

Development of a Coastal Community Entrepreneurial Ecosystem to Support Sustainable Local Economic Development

Yuli Budiati¹, Rohmini Indah Lestari², Indarto Indarto³, Adijati Utaminingsih⁴

Universitas Semarang, Semarang, Indonesia^{1,2,3,4}

yulibudiati@usm.ac.id¹, rohmini@usm.ac.id², indarto@usm.ac.id³, adijati@usm.ac.id⁴



Article History

Received on 02 August 2026

1st Revision on 09 August 2026

2nd Revision on 08 September 2026

Accepted on 09 September 2026

Abstract

Purpose: This community service program aimed to strengthen the entrepreneurial ecosystem of coastal communities by enhancing the capacity and competitiveness of Micro, Small, and Medium Enterprises (MSMEs) in Pidodokulon Village, Kendal Regency, Central Java.

Research Methodology: The program applied the Asset-Based Community Development (ABCD) approach and involved 25 MSME participants. The activities included training, discussion, and mentoring based on local assets and entrepreneurial potential. Evaluation used structured pre- and post-test questionnaires with a five-point Likert scale to assess participants' knowledge and understanding of marketing, product development, financial management and business networking.

Results: The evaluation indicated positive improvements across all the assessed indicators. The participants demonstrated a better understanding of fundamental digital marketing concepts, brand image development, and product differentiation. Their knowledge of product innovation and awareness of the importance of continuous product quality improvement also showed significant progress. In addition, competencies in financial recording and business networking improved following the implementation of the program, reflecting enhanced knowledge and practical capabilities among participants in various aspects of entrepreneurial development

Conclusions: The training and mentoring activities improved participants' entrepreneurial knowledge and understanding and provided an initial foundation for strengthening a more adaptive and collaborative coastal entrepreneurial ecosystem.

Limitations: The limited implementation period restricted the assessment of the long-term outcomes.

Contributions: This study offers a practical community empowerment model that integrates entrepreneurship, digital transformation, financial literacy, and business networking to support sustainable local economic development in Indonesia.

Keywords: Coastal Community, Entrepreneurial Ecosystem, MSMEs, Sustainable Local Economic Development

How to Cite: Budiati, Y., Lestari, R. I., Indarto, I., & Utaminingsih, A. (2026). Development of a Coastal Community Entrepreneurial Ecosystem to Support Sustainable Local Economic Development. *Yumary: Jurnal Pengabdian kepada Masyarakat*, 7(1), 117-132.

1. Introduction

Coastal areas are strategic and play an important role in local economic development because they have abundant resource potential, including capture fisheries, aquaculture, marine-processed products, and other economic activities ([Karani et al., 2025](#)). This characteristic makes the coastal area the primary basis for people's livelihoods and supports food security and regional economic growth ([Lauria et al., 2018](#)). Coastal communities play a central role in driving the local economy through fisheries, seafood processing businesses, and coastal MSMEs, which contribute to job creation and increased product value ([Daulay, 2025](#)). The potential of the coastal economy has not been fully realized owing to limited entrepreneurial capacity, limited use of technology, weak business management, and limited access to capital and markets ([Doktoralina et al., 2025](#)). The high dependence on the primary sector with low productivity also leads to the economic vulnerability of coastal communities to seasonal changes and price fluctuations ([Putri et al., 2025](#)). This condition reveals a gap between the great potential of coastal resources and the ability of communities to manage them sustainably and productively. Integrated efforts are needed to strengthen the role of coastal communities by developing entrepreneurship based on local potential, thereby increasing value, strengthening the local economy, and encouraging sustainable coastal development.

Pidodokulon Village is one of the 18 villages in the Patebon District, Kendal Regency, Central Java, with the following boundaries: the Java Sea to the north, Korowelang Anyar of the Cepiring District to the south, Margorejo Village of the Cepiring District to the west, and Pidodowetan Village of the Patebon District to the east. Pidodokulon Village has an area of 532.2 ha. The residents of the area earn their livelihood as farmers, traders, and fishermen. Coastal communities in Pidodokulon Village, Patebon District, Kendal Regency, Central Java, face a range of complex social and economic issues. The dependence on primary sectors, such as fisheries and pond farming, remains high. However, the added value of these products is relatively low and often fails to provide significant economic stability for local communities ([Susanti et al., 2025](#)). The community also has limited access to business capital, seafood processing technology, marketing networks, and sustainable business assistance, hampering the development of value-added businesses ([Asrum & Morkoyunlu, 2025](#); [Hikmah & Safari, 2025](#)). The community's entrepreneurial capacity and managerial literacy remain relatively low, so business actors have difficulty planning and developing businesses that are adaptive to market and environmental changes ([Gray et al., 2014](#)). Literacy is needed to strengthen entrepreneurial capacity and local potential-based business management to sustainably improve the welfare of coastal communities.

Pidodokulon Village was chosen as the object and location of this study because this area has many MSMEs that process marine products and have been operating for a long time. The potential of marine resources and derivative businesses has not been fully realized because of managerial limitations, innovation constraints, and limited market access. MSMEs in Pidodokulon Village face various obstacles, including reliance on conventional marketing, limited digital strategies, low-value-added product innovation, and non-systematic financial management. In addition, limited business networks hinder market expansion and sustainable competitiveness. Obstacles and other problems for small and informal businesses are also caused by the difficulty of accessing information and productive resources, such as capital and technology, which results in a limited ability for small businesses to develop ([Gyan et al., 2017](#)).

Previous MSME empowerment programs have generally focused on specific interventions such as digital marketing training, product diversification, financial literacy, and business mentoring. However, these interventions are often implemented in isolation and may not adequately address the interconnected challenges faced by coastal MSMEs. The service gap addressed in this program is the need for an integrated approach that strengthens marketing capabilities, product innovation, financial management, and business networking skills. The program's distinctive feature is the development of an entrepreneurial ecosystem perspective that integrates these four capacity-building dimensions through training and mentoring while emphasizing the utilization of local resources, community participation, and collaboration among relevant stakeholders. Therefore, the program is designed not

only to improve individual entrepreneurial knowledge but also to lay the foundation for a more collaborative, adaptive, and sustainable entrepreneurial ecosystem in coastal community.

The development of an entrepreneurial ecosystem is a strategic step toward strengthening the local economy and increasing the independence of coastal communities ([Ierapetritis, 2025](#)). Entrepreneurship is an instrument for creating added value, expanding employment, and increasing community competitiveness ([Praag & Versloot, 2007](#)). An ecosystem-strengthening approach is needed that involves collaboration among business actors, governments, academics, financial institutions, and communities ([Ierapetritis, 2025](#)). This synergy is important for supporting access to capital, innovation, managerial assistance, and market expansion. Entrepreneurship based on local potential encourages inclusive and sustainable development by leveraging local resources ([Prokopenko et al., 2024](#)) and strengthens the long-term economic resilience of coastal areas ([Zhu et al., 2021](#)).

