



COMMUNITY EMPOWERMENT IN UTILIZING YARD LAND TO SUPPORT VILLAGE FOOD SECURITY IN THE COVID-19 ERA

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Abstract

Increasing national food security needs to be built from food security at the household scale. Household-scale food security means that each family can meet their food needs independently. The yard of the house is the closest area that can be used by households for cultivating food crops, such as vegetables and fruits. The purpose of this work program is to stimulate productive community activities in the era of the COVID-19 pandemic, increase public awareness to take advantage of unused yards, increase independent food security, especially among families, and increase the entrepreneurial spirit of the community by utilizing local food that is around and increase the value of the community. plus. This service activity was carried out in Kama Village, Wesaput District, Jayawijaya Regency, Papua Province which lasted for \pm 1 month at the same time as the STIPER Petra Baliem Wamena Real Work Lecture Program Batch XIII 2021/2022. The results of the activity show that the application of the use of yard land can be applied in the community of Kama Village so that the community can be self-sufficient in food and able to utilize materials that are easily found as planting containers, the basic ingredients of vegetable pesticides and cattle waste fertilizers that are commonly encountered and are able to improve aesthetics in the house environment.

Keywords: Food Security, Covid-19 Pandemic, Yard.

INTRODUCTION

The cause of the potential disruption of production is disruption of the distribution chain. Prices have fallen due to restrictions on interaction between producers and distributors and consumers, middlemen's games, obstruction of transportation facilities, and uncertainty/absence of state policies regarding the distribution protocols for goods that are adaptive to the Covid-19 pandemic. Meanwhile, at the consumer level, both those based in rural and urban areas, there are often shortages of certain goods due to the break in the distribution chain of these goods. Covid-19 is an infectious disease that has the potential to cause a public health emergency.

In an effort to break the chain of the spread of the Covid-19 pandemic, the government issued an appeal to reduce social interaction by maintaining social distance and psychological distancing. In addition, several regions in Indonesia have established Large-Scale Social Restrictions (PSBB) and temporary restrictions on the operation of land, sea and air transportation facilities. This of course has implications for the socio-economic aspects of the

community's life (Masniadi et al. 2020).

In fact, some households, especially those with low incomes, have limited access to food due to declining incomes. Thus, strengthening the family-based economy through optimizing family resources for independent food supply will reduce household spending on food, which is a household adaptation strategy to face the Covid-19 pandemic.

Along with the development of technology, people are starting to look for solutions so that the narrow yard area is still able to support the daily needs of the family. So, in this case, a solution was found by using narrow land/yard land on an ongoing basis. This can be applied to the community in order to support community food security that is creative, independent, and beneficial for the household economy (Khomah and Fajarningsih, 2016).

The sustainable use of yard land is intended to carry out yard business not only once reminded by the village government but carried out continuously and sustainably. According to Prince (2013), a sustainable business will provide benefits and convenience for the family itself. This is because the effort to use this yard is to support the necessities of life forever and to create household independence in terms of food.

In principle, as long as humans are still alive, they need food/food and what they are trying to do is to fulfill their daily needs. The role and use of the yard vary from one area to another, depending on the level of need, socio-cultural, community education, as well as physical and ecological factors of the local area. In Indonesia, the role of yard land has not received full attention. Whereas according to Rahayu and Prawiroatmojo (2005), narrow land or yard land if managed properly is not impossible to increase food security, create independence, and if more can increase family income. Thus, the role of yard land can indirectly affect household economic needs.

Fulfillment of food needs can be done in a narrow land/yard. Organic plant cultivation systems are carried out in various ways to meet daily needs. A narrow yard is not an excuse for not being able to do gardening/cultivating, because, in principle, plant cultivation can be done anywhere as long as there is light and optimal air circulation. Not only in narrow yards, in homes that have no yard at all, such as in flats but this can also be done (Maharanto, 2005).

The majority of the people in Kama Village, Wesaput District, Jayawijaya Regency, Papua Province have yards that have not been utilized. The community considers that there is no potential in the yard to be developed into an agricultural land that supports food security when compared to planting on garden land. Based on these problems, we innovate to provide a solution to the community to optimize their yards to be used as a plant cultivation business, both vegetables, medicinal plants, and ornamental plants.

IMPLEMENTATION METHOD

1. Preparation and coordination

Preparation in the implementation of this program by conducting a site survey. The next stage is for the team to offer work programs to partners to raise the potential of their land. The work program prepared by the local government is in accordance with the potential of the area that has previously been surveyed. The planned work program is the use of yard land to increase food security through the cultivation of organic vegetables, ornamental plants, and medicinal plants, the use of used goods as planting media, and the use of the remaining clearing as compost for optimizing the plants cultivated in the yard. The activity was coordinated with

the team and community partners of Kampung Kama, Wesaput District, Jayawijaya Regency, Papua Province. The next stage is licensing to local village officials.

