

Tax Credit for Urban Agriculture in Food Deserts



Executive Summary

SB82 allows a taxpayer to claim a tax credit against the taxpayer's state tax liability and authorizes a tax credit equal to fifty percent of a taxpayer's expenses incurred in the construction or development of an urban farm located in a food desert. The tax credit shall not exceed \$1,000 for any single urban farm and shall not be transferable or refundable, but may be carried forward for three years. The total amount of tax credits authorized under this act shall not exceed \$100,000 in any calendar year. Enacted bills in Missouri have allowed the establishment of committees in cities for urban agriculture (HB1848, 2010), have established urban agriculture zones (UAZ)¹ (HB542, 2013) and have provided grants for promoting the establishment of community gardens (HB2006, 2016). SB82 is unique because it authorizes a tax credit for specifically producing an urban agricultural product in areas where there are not a lot of grocery stores (food deserts).¹

Highlights

- Living in a food desert contributes to the lack of access to healthy foods and can negatively affect public health.
- Urban agriculture plays a vital role in supporting local food systems in food deserts and can improve food security and food safety. Individuals who grow or sell products in urban farms tend to eat more fruits and vegetables.
- Fruits and vegetables that are raised in urban farms can be more expensive, and geographic distance and lack of technical training can be barriers to low-income households to afford urban produced foods.
- Soil contamination can be a constraint on urban agriculture to raise safe and healthy foods.

Limitations

- Most studies on the impacts of urban agriculture on food security are theoretical and it is hard to measure their effectiveness over other food-security measures.
- It is hard to measure and evaluate the impacts that urban agriculture has on food deserts because studies do not always differentiate between the impacts of gardens that grow food for personal consumption and urban farms that grow food for sale.

Research Background

This science note was prepared by MOST Policy Initiative, Inc. a nonprofit organization aimed to improve the health, sustainability, and economic growth of Missouri communities by providing objective, non-partisan information to Missouri's decision-makers. For more information, contact Dr. Eleni Bickell, Agriculture & Economic Development Fellow – eleni@mostpolicyinitiative.org. This was prepared in December 2020.

The relationship between urban agriculture and food deserts

A food desert is an area that has limited access to affordable and nutritious food,² with residents living more than one mile away from a supermarket in a city, or 10 miles or more in rural areas. About 23.5 million Americans live in food deserts. People who live in food deserts tend to only have access to foods that are processed and high in sugar and fats, which contributes to higher obesity rates and other negative public health outcomes. The presence of food stores, and the availability of healthful products in those stores, are important contributors to healthy eating patterns among neighborhood residents.⁴ In general, food desert counties (**Figure 1**)³ share a common set of characteristics. They tend to have: larger percentages of individuals without a high school degree or GED; higher individual and family poverty rates; lower median family incomes; greater percentages of residents living in sparsely populated areas outside cities; larger shares of people who are older; and higher numbers of small grocery and convenience stores per capita.⁵ The majority of convenience stores that are available at food deserts do not offer fresh and healthy foods, but rather processed snacks, sodas and alcohol.⁶ According to USDA's estimates, areas with higher levels of poverty are more likely to be food deserts and the higher the percentage of minority population, the more likely the area is to be a food desert.⁷



Figure 1. Food Desert Counties in the U.S.³

Urban agriculture refers to growing and distributing food in urban areas and can take the form of community gardens, urban farms with a social mission, rooftop farms, recirculating and vertical farms. Urban agriculture can contribute to the increased availability of healthy and nutritious food that become more accessible and more affordable to the residents of areas such as food deserts.⁸

Impacts of urban agriculture on food deserts

Studies conducted on urban community farming show that their benefits span from improving neighborhood aesthetics and community development, building social capital, to improving neighborhood property values and providing an area for community members to participate in physical activity. Urban agriculture offers a potential as a nutrition intervention because it addresses a primary barrier some urban residents face when trying to eat a healthful diet, that is, limited availability of fresh produce.⁵

Empirical studies use either participation in urban farming and availability of fruits and vegetables in farms or grocery stores as a predictor of fruit and vegetable consumption. For example, a Michigan study found that individuals who participated in urban farming consumed 1.4 times more fruits and vegetables.⁶ Urban agriculture can also help build better local food systems.⁹ Having better local food systems in place means that more people can afford and access a fresh food supply close to where they live.¹⁰

However, although studies point to the multiple benefits of urban farming, most of the literature is theoretical and only a few of them robustly measure the impact of urban farms on improving food security in low-income communities. Finally, despite its intentions, studies find that urban agriculture in food deserts may exclude low-income and minority groups because of location and other sociocultural reasons.^{11, 12}

