



Community economic empowerment through oyster mushroom cultivation: A case study on agricultural-based empowerment using local raw materials

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ABSTRACT

Background: Community economic empowerment based on oyster mushroom cultivation is one alternative to improve the welfare of rural communities. The potential for abundant raw materials, such as sawn timber waste, as well as the relatively easy cultivation process and low capital, make this business promising. The Sumber Maju Business Group seeks to implement empowerment through training and business development to improve the economy of the villagers. **Methods:** This research uses a qualitative approach with a case study method to analyze the implementation of economic empowerment through oyster mushroom cultivation by the SMBG (research site). Data were collected through in-depth interviews with administrators, group members, and the local community, as well as through observation of the empowerment stages carried out, from preparation to evaluation and termination. **Findings:** This study found that community empowerment through oyster mushroom cultivation succeeded in improving the village economy, as evidenced by the increasing number of mushroom huts and group members' income. However, some stages of empowerment are still not optimal, such as the lack of government involvement in providing the necessary production equipment and the low awareness of some people about the potential of this business. Nevertheless, there is a strong desire from the community to develop this business further. **Conclusion:** Economic empowerment through oyster mushroom cultivation can increase the economic independence of group members and improve community welfare. However, there are challenges related to government involvement and the provision of adequate production facilities. **Novelty/Originality of this Article:** This article offers new insights into agricultural-based economic empowerment that utilizes affordable local potential, namely wood waste, as the main raw material.

KEYWORDS: community empowerment; economic empowerment; oyster mushroom cultivation.

1. Introduction

Economy is one of the fundamental aspects closely related to development, especially in Indonesia as an archipelago based on agriculture, plantations, fisheries and livestock sectors. The majority of Indonesia's population lives in rural areas, so most of their livelihoods are related to the agricultural sector. Unfortunately, the access of rural communities to economic resources is still limited, leading them to live in underdeveloped and isolated conditions. In fact, an adequate quality of life is essential to support the prosperity and well-being of the community as a whole. Therefore, development in the

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agricultural sector is a strategic step to create equity and justice in Indonesia. This development not only increases the productivity of the agrarian sector but also opens up economic opportunities for rural communities. Thus, the development of the agricultural sector can be a solution to reduce social inequality and improve the standard of living of people in rural areas.

Economic growth refers to an increase in the production of goods and services in a society, which in turn increases overall prosperity. Community involvement in economic development is very important, because the more active their role, the faster welfare will be achieved (Baeti, 2013). Modernization in the economic sector has a major influence on the acceleration of economic growth, although the impact is not always evenly distributed (Matyushok et al., 2021; Sadik-Zada, 2021). Communities that have economic security and are able to fulfill basic needs such as food, clothing, shelter, health, and security tend to adapt more easily to modern changes. Conversely, communities that are left behind will face major challenges due to limited access and economic capacity. As the population grows, consumption needs continue to increase, so people's incomes need to increase in order to fulfill their needs. Inclusive economic development is therefore key to addressing these challenges and ensuring that all levels of society can enjoy the benefits of economic growth.

Underdeveloped villages are areas that are still less developed than other regions at the national level (Ratnadila, 2018). This condition requires planned development steps to encourage economic growth so that the village is no longer considered underdeveloped. One approach that can be taken is community empowerment-based development, which is considered an innovation in rural economic development (Andini, 2015). This empowerment includes efforts to introduce basic concepts and insights on how to increase the capacity of individuals and groups in society (Hamid, 2018). In this process, empowerment aims to provide strength and ability to individuals and communities so that they are able to identify needs, analyze potential, understand problems, and find solutions independently (Widjajanti, 2011). By optimizing existing resources, communities can be more independent in utilizing the potential of their villages. Community empowerment is also key to creating sustainable development and improving the lives of people in underdeveloped villages (Adamowicz & Zwolińska-Ligaj, 2020; Purnomo et al., 2020).

