Fighting Food Insecurity One Garden At a Time
Urban Agriculture: Is it the solution to all of our problems?

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Summary: Urban agriculture is a solution to a lot of problems, such as unemployment, food security, food sustainability, and community empowerment, but there are some factors that stand in the way of urban agriculture reaching its full potential. This report will examine some of those factors, such as zoning laws, support programs, as well as the stereotype of people (mostly women) involved in urban agriculture, through case studies in Detroit, Chicago, and New York. Urban agriculture programs with executive boards help navigate zoning laws to funding to extension programs to give people the tools and knowledge to farm in a city. As a community service project, a donation of alfalfa sprout seeds will be given to a community garden in the nearby city of New Brunswick. An instruction pamphlet will be distributed with these seeds to show how to grow alfalfa sprout seeds indoors.

Video Link:
https://www.youtube.com/watch?v=MJDgLAASdk0&list=UUts4_1WyqXMmVDFu9ZffstA

What is Urban Agriculture?

Urban agriculture is the growing of crops and production of animals, as well as the distribution of these goods, in an urban setting. Urban agriculture can further be broken up into three categories: backyard gardeners, community gardeners, and commercial growers. Backyard gardeners grow on private plots, whether it is in an actual backyard or a deck or terrace, in order to supplement a family food budget. They usually do not obtain full subsistence from their gardens and is more private than other types of urban agriculture. Community gardeners grow food on plots that have been divided into subplots for each family in the community. Usually, a family will keep what is grown on their plot and surplus from all plots is sold. Finally, there are commercial growers who focus on selling food for profit. This project will focus on mainly community and commercial growers, as they are the types of urban agriculture that have the largest effect on the community as a whole. (11)

The Benefits of Urban Agriculture

One of the main benefits of urban agriculture is security in general. Having fresh produce available at a reasonable or lower price to more families helps secure their health through good nutrition as well as decreasing the amount of money they spend on food. It can further help secure families economical by giving them potential work. Urban agriculture also helps in the security of the community by being environmentally beneficial as well as benefiting the community socially.

a. Health

Healthy foods tend to be more expensive. Many low-income families live in city settings and cannot afford these healthy foods or even afford enough food at all. They may resort to eating cheaper, unhealthy fast foods that will cause health problems down the line such as obesity, heart disease, and diabetes. Urban agriculture makes sure there is healthy food available to all families. Some families cannot even get to supermarkets because they do not have transportation or have such busy schedules. With urban agriculture, fresh food may be as close to a family as on their rooftop. Urban
agriculture gives families the opportunity through programs to grow their own nutrient rich food that they can supplement food budgets with. Even if the families aren’t directly involved with growing the food, food from urban growers will be less expensive because the cost of delivering the food is virtually nonexistent and the middleman will no longer be there. They also become more knowledgeable about how to pick healthy foods. Further, working in an urban farm gives people exercise they would not usually be getting.

1. **Economical**

Urban agriculture presents job opportunities. Between actually farming, taking care of the books, and running produce stands, there are many full and part time jobs for those in impoverished areas. Also, because the food is locally grown and usually cheaper, families save money and are able to spend that money elsewhere in the community. Urban farms can also save the municipalities they are a part of money because it is less vacant land the township has to take care of.

1. **Environmental**

Urban agriculture benefits the environment in several ways. First, it allows people to get fresh food from local sources, thus eliminating the carbon footprint that comes from transporting products from large traditional commercial farms. Urban agriculture also adds green space, which is good for the environment by adding plants that can help process carbon dioxide in the atmosphere, which may tend to be pretty heavy in urban settings. Urban agriculture recycles wastes in the city. Food wastes can be composted to help fertilize crops and feed livestock. Wastewater and collected rainwater can also be used as irrigation. Further, waste such as clippings from these urban farms can be used to help nourish other green spaces in a city or just be reused on the farm (1,4).

1. **Social**

Urban farms create places for people to go that are safe and will keep them out of crime, whether as victims or criminals. It is a public space where residents can feel comfortable. Urban agriculture has become the center of many youth programs. For instance, in Detroit, The Ferguson Academy for Young Women is an alternative high school for pregnant teen girls where students help take care of the school’s farm. It helps them obtain the necessary nutrients for themselves and their child as well as giving them the skills they need to continue such a career after they graduate, which is seen to be beneficial since they learn both agrarian and business skills (17). Youth involved in urban agriculture are more likely to graduate high school and continue to be positively involved in the community. It provides a positive space for socialization and community bonding. It also fosters community involvement and agency as citizens. Improving the aesthetic of a community is also a benefit of urban agriculture. It makes cities feel more full of life (5,6).

