

Community Empowerment through the Oyster Mushroom Cultivation Program in Kragilan Village

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Abstract: The community empowerment program through oyster mushroom cultivation in Kragilan Village was implemented as an effort to improve the skills, independence, and economic welfare of the community based on local potential. This program is part of the Community Service Lecture (KPM) activities of Al-Qur'an Science University. The method used is Participatory Action Research (PAR), which emphasizes the active involvement of the community in all stages of the activity, including planning, implementation, observation, and program evaluation. Data collection techniques were carried out through interviews, participatory observation, group discussions, and documentation. Community service activities included socialization, technical training in oyster mushroom cultivation (baglog production and shed maintenance), harvest assistance, and website-based financial management assistance. The results of the activities showed an increase in community knowledge and skills in oyster mushroom cultivation, increased participation and motivation for entrepreneurship, and a growing awareness of the importance of orderly and transparent business and financial management. In addition, this program had a social impact in the form of increased cooperation and collective responsibility, as well as an economic impact in the form of potential additional income for the community. This oyster mushroom cultivation program is considered effective as a means of community empowerment and has the potential to be developed sustainably with support from various parties.

Keywords: Community Empowerment, Oyster Mushroom Cultivation, Local Potential, Economic Independence, Community Service Lecture (KPM).

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INTRODUCTION

Sustainable social development places community empowerment as a key element in efforts to improve social and economic welfare, especially in rural areas. Community empowerment is carried out by increasing the capacity of individuals and groups to be able to actively participate in managing local potential and making decisions related to development in their environment. Through empowerment, communities are expected to reduce their dependence on external assistance, optimize their resources, and encourage more inclusive and equitable social change (Matonda *et al.*, 2026; Sangaji *et al.*, 2025; Alimi *et al.*, 2023). In this context, the community has a strategic role as an agent of change because it is considered to have high potential, creativity, and adaptability to local economic innovation.

One concrete form of community economic empowerment that has been widely developed is through productive businesses based on the creative economy and local potential (Sari, 2020). Oyster mushroom cultivation (*Pleurotus ostreatus*) is seen as an alternative business that has various advantages. According to experts and previous research, oyster mushrooms have relatively stable market demand, a cultivation process that is not complicated, a relatively short harvest time, and initial capital requirements that are not too large. In addition, the Directorate General of Horticulture of the Ministry of Agriculture of the Republic of Indonesia, in its 2019 guidelines for the development of edible mushrooms, explains that oyster mushroom cultivation has a short harvest time and broad opportunities for processed product development, thereby potentially increasing community income and economic independence. These characteristics make oyster mushroom cultivation suitable for development in rural areas, both as an additional source of income and as the main business for communities. Thus, oyster mushroom cultivation activities are considered capable of improving technical skills and promoting community economic independence because they can be managed independently by utilizing available local resources.

In the context of community empowerment, training and assistance in oyster mushroom cultivation not only focuses on improving technical skills, but also contributes to shaping an entrepreneurial attitude and awareness of the importance of diversifying productive businesses. Activities related to oyster mushroom cultivation training published in community service journals show that structured training can help communities understand the challenges of cultivation and improve their ability to deal with technical and economic constraints (Bambang *et al.*, 2023; Novita & Ariani, 2024). With continuous mentoring, the community becomes more prepared to manage oyster mushroom cultivation independently and with a focus on sustainability.

Kragilan Village, Gebang Subdistrict, Purworejo Regency, has considerable human resource potential, especially among the community. However, the limited number of productive jobs means that this potential has not been optimally utilized. This situation has prompted the need for empowerment programs that can open up new business opportunities while improving community skills. One of the efforts made is through an oyster mushroom cultivation program implemented in a Community Service Program (KKN). This program is designed to equip the community with practical skills, foster an entrepreneurial spirit, and encourage them to become productive entrepreneurs who can contribute to the village economy.

Based on this statement, this activity focuses on analyzing community empowerment through the implementation of oyster mushroom cultivation programs in Kragilan Village. This study aims to determine the implementation process of the program, the experiences of the community, and the impact on improving their skills and economic conditions. Using a descriptive qualitative approach, this study is expected to provide a comprehensive picture of

the role of oyster mushroom cultivation as a medium for sustainable community economic empowerment.

