

Utilization of Yard Land Through Horticultural Agriculture in Increasing Farmers' Income After the Covid-19 Pandemic in Cengkeh Turi Village, North Binjai District

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ABSTRACT

This study aims to find out the background of the use of yards through horticultural farming so that it can increase farmers' income during a pandemic. This research is descriptive qualitative research, data collection methods are observation, interviews, and documentation. The subject of this study focused on 5 farmers with data analysis techniques using inductive thinking methods. The results showed that the use of yards through horticultural farming in Cengkeh Turi Village, North Binjai District could increase the income of farming families and was very helpful in improving the farmer's economy during the pandemic. This is proven by the farming families who live much better lives which are enough to meet their daily needs as seen from the salaries of the interviewees who have experienced an increase and jobs that are much lighter.

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INTRODUCTION

In 2019, the world was shocked by the spread of the Covid-19 virus, which started in the Chinese city of Wuhan and quickly spread throughout the world. It is even certain that no country is not affected by this deadly virus. Most countries apply a lockdown which is quoted by definition from Cambridge, as a situation where people are not allowed to enter or leave an area freely because it is in an emergency. Of course, the lockdown policy will have a broad effect on all countries which in this era of globalization and free markets are already interdependent on one another. Therefore, food instability will experience a serious threat.

During the Covid-19 Pandemic, people were required to be more able to adapt to new things, apart from that they also began to carry out new activities to eliminate fatigue and boredom in dealing with situations amid a Pandemic. With various activities, that of course has to be done from home. Over time, the community began to have positive ideas such as cultivating crops using their yards, which mostly focused on horticultural crops as food security.

As is known, Cengkeh Turi Village is a village in North Binjai District that has the most extensive agricultural land compared to other villages in North Binjai District. According to data from the Food Security and Agriculture Office of Binjai City, it appears that Cengkeh Turi Village is one of the urban villages that has the most extensive agricultural land and is known as a producer of food crops such as rice. However, during the pandemic, the people in Cengkeh Turi Village began to switch and develop Horticultural crops to meet their daily needs and increase their income.

Therefore, researchers conducted this research to deepen understanding of the process of using narrow land through horticultural farming in increasing farmer income since the Covid-19 pandemic until now in Cengkeh Turi Village, North Binjai District. This study aims to find out how the process of using narrow land for horticultural agricultural land can increase the income of farmers or the community. In addition, this study also aims to analyze what challenges exist in utilizing narrow land for horticultural agricultural land and how to overcome them. This research will also examine how opportunities for narrow land use for horticultural farming activities can increase household or farmer income in the future.

LITERATURE REVIEW

2.1. Utilization of Agricultural Yard

According to Poerwadarminto, utilization is one of the activities, processes, ways, or actions that cause something that exists to be useful. The term utilization comes from the basic word benefit which means "benefits" which gets the affix pe-an which means the process or act of using. According to S. Alex, a yard is a plot of land that has boundaries (which can be clear or not clear) that are located around the house and are generally worked around the house and are generally worked on as a side business. The yard is an open area around the house.

According to Sopiah, the yard has various functions, namely:

- a. As a living barn
To deal with the lean season, the yard is usually able to help its inhabitants provide living food sources (living barns) such as crops, food, and horticultural crops, domestic animal products, and fish.
- b. As a living stall
The yard provides various types of plants and pets which are sold at any time for the needs of the owner's family.
- c. As a living pharmacy
The yard provides various types of medicinal plants, for example, sembung, lime, turmeric, and so on. These plants can be used for traditional medicines which are no less effective than chemically produced drugs.
- d. as an economic function
The value of a yard is based on fertility, and proximity to transportation facilities, the value of a yard can be determined by how well the management and processing are done. The economic dependence on the home garden is very clear because it can serve as a fulfillment of life.

The increase in population demands the provision of sufficient food. Fulfillment of food needs can be rigidly started from the household. One of the efforts to meet food needs in the household can utilize the yard. The benefits that will be obtained include being able to meet consumption needs and can also provide additional income for the family. The utilization of yards can have the benefits of household food self-sufficiency in an area, verified food based on local resources, conservation of future food crops, and welfare of farmers, communities, and families.

