

## IMPLEMENTATION OF COMMUNITY-BASED VOCATIONAL LEARNING IN DEVELOPMENT SMES OYSTER MUSHROOM PRODUCTS IN THE WALANTAKA COMMUNITY , SERANG CITY

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### ABSTRACT

This study aims to analyze the implementation of community-based vocational learning in the development of small and medium-sized oyster mushroom products in the Walantaka community, Serang City. The background of this research is the condition of the welfare of the Walantaka community which is classified as middle to lower class, which requires the community to increase income to meet their family needs by utilizing local potential. For this reason, the government needs to carry out a transformation by conducting community-based vocational learning through the utilization of oyster mushroom cultivation so that it becomes a processed product that is favored by all circles of society which aims to increase the level of independence and lead to positive transformation. This research method uses a qualitative approach through a literature study and field study approach. The data is collected by in-depth interviews, participatory observation, and analysis of related documents. The results showed that the implementation of community-based vocational learning succeeded in increasing the skills and knowledge of the community in cultivating and processing oyster mushrooms into varied foods with the main ingredients using oyster mushrooms. There is an increase in production capacity and diversification of products produced. As a result, the community's income increased and their welfare improved.

**Keywords:** *Vocational Learning; Small and Medium Enterprises; Oyster Mushrooms.*

### INTRODUCTION

In the current era, the development of education has progressed very rapidly. As vocational learning evolves with the changing economic and social needs of society, community-based approaches are being adopted to ensure that vocational education is relevant to local needs. Community-based vocational learning also emphasizes the importance of community empowerment and the development of skills that can be applied directly in the local environment. Vocational education is also integrated into sustainable development initiatives, supporting the development of skills relevant to the green economy and sustainable technologies. The focus on sustainability ensures that vocational education can provide long-term benefits to society and the economy.

Community-based vocational training is an innovative approach introduced at the G20 forum. The G20 is an international forum that includes 19 economically developed countries, plus the European Union. This multilateral forum aims to discuss and coordinate international economic policy, as well as other related issues such as trade, investment, development, and energy policy. The G20 member countries cover various continents, such as the United States, Canada, Mexico, Argentina, Brazil, the United Kingdom, Germany, France, Italy, the European Union, Russia, Turkey, Saudi Arabia, India, China, Japan, South Korea, Indonesia, Australia, and South Africa. The G20 has and plays an important role in global economic stability and in sustainable development. The Ministry of Manpower is actively supporting the G20 skills strategy to make room for a skilled workforce through several human-centered efforts, with an emphasis on community engagement. This approach is designed to address the challenges in the world of work that are occurring due to the massive digital transformation and the Covid-19 pandemic.

With the support of the employment government to bring community-based vocational learning into effective and innovative learning, this will be an effective strategy for the development and welfare of the community in Walantaka in managing oyster mushrooms which are the main focus of the research, where oyster mushrooms are local potential that must be utilized and can be produced properly. Initially recognized as a potential source of food and income in many rural communities, oyster mushrooms offer economic opportunities due to their relatively simple cultivation techniques and low production costs. Community-based vocational learning is one of the effective strategies in improving community skills to develop Small and Medium Enterprises (SMEs). SME development in Indonesia plays an important role in the economic progress of the community. In Serang City, the majority of the population is in the middle to lower welfare category. Therefore, they work harder to fulfill their daily needs. To raise the welfare level of the community, significant efforts are needed from the government. Referring to BPS data, the number of unemployed people in Indonesia in February 2022 reached 8.40 million people. One effective approach in minimizing unemployment in Indonesia is through community-based vocational learning that will provide training and education according to local needs to provide learning to the people of Walantaka, Serang City in the development of Small and Medium Enterprises through oyster mushroom cultivation.

Through oyster mushroom cultivation in Walantaka Subdistrict, Serang City, the potential is wide to grow again. This is due to the abundant availability of raw materials such as straw, husks, and merang that have not been optimally utilized. In addition, labor and other supporting materials such as bran, manure, lime, and water are easily available. The climate and weather in Walantaka Sub-district are also very conducive for mushroom growth. The average temperature there ranges from 26°C to 28°C, with a minimum humidity of 52-53% and a maximum of 80-90% (Serang District 2024). These conditions meet the ideal requirements for mushroom growth, which is an optimum temperature of 27-28°C and humidity of 85-90%.

