

Optimizing Agricultural Cultivation, Fisheries, Processed Products and Marketing in Mugarsari Urban Village of Tasikmalaya City through Innovative and Sustainable Approaches

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ABSTRACT

The optimalisation of agricultural cultivation, fisheries, processed products, and marketing in Mugarsari urban village of Tasikmalaya city aims increase productivity, quality, marketability of agricultural and fishery products in Mugarsari village through innovative and sustainable approaches. Innovative approaches include the application of new technologies and methods in agricultural cultivation and fisheries, while sustainable approaches involve the use of friendly environmentally technologies resource management. The results of optimization process are expected to be increased productivity and quality of agricultural and fishery products in Mugarsari village, as well as increased income for local farmers and fishers through improved marketing. Additionally, this optimization process is expected to have a positive impact the environment through environmentally application of friendly technologies and resource management.

INTRODUCTION

The introductory section is here; You can provide logical and phenomenological reasons for doing or the background of your service process. You are also required to provide a clear explanation of your community service contribution. It could be present in the description of a niche sample (capturing a unique sample), theory enrichment, or an interesting result (novelty if available). A brief and direct introduction to the subject matter is very important in this service process. The agriculture, fisheries and food sector in Indonesia is very important in improving food security and the community's economy (Ari Susanti et al., 2013) and is supported by the opinion of (Tola, 2016) that this sector is the main sector in the Indonesian economy because most of the Indonesian population still depends on the agriculture and fisheries sector as the main source of income. This sector also provides food and natural resources that are important for human survival (Nadziroh, 2020).

According to (Harianto and Wardhani, 2020), Indonesia is an agricultural country that has abundant natural resources, such as vast agricultural land, fast-flowing rivers and lakes, and large fishery potential. The agriculture, fisheries and food sectors in Indonesia can help strengthen domestic food security, as they can produce the food needed by the Indonesian population. This is also in line with the opinion of (Tanjung and Somaji, 2015) that the sector can make a significant contribution in increasing Indonesia's non-oil and gas exports and help reduce dependence on food imports. Therefore, the agriculture, fisheries and food sectors in Indonesia are very important for the progress and sustainability of the Indonesian economy. The development of regional potential is one of the important aspects in community service (Soleh, 2017). In developing the potential of the region, it can conduct surveys and analyses of the conditions of the region, such as natural resources, climate, soil conditions, agricultural and fishery potential, and accessibility to markets (Endah, 2020).

Mugarsari Village in Tasikmalaya City has sufficient agricultural land and potential for the development of the agriculture and fisheries sectors. However, there are still many obstacles faced by farmers and fishermen in the area. One obstacle is the lack of adequate market access, making it difficult for farmers and fish farmers to sell their products at a good price. According to (Nurjati, 2021 in Supriyati & Suryani, 2016), the lack of adequate market access can be one of the obstacles in marketing agricultural and fishery products in Indonesia. This is because there are still many small farmers and fishermen who do not have good market access and limited access to needed infrastructure, such as adequate roads and adequate transport (Nadziroh, 2020). In addition, the lack of knowledge and skills in marketing management can also be a contributing factor to the difficulty of marketing agricultural and fishery products (Nurjati, 2021). Community knowledge and skills are very important in developing existing regional potential. Without adequate knowledge and skills, regional potential is difficult to optimally utilize. Another problem faced is the attack of pests and diseases on crops and fish, which can damage crop yields and reduce productivity. This was revealed by (Batubara et al., 2021 in Yulia et al., 2018) that pests and diseases can damage crops and fish, reducing yields or even causing death in plants and fish. This will certainly reduce the productivity and income of farmers and fish farmers. Therefore, efforts are needed to improve the knowledge and skills of farmers and fishers in farming and fish rearing techniques, as well as marketing and processing of agricultural and fishery products. In addition, efforts also need to be made to overcome pest and disease problems in crops and fish.

IMPLEMENTATION AND METHODS

In this section the author needs to explain the method of implementation and the method of service carried out. The description of the implementation of the activities includes the location, time, background of the participants and the number of participants. Meanwhile, the description of the activity method includes the methods and materials presented. The implementation of this community service is to improve the productivity, quality, and marketing of processed agricultural and fishery products in Mugarsari Village. This community service involves several expertise, such as expertise in pests and diseases, agribusiness, agrotechnology, organic farming, weeds, agro-industry, and marketing. This community service is expected to provide benefits to the people of Mugarsari Village, especially farmers, fish farmers, and business actors and can improve their skills and knowledge in farming techniques, good fish maintenance, and in processing and marketing production. In addition, this community service is also expected to contribute to the development of the agriculture, fisheries and food sectors in Indonesia more broadly.

According to (Batubara et al., 2021; Isbah & Iyan, 2016; Tanjung and Somaji, 2015) explained that there are several ways that can be done to contribute to the development of the agriculture, fisheries and food sectors in Indonesia, namely buying agricultural, fisheries and food products produced in Indonesia, investing in the agriculture, fisheries and food sectors, participating in community service programmes related to the agriculture, fisheries and food sectors, assisting in the promotion of Indonesian agricultural, fisheries and food products, volunteering or volunteering in programmes related to the agriculture, fisheries and food sectors. The method of implementing community service with the title "Optimisation of Agricultural Cultivation, Fisheries, Processed Products, and Marketing in Mugarsari Village, Tasikmalaya City through Innovative and Sustainable Approaches" can be done through several stages, namely:

- 1. Problem identification. Problem identification is carried out by conducting a field survey to find out the condition of the agriculture and fisheries sector in Mugarsari Village, including the obstacles and problems faced.
- 2. Planning. Planning is done by collecting data and information from the results of problem identification, then formulating goals, objectives, strategies, and methods that will be used in the service.
- 3. Implementation. Implementation was carried out by providing training and mentoring to the community in farming techniques, fish rearing, and processing of agricultural and fishery products. In addition, pest and disease control is also carried out using organic cultivation techniques and the use of biological agents.

