

Development of Smoked Fish Business in Penatarsewu Village as an Effort to Empower the Community Economy

Diana Balqis¹, Lailul Mursyidah²

^{1,2} Muhammadiyah University of Sidoarjo, Indonesia



DOI : <https://doi.org/10.61796/icoss.v2i2.383>



Sections Info

Article history:

Submitted: April 15, 2025

Final Revised: May 01, 2025

Accepted: May 11, 2025

Published: May 24, 2025

Keywords:

Community empowerment

Smoked fish

Local economy

Local economic empowerment

Production technology

innovation

ABSTRACT

Objective: The research aims to analyze the development of smoked fish businesses as a strategy for strengthening local economic capacity and independence. **Method:** A qualitative descriptive case study was conducted using in-depth interviews, participant observation, and documentation involving business owners, village officials, and community leaders. **Results:** The findings indicate that smoked fish businesses significantly contribute to increasing income, fostering independence in production and distribution, and generating local employment opportunities. Innovations such as modern smoking technology and packaging training have enhanced product competitiveness and extended shelf life, while digital marketing initiatives have begun to expand market reach, although access to training and support remains uneven among business owners. **Novelty:** This research highlights the integration of local potential with technological innovation and policy support as a sustainable model of community empowerment, demonstrating that the synergy of communities, academics, and private actors can transform traditional businesses into resilient local economic drivers rooted in local wisdom.

INTRODUCTION

Penatarsewu Village has significant local economic potential in the fisheries sector, particularly in the smoked fish processing business. This smoked fish business thrives due to the village's favorable geographic location and the availability of freshwater fish resources such as tilapia. However, this potential has not been fully utilized due to limitations in technology and sustainable business management. This makes developing a smoked fish business crucial for community economic empowerment. According to research [1], developing environmentally friendly fish smoking can improve product quality and the competitiveness of Penatarsewu Village businesses. Therefore, more systematic development efforts are needed to ensure the community's economic independence.

Table 1. GRDP of Sidoarjo Regency at Current Prices (ADHB) 2020-2024

Year	DRB (billion rupiah)	Development Information
2020	157.487,37	The beginning of economic recovery after COVID-19
2021	176.121,23	There is an increase in consumption and production
2022	196.492,11	Significant growth, the MSME sector is starting to grow

Year	DRB (billion rupiah)	Development Information
2023	219.756,45	Local business expansion and the fisheries sector are starting to stabilize
2024*	240.770,80	Estimates based on growth trends

*2024 is a projected figure based on the annual increase trend. Source: BPS Sidoarjo Regency (2024)

Table 1 shows the consistent annual economic growth trend in Sidoarjo Regency. However, not all small business sectors, such as smoked fish, are directly impacted by this growth. Therefore, local businesses in Penatarsewu Village need to be empowered to grow through innovation and mentoring, as well as strengthening the local business ecosystem based on village potential.

At a macro level, Sidoarjo Regency's Gross Regional Domestic Product (GRDP) data demonstrates regional economic growth, which can serve as an indicator of potential business development, including in the fisheries sector. Based on data from the Sidoarjo Regency Statistics Agency [2], GRDP at current prices (ADHB) increased from IDR 157,487.37 billion in 2020 to IDR 240,770.80 billion in 2024. This increase indicates market opportunities and continued growth in public consumption. However, this growth has not yet been fully realized by smoked fish entrepreneurs in villages due to challenges in production and marketing. Empirical data shows that before modernization, communities still relied on traditional smoking methods, which resulted in low product quality and health risks for workers. Furthermore, marketing of smoked fish products was still conventional and limited to local areas without the use of digital marketing. Lack of access to a wider market and the absence of an effective promotional strategy resulted in suboptimal production results in increasing business income. This reinforces the urgency of community empowerment through increasing the capacity of local businesses, both in terms of processing technology and digital marketing strategies, so that smoked fish businesses can make a real contribution to regional economic development.