METHOD

Type and Approach of Activities

This activity is a community service activity carried out using the Participatory Action Research (PAR) approach. The PAR approach was chosen because it emphasizes the active involvement of the community as subjects and partners in all stages of the service activity, from planning, implementation, observation, to program evaluation (Cornish *et al.*, 2023). Through this approach, the community not only benefits from the program but also plays an active role in identifying problems, formulating solutions, implementing the program, and evaluating the success of the oyster mushroom cultivation program in Kragilan Village.

Location and Time of Activity

The research was conducted in Kragilan Village, Gebang District, Purworejo Regency. This location was chosen because it was the site of the Real Work Lecture (KKN) program, which promoted oyster mushroom cultivation as a flagship program for empowering rural youth. The research was conducted during the KPM implementation period, from January 5 to February 13, 2026.

Subjects & Informants of the Activity

The research subjects in this activity were those directly involved in the community empowerment program through oyster mushroom cultivation in Kragilan Village. Research informants were determined using purposive sampling, which is the deliberate selection of informants based on their involvement, role, and relevance to the implementation of the program. Research informants included village youth as the main participants in the program, PKK mothers, farmer groups, and other community groups involved or participating in oyster mushroom cultivation activities. In addition, research informants also included village officials and KPM students from the Al-Qur'an Science University (UNSIQ) as activity implementers.

Data Collection Techniques

1. Interviews: conducted in a semi-structured manner with village youth and related parties to gather information about the program implementation process, experiences, and the impact of the oyster mushroom cultivation program on the empowerment of village youth.
2. Observation: conducted directly to observe the implementation of oyster mushroom cultivation activities, from the training process, mentoring, mushroom care, to harvesting. The observation aims to obtain factual data on the participation and activities of rural youth during the program.
3. Documentation: Documentation is used as supporting data in the form of activity photos, field notes, program archives, and other documents relevant to the implementation of the oyster mushroom cultivation program.

Data Analysis Techniques

Data analysis is conducted qualitatively with the following stages:

1. Data Reduction, which is the process of sorting and simplifying data obtained from interviews, observations, and documentation to match the focus of the research.
2. Data Presentation, which is the compilation of data in the form of descriptive narratives to facilitate understanding of the research results.
3. Conclusion Drawing, which is the process of interpreting data to obtain conclusions about the process and impact of community empowerment through oyster mushroom cultivation programs.

RESULTS AND DISCUSSION

Result

a. Problem Identification and Program Socialization

Initial observations and discussions with the community and Kragilan Village officials showed that some members of the community did not yet have sustainable productive economic activities. Limited job opportunities and a lack of entrepreneurial skills were the main problems. The oyster mushroom cultivation training program received a positive response from the community, as demonstrated by the attendance and enthusiasm of participants in the initial activities.



Figure 1. Socialization of the Program to the community.

b. Mushroom Cultivation Training

Oyster mushroom cultivation training was conducted by delivering material and providing hands-on practice to the community. The material was delivered to provide a basic understanding of oyster mushroom cultivation, including an introduction to oyster mushrooms, baglog maintenance techniques, temperature and humidity control, and the harvesting process. After the material delivery, the activity continued with hands-on oyster mushroom cultivation practice so that the community could understand and apply the material that had been provided in a practical way. To support the implementation of these practical activities, the UNSIQ KPM team provided around 100 oyster mushroom baglogs to be used as a medium for practical activities by the community. The results of the training showed that the community was able to understand the basic stages of oyster mushroom cultivation and was actively involved in the practical care and maintenance of baglogs with the assistance of KPM students.



Figure 2. Oyster Mushroom Cultivation Training

c. Practical Cultivation Assistance

Assistance is provided continuously throughout the oyster mushroom cultivation process. Based on monitoring and observation results, the community showed enthusiasm and a high sense of responsibility in caring for the oyster mushroom baglogs, from routine watering,

regulating the humidity of the shed, to monitoring mushroom growth. Most of the baglogs showed good mushroom growth, with 80% of the mycelium already grown. This shows that the knowledge sharing from KPM students to the community was effective.