2.2. Agricultural Commodity Cultivation

According to the Big Indonesian Dictionary, Commodities are raw materials that can be classified according to their quality according to international trade standards, such as wheat, rubber, and coffee. The commodity is one of the most diverse trade goods because it consists of various types. Agricultural commodities are not only agricultural products such as rice and wheat. Taken to the Food and Agriculture Organization of the United Nations, agriculture has a very broad meaning which can include animals and plants as well as mountains of natural resources in it. According to the Regulation of the Minister of Agriculture of the Republic of Indonesia Number 18 concerning Guidelines for the Development of Agricultural Areas Based on Farmer Corporations, agricultural areas consist of food crops, horticulture, and plantation sub-sector commodities.

2.3. Horticultural Plants

The word horticulture comes from the Latin, namely hortus which means garden, and colere which means to grow. Horticulture is a branch of agriculture that is closely related to intensive cultivation aimed at food, medicine, and fulfillment of satisfaction. Horticulture is a science, art, or technology in the management of vegetables, fruits, ornaments, spices, and medicines. Horticultural plants have several types, including fruit, vegetable, and ornamental plants.

2.4. Food security

Food security can be interpreted as food supply and a person's ability to access and use it. If household occupants are not in a state of hunger or are at risk of starvation, it can be said that the household has food security. The World Health Organization (WHO) states that there are three main components to food security including food availability, food access, and food utilization.

2.5. Income Theory

According to Sukarno, income is the amount of income received by residents for their work performance during a certain period, whether daily, weekly, monthly or yearly. Individual income is income received by all households in the economy from payments for the use of production factors they have from other sources. Income can be said as an indicator to measure the welfare of a family or community so that a family or community reflects economic progress.

A prosperous family is a family that is formed based on legal marriage, can meet the spiritual and material needs of a proper life, is devoted to God Almighty, and has a harmonious, harmonious, and balanced relationship between members and between families and society, and the environment. The importance of well-being cannot be overstated. The goal of all economic activity is to improve people's lives. Where the economic goal of achieving social welfare must pay attention to basic human rights which must be preserved according to Islamic teachings, and social justice must be the main goal.

The importance of a good life is also mentioned in the Quran. Allah SWT states in Q.S Tha-ha verses 117-119 of the Qur'an:

فَقُلْنَا يَا آدَمُ إِنَّ هَذَا عَدُوٌّ لَكَ وَلِزَوْجِكَ فَلَا يُخْرِجَنَّكَمَا مِنَ الْجَنَّةِ فَتَشْقَ إِنَّ لَكَ أَلَّا تَجُوعَ فِيهَا وَلَا تَعْرَى وَأَنَّكَ لَا تَظْمَأُ فِيهَا وَلَا تَصْحَى

Meaning: Then we said, "O Adam, in fact (Ibless) this is your enemy to your wife. So, never let him expel you both from heaven. Soon you will suffer. Indeed (there is a guarantee) for you that there you will not be hungry and will not be naked. Indeed, even there you will not feel thirsty and the scorching sun will not overwhelm you."

RESEARCH METHODS

This research was conducted in Cengkeh Turi Village, North Binjai District, precisely in Binjai City and the implementation process was from June to August 2022. The subjects of this study were people who have horticultural crop businesses in their home yards, to be precise in Cengkeh Turi Village, North Binjai District, both who work as farmers and non-farmers.

The types and sources of data used in this study were obtained from observation, interviews, and documentation. The type of data in this study used primary data and secondary data.

This study uses qualitative methods, using inductive thinking methods to analyze the data. This study uses a triangulation technique which is a collection technique that combines various data collection techniques and existing data sources.

RESULTS AND DISCUSSION

Source Identity

In this study, researchers collected data through interviews with several informants. To answer questions from the formulation of the problem in this study, the researcher has determined five informants with different backgrounds before becoming horticulture farmers to be able to see differences in income from the previous work of the informants.

