the garden will not be disrupted or displaced during the growing season.

TYPES OF COMMUNITY GARDENS

Traditional community gardens are large lots sub-divided into plots gardened separately by individuals or families. Each gardener decides what to grow and is responsible for planting, watering, weeding, harvesting, etc. Typically, gardeners are responsible for a certain number of community service hours to maintain the spaces between plots and help run the garden organization.

Youth/school gardens expose young people to gardening and nature, give them the opportunity to do some of their own gardening and/or educate them in a variety of subject areas. These gardens are typically associated with a formal or semi-formal program that incorporates classroom lessons with hands-on gardening activities. Gardens may be located on school grounds, at a community center, in neighborhoods or on other parcels of land.

Entrepreneurial/job training market gardens are typically established by non-profit organizations or other agencies to teach business or job skills to youth or other groups. They grow and sell the produce they raise. Proceeds from the sale of garden products are used to pay the participants for their work. Programs typically rely on outside sources of funding to offset costs.

Communal gardens are typically organized and gardened by a group of people who share in the work and rewards. Plots are not subdivided for individual or family use. Produce is distributed among group members. Sometimes produce is donated to a local food pantry.

Food pantry gardens may be established at a food pantry, food bank or other location. Produce is grown by volunteers, food pantry clients, or both and donated to the food pantry.

Therapy gardens provide horticultural therapy to hospital patients and others. A trained horticulture therapist often leads programs and classes. Gardens may be located at hospitals, senior centers, prisons or other places. Demonstration gardens show different types of gardening methods, plant varieties, composting techniques and more.

Demonstration gardens located at working community gardens are often open to the general public for display and classes. They may be managed and maintained by garden

members or a participating gardening group such as extension Master Gardeners, community members who receive training in home horticulture and then serve as volunteers to educate the public about gardening.

LINKS TO MORE INFORMATION

FOR MORE INFORMATION ABOUT ESTABLISHING A COMMUNITY GARDEN, VISIT THE LINK BELOW

http://www.bostonnatural.org/cgOr_Resources.htm

https://communitygarden.org/resources/community-garden-start-up-resources/

http://www.pvgrows.net/

http://www.growfoodnorthampton.com/

FOR MORE INFORMATION, PLEASE CONTACT

Pioneer Valley Planning Commission
413-781-6045

60 Congress Street, Floor 1
Springfield, MA 01104-3419

www.pvpc.org

UNDERSTANDING

Food Hubs

PURPOSE

A regional food hub is an organization or business that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers. Food hubs strengthen the producers' ability to satisfy wholesale, retail, and institutional demands.

CHARACTERISTICS OF A FOOD HUB

» Carries out or coordinates the aggregation, distribution, and marketing of primarily locally/regionally produced foods from multiple producers to multiple markets.

» Considers producers as valued business partners instead of interchangeable suppliers and is committed to buying from small to mid-sized local producers whenever possible.

» Works closely with producers, particularly small-scale operations, to ensure they can meet buyer requirements by either providing technical assistance or findings partners that can provide this technical assistance.

» Uses product differentiation strategies to ensure that producers get a good price for their products. Examples of product differentiation strategies include identity preservation (knowing who produced it and where it comes from), group branding, specialty product attributes (such as heirloom or unusual varieties), and sustainable production practices (such as certified organic, minimum pesticides, or "naturally" grown or raised).

» Aims to be financially viable while also having positive economic, social, and environmental impacts within their communities, as demonstrated by carrying out certain production, community, or environmental services and activities.

Business structure classifications

» Nonprofit food hubs may be tied more to a social mission than to business profitability. Therefore, nonprofits may emphasize products that are more expensive to source, such as organic and fair trade products, but are valued by its consumer base. The focus on, and ability to cultivate, programs that respond to community and producer needs isn't as widely seen in other business models.

» Cooperative food hubs, whether producer-led, retailer-led, or with consumer members, there are several advantages to the cooperative business structure that make it a good fit for an emerging food hub. The cooperative structure is a well-known and established community entity with strong roots in agriculture that is owned and democratically controlled by its members. The membership

fees provide working and investment capital for the food hub, and any surplus revenues are returned to the members.