One example of an innovative community empowerment activity is mushroom cultivation, which is known as an appropriate technology because it does not require large capital and can be done easily by anyone (Zulfarina et al., 2019). Oyster mushrooms, for example, have the advantage of not requiring fertilizer, not depending on the season, and can be harvested in about 1.5 months. In addition, the harvest of mushroom baglogs can be utilized up to four times before it becomes waste. Baglog waste that is no longer productive can still be processed into compost, fish feed, or media for worm farming. In Cilacap Regency, the empowerment of mushroom cultivation is implemented by the SMBG with the support of Pertamina's CSR. After forming the group's organizational structure, they held a two-day oyster mushroom cultivation training involving 50 participants. The first day was filled with the provision of theory and cultivation practices, while the second day continued with a comparative study to Wangon to observe the mushroom cultivation process firsthand. This activity is a clear example of how community empowerment can have a positive impact on village economic development.

Oyster mushroom cultivation is one of the business opportunities that has promising economic prospects, especially in rural areas (Mahari et al., 2020; Thakur, 2020). With the availability of abundant raw materials and a relatively simple cultivation process, the SMBG in Dondong Village has started this business since 2016 and has managed to grow significantly. The Mushroom Village program is one innovation that offers great potential, given the high public consumption of mushrooms and the ease of production techniques that can be done simply. In addition to having a preferred taste, oyster mushrooms are also rich in nutritional content, including protein, unsaturated fatty acids, vitamins, and minerals that are beneficial to the health of the human body. Currently, the group cultivates several types of mushrooms, such as oyster mushrooms, ear mushrooms, and merang mushrooms. Not only selling the harvest to market traders, the group also processes mushrooms into

snack products in the form of crispy mushrooms with various flavors. The products are attractively packaged so that they can be marketed in supermarkets to outside the city, making this business more competitive and contributing to the local economy.

The SMBG has shown its success in improving the economy of the Dondong Village community, which even received appreciation from Mrs. TR, a candidate for the Indonesian House of Representatives. The group actively conducts oyster mushroom cultivation training aimed at the wider community, especially Dondong Village residents, with the aim of providing understanding to people who were previously unfamiliar with mushroom cultivation, so that they have the ability to develop their business independently. Many residents who have attended this training eventually decide to join as group members, which not only helps improve knowledge but also empowers unemployed housewives by involving them in the production process while learning. In addition, sawyers around the village benefit from increased income through the sale of sawdust, which is used as a medium for mushroom cultivation, thus reducing waste and providing additional economic value. This oyster mushroom cultivation is a clear example of how empowerment efforts can help create a more productive and economically independent community. With this success, this research aims to find out how community economic empowerment through oyster mushroom cultivation in Dondong Village, Kesugihan District, Cilacap Regency.

2. Methods

The approach used in this research is descriptive qualitative, which aims to understand certain phenomena through in-depth data collection and analysis. Qualitative research focuses on a person's life, story, behavior, and the function of an organization or social movement (Salim & Syahrums, 2012). According to Denzin and Lincoln, qualitative research is conducted in a natural setting to interpret phenomena using existing methods (Anggito, 2018). In this context, the research is directed to find out the process of community economic empowerment through oyster mushroom cultivation in Dondong Village. With this approach, the research is expected to produce descriptive data that describes events or conditions in detail, so that researchers can understand and explain how the empowerment process takes place in the field.

The subjects of this research involve the management and members of the SMBG, as well as the people of Dondong Village who participate in oyster mushroom production activities. Meanwhile, the object of the research is the community economic empowerment efforts through oyster mushroom cultivation carried out by the SMBG in Dondong Village, Kesugihan District, Cilacap Regency. Primary data was obtained through in-depth interviews with relevant parties, such as the group leader, administrators, and group members. In addition, secondary data was obtained from documentation in the form of the monographic profile of Dondong Village and data related to the SMBG. This approach is designed to provide a comprehensive picture of the role of business groups in improving the community's economy through oyster mushroom cultivation.

The direct observation process is carried out to obtain relevant and in-depth information about the activities taking place at the research location (Hasanah, 2016). Researchers conducted observations at the cultivation site, namely at the mushroom hut in Dondong Village, to record in detail the process of community economic empowerment through the business group. This observation includes observing mushroom production activities, interactions between group members, and various daily activities carried out in supporting the cultivation business. In addition, the researcher also recorded things related to the problem under study, such as the challenges faced in the cultivation process and the strategies used to increase production yields. With this approach, the research is expected to provide a real picture of how the SMBG contributes to empowering the economy of the Dondong Village community.