The entrepreneurial ecosystem perspective provides a conceptual basis for understanding that MSME development cannot rely solely on improvements in individual entrepreneurial capacity. A sustainable entrepreneurial ecosystem requires the interaction of multiple elements, including entrepreneurial capabilities, innovation, access to markets, financial management, business networks and collaboration among relevant stakeholders. These elements are interconnected; therefore, limitations in one area may constrain the effectiveness and sustainability of other entrepreneurial activities in the same area. In the context of coastal MSMEs, strengthening the entrepreneurial ecosystem requires an integrated intervention that addresses both internal business capabilities and external relationships that support business development.

The Asset-Based Community Development (ABCD) approach complements this ecosystem perspective by emphasizing the identification and mobilization of existing community assets, local resources, and community participation ([Chupp et al., 2023](#)). Rather than positioning coastal communities solely as beneficiaries with deficiencies, ABCD recognizes local MSMEs, marine resources, community knowledge, and social relationships as potential assets for sustainable development. Based on this conceptual framework, the intervention components were derived from the main challenges and available assets identified in the Pidodokulon Village. Digital marketing, branding, and packaging were selected to strengthen market access and product differentiation; product diversification was intended to increase value creation from local resources; financial recording was introduced to improve business management and decision making; and business networking was developed to strengthen collaboration, access to resources, and market opportunities. Thus, the selected interventions were designed as interconnected components to support the development of a more adaptive, collaborative, and sustainable coastal entrepreneurial ecosystem.

Through community service activities, knowledge transfer and capacity building will be carried out to increase the entrepreneurial capacity of coastal communities through training and mentoring that strengthen managerial competence, product innovation, and marketing strategies, enabling coastal MSME actors to be more adaptive and competitive and supporting regional development inclusively and sustainably. This community service activity will implement a structured, systematic, and sustainable mentoring program to achieve real capacity building and provide a solution through knowledge transfer, institutional strengthening, and business networks to build a resilient, adaptive, and sustainable coastal entrepreneurial ecosystem.

Based on the identified challenges and the program's conceptual framework, the training and mentoring activities were expected to improve participants' knowledge and practical understanding of key entrepreneurial competencies. Specifically, the program was expected to enhance participants' understanding and capacity in digital marketing, branding and packaging, product diversification and development, simple financial recording, and business networking. Therefore, the effectiveness of the program was evaluated by comparing the participants' conditions before and after the intervention across these targeted areas.

Through community service activities, knowledge transfer and capacity building will be carried out to increase the entrepreneurial capacity of coastal communities through training and mentoring that strengthen managerial competence, product innovation, and marketing strategies, enabling coastal MSME actors to be more adaptive and competitive and supporting regional development inclusively and sustainably. This community service activity will implement a structured, systematic, and sustainable mentoring program to achieve real capacity building and provide a solution through knowledge transfer, institutional strengthening, and business networks to build a resilient, adaptive, and sustainable coastal entrepreneurial ecosystem.

Based on the identified challenges and the program's conceptual framework, the training and mentoring activities were expected to improve the participants' knowledge and practical understanding of key entrepreneurial competencies. Specifically, the program was expected to enhance participants' understanding and capacity in digital marketing, branding and packaging, product diversification and development, simple financial recording, and business networking. The program's effectiveness was evaluated by comparing the participants' conditions before and after the intervention across these targeted areas.

MSMEs in Pidodokulon Village face various challenges in improving business sustainability. Some of the problems experienced by MSME managers in Pidodokulon Village include marketing, product innovation, financial management, and business network development. In terms of marketing, MSME actors still rely on conventional methods with limited market reach and have not fully utilized digital marketing, branding, packaging design, or effective marketing strategies. In terms of products, innovation remains low because the products are dominated by simple processed items with minimal added value and are less able to keep pace with changes in market demand. In addition, business financial management has not been carried out systematically, characterized by the absence of good financial records, separation of business and household finances, and adequate cash-flow planning. This condition is exacerbated by limited networks and business partnerships that hinder market expansion, access to financing, and sustainable improvement in MSME competitiveness.

Previous MSME empowerment programs have commonly focused on individual interventions such as digital marketing training, product innovation, financial literacy, and business mentoring. Although these interventions may improve specific entrepreneurial capacities, they are often implemented separately. They may not adequately address the interdependence among internal business capabilities, local resources, market access, and collaborative relationships. In the context of coastal communities, MSME development requires a more integrated approach because entrepreneurial challenges are closely connected to local resource utilization and the availability of supporting networks ([Doktoralina et al., 2025](#)). Therefore, this program addresses the need for a locally grounded empowerment model that integrates multiple entrepreneurial capacities within the coastal entrepreneurial ecosystem.

The novelty of this program lies not only in combining digital marketing, product diversification, financial management, and business networking activities. Instead, the program develops an ABCD-based and locally adapted entrepreneurial ecosystem model in which these components are positioned as interconnected ecosystem functions. The model was adapted to the local context of Pidodokulon Village by identifying existing community assets, local business characteristics, and specific entrepreneurial constraints as the basis for designing an intervention. Digital marketing, branding, and packaging were designed to strengthen market access and product differentiation; product diversification was intended to promote value creation from local resources; financial management was intended to strengthen internal business capacity; and networking was developed to facilitate access to information, resources, and markets, as well as collaboration. The program's measurable contribution is reflected in the descriptive pre- and post-program assessments of participants' knowledge and understanding across these interconnected areas. Therefore, the contribution of this program extends beyond implementing separate training activities by offering an initial, locally adapted framework for integrating MSME capacity building and entrepreneurial ecosystem development in coastal communities.

2. Research Methodology

The approach used to achieve this goal is Asset-Based Community Development (ABCD) ([Harrison et al., 2019](#)). In the concept of empowerment, the people targeted for empowerment are no longer referred to as weak groups or lacking potential. Society is seen as a group with the potential to overcome various problems, including those related to improving living standards and socioeconomic conditions ([Vogel et al., 2021](#)). In a community group, empowerment is more about the lack of access to maximize their potential and the limited-resource system that can facilitate the community's utilization of their potential.

The intervention design was developed as an ABCD-based, locally adapted entrepreneurial ecosystem model. The selection of intervention components was based on identifying local assets, business characteristics, and the interconnected challenges experienced by participating MSMEs. Accordingly, marketing, product development, financial management, and networking were addressed as complementary dimensions intended to strengthen both internal business capabilities and external relationships within the local entrepreneurial ecosystem.