» A co-op is managed by a board of directors elected by the members, which – in the case of a food hub – may be made up entirely of producers who will manage the organization to meet their members' needs, such as providing a fair return on products sold, arranging transportation of goods to end consumers, promoting a certain production practice, or serving a certain geographic area.

» Public run food hubs are often a city-owned public market or farmers market that is carrying out food hub activities. They play a "matchmaker" role, helping farmers connect to a market outlet and sell their food products. Entrepreneurs and established businesses have pursued local food hubs as a potential area for profits.

Primary service markets

» Farm to business or institution food hubs sell to wholesale market buyers, such as food cooperatives, grocery stores, institutional foodservice companies, and restaurants. Under this model, food hubs provide new wholesale market outlets for local growers that would be difficult for them to access individually.

» Farm to consumer food hubs are responsible for marketing, aggregating, packaging, and distributing products directly to consumers. This includes multi-farm community supported agriculture (CSA) enterprises, online buying clubs, food delivery companies, and mobile markets.

» There are also hybrid food hubs that focus on both markets.

BENEFITS OF A FOOD HUB

Overcoming Infrastructure Barriers

The lack of distribution and processing infrastructure of appropriate scale restricts many farmers and ranchers from better accessing retail, institutional, and commercial foodservice markets, where demand for local and regional foods continues to rise.

Regional food hubs have emerged as an effective way to overcome these infrastructural and market barriers. For those smaller and mid-sized producers who wish to scale up their operations or diversify their market channels, food hubs offer a combination of production, distribution, and marketing services that allows them to gain entry into new and additional markets that would be difficult to access on their own. For larger producers, food hubs can provide product-differentiation strategies and marketing services that ensure the highest price in the market place. Moreover, for wholesalers, distributors, retailers, and foodservice buyers who would like to purchase larger volumes of locally and regionally grown products, food hubs lower the transaction costs by providing a single point of purchase for consistent and reliable supplies of source-identified products from local and regional producers.

Fulfilling essential services

In many parts of the country, wide gaps exist in local distribution and processing infrastructure, making it difficult for small and mid-sized growers to gain access to markets where there is unmet demand for source-identified locally or regionally grown products. Regional food hubs are increasingly filling a market niche that the current food distribution system is not adequately addressing—the aggregation and distribution of food products from small and mid-sized producers into local and regional wholesale market channels (retail, restaurant, and institutional markets). Additionally, because food hubs provide a number of additional services that build the capacity of local producers and also engage buyers and consumers to rethink their purchasing options and habits, food hubs are emerging as critical pillars for building viable local and regional food systems.

Although regional food hubs are filling a market niche of small farm distribution, this does not mean they do not engage with conventional supply chains. In fact, many food hubs complement and add value to these more traditional distribution channels by enabling regional food distributors—and their national food distribution clients and partners—to offer a broader and more diverse selection of local or regional products than they would otherwise be able to source. In addition, they often add significant value to conventional supply chains by providing a reliable supply of source-identified (and often branded) local products that conform to buyer specifications and volume requirements and still enable their clients to "tell the story" behind the product. For this reason, regional distributors—and even broadline, full-service national distribution companies like Sysco—are beginning to view food hubs as critical partners instead of competitors to ensure they can meet the market demand for locally and regionally grown food.

Positively impacting the communities they serve

Even though many food hubs are relatively new, they demonstrate innovative business models that can be financially viable and also make a difference in their respective communities. Economically, they are showing impressive sales performance and help to retain and create new jobs in the food and agricultural sectors.

Many food hubs are also looking to leverage their economic impacts into wider social or environmental benefits for their communities.

Socially

Most food hubs are providing significant production-related, marketing, and enterprise development support to new and existing producers in an effort to increase the supply of local and regional food. In addition, quite a few food hubs make a concerted effort to expand their market reach into underserved areas where there is lack of healthy, fresh food.