Two informants were rice farmers in the fields, one informant who was a free-range chicken farmer, one informant who was a grocery seller until now, and one informant was a private employee.

Geographical Circumstances

Cengkeh Turi Village is one of the villages in North Binjai District which is in Binjai City. Based on its geographical location, Clove Turi Village is located at 3.6471 North Latitude and 98.4796 East Longitude. The distance between Cengkeh Turi Village and the district government center is 2 kilometers and takes about 10 minutes. The following are the names of the Villages in North Binjai District, namely:

- a. Hero Village
- b. Jatinegara Village

- c. Nangka Village
- d. Jatimh Village
- e. Peace Village
- f. Pepper Garden Village
- g. Clove Turi Village
- h. Jati Karya Village
- i. Jati Utomo Village

The total area of Clove Turi Village is 1008 hectares. Rice fields, corn, and horticultural crops are the most widely grown crops. This sub-district has a tropical climate and is located in the lowlands with an average temperature of 27°C to 33°C.

Total population

Cengkeh Turi Village has a total population of 10,958 in 2020, consisting of 5,642 males and 5,316 females. The majority of people in Cengkeh Turi Village, North Binjai District are farmers or planters, but some individuals do not work as farmers. The highest source of livelihood is farmers, with 3,038 people or 27 percent of the total population, followed by traders with 1,873 people or 17.09 percent of the total population.

The Process of Utilizing Narrow Land Through Horticultural Agriculture in Increasing Farmers' Income After the Covid-19 Pandemic

Yard land can be used as agricultural land if the land in the yard has been processed first so that it is fertile and contains nutrients in it. However, because most people in Cengkeh Turi Subdistrict use polybags for cultivation, their yards are only sufficiently arranged to make them look clean and tidy. The wire is also installed on each side so that it becomes a barrier between the road and the land. They also installed a roof using bamboo as a support for the roof, and the roof uses a net so that the light still shines but is cool when gardening.

The first thing done by horticulture farmers in Cengkeh Turi Village before starting crop cultivation was starting from clearing and structuring the land. As much as possible farmers make their agricultural land clean and comfortable. The process of turning this house's yard into agricultural land usually takes approximately 1-2 months. In the Clove Turi Village, the majority of the people use their yards to cultivate fruit trees.

The care of this horticultural plant is very easy to do. In general, the techniques or methods used for the cultivation of horticultural crops started with seeding the plants. So actually the seed is a seed or a small plant resulting from germination. Then the seeds are sown or commonly referred to as seeding to produce plant seeds. After that go into the process of planting and caring for it. It is at this time that nutritional intake begins to be given, such as water, fertilizer, and also routine spraying of liquid pesticides. Then enter the harvest phase of the plant. This is where the end of the process of planting and caring for horticultural crops. to produce good plants requires a good and consistent care process.

Cultivating horticultural crops in the yard of this house helps increase family income, especially farmers. With a little capital, the plant maintenance process is not too difficult but the benefits are quite large. These horticultural farmers also have agents or are usually called consumer customers and consumers come from out of town.

The challenges faced by farmers and the community in the use of narrow land in the yard for the cultivation of horticultural crops

One of the toughest challenges for farmers when cultivating crops is unstable weather conditions or seasons such as prolonged rainy seasons and continuous dry seasons resulting in plants not getting good nutrition naturally. prolonged rainy season the plant may fail to thrive or it can be said that the plant will die. With sufficiently high rainfall, the water content in the plants increases so that moisture occurs in the soil, especially in durian seedlings where if the nutrients obtained are not able to enter the plants due to the water level in the plants being too much, the durian plants are damaged and very susceptible to mold. . Fungus on plants is very influential with the growth and development of plants and also has an impact on yields at harvest.