The intervention design was developed as an ABCD-based, locally adapted entrepreneurial ecosystem model. The selection of intervention components was based on identifying local assets, business characteristics, and the interconnected challenges experienced by participating MSMEs. Accordingly, marketing, product development, financial management, and networking were addressed as complementary dimensions intended to strengthen both internal business capabilities and external relationships within the local entrepreneurial ecosystem.

The community service program was conducted in Pidodokulon Village, Patebon, Kendal Regency, Central Java, Indonesia. The program involved 25 MSME participants engaged in various small-scale businesses, particularly those related to local and coastal resources. Participants were selected based on their active involvement in MSME activities and willingness to participate in the training and mentoring program.

Participants were selected purposively based on several criteria: (1) actively operating a micro-, small-, or medium-sized enterprise in the target village; (2) experiencing challenges related to marketing, product development, financial management, or business networking; and (3) willingness to participate in the training and evaluation activities.

The stages of community service program activities for MSME members in Pidodokulon Village, Patebon District, Kendal Regency include. The preparation stage will be conducted in March 2026, with pre-survey activities to identify the specific problems faced by the partners. The results of the identification are then used to form an implementation team, ensuring that the designed solutions align with the partners' needs and conditions. Furthermore, the team prepares an activity proposal that includes a systematic and comprehensive problem-solving plan. To ensure smooth program implementation, intensive coordination is conducted with partners to assess their readiness to implement activities. The preparation stage ends with the provision of all necessary facilities and infrastructure, enabling the program to be implemented effectively and in accordance with the planned.

The program was implemented through a combination of training, discussion, and mentoring activities conducted over seven sessions on April 30, 2026. Each session focuses on specific entrepreneurial competencies. The training materials covered: (1) digital marketing, branding, and packaging development; (2) product diversification and quality improvement; (3) simple financial recording and cash flow planning; and (4) business networking and the development of MSME communities. Mentoring activities were conducted through direct interaction between the facilitators and participants to guide the latter in applying the training materials to their respective businesses.

The Discussion and Evaluation stage consisted of questions and answers between the presenter and participants. The discussion was conducted to help participants better understand the material

presented and the problems their partners were facing. Program effectiveness was evaluated using a structured questionnaire administered before and after training and mentoring activities. The questionnaire assessed the participants' knowledge and understanding across four main areas: marketing, product development, financial management, and business networking. The indicators included understanding digital marketing, brand image and product differentiation, packaging development, product innovation and quality improvement, financial recording, and business networking.

Each indicator was assessed using a Likert scale or a percentage-based assessment (1–5). The same indicators were used in both the pre- and post-program assessments to enable comparison of changes in participants' responses. The questionnaire results were converted into percentage scores for each of the indicators.

The questionnaire was developed based on the program's objectives and intervention components and reviewed by the implementation team for content relevance and clarity before administration. Because the evaluation was designed as a program-based descriptive assessment with a limited number of participants, formal statistical testing of the questionnaire's validity and reliability was not conducted. This limitation should be considered when interpreting the evaluation results.

The evaluation data were descriptively analyzed by comparing the participants' responses before and after the program. The scores for each evaluation indicator were summarized and presented as percentages. Changes in the pre- and post-program results were interpreted descriptively to identify improvements in the participants' knowledge and understanding of the targeted entrepreneurial competencies. No inferential statistical tests were conducted; therefore, the findings are reported as descriptive changes rather than statistically significant differences.

3. Results and Discussion

The community service activity to develop the coastal community entrepreneurial ecosystem to support a sustainable local economy in Pidodokulon Village, Patebon District, Kendal Regency, Central Java, will be held on April 30, 2026. The community service activities were as follows:

The first part is knowledge dissemination, training, and assistance in digital marketing, branding, and packaging. The initial success of community service programs in the creative economy is measured by the extent to which Micro, Small, and Medium Enterprises (MSMEs) can absorb the basic concept of digital marketing (digital marketing). Digital literacy is not just the technical ability to use devices but also a deep understanding of how the digital ecosystem can reduce operational costs, accelerate communication with consumers, and provide accurate market data ([Pfister & Lehmann, 2023](#)). When MSME actors understand these strategic benefits, there will be a paradigm shift (mindset shift) from conventional passive marketing methods to digital strategies that are more proactive and adaptive to the times ([Rizkita et al., 2025](#)). Amidst intense market competition, good product quality is no longer sufficient to ensure business sustainability. MSME actors must understand the importance of brand image and product differentiation strategies ([Rua & Santos, 2022](#)). Brand image is the mental representation and reputation of a business in the eyes of consumers ([Jukić, 2023](#)). Simultaneously, differentiation is an effort to create unique values or characteristics that distinguish partner products from competitors' products ([Budiati et al., 2022](#)). Through a mature understanding of the concept of differentiation, both in terms of taste, product story (storytelling), and other added value, MSMEs can get out of the price war and build stronger customer loyalty ([Patty & Turukay, 2025](#)). Packaging is the first physical point of contact between consumers and products. One of the concrete outputs of the MSME mentoring program is the ownership of new packaging designs that are not only aesthetically appealing (visually appealing) but also informative ([Maulana et al., 2025](#)). Attractive packaging serves as a "silent salesperson" that can attract consumers' attention on the sales shelf or digital storefront ([Lydekaityte & Tambo, 2020](#)). Conversely, informative aspects, including a clear logo, product composition, expiration date, business contact details, and business legality, are crucial for enhancing product credibility and consumers' sense of security when making purchases ([Ankiel et al., 2025](#)).

Part Two: The importance of product diversification and quality improvement. Product diversification is a crucial adaptive strategy for Micro, Small, and Medium Enterprises (MSMEs) to avoid dependence on a single product ([Budiati et al., 2025](#)). By developing new products or variants through diversification, MSMEs can expand their target markets and minimize the risk of losses due to market saturation ([Lestari et al., 2023](#)). Community service focused on this aspect encourages partners to utilize local raw materials or leftover production (by-products) to become a new commodity with high economic value ([Santoso et al., 2026](#)), so that it can capture dynamic consumer opportunities and preferences ([Bohlmann et al., 2013](#)). Product innovation cannot occur without increasing the capacity of human resources (HR) of business actors. Measurable training and direct mentoring have proven effective in boosting the knowledge and skills of MSME actors ([Susilawati et al., 2025](#)). This competency improvement includes understanding modern processing techniques, optimizing production flow efficiency, and using the appropriate technology. When MSME actors have strong innovation skills, they are no longer just market followers but can create new product trends in their environment ([Indrayani & Arman, 2025](#)). A crucial aspect of the MSME production cycle is consistent maintenance and improvement of product quality. Product quality is judged not only by the final result but also by the standardization of hygienic production processes, selection of high-quality raw materials, and strict application of quality control ([Wang et al., 2023](#)). Community service programs are directed toward instilling awareness of the importance of sustainable quality improvement. With maintained and standardized quality, MSME products will have a longer shelf life, consistent taste or function, and meet expectations and safety regulations ([Riyanti et al., 2026](#)). The result of successful diversification, innovation, and improvements in product quality is the creation of MSME products that are highly competitive in the market ([Sundari et al., 2024](#)). The competitiveness of a product is determined by its ability to offer a competitive advantage in terms of unique characteristics, price efficiency, and added value not offered by competitors' products. In the current era of free markets and digitalization, local products with strong competitiveness will more easily penetrate broader market networks, increase sales volume, and ensure long-term economic sustainability for business actors ([Berti & Mulligan, 2016](#)).