Starting a mushroom cultivation and nursery business does not require large capital and can be started with a small investment. So, this mushroom cultivation and nursery business deserves more attention to be developed. It is desirable that this will have a positive impact on improving the welfare of the community, especially for mushroom cultivation SMEs in Pipitan Village, Walantaka District, Serang City. From a business perspective, mushroom cultivation is very profitable due to the high selling price of fresh mushrooms and the ever-increasing market demand. In addition, the short harvest time allows for quick capital turnover. Market opportunities are also still very wide, provided that business actors can be observant in seeing opportunities. Raw materials for mushroom cultivation, such as rice husks, are easily obtained from the rice harvest in the surrounding agricultural areas. Oyster mushroom cultivation groups in Walantaka, Serang City, have great potential. Although the operations of the mushroom SMEs are running smoothly, the production results are not so optimal. As a result, further improvement and development is needed to meet the target market. To fulfill and achieve this, it is necessary to pay attention to the various obstacles it faces, one of the obstacles faced is the lack of knowledge of oyster

mushroom processing as a result not only sold in raw form, but can be produced into various processed oyster mushrooms that are healthy and favored by all groups and have a higher selling value.

The purpose of this study is to identify and analyze the challenges faced by oyster mushroom farmers in Pipitan village in cultivation and management to reduce poverty with the advancement of economic competition in this increasingly advanced era, as well as effective strategies for implementation in community-based vocational learning in the face of economic development through the use of local potential, namely oyster mushrooms that can be well preserved.

For this reason, the problem formulations that will be answered in this study are: How to identify the implementation of community-based vocational learning in the development of oyster mushroom SMEs in the Walantaka community? By answering this problem formulation question, it is hoped that it will identify specific and in-depth strategies faced by stakeholders, and provide a strong basis for formulating appropriate and effective solutions.

This study has limitations in its scope to determine the implementation of community-based vocational learning in the development of oyster mushroom SMEs in the Walantaka community. The limitation of this research that needs to be considered is that this research only focuses on the community of oyster mushroom SMEs in Pipitan Village, Walantaka Subdistrict, Serang City, the selection of this research is based on the needs and local potential of the Walantaka community, although there are still many people who do not understand how to manage oyster mushrooms to become a more profitable income for them. This research was also conducted in a short period of time so that in-depth data collection was obtained but limited to the time set and ensured the completion of this research with the available sources. Therefore, this research will not only identify the implementation of community-based vocational learning, but will also provide insights into oyster mushroom management that has the potential for the advancement of community SMEs.

## RESEARCH METHODS

This research uses a type of qualitative research with thematic analysis techniques to identify patterns and themes that are in line with the study mission, namely a study method that provides an understanding of the implementation of community-based vocational learning in the development of oyster mushroom product SMEs in the Walantaka community, Serang City. This qualitative research is a study that explains and seeks the meaning contained in an event or phenomenon by maximizing the methods of literature study and field study.

The time of the study was on Saturday, May 18, 2024. The place of this research was conducted in Pipitan Village, Walantaka District, Serang City. This location was chosen as a place to find and collect information or data because this place has a direct impact on the cultivation of oyster mushrooms to meet the needs and target market. The target of this research is the community of oyster mushroom Small and Medium Enterprises (SMEs) in Pipitan Village, Walantaka District, Serang City. The focus of this research is to describe the implementation of community-based vocational learning in the development of oyster mushroom product SMEs in the Walantaka community, Serang City in order to create broad employment opportunities.

The data collection technique consists of several steps, the first stage of the research involves collecting literature sources. This process categorizes the data based on the research formula (Darmalaksana.W, 2020: 26-27). Furthermore, the data that has been collected is processed and references are cited as needed. In the second stage, the research was conducted through field studies. The first step was to develop a research design and test the tools to be used. This was followed by selecting the location of the study, as well as the informants. The field study process involved observation, documentation

*International Conference on Learning Community (ICLC)*

and interviews. The study was derived from data taken from literature and field research. The information contained in the data was then abstracted to provide a comprehensive picture and interpreted to generate knowledge that could be applied in making conclusions.

