

# Marginalization Of Agriculture Vis A Vis Urbanization And Its Implications On Food Security

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## ABSTRACT

Public agencies, civic society, and scholars are all showing a growing interest in urban agriculture, despite its long history of being neglected or disregarded on the notion that it is not a suitable urban activity. This study presents findings from research and municipal discussions conducted in seven West Indian towns that analyzed the institutional features of urban agriculture, such as the limitations that it encounters. And despite regional decentralization efforts, local governments have not committed to bolstering urban farming. Despite the many people involved in urban agriculture's promotion and growth, its legal standing is unclear. They also make people more vulnerable to the effects of climate change and hinder efforts to fortify communities against these hazards. Gender inequality is exacerbated by urban food insecurity, which has both economic and non-economic causes.

**KEYWORDS** food security, Agriculture, Urban, Development.

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## INTRODUCTION

For decades, issues of food insecurity have been a focus of development and equality efforts. 'Starvation is the feature of people not having enough food to eat,' Amartya Sen said more than three decades ago. It's not the quality of always having enough to eat. Most people still use the definition that was created at the 1996 World Food Summit. That "food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for active and healthy life," is the definition given. The transition from a singular emphasis on food production to a more holistic conceptualization that includes availability, access, use, and stability is the most striking difference<sup>2</sup> between this definition and those in use before 1996. Strong food systems lead to greater food safety. These include everything that happens between the farm and the dinner table, including input production and distribution, farming, processing, packing, warehousing, shipping, retailing, catering, home food management, and trash collection. The results of these actions and the management of them are also crucial parts of food systems.

One of the major issues society has in recent years is the increasing rise of cities, especially in the global South. The 'urbanization of poverty' is a phenomena caused by the combination of rapid urbanization and preexisting conditions of poverty and inadequate governmental support for essential services. As a result of the almost complete lack of governmental infrastructure, housing, and social services, many urban people are forced to become entirely self-reliant in a wide variety of essential services, including housing, employment, and food

supply. This is especially true in the current period of increased urbanization, rising global food shortages, overpopulation and degradation of rural land, foreign "land grabs," and poor economic performance throughout the world. The UN's Food and Agriculture Organization (FAO) has come out in strong favor of UA, defending the practice on the grounds that it helps feed millions and provides employment for tens of thousands. Therefore, the Food and Agriculture Organization of the United Nations (FAO) believes, "African policymakers need to act now to steer urbanization from its current, unsustainable path towards healthy "greener" cities that ensure food and nutrition security, decent work and income, and a clean environment for all citizens.

## LITERATURE REVIEW

**Tiechou Shi <sup>a</sup>, Xiubin Li et.al (2018)** Large numbers of people from rural areas have moved to Chongqing municipality's cities and towns in recent years. Abandoned farmland parcels were extracted from 1:10,000 scale farmland distribution maps in 2002 and 2011 for analysis, rates of abandonment were calculated for each township in three countries, and variations in abandonment rates across towns and the factors influencing them were investigated. Based on the results of a multiple linear regression analysis, we know that the ratio of forestland area to total area within a township is the most significant factor in determining the abandonment rate. There is a positive, albeit not statistically significant, influence of township average elevation, distance from townships to county seat, and terrain slope. In other words, the incidence of farmland abandonment is greater in more distant municipalities and municipalities where crops are more vulnerable to danger from wild animals, where average net income per farmer is higher, and where there is a larger total area of farmland per farmer.

**Wojciech Sroka et.al (2018)** This research aims to investigate the varying influence of internal regional variables on land usage. In order to evaluate what variables determine the proportion of agricultural land in the municipalities of several Polish metro regions in 2010, we developed spatial regression tree models. Exogenous variable values are reported as an average over the longest time period available prior to 2010, and the analyses are static. We examined how the presence or absence of agricultural land in a given municipality's surface area is affected by socioeconomic processes, environmental circumstances, and farming features. Using the theory of economic rents, which states that land use is governed by economic rent, we demonstrated that the number of firms per 10,000 persons of working age is the most significant factor having an influence on the percentage of agricultural land. Population density, the rate of net migration, and the health of the environment for farming are other major considerations. It was found that a high quality of agricultural production is associated with a relatively high share of agricultural land in the surface area of the municipalities analyzed, and that this share decreases with an increase in the rate of enterprises, population density, and net migration.

