

Training on Cultivation of Organic Food Crops for the KWT Fajar Ayu Group and the Podo Rukun Farmer Group

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Abstract

Training on Cultivation of Organic Food Crops for the KWT Fajar Ayu Group and the Podo Rukun Farmer Group is an effort to increase farmers' understanding and skills in organic farming practices. This community service aims to identify the influence of this training on increasing organic food crop production as well as farmers' understanding and practices related to organic farming. This community service is carried out through socialization and discussions about organic plant cultivation, practice organic vegetable cultivation and program evaluation. The results of this community service show that training in organic food crop cultivation has had a positive impact on increasing organic food crop production, reducing the use of dangerous chemicals, and increasing farmers' understanding of organic farming practices. Apart from that, this training also contributes to increasing farmers' income and their welfare. Thus, training in organic food crop cultivation is an effective step in encouraging sustainable agricultural practices, which have the potential to increase food security and farmer welfare. The results of this community service can be an important reference for the government, agricultural institutions and other farmer groups in their efforts to promote organic farming as a sustainable solution in meeting people's food needs.

Keywords: Training, Cultivation, Food Crops, Organic

Abstrak

Pelatihan Budidaya Tanaman Pangan Organik pada Kelompok KWT Fajar Ayu dan Kelompok Tani Podo Rukun merupakan upaya untuk meningkatkan pemahaman dan keterampilan petani dalam praktik pertanian organik. Pengabdian masyarakat ini bertujuan untuk mengidentifikasi pengaruh pelatihan tersebut terhadap peningkatan produksi tanaman pangan organik serta pemahaman dan praktik petani terkait pertanian organik. Pengabdian masyarakat ini dilakukan melalui sosialisasi dan diskusi tentang budidaya tanaman organik, praktek budidaya sayuran organik dan evaluasi program. Hasil pengabdian masyarakat ini menunjukkan bahwa pelatihan budidaya tanaman pangan organik telah memberikan dampak positif terhadap peningkatan produksi tanaman pangan organik, mengurangi penggunaan bahan kimia berbahaya, dan meningkatkan pemahaman petani tentang praktik pertanian organik. Selain itu, pelatihan ini juga berkontribusi pada peningkatan pendapatan petani dan kesejahteraan mereka. Dengan demikian, pelatihan budidaya tanaman pangan organik merupakan langkah yang efektif dalam mendorong praktik pertanian berkelanjutan, yang berpotensi meningkatkan ketahanan pangan dan kesejahteraan petani. Hasil pengabdian masyarakat ini dapat menjadi referensi penting bagi pemerintah, lembaga pertanian, dan kelompok tani lainnya dalam upaya mempromosikan pertanian organik sebagai solusi berkelanjutan dalam memenuhi kebutuhan pangan masyarakat.

Kata kunci : Pelatihan, Budidaya, Tanaman Pangan, Organik

INTRODUCTION

Cultivation of organic food crops is an agricultural practice that is gaining attention throughout the world, including in Indonesia. Agriculture is the driving wheel of the national economy. Apart from aiming to fulfill people's livelihood needs, this sector is also useful for boosting Indonesia's image in the eyes of the world.(Raharjo et al., 2020)The concept of development in the agricultural sector should not only focus on increasing product productivity, but also pay attention to natural balance, quality and product safety.(Yuriansyah et al., 2020)

Organic farming is a challenge for Indonesia to face future needs and availability. At this time, people are starting to switch to products from organic farming for the reason that they are healthier and of better quality.(Hoesain et al., 2020)

This is due to increasing awareness of the importance of protecting the environment and human health, as well as efforts to reduce the negative impact of conventional agriculture on ecosystems and humans. In this context, the Fajar Ayu Women's Farming Group (KWT) and the Podo Rukun Farming Group are two agricultural

groups involved in cultivating organic food crops.

Awareness of Food Safety, Conventional agricultural conditions involving the use of pesticides, herbicides and chemical fertilizers have raised concerns about chemical residues in food. The Fajar Ayu KWT Group and the Podo Rukun Farmers Group realize the importance of producing safe and healthy food for consumers, their families and the wider community.

Furthermore, the empowerment activities of the Fajar Ayu Women's Farming Group (KWT) and the Podo Rukun farmer group in community service can include a number of activities aimed at increasing the capacity and independence of KWT members and supporting sustainable development in the village. Cultivation of organic food crops can provide opportunities to increase farmers' income. Organic farming is a way to avoid the use of synthetic compounds as fertilizers, growth agents and pesticides. Stopping the use of synthetic chemicals in organic farming is a serious problem for farmers, and apart from long-standing habits, organic farming can also reduce yields if not handled properly.(Tangkesalu et al., 2022)The use of organic fertilizers can reduce the use of chemical fertilizers which people currently use in large quantities and buy at expensive prices.(Hadid et al., 2022)