Environmentally

There are some food hubs that are encouraging their producers to use more sustainable production practices, as well as finding innovative ways to reduce their energy use and waste in the distribution system. In summary, food hubs and those that operate them

represent a new kind of food entrepreneur, one that is increasingly demonstrating a financially sound business model that can be both market and mission driven.

LINKS TO MORE INFORMATION

FOR MORE INFORMATION ABOUT FOOD HUBS, VISIT THE LINKS BELOW.

http://www.fccdc.org/about-the-center

http://www.ngfn.org/

http://www.wallacecenter.org/foodhubcollaboration

FOR MORE INFORMATION, PLEASE CONTACT

Pioneer Valley Planning Commission
413-781-6045

60 Congress Street, Floor 1
Springfield, MA 01104-3419

www.pvpc.org

UNDERSTANDING

Farm to Institution

PURPOSE

By increasing the demand for fresh locally grown food by large institutions, and by making the procurement process easier and more manageable, farm to institution initiatives help keep farming viable, promote good jobs and a strong agricultural economy, and also improve people's health and well-being.

EXAMPLES

Massachusetts Farm to School Project

Mass Farm to School Project (www.massfarmtoschool.org) is one of the oldest Farm to Institution initiatives. Started in 2003 as a pilot project in 5 schools, the program now includes 114 Farmers working in 231 school districts and 89 colleges or individual schools. Mass Farm to School facilitates sustainable purchasing relationships between local institutions and local farms, promotes local food and agriculture education for students, and supports state, regional and national networking of farm to school practitioners. They offer technical assistance.

University of Massachusetts-Amherst

UMASS-Amherst offers an example of high volume, affordable sourcing of locally grown foods purchased direct from a farmer who aggregates products from neighboring farms. Through this streamlined supply chain as well as purchases from traditional distributors and on-campus production, the University has increased local procurement within their produce budget to over 30%, and has signed onto the Real Food Challenge Commitment to reach 20% Real Food in their overall food spending by 2020. Success with the local foods program has fostered more opportunities – securing private foundation funds to expand the program and document the structure as a model for other campuses, solidifying student support for and participation in campus dining, and expanding key partnerships across campus and the surrounding community to institutionalize local foods procurement through administrative policy.

LINKS TO MORE INFORMATION

FOR MORE INFORMATION ABOUT FARM TO INSTITUTION PROGRAMS,
VISIT THE LINK BELOW.

http://www.whyhunger.org/getinfo/showArticle/articleId/93 Policy and Advocacy on Farm to Institution

http://www.localumass.com/ for more information on UMASS Dining Services' commitment to local food

http://toolkit.centerfornutrition.org/ Nebraska-based toolkit for starting Farm to School projects

FOR MORE INFORMATION, PLEASE CONTACT

Pioneer Valley Planning Commission
413-781-6045
60 Congress Street, Floor 1
Springfield, MA 01104-3419
www.pvpc.org

UNDERSTANDING

Poultry And Small Livestock Regulations

Allowing poultry and other small livestock to be raised in residential areas is another strategy for increasing access to food. Chickens, rabbits, goats and other small animals provide eggs, milk, and meat. Plus, they enhance gardens and farms by eating bugs, managing brush and generally improving biodiversity. And of course, their manure helps complete the natural nutrient cycle so things grow better.

Some communities in Massachusetts and the Pioneer Valley already have effective regulations for keeping chickens and other small livestock in residential neighborhoods. Typically, controls are placed on the type and number of animals allowed (often based on lot size), the size and setbacks of animal enclosures, and clear procedures for handling complaints from neighbors.

Other communities, especially those that are more rural in character, may address small livestock regulation through a "right to farm" bylaw, which typically offer greater flexibility in the keeping of small farm animals.

EXAMPLES OF POULTRY AND SMALL LIVESTOCK REGULATIONS

Arlington, Massachusetts

Up to six (6) hens—and no roosters—are allowed in residential districts by right. Hens and eggs cannot be sold commercially, and must be kept at least 25 feet from residences on adjacent lots. Owners must obtain a permit from the local Board of Health.

