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Partnership to Create a Food Independent Urban Village in Tanjung Mas, Semarang City

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Abstract

Tanjung Mas Village, North Semarang District is one of the areas in Semarang City that is vulnerable to food insecurity. This food insecurity is caused by the high level of poverty in this region. Poverty has a big impact on food security because poor people are unable to provide sufficient amounts of food, either by producing it themselves or by buying it. This condition encourages the government and society to start trying to fulfill their food needs independently through farming. However, these efforts are hampered by limited agricultural land availability. The aim of the community service program is to provide knowledge, skills and facilitate urban farming facilities to achieve food independence in the Tanjung Mas, Semarang City. The methods used are socialization, counseling, dissemination, training and facilitation of urban farming facilities. The results of this community service program are that the community has an understanding of urban farming, knows the technologies in urban farming, has verticulture skills, and verticulture facilities are available as learning demonstration plots.

Keywords: Partnership, Food Independent Village, Urban Farming

INTRODUCTION

The rapid population growth due to urbanization in Semarang City has consequences for increasing the population's food needs. This is a serious challenge for Semarang City because the rate of increase in food demand is not directly proportional to the amount of food that can be produced. Semarang City's food production is decreasing due to the increasing rate of agricultural land conversion (Haryanto, 2010). Semarang City is not an area that produces surplus food, so it is very dependent on food supplies from other areas to meet its food needs (Pratomo & Daenie, 2021). The challenges are becoming increasingly difficult because food supplies from other regions are increasingly limited and prices are increasingly expensive due to reduced agricultural land and climate anomalies which have resulted in crop failures and reduced yields (Widyaastomo, 2021). Insufficient food to meet the increasing need for food will trigger a food crises (Fauzi et al., 2016).

One of the areas in Semarang City that is vulnerable to food insecurity is Tanjung Mas Urban Village, North Semarang District. This food insecurity is caused by the high level of poverty in this region. Poverty has a big impact on food security because poor people are unable to provide sufficient amounts of food, either by producing it themselves or by buying it (Damayanti, 2018). Low food security is also suspected to be the main cause of the high number of stunting cases in Tanjung Mas. Stunting cases in Tanjung Mas are the highest in Semarang City, reaching 94 cases. This condition encourages the government and society to start trying to fulfill their food needs independently through farming. However, these efforts are hampered by limited agricultural land availability (Noorsya & Kustiwan, 2012).

To meet food needs independently, this can mainly be done through farming to produce agricultural products. However, this is hampered by the limited agricultural land available in Tanjung Mas. Tanjung Mas has the characteristics of a densely populated residential area with the physical characteristics of small house sizes, high house density, poor and unhealthy house quality, and no land for planting (Nafsi et al., 2019). Tanjung Mas is even listed as one of the slumliest subdistricts in Semarang City with the largest slum area, namely 37.63 hectares (Huda et al., 2023). With these characteristics, farming activities in Tanjung Mas are considered difficult to carry out.

The problems mentioned above need to find solutions so that people can carry out farming activities to meet their food needs independently by utilizing the limited land that remains. In this regard, the Food and Agriculture Organization (FAO) has developed several strategies to increase access to food in urban areas, one of which is through urban farming (Arriani & Rahdriawan, 2019). Urban farming is the activity of planting, processing and distributing food and other products through intensive agriculture and animal husbandry in urban areas and reusing natural resources and urban waste to obtain a diversity of harvests (FAO, 2018). In principle, urban agriculture is designed as an effort to utilize existing space or land in urban areas to produce agricultural products (Huda et al., 2023). Technology in urban farming systems can be run on limited land so that the problem of limited land in urban areas is no longer an obstacle to agricultural activities (Sulistyowati dan Ilhami, 2018).

Based on the description above, this community service program with a partnership scheme will be directed at helping the people of Tanjung Mas in developing agricultural businesses through urban farming. The target of this community service program is the Tunas Bahagia Farmer Women's Group, Tanjung Mas, which is then expected to be the main actor in replicating this program to the entire Tanjung Mas community.

The aim of the community service program is to provide knowledge, skills and facilitation of urban farming facilities to the community. Through this program, it is hoped that the community will be able to carry out urban farming activities to meet their food needs independently.

METHODS

Location

The community service program will be implemented in Neighbourhood 09, Tanjung Mas Urban Village, Semarang City, from May-October 2023

Methods

The community service program will be implemented in Neighbourhood 09, Tanjung Mas Urban Village, Semarang City, from May-October 2023. The community service method is implemented through the following stages:

Preparatory stage. The preparation stage begins with conducting field observations and interviews to identify the problems and needs of the target community. The data resulting from observations and interviews are then used to design activity programs according to the needs of the target community;

Program Socialization Stage. Program socialization is carried out by communicating the community service activity program plan to the community through program presentations. The aim of this socialization is to provide understanding to the community about the activity program that will be implemented, thereby fostering community support and participation in the program.

Program Implementation Stage. The community service program is implemented through outreach activities, dissemination of urban agricultural technology, training, facilitation of supporting facilities, and mentoring;

Monitoring and evaluation stage. Monitoring and evaluation is carried out at each stage of activities by observing and assessing the progress of the program so that it is in accordance with the goals and targets set.

RESULTS AND DISCUSSION

This community service program is aimed at increasing the capacity of the target community (Tunas Bahagia Women's Farmer Group) in developing farming businesses through urban farming practices. With its capabilities, it is hoped that this group can become the main actor in replicating this program to the entire community in Tanjung Mas. This program is implemented by providing socialization, counseling, training, dissemination and facilitation of urban agricultural facilities to the target community.

