



Urban Expansion in Addis Ababa: Effects of the Decline of Urban Agriculture on Livelihood and Food Security

Mara Gittleman
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Abstract

The city of Addis Ababa, Ethiopia, is rapidly changing from one of traditional agricultural communities to one that is competitive in the global economic market. It is building in only a couple of years what most cities took decades to develop, and it is displacing thousands of people as it does so, many of whom are farmers. This is causing a major crisis in urban food insecurity, homelessness, and poverty. With a reassessment of the government's current plans for urbanization, urban agriculture as the potential to be Ethiopia's key means of achieving food sovereignty, food security, and economic wellbeing, and it thus deserves the attention of policy-makers. This paper offers a comprehensive assessment and a collection of recommendations for a new framework of urban development that will require the government to rethink their current development plan and to reassess the social, economic, and environmental values of agriculture in their city.



Addis Ababa, Ethiopia (1)

Introduction

In an era in which the majority of the world population lives in cities, the food and agriculture industries are evermore unsustainable, and urban slums are rapidly expanding, it is becoming crucial that city governments work to ensure food security for their citizens. There have been many efforts over the last several decades to ensure aid for nations in need of extra food supplies to feed their hungry, but this does not aim to improve how much sovereignty a government actually has over its own food supply, and who maintains the right to the food and nutrition needed to survive. Foreign food donations are not geared for helping communities achieve food autonomy, self-sufficiency, or independence—only in feeding the present hungry. Urban agriculture comes as a response to the food insecurity that arises from this problem, and provides a means for poor communities to achieve for themselves adequate nutrition and livelihood.

According to the UN Development Programme, some 800 million people, or nearly 8% of the world's population, are now engaged in urban agriculture worldwide (1). Urban agriculture is defined as the practice of food production within a city boundary or on the immediate periphery of a city – it includes the cultivation of crops, vegetables, herbs, fruit, flowers, orchards, parks, forestry, fuelwood, livestock, aquaculture, and bee-keeping (2). Urban gardeners around the world are very often rural migrants or immigrants who used to rely on the land for food, or who need supplements to their food supply or income. They tend to be a vulnerable population, and the gardens and farms act as a means of increasing security and health.

In Africa, urban cultivation has become a permanent part of the landscape – in the beginning of the 1980s, a mere 10-25% of the urban population in Africa was engaged in urban agriculture, while up to 70% of the urban population in Africa...[had] become urban cultivators [by] the 1990s (4). One possible explanation of this massive increase in urban farming is the negative effect of Structural Adjustment Programs, which were, in essence, market liberalization:

The Structural Adjustment Programs have, however, often resulted in noteworthy economic setback of the poorest part of the population who cannot afford the free market prices of basic food. These programs resulted in a removal of subsidies to food production in the developing countries seeking loans from the World Bank and International Monetary Fund, which consequently led to a liberalization of the food trade, which again resulted in significant price rise (fivefold). (5)

The lack of formal safety nets, and the shifting of responsibility for coping with food insecurity away from the state towards the individual and household level have tended to atomize and muffle any political response to this new urban food insecurity (6).

In Ethiopia, like many developing countries, the increasing concentration of population in the urban areas, coupled with drought, famine, and war, has put enormous

pressure on food supply systems in both urban and rural areas (3). The majority of migrants and immigrants coming to the cities come from the rural poor, which is often plagued with drought and famine; thus they contribute to the growing low-income urban population, which lacks access to adequate food or the financial means to buy it.

In Addis Ababa, the capitol and largest city in Ethiopia, 99.4 percent of the population lives in slums (7). Slight increases in food prices and available land for cultivation can push many individuals and families into hunger. With this in mind, there is a growing movement to empower the efforts of farming within the city.

Urban Expansion in Addis Ababa

Given Ethiopia's history of being generally politically stable, it has become one of the main diplomatic centers of Africa. As such, the national government is essentially uprooting entire neighborhoods in favor of hotels, office buildings, and high-rises, completely transforming the city's image to better fit the model of a globally competitive city and to bring in more revenue. The majority of the thousands of displaced peoples typically lack the means to resettle, and the government, knowing this, has embarked on a massive project to build hundreds of subsidized condominiums. Most of the city residents are too poor to afford this subsidized housing, however, posing a major problem. No one is ensuring that the displaced people find new homes, and there are currently no studies about what is happening to them. Thus the social costs of these new condominium developments are only minimally accounted for by the government, potentially making them more detrimental to the city than advantageous.