Part Three: Simple financial recording and cash flow planning training. A classic problem often faced by MSMEs is the lack of separation between personal and business funds, as well as neglecting to document every cash flow in and out. The ability to regularly record income and expense transactions is a foundational skill in financial management ([Susanto et al., 2025](#)). Through disciplined recording, business actors can monitor daily liquidity in real terms and avoid hidden fund leakages. This community service training, which focuses on the habit of recording transactions, has been shown to increase financial sensitivity (financial awareness) among partners regarding the operational performance of their businesses ([Das & Maji, 2026](#)). Cash books, both physical (manual) and digital application-based, serve as vital instruments for maintaining legitimate business financial records. The ownership of simple financial records is concrete evidence of the transformation of governance in MSMEs from previously speculative to more measurable forms ([Padi et al., 2025](#)). The availability of this cash book makes it easier for business actors to organize financial data by transaction categories. In the modern era, the adoption of simple smartphone-based accounting applications (such as Cash Book) is considered highly effective for accelerating bookkeeping adoption among micro-business actors because of their practicality and ease of access ([Ikhtiari et al., 2024](#)). Many MSME actors think their business is profitable because they see the sales turnover without considering the accumulated operational and depreciation costs in detail. Therefore, participants' ability to calculate total income, identify all cost components (both fixed and variable), and determine net profit is a very important indicator of financial education success ([Thacker et al., 2020](#)). A proper understanding of this simple profit-and-loss formula helps MSME actors rationally determine the ideal selling price of products and evaluate the efficiency of the ongoing production process ([Dewi et al., 2021](#)). The long-term goal of the financial assistance program is to establish an orderly, neat, and systematic bookkeeping ecosystem within MSMEs. Systematic recording is not only useful for an organization's internal business decision-making (such as expansion plans or asset purchases). However, it is also a major prerequisite for external (bankable) financing ([Madurapperuma et al., 2016](#)). When MSMEs present structured financial statements, the credibility of their businesses in the eyes of financial institutions

and investors increases ([Zuhroh et al., 2025](#)). This can broaden access to formal capital assistance for scaling up business operations

Part Four: Literacy on the importance of building MSME communities/partnerships. Strengthening MSMEs capacity cannot be achieved if business actors act individually (in isolation). A crucial first step in community service interventions is to instill an understanding of the tactical steps involved in forming a community or business group ([Parrangan et al., 2025](#)). [insert here] The success of the entrepreneurial process is heavily influenced by the community's ability to provide resources, build networks, create supportive institutions, and connect local actors to the external environment. The community enables entrepreneurial success ([Hindle, 2010](#)). Once a basic understanding is established, intensive communication channels become the lifeblood of business networks. The establishment of discussion forums both through regular face-to-face meetings and through digital groups such as WhatsApp or Telegram plays an important role in knowledge sharing and business experience ([Kabir, 2026](#)). This communication forum breaks down sectoral ego barriers among business actors, enabling the exchange of information on fluctuations in raw material prices, the latest regulations, market opportunities, and the rapid and collective resolution of production obstacles ([Suharsono et al., 2024](#)). The ability to build networks and relationships is crucial for creating competitive advantage and enhancing corporate performance. Networking enables companies to access and mobilize resources they lack through partners, thereby creating value despite resource constraints. Networking capabilities also drive innovation and improve performance ([Farida & Nuryakin, 2021](#)). Through this active collaboration, limited resources (resource scarcity), which are often wrapped around micro businesses, can be resolved, ultimately increasing collective competitiveness and maintaining the sustainability of the regional economy in an integrative manner ([Suvianti et al., 2025](#)).

The fifth part is the discussion and evaluation of the activity itself. The discussion and evaluation stage was conducted at the end of the activity to assess the effectiveness of the implementation of the Community Service program. This activity involves the implementation team and partners discussing the results achieved, identifying obstacles encountered during implementation, and obtaining input on the program's benefits for partners. The results of the evaluation showed that the activities were conducted in accordance with the planned objectives, improved participants' knowledge and skills, and served as the basis for preparing recommendations to improve and sustain the service program in the next period. The evaluation is presented in Figures 1–4, based on the responses of 25 participants who completed both the pre- and post-program assessments. The results are presented descriptively as the percentage of participants who demonstrated an understanding of each targeted competency. The denominator for each percentage was the total number of participants who completed the corresponding assessments. The evaluation focused primarily on changes in participants' knowledge and understanding across the targeted areas rather than on statistically tested differences. Therefore, the observed changes should be interpreted as descriptive improvements resulting from the program and not as evidence of statistically significant effects. Each evaluation indicator was assessed using a five-point Likert scale ranging from strongly disagree to strongly agree. The responses were subsequently converted into percentage scores for comparison between the pre- and post-program assessments.