Figure 3. Direct practical assistance

d. Initial Response & Impact of the Program

The community's response to the oyster mushroom cultivation program has been positive and constructive. Based on interviews and observations, the community has gained increased knowledge and skills in oyster mushroom cultivation after participating in a series of training and mentoring activities. In addition, this program has succeeded in fostering community interest and motivation to become entrepreneurs, particularly in developing oyster mushroom cultivation businesses as an alternative source of income. The community has also begun to realize the importance of utilizing local potential as a step towards economic independence, so that this program not only provides short-term benefits, but also opens up opportunities for sustainable business development in the future.

e. Website-Based Harvest Management and Financial Management Assistance

Harvest management assistance is provided to help the community understand how to manage oyster mushroom cultivation yields to achieve optimal economic value. Assistance activities include introducing proper harvesting techniques, post-harvest handling, and managing harvests to keep them fresh and marketable. In addition, the community is also provided with a basic understanding of harvest recording and simple calculations of the potential income from oyster mushroom cultivation. To support transparency and neat business administration, the UNSIQ KPM team also created and provided assistance in the use of a simple financial management website, which is used to record income and expenses from oyster mushroom cultivation. The existence of this website helps the community understand the importance of structured and modern business financial management. The results of the assistance show that the community has begun to develop awareness and initial capabilities in managing harvests and business finances in a more orderly manner, as a step toward economic sustainability and independence.

Discussion

The community empowerment program through oyster mushroom cultivation in Kragilan Village shows that the application of a participatory training and mentoring approach is effective in increasing the knowledge, skills, and independence of the community. The participatory approach allows the community to be actively involved in all stages of the

activity, from socialization, technical training in cultivation, to follow-up mentoring, so that the empowerment process is not top-down (Chambers, 1997). This active involvement is an important indicator of the success of empowerment because the community is not only positioned as the recipient of the program, but as a subject that plays a direct role in the planning, implementation, and evaluation of activities (Lynn, 2006). This active participation encourages a sense of ownership, responsibility, and community commitment to the sustainability of the oyster mushroom cultivation program as an effort to improve local economic welfare (Mardikanto & Soebiato, 2017). These findings are in line with the concept of community empowerment that emphasizes capacity building, independence, and sustainability as the keys to the success of community service programs (Sumodiningrat, 2009).

Oyster mushroom cultivation has proven to be a suitable business option for rural areas because it does not require a large area of land, has a relatively short production cycle, and can be carried out with affordable capital requirements. These characteristics make oyster mushroom cultivation relevant to be developed as a business based on the local potential of rural communities (Directorate General of Horticulture, 2020). The results of the community service activities show that the community is able to master the basic skills of oyster mushroom cultivation, from preparing the growing medium, to maintenance, to harvesting. This achievement is in line with the main objective of community service, which is to improve the skills, independence, and capacity of the community through the optimal utilization of local resources (Mardikanto & Soebiato, 2017).

In addition to improving technical skills, this program also has a positive social and economic impact. The implementation of oyster mushroom cultivation activities in groups has strengthened cooperation, active participation, and a sense of collective responsibility among community members. The strengthening of these social aspects is one of the indicators of the success of community-based empowerment (Ife & Tesoriero, 2008). From an economic perspective, oyster mushroom harvests have begun to provide added value in the form of potential income for the community, both to meet daily needs and as initial capital for the development of independent oyster mushroom cultivation businesses. This shows that community service activities are not only oriented towards knowledge transfer, but also towards the creation of sustainable economic opportunities (Sumodiningrat, 2009).

Assistance in the areas of harvest management and website-based financial management adds value to this program. The community has begun to understand the importance of recording harvests, managing income and expenses, and financial transparency in running oyster mushroom cultivation businesses. The implementation of simple financial management has proven to help the community control business cash flow, thereby supporting the sustainability of productive economic activities (Kasmir, 2016). However, the sustainability of the program still requires further assistance, capital support, and expanded market access. Therefore, synergy between the community, village government, and relevant stakeholders is an important factor in ensuring that the oyster mushroom cultivation program can develop sustainably and provide long-term economic benefits for the community.

CONCLUSION

The community empowerment program through oyster mushroom cultivation in Kragilan Village shows that a participatory training and mentoring approach is effective in increasing community capacity, both in terms of knowledge, technical skills, and independence in managing productive businesses based on local potential. The active involvement of the community in all stages of the activity confirms their role as subjects and agents of change in the empowerment process. Oyster mushroom cultivation has proven to be an alternative

business that is suitable for rural conditions because it is easy to develop, has a relatively short harvest time, and requires affordable capital, thereby encouraging the growth of entrepreneurship, cooperation, and opportunities for increasing community income.

Assistance in the areas of harvest management and website-based financial management has made an important contribution to supporting business sustainability through more orderly and transparent management. Although this program has had a positive social and economic impact, its sustainability still requires further assistance, capital support, and expanded market access. Therefore, synergy between the community, village government, and relevant stakeholders is key to ensuring that the oyster mushroom cultivation program can develop sustainably and provide long-term economic benefits for the community of Kragilan Village.

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