When the government uproots people with their expansion, they are also

destroying valuable farmland, decreasing the amount of land available for cultivation. Entire agricultural communities are moved and left with very little compensation for their land, with no other skills to rely upon in a city with already very few employment opportunities. The government expects them to use the small compensation money for investments in new livelihoods and homes, particularly in their new condominium project, but this does not often happen. This process of rapid urban development is working both to increase the populations of unemployed and homeless peoples, and to decrease the supply of fresh produce available, causing prices and food insecurity to increase.

Urban agriculture is a traditional practice in Ethiopia, and the urban-based population is used to keeping cattle, sheep, and chickens, or growing rain-fed crops such as maize and vegetables, on the plots adjacent to their houses (3). The ability to grow food in cities helps increase the standard of living, access to healthy and abundant produce, and income of everyone from the most disadvantaged populations upward. This paper looks at Addis Ababa, the capitol and biggest city in Ethiopia, where urban agriculture provides income, employment, and security for disadvantaged populations, women, those who are illiterate and/or unskilled, and migrants, but which is quickly becoming endangered through urban expansion.

Past, Present, and Future

This section will explore past and present studies of urban agriculture in Addis Ababa. The main studies used in this section (3, 8) offer deep insights into the nature of urban agriculture in Addis Ababa, and a comparison of their work will provide a

comprehensive assessment of trends in the field.

Production and Food Security:

Urban food production and area of land in Addis Ababa has experienced a net increase over time, plot sizes have decreased enormously. A survey of household consumption of vegetables in Addis Ababa in 1983 showed that 17% of the 1,352 surveyed households produced their own vegetables, and that the area under cultivation in all income categories was usually less than 25 m² (.0025 ha) (9). Duressa's study (2007), however, shows a range of 8,000-14,000 m² (0.80-1.37 ha) as the average area of private land owned by farming households across income levels. While this does not indicate how much of the land is actually cultivated, it could represent a number of changes in the urban food system, including land access for individual urban farmers, a shift to more peripheral farms (where there is more open space) than inner-city farms, or a reason that has more to do with the land market itself.

Furthermore, the percentage of farmers growing vegetables as opposed to just raising livestock has increased substantially, as has the legitimacy of this practice. While 17% of the surveyed households in 1983 produced vegetables, almost entirely for subsistence, in 2006 eleven marketing service cooperatives of urban farmers produced almost 12,000 tons of vegetables for the city market (10). Irrigated vegetable farming in Addis Ababa is now partly in the formal sector, as opposed to livestock rearing, which is still mostly informal (11). According to the Office for the Revision of the Addis Ababa Master Plan (12) report, there are a large number of households whose lives are associated with farming in Addis Ababa city, and directly support over 51,000 families

and indirectly have an influence on the lives of other parts of the urban environment (8).

Annually, there are two harvests in and around Addis Ababa, providing an abundance of fresh produce. Carrots, different types of cabbage, cauliflower, lettuce, celery and/or potato are the most commonly cultivated vegetable crops (8). However, during the rainy season, very little is in season in and around the city, resulting in a cyclical local food shortage (13). Ethiopia does not have sufficient technological and financial means of transporting and storing fresh produce over long distances, so most, if not all, of the produce sold in the city must come from nearby. Food grown within the city makes up a tremendous amount of the city's supply, keeping prices low with its abundance. The annual pause in production due to seasonality can cause the prices of highly used fruits and vegetables, such as tomatoes and onions, to skyrocket 200-1,000% (13). Such an increase in price leaves many families dangerously without access to nutritious food and severely food insecure.

The provision of fresh produce locally through urban agriculture is thus absolutely critical to the food security and nutrition of the residents of Addis Ababa. The food shortage described above, while an annual occurrence, is exacerbated by the land use changes that are taking place, as they diminish land available for cultivation. The decrease in availability of local produce will inevitably raise prices, whether from the decrease in supply and increase in demand, or from the eventual need to import produce from elsewhere, which makes food inherently more expensive.

The evidence is building that the city of Addis Ababa is spiraling into its own dangerous food crisis. As of right now, there are many efforts by NGOs and international organizations such as the World Food Programme and USAID to bolster food access in

rural areas, as these areas are most effected by Ethiopia's notorious famines, but there is very little attention being paid to people directly outside their headquarters.

Income:

Not only does an increase in urban agriculture bolster a more equitable urban food system in Addis Ababa, but it also acts as a lucrative source of income. Given that agriculture is a traditional skill and provides Ethiopia with a more than half of its GDP and 80% of its employment, many city residents came from a family or place where they participated in farming (14). In 1994, about 50% of the selected households had an estimated monthly income greater than that of 70% of the employed population in Addis Ababa, not including vegetables consumed by the households themselves or cooperative investment allocations (3). Today, mean monthly income from crops is 607.6 ETB¹ (8). This is a substantial increase, and indicates urban agriculture's growing role in securing financial stability for residents of Addis Ababa.

