



Empowerment Strategy for BUMDes-Assisted MSMEs through Management and Technology Innovation in Tanara Village

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Abstract

BUMDes Tanara, located in Tanara District, Serang Regency, Banten Province, has good potential for empowering MSMEs fostered by Tanara BUMDes. Tanara BUMDes has developed partnerships with home industries that are capable of competing with other home industry products in the vicinity of Tanara Village and with various MSME products. Home industry actors frequently encounter challenges such as the absence of technology in their production processes, business mentoring and socialization activities conducted by BUMDes or other entities, and marketing that is still performed manually and does not take advantage of e-commerce assistance or technology. This community service aims to provide knowledge and skills to BUMDes fostered partners in increasing the use of technology and business mentoring, especially in marketing, which the PKM team will carry out through socialization and salesmanship training. Therefore, the community service carried out by the PKM team of Bina Bangsa University, funded by DPPM Kemendikisaintek, for the Fiscal Year 2025, can provide solutions to Tanara BUMDes fostered partners. The method used was gradual outreach and counseling for BUMDes Tanara's fostered partners. The results of the outreach and counseling activities conducted by the Community Partnership Empowerment (PKM) team demonstrated that mentoring and outreach regarding science and high technology needs for the home industry players, fostered by BUMDes Tanara.

Keywords: BUMDes, Home industry, MSMEs, Science and technology

1. Introduction

In Indonesia, the province of Banten is one of the regions abundant in natural and cultural resources. One of the most notable aspects is the presence of the indigenous Baduy people, who are renowned for their knowledge of the local area and ability to maintain traditions. The extensive natural resources that Banten possesses, both in the agricultural and marine sectors, contribute to the region's high level of fertility and productivity. It encourages a significant number of residents to pursue livelihoods in the fields of agriculture and fishing. Tanara Village, in Tanara District, Serang Regency, Banten Province, is an example of a village demonstrating the active utilization of marine potential despite its location. In light of the village's advantageous location in proximity to the coast, particularly in the vicinity of Cangkir Island, most of its inhabitants are employed in the fishing industry. Tanara Village encompasses a total area of 670 hectares, as indicated by the "Badan Pusat Statistik" (BPS) or Statistic Indonesia of Serang Regency in 2021. It includes 300 hectares of swampland, 270 hectares of rice fields, and 1.7 hectares of peatland. From an administrative standpoint, Tanara Village is directly bordered by several other villages in the surrounding area, further strengthening its strategic position in developing the coastal regions and the potential for local economic growth. Pedaleman Village is located to the north, Kedaung Village is to the south, Sukamanah Village is to the west, and Jenggot Village is to the east. Tanara Village is not only strategically located, but it also borders several other villages. It takes approximately five minutes to travel approximately 2.7 kilometers to reach Tanara Village from the government center of Tanara District. The distance between the two locations is approximately five minutes.

Meanwhile, if departing from the Serang Regent's office, the distance is approximately 37.5 kilometers, with a travel time of roughly 55 minutes by private vehicle (Serang Regency Government, 2021). The village is inhabited by 2,887 people, consisting of 1,423 men and 1,464 women (BPS Serang, 2021). Most residents work as farmers and

fishermen, reflecting their dependence on the agricultural and fisheries sectors. In addition, some residents work as midwives, private employees, teachers, traders, and State Civil Apparatus (ASN), indicating the diversity of occupations in this village. The highway connecting Serang and Tangerang and the village's proximity to the district border have contributed to the rapid growth that Tanara Village has experienced. The village population is becoming more diverse due to the many people who have moved there. This diversity is made manifest not only in the population of the Tanara Village community, but also in its members' occupational backgrounds and the community's social life. Banten Province, a predominantly maritime province, boasts an abundance of marine resources, with fishermen catching a diverse range of shellfish, squid, shrimp, fish, and other animals.