- 4. Evaluation. Evaluation is carried out to evaluate the results of the implementation of community service and measure the level of success. This evaluation can be done through field surveys, interviews, and measurement of predetermined success indicators.
- 5. Dissemination. Dissemination is carried out by disseminating information and results from community service through scientific publications, seminars, workshops, and social media so that it can be accessed by the wider community and can provide greater benefits.

RESULTS AND DISCUSSION

The dedication activities carried out took place from June to November 2023 with the target of the Family Income Improvement Business Group located in Mugarsari Village, Tamansari Sub-District Tasikmalaya City, West Java. Some of the things that have been done in this service are as follows:

Material Exposure

At this stage, material exposure has been carried out related to farming techniques, fish rearing, and processing of agricultural and fishery products. Pest and disease control was also presented including control using organic cultivation techniques and the use of biological agents. In addition, marketing of agricultural and fishery products was also presented to gain broad access to the market. The activity took place interactively and the participants were very enthusiastic to follow the presentation of the material presented. The first material presentation was delivered by Suhardjadinata, by conveying good farming techniques, especially plants available around the partner location, namely banana and cassava trees to be used as ingredients for making chips. Several things were conveyed how to choose the right location, selection of seed varieties, soil preparation, planting maintenance and harvesting. In addition, it was also conveyed about good fish maintenance starting with the selection of fish species, water quality, feed, health monitoring and environmental management so that the fish raised can live well and have optimal economic value.



Picture.1 Presentation by Suhardjadinata about Material on Farming Techniques and Fish Rearing

The next material presentation was delivered by Ade Hilman Juhaeni, by presenting a presentation on the processing of good agricultural and fishery products by taking important steps in ensuring these products remain fresh, safe for consumption, and have high economic value starting from harvesting, sorting and selecting, cleaning and packaging, storage. It is also important to comply with sanitation and food safety regulations that apply in your region. This includes keeping tools and processing facilities clean, as well as ensuring products are not contaminated by hazardous materials. All of these will help to improve the quality and durability of agricultural and fishery products, as well as to provide a guarantee of safety for consumption by consumers.



Picture.2 Presentation by Ade Hilam Juhaeni about Material on Agricultural and Fishery Product Processing Techniques

The next presentation was by Gilang Vaza Benatar on pest and disease control which is also an important aspect in agriculture and fisheries. Participants were presented with material on how to identify pests and diseases by conducting routine monitoring, preventing and responding quickly to detect early symptoms of pests or diseases by conducting visual inspections, measuring temperature, humidity, and using special monitoring devices. Participants were also given insights into using organic or biological methods such as the use of natural predators, organic fertilizers, and other methods that reduce dependence on chemicals.



Picutere.3 Presentation by Gilang Vaza Benatar about Material Pest and Disease Management Techniques.

The next presentation was about marketing agricultural and fishery products by Rudhiana Salam. The participants were given insights so that the processed agricultural products that have been made can be more optimal in terms of economic value, so they were given a presentation on how to do good packaging, provide unique labels and brands in the hope of attracting consumer interest. In addition, material was also presented on how to enter wider market access by utilizing digital media.



Picture.4 Presentation by Rudhiana Salam About Marketing of Agricultural and Fishery Products

Provision of Tools and Materials

In addition to the presentation, partners were also given the equipment needed to support the processing of agricultural products and bonding. Some of the items provided include a set of tools for cooking, frying, weighing tools, tools for vacuum etc. It is hoped that partners can increase productivity, ease of process, and make better chips. Scales are also needed to provide a very precise measurement of the weight of the chips. This is important because customers want to know exactly how many chips they are buying. With accurately measured weight, you can price your products more fairly and transparently. This helps build trust with customers. A vacuum device helps remove air from the packaging, which reduces the exposure of the meatball product to oxygen. This helps slow down oxidation and chemical changes that can spoil the taste and colour of the meatballs, resulting in a fresher and longer-lasting product. By removing air from the packaging, vacuum packaging can help prevent physical damage to the meatballs, such as compaction or squeezing of the product during storage and shipping. Vacuum packaging can help reduce the access of microorganisms such as bacteria to the product, as they require oxygen to multiply. This helps to extend the shelf life of the product. Scales can assist in measuring ingredients with precision, which is important in food manufacturing to produce consistent, high-quality products.



Picture.5 Provision of Equipment to Support the Processing of Agricultural and Fishery Products

Partner Assistance

Some of the assistance that has been done is packaging by giving brands and logos to agricultural and fishery products because at the time before the Community Service for Community Partnership Programme (PbM-PKM) team entered the products did not have labels, brands and logos.



Picture.6 Sampling of Processed Agricultural and Fishery Products Before Being Given the Logo

After being given the material and equipment needed by partners, so that processed agricultural and fishery products have changed for the better because they already have a logo, available measure sizes and marketing access with digital media utilization.







Picture.7 Sampling of Processed Agricultural and Fishery Products After Being Given the Logo and Packaging

CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this community service activity is that it has provided benefits that can be directly applied to partners. This can be seen when partners are given supporting equipment directly used in the processing of agricultural and fishery products. Partners have the skills to carry out cultivation, control pests of animal/fishery diseases and even marketing that adjusts to focus on the needs and desires of customers. Partners also have the confidence to be able to access a wider market because they have been given labels and brands for their products. The suggestion from this service activity is that it is hoped that consistent assistance is still carried out in connection with partners who are very close to the campus area so that Universitas Siliwangi presence can be felt and have a direct impact on the community around the campus.

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