Interviews are one of the important techniques in data collection that requires information that is factual, reliable, and relevant to the research objectives (Rosaliza, 2015). Before the interviews were conducted, researchers compiled a list of questions designed to

obtain the information needed. In this study, interviews were conducted with various parties, including the head of the SMBG, administrators, group members, community leaders, as well as residents of Dondong Village who were not members of the business group to complement the data. The information collected included various perspectives to provide a more comprehensive picture. In addition to interviews, documentation techniques were used to collect data on the history of business group formation, geographical conditions, establishment objectives, and empowerment programs in Dondong Village. This approach helps ensure that the data obtained supports an in-depth analysis of the success of community economic empowerment.

The data analysis process in qualitative research includes three main stages, namely data reduction, data presentation, and conclusion drawing (Gumilang, 2016). Data reduction is done by summarizing, coding, finding themes, and grouping the results according to the research focus. This stage began from the beginning of the research until the preparation of the final report. Data presentation is done by arranging information that has been summarized in an easy-to-understand form, such as matrices, graphs, charts, or narrative text, making it easier for researchers to understand the conditions that occur. Based on the presentation of the data, researchers can draw conclusions according to the theme or category of research. Furthermore, the conclusions drawn will be re-examined to ensure there are no data errors, while validating the data reduction and presentation process. With this qualitative descriptive method, the research is expected to be able to provide a clear and accurate picture related to community economic empowerment through oyster mushroom cultivation in Dondong Village.

3. Results and Discussion

Economic empowerment of the community is a strategy aimed at fostering structural changes by enhancing the position and role of local economies within the broader economic system (Dushkova & Ivlieve, 2024; Malizia et al., 2020). This effort strives to improve the community's ability to achieve self-sufficiency and break free from poverty and underdevelopment (Kurniawati, 2013). In Dondong Village, the SMBG exemplifies the implementation of such empowerment. This collective group of mushroom farmers benefits from various forms of guidance and support to help them develop their business ventures. The group was formed with the goal of increasing members' income and contributing to the overall social welfare of the village. By focusing on oyster mushroom cultivation, the group facilitates collaboration between the government and the community in implementing economic empowerment initiatives (Acharya et al., 2024; Domingo, 2025).

This program not only enhances the skills of mushroom farmers but also strengthens their capacity to overcome economic challenges. According to Payne's concept of empowerment, the initiative helps the community make informed decisions and take actions that influence their own lives, thereby reducing personal and social barriers. As a result, economic empowerment through oyster mushroom cultivation in Dondong Village aligns with the core principles of empowerment. It has created new opportunities for the community to advance, enhancing their prospects of achieving economic independence. This approach supports the development of sustainable livelihoods and increases the community's resilience to external economic pressures.

3.1 Stages of empowerment

Based on the results of research conducted by researchers using observation, interview and documentation methods at the SMBG in Dondong Village, the implementation of oyster mushroom cultivation is carried out in accordance with the concept of the stages of the community empowerment process according to Soekanto, including the stages of preparation, assessment, alternative program planning, action plan implementation, program implementation, evaluation and findings. In the preparation stage, the SMBG focuses on preparing officers and field locations. The success of an empowerment program

is highly dependent on competent and responsible implementers. In this case, Mr. S, who has been experienced in oyster mushroom cultivation since 2014, was chosen as the group's advisor and patron. Based on his narrative, oyster mushroom cultivation was started by himself from 2014 to 2016, before finally being managed seriously. At that time, he was active as an Ansor youth advisor and a member of Karang Taruna. Similarly, the Head of the SMBG, Mr. M, mentioned that although Mr. Suratman was not yet the Village Head at the time, his role as an advisor was very important in helping to manage the group. The experience and trust that members have in Mr. S's abilities are strong reasons why he was entrusted as the group's patron. With an experienced advisor, the group feels confident that they can run the oyster mushroom empowerment program better.

