



## **Urban Agriculture Development in Medan City Towards Food Sovereignty**

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### **Abstract**

Medan has enormous potential for expanding urban agriculture for achieving food security. The primary issues in achieving the urban agricultural movement are consistency and cooperation. The goal of this essay is to show how the city of Medan's agricultural policies can boost food independence while also improving the economy. This study employs a qualitative descriptive research method with a literature review approach. Data analysis techniques include data reduction, data visualization, and making conclusions. The findings indicate that urban agriculture plays an important role in community empowerment through the food self-sufficiency movement. The advantages can lead to new work prospects. It is critical to increasing cooperation between local governments and the community through policy protection and aid for the development of plant management expertise and harvest marketing distribution.

**Keywords:** Urban Agriculture, Food Sovereignty

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## **INTRODUCTION**

Agriculture has long been linked to the countryside. For a long time, rural agriculture was assumed to be primarily concerned with feeding the metropolitan population (Orsini, 2013). However, the reality is frequently different, with rural agriculture not always able to supply urban food needs. Finally, the city imports its food needs from whichever source is available. Indeed, if the city promotes urban agriculture in its region, this can be expected.

Medan City is one of the cities with significant potential for establishing urban agriculture as a means of achieving food security. The city of Medan is expected to have population of 2,460,858 in 2022, according to the Central Statistics Agency (BPS Kota Medan, 2022). This presents an excellent opportunity for the advancement of urban agriculture in the goal of food sovereignty. However, food reliance that is dependent on the surrounding environment necessitates food sovereignty measures through urban agriculture. Agricultural programs, particularly in metropolitan areas, have become increasingly critical in coping with population increase, which produces a high demand for housing while decreasing the demand for agricultural land.

With little acreage, the urban agricultural industry enables for food production (Boyer, 2010). Medan City's agricultural growth should receive minimal emphasis; instead, strategies focusing on urban agriculture should be prioritized (Siregar, 2020). There are three roles of urban agriculture: as a method for dealing with low-income households, an economic perspective with a focus on boosting income and job creation, and an ecological perspective on the role of urban environmental agriculture (Ikhsan, 2021). According to data from the Ministry of Agriculture's Food Security Agency in 2021, Medan City ranks 16th with an IKP of 85.02, trailing Denpasar and Pekanbaru City in first and second position (Pangan, 2020).

The enormity of the impact of food on life, over time, the problem of food supply will not stop (Purwanto, 2022). This means that urban agriculture (Urban Farming) will play a major role in the creation of growth activities and the distribution of food and other goods through intensive crop and livestock cultivation in urban areas. As a result, smart measures can encourage the City of Medan to engage in significant urban agriculture. As a result, Medan City has various strategic sub-districts in the development of agriculture or agribusiness areas based on location.

Given this potential, the agricultural sector of Medan City should be expanded on a small scale. The basic capital for increasing competitiveness in additional revenue, productivity, and food security is urban agriculture. According to North Sumatra BPS data, food crop production in North Sumatra in 2021 will be lower than in 2020. Rice production in 2021 is expected to be 2,074,855.91 tons, up from 2,040,500.19 tons in 2020. This is consistent with rice productivity increasing from 52.51 ku/ha in 2020 to 52.64 ku/ha in 2021. More than that, North Sumatra has a lot of potential for palawija crops. North Sumatra's corn production in 2021 is estimated to be 1,724,398 tons, with an average yield of 63 kw/ha. Meanwhile, the harvest area of Medan City's rice production in 2020 is 924.83 acres, and it will increase to 1,051.13 acres in 2021. This suggests that the harvested area in Medan City has potential if properly managed (BPS Prov Sumut, 2022).

The scarcity of agricultural land in relation to a city's food needs forces the city to rely on the surrounding countryside. As a result, Medan City requires urban agriculture to lessen its reliance. The urban agricultural program must be begun in order to maintain the quality of life, specifically the ability to consume healthy meals made from excellent fish and vegetables in the center of the city. This program is intended to be implemented in crowded urban settings with limited vacant land. Furthermore, urban agriculture contributes to urban green open spaces and food security (Prihatin, 2015).

One of the strengths of increasing community independence is the growth of the urban agricultural movement. With the urban agricultural movement, it may be possible to preserve food security, particularly on a small scale for disadvantaged households. So that the urban agriculture development movement can alleviate poverty and promote community independence. This article explains how the city of Medan's agriculture policy can boost food independence while also improving the economy.