**Davide Viaggi et.al (2015)** The purpose of this article is to analyze the impact that agri-environmental programmes had in improving the natural capital of farmland in the Italian region of Emilia-Romagna as part of the rural development plan. Using information from the 2000 and 2010 national agricultural censuses, an indicator for biodiversity-friendly farming practices (BFFP) is established, and its level and distribution at the municipality level are

assessed. Then, using spatial econometric methods, we examine the connection between BFFP and involvement in rural development initiatives. The paper's primary findings corroborate the hypothesis that RDPs have a role in determining the dynamics of BFFP evolution. While some strategies, like integrated production, do not contribute positively to the distribution's development, those that favor organic farming do. Important geographical linkages between these impacts are also shown in the article.

**Yurui Li et.al (2014)** Improving land use efficiency and synchronizing urban and rural growth in China have been hampered by the country's rapid rural hollowing, which is being fueled by the massive and rising out-migration of rural laborers under the urban-rural dual-track system. This study examines the current state of rural hollowing and covers two common methods of rural residential land consolidation and allocation (RRLCA) in China's TAAs using Dancheng County as an example. Dancheng witnessed fast rural hollowing, which was characterized by a decline in rural industry, infrastructure, residential population, and settlements, according to the study's findings. The model-based calculation indicates that the possibility of growing farmland by carrying out RRLCA was around 5649 ha, therefore it's clear that RRLCA is both desirable and necessary in Dancheng. The two RRLCA approaches used at the community level have had a good impact on the quality of life in the region, the expansion of agricultural land, and the growth of rural enterprises. It's possible that RRLCA might learn from these examples of self-organized rural planning, democratic decision-making, and endogenous institutional innovation. In sum, it suggests that establishing community-based RRLCA in a scientific manner that takes into account local realities might offer a unified framework for expanding arable land, fostering modern agriculture, encouraging new building in the countryside, and reviving abandoned towns. Future RRLCA in rural China has been proposed after evaluating the limits and challenges of present programs.

**Hualin Xie et.al (2017)** This research uses quantitative methods to analyze how the availability of non-farming labor and land fragmentation affect the transfer of land management rights in the agricultural sector. Using data collected by the Ministry of Agriculture in rural areas of the People's Republic of China, we analyze the topic from the vantage point of labor heterogeneity and family joint decision making. The findings show that agricultural land circulation choices are greatly impacted by land fragmentation. The impact of non-agricultural labor supply on agricultural land outflow is bolstered by land fragmentation, and this effect is especially prominent for women. Female non-agricultural labor supply influences agricultural land circulation more than male supply does. Female non-agricultural labor supply has a disproportionate impact on agricultural land circulation when the supply of non-agricultural labor rises, leading to greater outflows and reduced inflows of land. Female non-agricultural labor supply affects agricultural land outflow significantly in eastern, central, and northeastern China. Also, in eastern and northeastern China, the number of land plots boosts the impact of the non-agricultural labor supply on the outflows of agricultural land, with the latter impact being particularly obvious for women in the latter region. In order to achieve rapid agricultural growth throughout the course of human urbanization, the government and relevant agencies should boost non-agricultural job training and create circumstances and laws to encourage the orderly transfer of home labor.

## **OPPORTUNITIES OF URBAN AGRICULTURE**

Urban agriculture's supposedly positive effect on African cities' development is hotly debated. At one end of the spectrum, urban agriculture is seen as a panacea, improving the lives of city residents by increasing their access to healthy food, creating jobs for low- and middle-income residents, and improving the city's ecological footprint. It is clear that urban agriculture may serve several goals in cities throughout the developing world, including but not limited to: improving city ecology; increasing income and job opportunities; and addressing food security concerns. Multiple benefits, including an increase in "the number of livelihood alternatives accessible to the poor," have been attributed to urban agriculture's favorable impact on development.

Millions of Indian living in cities also grow their own food in backyard gardens for consumption and resale. Around 7,500 families in Bengal "grow their own" on little backyard plots. Listed various useful outcomes that might be expected from engaging in urban agriculture. These merits highlight the value of urban agriculture in bolstering city dwellers' access to healthy, affordable food. Those who support urban agriculture point to two key ways in which it might improve families' food security: the revenue it creates and the direct access to the food security itself. In addition, urban farming households may have greater protection against seasonal or other temporary food shortages, as well as access to relatively cheaper food and a wider variety of particularly nutritious foods, such as vegetables and products of animal origin (milk, eggs, meat). If food markets in metropolitan areas, especially in low-income areas, are inefficient, the latter mechanism may become more important. Under these circumstances, families may be able to eat more food and eat a more varied diet, increasing their intake of beneficial micronutrients, provided they have direct access to food.