In addition to officer preparation, field preparation is an important step to support the success of oyster mushroom cultivation. The SMBG started by determining a suitable location for cultivation, although initially it did not have a permanent hut for baglog storage. As a temporary solution, baglogs were deposited at the homes of several members who had free space. According to Mr. S, this condition lasted until the group grew and finally received support from the Village Head, who provided a permanent location for cultivation activities. This new location has become an education center for the community, especially Dondong villagers who want to learn about oyster mushroom cultivation. Careful field preparation aims to minimize obstacles during program implementation. The agreement between members in determining the temporary location is part of a joint commitment to support the success of the program. With the synergy between officer and field preparation, SMBG can start empowerment activities in a more organized and efficient manner.

In the assessment stage, empowerment actors identify existing problems in the community, and explore the potential and resources that can be developed in Dondong Village. This process began with the "*Ngolah Pikir*" activity which became a forum for members to share ideas. Through this meeting, the idea of oyster mushroom cultivation emerged as a solution to community economic empowerment. Mr. S, who has experience in mushroom cultivation since 2014, proposed this idea after hearing various suggestions from other members, such as goat, cow, and fish cultivation. Oyster mushrooms were chosen because the cultivation process is easy, with relatively small capital, and the raw materials are affordable, such as sawdust and bran (Aditya et al., 2024; Akter et al., 2022). In addition, the oyster mushroom cultivation process also does not require sophisticated equipment, making it suitable for people with limited resources. Based on these considerations, the idea of oyster mushroom cultivation was then agreed upon as an appropriate economic empowerment measure for Dondong Village.

In the *Ngolah Pikir* activity, Mr. M as the Head of the SMBG also revealed the reason for choosing oyster mushroom cultivation, namely due to the abundant availability of raw materials in Dondong Village, especially sawdust which is the main ingredient in oyster mushroom cultivation. In addition, the costs required to start oyster mushroom cultivation are relatively small, with quite profitable results. The people of Dondong Village realize that oyster mushrooms can be a commodity with promising economic value. They also realize that in addition to selling the mushroom harvest, they can produce and sell baglogs as a by-product, which increases their income potential. Thus, the wide market potential and affordable costs are strong reasons why oyster mushroom cultivation was chosen as a business that can boost the village economy.

The SMBG then conducted a SWOT analysis to evaluate the potential of the oyster mushroom cultivation business in more depth. In terms of strengths, this business is known for its simple process, small capital, and can be managed manually, which is very suitable for the conditions of the Dondong Village community which has good land and humidity for mushroom cultivation. However, there are weaknesses that need to be considered, such as the importance of maintaining the cleanliness of the cultivation site, because mushroom baglogs are very vulnerable to pests that can damage the harvest. On the opportunity side, this business has bright prospects due to the high public demand for oyster mushrooms. Mushrooms can not only be consumed as vegetables, but can also be processed into various products such as mushroom chips, mushroom meatballs, and other products that can

become business opportunities. The threat faced is the potential for tighter competition as more and more people are interested in the oyster mushroom cultivation business. Nevertheless, this analysis shows that the oyster mushroom cultivation business in Dondong Village has a great opportunity to develop and make a positive contribution to improving the community's economy.

At the alternative program planning stage, the SMBG began with the formation of a management consisting of a chairperson, patron, secretary, treasurer, and areas that would manage various aspects of oyster mushroom cultivation. The name of the business group is *Gubug Jamur Sumber Maju* (GJSM) Dondong, which focuses on managing mushroom production, marketing and processing. Next, they designed and submitted a training proposal to CSR Pertamina through *Baituzzakah Pertamina* (Bazma), which was approved to involve 50 participants from Dondong Village, consisting of youth, mothers, and mushroom business owners. The training aims to provide basic knowledge and skills in good oyster mushroom cultivation. Mr. S, who has previous experience working in state-owned enterprises, was also one of the main resource persons in the training, which was held at Pertamina's training building for two days. In addition, participants were also invited to visit mushroom farmers in Wangon and Baturaden to see first-hand the practice of mushroom cultivation, including the nursery process (F2) and baglog management that has developed rapidly in the area.