**Problems with Urban Agriculture**

Land is one of the main problems in urban agriculture as it is very hard for farmers to get permanent land. Not owning the land you’re working on is very hard as a farmer; it usually takes a few seasons for your land to become up to par and by the time that happens, your lease could be up, your rent could skyrocket or a building developer could outbid you for your lot. And obviously, in an urban setting, there is not much land to go around. It takes a lot of urban planning, which again costs money, to make it happen. Also, the land itself may not be good. Soil may be contaminated and will not produce crops and farmers will have to spend more money just to get appropriate soil. There may be seasonal limitations on growth of crops as well.
The main reason it’s hard to get land is because it is hard to get governments to realize the true value of urban agriculture. And the reason it is hard to get governments to realize the true value of it is because there has not been a comprehensive study done on urban agriculture. Most studies on urban agriculture have been done on a case-by-case basis. There needs to be more research done with clear definitions of urban agriculture and a wide inventory of projects. Further, more research needs to be done on the macro scale of farms in an urban area to see if it really is a viable economic development tool and how much funding it should really get.

Also in the political realm, there is controversy over zoning, especially when animals are involved. In Grand Rapids, MI women were given a ticket for keeping animal too close to houses and their fence was only less than a foot off from what is considered acceptable. They plan on fixing their fencing, but many people are still concerned about the smell, noise, and waste disposal associated with livestock (2).

Problems on the financial front include high start up costs of farms and inadequate demand of produce. From making the space they’re farming fertile, to all of the equipment involved to maintain farms, to paying for permits, it takes a lot of money upfront to get a farm started before revenue is anywhere in sight. Then, most people can’t get to farmers markets and further don’t really know what to do with fresh produce so they don’t purchase it. When it is hard for producers to get their products in the market in the first place, it is difficult for farmers to offset their initial costs. Also, it is hard for farmers to keep prices down while keeping quality high.

One of the most prominent problems associated with urban agriculture is lack of knowledge on many fronts. There are programs in place to help farmers get their start, but there definitely could be more programs. Also, these programs could be strengthened because once farmers are on their own, they tend to struggle or fail. The general public needs to be more informed on the matter as well. As mentioned, many people do not see the benefits of urban farming or they do not know what to do with the results of urban farming (i.e. what to do with the produce). They also need a lot of encouragement to come out to workshops, as farming can be intimidating, especially if you have never been involved. There is also a lot of miscommunication. For example, in Chicago, many people thought the expansion of urban farming would bring full time jobs to the area. Realistically, it can only allow people to supplement their income just because of the nature of the work. This concept was not expressed well enough to the public nor was the benefits of just supplemental income (3). Further, there tends to be only one type of demographic involved in urban farming, women and specifically white women. In order to see the full benefits and really help in the social aspect of urban agriculture, there needs to be more diversity in the people involved (13,14).

**Solutions to urban agriculture problems**

A lot of the solutions for the problems in urban agriculture have to do with building awareness and organization. On the political side, there needs to be policy changes that will start with having a designated department for food that will support urban agriculture needs in order to increase the amount of healthy food available. This department needs to be responsible for fostering programs that will help urban farmers as well as help to link them up to other services that will help them in the city, such as tool banks, farmers markets, and schools. This department will also help promote and develop training for urban farmers by connecting with all levels of education as well as welfare programs that help get people jobs.
In respect to land, a department for healthy food will also help with this by being responsible for educating officials and urban planners on the importance of using vacant lots for agriculture as to discourage building development on these lots that would be great for farms. This department may also help the farmers help themselves by helping farmers find land trusts or helping them write longer leases for land. Also, if possible, spaces like rooftops are usually great for long-term agriculture because there is no other purpose they can serve. For the issue of seasonality, greenhouses are a great solution and certain crops, like mushrooms and sprouts, can be farmed in basements.

Another solution for the problem with land and seasonality is growing plants indoors. This works best for herbs, sprouts, and small fruiting plants like peppers or tomatoes, which all can supplement a food budget as well as significantly enhance the nutritional value of a meal. It is quite easy to grow sprouts and herbs if there is a sunny windowsill after simply potting these plants and watering them on a daily basis. Sprouts can even been grown in a jar without need for a light source, as seen in the appendix. As for larger plants, a light source is needed, such as a fluorescent light, which costs money to buy and keep running. There are even more advanced lighting systems as well. For those with the income to do it, indoor tomato or pepper growing can be worthwhile. However, for urban families who do not have much time or money to spare, herb and sprout gardening may be worthwhile (7,10,16).

