Policy Brief: New Directions for Urban Agriculture in New York City
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Introduction

New York City has the largest urban agriculture system in the United States. Approximately 600 community gardens, managed by the Department of Parks and Recreation’s GreenThumb program, are in neighborhoods throughout the five boroughs. Some 700 additional gardens, along with 4 new urban farms and an 8,000 square foot rooftop hydroponic greenhouse, are located on NYCHA developments. Nearly a third of the city’s 1,800 public schools have garden projects. Other city agencies have created innovative urban agriculture projects: the Department of Housing Preservation and Development’s (HPD) Via Verde housing in the Bronx features a rooftop community garden and apple orchard and the Department of Environmental Protection (DEP) funds a one-acre rooftop farm and smaller farms and gardens through its green infrastructure program to increase permeable surfaces and stem sewage discharges when it rains. According to an estimate by the Design Trust for Public Space, 900 of these gardens and farms grow food.

Policy Goals for Urban Agriculture

Both the City Council and de Blasio administration have expressed support for urban agriculture. The Council’s FoodWorks plan calls for increasing urban food production by: (1) protecting community gardens; (2) including urban farmers in the USDA census of agriculture; (3) creating a database of additional city properties suitable for urban agriculture; (4) supporting rooftop agriculture; and (5) ensuring access to urban farming education and technological development for advanced urban agriculture. The de Blasio administration’s OneNYC plan views urban agriculture as a means to create healthier neighborhoods and foster active living, calling for improving “food access, affordability, and quality,” along with a “sustainable, resilient food system.” These goals would be realized by several strategies, including supporting community gardens and urban farms “in select neighborhoods in the city.” OneNYC notes:

*Urban agriculture plays a small but important role in increasing access to affordable, high-quality fresh food in underserved communities. It also provides opportunities for residents to connect with nature, improve the environment, beautify public open space, learn about growing and*
preparing nutritious food, and form lasting intergenerational relationships and social bonds within communities.

Many other elected officials have expressed support for expanding urban agriculture. Manhattan Borough President Brewer issued a report on increasing community and school gardens in Manhattan, while Brooklyn Borough President Adams hosted a roundtable with entrepreneurs who have started for-profit farming businesses and city agencies to discuss how farm businesses could be better supported in Brooklyn and the rest of New York City. City Council members have allocated funds to community gardens in their districts and have been staunch supporters of gardens threatened by development.

Urban agriculture advocacy groups and individual farmers and gardeners have articulated more ambitious goals for securing access to existing farm and garden sites and for expanding the amount of land dedicated to public uses – for food cultivation as well as for non-agricultural community activities. The New York City Community Garden Coalition has been a forceful advocate for preserving the existing community gardens, fighting in 2016 to secure garden sites slated for affordable housing development. The group 596 Acres has advocated for community land access and greater transparency in the disposition of publicly owned parcels. Many other groups, from Just Food to Black Urban Growers, have advocated for policies to encourage urban agriculture. In addition, as Kristin Reynolds and I documented in a new book, Beyond the Kale: Urban Agriculture and Social Justice Activism in New York City, many activist farmers and gardeners, often women and people of color, see urban agriculture as a means to address broader social issues, from dismantling oppression to political coalition building to gender equality. Their work involves much more than growing food, and their goals include social justice and empowerment.

Available and Needed Data

One of the challenges in expanding urban agriculture in New York City is the lack of consistent, reliable, accessible data on the gardens and farms throughout the five boroughs, and information on additional locations suitable for urban agriculture.

Existing Community Gardens and Farms
Several sources list and describe the various gardens and farms in New York, but there is no comprehensive, regularly updated urban agriculture database. Those community gardens that are licensed by the GreenThumb program are listed on GreenThumb’s website and in a publicly accessible database, and in an annual Food Metrics Report prepared pursuant to Local Law 52 of 2011 by the office of the city’s Food Policy Director. There isn’t a publicly accessible database of NYCHA gardens, but the Five Borough Farm II report contains a map of all gardens and farms, including those located on NYCHA properties. The Oasis NYC project maps community gardens and schools with gardens.

New Sites for Urban Agriculture

New York City no longer has the large inventory of vacant land that it accumulated as landlords abandoned properties in the 1970s, but an estimate by researchers at Columbia University suggests there are thousands of acres of cultivatable land throughout the five boroughs, including some 3,000 acres of rooftops that have the potential to be farmed. While likely an overestimate, the question of how much additional land could be put into food production led the City Council to enact Local Law 48 of 2011, requiring the Department of Citywide Administrative Services (DCAS), the agency that manages city property, to maintain a publicly accessible list of all parcels owned or leased by the city, as well as information on whether the land is potentially suitable for urban agriculture. DCAS has published this list on the NYC Open Data site. The advocacy group 596 Acres has published its own map of vacant public land in New York City, called Living Lots NYC, built from the Local Law 48 database and other data sources, and reviewed to eliminate lots designated as vacant but actually in use, or parcels too small to be usable. There is no similar database of private land suitable for growing food.