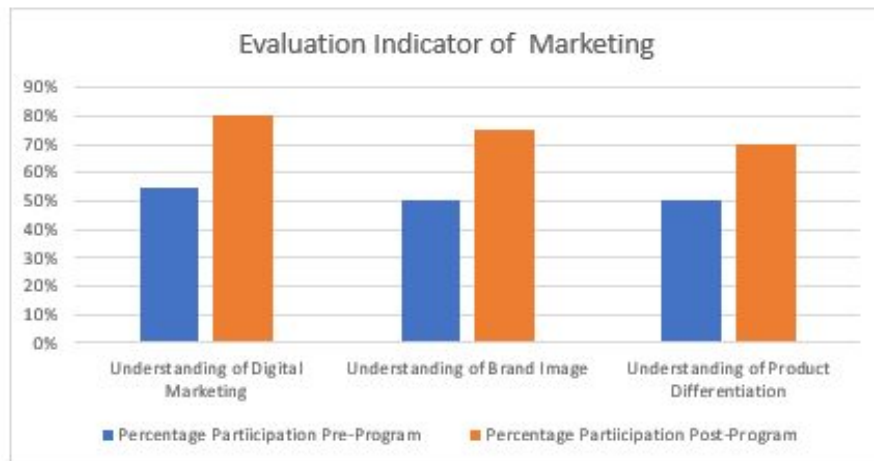


Figure 1. Pre- and Post-Program Evaluation of Participants' Understanding of Marketing Competencies

The results of the descriptive evaluation in Figure 1 show a higher level of participants' understanding of marketing after the program across all measured indicators. The understanding of basic digital marketing concepts increased from 55% to 80%. The aspects of brand image and product differentiation increased from 50% to 75%, while knowledge of attractive and informative packaging design increased from 50% to 70%. These findings align with the program's goal of strengthening entrepreneurial knowledge and marketing capabilities. These results indicate that training and mentoring activities provide participants with broader insights into marketing concepts relevant to the development of their MSMEs. However, because the evaluation was based on a descriptive comparison between pre- and post-program conditions without inferential statistical tests, the observed improvement could not be interpreted as evidence of a statistically significant impact or causal relationship attributable to the program.

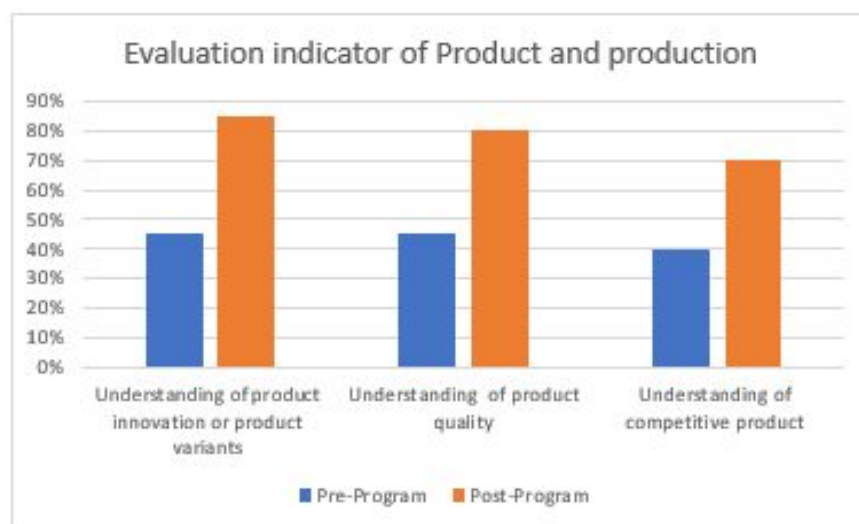


Figure 2. Pre- and Post-Program Evaluation of Participants' Understanding of Product Development and Production

The post-program evaluation also showed a higher understanding of product innovation and product quality improvement (Figure 2). The understanding of the importance of product innovation or diversification increased from 45% to 85%, and awareness of the importance of continuous product quality improvement increased from 45% to 80%. The evaluation related to product development with market competitiveness has also increased from 40% to 70%. This result is directly related to the

program objective of strengthening product development capabilities by utilizing local resources and developing value-added products for the local economy. From an entrepreneurial ecosystem perspective, product innovation is an important component because it supports value creation and enables MSMEs to respond to evolving market opportunities. Nevertheless, the findings represent descriptive changes in participants' reported understanding and cannot independently establish a causal relationship between the intervention and subsequent changes in actual business performance.

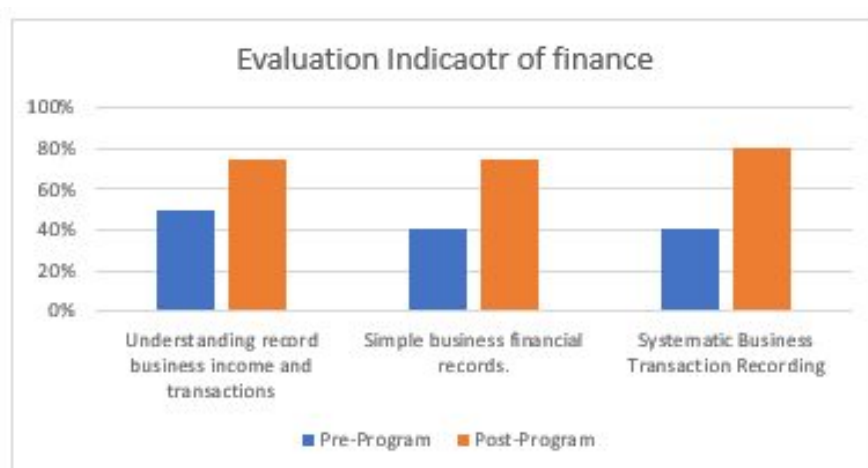


Figure 3. Pre- and Post-Program Evaluation of Participants' Understanding of Financial Management

Figure 3 presents the results indicating an improvement in participants' understanding of simple financial record-keeping and financial management following the program. The participants' ability to record income and expense transactions increased from 50% to 75%, their ability to compile simple financial records increased from 40% to 75%, and their ability to record transactions systematically improved from 40% to 80%. These findings support the objective of strengthening the basic managerial capabilities of the participating MSMEs. An enhanced understanding of financial record-keeping can serve as a foundation for business monitoring and more systematic decision-making. However, this evaluation did not directly measure changes in actual financial performance or the long-term application of financial recordkeeping practices. Therefore, these results should be interpreted as changes in the participants' understanding rather than as evidence of improved business performance.

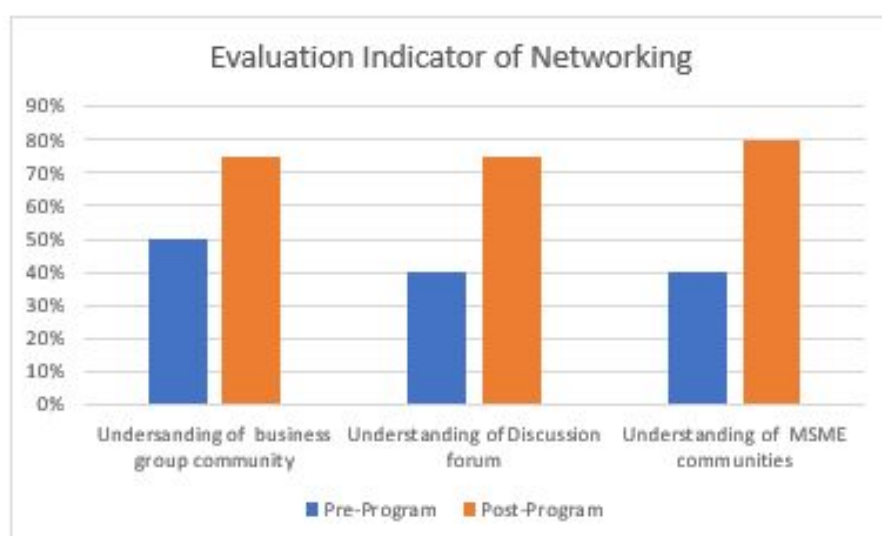


Figure 4. Pre- and Post-Program Evaluation of Participants' Understanding of Business Networking