There are options for funding in urban agriculture. There are some government and community development grants that urban farmers may gain access too. A better way to eliminate funding issues however is to cut costs as much as possible and increase profits. Many cities offer a tool bank where farmers can borrow equipment at no charge as long as they return it. Also, urban farmers and community gardens can team up with community kitchens and schools for access to certain equipment (i.e. canning space in kitchens), to possible to a share of their funding, and as a place to sell their crops. Further, by being involved with these kinds of programs, farmers will be able to educate people on the importance of the urban agriculture movement since the people will be able to see the benefits first hand, thus encouraging them to buy more produce or donate.

There needs to be more awareness in general. Better public education on the benefits of urban agriculture is a definite. As the local and slow food movements continue to gain popularity and education on these movements increase, there should be a higher interest in urban agriculture. Local and social media should be used in order to educate the public. From this increase in education, a more diverse group of people will become involved in urban agriculture, thus helping it to continue expanding.

It is important that urban agriculture appears easy to do, fun, and cost efficient. The general public of a city are very busy and may not have the funds to start up an entire garden. Also as mentioned, climate and contaminated soil pose issues for gardening outside in the city. One option is to bring the garden inside. Gardening can be done in space efficient ways, such as on a windowsill or on a small table in the kitchen. There are relatively inexpensive options for lighting and soils as well, so start up costs should not be an issue. It improves the home environment by improving the aesthetic and it is also a good way to get the whole family involved (4,9,15).

**Conclusion**

Urban agriculture can be beneficial to individual families as well as a community because it provides nutritional, lower cost foods that will help improve health as well as help to improve the economic condition of an area. It is also something that will contribute to community spirit and bonding, which
has great personal benefits. However, the main problems of urban agriculture include problems with zoning and land, funding, seasonality, and awareness. These problems can be solved by having an assigned committee to help navigate political waters for getting zoning laws for agriculture approved, helping to secure land, and receiving funding. This committee can also help to encourage city residents to be involved by setting up programs to show them that gardening is not all that difficult and has many benefits.

Community Action Project

What is the state of urban agriculture in the local city of New Brunswick?

New Brunswick is a heavily populated area where food security is an issue. Not all residents get the recommended amount of nutritional foods, which is a problem urban agriculture can solve. There is plenty of potential for urban agriculture in the city, however getting residents involved has proven to be a difficult task. There are some urban agriculture programs in place in New Brunswick. Elijah’s Promise is an organization designed to combat hunger in New Brunswick. They are in charge of the Shiloh Community Garden in which people can rent out a raised garden bed for a season and attend common work hours and gardening workshops. The Greater New Brunswick Charter School also has a gardening program in which students and parents tend to the schools garden, which cultivates produce for the local food bank. The New Brunswick Community Food Alliance is an organization with the mission of building a better food system for New Brunswick. They provide workshops and work groups with specific goals, such as expanding the amount of gardening space in New Brunswick, advocating for better zoning laws for gardens, and educating the public about gardening and nutrition.

I have spoken with a representative from Elijah’s Promise. He says that education is always an important factor to get people involved. Most people are intimidated by gardening, so it is part of their mission to make people more comfortable with it (8).

My community action project will be to supply Elijah’s Promise with alfalfa sprout seeds that have been donated by Todd’s seeds with pamphlets on how to grow them in jars so residents of New Brunswick will have the knowledge of how to simply grow nutritious alfalfa sprouts in their homes in a cost effective manner that will also give them a way to bond with their family by doing this activity together.
References:


8. Interview with Anthony Capece of Elijah’s Promise


Dear Editor,

We take for granted that we can go to a grocery store and purchase food. However, there are people, even in our area, that are food insecure as they don’t have steady access to nutritious foods. Engaging residents in urban agriculture would help provide fresh veggies and the satisfaction of knowing that they grew their own food. People can garden on community plots or they can garden in their own yards or even bring their potted veggies inside. There are programs in place in New Brunswick that use some small open areas to garden in, such as Shiloh’s garden run by Elijah’s Promise.

People tend to be intimidated by gardening because it seems like a lot of work. But it can be a fun, cost efficient activity to supplement a family’s food budget as well as providing a positive social environment. I think it needs to be emphasized that urban agriculture is way more than just growing veggies. It is a community experience, something I think is very valuable. It creates a place where people can feel comfortable to socialize while they are doing something good for their families and their environment. Also, urban agriculture can be a great family bonding activity getting back to home cooking with their home-grown foods. Full tummies and pretty plants; what’s not to like about urban agriculture?