Northampton, Massachusetts

The City established two categories of animals which are allowed as accessory uses. The first category covers animals which are considered pets. It allows up to six rabbits, and up to six chickens or three ducks per parcel or per structure. The number of chicks and ducklings is not limited. Coops must be at least 4 feet from property boundaries and at least 10 feet from existing residential structures on abutting parcels. All stormwater runoff from coops, runs and compost areas must be contained on site. The second category covers "farm animals and exotics" and sets more restrictive standards. It requires a minimum lot size of 30,000 square feet to keep animals including sheep, goats, and llamas. Three animals are allowed for the first 30,000 square feet, with an additional animal allowed for each additional 10,000 square feet of lot area. Other types of animals require an additional 15,000 square feet for each animal beyond the first three. Animals

under six months are not counted toward the limits. Stables must be at least 100 feet from a street lot line and 30 feet from other lot lines. Stables, corrals and yards must be kept clean without excessive odor, dust or mud.

Easthampton, Massachusetts

The City allows up to 25 hens or other poultry (but no roosters!) on lots that are at least one acre in most (but not all) residential districts. Up to six hens (again, no roosters) are allowed on lots of at least 15,000 square feet in more residential districts. Hens and small livestock are allowed by Special Permit on lots smaller than 15,000 square feet.

IMPLEMENTING REGULATIONS FOR POULTRY AND SMALL LIVESTOCK

When it comes to regulations for poultry and small livestock for food, every community is different. Many communities regulate small animal keeping through zoning bylaws; other towns do it primarily with board of health regulations. Some key factors to keep in mind when deciding whether a new or improved regulation for poultry and small livestock include:

- Should there be different rules about small livestock for outlying areas versus more densely settled areas of the community?
- Should the regulations apply only to animals kept for "personal" use in residential areas—and be structured to make sure that commercial livestock operations are kept in agriculturally or commercially zoned areas?
- Should residents be required to register small livestock, the way many communities require dog licenses?
- How are large livestock, like cows, bison, and horses, regulated?
- Who will inspect animal facilities, enforce regulations, and handle complaints?

LINKS TO MORE INFORMATION

FOR MORE INFORMATION ABOUT KEEPING CHICKENS, VISIT THE LINK BELOW
http://pioneervalleybackyardchickenassociation.weebly.com/index.html

http://www.backyardchickens.com/

http://www.backyardpoultrymag.com/

FOR MORE INFORMATION, PLEASE CONTACT

Pioneer Valley Planning Commission
413-781-6045

60 Congress Street, Floor 1
Springfield, MA 01104-3419

www.pvpc.org

UNDERSTANDING

Urban Agricultural Districts

Urban agriculture is an increasingly popular and common sense way to grow more fresh food in cities and suburbs—closer to people who will buy and eat it. Urban agriculture includes community gardens, where individuals tend their own plots, as well as small farm operations that may have small fields. Many people are familiar with the idea of urban agriculture from the "victory gardens" that were numerous during World War II. Today, urban agriculture offers many benefits beyond the obvious benefit of producing more healthy fresh food, from education about where food comes from, to creating centers of community activity where residents to come together, to making productive use of vacant or under-used land that enhances neighborhoods.

Communities can encourage more urban agriculture by designating a zoning district in which standards apply for how the garden or farming areas are laid out and maintained. Unlike rural farms, urban farms and gardens have many neighbors. By setting out clear definitions and expectations, urban agriculture can fit well with its context. In fact, various studies show that many communities with urban agricultural districts have less crime, better economic development prospects, higher adjacent property values, significant health benefits, and improved food security.

DEFINITIONS

Many urban dwellers are unfamiliar with the structures and equipment used in farming. Therefore, zoning regulations for a good urban agriculture district should include some clear definitions of common urban agriculture items, such as:

Greenhouses: Buildings with large translucent roofs and walls in which plants are cultivated. Typically has a heating system.

Hoop houses: Temporary structures similar to greenhouses with a lightweight frame in a "half-round" or "hoop" shape that is covered with translucent plastic. May be heated.

Cold frames: Unheated outdoor wooden or concrete frames with top that is covered with glass or clear plastic, usually used to protect seedlings and extend seasons for leafy crops during cold months.