Based on Figure 4, the post-program evaluation showed a higher level of participant understanding of business networking and collaboration, increasing from 0–50% to 75–80%. This finding corresponds

with the program objective of encouraging stronger connections among MSMEs and relevant stakeholders. From an entrepreneurial ecosystem perspective, networking is important because access to information, markets, resources, and opportunities for collaboration is often facilitated by actors' relationships. However, the current evaluation measures participants' understanding of networking rather than the actual formation or long-term effectiveness of business networks. Therefore, the findings should be interpreted as an initial indication of increased awareness and readiness for collaboration in the field.

Overall, the descriptive pre- and post-program evaluation results were consistent with the expected changes outlined in the program objectives. The observed improvements in marketing, product development, financial management, and networking suggest that the integrated training and mentoring activities supported participants' knowledge and understanding of key entrepreneurial competencies. These four components were intentionally selected because they represent the interconnected elements required to strengthen the entrepreneurial ecosystem of coastal MSMEs. Marketing and product development support value creation and market access, financial management strengthens internal business management, and networking facilitates access to external resources and collaborations.

However, the findings should be interpreted cautiously. The evaluation was based on descriptive comparisons of pre- and post-program responses and did not include inferential statistical testing or a comparison group. Therefore, the results demonstrate improvements following program participation but do not establish a causal impact. Future community service programs may strengthen the evaluation design by using validated instruments, larger participant samples, and follow-up assessments to examine the sustainability of changes in knowledge and business practices. Figure 5 shows that all participants actively participated in community service activities, and they also displayed the products of their businesses (Figure 6).



Figure 5. Community service Activity



Figure 6. MSME production

The program's contribution extends beyond the delivery of individual training activities. The descriptive evaluation results demonstrate the feasibility of integrating marketing, product

development, financial management, and networking as interconnected dimensions within the ABCD-based coastal entrepreneurial ecosystem model. The observed improvements in the participants' knowledge and understanding of the targeted areas provide measurable short-term evidence of the program's capacity-building contribution. However, these findings should be interpreted cautiously because the evaluation focused on descriptive changes in knowledge and understanding and did not measure long-term business performance or the sustainability of entrepreneurial ecosystems.

4. Conclusions

4.1 Conclusion

The community service program contributed to strengthening the entrepreneurial knowledge and understanding of MSME participants in the village. The descriptive pre- and post-program evaluation showed improvements across the targeted areas, including product innovation and diversification, digital marketing, branding and packaging, financial management, and business networking. These findings indicate that the training and mentoring activities supported the program's capacity-building objectives. However, given the short implementation period and limited measurement of actual business practices and performance, the results should not be interpreted as evidence that a resilient or sustainable entrepreneurial ecosystem has already been established. Instead, the program provided an initial foundation for developing a more adaptive and collaborative entrepreneurial ecosystem that may support sustainable local economic development.

4.2 Research Limitations

However, the implementation of these activities still has some limitations. First, the relatively short mentoring period leads to the implementation of materials that cannot be optimally monitored in daily business practice. Second, the number of participants remains limited to specific MSME actors; therefore, the program's impact has not reached all coastal communities. Third, the evaluation is more focused on increasing participants' knowledge and understanding; therefore, it cannot measure real changes in business performance, such as increased turnover, market expansion, or long-term revenue growth. In addition, assistance with the use of digital technology and the formation of business networks still require further support for sustainable implementation.

4.3 Suggestions and Directions for Future Research

Future community service programs should extend the mentoring duration and include periodic follow-ups to assess whether participants apply the knowledge acquired in their business practices. Future evaluations should also assess long-term outcomes, including changes in product development, market access, financial management practices, productivity, competitiveness, and business performance. Future programs should explore the effectiveness of continuous mentoring and collaboration among universities, local governments, financial institutions, and business communities in supporting the development of coastal MSME entrepreneurial ecosystems.

Acknowledgements

The authors gratefully acknowledge the Government and community of Pidodokulon Village, Patebon District, Kendal Regency, particularly the participating MSME actors, for their cooperation and active involvement throughout the program. The authors also sincerely thank Universitas Semarang and all members of the community service team for their valuable support and contributions to the successful implementation of this program.

References

- Ankiel, M., Halagarda, M., Piekara, A., Sady, S., Zmijowska, P., Kucia, M., Popek, S., Pacholek, B., & Jefma, B. (2025). Role of certifications and labelling in ensuring authenticity and sustainability of fermented milk products. *Sustainability*, 17(18), 1-22. <https://doi.org/10.3390/su17188398>
- Asrum, A. H., & Morkoyunlu, A. (2025). The shellfish industry in Indonesia : Economic significance sustainability challenges and communityu empowrment. *International Journal of Engineering Technologies and Management Research*, 12(5), 30-39. <https://doi.org/10.29121/ijetmr.v12.i5.2025.1594>