Due to urban poverty, many people have been forced to enter the market system, making a stable income and employment situation two of the most important factors in ensuring adequate nutrition. However, this might be a problem for the urban poor, since it makes achieving food security more difficult for them if they do not have access to a work or money. Therefore, it is crucial to look at ways of improving food safety. One strategy that has been proposed to increase the availability of nutritious food for city people is urban agriculture (UA).

Growing food close to where it will be consumed has several environmental benefits: it decreases the urban heat island, improves air quality, and cuts down on energy usage and pollution caused by transporting food. The psychological, emotional, and physical well-being of city dwellers may improve as a result of an increase in urban greenery. Participation in urban agriculture has been linked to improved illness prevention, increased physical activity, less reliance on food help, and increased feelings of pride and accomplishment. However, in order to lessen food insecurity, it has been advised that the urban poor use a number of informal food supply options. These methods may sometimes include food transfers from rural areas to urban centers, but growing distances prevent this and instead require people to depend increasingly on self-provisioning. As a result, UA is now an essential component of food security for the urban poor. It was also pointed out that the worsening of wider economic indicators has had a knock-on effect on the availability of food in urban areas, prompting

people to resort to "a range of survival strategies," one of which is the manufacturing of foodstuffs.

### **CHALLENGES ASSOCIATED WITH URBAN AGRICULTURE**

Although the advantages of urban farming have already been discussed, there are still certain problems that might arise, either because of the farmers' actions or because of external factors. Production, processing, and selling all present difficulties.

The inability to legally acquire land is a major obstacle. Many gardeners now lose their property without warning because they lack legal ownership. Horticulturally productive land is being converted into urban areas with new homes, factories, and roads. Many gardeners overuse pesticides and wastewater to increase profits from precarious jobs. Since market gardening currently provides fresh food for millions of Indian, it is imperative that both national and local governments invest in and promote this sector.

Soil erosion, siltation, loss of flora, visual untidiness, depletion of water supplies, and contamination of resources are only some of the environmental problems that have been associated to UA activities. This problem exists in most cities, including Lusaka, due to the blocking of numerous drainages, which results in undesirable and superfluous water bodies that serve as mosquito breeding places. Although the government has built several drainages across the city, many of them get clogged with sand during the rainy season. Soil erosion caused by UA has also led to the drying up of several major water sources.

### **POSITIONING URBAN AGRICULTURE IN STATUTORY AND LEGAL TEXTS**

The excessive dichotomy between urban and rural areas has made urban agriculture a secondary concern in city planning and development. The prohibition of urban agriculture in statutes and legal documents is the most tangible manifestation of this marginalization. Despite the importance of urban agriculture, there has been little progress in incorporating it into the existing infrastructure of city administration, despite the professed political intention to do so.

In Abidjan (Côte d'Ivoire), for instance, urban agriculture is overlooked in development plans because of its perceived lower priority. Housing, roads, bridges, and other infrastructure were not prioritized by the agency responsible for incorporating agriculture into Abidjan's urban development plan. The lack of objectively verifiable indications of the economic effect of urban agriculture, on the one hand, and the main demands of the populations, housing, local services, and key infrastructure, on the other, continues to characterize this situation. For this reason, the previous housing director's comments at a meeting may be fully understood as follows: "When my minister presents his progress report to the prime minister, the essential question that he will be asked is as follows: 'how many houses have you built?'"

Abidjan is hardly an exception when it comes to the marginalization of urban agriculture. Although the relevance of urban agriculture is widely acknowledged in Ouagadougou, its long-term viability remains uncertain due to a dearth of effective management tools. Market gardening is included in the 1997 overall urban development plan, although "...the

recommendations are still vague and leave room for ambiguities at several levels (status of some sites, appropriation of dam waters for the activity, etc.)"