Inefficiencies and other barriers to improving food security

Residents who live near food deserts and participants of urban farming projects mention that production and labor costs keep them away from being profitable, and continuing to farm.¹³ Similar to production and labor costs, challenges of urban agriculture are often related to the type of the urban farm and its ownership. Economic studies that examine urban community farms--where the urban farm is a collaborative project and is owned by multiple individual members from the community who share the maintenance and products—indicate that there is relative inefficiency in the use of materials and labor resources.¹⁴ Other studies have highlighted issues such as seasonal accessibility for the products of the farms and the low yields as reasons for such inefficiencies.¹⁵

Some of the other major challenges urban growers face are related to the land, including contaminated soils and land tenure. The soil in city lots can contain chemicals, lead or other heavy metals, and most urban agriculture is therefore done in containers or raised beds, where clean compost and topsoil are spread on top of the existing ground.¹⁶

Indirect impacts of urban agriculture

An indirect, positive impact of urban agriculture is the increase in property values in the blocks that surround urban farms, and the resulting increase in tax revenue.¹⁷ Studies also indicate that urban farms indirectly decrease the crime rate of the neighborhoods in which they are located.¹⁸

A growing line of research suggests that investing in such projects may be a more effective crime-reduction strategy than other conventional strategies.¹⁹ Others suggest that because urban agriculture uses wastes and idle land and water bodies as resources urban areas can be transformed from being only consumers of food and other agricultural products into important resource-conserving, health-improving, sustainable generators of food products.²⁰

Property tax incentives for urban agriculture

Some states and cities have created tax incentives, like tax credits or tax rebates, to help encourage urban agriculture (**Table 1**)²¹. Usually the state legislature passes an enabling statute allowing localities to choose to enact an incentive and giving the locality the authority to establish eligibility criteria, determine the process for granting and maintaining the tax incentive, and even set the amounts of the incentives.

Over the last decade, Columbia and Kansas City have seen an increase in population and face an increased need for fresh and safe food. People across Missouri are responding to these needs by putting in place zoning regulations and city plans. In 2010, the city council of Kansas City established the right of homeowners to grow produce in their front yard for consumption or for sales. Another example is the Columbia Center for Urban Agriculture in Columbia, MO, whose objectives are to feed and educate the urban community and to empower low-income families to garden and grow their food.²³ Despite the several initiatives for urban agriculture in food deserts in MO, over 25% of Missourians still have low food access.²⁴ Although state legislation that creates tax credits and incentives for growing agricultural products in food deserts could help Missourians access healthy and nutritious food, economic constraints associated with starting or maintaining an urban farm may still be prohibitive. Therefore, balancing the sustainability of urban food production with the cost of inputs is important to determine the trade-offs required to achieve high yields.¹⁴

Table 1. Urban Agriculture Tax Incentives, as presented by the New England Land Access Policy Project, 2016

State	Missouri	Maryland	New Jersey	Utah	California
Category					
Urban Ag Allowed	Yes, explicitly	Yes, explicitly	Yes, but only for non-profit organizations and not explicitly referenced	Yes, but only relatively large parcels	Yes, explicitly
Minimum Parcel Size	None	0.125–5 acres	No minimum, but a maximum of 5 acres	2–5 acres	0.10–3.0 acres

Minimum Gross Income	UAZ must have at least 1 qualifying small business; thereafter, no one else needs to meet income requirement	None, but a city/county may implement one of their choosing	None, and must be nonprofit	Must meet criteria of UAS, UAU, or FAA. Must also have a reasonable expectation of profits	None
Previous Years of Qualifying Use	0	0, but a city may implement one	0	2 years	0
Land Use Change Tax	None	100% penalty of tax benefit if converted within 5 years of qualifying	None, and must be nonprofit	Tax benefit of 5 previous years must be repaid if converted within 10 years of qualifying	100% penalty of tax benefit if converted within 5 years of qualifying
Minimum City Population	50,000 / Metropolitan area	Must be a county or municipal corporation, and must meet density requirements	Must be in a "municipality"	County of 125,000 (if 98% urban) or else 700,000	250,000
State Mandate or City Discretion	City discretion to pass ordinance	City discretion to pass ordinance	City discretion to lease or sell public lands for specified use	Mandate	City discretion to pass ordinance