Food Production

There is no comprehensive database on food produced on farms and gardens in New York City. The Five Borough Farm project, in collaboration with Farming Concrete, created a set of tools for gardens to measure the weight of produce they grow and to upload this data to a central website. The project enables interested gardeners to track their productivity, but covers only a small number of the 600 community gardens. Food production in community gardens and farms depends on the availability of sun, water, and nutrients, the skills of the gardeners and farmers, and their goals. For many, growing food is a hobby, and some urban agriculture projects use food production for education, therapy, socialization, physical activity, and other objectives that result in less productive cultivation. With respect to commercial farms that do aim to maximize the productivity of their spaces, there aren’t data on what is being grown and the quantities produced. One company, Gotham Greens, reports that its 15,000 square foot Greenpoint greenhouse annually produces 100,000 pounds of leafy greens, and its 20,000 square foot greenhouse atop Whole Foods’ Gowanus store produces more than 200,000 pounds of greens and herbs annually, but other farms and greenhouses do not report this information.

Farm and Garden Activities
Food production is only one of the many benefits of urban agriculture. As documented in the Five Borough Farm I project, many other beneficial activities take place in gardens and farms: formal and informal education, business development, community events, youth development activities, services for older adults, and many ecosystem services such as composting, rainwater harvesting, beekeeping, and moderation of the urban heat island effect. These activities, and the outcomes, are tracked by some gardens and farms, but not most, and there is no city or non-profit project to gather and analyze such data.

Recent Policy Initiatives

The policy strategies advanced by the Mayor and City Council (e.g., FoodWorks, OneNYC) and advocacy by urban agriculture supporters have led to a number of initiatives that have expanded and strengthened the city’s urban agriculture system.

GreenThumb Budget

The Parks Department’s Fiscal 2017 Executive Budget included an additional $1.3 million to expand the GreenThumb community garden program, and for the first time included GreenThumb as a “baseline” budget item supported by tax levy funds instead of relying exclusively on precarious federal Community Development Block Grants. The City Council urged an additional $750,000 in Fiscal Year 2017 to enable GreenThumb to hire six new outreach coordinators and six technical staff (double the existing staff) to support the community gardens, though these additional funds were not added to the budget. Many advocates urge expanding the capacity of the city to support gardens and farms.

Protection of HPD Gardens

In 2015, the city’s Department of Housing Preservation and Development (HPD) issued a request for qualifications seeking developers for more than 180 city parcels, 20 of which were being used as community gardens. Protests by urban agriculture advocates ensued, leading HPD to discover approximately 50 gardens under its jurisdiction and thus slated for eventual development. After a year of negotiations within the de Blasio administration and between the city and advocates, the Mayor announced that 34 of the 50 garden sites would be preserved by transferring them to the Parks Department’s GreenThumb program and committed to finding alternative garden sites for those parcels deemed essential for affordable housing construction. And HPD has issued an RFP for a new development in East Harlem to be built on the site of four existing community gardens that requires the
developer to incorporate the four gardens into the new project. According to the RFP, “the vision is to create high quality and active community gardens that will enhance everyday life in the neighborhood.” Many advocates considered the preservation of 34 gardens a reasonable outcome that demonstrated the de Blasio administration’s support for community gardens, but the incident also highlighted the vulnerabilities that gardens face without permanent status, particularly in communities facing growing real estate development and in the event a future administration is less committed to urban agriculture.

**NYCHA Urban Agriculture Initiative**

To help achieve the goal of healthier neighborhoods with vibrant open spaces, the city launched a program called Building Healthy Communities. One part of this initiative involved the creation of new large-scale urban farms at NYCHA developments. An existing farm at NYCHA’s Red Hook Houses run by the non-profit youth development organization Green City Force served as the model. NYCHA established three additional farms in Brownsville (Howard Houses), Canarsie (Bay View Houses), and East Harlem (Wagner Houses), with Green City Force developing and operating the farms and local urban agriculture organizations providing support. The urban farms are expected to grow and distribute without charge more than 10,000 lbs. of fresh produce each year to NYCHA residents. Depending on the availability of funding, additional farms in Staten Island and the South Bronx may be added next year.

