Program Evaluation in the Development Urban Farming for Sustainable Food Independence in Makassar City

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KEYWORDS

Urban Farming, Food, Cultural Activity

ABSTRACT

Introduction: The growth of urban populations throughout the world has transformed urban landscapes into important centers of economic, social, and cultural activity, and along with this development, the challenges of environmental sustainability and societal well-being are increasingly complex. To overcome the threat of environmental balance and food security due to high changes in urban land, the strategy used is through urban agriculture or urban farming. **Aims:** This research aims to analyze the evaluation of development programs in urban farming for sustainable food independence in Makassar City. **Methods:** This research uses a descriptive qualitative approach with data collection methods, namely observation, in-depth interviews, and documentation. The informants in this research are the authorities and are directly involved in the development of urban farming for sustainable food independence in Makassar City. **Results:** The research results show that the evaluation of development programs for urban farming for sustainable food independence in Makassar City has not been implemented optimally. This is due to a lack of public awareness of the sustainability of the development of urban farming in Makassar City. Furthermore, not all communities respond well to urban farming programs/urban farming. However, for people who have felt the benefits of urban farming by fulfilling household food needs and experiencing economic value through selling harvests and production, this supports the sustainability of this program.

1. Introduction

Indonesia, with its abundant natural resource potential, is an agricultural country with a population spread across various islands, with an average annual population growth rate of 1.25% with a population increase of 32.6 million people. The increasing population growth is of course in line with the need for housing and consumption needs also increased. This is in line with the function of agricultural development which has a role in people's lives and aims to improve the quality of life and welfare of people, especially people who work as farmers. Then the phenomenon of urbanization which is increasingly developing, especially in cities, is turning many certain areas into built-up land, and causing productive agricultural land in urban areas to be reduced or even nonexistent. The growth of urban populations throughout the world has transformed urban landscapes into important centers of economic, social, and cultural activities. Along with this development, the challenges of environmental sustainability and community welfare are increasingly complex, requiring innovative solutions that can integrate economic, social, and social aspects. Environment.

Changes in land use in urban areas are increasing over time. Increasing population growth has implications for increasing life activities that require land for housing and life support infrastructure. To overcome the threat of environmental balance and food security due to high changes in urban land, the strategy used is urban agriculture or urban farming (Rahmawati et al, 2024).

Urban farming otherwise known as urban farming is an activity ranging from cultivation, processing, marketing, and distribution of food, forestry products, animal husbandry, horticulture, and other

agricultural products carried out in or around urban areas. Urban farming This is an effort to obtain food, improve welfare, empower people to beautify cities, and well environmental education for urban communities, their food security will increase because they do not depend on other parts, prices are cheaper, fresh with a cultivation process that is known to the general public. Urban farming (urban farming) uses land intensification to meet the daily need for fresh fruit and vegetables for residential areas in urban areas.

In this context, urban farming appears as an attractive alternative to answer these challenges. Urban farming is an agricultural practice in and around cities. Has great potential to make a contribution positive to creating a sustainable city. As for the positive impact of urban farming on the environment, economy, and society, namely the benefits that society obtains from agriculture which encourages low environmental damage, improves the economy of farmers, the circulation of money in society and consumers get healthy food. Urban farming is not just a farming activity in the city but is also an important strategy for rebuilding the relationship between humans and natural resources while increasing community food security. (Suryani et al, 2023)

Urban farming is one of the programs implemented nationally to help people consume nutritious food and to reduce family expenses. Urban farming This is done by utilizing land that can be planted with various types of vegetables. The effects of implementing urban agriculture include improving people's welfare and standard of living, becoming a source of household income, and reducing poverty through developing vegetable cultivation business activities by existing potential. Draft urban farming is utilizing yard land in urban areas which is converted into yard land in urban areas which is converted into green productive agricultural land carried out by the community or community so that it can provide benefits.

Urban farming has become a topic in urban planning and development in Indonesia. Urban farming not only aims to increase food availability but also to overcome environmental and social problems in urban areas. However, the successful implementation of urban farming has effective communication between stakeholders and beneficiaries of urban farming in this case the Women Farmers Group (KWT). Urban farming in Indonesia is increasingly popular along with increasing urbanization and the need for sustainable food solutions. Implementation of urban farming This can be done using simple green technology in the form of land-saving viticulture techniques, considering that land in urban areas is very limited. Vermiculture is a planting system in pots that are arranged/assembled horizontally and vertically or in tiers on limited land or in the yard of the house. This viticulture technique is considered a safe, efficient, easy solution and will have a huge impact if carried out by city residents in a systematic, structured, and massive manner. (Luthan et al, 2019)

The need for food is a basic need for every human being. Fulfillment has also been guaranteed by the state in the 1945 Constitution Article 28 H Paragraph 1. Article 28 H paragraph (1) of the 1945 Constitution. The need for food is considered a basic human need because food is a source of energy and nutrition needed to maintain health and survival. The focus of food security is not only food provision at the regional level but also at the household and individual levels. Food security is a condition where food needs are met in terms of quantity, quality, and balanced nutrition. Food security is a flexible concept as reflected in the many attempts to define it in research and policy use.

