

Farming from the City Center to the Urban Fringe

Urban Planning and Food Security

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Food production has traditionally been seen as an agricultural or rural issue. But as food insecurity and poor health becomes acute in U.S. cities, urban agriculture should become as high a priority for planners as

Eighty percent of the U.S. population lives in cities. Thus, the current food system requires vast resources for distributing, processing and storing food from the world wide places of production to cities which may be thousands of miles from the places where the food was produced. This expends tremendous amounts of energy, contributes to wear on roadways, adds to pollution, and increases the amount of food lost to waste during travel.

Additionally, the more complex and far-reaching the food system, the more difficult it is to keep safe.

Incorporating urban agriculture as an integral part of city planning can provide new means to decrease energy and environmental costs associated with food in cities. Urban agriculture is defined as the growing, processing, and distributing of food and other products through intensive plant cultivation and animal husbandry in and around cities. An urban food system contributes significantly to community health and welfare; to metropolitan economies; to other urban systems such as housing, transportation, and land use; and impacts the urban environment.

Urban Agriculture Builds on the Resources of Cities

Urban planners are joining with health and nutrition advocates, community gardeners, U.S. Cooperative Extension or their equivalent, emergency food distributors, and faith communities to promote and support local and regional food systems. Community economic development organizers and environmentalists, concerned with urban waste reduction and recycling, see the potential of urban farming to create jobs and improve the quality of water, air, and soil.

Growing food can have a regenerative effect on the inner-city, especially when vacant lots, which number in the tens of thousands in some de-industrialized cities, are transformed from eyesores into gardens. Often, once a vacant lot becomes green space, the surrounding areas are cleaned up and redeveloped as well. Property values of those lots increase, bringing new revenue into the city.

Urban farming has significant economic potential and merits long-range planning for economic development and security. There are three main types of urban agriculture: commercial farms,

community gardens, and backyard gardens. Backyard gardeners use land around their homes or grow on rooftops and balconies. Community gardeners use larger pieces of land that are subdivided among several households. The produce from both types of gardens are used primarily for home consumption. However, they can have a significant economic impact on the family's food budget - adding between \$500 and \$1200 of produce to family meals. Urban commercial farms are set up as for profit enterprises and may combine with commercial kitchens to create value-added food products such as salsa and jams and sell to farmers markets, restaurants, and Community Supported Agriculture (CSA) ventures.

Challenges of urban agriculture

Land Use Planning

The preservation of agricultural land is increasingly becoming a regional priority, with cities being asked to reduce sprawl as part of the solution. Urban planners can assist in a number of ways:

-Support smart growth and other initiatives that manage urban and suburban sprawl without loss of critical open space and farmland.

-Develop ways for governments, land-grant universities and

businesses to preserve existing farms and to convert idle and under used urban lands to areas of food production.

-Encourage land tenure schemes such as land trusts, leases, eminent domain, and allied policy initiatives.



Rooftop garden in Seattle.

-Secure long term use commitment for community gardens, entrepreneurial farms, and other urban agriculture ventures to ensure the horticultural, social and economic value of the venture.

Public Policy

The food sector, comprising restaurants, fast food outlets, supermarkets, specialty food stores, taverns, green markets,

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farmers' markets and food wholesaling is an important part of the urban economy and needs planning. Policy changes could support the following ideas:

- Support institutional food buying from local vendors by changing bidding codes to allow preference for local products.
- Support sales cooperatives that allow vendors to come together and create their own business venture and sell to institutions or individuals.
- Promote buy-local campaigns to create new business for local food producers.

Nutrition and Health

City residents often have difficulty obtaining nutritious food at a fair price. This incurs health problems related to inadequate food, an unbalanced diet, or excessive intake of foods high in fat and calories. Preliminary studies suggest that those who grow their own food have a higher intake of fruits and vegetables. Growing food provides an active lifestyle and recreational opportunity needed by the largely sedentary US population. Health care planners should support urban food systems as a means to prevent diet-related diseases and obesity.

Environmental Clean Up

City planners are faced with abandoned buildings and vacant lots that are contaminated with lead and other industrial chemicals. Agriculture can be a means of creating a valuable use to these spaces while decontaminating the site.



Raised beds in a Seattle community garden.

- Raised beds with uncontaminated soil and compost has been successfully placed on top of questionable soils, enabling farmers to produce healthful food.

-Low-cost soil testing, subsidies, and training support have enabled gardeners to know their level of lead risk and seek appropriate solutions.

-Phytoremediation (using nonedible ornamental plants to take up metals from the soil) has great potential to assist with lead abatement.