## RESULTS AND DISCUSSION

### RESULT

From the observations that have been made, results can be obtained in the form of a description of the implementation of community-based vocational learning in the development of oyster mushroom SMEs in the Walantaka community. The process observed during the observation took place, namely the process of preparing oyster mushroom growing media, planting mushroom seeds into sterilized media, incubation, maintenance and watering, harvesting, and further oyster mushroom processing. This community-based vocational learning process is one of the effective strategies to provide understanding and empower the community, oyster mushroom processing carried out by the Walantaka community is actually quite good, but researchers noticed that the management of oyster mushroom SME development was still not optimal. Because the community is constrained in the lack of knowledge of diverse oyster mushroom product innovations that can be a promising business if the processing is done in a modern way. For processing, the community still does not know and most do not want to develop it further, only when the harvest will sell it raw to the nearest market, so that the income earned feels less competitive in the market.

During the observation, the researcher also paid attention and took careful notes on the process of oyster mushroom cultivation carried out by the people of Pipitan Village, to preserve this oyster mushroom does not need to have many special skills, but the basis of this research lies in the processing of oyster mushrooms which requires adequate skills so that oyster mushroom SMEs can compete in the market. Researchers observed that the development of oyster mushroom SMEs in the Walantaka community is still a lot of fresh oyster mushrooms that are less sold in the market, which is an obstacle due to increasingly paritative marketing competition in the current era, therefore it is necessary to follow up through vocational learning to find out the development of oyster mushroom SMEs to be processed into food products that are favored by all circles of society.

The lack of knowledge about how to process oyster mushrooms makes oyster mushroom SMEs find it difficult to take advantage of existing opportunities. Whereas if the oyster mushroom SMEs are able to manage these oyster mushrooms into various foods such as crispy oyster mushrooms, oyster mushroom meatballs, oyster mushroom naget, oyster mushroom risol and other processed foods whose main ingredients use oyster mushrooms can increase income, attract more customers, can compete in the market, and ultimately can meet market targets and increase sales more effectively.

The conclusion of this research is to reveal the problems that occur in oyster mushroom SMEs in Pipitan Village and provide solutions in the form of product processing ideas from oyster mushrooms that can not only be consumed in the form of cooked vegetables, but to run this oyster mushroom cultivation business as well as SME development that can attract more enthusiasts and increase sales. So that this requires community-based vocational learning so that the development of oyster mushroom Small and Medium Enterprises (SMEs) in the Walantaka community in the city of Serang becomes more optimal and prosperous. So from this, researchers revealed several problems that oyster mushroom SMEs have and solutions that can be provided by researchers for the Walantaka community in Serang City, including:

#### 1. Lack of Technical Knowledge and Skills

Most oyster mushroom SMEs in Pipitan Village face significant challenges in terms of technical knowledge and skills. They often lack an adequate understanding of effective and efficient cultivation techniques. This is evident from the difficulties they face in various important stages of the cultivation process, such as growing media preparation, sterilization, and incubation. In the preparation stage of the growing medium, many SMEs do not know how to prepare the growing medium properly. Non-sterile or unsuitable growing media can lead to non-optimal mushroom growth. For example, some SMEs use inappropriate materials or do not carry out sterilization procedures properly, so that the growing medium becomes contaminated. This contamination often leads to uneven mushroom growth or even complete failure. In addition, ignorance of the ideal media composition can also result in slow mushroom growth and low yields.

Sterilization is another crucial step that is often overlooked or done incorrectly. Many SMEs do not have the knowledge of the importance of sterilization and the correct method to perform it. Incomplete sterilization can result in the growing medium being contaminated by microorganisms that compete with oyster mushrooms, inhibit mushroom growth, and reduce the quality of the harvest. This shows that SMEs need a deeper understanding of effective sterilization techniques to ensure that the growing medium is free from contaminants. The incubation stage is also a source of problems for many SMEs. They often do not understand the ideal environmental conditions for incubation, such as temperature, humidity and air circulation. Non-optimal incubation can slow down mycelium growth and reduce yields. For example, too high or low temperatures, inappropriate humidity, and lack of air circulation can inhibit oyster mushroom mycelium development. Therefore, knowledge of the proper setting of environmental conditions during incubation is essential to ensure optimal mushroom growth. This limited knowledge and technical skills negatively impact the productivity and quality of mushrooms produced by SMEs in Walantaka. They not only face challenges in producing quality mushrooms, but also in increasing production volumes. Without adequate knowledge of proper cultivation techniques, it is difficult for SMEs to achieve optimal productivity levels and produce high-quality oyster mushrooms.