Several developments have been made to improve the quality and productivity of the smoked fish business in Penatarsewu Village. One significant step is the innovation of an environmentally friendly smoking device initiated by a community service team from Muhammadiyah University of Sidoarjo. This innovation resulted in a closed stainless steel smoker designed with a temperature and smoke flow control system, resulting in a more hygienic, faster, and more consistent smoking process. According to [3], the use of this device not only reduces direct smoke exposure for workers, who are mostly elderly, but also improves the visual and taste quality of the fish due to a more even drying process and stable temperature. This device overcomes the shortcomings of

the old method, which relied on open burning with fluctuating temperatures and produced products that were sometimes too hard and short-lasting.

Furthermore, data from [4] shows that the "Kami Usaha" MSME owned by Mr. Jumain one of the main players in the smoked tilapia business in Pelataran Hamlet has a production capacity of 35–50 kg of smoked tilapia per day, with an additional 30–35 kg of fish sold fresh. However, previously smoked fish products only had a shelf life of approximately three days without special packaging, so distribution was limited to traditional markets around Tanggulangin District. To address this, the community service program also provided training in product quality management, packaging with a vacuum sealer, and diversification of processed products. Assistance with tools such as a vacuum sealer allows products to be packaged airtight, extending shelf life and increasing product sales value. This program also encouraged entrepreneurs to explore modern markets and wider distribution.

The main problem hampering the smoked fish business in Penatarsewu Village is the use of traditional smoking methods, which are inefficient and have negative health impacts. The main problem hampering the smoked fish business in Penatarsewu Village is the use of traditional smoking methods, which are inefficient and have negative health impacts. Empirical data shows that traditional smoking methods do have serious health impacts. According to research by [5], of 63 smoked fish workers in Koto Mesjid Village, 54% were exposed to heavy smoke (≥ 8 hours per day), and 66.7% experienced severe respiratory complaints. Bivariate analysis results confirmed these findings with a p-value of 0.002, indicating a significant relationship between smoke exposure and respiratory complaints. In fact, the Prevalence Odds Ratio (POR) value reached 7.138, meaning that workers with high smoke exposure had a seven-fold greater risk of experiencing respiratory problems compared to those with light exposure. This shows that the use of environmentally unfriendly fumigation technology not only reduces production efficiency, but also endangers workers' health.

Technological innovation in smoked fish processing has become an essential solution to improve product quality while safeguarding workers' health. [3] developed a more environmentally friendly fish-smoking device that enhances product quality and reduces excessive smoke exposure. This is consistent with the findings of [5], who demonstrated that workers in smoked fish production centers face a high risk of respiratory problems due to traditional smoking methods. Therefore, the application of innovative technology not only supports production efficiency but also provides health protection for MSME actors.

[6] Further emphasized that technical factors such as air circulation and the type of fuel used influence the quality of smoked fish products. Meanwhile, [7] showed that technological innovations can enhance the organoleptic quality of smoked fish, making it more competitive in the market. Thus, technological innovation is not only part of the modernization of household industries but also a strategic step in protecting workers' health and ensuring the sustainability of the smoked fish business.

This indicates that the use of environmentally unfriendly smoking technology not only reduces production efficiency but also directly impacts worker health. Furthermore, business owners' lack of knowledge about proper processing and marketing techniques hinders business development. This gap creates a gap between village potential and the community's still-poor economic conditions. In line with research by [5], traditional smoking methods cause excessive smoke exposure, leading to health problems for workers. Therefore, innovation in smoking equipment is urgently needed. The use of modern equipment is expected to increase productivity while maintaining worker health.

Before the modernization of smoking, people still relied on conventional methods using open stoves and wood fuel.



Figure 1. Conventional Smoking (Researcher, 2025)

Besides production, marketing is also a serious challenge faced by smoked fish entrepreneurs. To date, product marketing has been limited to local areas and has not utilized digital media. The lack of a marketing strategy hinders market expansion and wider product recognition. The implementation of digital marketing has become an essential strategy for fisheries-based MSMEs in expanding market access. [8] asserted that digital marketing strategies can reach a wider range of consumers, reduce geographical barriers, and enhance the competitiveness of local products in global markets. This aligns with the perspective of [9], who highlighted the importance of digital literacy for MSMEs in utilizing technology as a marketing tool. Moreover, digitalization in marketing fosters more intensive interactions between producers and consumers, thereby strengthening trust in the products.