Furthermore, organic farming systems do not only focus on the use of natural materials, but holistically strive to develop and improve healthy biodiversity, including biodiversity, biological cycles and soil biological activity. Usually the most commonly used method is to eliminate the use of pesticides and synthetic chemicals in fertilizer. Instead, organic farming systems use biological fertilizers, including occasional fertilizer, compost and green fertilizer.(Trihastuti et al., 2022) Organic farming systems, basic components and natural processes of ecosystems such as the activity of soil organisms, the exchange (cycle) of soil nutrients, as well as the distribution and competition of species are involved directly or indirectly directly as a crop

management tool.(Jannah & Dirawan, 2022) Organic material is an essential material that cannot be replaced by other materials in the soil, which plays a role in maintaining and improving the texture and structure of the soil.(Salamah & Sasongko, 2020)

The organic farming system adheres to the understanding of organic processes, meaning that all processes of the organic farming system starting from land preparation to post-harvest meet organic cultivation standards, not looking at the organic products produced.(Sartiana Saitun et al., 2020)Organic farming is a cultivation system that applies the concept of sustainable agriculture.(Dulbari et al., 2021)

One thing that can be easily cultivated in organic farming is vegetables. Vegetables are an important type of food for humans to maintain health. Green vegetables such as mustard greens, kale and spinach, have various health benefits. The natural nutritional content in green vegetables is very high. Apart from being rich in vitamins A and C, green vegetables also contain various mineral elements such as lime, iron, magnesium and phosphorus.(Mulyana et al., 2021)Organic vegetable cultivation is vegetable cultivation that avoids the use of synthetic chemicals.(Hadid et al., 2022)Vegetables are an important commodity as a source of vitamins and minerals for society, so they must be available in sufficient quantities, be cheap and be organic products so that the vegetables produced are healthy vegetables.(Kustiani et al., 2021)

Organic products often have a higher resale value, and there is an ever-increasing demand for organic products. This can help improve the economic welfare of the KWT Fajar Ayu group and the Podo Rukun Farmers Group.

Based on the description above, the KWT Fajar Ayu group and the Podo Rukun Farmers Group decided to switch to cultivating organic food crops. They are determined to achieve environmental sustainability, improve the quality of agricultural products, increase income, and promote awareness of food safety in society. These measures constitute their important

contribution to more sustainable agriculture and general prosperity.

IMPLEMENTATION METHOD

The method that will be implemented in the training on cultivating organic food crops in the KWT Fajar Ayu group and the Podo Rukun Farmer Group to resolve partner problems is carried out with the following steps:

1. **Socialization and discussion** related to organic cultivation in Kalibening and Taman Fajar, East Lampung.
2. **Practice organic vegetable cultivation**, care, fertilization and harvesting as well as post-harvest management
3. **Program Evaluation**

Evaluation of the Community Service program is carried out at the end of each activity. Evaluation is carried out to obtain information on the process of activities that have been carried out and the results obtained in accordance with the planned targets. Evaluation is carried out by the Kosabangsa Program team at the end of each activity, and is also carried out by LPPM through internal monitoring and evaluation. The evaluation results become material for the sustainability of the Community Service program. The sustainability of this program is mentoring and continuing activities through LPPM as a vehicle for KKN and assisted villages. Specifically, evaluating the success of knowledge will be tests and interviews. The success of organic cultivation is measured by production and profits as well as the feasibility of cultivation. The success of packaging, branding, making ice cream, nuggets and juice is measured by the feasibility of the business.

The flow of the Kosabangsa Program community service activities that will be carried out can be seen in Figure 1 as follows:



Figure .1 Flow of PKM activities

4. The sustainability of this program is mentoring and continuing activities through LPPM as a vehicle for KKN and assisted villages.

RESULTS AND DISCUSSION

RESULTS

Results Training activities on cultivating organic food crops carried out by the Fajar Ayu Women's Farming Group (KWT) and the Podo Rukun Farming Group have provided several positive results and important discussions. The following are the results and discussion:

1. Socialization of organic food crop cultivation

Socialization of organic food crop cultivation is an important step in encouraging a shift to more sustainable farming methods. In this outreach, we seek to educate farmers and the agricultural community about the importance of reducing the use of pesticides and chemical fertilizers which are detrimental to human health and the environment. We share knowledge about how to choose suitable plant varieties, produce organic fertilizer, and control pests and diseases naturally. Throughout this process, we encourage greater environmental awareness, help farmers understand the positive impact that organic farming practices can have, and create a change for the better in the way we produce food. Socialization of organic food crop cultivation is the first step towards more sustainable agriculture and healthier food for the future. The following is documentation of

socialization activities for the cultivation of organic food crops:



Picture 2 Socialization regarding Organic Plant Cultivation



Picture. 3 Socialization with Farming Groups about Organic Plant Cultivation



Picture. 4 Making Organic Fertilizer

2. Practice organic vegetable cultivation

The results of organic crop cultivation practices have had a significant impact on agricultural productivity and environmental health. In this practice, it decided to avoid the use of pesticides and chemical fertilizers, which were previously part of the farmers' routine in agriculture. Plant growth becomes healthier and stronger. Apart from that, the harvest also has a fresher

taste and better nutritional quality. By using organic fertilizer and organic pest control techniques, we have succeeded in reducing the negative impact on the surrounding environment. The soil becomes more fertile, and supports previously neglected biodiversity. The results of this organic crop cultivation practice not only mean increased productivity, but also represent sustainable agriculture for the health of the people who consume the harvest.