In addition to the challenges that hinder the process of plant growth and development, the market is also the toughest challenge for farmers in increasing income. The Covid-19 pandemic has resulted in all people not being allowed to leave their homes and interact with other people. At the beginning of the pandemic, farmers, especially horticulture farmers, experienced a decline due to the many regulations that were in effect during the pandemic, one of which was the PSBB, which was not allowed to go outside the area, so access to the public was slightly hampered. Agricultural produce that should have been sent outside the city was stopped because it was not allowed to leave the zone. This causes no income but must always produce plants by continuing to take care of them.

Solutions made by farmers to overcome the challenges that occur in horticultural farming

Judging from the explanation above, the problems that occur can be minimized by better understanding plant conditions and situations that can worsen plant growth and development. Being a farmer is not easy. Perseverance and consistency are things that must be done so that plants can grow well. By knowing the character of plants, understanding the nutrition that must be given to plants, and knowing about buying and selling plants.

as a farmer, you have to be more diligent in observing the weather conditions and ensuring that the plants grow well. If there is a prolonged rainy season, what must be done is to always ensure the water content in the plants if it is too wet, the fertilizer that has been given will not be digested properly by the plants, therefore farmers have special activities during the rainy season by paying attention to the levels of fertilizer used. there is.

During the pandemic, many people experienced a decrease in income. This makes farmers overwhelmed and there is no income. At the start of the pandemic, horticultural farmers could not carry out the process of sending plants to agents outside the city because many regulations were made to reduce the chain of transmission of Covid-19. Therefore farmers can only take advantage of the surrounding community. In order not to stop the process of cultivating crops, farmers continue to produce crops to reproduce existing plants.

Opportunity to use narrow land in the yard for horticultural farming in improving the welfare of farmers in the future

The need for land for horticultural crops is much less than the need for plantation land. As for its utilization, even though at the beginning of the pandemic they experienced anxiety, about one month during the pandemic, farmers began to consistently care for and increase crop yields. They saw that the prospects for the horticultural commodity business amid the Covid-19 pandemic were an opportunity because people consumed a lot of vitamins and minerals to strengthen endurance. body. And it is found in vegetables and fruits.

The most appropriate strategy for the survival of horticulture farmers is to expand their yards to be able to add more types of horticultural commodities to be cultivated. With increasing types of plants, the results will also increase. In addition to improving the network of relations, it is equally important to be able to provide information to each other and to be able to jointly introduce horticultural crops, especially in the North Binjai Sub-District, which can be brought to foreign countries.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion:

1. Utilizing house yards through horticultural farming can increase farmers' income amid the Pandemic to Post-Pandemic Covid-19 by going through several utilization processes including requiring yards, clearing land, carrying out horticultural plant seeding, nurseries, maintenance, crop production to distribution of horticultural crops.
2. During the cultivation of horticultural crops in the yard of the house, the challenges faced by farmers in Cengkeh Turi Village, North Binjai District were unstable weather conditions which resulted in the plants not growing properly, when applying fertilizer to the plants which turned out not to be suitable for the plants. This resulted in stunted plant growth and during a pandemic, several regions implemented social restrictions so that public access to horticultural crops was hampered.
3. Efforts made by farmers and the community in Cengkeh Turi Village, North Binjai District to overcome challenges in horticultural farming by utilizing narrow land in the yard of the house are paying more attention to plants when weather conditions are unstable and carrying out more intense plant care so that plant growth and development well, understand the character of plants and know more about what nutrition is right for the plants planted and to still be able to access or introduce horticultural plants you can utilize technology with social media such as Sayur Box where to sell and promote plant products so that it can make it easier for people to get horticultural commodities without having to leave the house and interact directly and can increase your post-pandemic income.
4. Utilization of yards by cultivating horticultural crops has great opportunities. The land used to cultivate horticultural crops is relatively more efficient.

Suggestion:

Horticultural farmers should have more knowledge about the process of cultivating horticultural crops because successful farmers are farmers who have good knowledge. To prevent the extinction of horticultural

agriculture, which is one of the livelihoods that are the majority in Cengkeh Turi Village, North Binjai District, farmers should be more can balance the commodity by what is happening in the market.

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