Furthermore, Banten is an agricultural province, with much land still used for agriculture. With the abundant marine products, some residents process them into processed food products carried out by home industries, where homemakers carry out these activities to improve the family economy. Support from Tanara Village itself for the local community's economy is through partnerships under the auspices of the Village-Owned Enterprises (BUMDes) (Senjani, 2019). The processing of marine products, especially fish, is the main activity of BUMDes Tanara's fostered partners. The sea fish can be made into processed products such as crackers, fish balls, and meatballs.

During their initial visit, the 2025 Community Partnership Program (PKM) Team, a component of the Community-Based Empowerment Scheme, acquired critical information regarding BUMDes partners in Tanara Village. In 2025, the Ministry of Education, Culture, Research, and Technology (Kemendikisaintek) funded this activity through Bina Bangsa University. The results of the visit identified several problems faced by BUMDes partners in Tanara Village. The main problem was a lack of knowledge and skills in business management. Furthermore, home industries in this village have not yet utilized modern technology in their product production processes. When it comes to marketing and sales, the practices that are practiced are still conventional, specifically the practice of consigning products to nearby stalls. Consequently, there has not been a discernible rise in product sales. The results of this study suggest a need for a more intensive intervention and training program to enhance managerial capacity and the adoption of technology in businesses run by the community of Tanara Village. The BUMDes partners are expected to increase the production output of their home industries with the assistance of the PKM team from Bina Bangsa University. It is done with the intention of improving the economic situation of their families and other residents who are involved.

2. Literature Review

The empowerment strategy for micro, small, and medium enterprises (MSMEs) is extremely pertinent when considered in the context of village-owned businesses (BUMDes), which are extremely important to the growth of the local economy. Given that the micro, small, and medium-sized enterprise (MSME) sector accounts for more than sixty percent of Indonesia's gross domestic product (GDP) and employs approximately ninety-seven percent of the labor force, BUMDes has the potential to be a driving force in the process of strengthening the economic structure of the village (Ministry of Cooperatives and SMEs, 2021). Increasing access to capital through the "Kredit Usaha Rakyat" (KUR) program and working with non-bank financial institutions are some of the most essential strategies BUMDes can implement. To reach micro, small, and medium-sized enterprises (MSMEs) not yet served by formal banking, BUMDes can help MSMEs in villages develop their businesses and establish partnerships with microfinance-based fintechs (Bank Indonesia, 2020). Furthermore, Village-Owned Enterprises (BUMDes) can improve human resource capacity through entrepreneurship, digital marketing, and financial management training.

By providing appropriate training, BUMDes can help MSMEs enhance product quality and competitiveness in the global market (Ministry of Cooperatives and SMEs, 2021). By facilitating the entry of business actors into digital ecosystems, such as marketplaces and government e-catalogs, BUMDes can also accelerate the digitalization of MSMEs. It will increase the market access of products manufactured by micro, small, and medium-sized enterprises (MSMEs) in rural areas (OECD, 2022). It is also essential to fortify MSME institutions through BUMDes by establishing cooperatives and associations that broaden supply chains and distribution networks. With an integrated and collaborative strategy between BUMDes and various stakeholders, MSME empowerment can create local economic independence and sustainable national competitiveness. Good management and technological innovation are also crucial elements in the context of BUMDes. BUMDes must implement effective management to manage their businesses efficiently, utilizing modern technologies such as Point of Sales (POS) systems and e-commerce platforms. Therefore, BUMDes can assist MSMEs in enhancing operational efficiency and adapting promptly to evolving consumer demands. Consequently, the function of BUMDes is to improve managerial capacity and the adoption of contemporary technology, which must be consistently promoted as part of the national economic empowerment strategy. It will positively impact the growth and sustainability of the village-level MSMEs.

3. Materials and Methods

3.1. Materials

The PKM (*Pemberdayaan Kemitraan Masyarakat*) known as “Community Partnership Empowerment” team implemented the MSME empowerment strategy through management and technological innovation by conducting outreach, counseling, and business mentoring with home industry business partners under the guidance of BUMDes Tanara.