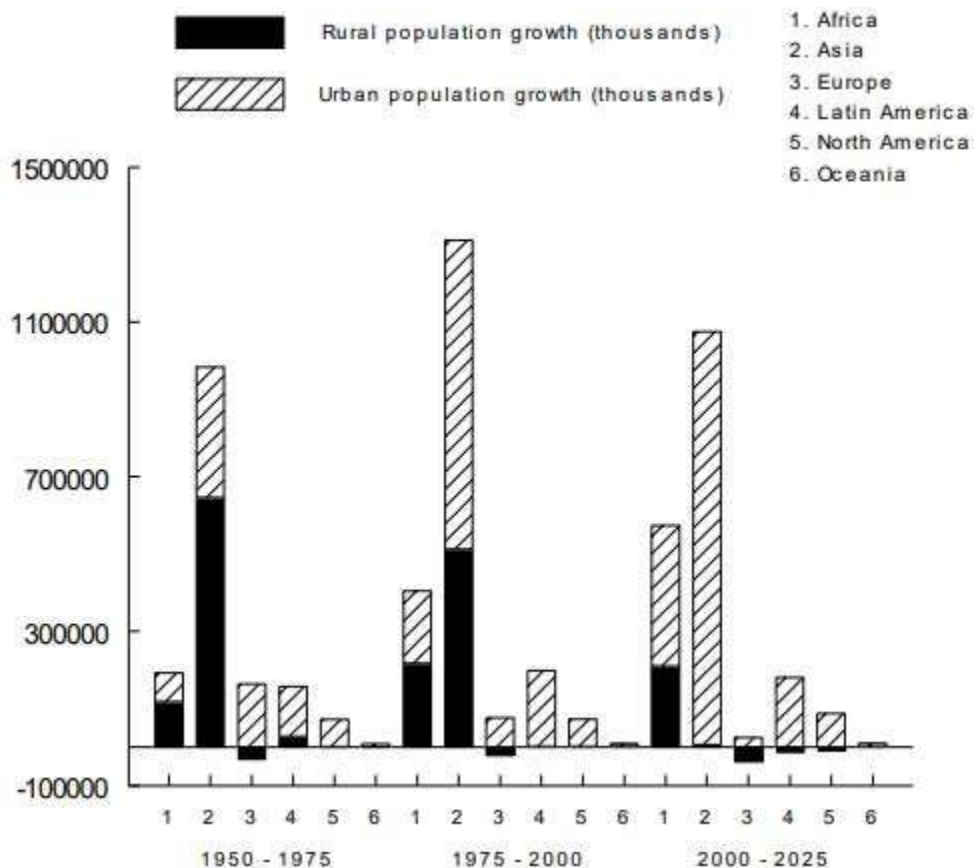
Similarly, urban agriculture is not prioritized in the Nouakchott municipal government's 1983 and 1987 master plans for the city's overall urban growth. As far as I can see, the plan only takes into consideration the Sebkhia sites and the green belt. The existing usage of market gardening sites is documented; nevertheless, their growth is not included in an overall urban development plan for the years 2002–2005.

Most West African nations' statutory and legislative laws give urban agriculture a very little role. Although it has been shown to aid in urban revitalization, this practice is often overlooked because of its marginal status. Unfortunately, William Rees's plea for increased attention to urban agriculture does not seem to have been heard by the powers that be just yet. The environmental, social, and economic benefits of urban agriculture seem to be universal. It's a concept whose time has come, and governments should think about it."

### **THE IMPACT OF URBANISATION ON FOOD PRICES**

An rising number of people live in urban areas, and it is often expected that this would lead to resource-intensive dietary and consumption changes, such as an increase in meat consumption. However, an examination of the correlation between urbanization and food costs reveals little support for this claim. Growth in the urban population, urbanization, rising incomes, and changes in popular culture are all sometimes included under the umbrella word "urbanization." To understand the influence of urbanization on food security, it is important to separate these factors.

Simply put, urbanization is the proportion of a country's population that resides in urban areas, whereas urbanization rate is the yearly percentage rise in this level. Figure 1 shows that the majority of the world's population increase over the next four decades will occur in metropolitan centers in Asia and Africa.



**Figure 1: Population growth in urban and rural areas of main world regions, 1950– 2025**

Urban regions are defined in a variety of ways across nations. Population size (typically between 5,000 and 20,000), density (typically between 400 and 1,000 people per square kilometer), administrative function, and percentage of adult population engaged in non-farm activities are just some of the criteria that can be used. This complicates international comparisons, and the fact that standards might shift over time even within a single country adds to the muddle. Comparing the pre-1982 definition with the 1982 definition and the 1990 definition, it is projected that China's urbanization level in 1999 would have been 23.9 percent, 73 percent, and 30.9 percent, respectively.