-Where air and ground pollution produces significant risk to food safety, ornamental plants produce urban beauty and potential business income in blighted areas.

-Use of organic agricultural practices will decrease further introduction of chemicals to city soils and water supply.

-Sheltered production methods have been used to avoid contact with the soil and air by providing alternative production sites in

contaminated areas.

Transportation

Household and individual trips to the grocery store and other food outlets contribute to a significant portion of urban transportation volume. Because many urban residents do not have cars, the quality of a city's transit system becomes a major factor affecting their ability to access affordable food stores. The movement of supermarkets from the inner city to the suburbs contributes to the problem. Planners can subsidize or find other means to support several activities to get shoppers to and from larger supermarkets and farmers' markets.

-Support intra-city transit lines that travel from neighborhoods directly to grocery stores and farmers' markets.

-Support store-initiated shuttles for seniors and those without private transportation.

-Create and promote grocery delivery businesses for homebound residents.

-Allow zoning variances for smaller parking lots associated with large grocery stores so that they can fit into existing inner city lots in areas with high foot traffic or other public transportation services.

Planning Changes Specific to Urban Agriculture

While the needs of urban farmers are in certain cases similar to those of rural farmers, in other cases they are quite different and require special services. Planners and policymakers can work with representatives of urban farming organizations and food policy councils to meet these needs.

-Support an educational infrastructure through urban extension agents, parks and recreation gardening programs, and school gardens.

-Support entrepreneurial infrastructure for increased urban food production, processing, and marketing ventures, funding streams, and technical service providers.

-Tailor loan programs so that urban growers as well as rural farmers have access to benefits such as start-up capital, credit, crop insurance, financial advice, soil testing, markets, subsidies, tools, and inputs such as seeds and soil amendments.

-Support new or existing businesses that provide farm-related services and materials.

-Amend building codes so that they reflect the actual structural contingencies of rooftop gardening.



Beekeeping in an urban city lot.

-Provide support and access to public waterways for raising fish in cities (aquaculture) as an inexpensive high-protein food.

-Enhance municipal support for composting solid waste with door-to-door collection of organic material, onsite composting facilities in urban agriculture projects, public education programs, and advice.

Case Study: Greensgrow Farm

Greensgrow Farm is the centerpiece of the Greensgrow Philadelphia Project. Built on an abandoned brownfield site in an economically disadvantaged neighborhood of Philadelphia, Greensgrow Farm is both a working farm and a center for urban agriculture.

Greensgrow Farm serves a dual role. First, it serves as a model for educating urban consumers about food (how it is grown, why buying local food is important) and give urban consumers a voice in food production issues (what food is grown, how it is grown).

Second, it serves as a distribution mechanism for rural growers to have access to urban markets and providing locally grown and processed meats, fruits, and dairy products to consumers in low-income neighborhoods that neglected by large grocery chains.

It began as a commercial hydroponics lettuce farm serving high end gourmet greens to restaurants. It now operates a CSA and Farm Market while continuing to provide produce to restaurants. It serves as a clearinghouse of information on urban agriculture issues, adoption of urban agriculture as a tool for neighborhood redevelopment and acts as a de-facto extension agent for individuals, organizations and institutions seeking information about alternative growing systems and reuse of brownfield land for green use.

Greensgrow Farm was built on the site of a former galvanized steel plant. It was remediated by the EPA and sat abandoned for eight years. The site is a full city block surrounded by a fence.



Greensgrow Farm in Philadelphia has a hydroponic lettuce operation in a former abandoned lot.

Currently the site consists of a 6000-ft² heated greenhouse; three raised beds (4500 ft²) with French drains and irrigation lines covered in high tunnels; a 4000-ft² hydroponics system; a 1500-ft² nursery hoop house and flower bed; beehives; a farm market area; a retail nursery area; and 6000-ft² lot for vermiculture.

In 2002, working in collaboration with a network of for-profit and non-profit organizations, local and state government agencies, and

local higher and secondary institutions, the Greensgrow Farm formed the Neighborhood Urban Agriculture Coalition (NUAC). NUAC created a model for other urban agriculture enterprises that wished to establish in heavily industrialized and urbanized low income areas.

NUAC is a comprehensive practical approach to ensuring access to fresh food products in low income communities via the establishment of small, locally-owned and run urban farms that work together through its cooperative. Farms are sponsored and developed through community-based organizations that already exist in neighborhoods of the city. NUAC farms will ensure a constant supply of fresh farm products produced with input from the communities they serve. Thus, it will give a voice to the ever-changing face of the urban population while opening new untapped markets for rural family farms.