2. Implementation

The team carried out the work program in Kama Village, Wesaput District, Jayawijaya Regency, Papua Province. The implementation of this KKN activity is based on the principles, namely: mutual support, empowerment, and mentoring. This program is carried out for a month starting February 21 - March 22, 2022. This Community Service Program is through the potential of villages by increasing food security in the Covid-19 era, including:

- a. Utilizing yard land for organic vegetable cultivation.
- b. Utilize used goods as a medium for growing organic vegetables.
- c. Utilizing manure to optimize organic vegetable crops

The stages in the implementation activities, among others:

- 1) Preparation for the use of yard land to support food security and the family economy
- 2) Training on making beds to prepare vegetable seeds (lettuce, spinach, kale, mustard greens, chili, green onions, shallots)
- 3) Preparation of vegetable seeds that are ready for planting, as well as seed selection to maintain seed quality
- 4) Community planting

3. Evaluation

This evaluation process is important in terms of controlling the work program carried out, including control of the arrangement of the sample houses that have been successfully arranged, the process of controlling the quality of organic vegetables that have grown from seed seedlings, pests and growth if they grow on these vegetable plants. Evaluation of the obstacles faced by partners after the socialization and training program.

RESULTS AND DISCUSSION

The COVID-19 pandemic has an impact on society which affects daily needs, especially in the food sector. Therefore, the Covid-19 edition of the KKN activity was carried out with partners in Kama Village, Wesaput District, Jayawijaya Regency, Papua Province regarding the joint empowerment of food-strong communities during the COVID-19 pandemic. Kampung Kama has potential for the development of a simple organic plant cultivation system using used goods and polybags.

Based on population data in Kama Village, almost all of the people depend on agriculture for their livelihood. Moreover, the current erratic weather affects production results. In this case, the use of yard/narrow land and local food potential needs to be developed. Therefore, the existence of the Petra BAliem Wamena STIPER KKN team can help and benefit the community, especially in Kama Village regarding simple plant cultivation so that it can become family food security in the covid-19 era.

The purpose of this work program is to stimulate people's productive activities in the era of the covid-19 pandemic, increase public awareness to take advantage of unused yards, increase independent food security, especially for families, and increase the entrepreneurial spirit of the community by utilizing local food that is around and increase the value of the

community. plus.

The implementation of this KKN activity can be an effective learning tool to apply knowledge to the community to develop the potential of the area around the KKN site in Kama Village to utilize the yard for organic vegetable cultivation. This activity aims to stimulate productive community activities in the era of the covid-19 pandemic, increase public awareness to take advantage of unused yards, and improve family food security. In this case, to reduce family spending in the Covid-19 era because it has an impact on the economic and social fields of society.

The activity was carried out in the yards of residents' houses that had not been planted by supporting the food security program. In maximizing the planted yard land such as lettuce, mustard greens, kale, spinach, leeks, and so on to increase household food independence. Our team utilizes gallons, used gasoline bottles and plastic cups, and polybags as planting sites to reduce costs. This is a solution for students to provide ideas for cultivating plants in simple conventional gardens.

To beautify people's yards in planting, make racks of wood or tree branches which will then be placed in gallons and polybags. In addition, to avoid pests and diseases, farmers are also taught to make vegetable pesticides made from tobacco and onion peel (Figure 1).



Figure 1. Arrangement Results



Figure 2. Nursery

In the nursery, there are also seeds to support the cultivation of vegetables and to use used goods in the form of a basin, which can be seen in Figure 2. Types of horticultural plants that can be cultivated are simple, such as mustard greens, spinach, kale, and several other plants, and utilize used goods such as gallons, bottles, and glasses were added using polybags as shown in Figure 3.

The advantages of simple cultivation are reducing costs, easy and practical, intensive pest control, and product quality easy to control. After the media has been collected, the soil and organic fertilizer are mixed into one which is then put into used goods and polybags as shown in Figure 4. In planting, we empower farmer groups as a direct practice in growing organic vegetables as shown in Figure 5.



Figure 3. Utilization of Used Gallons



Figure 4. The appearance of planting in used goods



Figure 5. Organic Growing Process

When inserting media into used goods and polybags, the next step is to arrange it so that it looks neat. Vegetable plants that have been planted are waiting for growth. Furthermore, after 1 week of age, fertilization is carried out again using organic fertilizer as shown in Figure 6. Do not forget to supplement the plants other than the basic fertilizer that has been mixed with the soil at the beginning and then given again to the plants.



Figure 6. Utilization of Cow Manure

The result of this activity is that the community continues to use their yards in a sustainable manner, starting from collecting used goods and polybags as a place for planting, making planting media, seedbed nurseries, and plant maintenance until harvesting. In addition

to meeting daily needs so as to create food self-sufficiency and if there is excess it can be sold to increase family income in the era of the COVID-19 pandemic. According to Rahayu and Prawiroatmojo (2005), narrow land or yard land if managed properly is not impossible to increase food security, create independence, and if more can increase family income. According to Khomah and Fajarningsih (2016) that in the yard there is potential in terms of providing family food, reducing expenditure, and able to increase household income. In the future, this activity can be carried out in collaboration/collaboration with the local government with the work program of local government to increase the potential of the village.

CONCLUSION

Based on the results of the Community Service Program activities in Kama Village, the following conclusions were obtained:

1. The KKN activities carried out were able to increase public awareness and knowledge of the importance of using yard land to create food self-sufficiency.
2. Cultivating organic vegetables in the yard using used media and polybags can be applied in Kama Village.
3. Increase community knowledge and skills regarding organic fertilizer from cattle waste and be able to reduce community dependence on the use of inorganic fertilizers.

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