1. https://www.senate.mo.gov/21info/BTS_Web/Bill.aspx?SessionType=R&BillID=54108880
2. Story, M., Kaphingst, K. M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating healthy food and eating environments: Policy and environmental approaches. *Annual Review of Public Health, 29*, 253–272. <https://doi.org/10.1146/annurev.publhealth.29.020907.090926>
3. Medley Food Desert Project, <https://19january2017snapshot.epa.gov/sites/production/files/2016-05/documents/floridainternationaluniversitymedleyfooddesertproject.pdf>
4. Glanz, K., & Yaroch, A. L. (2004). Strategies for increasing fruit and vegetable intake in grocery stores and communities: policy, pricing, and environmental change. *Preventive medicine, 39*, 75-80.
5. Morton, L. W., & Blanchard, T. C. (2007). Starved for access: life in rural America's food deserts. *Rural Realities, 1*(4), 1-10.
6. Alaimo, K., Packnett, E., Miles, R. A., & Kruger, D. J. (2008). Fruit and Vegetable Intake among Urban Community Gardeners. *Journal of Nutrition Education and Behavior, 40*(2), 94–101. <https://doi.org/10.1016/j.jneb.2006.12.003>
7. USDA, ERS-Food deserts. https://www.ers.usda.gov/webdocs/publications/45014/30940_err140.pdf
8. Bellows, A., Brown, K., & Smit, J. (2008). *Health Benefits of Urban Agriculture*.
9. The University of Melbourne, Planning a resilient city food bowl, <https://minerva-access.unimelb.edu.au/handle/11343/121776>
10. Smit, J., & Nasr, J. (1992). Urban agriculture for sustainable cities: Using wastes and idle land and water bodies as resources. *Environment and Urbanization, 4*(2), 141–152. <https://doi.org/10.1177/095624789200400214>

11. Oberholtzer, L., Dimitri, C., & Pressman, A. (2014). Urban agriculture in the United States: Characteristics, challenges, and technical assistance needs. *Journal of Extension*, 52.
12. Kato, Y. (2013). Not just the price of food: Challenges of an urban agriculture organization in engaging local residents. *Sociological Inquiry*, 83(3), 369-391.
13. Dutko, P., Ploeg, M. V., & Farrigan, T. (n.d.). *Characteristics and Influential Factors of Food Deserts*. Retrieved December 9, 2020, from <http://www.ers.usda.gov/publications/pub-details/?pubid=45017>
14. McDougall, R., Kristiansen, P., & Rader, R. (2019). Small-scale urban agriculture results in high yields but requires judicious management of inputs to achieve sustainability. *Proceedings of the National Academy of Sciences*, 116(1), 129-134. <https://doi.org/10.1073/pnas.1809707115>
15. Smith, D., Miles-Richardson, S., Dill, L., & Archie-Booker, E. (2013). Interventions to improve access to fresh food in vulnerable communities: a review of the literature. *International Journal on Disability and Human Development*, 12(4), 409-417.
16. Koski, Hannah. "Urban Guide to Farming in NY. Chapter 8: Dealing with Contaminated Soils." *Cornell Small Farms Program*, 2012. Retrieved March 21, 2019.
17. Voicu, I., & Been, V. (2008). The effect of community gardens on neighboring property values. *Real Estate Economics*, 36(2), 241-283.
18. Klinenberg, Eric. "The Other Side of 'Broken Windows'." *The New Yorker*, August 23, 2018. Retrieved March 21, 2019, from <https://www.newyorker.com/books/page-turner/the-other-side-of-broken-windows>
19. Peters, Justin. "Loose Cigarettes Today, Civil Unrest Tomorrow." *Slate*, December 5, 2014. Retrieved March 21, 2019, from <https://slate.com/news-and-politics/2014/12/edward-banfield-the-racist-classist-origins-of-broken-windows-policing.html>
20. Smit, J., & Nasr, J. (1992). Urban agriculture for sustainable cities: Using wastes and idle land and water bodies as resources. *Environment and Urbanization*, 4(2), 141-152. <https://doi.org/10.1177/095624789200400214>
21. Current Use Valuation and Tax Incentives for Urban Areas, <https://landforgood.org/wp-content/uploads/LAPP-Current-Use-Valuation-and-Tax-Incentives-for-Urban-Areas.pdf>
22. United states Cencus, <https://www.census.gov/quickfacts/fact/table/columbiacitymissouri,kansascitycitymissouri/PST045219>
23. <https://brownfieldagnews.com/news/columbia-missouri-agriculture-park-opens-saturday/>
24. <https://allthingsmissouri.org/>