Core Module #8: Urban Agriculture

Enjoyment Module
The challenges of urban agriculture.

Community involvement in urban agriculture.

Advancements and innovations in land reuse and urban agriculture.

Training and education that supports successful urban agriculture.

Authors: Meredith Taylor and John S. Watson, Jr.

Themes

1. The challenges of urban agriculture.
2. Community involvement in urban agriculture.
3. Advancements and innovations in land reuse and urban agriculture.
4. Training and education that supports successful urban agriculture.

Background
Lack of access to fresh nutritious foods in urban communities directly affects the health and quality of life for many communities of color. Lack of fresh markets, high prices, and low-quality food sources result in health concerns, including high obesity rates, diabetes, and heart disease. Growing fresh produce in cities is an emerging land use that improves access to good nutritious foods and connects people with the source of their meals, all while enhancing neighborhood aesthetics and providing a gathering space for communities outdoors. Cities across New Jersey and the nation are utilizing undeveloped lands and vacant lots for food production. Neighbors are getting involved in the growing, nurturing, harvesting, and consumption of these hyper locally grown products. “Vertical Farms” are cropping up in former industrial buildings using cutting edge indoor controlled atmosphere hydroponic and aeroponic growing techniques and strategies.

Values/Benefits
Growing nutritious food sources in neighborhoods will provide easy access to healthy choices of food products. Proper diet can measurably improve the health and wellbeing of a community. Easy-to-access neighborhood spaces also provide opportunities for new food entrepreneurs to develop value-added products, such as local honey, hot sauces, herbal botanicals, tomato sauce, and other ‘up market’ products. Also important are the social benefits generated by urban green spaces. These farms provide places for communities to gather around important topics of discussion, music, poetry, art, and other programs that get people outdoors connecting with the environment, soils, food production, and nature.
Challenges
One challenge is that just about every urban lot presents remediation obstacles to overcome to ensure that the food we consume is grown in places that are not contaminated. Urban vacant lots often have had some prior use that may have contaminated the land in some way through demolition of structures and backfill in basements, underground leaking fuel storage tanks, lead paint residue, and illegal dumping, to name a few.

If we are growing food to bring good nutrition to the community, we must make sure the soils are suitable for safe growing so contaminants are not absorbed into edible parts of the plant and the workers and visitors at the site are not exposed while working.

Other challenges include developing a consistent, skilled land management structure by the community to operate and innovate in the space.

Solutions/Mitigation
We should use public funding sources, foundation grants, and “angel investors” to permanently dedicate these properties to open space/natural habitat (pollinator meadows and micro forests) and agriculture. These lands can be held by local nonprofit land conservancies, or the local community, and the lands should be protected by a conservation/agricultural easement, which will restrict the lands for these purposes in perpetuity. If the community no longer has the will to farm the lands, they can easily be converted into pollinator meadow habitats, or micro forests to help cool our streets and clean our air, aiding our climate resiliency objectives.

All resources, including state/federal agencies, licensed site remediation professionals, institutions, and universities, should lend their expertise and resources to assist in soil sampling, developing remedial action work plans, and remediating these lands to make sure the growing medium and workspace is safe for the community and consumers.

Most often, urban gardeners will either test the soil or generally assume that their sites are contaminated in some way. The way these sites are generally ‘unofficially mitigated’ is by bringing in soil and compost and planting in raised beds in the new soils so that none of the food source plant roots will penetrate the existing soils on site.
Teaching/Training
We must tap into the local institutions to provide curriculum and ‘hands-on’ experiences in agricultural, environmental, and related industries. Working with vocational technical schools, private universities, and governmental agencies, we can train communities to use proper techniques and share information on professional fields of employment. Additionally, local garden clubs, extension services, and others are all looking for opportunities to engage their communities around similar issues.

Training should include topics like soil science, basic horticulture, agricultural techniques, greenhouse management, food and health connections, marketing, and sales. Nonprofit organizations and municipal/county officials can support the community on strategies to identify, preserve, and dedicate lands and lots for these purposes.

Basic training on conducting environmental assessments, land remediation requirements, and feasibility and actions needed to make land safe for food production can be provided by the local health offices, environmental agencies, and others.

Facilitation Questions
1. What is “urban agriculture”?
2. What are some of the benefits of urban agriculture?
3. What are some challenges in urban agriculture?
4. What are some new, innovative ways to produce food in our cities?
5. Why are these new methods important and beneficial in urban spaces?
6. What are some of the products that can be marketed to the community?
7. What other ‘community values’ can be derived from farm spaces in cities?

Additional Resources
- A guerilla gardener in South Central LA / Ron Finley – TED talk
- USDA Urban Agriculture
- Rutgers Urban Agriculture Lab