To overcome this problem, structured training and mentoring efforts are needed for oyster mushroom SMEs. A comprehensive training program can help them understand effective cultivation techniques, from growing media preparation, sterilization, to incubation. In addition, ongoing technical assistance is also important to ensure that they can overcome various challenges that arise during the cultivation process. By improving the knowledge and technical skills of SMEs, it is expected that they can increase the productivity and quality of the oyster mushrooms produced. Good training will provide them with a better understanding of the entire cultivation process, so they can optimize each stage to achieve better results. In addition, better knowledge of cultivation techniques can also help them reduce the risk of contamination and other problems that can hinder mushroom growth. Overall, improving the knowledge and technical skills of oyster mushroom SMEs in Walantaka is an important step towards improving the productivity and quality of their cultivation output. With a better understanding of effective cultivation techniques, they can produce higher-quality oyster mushrooms and in larger quantities, thereby increasing their income and overall well-being.

## 2. Limited Access to Technology

The latest technology also plays an important role in improving the efficiency and productivity of oyster mushroom cultivation. However, many SMEs in Walantaka do not have access to such technology. The latest technology in oyster mushroom cultivation covers various aspects, ranging from innovative methods in the preparation of growing media, automated environmental control systems, to efficient harvesting techniques. This limited access to technology means that SMEs must use traditional methods that are less efficient and often ineffective in increasing yields. Without adequate technology, they cannot compete with other producers who have better access to modern innovations and technology. This limited access to resources and technology has a direct impact on SMEs' ability to optimize their production processes. With low-quality seedlings, inadequate equipment, and outdated technology, the

productivity and quality of the oyster mushrooms produced are suboptimal. This affects not only the quantitative yield, but also the quality of the mushrooms produced, which ultimately impacts their income and business sustainability.

To address this issue, systematic and planned interventions are required. Training and mentoring programs that include access to resources and technology should be initiated. SMEs should be provided with access to quality seedlings through cooperation with seedling providers or the establishment of cooperatives that can collectively provide seedlings at more affordable prices. In addition, efforts should be made to provide adequate cultivation equipment through subsidies or financing schemes that are easily accessible to SMEs. The introduction of new technologies should also be part of the training program. SMEs need to be trained to adopt new technologies that can improve the efficiency and productivity of their farms. This could include training on the use of automated systems for environmental control, more efficient harvesting techniques, and other innovative methods that have proven effective in increasing yields.

### 3. Marketing and Distribution Issues

A further obstacle is the lack of a strong marketing network. Many SMEs do not have access to larger, organized markets, such as supermarkets, restaurants, or export markets. They often rely solely on local markets or direct sales to consumers. This limits their product distribution reach and reduces opportunities to increase sales volume. Without access to a wider marketing network, oyster mushroom products from Walantaka find it difficult to compete with products from other areas that have better distribution networks. In addition, the lack of knowledge about effective marketing strategies is also a significant obstacle. Many SMEs have not mastered modern marketing techniques that can help them promote their products more widely and attract consumers. They often lack the ability to use social media, e-commerce, or other digital platforms that can increase the visibility and appeal of their products. Knowledge on branding, attractive packaging, and promotion is also often lacking, resulting in the oyster mushroom products being less recognized by potential consumers. Product distribution is also a significant challenge. Many SMEs do not have adequate infrastructure to distribute their products to a wider market. Limitations in logistics and transportation often lead to delivery delays and product losses, especially for perishable products such as oyster mushrooms. Without an efficient distribution system, it is difficult for oyster mushroom products to reach consumers in good condition and on time, reducing competitiveness and consumer confidence in the product.

To address these marketing and distribution issues, integrated and systematic efforts are needed. First, SMEs need to receive training and assistance in developing effective marketing strategies. This training can include the use of social media and other digital platforms to promote products, attractive branding and packaging techniques, and creative and innovative promotional strategies. In addition, SMEs should also be encouraged to conduct in-depth market research to understand consumer needs and preferences as well as prevailing market trends. Second, there is a need to build a broader and more organized marketing network. This can be done through cooperation with cooperatives, business associations, or local governments to open access to larger and more diverse markets. For example, local governments can help SMEs to establish partnerships with supermarkets, restaurants, or other businesses that have a wide distribution network. In addition, the establishment of organized local markets and promotion at various events or exhibitions can also help increase the visibility and sales of oyster mushroom products. Third, improving distribution infrastructure is also very important. SMEs need to be supported with adequate logistics facilities, such as suitable transport vehicles and efficient delivery systems. The government and related parties can help by providing access to adequate storage facilities and developing a well-coordinated distribution system. With better infrastructure, oyster mushroom products can be distributed more efficiently and reach consumers under optimal conditions.