## **RESEARCH METHOD**

The research method employed is descriptive qualitative using a literature study approach. The goal of this study is to examine the role of urban agriculture in achieving food sovereignty in Medan City. The study of literature in the form of journals, books, online media, and documents is a method for gaining research findings. Data analysis techniques include data reduction, data visualization, and making conclusions (Miles & Huberman, 2018).

## **RESULTS AND DISCUSSIONS**

With a huge population, Medan offers numerous prospects for urban agriculture growth. Every residence has its own plants that will have a significant impact on food security. With the rise of urban growth, there are three viable agricultural options. First, because production is close to consumers, transportation costs are lower, and changes in consumer behavior are rapidly noticeable. Second, urban population growth and welfare levels are higher than in rural areas. Third, creating new work prospects for urban communities (Thamrin, 2022).

According to the 2022 BPS data report, Petsai ranks first in vegetable crop production by plant type in Medan City, 2019-2020, followed by kale, mushrooms, spinach, chilies, and onions. The six vegetable commodities have a lot of potential in realizing urban farming with a Horticultural system. It is very important to provide regulatory protection for the potential for agricultural development while meeting the needs of vegetables related to improving health and nutrition. This shows that the potential for economic growth can improve people's living standards (BPS Kota Medan, 2022). In addition, certain vegetable commodities (such as potatoes, tomatoes, cabbage, shallots, and chilies) and types of vegetables (spinach, kale, mustard greens, leeks, beans, and long beans) have the potential for development with limited land using an urban farming approach. The significant beneficiary was other than personal consumption and sale to a small group of people. This shows that urban farming generates profit transactions.

### **The Importance of Strengthening Municipal Agricultural Policies**

Serious efforts to develop urban agriculture emphasize the significance of a regulatory position that protects and supports urban agricultural endeavors. In the realization of urban agriculture. It is critical to prioritize urban agriculture by focusing on satisfying demands, processing, producing, and distributing agricultural goods for home consumption. This means that policies that mirror public policies are required. When discussing agriculture in North Sumatra, it tends to suit industrial demands with a food estate program that emphasizes commodity crops such as rice, corn, potatoes, and others while ignoring the food needs of local residents (Wahyuni, 2022).

According to Anderson, it is critical to consider the key principles of public policy when implementing urban farming in Medan City. First and foremost, authoritative government action. Public policies are activities taken by government bodies with legislative, political, and financial authority. This implies that consistency in implementing urban farming will have a positive impact on desire in the field. Second, responses to actual needs or difficulties. The public policy aims to respond to the community or groups in society's concrete demands or issues, such as individuals, non-governmental organizations (NGOs), or governments (Anderson, 2011).

Fourth, be goal oriented. Public policy aims to attain a specific set of specified goals that indicate efforts to address or meet specific community issues. Fifth, there is an action. Public policy is typically defined as a method or plan rather than a single choice, action, or reaction. Sixth is the decision to do something or not to do something. Outlined policies may take action to try to fix the problem, or they may be based on the premise that the problem will be solved within the current policy framework, in which case no action is taken. Seventh, performed by one or more actors. A single representative or government agency, or a group of actors, can carry out the policy. The eighth point is a justification for the action. The policies outlined usually include a statement of the policy's rationale. On the ninth, decisions are made. Public policy is a deliberate choice, not an intention or promise (Anderson, 2011).

## **Urban Agriculture Development Strategy**

All stakeholders must innovate for urban agriculture to have character. An agricultural system can be classified as urban if it makes the best use of urban environments (Mougeot, 2000). Looking at the peculiarities of urban living, there are at least five things that must be done to create urban agriculture, namely: 1) Increasing. growing urban farm areas; 2) Processing and Organizing local communities as actors in urban agriculture; 3) Distribution. Creating outlets for urban agricultural products; 4) Food loss and recovery Processing and recovery of food waste, and 5) Education and connection. Local communities of urban agriculture actors' education and capacity building (London, 2017).

Urban agriculture is required in order to achieve food sovereignty in urban populations. Stakeholders can implement one of three tactics in its development. First, consider social strategy. Urban agriculture contributes to the social well-being of urban communities and the reduction of urban food insecurity. Second, consider economic strategy. Urban agriculture may be a source of income for urban populations while also promoting the empowerment of urban vulnerable groups. Third, consider the environmental plan. Sustainable urban agriculture also helps to save the urban environment, which is frequently a source of pollution owing to industrialization (Salleh, 2020).