While it's true that more and more people are settling in urban areas since they are bigger and denser than their rural counterparts, it's also crucial to note that "urban" is not a universal term. Although half of the world's population currently resides in urban regions, it is important to note that only a tiny percentage (about 10%) resides in mega-cities, while the other half of the urban population resides in small towns, some of which are more comparable to big villages than cities. It's also worth noting that despite the fact that urbanization is intrinsically linked to GDP growth, economic inequality is often worse in urban centers than in rural ones.

The degree to which urbanization may be a cause of food insecurity may be better understood by disaggregating income growth and urbanization. Food markets tend to be more varied in urban centers, and even relatively tiny cities may serve as key distribution hubs for farmers in the surrounding countryside. It's thus clear that city dwellers enjoy a greater selection of foods

than their rural counterparts. However, the trend toward meat, fish, and other so-called "luxury" foods is not a direct result of urbanization per se. For instance, living standards survey data collected in Vietnam between 1993 and 2004 (a time of rapid economic growth for the entire country) shows that higher incomes are correlated with increased expenditure on these foods. Spending on meat, eggs, fish, and milk and milk products rises with wealth in Sri Lanka, India, Ghana, China, and Tanzania, suggesting that this trend holds true regardless of whether customers live in rural or urban regions. Actually, it's not always the case that metropolitan areas have a lower hunger rate. Figure 2 demonstrates that in 12 out of 18 low-income countries, urban areas had a greater rate of food insecurity as assessed by food-energy deficits.

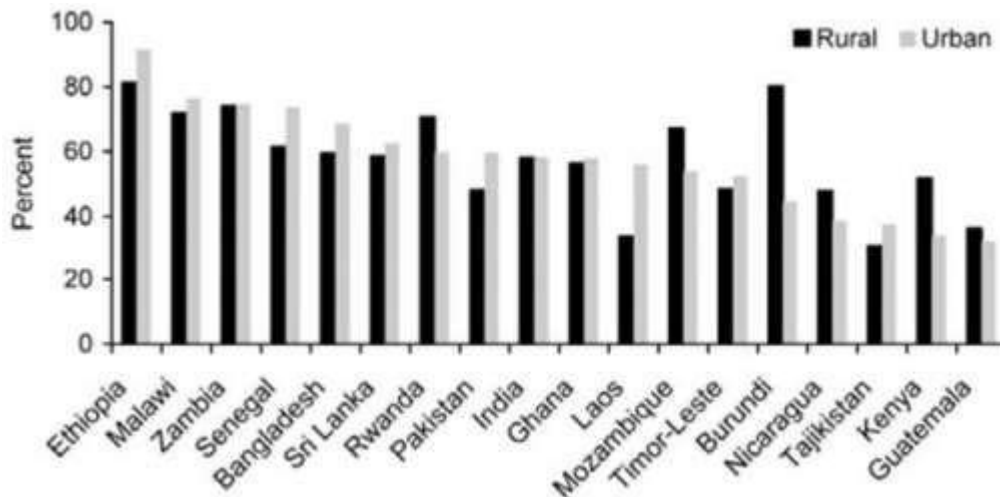


Figure 2: Rural and urban incidence of hunger (food-energy deficiency)

## CONCLUSION

The public sector, civic society, and academics are all very interested in the growing urban agriculture industry because of the value it adds to the economy. Despite urban agriculture's shown ability to contribute to job development and revenue production, as well as food security and environmental protection, a variety of barriers prevent it from doing so. Unfortunately, urban agriculture is still often overlooked in city planning tools because of this bias. One of the most glaring signs of urban agriculture's marginalization is the insecurity of the land in prime market gardening locations. Generally, decisions are made in favor of satisfying building and town planning concerns, despite the fact that there is a near perpetual conflict between the search for places appropriate for development and agricultural lands. It is premature for decentralized groups, especially municipalities, to prioritize urban agriculture. Practices that prioritize increasing the revenue base above encouraging the growth of urban agriculture stand in the way of the transfer of duties related to urban agriculture in places where it exists. One of the most pressing issues of the 21st century will be ensuring enough food for everyone, and the effects of climate change will further exacerbate the problem. All net food purchasers, whether in cities or the countryside, will continue to feel the effects of rising and more fluctuating food costs.

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