Furthermore, the study by [10] revealed that promotions through social media platforms, such as Instagram and Facebook, are effective in building the branding of village-based fisheries products. These findings reinforce the research of [9], which emphasized that digital marketing can help fisheries MSMEs comply with health and food safety standards. Thus, digital marketing is not merely a promotional strategy but also a tool of empowerment that enables fisheries MSMEs to penetrate wider markets at relatively low costs.

According to [10], implementing digital marketing is highly effective in increasing the reach and sales of fishery products in villages. Therefore, entrepreneurs need to be

provided with digital-based marketing training to strengthen their economic capabilities. Synergy between processing and marketing is key to empowering rural communities economically.

Community empowerment through micro, small, and medium enterprises (MSMEs) serves as a vital foundation for strengthening village economies. [4] demonstrated that the development of MSMEs based on local potential, such as the smoked tilapia business in Sidoarjo, can create employment opportunities while enhancing the competitiveness of traditional products. In line with this, [11] emphasized that the optimization of knowledge, understanding, innovation, and digitalization constitutes the main pillars in building independent and creative villages. Through this approach, MSMEs function not only as economic drivers but also as agents of social transformation that foster community self-reliance.

The Central Bureau of Statistics of Sidoarjo Regency [2] reported that the contribution of MSMEs to regional GDP has become increasingly significant, particularly in the processed food sector. This data illustrates that the success of MSME empowerment has a direct impact on sustainable local economic growth. According to [1], the success of community empowerment is also determined by collaboration between the government, universities, and business actors in creating a supportive ecosystem. Thus, MSMEs stand as the economic pillars of villages that not only endure but also thrive in the face of global dynamics.

Previous research has demonstrated various efforts in developing smoked fish businesses, encompassing technical, management, and marketing aspects. One such study is by [4], which focused on strengthening smoked fish MSMEs in Penatarsewu Village through training in processing and business management. These findings indicate that mentoring and training are crucial factors in developing community businesses. However, most research is limited to a single aspect and does not fully integrate all components of business development. Therefore, research that holistically combines aspects of production, marketing, technology, and community empowerment is needed to ensure the sustainability and long-term impact of the smoked fish business on the village economy.

In analyzing the development of this smoked fish business, the study employed the theory of community empowerment based on local potential. This theory emphasizes the utilization of existing resources within the community to create economic independence. According to [12], community empowerment based on local potential encompasses strengthening individual capacity, access to information and technology, and active participation in economic activities. This theory is relevant to examining the dynamics of the smoked fish business in Penatarsewu Village, which relies on local resources. This approach encourages the community to recognize and develop its potential. The analysis indicators include community involvement, production capacity, access to technology, and market networks.

One of the main indicators in developing a smoked fish business is the availability of efficient and environmentally friendly processing technology. The use of modern

smoking equipment can improve product quality, speed up production times, and reduce operational costs. The efficiency of the smoking process is greatly influenced by factors such as temperature, time, and smoke circulation within the smoking machine [6]. Therefore, mastering the technology is key to successful business development. Furthermore, safety and environmental sustainability must also be key considerations when selecting technology. This will ensure the long-term sustainability of the business.

Finally, indicators of successful community economic empowerment through smoked fish businesses can be seen in increased income, business independence, and active involvement in economic activities. Furthermore, increasing the capacity of business actors to manage and market products is also a crucial indicator. Improving the quality of smoked fish directly impacts the selling price and competitiveness of the product in the market [7]. Therefore, training in quality and business management needs to be consistently promoted. Economic empowerment is measured not only by business output but also by the process of social and economic transformation in the community. These efforts are expected to create more independent and prosperous village communities.