PERMITTED USES

It's important for a community to clearly understand the reasons why they want to have an urban agriculture district. Is it only to grow fresh food for home use of the gardeners or farmers—or should sales to the public be allowed? Is agriculture a desired permanent use in the district—or is it more of a transitional use until other development of the land becomes more viable and beneficial to the community? Will poultry or small livestock be allowed? What about large animals? Is education a component? What about space for community gatherings?

Answering these questions will help everyone decide what the principal uses should be in an urban agriculture district. Some typical principal uses include:

"Community gardens" typically less than 5 acres in size that may have occasional sales of items grown at the site only.

"Market gardens" which include the sale of crops produced on the site, as well as a defined percentage of supplemental products that may be brought in to meet demand.

"Urban Farming" which can be up to 10 acres, typically owned and operated by a nonprofit or community-based organization with professional farmers and support of members or volunteers.

ACCESSORY USES

Once the principal uses are established, the community needs to decide what supporting, or "accessory" uses need to be allowed so those uses can be fully realized. Typical accessory uses include:

- Greenhouses, hoop houses, cold frames, and similar structures used to extend the growing season
- Compost bins, fences, rain barrel systems, chicken coops, beehives, and other structures typically associated with growing and agriculture.
- Open space associated with and intended for use as gardens, staging and resting.
- Farm stands, usually seasonal only, with limited hours.
- Signs, typically limited to informational and directional.
- Benches, bike racks, shade shelters, picnic tables, and children's play areas and other facilities for farmers and gardeners.
- Raised and accessible planting beds
- Rest-room facilities with composting toilets.
- Off-street parking and walkways.

STANDARDS FOR THE URBAN AGRICULTURE DISTRICT

Based on the principal and accessory uses, the community may then turn to some of the more specific details, or "standards," for how the structures and lay out of farms and gardens in the Urban Agricultural District should be configure. Standards may vary, depending on the character and density of development in the district. Some typical standards include:

- Setbacks: Buildings should be no closer than five (5) feet from a residential property line.
- Height: No buildings or other structures should be higher than twenty-five (25) feet.
- Building coverage: The combined area of all buildings, excluding greenhouses and hoop houses, should not exceed fifteen percent (15%) of the total lot.
- Parking and walkways: Off-street parking should be allowed only for gardens or urban farms that are on lots larger than 15,000 square feet, and then should be no more than ten percent (10%) of the lot. It is also preferable that parking lots and roads on the site be either unpaved or surfaced with gravel to reduce stormwater runoff. Similarly, walkways should also be unpaved, except as necessary to meet the needs of people with disabilities.
- Signs: Should not exceed four (4) square feet in area per side and shall not exceed six (6) feet in height.
- Seasonal Farm Stands. Farm stands should be removed from the premises or stored in a building on the site during the off season when sales to the public are not available.
- Fences: Should not be higher than six (6) feet. If they are taller than four (4) feet, they should be at least fifty percent (50%) open (slatted) and should be made of wood, chain link, or ornamental metal.

LINKS TO MORE INFORMATION

METROPOLITAN AREA PLANNING COUNCIL: ZONING FOR LOCAL FOOD PRODUCTION
http://www.mapc.org/sites/default/files/Food_system_guide_3-18-14.pdf

ON THE GROUND: BOSTON URBAN AGRICULTURE ZONING AMENDMENT QUICK FACTS
http://www.bostonredevelopmentauthority.org/getattachment/8a1e3014-d6c7-42ac-969f-c9bb12ccf955

CITY OF MINNEAPOLIS, MINNESOTA URBAN AGRICULTURE POLICY PLAN
http://www.minneapolismn.gov/cped/planning/plans/cped_urban_ag_plan

POLICY LINK FACT SHEET: URBAN AGRICULTURE AND COMMUNITY GARDENS
http://www.policylink.org/find-resources/library/urban-agriculture

FOR MORE INFORMATION, PLEASE CONTACT

Pioneer Valley Planning Commission
413-781-6045

60 Congress Street, Floor 1
Springfield, MA 01104-3419

www.pvpc.org