3.2. Methods

Methods in community service activities, empowerment programs based on community partnerships, and the Scope of Community Partnership funded by DPPM Kemendiktisaintek RI in 2025 BUMDes in Tanara Village, Tanara District, Serang Regency, using a chronological method (in stages) with activities consisting of three (3) stages, namely: Partner situation analysis stage, Preparation and IPTEK Transfer stage, and Implementation Stage, as well as the Evaluation and Program Sustainability stage, which will be carried out when the project is finished. This PKM activity will take place on July 1, 2025, and the first stage will consist of conducting a Partner Situation Analysis in Tanara Village.

1. Partner Situation Analysis Stage

The community-based empowerment scheme community service activity began with the preparation of the 2025 DPPM Kemendiktisaintek RI service grant recipient team to the location of the BUMDes-assisted home industry business partners in Tanara Village. In the context of receiving community service grant funding for the community-based empowerment scheme, the team surveyed the location to ensure the suitability of the problems conveyed by the BUMDes-assisted home industry partners. A field survey will be conducted regarding the alignment of the BUMDes program with the PKM team so that it can run well.

2. Stages of Preparation and Transfer of Science and Technology

In this community empowerment preparation activity, the objective is to engage in direct interactions with the partners of home industry actors fostered by BUMDes to understand better the challenges that MSMEs fostered by BUMDes Tanara encounter. The community service team that received the grant for the community-based empowerment scheme visited MSME actors, one of whom was a home industry that processed fish into crackers. Interviews and direct observations at the location of the processed cracker product manufacturing became a critical agenda to provide the service team with a direct understanding of the challenges faced by MSME actors in standardizing the shape and thickness of crackers made from basic sea fish ingredients, such as tuna or tembang fish.

3. Implementation stage

In the implementation activities that the community service team will carry out, the community-based service scheme is conducted by socializing appropriate technology machines in the form of cracker-cutting tools. In addition, skills training in product marketing is carried out online on the e-commerce platform, which will be guided by the community service team receiving the 2025 PKM DPPM grant funds. These skills, socialization, and training will be attended by BUMDes home industry partners, consisting of homemakers who make MSMEs a home industry processing sea fish into crackers, as well as other MSME products to improve the family economy.

4. Evaluation and Sustainable Programs

The next activity evaluates the BUMDes' fostered partners' use of appropriate technology. In their production activities, the question is whether partners are still experiencing difficulties using appropriate technology, namely, cracker cutting tools. Furthermore, ongoing program activities are carried out to monitor and evaluate online marketing through online sales applications. Skills training and outreach activities on appropriate technology provide insight and knowledge for BUMDes partners and MSMEs.

The implementation of community empowerment from the community empowerment-based service scheme grant funding program is not only an evaluation but also how partners receive the results in improving their skills and knowledge in producing and marketing products to enhance the economy of BUMDes partners in Tanara Village.

4. Results and Discussion

This community service implementation activity is funded by the DPPM Directorate and Community Service funds under the Ministry of Education, Culture, Research and Technology (Kemendikbudristek) for the 2025 budget year. It was signed on July 1, 2025, and ended in December 2025. It is located in Tanara Village, Tanara District, Serang Regency, Banten Province. The Partner Situation Analysis and Survey activities for BUMDes partners were carried out at the Tanara Village Office and continued with visits to BUMDes-assisted MSME partners.