### 4. Lack of Ongoing Support and Training

SMEs in Walantaka face major challenges related to the lack of ongoing support and training. Support in the form of structured and ongoing training is needed to improve their skills and knowledge in running an oyster mushroom

farming business. However, in reality, many SME actors do not have adequate access to training programs that can help them develop the necessary technical and managerial skills. In addition, the lack of ongoing training is also a significant obstacle. Ongoing training is essential to ensure that SMEs keep their knowledge and skills up-to-date with evolving technologies and cultivation methods. Without ongoing training, their knowledge and skills tend to stagnate, reducing their ability to adapt to changes and innovations in the oyster mushroom cultivation industry. Support from the government and related institutions is also still inadequate. Local governments and related institutions should play an active role in providing structured and sustainable training programs, as well as providing the technical assistance needed by SMEs. However, many SME operators feel that the support they receive from the government and relevant institutions is still very limited. Lack of funding and resource allocation for training programs and technical assistance is one of the main reasons why such support has not been optimal.

This requires greater efforts from various parties to provide better support for SMEs in Walantaka. Among other things, the local government and related institutions need to develop a more structured and sustainable training program. This program should cover all important aspects of oyster mushroom cultivation, from basic techniques to business management. In addition, these training programs should be conducted periodically and continuously, so that SMEs can continuously update their knowledge and skills according to the latest developments in the industry. More intensive technical assistance is also needed. The government and relevant institutions can work with experts or practitioners in the field of oyster mushroom cultivation to provide quality technical assistance to SMEs. This technical assistance can be done through field visits, consultations, or technical guidance tailored to the needs of SMEs. Support in the form of access to information and resources is also very important. Local governments and related institutions need to provide SMEs with easier access to information on the latest cultivation techniques, technological innovations, and market opportunities. In addition, there also needs to be support in the form of access to the required resources, such as quality seeds, cultivation equipment, and the latest technology. So that SMEs can more easily grow their businesses and increase production output.

##### 5. Environmental Issues

Erratic climate change can disrupt the growth cycle of oyster mushrooms. Extreme temperature changes, either too high or too low, can inhibit the growth of mycelium, the vegetative part of the mushroom. Mycelium that does not grow well will result in less quality mushrooms and a decreased harvest. In addition, unstable humidity is also a problem, as oyster mushrooms require a certain level of humidity to grow optimally. Humidity that is too low or too high can make it difficult for the mushrooms to grow or susceptible to pathogen infection.

SMEs must adapt in various ways. One of them is by improving cultivation environment management techniques. They can use more sophisticated technology to control the temperature and humidity in the cultivation room, so that microclimate conditions remain stable and in line with the needs of oyster mushrooms. The use of sensor and automation technology can help monitor and regulate environmental conditions in real-time, thereby reducing the negative impacts of erratic climate change.

From the results of these findings, researchers found that there is community awareness to develop the local potential that has been in the milki, and the community also knows more about how to cultivate good plants and not only sell in the form of fresh oyster mushrooms, but will be processed further into varied foods to be able to continue to grow and compete in the market. This can increase public awareness of the manufacture of processed food from the main ingredient of this oyster mushroom, many of the SMEs have also processed into crispy oyster mushrooms and sold them in nearby shops and in souvenir centers. But it should not be limited to processing it, in the current technological era there are many varied foods that can be made into more sensational processed ideas such as oyster mushroom meatballs, oyster mushroom nuggets, which can be made into frozen food businesses, and ready-to-eat foods such as oyster mushroom risol with various

contemporary spices, even oyster mushroom pizza which has a unique taste. This can increase sales reach and create jobs for oyster mushroom SMEs.

## DISCUSSION

The importance of applying community-based vocational learning to prepare and raise the level of community welfare in the development of oyster mushroom products in Pipitan Village, Walantaka District, is not optimal, even though the oyster mushroom SME group is basically able to produce oyster mushrooms well. The community was given new insights into independence and transformation towards more advanced conditions through community-based vocational learning in the development of this oyster mushroom product SME.