This planning stage not only focused on establishing an organizational structure, but also on building the capacity of the community through training. The main objective of the training was to introduce the community of Dondong Village to the correct ways of processing oyster mushrooms using good standard operating procedures. The training included both theory and practice, with an emphasis on introducing modern technology in mushroom cultivation. In addition, participants also had the opportunity to conduct comparative studies to mushroom farmers in surrounding areas, such as Wangon and Baturaden, to gain more insight into oyster mushroom nurseries and production. It is hoped that through this training, the people of Dondong Village will not only gain knowledge, but also be motivated to develop an oyster mushroom cultivation business as an economic opportunity. With the skills they have acquired, it is hoped that they can make significant changes in their lives, improve the village economy, and achieve better welfare.

At the stage of performing the action plan, all members and administrators of the SMBG who had attended the training immediately tried to start oyster mushroom production. Mr. M, Chairman of the SMBG, explained that they collected funds together to make baglogs as a medium for mushroom cultivation. They also invited the community to set up mushroom huts that would be filled on a rolling system. Although at first they managed to fill six mushroom huts, funding problems caused the system to not run smoothly, so the huts were not replenished. Despite this, the SMBG continued to hold trainings for the community on how to cultivate oyster mushrooms. Thanks to this training, some participants have succeeded in developing a mushroom cultivation business independently, and some have even invited their friends and neighbors to join them.

Mr. S, Patron of the SMBG, revealed that after starting mushroom cultivation, they continued to try to introduce this business to the people of Dondong Village. They invited the community to join by offering free training on mushroom cultivation. Initially, around 30 households in Dondong Village participated in oyster mushroom cultivation, with each house having a registered number, ranging from number 01 to 30. The SMBG has also established an organizational structure that involves all sections, from production to field checking. Although they had faced obstacles in terms of funding, the SMBG managed to overcome these obstacles and continue the production of mushroom cultivation. By actively involving the community, they hope to increase the knowledge and skills of the Dondong Village community to start a profitable oyster mushroom cultivation business.

At the program implementation stage, SMBG showed good progress in the oyster mushroom cultivation business. The business has been running for five years and is growing, with support from both the government and the community. Assistance from the government in the form of production equipment aims to increase the group's capacity to

produce mushrooms more efficiently. The tools received, such as sterilization machines and mixers, support the production process, although there are constraints in their receipt that affect smooth operations. In this case, the government did not provide direct assistance at the expected time, so the SMBG was forced to use makeshift production equipment to meet market demand, both locally and outside the city.

As stated by Mr. S as the Patron of the SMBG, the process of applying for assistance from the government took quite a long time, even after seven years of business, the assistance was only received in 2021. This shows the lack of timeliness in the provision of assistance that is needed to support the smooth running of the mushroom cultivation business. Mr. M, Chairperson of the SMBG, also added that although assistance had been received, not all the tools provided were in accordance with the needs of the group. For example, assistance such as frying pans and stoves are more suitable for mushroom processing, not for the cultivation production process which requires more tools for sterilization and baglog processing.

On the other hand, the assistance received, although late, has had a positive impact on some group members. Some members began to be motivated to open their own mushroom cultivation business, as happened to Mrs. S who has owned a mushroom hut since two years ago. With the support of the SMBG, Ms. Suprapti was able to expand her business and now has a market for selling oyster mushrooms at local stalls and markets. Likewise with Mas Egi, who after joining the group and seeing the potential of this business, has now started to open his own mushroom hut with 3000 baglogs. He also feels the benefits of this business, because in addition to earning income, he is also increasingly interested in developing his business in the future.

The process of implementing this mushroom cultivation program as a whole showed positive developments despite being faced with various obstacles, especially related to the distribution and quality of production equipment from the government. However, the enthusiasm and perseverance of group members in developing the oyster mushroom cultivation business proves that with the right support, this business has bright prospects. The success of members in establishing their own businesses shows that the training and mentoring provided by SMBG has paid off. However, there is a need for improvement in the provision of assistance from the government to be more targeted and timely, so that the production process can run more smoothly and effectively.