RESEARCH METHOD

This research uses a qualitative approach with a descriptive case study to understand the smoked fish business development process in Penatarsewu Village in depth. This type of study was chosen because it provides a detailed and comprehensive picture of the phenomenon studied within the context of the real-life village community. Descriptive case studies allow researchers to explore social and cultural dynamics more deeply and naturally. Case studies not only describe an event but also explain the essence and complexity behind the event in a real local context [13]. The research location was purposively selected in Penatarsewu Village, Tanggulangin District, Sidoarjo Regency because this village has strong local potential in the field of fish smoking. The uniqueness of the production process and the constraints on business development were the main reasons for selecting this location, making this approach suitable for studying economic empowerment through local fish smoking-based businesses.

The data sources in this study consist of primary and secondary data. Primary data were obtained through in-depth interviews with smoked fish entrepreneurs, village officials, and other parties involved in local economic development. Meanwhile, secondary data were obtained from village documents, community service activity reports, and relevant scientific articles and journals. The data collection techniques used were semi-structured interviews, participant observation, and documentation. These techniques are important in a qualitative approach because they help researchers understand the subjective meaning of directly observed social behavior [14]. This approach results in richer, more contextual, and more in-depth data, making it relevant for comprehensively explaining the problem.

Informants were selected purposively, selecting individuals directly involved or with extensive knowledge of the smoked fish business in the village. Informants in this study included smoked fish entrepreneurs, business group leaders, village officials, and local community leaders deemed credible. This study utilized thematic data analysis techniques to manage the collected data. This technique encompasses stages such as data transcription, coding, pattern identification, and the extraction of key themes from interviews and observations. Thematic analysis allows researchers to systematically and flexibly uncover the deeper meaning and narrative structure of qualitative data [15]. Therefore, the results of this study are expected to provide practical and theoretical contributions to the development of smoked fish-based economic empowerment strategies.

RESULTS AND DISCUSSION

Results

1. Increased Income for Business Owners

Increased income is one of the main indicators of success in empowering the community's economy through the smoked fish business in Penatarsewu Village. Based on interviews, Mrs. Haji Sunariyati, a business owner, stated that this business has provided a decent and stable livelihood for her family. She explained,

"We have been running this smoked fish business for generations, and thank God, it can meet our family's daily needs. Especially during the peak season, income can increase significantly," she said.

Regarding daily operations, Mrs. Haji Sunariati said:

"The cost to smoke one quintal of fish is around Rp 200,000 to Rp 215,000, including coconut shells, labor, and a fish grill," explained Mrs. Haji Sunariyati. *"The selling price is usually Rp 50,000 to Rp 60,000 per kilo, and I can process two to three quintals of fish a day,"* she continued.

With this production capacity and sales turnover, the smoked fish business makes a significant economic contribution, both at the individual and community level. This finding aligns with [7] findings, which state that improving product quality impacts selling prices and business revenues.

Furthermore, the smoked fish business also reflects independent and sustainability-oriented household financial management. In an interview, Mrs. Haji Sunariyati, a smoked fish entrepreneur, stated,

"We don't just use the profits for our daily needs, but we also set aside some to save or use as capital for another business. So, the profits aren't immediately depleted," he said.

He also added that the increased income from this business has a positive impact on various aspects of life, including children's education and household needs.

"Thank God, from this business we can pay for our children's school fees, pay for daily meals, and even if there are urgent needs, we still have savings," he said further.

When market demand is high, Mrs. Haji Sunariyati also opens up job opportunities for local residents.

"When it's busy, I usually call my neighbors to help out. It's quite helpful and I can earn some money," he explained.

This also strengthens the local economy and creates a multiplier effect on the well-being of village communities. According to [12], one crucial aspect of economic empowerment is the community's ability to manage income sources productively and sustainably. Therefore, the smoked fish business in Penatarsewu Village demonstrates a real and relevant practice of economic empowerment.