Medan City Government Policies that stimulate urban agriculture implementation by improving rules, mentoring, and monitoring will create possibilities to build community potential. Policies aimed primarily at alleviating poverty and creating work opportunities for the Medan city administration have so far failed to yield results. According to BPS data for 2021, the number of unemployed individuals in Medan City is still quite high 2021; in 2019, the open unemployment was 8.53 percent; in 2020, there was a growth of 10.7 percent; and in 2021, it is continuing to happen. Another increase is 10.81 percent in open unemployment (BPS Kota Medan, 2022).

The difficulty of expanding urban agriculture is also influenced by a lack of land. This, however, can be expanded with the concept of urban farming. It is critical to provide education and training. Two considerations must be taken into account. First, internal refers to the city government's and the community's devotion. This begins with the ability to gain access to information, networks, and distribution management, all of which can aid in the growth of agricultural products. The goal is for people's efforts in agricultural product production to be fully absorbed. Second, external issues such as environmental construction and urban agriculture development from the ground up. Of course, the trend of urban agricultural development can be leveraged as a possibility for development. In order to achieve food sovereignty, increased environmental awareness will generate opportunities for loyal consumers as well as business potential (Nurlaelih, 2019).

## **Community Participation in the Urban Farming movement**

The success of the Urban Farming initiative is also inextricably linked to the target community's engagement, both direct and indirect. Junainah (2016) This involvement results in an active role in maximizing every community development effort. This means that every community plays an active role in decision-making, beginning with planning and progressing through implementation and evaluation (Thamrin, 2021). Urban gardening in the community is a growing movement that has the potential to increase food security and community empowerment (Wardah & Niswah 2021). Urban agriculture is an important method for urban survival since it involves domestic food production within or directly adjacent to populations (Abdurrohman, 2021).

This suggests that this potential is a positive step toward developing a gardening culture in urban places. According to BPS statistics, with a population of 2,460,858 people divided into 21 sub-districts in 2022, it has a lot of potential for enhancing food security. This emphasizes the need for community involvement. For example, as the owner and developer of agriculture, it primarily relies on the community in its implementation. It will be easier for the community to promote agriculture through farmer groups rather than walking alone. Such engagement fosters the creation of supervision to facilitate the development and prospective advantages and downsides of the crops

produced. Building community engagement in the success of urban agriculture by providing an understanding of the necessity of food for humans is critical to ensuring Medan City's food independence (BPS Kota Medan, 2022).

### **Efforts to Strengthen the Urban Farming Movement**

Growing urban farming trends among Medan City residents necessitate collaboration between the local administration and the community via various agricultural groups. Food agriculture aims to achieve food security and food sovereignty. On the other side, education on the importance of greening the city by studying the natural and community characteristics of the field. It is critical to consider numerous aspects of policies that promote the urban agriculture movement (Puriandi, 2013).

First, the type of collaboration between the Medan City Government, the Agriculture and Fisheries Service, and the Parks Service should be highlighted. Second, delivering a legal product in the shape of a stinging regulation on urban agriculture cultivation. Third, promote the value of urban agriculture in Medan City. Fourth, each sub-district provides technical guidance and empowers the PKK to plant existing food. Fifth, establish cooperatives to improve distribution and expand current food production. The sixth goal is to limit food imports and build a clean market in the city. Seventh, create a partner team to do urban agriculture.

Some of these activities are thought to be able to address issues in Medan, particularly in urban agriculture. This has had a positive impact on many efforts to encourage the urban farming movement to be more than just a passing fad. Local governments must be able to improve themselves in order to achieve food sovereignty through implementing the New Public Service.

### **CONCLUSION**

The success of urban agriculture depends on the ability of all stakeholders to collaborate to achieve food sovereignty. It is sufficient to recognize that this is not easy to achieve with limited land. Optimistic, to provide an in-depth awareness of the importance of food to the people of Medan by moving the notion of urban agriculture. Organic agriculture produced in urban agriculture is a solution for Medan City's food security and health. The number of non-organic agriculture that uses genetic procedures that endanger human life. As a result, urban agriculture is not only being established in Medan, but it is also projected to be able to carry out urban agriculture in realizing food sovereignty, creating jobs, and raising income. It is critical to expand on this research in the future by investigating the effectiveness of urban agriculture in achieving food independence in Medan City.

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