In implementation of urban farming Of course, a program evaluation is needed to see to what extent this program has been successfully implemented in society. Wirawan (2012) explains evaluation as research to collect, analyze, and present useful information about the evaluation object, assess it using indicators, and the results are used to make decisions regarding the evaluation object. In evaluation, program evaluation is also known, Ralph Tyler, 1950 (Akbar, 2016) defines program evaluation as a process to find out whether the program objectives have been realized.

Development urban farming in Makassar City in recent years has been increasingly developed, this is to help the community become food independent. Development of urban farming It is also able to encourage people to be more productive in utilizing yard land for agricultural land which can provide

benefits for food independence. However, in its implementation, there are still shortcomings in terms of providing agricultural extension workers for each Women Farmer Group, not only that, there is still a lack of public interest in the importance of implementing agriculture for household food needs and limited land for implementation. Urban farming in Makassar City. So it is necessary to evaluate the extent of success in implementing the program of urban farming in Makassar City.

Based on the explanation above, the focus of this research is to analyze program evaluation in the development of urban farming for sustainable food independence in Makassar City.

2. Methodology

This research uses a qualitative approach. The choice of this method is based on a theory or model that is used as a reference in data collection, which is then verified or confirmed with field data collected through qualitative analysis methods. In this research, the focus is on program evaluation in development. Urban Farming for Sustainable Food Independence in Makassar City. The research location was carried out in Makassar City. To collect data, researchers used observation and interview techniques. Data sources in this research were taken through primary data and secondary data. Primary data collection was carried out directly using in-depth interview methods. Secondary data collection was obtained through related office documents and online data searches. Informants in this research were selected according to the criteria set by the researcher by considering all the information needed to carry out the research. The data collection technique in this research is a systematic procedure using interview, observation, and documentation methods. Furthermore, to declare the validity of the data using four techniques, namely Trustworthiness (Credibility), Transferability (Transferability), Dependency (Dependability), and Certainty (Confirmability). According to Miles and Huberman, they divide the analysis into four activity streams, namely as follows: (Sugiyono, 2010), namely data collection, data reduction, data presentation, and drawing verification conclusions.

3. Result and Discussion

Development of urban farming Sustainable food independence in Makassar City will be explained by looking at the evaluation criteria put forward by Dunn (1999) with the evaluation criteria namely effectiveness, efficiency, adequacy, distribution, responsiveness, and accuracy. The description of the research results for each evaluation criterion will be explained as follows.

Effectiveness

Effectiveness relates to an alternative achieving the expected results or achieving the goals of the action. Effectiveness is closely related to technical rationality, always measured in units of product or service or value monetary. The effectiveness referred to in this research is that the objectives that have been set are what is expected in implementing the program.

The research findings show effectiveness in the development of urban farming For sustainable food independence in Makassar City, it shows that in several lanes that have been formed, Women Farmer Groups (KWT) have started to become independent and no longer expect assistance from the government. However, in several other lanes, this has not been implemented optimally, this is due to a lack of public awareness. Of the sustainability of the development of urban farming in Makassar City. This is shown through the lack of care of the people who have been formed as Women Farmer Groups (KWT) in several tourist alleys that have been formed. Most communities that have been assisted at the start of their formation will only survive the first harvest period. This is caused by people who are not yet fully independent in developing agriculture and always expect assistance from the government.

Efficiency

Efficiency is concerned with the amount of effort required to increase a certain level of effectiveness. Efficiency, which is synonymous with economic rationality, is a relationship between effectiveness and effort, the latter of which is generally measured in terms of monetary costs. In this research, efficiency is meant by how much effort is made to achieve the desired results shown through the

program carried out.

The research findings show that achieving the desired goals in the development of urban farming for sustainable food independence in Makassar City is demonstrated through existing programs. Here's the program for urban farming in Makassar City:

Table 1. Program Urban Farming in Makassar City

Year	Program
2019	➢ Food Security Effort Program ➢ Food availability and production program
2020	➢ Program for efforts to implement food security ➢ Food availability and production program
2021	➢ Diversification Improvement Program and Community Food Security
2022	➢ Diversification Improvement Program and Community Food Security
2023	➢ Diversification Improvement Program and Community Food Security

Source: Makassar City Food Security Service, 2024

Based on the table above, shows that the program of urban farming in the city of Makassar has achieved efforts for community food security and food production. The program has been prepared by the Food Security Service as a leading sector in an effort to support food independence for the people of Makassar City. Through the existing program, it is hoped that the community can be more independent in meeting household food needs by utilizing yard land for farming.