- Berti, G., & Mulligan, C. (2016). Competitiveness of small farms and innovative food supply chains : The Role of food hubs in creating sustainable regional and local food systems. *Sustainability*, 8(7), 616. <https://doi.org/10.3390/su8070616>
- Bohlmann, J. D., Spanjol, J., Qualls, W. J., & Rosa, J. A. (2013). The interplay of customer and product innovation dynamics : An exploratory study. *Journal Product Innovation Management*, 30(2), 228-244. <https://doi.org/10.1111/j.1540-5885.2012.00962.x>
- Budiati, Y., Larasati, D., & Widowati, A. I. (2025). Increasing production capacity through diversification of mangrove processing. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, 10(1). <https://doi.org/10.26905/abdimas.v10i1.14045>
- Budiati, Y., Untoro, W., Wahyudi, L., & Harsono, M. (2022). The mediating effect of strategy on entrepreneurial orientation and performance. *Journal of Research in Marketing and Entrepreneurship*, 24(1), 1-22. <https://doi.org/10.1108/JRME-05-2020-0048>
- Chupp, M., Hirsch, J., & Malone, M. (2023). Integrating asset-based community development and community-based research for social change : A beginning. *Gateways:International Journal of CommunityResearch and Engagement*, 16(2), 1-12. <https://doi.org/10.5130/ijcre.v16i2.8968>
- Das, S., & Maji, S. K. (2026). Effect of financial literacy and financial confidence on the financial discipline of farmers : Evidence from West Bengal , India. *Management Matters*, 22(2), 159-172. <https://doi.org/10.1108/MANM-09-2024-0051>
- Daulay, M. S. M. (2025). Potret UMKM Desa Pantai Labu : Analisis Tantangan, Strategi dan Kontribusi Ekonomi Lokal. *Smart Goals: Jurnal Bisnis Digital dan Manajemen*, 1(2), 61-80. <https://doi.org/10.47467/elmal.v5i7.4160>
- Dewi, P. E. D. M., Devi, S., & Riesty, P. (2021). Analysis of cost of sold and production costs on company profit. Paper presented at Proceedings of the 6th International Conference on Tourism, Economics, Accounting, Management, and Social Science (TEAMS 2021), 197(Teams), 388–391.
- Doktoralina, C. M., Al, M., Abdullah, F., & Desty, W. (2025). Empowering coastal SMEs : A digital transformation model to enhance competitiveness and sustainability. *Calitatea Quality Access to Success*, 26(206), 422-427. <https://doi.org/10.47750/QAS/26>
- Farida, N., & Nuryakin, N. (2021). Network capability , relational capability and Indonesian manufacturing SME performance : An empirical analysis of the mediating role of product innovation. *Engineering Management in Production and Services*, 13(1), 41-52. <https://doi.org/10.2478/emj-2021-0003>
- Gray, B. J., Duncan, S., Kirkwood, J., & Walton, S. (2014). Encouraging sustainable entrepreneurship in climate-threatened communities: A Samoan case study. *Entrepreneurship & Regional Development*, 26(5-6), 401-430. <https://doi.org/10.1080/08985626.2014.922622>
- Gyan, A., Brahmana, R., & Abdul, B. (2017). Diversification strategy, efficiency, and firm performance: Insight from emerging market. *Research in International Business and Finance*, 42, 1107-1114. <https://doi.org/10.1016/j.ribaf.2017.07.045>
- Harrison, R., Blickem, C., Lamb, J., Kirk, S., & Vassilev, I. (2019). Asset-based community development : Narratives , practice , and conditions of possibility A qualitative study with community practitioners. *SAGE Open*, 9(1), 1-11. <https://doi.org/10.1177/2158244018823081>
- Hikmah, N., & Safari, M. (2025). Pemberdayaan UMKM perikanan melalui pelatihan manajemen rantai pasok dan digital marketing di Desa Sekotong Lombok Barat. *Teras Jurnal Pengabdian Masyarakat Sosial Budaya*, 2(1), 9-15. <https://doi.org/10.71094/teras.v2i1.210>
- Hindle, K. (2010). How community context affects entrepreneurial process : A diagnostic framework. *Entrepreneurship & Regional Development : An International Journal*, 22(7-8), 37-41. <https://doi.org/10.1080/08985626.2010.522057>
- Ierapetritis, D. G. (2025). Beyond the shoreline : Rethinking coastal futures of fisheries- based communities through blue entrepreneurial ecosystems in Greece. *Sustainability*, 17(7289), 1-37. <https://doi.org/10.3390/su17167289>

- Ikhtiyari, K., Muslim, M., & Nurfadila, N. (2024). Improving MSME accounting financial recording skills based on android applications. *Advances in Community Services Research*, 2(2), 62-73. <https://doi.org/10.60079/acsrv2i2.137>
- Indrayani, S., & Arman, A. (2025). The role of innovation mediation on the influence of digital marketing capabilities on MSME marketing performance in Makassar. *Asian Journal of Management Entrepreneurship and Social Science*, 05(03), 920-940. <https://doi.org/10.63922/ajmesc.v5i03.1417>
- Jukić, D. (2023). Beyond brand image : A neuromarketing perspective. *Communication Today*, 14(1), 22-38. <https://doi.org/10.34135/communicationtoday>
- Kabir, S. (2026). Traditional and digital networking strategies and its impact on business sustainability for foreign entrepreneurs in Poland. *Journal of Innovation and Entrepreneurship*, 15(21), 1-39. <https://doi.org/10.1186/s13731-026-00630-z>
- Karani, P., Failler, P., Gilau, A. M., & Ndendé, M. (2025). Africa blue economy strategies integrated in panning to achieve sustainable development at national and Regional Economic Communities (RECs). *Journal of Sustainability Research*, 4(3), 1-35. <https://doi.org/10.20900/jsr20220011>
- Lauria, V., Das, I., Hazra, S., Cazcarro, I., Arto, I., Kay, S., Ofori-danson, P., Ahmed, M., Hossain, M. A. R., Barange, M., & Antonio, J. (2018). Importance of fi sheries for food security across three climate change vulnerable deltas. *Science of the Total Environment*, 640-641, 1566-1577. <https://doi.org/10.1016/j.scitotenv.2018.06.011>
- Lestari, R. I., Budiati, Y., Indarto, I., & Larasati, D. (2023). Pemberdayaan kelompok wanita tani sebagai implementasi SDGs Desa untuk meningkatkan ekonomi keluarga. *Journal of Dedicators Community*, 7(2), 165-178. <https://doi.org/10.34001/jdc.v7i2.3628>
- Lydekaityte, J., & Tambo, T. (2020). Smart packaging : Definitions , models and packaging as an intermediary between digital and physical product management. *The International Review of Retail, Distribution and Consumer Research*, 00(00), 1-34. <https://doi.org/10.1080/09593969.2020.1724555>
- Madurapperuma, M. W., Thilakerathne, P. M. C., & Manawadu, I. N. (2016). Accounting record keeping practices in Small and Medium Sized Enterprise' s (SME's) in Sri Lanka. *Journal of Finance and Accounting*, 4(4), 188-193. <https://doi.org/10.11648/j.jfa.20160404.14>
- Maulana, A., Novalia, N., Rosa, A., & Putri, M. A. (2025). Optimalisasi nilai produk melalui manajemen usaha , kemasan , dan labeling Desa Burai. *Yumary: Jurnal Pengabdian Kepada Masyarakat*, 6(2), 385-395. <https://doi.org/10.35912/yumary.v6i2.3819>
- Padi, A., Musah, A., Blay, M. W., & Okyere, D. O. (2025). Small and Medium Scale Enterprise (SME) owner financial literacy , entrepreneurial competencies and financial performance : The role of corporate governance. *Future Business Journal*, 11(160), 1-18. <https://doi.org/10.1186/s43093-025-00585-9>
- Parrangan, B., Iek, M., & Harizrianda, Y. (2025). Partnership strategy patterns of micro, small, and medium enterprises in increasing the productivity of crocodile leather artisans in Mimika Regency. *Global Academy of Business Studies*, 1(4), 297-310. <https://doi.org/10.35912/gabs.v1i4.3581>
- Patty, M., & Turukay, E. (2025). Analysis of the application of Blue Ocean Strategy (BOS) in the digital transformation of MSMEs : A literature study to increase the buying interest of generation Z in Ambon City. *International Journal of Management and Business Intelligence*, 3(4), 289-302. <https://doi.org/10.59890/ijmbi.v3i4.120>
- Pfister, P., & Lehmann, C. (2023). Measuring the success of digital transformation in German SMEs. *Journal of Small Business Strategy*, 33(1), 1-19. <https://doi.org/10.15640/jsbs>
- Praag, M. v., & Versloot, P. H. (2007). What is the value of entrepreneurship ? A review of recent research. *Small Business Economics*, 29, 351-382. <https://doi.org/10.1007/s11187-007-9074-x>
- Prokopenko, O., Chechel, A., Koldovskiy, A., & Kldiashvili, M. (2024). Innovative models of green entrepreneurship: Social impact on sustainable development of local economies. *Economic Ecology Socium*, 8(1), 89-111. <https://doi.org/10.61954/2616-7107/2024>