2. Business Independence

Business independence is a crucial benchmark for assessing the success of economic empowerment through local MSMEs, such as the smoked fish business. In an interview, Ms. Haji Sunariyati stated that she manages all business activities herself without any intervention from other parties.

"I manage everything myself, from finances to purchasing ingredients to selling at the market. There's no cooperative or group yet; it's always been like that, we've all run our own businesses," he said.

However, he feels that this independence actually provides flexibility in making business decisions:

"Being independent is great. I can make decisions right away. Whether I want to buy ingredients or change prices, I don't have to wait for anyone else," added Mrs. Haji Sunariyati. However, on the other hand, this situation also presents obstacles to accessing aid. In a separate interview, Ms. Nurul Huda, Head of Penatarsewu Village, revealed,

"There's no such thing as a cooperative, so the aid that comes is only accessible to a select few businesses. Because they're not formally organized, data collection and distribution are limited," he explained.

This situation reflects the fact that while individual independence is powerful, collective institutions are still needed to broaden access to opportunities for business development and mentoring. Consistent with [12], independence is indeed the foundation of local economic transformation, but it still needs to be supported by institutional synergy for broader impact.

The impact of business independence is reflected not only in day-to-day operations but also in how entrepreneurs maintain their presence amidst market competition. In an interview, Ms. Haji Sunariyati explained the strategies she employs to remain competitive without compromising quality:

"If my neighbor sells smoked fish for Rp 60,000, I usually lower it to Rp 55,000. If they charge Rp 55,000, I'll give them Rp 50,000. The important thing is that customers don't go elsewhere, but I maintain the quality," he said.

This flexible pricing strategy demonstrates strong economic intuition, despite having no formal training. He added that all business decisions, from raw material procurement to production planning, are based on personal experience:

"I've been used to seeing my parents work since I was little. So now I just keep going, and I manage everything myself. From buying ingredients, setting the baking schedule, to selling, I manage everything," he explained further.

This independent and swift decision-making makes Bu Haji Sunariyati's business a representative of an adaptive and resilient community enterprise. This aligns with [12] idea, which emphasizes that local independence is a crucial foundation for building a village community independent of external intervention.

3. Active Involvement in Economic Activities

Active community involvement in local economic activities is a key indicator of successful empowerment. According to an interview with Village Head Nurul Huda, the smoked fish business in Penatarsewu Village has grown significantly and involves many residents:

"In this village, there are already around 31 smoked fish businesses, with the largest number being in Neighborhood Association (RT) 6, with around 12 businesses. Each business typically employs five to seven people to help clean and smoke the fish," explained the Village Head.

According to him, the smoked fish business is not only a driver of the family economy, but also opens up informal employment opportunities for local residents, especially housewives and village youth.

"Many women who previously didn't work can now help with production. Young people can also help, so everyone can earn an income," he added.

A similar thing was conveyed by Mrs. Haji Sunariyati as a business actor, who stated that recruitment of workers was carried out from the surrounding environment:

"I usually ask my neighbors to help out, from cleaning fish to helping with sales. So, besides helping my business, they also get some income," he said.

Furthermore, Ms. Lurah Nurul Huda also added that the success of the smoked fish business has become an inspiration for other residents:

"Now, more and more people are interested in starting similar businesses. They see their neighbors' success, so they're inspired to start their own," he said.

Meanwhile, Mrs. Haji Sunariyati said that community involvement in this business is not only limited to the production sector, but also includes distribution and marketing:

"Usually, if I don't have time to go to the market, I ask my neighbors or relatives to sell it. So, we help each other, and the village economy also grows," he explained.

In line with [12] view, participatory village economic development will produce a strong and resilient social structure. Therefore, active community involvement is a crucial pillar in the success of economic empowerment through smoked fish farming in Penatarsewu Village.

4. Increasing Management and Marketing Capacity

Improving the capacity of business owners to manage and market products is a crucial factor in supporting the success of local-based economic empowerment. Based on interviews, Ms. Haji Sunariyati explained that some business owners in Penatarsewu Village have received training assistance from external parties, such as Pertamina's CSR program:

"We once received training from Pertamina. They taught us how to smoke fish cleanly, and they also provided us with a cool box and a chimney. It was very helpful, especially in maintaining the quality of the fish and preventing excessive smoke exposure," he explained.

