

Science Policy Outreach Task Force at Northwestern University

Urban/Community Gardening



SPOTlight: Urban and community gardens provide economic, social, and environmental benefits to residents. Increased development and implementation of gardens for more widespread community access remains a challenge.

What are urban/community gardens?

- Community gardening is the shared use of a plot of land to grow vegetables and plants for non-commercial purposes.¹
- A plot can be divided into smaller lots to be distributed to garden members for individual caretaking, and organized by a leadership group to coordinate volunteer gardeners.²
- Gardens can be used to grow edible plants such as fruits and vegetables, as well as flowers and native plants.³

What are the benefits of urban/community gardens?

- *Health benefits:* Increase the fruit and vegetable consumption in garden members' households, decrease consumption of processed foods and meat, improve physical and mental health, and help manage chronic diseases.⁴⁻⁷
- *Environmental benefits:* Reduce terrestrial invasive plants by growing native plants, provide stormwater management, sequester carbon and nitrogen, and reduce urban heat island effects.⁸⁻¹¹
- *Social & Economic benefits:* Provide fresh produce to local food pantries and soup kitchens, which can reduce food deserts and food insecurity for community members.¹²⁻¹⁹
- *Other benefits:* Provide hands-on learning of healthy nutrition and the food system as well as job training. Transformation of abandoned lots into community gardens has also been shown to decrease crime and gun violence.^{20,21}

What are the outstanding challenges in urban/community gardens?

- *Economic challenges:* Funding to secure space, develop, and maintain community gardens is difficult to secure. Competition for scarce funding opportunities and eligibility requirements limit access.²² The cost to join community gardens poses barriers to those who cannot afford annual fees. Furthermore, the addition of green spaces can increase surrounding property costs, leading to gentrification.²³
- *Social challenges:* Land maintenance and management by sustaining community engagement is another limitation for these spaces; developing incentives for community members to participate can be difficult.¹⁵
- *Environmental and health challenges:* Soil in urban and industrial areas can have high levels of contamination (e.g. lead). Mismanagement of gardens (ex: planting invasive species) can lead to costly environmental complications.^{16,17}
- *Other challenges:* Physical spaces available for urban/community gardens are limited. Limited land tenure and access to support agencies can threaten long-term existence of community gardens.²³ Urban/community gardens have room to improve in enhancing ADA accessibility.²⁴

What policies and practices currently exist for urban/community gardens?

- Appropriate state permits and licenses are required to ensure compliance with zoning laws.²⁵
 - Land tenure arrangements or partnerships with local authorities and nearby public gardens can be established to help secure community gardens.²⁵
 - Educational programming on sustainable gardening practices can be offered in collaboration with public gardens.²⁵
 - Abandoned lots and rooftops can be leveraged to provide space for the development of community gardens.²⁵
 - Rainwater can be collected to alleviate dependence on external water sources.²⁵
 - Soil quality should be evaluated to ensure safety; building raised beds that can be filled with uncontaminated soil can serve as a solution if soils contain high levels of contaminants. Additionally, composting and cultivating plants that remove heavy metals from the soil can help to address this challenge.²⁶
 - Native plants can be cultivated to improve soil quality, prevent erosion, and provide habitat for native pollinator species.²⁵
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