However, there is a vast range of incomes from crop and livestock agriculture that indicates a gap worth noting. Livestock generates far greater income than crop production, and the majority of poor urban farmers do not have the means to obtain any livestock. There is also a major disparity within each sector—a range of 0-90,740 ETB for crop production and 0-215,000 ETB for livestock incomes (8).

The poorest farmers become trapped in a cycle of poverty, whereby they are limited by the amount of land accessible to them, cannot obtain loans for investments because they do not own the land they cultivate, or cannot obtain loans because they are

¹ Ethiopian Birr. At time of writing, 1 ETB is approximately \$0.096.

female or new migrants. The poor are trapped in asset poverty, limiting their livelihood strategies, and are among the majority of food insecure urban farmer households (8).

Without proper access to loans, poor farmers cannot invest in revenue-increasing assets, like machinery or more land, and thus they stay on the lower end of the income spectrum.

While both of these studies indicate that participation in urban agriculture can substantially raise quality of life, food security, and financial stability, it would take backing from the local and national governments to support cooperatives and farms with loans and land tenure.

Because low-income farmers are so limited, many have taken to selling or renting their land to new city residents, because they cannot make enough of an income by cultivating the little land that they have. The government technically owns all of the land, so they cannot legally sell plots, but transactions take place anyway through loopholes in the system. This process is also contributing to the decrease in land available for cultivation, because farmers have realized that they can generate more income renting their land than cultivating it (15). Selling the land makes less money than cultivation, so this occurs less often.

Providing the farmers with more land and loans for investment would raise poor farmers out of the cycle of poverty and stop the feedback loop of decreasing farmland. With enough land and proper equipment, farmers would generate more revenue, which would in turn sustain the farm and increase employment, food supply, and the city's economy.

Policy and Government:

The government plays a key role in the success of urban agriculture. Urbanization in most countries has historically pushed all forms of agriculture out of the city and into rural areas, considering it too dirty for the wealth and glory of the city. Land use regulations today still follow that same valorization, despite prevailing evidence that producing food within cities today would solve many looming problems. Governments and planners today tend to systematically seek firms, residences, or commercial centers that will bring them the most monetary return, using the rationale that the income generated for the city from this sort of land use will provide the most money for the social services the government provides. This single-bottom-line system, however, fails to take into account environmental and social sustainability, quality of life, standard of living, and equitable food and financial security. This is now happening in Addis Ababa. In order to best empower its residents and ensure a more holistic health for the city, municipalities would need to reevaluate their land use priorities.

In 1994, there was no stated policy regarding urban agriculture in Ethiopia (3). Now, however, in many large regional towns and cities in Ethiopia, the municipal governments are gaining interest in urban farming; as part of their poverty-reduction programs, they encourage urban dwellers, especially the poor and formally unemployed, to raise “fast-return” animals (11).

The city of Addis Ababa even has an Office of Urban Agriculture. Some of the responsibilities of the office include:

- Design strategies for the production and supply of quality agricultural products and for the expansion of investment that enhances agricultural development in the city and implement same upon approval
- Facilitate the ways for the distribution of improved products of agricultural technology, selected seed and fertilizer, supervise the outcome thereof; give education and training as well as render professional support to farmers.

- Design ways of reforestation, prepare for the conservation and protection of forest resource.
- Issue and supervise professional licenses to individuals and enterprises that are engaged in agricultural activity.

(16)

The fact that the city of Addis Ababa is consciously aware of and actively supports the urban agriculture sector signifies important change. This is especially timely considering the recent world food crisis, the devastating droughts that periodically drag Ethiopia into famine, and the threat of other nations buying up Ethiopian farmland for their own consumption. The Ethiopian government has been marketing its farmland to Saudi Arabia, but because of cyclical famine and drought, foreign growers planning to export food could face potential protests, even riots, from hungry locals, so no transaction has yet been made (17).

It is particularly important that the Office of Urban Agriculture “issue and supervise professional licenses to individuals and enterprises that are engaged in agricultural activity” (16). One of the greatest obstacles to growing food commercially in the city has been a lack of political legitimacy, so labeling such efforts as professional can make it a viable option for more people in terms of a career. The farmer is no longer limited to just the countryside, and the urban slum dweller that grows food for subsistence and to sell in the market does not have to feel like a degraded peasant by being labeled a blight on the city.

It is problematic that the Office of Urban Agriculture plays no role in discerning land use. It will support the farmers that remain, but can currently do nothing against the city’s rapid development. In order to ensure that agriculture is a sustainable sector of Addis Ababa’s economy, this sort of office needs to be given a louder voice.