**Gardens Rising Resilience Project**

The New York City Community Garden Coalition received $2 million to study and implement green infrastructure techniques to stem storm water flow (e.g., rain gardens, bioswales, permeable pavement) in the 47 community gardens on Manhattan’s Lower East Side. The goal of the project is to increase the neighborhood’s resilience to climate change-related storm events and to reduce the water pollution from combined sewer overflows. The project, called “Gardens Rising,” was funded by the federal Housing and Urban Development Department through the New York Governor’s Office for Storm Recovery. The near- to mid-term goal of the project is to increase permeability and reduce storm water runoff in the community, and over the long term to serve as a laboratory for other garden-based innovations to make the city ecologically sustainable. A master plan for the project will be completed by the end of 2016, with infrastructure built over the next three years. This program, as well as the continued potential for the Department of Environmental Protection’s green infrastructure funds to fund garden and farm projects, advances the goals of FoodWorks, OneNYC, and other policies and programs to make the city more resilient to climate change related storms.

**Commercial Urban Agriculture**

New York City is recognized as a leader in rooftop agriculture, hydroponics and aquaponics, and other high yield urban production techniques. The idea of profitably operating commercial urban farms continues to attract entrepreneurs to the field, and to New York City. In 2016, a group of businesses that grow food or produce technologies for urban agriculture have coalesced into the New York City Agriculture Collective. In April 2016, the Brooklyn Borough President organized a one-day roundtable
with members of the collective and City agency staff to discuss policies and programs to support commercial urban agriculture. Issues ranged from resolving uncertainties about how building and fire codes are applied to indoor or rooftop farms to ideas for public support for this emerging business sector. This meeting was followed by a September conference on production agriculture. These efforts advance a goal in FoodWorks to support rooftop agriculture and advanced urban agriculture technologies, and is aligned with FoodWorks’ overall goal of viewing the food system as an opportunity for economic development. It also advances the city’s Economic Development Corporation’s effort to grow manufacturing jobs in New York City.

Ongoing Policy Issues

The initiatives above illustrate that New York City’s urban agriculture system is diverse, large, and thoroughly integrated into the cityscape. They also show that the primary goal of urban agriculture is to create healthier, livable, more resilient communities, not to produce large amounts of food. The decision to save many of the gardens slated for development by HPD came from a recognition that healthy neighborhoods also require spaces and activities for community members to work together to build social capital, and that gardens and farms fulfill those needs. The NYCHA urban agriculture initiative, too, is designed to provide youth development, to activate spaces within housing developments, engage and educate residents, as well as to grow and distribute fresh vegetables. Gardens Rising aims to demonstrate that urban gardens are part of the city’s infrastructure, making neighborhoods ecologically as well as socially resilient in the face of more frequent storm events. And efforts to grow the commercial urban agriculture sector recognize the potential for food production to be a source of future technological investment and job growth, even if commercial farms meet only a small portion of the city’s demand for fresh food.

Breaking Down Silos

The multidimensional functions of urban agriculture have attracted the attention of a wide range of policy advocates, yet policymakers and some advocates continue to view farms and gardens as primarily places to grow vegetables, albeit less abundantly than rural farms. Policy initiatives thus need to be better coordinated across conventional bureaucratic silos to ensure that the many benefits of urban agriculture are realized and that existing urban agriculture sites remain protected. For example, urban agriculture policies should be integrated with affordable housing policies and neighborhood planning and zoning initiatives to more systematically design gardens and farms (and other food projects and infrastructure) into new residential developments and neighborhood land use plans to create healthier affordable communities. New York City also needs to coordinate urban agriculture planning with regional agriculture. Many individual gardens and farms already do this by operating farmer’s markets that sell both local and regional produce, yet more could be done by strategically sourcing ingredients from both regional and city farms for meals served by city agencies. While fruits, most vegetables, and dairy will continue to be sourced beyond the five boroughs, ingredients like herbs, which can be incorporated into meals as a healthy salt-free flavor enhancer, could be produced at scale by city growers. The experience
of *Bronx Hot Sauce*, made from serrano chilies grown in community gardens across the South Bronx could be a template for new business models. Advocates have urged the creation of a citywide urban agriculture task force with citizen representatives to ensure coordinated efforts among different city agencies in support of farms and gardens, and some have urged the creation of a plan to make concrete the spatial, administrative, and financial commitments required for a larger urban agriculture system.

**Encouraging Wider Citizen Involvement**

The continued success of urban agriculture in New York City depends on supportive policymakers and continued attention by gardeners and farmers, advocates, and ordinary New Yorkers. Citizens can become involved in this effort in various ways:

- Advocate for expanding funding for GreenThumb and other city programs, like DEP’s green infrastructure program, that support farms and gardens.
- Support neighborhood organizations seeking to turn vacant land into garden and farm projects.
- Participate in neighborhood planning meetings and hearings about rezoning to ask for urban agriculture to be considered as parcels are designated for different uses.
- Meet with your council member to encourage legislation requiring a citywide urban agriculture plan.
- Urge elected officials and city agency administrators to preferentially support garden and farm projects dedicated to social justice.