This is in line with one of the policy recommendation concepts for community-based vocational training education proposed by the Secretary General of the Ministry of Manpower, Anwar Sanusi, who stated that one of the ideas or proposals that will be submitted at the next G20 meeting is a regulation related to community-based vocational education and training (BLK Komunitas). The hope is that the training can increase the availability and quality of training, especially for underprivileged people, including those living in rural areas.

At the 2022 G20 Presidency, the Ministry of Manpower will raise four priority issues or themes. Anwar Sanusi explained that the increase in capacity is the responsibility of all elements from the person himself, the government, labor unions, to the community. First, the formation of sustainable employment in anticipation of transformation in the world of work. Second, integration of the labor market and appropriate employment for persons with disabilities. Third, human resource capacity building for sustainable productivity growth. Fourth, responsive and inclusive labor protection in response to continuous transformation in the world of work.

The development of mushroom cultivation through community-based vocational learning is needed to develop oyster mushrooms because it has the potential to be improved in the future, as a result it can add value to the oyster mushrooms that have been produced. Therefore, attention is needed to the obstacles that exist in mushroom business groups, the way is to analyze and divide them into groups of obstacles to various relevant problems. Aspects of production, post-harvest handling, and processing methods are the main problems faced by mushroom SME groups. The community needs to have the skills to develop the manufacture of oyster mushroom products.

Small and Medium Enterprises (SMEs) currently play a significant role as one of the main supporters of economic growth in Indonesia. In Pipitan Village, the oyster mushroom cultivation industry continues to grow rapidly, contributing positively to the increasing demand for mushrooms. Oyster mushroom products are then processed into food with high economic value and are easily accepted, as people tend to choose daily food products that have become their favorites. Initially, oyster mushrooms were only used as complementary vegetable ingredients. Oyster mushrooms have many nutrients that have many benefits for the human body. However, most oyster mushrooms are only used as food ingredients in vegetable dishes at home. As a solution, various innovations have been made to create new foods using oyster mushrooms as the main ingredient, such as crispy oyster mushrooms, oyster mushroom nuggets, oyster mushroom satay, oyster mushroom meatballs, oyster mushroom pepes, oyster mushroom risol, and various other very diverse mushroom preparations.

People love oyster mushrooms because they are widely available in the market, very easy to make into many kinds of dishes, and most importantly, have many types of nutrients that are healthy for the body. (Hernawati et al., 2019). Oyster mushroom cultivation is quite simple by maximizing sengon wood sawdust as the main ingredient. For this reason, many



people have started to grow processed mushrooms to increase their income levels. Rahmat & Nurhidayat (2011) describe that oyster mushrooms have many benefits, including:

1. As an anti-cholesterol, antioxidant, and anti-cancer, because it has extraordinary nutritional content such as lipids, minerals, various types of vitamins, and fiber to strengthen human immunity.
2. In every 100 grams of fresh oyster mushrooms, there are 8.9 mg of calcium, 1.9 mg of iron, 17.0 mg of phosphorus, 0.15 mg of vitamin B1 (thiamine), 0.75 mg of vit B2 (riboflavin), and 12.40 mg of vit C.
3. Has folic acid (folid acid) to provide prevention of cancer and overcome the lack of red blood cells.
4. The folate content is very beneficial for pregnant women as it can minimize the risk of birth defects and brain defects in babies.
5. Have nine essential amino acids that the body cannot produce, including phenylalanine, histidine, isoleucine, lysine, leucine, methionine, tryptophan, threonine, and valine.
6. The majority of the fat is unsaturated fat, which does not cause cholesterol buildup in the body like saturated fat, making it safe and suitable for consumption.

The purpose of creating product innovation is to introduce new products that can meet the needs and desires of consumers, as a result encouraging interest in purchasing these products, which can be realized through purchasing decisions. (Hasnatika & Nurnida, 2019). According to Kotler and Keller (2016: 454), product innovation is the result of the interaction of various processes that influence each other. On the other hand, according to Hubies (2012: 75), product innovation is a combination of new products and new elements to form previously unknown production methods. Innovation is also a transformation and collection of information that connects inputs and outputs. (Hubies, 2012: 67). Then Kotler and Keller (2016: 32) explain that product innovation has certain characteristics, including:

1. Have a unique identity of ideas, programs, structures, systems, and possible desired outcomes.
2. Having an innovative element, which means that the innovation has the characteristics or elements of being an original and new work and idea.
3. Implemented in a planned program, i.e. through a well-prepared, clear and planned process.