Picture. 5 Land Management



Picture. 6 Planting Organic Vegetables



Picture. 7 Planting Organic Vegetables

3. Program Evaluation

Evaluation of the results of organic crop cultivation activities is a key step in understanding the impact of organic farming practices that have been implemented. In this process, various aspects can be seen including productivity, environmental sustainability and impact on human health. The evaluation results are very satisfactory. Firstly, we recorded a significant increase in the productivity of our crops, with larger and better quality harvests. The quality of our products is also higher in terms of taste and nutritional value.

Additionally, we see a positive impact on the surrounding environment. Our soil becomes more fertile, and we support a variety of soil organisms that are important to the agricultural ecosystem. Apart from that of course, there are challenges that we encounter in adopting organic crop cultivation, such as more intensive pest control and more careful weed management. However, with the right support and growing knowledge, we can overcome these obstacles.

The overall results of this evaluation show that organic crop cultivation not only provides better results in terms of agricultural productivity, but also contributes to environmental preservation and better public health. We believe that this practice is a step in the right direction towards more sustainable farming and healthier food for the future. The following are the results of documentation of organic plants that have grown well:



Figure 8. Organic Vegetables

Picture. 9 Organic Edamame



Picture. 9 Organic Vegetables

DISCUSSION

Through this training, participants from KWT Fajar Ayu and the Podo Rukun Farmers Group experienced a significant increase in their knowledge and skills in cultivating organic food crops. They learn about the use of organic fertilizers, organic pest control methods, selecting appropriate varieties, and plant maintenance techniques. Increasing this knowledge and skills is important in increasing the productivity of organic food crops. Participants can now plan and carry out cultivation in a more sustainable and environmentally friendly way.

Trainees are provided with a solid understanding of various types of organic fertilizers and how to use them in crop cultivation. They are also taught how to make simple organic fertilizer. The use of organic fertilizer helps improve soil quality and reduces negative impacts on the environment. Participants now have the ability to make and use environmentally friendly organic fertilizer.

Organic Pest and Disease Control. Participants also understand how to control pests and diseases in plants organically. They learn techniques such as the use of organic insecticides and pest control with trap crops. Organic control of pests and diseases is very important in organic food cultivation. Trainees now have the knowledge to keep their plants healthy without relying on dangerous chemical pesticides. Increased Productivity with increased knowledge and skills c



Fajar

Ayu KWT Group and the Podo Rukun Farmer Group experienced increased productivity in cultivating their organic food crops. They can harvest better and higher quality crops. Increasing productivity is the main goal in cultivating organic food crops. By increasing crop yields, participants have the potential to increase their income and provide healthier food to their communities.

Trainees also develop greater environmental awareness. They understand the importance of organic cultivation practices in preserving the environment. Environmental awareness is an important aspect of organic food crop cultivation. By understanding the positive impact that organic practices can have, participants can become agents of change who care more about their environment.

Training activities on cultivating organic food crops at the KWT Fajar Ayu Group and the Podo Rukun Farmers Group succeeded in increasing the participants' knowledge, skills and environmental awareness. This has the potential to help them increase agricultural productivity, reduce negative impacts on the environment, and provide healthier food for their communities. This kind of training activity is very important in efforts to encourage sustainable organic farming.

CONCLUSION

Overall, the organic food crop cultivation training that has been given to the Fajar Ayu KWT Group and the Podo Rukun Farmer Group is a very positive step in advancing sustainable agriculture in this community. With the increased knowledge and skills they have acquired, these two groups can now carry out organic farming practices more efficiently and have a positive impact on production results and the surrounding environment. This is a real example of how training and education can bring positive change in society, support food security, and raise awareness of the importance of environmental conservation. Through cooperation and a spirit of sustainability, the KWT Fajar Ayu Group and the Podo Rukun Farmers Group have paved the way to a brighter future for organic farming and the

prosperity of their communities. The success of this training also reflects the importance of collaboration between the agricultural sector, government and non-governmental organizations in supporting sustainable agriculture. In this context, local governments and non-governmental organizations have played an important role in providing the resources, access to technology and financing necessary to support this training. Additionally, groups of farmers united in their passion to adopt organic farming practices demonstrate their commitment to the environment and local communities. It is hoped that this success will serve as inspiration for other farmer groups in their efforts towards more sustainable agriculture.

SUGGESTION

Considering the enormous benefits of this community service activity, it is necessary to hold similar training for communities in other areas. The training in cultivating organic food crops has opened the door to improving the quality of life, income and food security for the KWT Fajar Ayu group and the Podo Rukun Farmers Group, as well as providing a positive example in efforts to maintain a balance between productive agriculture and a healthy environment. This proves that through education, collaboration and innovation, we can achieve the goals of sustainable agriculture that provide long-term benefits for all parties.

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