The urban farm offers both a CSA and a Farm Market to the neighborhood. Payments are made through a variety of plans ranging from getting a discount for paying the full amount to paying weekly. Members pick up their food boxes at the farm. Each share consists of a basic package of eggs, bread, and cheese, and alternating weeks of yogurt, butter, meat, fish, and poultry and a range of seasonal produce.

Thus far, 15 farmer/producers are in the cooperative. Members are surveyed regularly to determine satisfaction and needs. Greensgrow hopes to add a commercial kitchen entrepreneurs can add other items to the food basket.

Because Greensgrow Farm is in the city, it can extend services to the community that other rural farms cannot. At the request of a senior center, the farm began to deliver groceries to seniors who could not get to the Greensgrow site on their own because of weather or physical conditions, but still would be able to use their senior farmers' market coupons. Another service it provides is that it can fill the requests of customers wanting ethnic or vegetarian items through the network of organizations in the NUAC.

NUAC is designed to increase entrepreneurial urban agriculture, ensuring that monies stay in the community, while increasing the local input into food-related issues in communities. For more information contact, Mary Corboy 215-427-2702, setonc@aol.com or <http://www.greengrow.org>.

Case Study: Food from the 'Hood

After the 1992 Los Angeles riots, students of Crenshaw High School, troubled by the fact that there were no grocery stores in the area, and driven by a desire to better feed themselves and to gain a sense of ownership and entrepreneurship, met to discuss how they could help their community. With the help of the science teacher, a volunteer business consultant and a volunteer corporate executive, they formed a company, *Food from the 'Hood*, a for-profit company owned by the nonprofit Food From the 'Hood

Entrepreneurial Training Institute, whose corporate office is located in Crenshaw High School.

They cultivated an unused site behind the school and harvested their first crop in 1992, then donated it to Helpers for the Homeless and the Hungry - a local area food bank. In 1993, the company joined the local farmers' market where it sold \$300 worth of vegetables. From there, they decided to develop and market their own brand of salad dressing, "Straight out 'O the Garden Creamy Italian Dressing." They contacted ReBuild LA, a privately funded public-benefit corporation, which introduced the company to two local businesses willing to help. A few months later, a leading salad dressing producer provided additional guidance. With this assistance, the company put in place financial projections, a marketing plan and a distribution strategy.

In the years that followed, Food From the 'Hood has become nationally known for its remarkable success in creating, sustaining, and growing a serious and profitable company which produces and sells brand-name salad dressings in 27 states. In 1998, the company grossed about \$200,000.

Profits from the project have helped fund college scholarships for the student owners. In 1993, Food from the 'Hood students awarded their first \$600 in college money. By 1997, the 25 students in the program could expect to earn between \$3000 and \$12,000 each in scholarship money when they graduated. The company also helps provide after-school tutoring, college counseling and preparation for exams. Although originally established as a company that would provide jobs for youth, Food From the 'Hood is now helping create jobs for adults as well and tends to work with companies located in deprived areas of Los Angeles.

Although the salad dressings are no longer linked directly to the vegetable garden on school property, the garden remains a vital part of the program. It is "where the new recruits build sweat equity, learn to function as a team and learn all sorts of critical lessons about the work ethic." Produce from the garden is now given to a nearby shelter for homeless persons with AIDS. Contact: Food From the 'Hood, 5010 11th Ave., Los Angeles, CA 90043.

Conclusion

The preceding proposals for planning urban food systems focused on city departments that already exist, such as economic development, environment, health, and transportation. A municipal Department of Food – currently nonexistent in the United States – would allow for a comprehensive approach to local food issues, including outreach and community education, regulation, and food-related services development and administration. Food Policy Councils are an effective conduit for urban education, research and planning. The policies and actions outlined above, as well as others, will help promote urban agriculture as a powerful instrument for building community food security and increasing

economic development in North American cities.

References

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Small greenhouse attached to commercial kitchen and office space in downtown Holyoke, Massachusetts.

About the Community Food Security Coalition

The Community Food Security Coalition (CFSC) is a nonprofit 501(c)(3), North American organization dedicated to building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times. We seek to develop self-reliance among all communities in obtaining their food and to create a system of growing, manufacturing, processing, making available, and selling food that is regionally based and grounded in the principles of justice, democracy, and sustainability. CFSC has more than 250 member organizations. For more information, contact Andy Fisher, Community Food Security Coalition, P.O. Box 209, Venice CA 90294. [Http://www.foodsecurity.org](http://www.foodsecurity.org). See the North American Urban Agriculture Committee website for more information http://www.foodsecurity.org/ua_home.html.