However, he also said that this assistance had not been received equally by all business actors:

"Not all business owners receive training; many haven't. So, those who have received training typically produce better fish and are more competitive," added Ms. Haji Sunariyati.

This is reinforced by the statement of the Village Head, Nurul Huda, who explained that several business actors have started to utilize tools such as coolboxes and chimneys, while others still use traditional techniques:

"Those who have received training usually use coolboxes and chimneys, but those who haven't are still using the old methods. So, equality is needed so everyone can progress together," said the Village Head.

In terms of marketing, Mrs. Haji Sunariyati said that now some business actors are starting to explore social media to promote their products:

"Now, some people are starting to promote via WhatsApp or Facebook, although not all of them yet. But it's quite helpful, so buyers from outside the village can also find out," he said.

He also emphasized that product packaging is an important consideration to increase attractiveness and selling value:

"If the packaging is good, people are more interested in buying. But we still need guidance, especially regarding branding and online sales," he continued.

These sources' statements demonstrate that capacity building is needed not only for technical production aspects, but also for modern marketing and branding strategies. With equitable training support and collaboration from various parties, the smoked fish business in Penatarsewu Village can develop more equitably and sustainably. This reflects the importance of capacity building not only encompassing technical production skills but also modern marketing strategies. [12] emphasized that comprehensive empowerment must target the entire business value chain, from production to distribution. Therefore, successful capacity building must be supported by inclusive village policies and collaboration between the community, academics, and the private sector. This way, the smoked fish business can grow sustainably and make a significant contribution to the local economy.

The concept of community empowerment emphasizes the importance of active citizen participation in economic development based on local potential. Triono (2025) explained the philosophy of *Hamemayu Hayuning Bawana* as the foundation of empowerment, oriented toward social harmony and sustainability. This principle positions communities as empowered subjects of development rather than mere objects of intervention. In line with this, [16] highlighted that active community engagement in health and economic programs is a key factor in achieving sustainable change.

This participatory approach also aligns with qualitative methods that focus on meaning and lived experiences, as described by [15] through thematic analysis. [14] further noted that community participation can be mapped in depth through qualitative

approaches, thereby producing more targeted interventions. Thus, theories of empowerment and community participation are not only conceptual frameworks but also practical guidelines applicable in developing MSMEs based on local potential.

5. Improving Product Quality and Competitiveness

Improved product quality is a direct determinant of the competitiveness of smoked fish businesses in a competitive market. In an interview, Bu Haji Sunariyati, a business owner, explained that traditional coconut shell fuel remains the primary choice due to its distinctive aroma and customer-preferred quality:

"We still use coconut shells to smoke our fish because they produce a more fragrant and beautiful color. That's what keeps our customers coming back; the taste is different from smoked fish from other places," he said.

He also emphasized that even though the methods used are still traditional, the smoking process is still carried out consistently and hygienically:

"Usually, smoking takes between four and six hours. We take great care to ensure the fish doesn't burn and remains clean. We also maintain the equipment to ensure consistent good results," explained Mrs. Haji Sunariyati.



Figure 2. Traditional Smoking Process (Researcher, 2025)

Figure 2. The Traditional Smoking Process shows the manual processing of smoked fish by entrepreneurs in Penatarsewu Village. In this process, the fish are arranged on iron or bamboo racks and then smoked using natural fuel such as coconut shells. This method has been passed down through generations and produces a distinctive flavor that is the product's main attraction. Despite its simplicity, this traditional technique is still maintained because it is effective in preserving the fish and imparting a distinctive smoky aroma without additional preservatives. However, this process also requires high precision to ensure even results and prevent burning. Regular customers, he said, buy again because of the distinctive taste and maintained product quality.