Program evaluation aims to assess the extent to which the success of a program has been achieved, whether it is in accordance with the objectives set or not. In addition, evaluation is also important to identify obstacles that arise during program implementation, so that steps can be taken to overcome them. According to Mr. M, Chairperson of the Oyster Mushroom Cultivation Business Group,

"In the past, every month there was a meeting of members to exchange experiences, but now since covid-19 we only go through the group."

This statement shows a change in the evaluation mechanism that was previously carried out face-to-face. Mrs. S, a member of the SMBG, also said that sometimes they discuss problems encountered in mushroom cultivation through the group, such as,

"Yes, sometimes I vent with the group, how come the mushrooms are like this, how come they usually harvest bobote mandan abot, how come they don't, sometimes I vent."

Although regular meetings cannot be held directly due to the pandemic, evaluation continues through communication in online groups, such as WhatsApp, to ensure the smooth running of the program.

Before the pandemic, regular meetings conducted by the management and members of the SMBG were held every month. The purpose of this meeting is to evaluate the implementation of the oyster mushroom cultivation program, discuss the obstacles faced, and find solutions together. The evaluation is conducted in the form of discussions that

allow each member to share experiences and support each other in facing challenges. This evaluation process not only aims to monitor business progress, but also to strengthen cohesiveness among group members. Although face-to-face meetings are not possible at the moment due to the pandemic, online evaluations still provide space for members to share obstacles and solutions. This shows that despite the change in evaluation methods, the spirit of cohesiveness and support between members is maintained.

The termination stage is the process of formally breaking the relationship with the target community. At this stage, it is expected that the project will be terminated. The SMBG, which was formed independently by the community and Ansor Youth, did not involve any government assistants. The process of group formation, training, until the implementation of empowerment is carried out without assistance from external parties. Mr. S, as the Patron of SMBG, explained,

"We have no assistance mba, from the beginning the management was formed together with the youth, there was also the community, the more here the government came in just when it was running."

This shows that initially, the government was not involved in assisting the group, but only provided support after the business was running. The community and youth in Dondong village are the ones directly involved in this oyster mushroom cultivation activity, with moral support from the village.

Meanwhile, the support provided by the village regarding this group is more temporary. Mr. S, one of the administrators of the SMBG, stated,

"The village temporarily supports bridging activities so that there is training and then there is a sponsor from the bank and the dispermades have also held activities here socialization counseling and training."

Although the village government provides support in the form of training facilitation and socialization, there has never been formal assistance from outside parties. From the interviews conducted, it appears that the group was established independently without the intervention of a formal facilitator, and there was no formal disconnection between the group and related parties or the target community, because from the beginning the process has been running without a bound facilitator.

3.2 Purpose of empowerment

The main goal of community empowerment is to increase the capacity of weaker groups, as well as support community groups to be more independent and able to meet their life needs. According to Mardikanto, there are six main objectives in community empowerment. One of the objectives is institutional improvement, which includes improving the quality and effectiveness of organizations and developing business partnerships. In the context of empowerment implemented in Dondong Village, the institutions have experienced significant development. The SMBG has clear objectives and programs, as well as administrators and members who carry out their duties well. As stated by Mr. S, the Patron of the SMBG,

"In 2019, I was elected as the village head, so I decree the cultivation of oyster mushrooms under the name GJSM Sumber Maju, I decree the management, then we take it to the wider government, to the province and to the ministry."

This statement shows that there was an effort to establish a strong and clear institution at the beginning of group formation.

However, although the institutional structure of SMBG is well organized, there are still challenges related to the development of partnership networks. The lack of government

involvement in the empowerment process hinders the formation of a wider network that can help the group market their products. In an interview, Mas Lidi, Secretary of the SMBG, revealed, "Actually, the oyster mushroom cultivation group is also structurally the same as the gapoktan, its nature is to accommodate mushroom farmers and members of fostered partners in their respective homes as well as baglog production. For GJSM itself is a cultivation center, apart from baglog production every day, it is also a training place." However, in practice, oyster mushroom production is currently marketed directly by group members to markets and stalls, with each member selling their harvest to regular consumers independently. This shows that although the institution is well-established, the limited partnership network hinders the group's potential to grow further.