- Putri, R. T., Ismail, I., Mulyadi, F., Purnama, S. M., Wardani, M. P., Sciences, P., District, G., City, K., Science, M., & City, K. (2025). A systematic review on economic vulnerability and sustainability of small-scale fisheries in madura. *Egyptian Journal of Aquatic Biology & Fisheries*, 29(4), 283-301. <https://doi.org/10.21608/ejabf.2025.437797>
- Riyanti, L. S., Dellyana, D., Wahyuni, S., Kartika, K., & Basori, A. (2026). Selective openness as a sustainable strategy : How culinary MSMEs organize collaboration across the value chain in an emerging economy. *Sustainability*, 18(5), 1-34. <https://doi.org/10.3390/su18052572>
- Rizkita, M. A., Winarno, A., Suwono, H., & Malek, N. A. N. (2025). Integrating cultural adaptation in digital marketing strategies : Enhancing competitiveness and sustainability in MSMEs of Java , Indonesia. <https://doi.org/10.1016/j>
- Rua, O. L., & Santos, C. (2022). Linking brand and competitive advantage : The mediating effect of positioning and market orientation. *European Research on Management and Business Economics*, 28(2), 1-10. <https://doi.org/10.1016/j.iedeen.2021.100194>
- Santoso, B., Pranata, B., Akbar, O., Ichsan, N., Nurmaseli, T., & Yanuriati, A. (2026). Strengthening community economic capacity in sei selincah through gambier jelly candy innovation. *Jurnal Nusantara Mengabdi*, 5(2), 15-24. <https://doi.org/10.35912/jnm.v5i2.6140>
- Suharsono, S., Nugroho, A. A., & Harrison, A. (2024). Peran dan tantangan Forum Komunikasi (Forkom) Pokdarwis dalam pengembangan desa wisata berbasis komunitas dan modal sosial. *PROSIDING COMICOS 2024 Ekosistem Pembangunan Berkelanjutan : Interelasi Dalam Merespons Perubahan*, 117–134. Retrieved from https://www.researchgate.net/publication/391778322_ProSIDING_COMICOS_2024
- Sundari, E., Dianto, I., Hamsal, H., & Hanafi, I. (2024). The effect of product diversification on purchasing decisions at Mandau Bakery Kota Duri Store. *Global Academy of Multidisciplinary Studies (GAMS)*, 1(1), 47-8. <https://doi.org/10.35912/gams.v1i1.3374>
- Susanti, R., Badriyah, J., & R, M. (2025). Pemberdayaan masyarakat pesisir melalui diversifikasi produk. *Joong Ki : Jurnal Pengabdian Masyarakat*, 5(1), 151-159. <https://doi.org/10.56799/joongki.v5i1.11888>
- Susanto, A., Nurmala, N., & Damayanti, D. (2025). Excel-based financial reporting for grocery stores in Rajabasa. *Jurnal Akuntansi, Keuangan, dan Manajemen*, 7(1), 113-134. <https://doi.org/10.35912/jakman.v7i1.5017>
- Susilawati, L., Rachmawati, I., Hestiana, S., Komariah, K., & Juliansyah, A. (2025). Pendampingan labelling berbahasa Inggris pada produk UMKM di Ranting Selabatu cabang Cikole kota Sukabmi. *Yumary: Jurnal Pengabdian Kepada Masyarakat*, 5(3), 449-456. <https://doi.org/10.35912/yumary.v5i3.3327>
- Suvianti, E., Aprilia, T. D., Cahyati, N. A., & Saputri, E. (2025). Dinamika struktur pasar dan tantangan daya saing Usaha Mikro Kecil dan Menengah (UMKM) di Indonesia. *Jurnal Ekonomi dan Bisnis*, 13(2), 209-218. <https://doi.org/10.58406/jeb.v13i2.2116>
- Thacker, P. G., Witte, R. J., & Menaker, R. (2020). Key financial indicators and ratios: How to use them for success in your practice. *Clinical Imaging*, 64, 80-84. <https://doi.org/10.1016/j.clinimag.2020.03.015>
- Vogel, J., Steinberger, J. K., Neill, D. W. O., & Lamb, W. F. (2021). Socio-economic conditions for satisfying human needs at low energy use : An international analysis of social provisioning. *Global Environmental Change*, 69, 102287. <https://doi.org/10.1016/j.gloenvcha.2021.102287>
- Wang, H., Chen, Y., Wang, L., Liu, Q., Yang, S., & Wang, C. (2023). Advancing herbal medicine : Enhancing product quality and safety through robust quality control practices. *Frontier in Pharmacology*, 14, 1-16. <https://doi.org/10.3389/fphar.2023.1265178>
- Zhu, W., Li, B., & Han, Z. (2021). Synergistic analysis of the resilience and efficiency of China's marine economy and the role of resilience policy. *Marine Policy*, 132, 104703. <https://doi.org/10.1016/j.marpol.2021.104703>

Zuhroh, D., Jermias, J., Langgeng, S., Nurjanah, E., & Fahlevi, M. (2025). The impact of sharing economy platforms , management accounting systems , and demographic factors on financial performance : Exploring the role of formal and informal education in MSMEs. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(1), 100447. <https://doi.org/10.1016/j.joitmc.2024.100447>