Figure 1. Signing of the 2025 DPPM PKM Grant Program
Source: Documentation of LLPM Bina Bangsa University

Both the analysis of partners and the surveys of players in the MSME industry went off without a hitch and without any obstacles. The partners involved in home industries, one of which is processing sea fish into cracker products, responded enthusiastically. Residents of the area, who serve as partners, have expressed a strong desire to take part in the socialization of the community service program with the Community-Based Empowerment scheme as soon as possible. It was because they thought they could acquire knowledge about the application of appropriate technology and skills in product marketing. The following is the sequence of activities that will be carried out to carry out the Community Partnership Program (PKM):

4.1. Partner Situation Analysis Stage

Initially, the community service team assessed the circumstances in Tanara Village, Tanara District, Serang Regency, to determine the appropriate location for the implementation of community service activities. The PKM team conducted a field visit to the BUMDes-assisted home industry partners to observe the partners' challenges in producing and marketing processed MSME products, particularly those processed into crackers from sea fish. The Head of Tanara Village warmly welcomed the PKM Team during their visit to the location. The BUMDes-assisted partners were also highly enthusiastic about the presence of the PKM team, which would provide socialization and knowledge to partners as home industry actors, particularly in marine fish processing. The PKM team's initial analysis and socialization were conducted without incident, with the local village officials extending a cordial welcome and the BUMDes MSME partners in Tanara Village demonstrating enthusiasm.



Figure 2. The Field Visit and Partner Situation Analysis
Source: Documentation of the 2025 DPPM PKM team

4.2. Preparation Stage for Activity Implementation

The Community Empowerment and Development (PKM) team motivated the business owners regarding the upcoming outreach activities while they were visiting the home industry partners. This visit was conducted under the guidance of the Village-Owned Enterprise (BUMDes). This outreach aims to provide new information and skills regarding online marketing to improve families' economic well-being. In the activities described above, responsibilities will be assigned to each member who is successful in obtaining the 2025 DPPM Kemendikti Sainstek RI Community Service Grant in accordance with the proposals that have been approved, specifically:

- 1) Dedy Khaerudin provided training and mentoring and demonstrated the use of technology in managing BUMDes business units.
- 2) Counseling, Training and Mentoring in business management to optimize the role of BUMDes in empowering the community's economy by Ombi Romli.
- 3) According to Irma Nurmala Dewi, optimal socialization and counseling for sales management are still conventional and entrusted to local stalls, so sales are difficult to increase.



Figure 3. Discussion Regarding the Implementation of Socialization and Counseling for Home Industry Actors, BUMDes Partners

Source: Documentation of the 2025 DPPM PKM team

In addition to the aforementioned activities, the PKM team will conduct digitalization training to enhance the effectiveness of residents' and BUMDes fostered partners' income. Additionally, they will assist in effective marketing using the internet and social media. Community service activities for the community-based Empowerment scheme, which is funded by the DPPM of the Indonesian Ministry of Education and Technology in 2025, are conducted through a variety of activities, including the implementation of ongoing program evaluations and partner analysis.



Figure 4. PKM Team Visits One of BUMDes' Fostered Partners



Figure 5. Processed Products of Home Industries of BUMDes Partners
Source: Documentation of the 2025 DPPM PKM team

5. Conclusions

Activities involving community service, Empowerment through Community-Based Initiatives, SCHEME SCOPE OF COMMUNITY PARTNERSHIP EMPOWERMENT, funded by DPPM Kemendiktisaintek in 2025, which was implemented at BUMDes Tanara Village, where partners can process marine products in the form of fish, which are processed into processed Crackers and other processed food products. Through this community empowerment activity, partners for this service activity have the potential to improve the economy even further. BUMDes is vital as a forum for micro, small, and medium-sized home industry enterprises or MSMEs to strengthen the family economy.

They have a place to discuss and find solutions if they encounter problems in the business activities of MSMEs that are still operating on a home industry scale. It is because the role of BUMDes is to provide genuine support to micro, small, and medium-sized enterprises (MSMEs) in their pursuit of growth. Using a cracker cutting machine, the next objective of this PKM activity is to hold advanced training related to appropriate technology. It will ensure that the processed fish products are uniform, with none being excessively thick or thin. By utilizing the proper technology, one of the business actors that are partners of BUMDes can reduce the work they must do to transform processed sea fish into fish crackers.

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