The business improvements carried out by the SMBG aim to improve the quality and feasibility of the oyster mushroom cultivation business managed by members. Each group member continues to try to improve the production process so that the mushroom harvest remains marketable and provides satisfaction to consumers. As stated by Mr. M, Chairman of the SMBG,

"Alhamdulillah, my machine is a little modern, the stirring has used a tool, the pressing has used a tool, the open has used a drim, it is more practical and has more contents. I have also used a temperature device to make it easier."

This statement shows that increased use of more modern and efficient equipment has been implemented to support a better production process. With more sophisticated equipment, oyster mushroom production can be done in larger quantities and with better quality, which in turn can increase marketability and customer satisfaction.

In addition to equipment improvements, SMBG also provides financial support for its members who want to start an oyster mushroom cultivation business by providing revolving capital loans. This loan is provided interest-free, aiming to facilitate members who want to build their own mushroom huts. Mr. S, Patron of the SMBG, explained,

"In GJSM there is a revolving fund from the first joint venture funds for that, for example, if A is given 500 tomorrow, it means that he has to return 500 baglogs for others, for those who are ready but not all. Yesterday given, for example, 1000 means that tomorrow you give 1000 to whom the revolving fund is. Now the funds are from the joint venture first, from the training fund, like a kind of GJSM cash, the cash is for what is for development."

With this system, members who get loans are expected to return the funds to support the sustainable development of the group's business. Through this strategy, SMBG seeks to improve the quality of its business and provide opportunities for its members to grow independently in the field of oyster mushroom cultivation.

The improvement in income felt by members of the SMBG occurred after they joined the oyster mushroom cultivation business. Before being involved in mushroom cultivation, members' income, as experienced by Mrs. S, was uncertain because they only relied on odd jobs, such as selling bananas and raising goats. The income earned was only around one million rupiah per month, with no stable daily income. However, after starting the mushroom business, Mrs. S began to feel a significant change.

"Every day I earn 40 ewu (40 thousand) 50 ewu (50 thousand), we sell every day, panene cepet cepet jadi duit," she said.

By having a mushroom farm, every morning Mrs. S can harvest and immediately sell the results to the market, which provides daily income. The initial capital of only around six hundred thousand rupiah for 1000 mushroom baglogs can generate around two million rupiah after three months of harvesting, which shows a significant economic improvement.

This improvement in income can also be seen in the comparison between the oyster mushroom business and other businesses such as chicken farming. Mr. M, Head of the SMBJ, explained,

"If I make one baglog it is only 600 rupiah if calculated, if it comes out at least half a kilo, it is valued at 5000 rupiah. This means that the capital of 600 rupiah becomes 5000 rupiah."

In mushroom cultivation, the risks faced are much lower than in chicken farming, which risks the lives of animals and the environment. The mushroom cultivation business does not require large capital, even with a small capital of around 100 thousand rupiah, someone can start this business. The profit generated from oyster mushroom cultivation is proven to provide a stable and sustainable income, and is able to fulfill the daily needs of its members. With the daily income from mushroom sales, members of the SMBG feel helped in improving their economic conditions.

Environmental damage that occurs is often caused by human activities carried out to fulfill the needs of life (Sukumaran, 2022). However, in the oyster mushroom cultivation business by the SMBG, there are positive steps taken to improve the environment. One of the innovations applied is the utilization of wood waste from factories as raw material for oyster mushroom cultivation (Doroški et al., 2022; Li & Xu, 2022; Zotti et al., 2025). Previously, the wood waste was often wasted, but with the mushroom cultivation business, this waste can now be used optimally and provide economic benefits (Cunha Zied et al., 2020; Mahari et al., 2020). Mr. S, Manager of the SMBG, explained that the utilization of this wood waste has helped improve the economy of the sawmill workers, because the raw materials they produce now have a value of rupiah. Mr. M, a sawyer in Dondong Village, also added that albiso wood, although not always needed, has better quality in supporting mushroom growth. With this activity, previously worthless wood waste can now be a source of income, helping to reduce waste and improve the economy of the surrounding community. The results show that oyster mushroom cultivation is not only economically beneficial, but also has a positive impact on the environment, making it cleaner and more useful.