Program socialization activities are carried out by communicating program plans for service activities to the target community. The focus of this socialization activity is to provide understanding to the target community about the activity program that will be implemented, thereby fostering support and participation of the target community for the program. The service team explains the aims,

objectives, stages and benefits of the program to be implemented, as well as the role of the target community in the program.



Figure 1. Community service program outreach activities and urban agricultural extension

Extension activities are carried out by providing knowledge to the target community about urban farming. The focus of extension activities is to increase the target community's understanding of urban agriculture so as to encourage the target community to implement it in their daily lives. Extension material includes the meaning, objectives, dimensions and benefits of urban farming, as well as methods in urban farming.

Implementation of dissemination focuses on introducing urban farming technology innovations. Urban farming technology innovation is new to society. To change mindsets and increase public acceptance of urban agricultural technology innovation, it is necessary to carry out dissemination activities. The dissemination material includes an introduction to technological innovations commonly used in urban farming, but more specifically explains verticulture technology. Verticulture is a vertical cultivation technique that can be applied to limited land. The verticulture technique can be a solution to the problem of limited agricultural land in Tanjung Mas.



Figure 2. Dissemination of verticulture technology

Agricultural techniques training is provided through presentations, demonstrations and field practice. This training material focuses on vertical agricultural techniques. Training participants gradually train together with trainers from the community service team, starting from selecting superior seeds, making seedling media and planting media, nursery, planting and care. In this program, verticultural facilities are also provided which function as learning demonstration plots for the community.



Figure 3. Training in vertical farming techniques



Figure 4. Facilitation of verticulture facilities

The results of this community service program can be identified from several aspects, including:

- 1) Increasing knowledge of target communities about urban agriculture. Good public knowledge about urban agriculture will be an encouragement for them to implement it in their daily lives;
- 2) The target community is familiar with verticulture technology and how to operate it;
- 3) Improve the skills of target communities in agricultural techniques. With the skills they have, the target community will be able to carry out agricultural activities independently, starting from selecting seeds, making seedling media and planting media, seeding, planting and caring for plants;
- 4) Availability of verticulture facilities. Verticulture facilities can be a learning demonstration plot for the community to practice and observe independently so that it is hoped that this verticulture technology can be applied by the community.

In general, the implementation of community service activities is going well according to the planned stages. However, there are several obstacles that arise during the implementation of community service activities. These obstacles are as follows:

- 1) Urban farming is a new thing for society, so some of the participants have not been able to fully accept the technology being introduced;
- 2) Some of the participants in this community service program are quite old, so they are quite slow in accepting the information and training provided. To overcome this obstacle, the actions taken by the community service team are:

- 1) The material in socialization, counseling, dissemination and training activities is explained slowly to give participants sufficient time to understand the information provided;
- 2) Provide intensive assistance so that the service program can be accepted, understood, and implemented by all participants;
- 3) Establish communication and cooperation with the Semarang City Agriculture Department to help provide assistance, especially after the community service program ends to ensure the program's sustainability.

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CONCLUSION

Based on the implementation of the community service program which has been implemented in Tanjung Mas, Semarang City, it can be concluded that this program has been able to provide understanding for the target community about the important role of urban farming in increasing the food security of urban communities. This program has helped the target community become familiar with urban agricultural technology and improve their skills in agriculture using verticulture techniques. Facilitation of verticulture facilities can be used as a learning demonstration plot for target communities to enrich their experience and skills in urban agriculture.

REFERENCES

- Arriani, RR. and Rahdriawan, M. (2019). Community Participation in the Urban Agriculture Program for residents of Marunda Flats, North Jakarta, *Teknik PWK (Perencanaan Wilayah Kota) Journal*, 8 (3), 134-147.
- Damayanti HO. (2018). Level of Food Security in Poor Households in Flood Prone Areas (Studi in Tanjang Village and Kosekan Village, Gabus District, Pati Regency). *Litbang Journal*, 14 (1), 15-26.
- Fauzi, AR., Ichniarsyah, A.N., and Agustin H. (2016). Urban Agriculture: Urgency, Role, and Best Practice. *Agroteknologi Journal*, 10 (1), 49-62.
- Food and Agriculture Organization (FAO). (2008). *Urban Agriculture for and Sustainable Poverty Alleviation Food Security*. 84p
- Hariyanto. (2010). Pattern and Intensity of Agricultural Land Conversion in Semarang City 2000-2009. *Geography Journal*, 7(1), 1-10
- Huda, A.S., Nuzzulaini, I., Maulidah, S.A., Kusuma, R.W., Kurniawan I.A. (2023). Chronology of Slum Management Program Policies in Indonesia from 1969-2021. *Tambusai Education Journal*, 7(1), 115-128.
- Nafsi, N., Aspin, Santi, Belinda, S. (2019). Characteristics of Slum Settlements (Case Study: North Semarang District, Semarang City). *Malige Architectural Journal*, 1(1), 30-39.
- Noorsya, AO dan Kustiwan, I. (2012). The potential for developing urban agriculture to create a sustainable Bandung urban area. *Journal of Regional and Urban Planning B SAPPK*, 2(1), 89-99.
- Pratomo YS and M Daenie. (2021). Realizing Food Security Development Policy in Semarang City. *Public Service and Governance Journal*, 2(2), 1-11.
- Sulistyowati, D. and Ilhami, WT., 2018. *Urban Farming*, Jakarta (ID): Agricultural Education Center, Ministry of Agriculture.
- Widyastomo RP. (2021). Food Security Policy and Community Food Literacy (Research Study on Food Literacy Supporting Food Security in Semarang City). *Public Service and Governance Journal*, 3(1), 23-36.