Adequacy

Adequacy is concerned with how far a level of effectiveness satisfies the needs, values , or opportunities that give rise to the problem. Adequacy criteria emphasize the strength of the relationship between policy alternatives and the expected results. In this research, the adequacy referred to is how far the desired results are achieved in solving problems in the development of urban farming for sustainable food independence in Makassar City.

The research results show that solving problems faced in the development of urban farming for sustainable food independence in Makassar City is demonstrated through the strategies used to overcome limited land in the development of urban farming namely, agriculture is formed using hydroponic, verticultural, and polybag methods. This planting method can help utilize narrow land to develop plant growth in the aisles as well as provide understanding and assistance. Furthermore, in overcoming carbon emissions and limited land which affect plant growth, intervention is carried out by adjusting the conditions of existing aisles. The next step is to encourage the independence of women farming groups by providing an understanding of the importance of urban agricultural sustainability. Apart from that, there is a need to increase the capacity of extension workers in terms of assisting women farmer groups.

Alignment

Leveling or equality is closely related to legal and social rationality and refers to the distribution of consequences and efforts between different groups in society. In development research urban farming for sustainable food independence in Makassar City is related to the needs or assistance provided by stakeholders in this case the Food Security Service and the Agriculture Service.

The research findings show that in providing needs and assistance for activities urban farming in each alley is provided in the form of plant production facilities. The forms of assistance provided are as follows:

Table 2. Agricultural Assistance for Farming Women's Groups

District Name	Types of Assistance
Bontoala	Vermiculture racks, seeds, seedlings, fertilizer, and other facilities
Tamalanrea	Vermiculture shelves, seeds, seedlings, fertilizer, aquaponic, Lobster, Microgen, Vermiculture Rice, Organic vegetable packages
Mamajang	Vermiculture shelves, seeds, seedlings, fertilizer, Lobster, Microgen, Rice Verticulture
Mandala	Vermiculture racks, seeds, seedlings, fertilizer, and other facilities
Mangala	Vermiculture racks, seeds, seedlings, fertilizer, Lobster, Microgen, Vermiculture Rice, and other facilities
Panakukkang	Vermiculture racks, seeds, seedlings, fertilizer, aquaponics, Lobster, Microgen, Rice Verticulture, and other facilities

Source: Makassar City Fisheries and Agriculture Service, 2024

Based on the data in the table above, it shows that the assistance provided to each group of Women Farmers in each sub-district is different, this is due to looking at the existing conditions of the development location. Urban farming. The assistance provided is not only for vegetable seeds, but in several places, the assistance provided is in the form of freshwater lobsters.

Responsivities

Responsiveness is concerned with the extent to which a policy can satisfy the needs, preferences, or values of certain community groups. The responsiveness criterion is important because an analysis that can satisfy all other criteria such as effectiveness, efficiency, and adequacy of equality still fails if it does not respond to the actual needs of the group that should benefit from the policy. In the development program research urban farming for sustainable food independence in Makassar City, namely the results of policies that satisfy group needs certain groups.

Field findings show that in the development program urban farming for sustainable food independence in Makassar City shows that policies related to food security in Makassar City have not been implemented optimally. This is because not all communities respond well to urban agriculture programs. However, for people who have felt the benefits of urban farming Very supportive of the sustainability of this program. Through the program urban farming is felt by people who are starting to become independent in developing agriculture, it can not only fulfill household food needs but can also have economic value.

Accuracy

Appropriateness is a criterion closely related to substantive rationality because statements about policy accuracy do not relate to one individual criterion but to two or more criteria together. Appropriateness refers to the value or self-esteem of program objectives and the strength of the assumptions underlying these objectives. In development program research urban farming for sustainable food independence in Makassar City is related to the desired outcome being truly useful or valuable.

The research findings show that the development program of urban farming in Makassar City is valuable and very useful for people in urban areas. This is demonstrated through agricultural activities which encourage housewives to be more productive and utilize yard land around the house for farming. Through the program urban farming also helps the community to improve the economy, this is proven through the cooperation that is built between Women Farmers Group (KWT) with retail shops in terms of suppliers of organic vegetables grown by women in the tourist aisle through the program urban farming.

4. Conclusion

Based on the results of the research and discussion, the conclusion of this research shows that the evaluation of the development program urban farming for sustainable food independence in Makassar City has not been implemented optimally. This is due to a lack of public awareness of the sustainability of the development of urban farming in Makassar City. Furthermore, not all communities respond well to urban farming programs/urban farming. However, for people who have felt the benefits of urban farming by fulfilling household food needs and experiencing economic value through selling harvests and production, this supports the sustainability of this program.

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