Below are the types of innovation that can be applied to products:

1. Product innovation is the introduction of new products or significant service improvements.
2. Process, is the implementation of improving the quality of the product or the delivery method of the item.
3. Marketing, is the development of strategies to reach new markets by improving the quality of design, packaging, and promotion.
4. Organizations include the creation of new entities, the adoption of new business practices, and modifications in the way an organization is run or behaved.
5. A business model, an approach to doing business that is based on values.

New product innovations such as crispy oyster mushrooms, oyster mushroom nuggets, oyster mushroom meatballs, oyster mushroom pepes, and oyster mushroom risol, are the result of processing oyster mushrooms that have unique textures and flavors. These products are suitable for use as alternatives to plant-based ingredients to replace plant-based ingredients. Similarly, oyster mushrooms are sold at a more affordable price compared to chicken meat. Therefore, their use as the main ingredient in production can significantly reduce costs. With the innovation in making various oyster mushroom products, it is desired to provide support for Small and Medium Enterprises (SMEs) in Walantaka District, Serang City.

This research aims to implement community-based vocational learning in an effort to develop SMEs producing oyster mushrooms in the Walantaka community, Serang City. The results of this study reveal that the vocational learning program that has been implemented has succeeded in improving the skills and knowledge of the community in the field of oyster mushroom cultivation. The training or learning provided covers various technical and managerial aspects, which aim to empower the community to be able to manage the oyster mushroom cultivation business independently and effectively. This learning program is designed with a practical and interactive approach, so that the community can directly apply the theory they learn. Before participating in vocational learning, most of the community only had basic knowledge about oyster mushroom cultivation. After participating in the community-based vocational learning, there was a significant improvement in their technical skills. People who previously only understood the basics of cultivation are now able to carry out the complete cultivation process, starting from the preparation of planting media, inoculation, maintenance to harvesting oyster mushrooms. One of the significant results of this learning is the increased productivity of oyster mushroom cultivation.

This increase shows that the vocational learning provided has succeeded in improving the efficiency and effectiveness of the cultivation process carried out by the Pipitan Village community, in addition to increased productivity, community income has also increased significantly. This increase in income not only has a positive impact on the participants' economic welfare, but also provides them with the opportunity to further develop their oyster mushroom cultivation business. Community satisfaction with the training and learning program on mushroom cultivation to improve SMEs was also very high. Most of the communities felt that the training was very useful and relevant to their needs. They stated that the skills and knowledge they gained during the learning on mushroom cultivation were very helpful in managing their oyster mushroom cultivation and management SMEs. This high level of satisfaction indicates that the community-based vocational training program has successfully met the expectations and needs of the community.

Overall, this research shows that the application of community-based vocational learning in the development of oyster mushroom product SMEs in Walantaka community, Serang City, has successfully improved the skills, productivity and income of the community. The vocational training and learning programs provided have proven effective in empowering the community and increasing their economic capacity. The results from this study support the theory that structured and practical vocational training can have a significant positive impact on community empowerment and local economic development.

## CONCLUSIONS

By analyzing the implementation of community-based vocational learning in the development of oyster mushroom product SMEs in the Walantaka community, Serang City. It shows that the community-based vocational learning program succeeded in increasing the skills and insights of the community in oyster mushroom cultivation and processing. This increase is reflected in the increasing number of SMEs engaged in this field, as well as the production capacity and variety of products produced. The community's income increased, which had a positive impact on their welfare. Based on these results, new thoughts can be developed as the essence of the findings of this research. First, community-based vocational learning has proven effective in raising the level of economic independence of the community by utilizing local potential. Second, the success of this program is greatly influenced by government support and active community participation. Third, the diversification of oyster mushroom products with economic value is an effective strategy to increase community income and prosperity. Thus, community empowerment through community-based vocational learning not only increases the level of skills and knowledge, but also has a real impact on improving the economy and community welfare. This approach can be used as a model to develop the local economy and reduce poverty.

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