Improvements in people's lives can be measured in various aspects such as health, education, income, and purchasing power (Wei et al., 2021). The efforts made by the SMBG, including institutional, business, income, and environmental improvements, are expected to bring positive changes to the lives of each family member and the community. As stated by Mrs. S, one of the group members, her mushroom cultivation business has helped her cover the cost of her child's education at a boarding school, which requires more money than usual. With the income from the mushroom business, Mrs. S felt that she was able to cover her child's education needs for three years. In addition, Mr. S, as Patron of the SMBG, revealed that the number of active members has decreased from 30 to 15, but each mushroom hut now has a greater production capacity, with an average of 3000 to 5000 baglogs. This increased capacity of the mushroom huts has certainly contributed to increased production and income for the members. Overall, the research shows that oyster mushroom cultivation not only increases income, but also improves the quality of life, especially in terms of education and family economic sustainability. This success proves that a well-managed small business can have a major impact on the welfare of members and the surrounding community.

The SMBG has had a positive impact on its management and members, which in turn has also affected the community as a whole. One of the changes that can be felt is the increasingly advanced mindset of the community, especially among the youth. As expressed by Mas Egi, a group member, with this business, he is no longer dependent on his parents and can buy the things he wants, such as t-shirts and shoes, as well as internet packages. This shows that oyster mushroom cultivation provides opportunities for individuals to be financially independent. Mr. S, the group administrator, added that the enthusiasm shown

by Mas Egi is expected to be an example to other youths, that they do not need to migrate to earn a living, but can be entrepreneurs in their own village.

However, while this venture provides great opportunities for the community, especially the village youth, the challenge of changing the mindset of the majority of the community still exists. Many youths still choose to look for jobs outside the city, and oyster mushroom cultivation is not yet a top choice. In addition, the business groups still face obstacles in establishing broader partnerships, which can support their business development. Many members are still moving on their own, without a strong network, so the process of achieving goals has not run optimally. The community also still has doubts about the success of this business, especially due to the lack of knowledge and skills in caring for oyster mushrooms, which makes them feel uncertain about getting involved.

4. Conclusions

Community economic empowerment in Dondong Village through oyster mushroom cultivation was implemented through seven stages, starting with the preparation stage. In the first stage, preparations were made by determining the implementing officer, Mr. S, who has experience in mushroom cultivation, and determining the cultivation location, which was temporarily entrusted to the homes of group members. The second stage was the assessment, where the community together with the officers identified the potential of oyster mushroom cultivation as a promising business. Given the abundance of raw materials in the village, namely sawn wood waste, as well as the easy cultivation process and affordable capital, it was finally agreed to make oyster mushroom cultivation the main choice for economic empowerment. In the third stage, planning was carried out with the formation of management and the preparation of a training proposal for oyster mushroom cultivation to improve community skills. The training was attended by the management and group members as well as several mushroom cultivation actors in the village. In the fourth stage, after the training, members started producing oyster mushrooms for the first time and introduced this business to the community as an easy economic opportunity. In the fifth stage, the implementation of the program went well, as evidenced by the increasing number of mushroom huts, which now number 15 units, as well as the assistance of production equipment from the government that can be used together by group members.

Although the stages of empowerment are going well, some obstacles still arise, especially at the evaluation and termination stages. At the evaluation stage, regular meetings are held every month to evaluate cultivation activities, share experiences, and find solutions to existing problems. However, at the termination stage, the group is not formally bound to the mentor, so no termination is done. One of the biggest challenges is the lack of government involvement in the empowerment process, especially in meeting the needs of production tools that support the oyster mushroom cultivation process. As a result, despite the economic improvement, the production of mushroom cultivation is slightly hampered. In an effort to overcome this obstacle, the management and group members reapplied for assistance to the government, hoping to get a baglog press machine and other production tools. Hopefully, with this assistance, the oyster mushroom production process can run more optimally, increasing the results obtained by the community.

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