Recommendations for a Holistic city

Growing food within Addis Ababa would give the city a much stronger foundation to be more resilient to food and financial insecurity. A country that faces a constant threat of hunger, Ethiopia has for decades relied on foreign aid, which had a major boost after the infamous 1985 famine that killed over a million people. Such a heavy dependence on other nations consequentially makes Ethiopia an extraordinarily vulnerable country, especially during this time of worldwide parallel financial and food crises. Addis Ababa is thus a crux of vulnerability – increasing rapidly in population, much of which is poor, and working to develop the tools with which to cope. It has an enormous responsibility to ensure the survival of its residents, and with the systematic, rapid upheaval of poor communities in favor of more globally competitive development, the municipality is not doing a sufficient job. Supporting and expanding urban agriculture, rather than let it decline, would not only help ensure the survival of the residents in poverty, but can help them thrive and achieve higher standards of living, benefiting the city as a whole.

One way to increase urban agriculture in Addis Ababa would be to expand the power of the Office of Urban Agriculture, as outlined in the previous section. Another important way is to provide communal land. The availability of communal plots and farming cooperatives already has a history of contributing enormously to urban farmers' ability to enter the market and make a living on their produce, especially when no other land was available to them. It has also given participants the strength in numbers to stand up to the government's appropriation of their land to private developers in some

circumstances.

Even today only 75% of gardeners claim any ownership to the land they cultivate, and within that are varying definitions of “ownership”—45% of the participants in Duressa’s study claimed to have acquired land in the 1975 “land to the tiller” policy reform, and others only have access to cultivatable land through the shared plots (8). Those without land ownership most often do not have access to loans that would allow them to invest in equipment, labor, livestock, or more land to increase profits. Even those who expressed ownership rights to the land they cultivate emphasized that their lands are not enough to be a guarantee for getting formal loans (8). Joining a cooperative increases the likelihood of loan acquisition, and can thus increase the profitability of individuals’ agricultural practices.

The formation of a cooperative has created unity and solidarity among the members and the aspiration to strengthen themselves, to solve their common problems, and to fight against perceived common enemies (3). They also work to beautify the city, increase biodiversity, retain more water in the soil, and increase accessible green space. However, many of them only have temporary title deeds, so they pay a tax to occupy the land but they cannot invest in permanent structures, or get credit to make investments in the first place.

This is where policy makers can make an important decision—should the cultivated land, which empowers and feeds the urban poor, stay cultivated, or should the government claim back the land for economic development? In the past, governments worldwide have chosen the latter, and it is clear that Addis Ababa is on that same path. However, it is critical to look at the issue of food security in a dire light, especially in

Ethiopia, given the harsh impacts of the food crisis, high level of poverty, and visible inequality.

The ability for urban dwellers to grow enough food to sell commercially in the markets and not just for household subsistence is a relatively recent development, one that can be repeated in other cities to increase the income of the urban poor. It marks the beginning of the use of urban agriculture as a viable option for a more environmentally and socially sustainable system of commercial food production. For a city at the crux of modern urban development, this is an extraordinarily significant opportunity to learn from the mistakes of other societies and choose a different path.

Conclusion

It is important to maintain a comprehensive understanding of the past trends and present status of urban agriculture in Addis Ababa in order to best prepare for the future. Ethiopia faces a number of hardships, including a growing urban population, severe food insecurity, and deep poverty, all of which are concentrated in the capitol, yet the urban setting is rarely aided by NGOs and government and international organizations. Currently, millions of urban dwellers throughout many African cities revert to farming either to supplement their household income or because they cannot afford to meet their daily food needs (18, 19).

Historically, urban agriculture took place either in backyards or on untenured land. Cultivation was considered a temporary land use until something more economically desirable could take its place, and families farmed for subsistence only. Today the practice is gaining in political and social legitimacy, in income received, and in

overall participation. It provides an average of 60% of a farming household's income, and contributes to community unity in the cases of cooperatives and shared plots. Urban crop production on private and communal plots has made an entry into the commercial food market. 70% of the urban farmers in Addis Ababa own livestock, and 20 million liters of non pasturised milk come from back-yard city farms and are sold directly to the consumer by the producer (20, 21).

Virtually all of the participants in the studies used in this paper were food secure. The ability to grow their own food has enabled households to not only stave off starvation in the face of deep poverty, but also to actually improve their standard of living by creating a means of income. Barriers to participation, however, which include inaccessibility to ample land for cultivation and credit for investment and tools, will require government support. It will also require the government to rethink entirely their current development plan and to reassess the social, economic, and environmental values of agriculture in their city. The security of the residents of Addis Ababa, particularly those with the lowest income, depends on the government's response to these issues. Urban agriculture has the potential to be Ethiopia's key means of achieving food sovereignty, food security, and economic wellbeing, and it deserves the attention of policy-makers.

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