"Many customers say the smoked fish from here tastes different. That's what keeps them coming back," he added.

In terms of competitiveness, he said that the main strategy is to maintain price stability and provide friendly service to customers:

"We keep our prices low, but maintain good quality. If someone buys, we welcome them, and sometimes we even give them bonuses to keep them happy," he said.

Regarding packaging and marketing, Mrs. Haji Sunariyati said that several business actors have started to innovate, even though they are still simple:

"Some have started packaging their fish more neatly so they can sell them as souvenirs. They're also slowly promoting their products via WhatsApp or Facebook, although not everyone can do it yet," he said.

But he is aware of the limitations he still faces:

"The problem is that many people still don't understand digital marketing. So we need training to be able to sell more widely," he concluded.

Discussion

This statement illustrates that even using a local approach, the quality of smoked fish products can still be improved and contribute to business competitiveness. In line with [12] view, economic empowerment must be accompanied by innovation in packaging and marketing so that smallholder businesses can compete in a wider market. Interviews revealed that some business owners have begun promoting their products through simple social media platforms, indicating an initiative to expand their reach. However, limited knowledge and access to technology remain obstacles that need to be addressed through further training. Similarly, quality improvement must be accompanied by market expansion and product innovation [12] emphasized that economic empowerment is not limited to production alone; it also requires transformation in packaging and marketing. Thus, improved product quality will provide a strong competitive position for smoked fish businesses in both local and regional markets.

CONCLUSION

Fundamental Finding : The development of the smoked fish business in Penatarsewu Village has significantly improved community welfare by increasing business owners' income, fostering independence in production and distribution, creating informal employment, and encouraging the adoption of digital marketing, thereby positioning it as a backbone of the local economy and a model of community empowerment. **Implication :** These results imply that sustainable growth of local businesses requires not only technological innovation and entrepreneurship but also inclusive policy support, equitable training, and cross-sector collaboration involving village governments, universities, and the private sector to build a resilient local economic ecosystem. **Limitation :** This study is limited by unequal access to training and production facilities among business owners, which has resulted in varying levels of product quality and market competitiveness, and by its focus on a single case study that restricts generalizability. **Future Research :** Further studies should explore scalable empowerment models, assess the role of cooperative institutions in strengthening entrepreneurial independence, and conduct comparative analyses across regions to

identify best practices for replicating village-based economic empowerment through local industries.

REFERENCES

- [1] M. D. Abror, R. T. Probojati, and S. Ratnawati, "TANGGULANGIN KABUPATEN SIDOARJO Fakultas Ilmu sosial dan Ilmu Politik Universitas Bhayangkara Surabaya Abstrak © 2022 Jurnal Abdi Masyarakat Universitas Kadiri | 125," vol. 6, no. 1, pp. 124–142, 2022.
- [2] Badan Pusat Statistik Kabupaten Sidoarjo, *Produk Domestik Regional Bruto Kabupaten Sidoarjo menurut Pengeluaran 2020–2024*, vol. 11, no. 1. BPS Kabupaten Sidoarjo, 2024. [Online]. Available: http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI
- [3] I. Iswanto, "Inovasi Alat Pengasapan Ikan Mujair bagi Pelaku UMKM Mujair Asap Desa Penatarsewu Jawa Timur," *J. Abdimas Kartika Wijayakusuma*, vol. 4, no. 2, pp. 145–151, 2023, doi: 10.26874/jakw.v4i2.312.
- [4] L. Hudi, I. A. Saidi, R. B. Jakaria, P. A. Kusumawardani, and A. R. As'at Rizal, "Pengembangan Pelaku Umkm Mujair Asap Dusun Pelataran Desa Penatarsewu Kec. Tanggulangin Kab. Sidoarjo Jawa Timur," *J. Pengabd. Masy. Indones. Maju*, vol. 2, no. 02, pp. 55–59, 2021, doi: 10.33221/jpmim.v2i02.672.
- [5] V. Syahrinisya, Alini, and Erlinawati, "Hubungan Paparan Asap Pengasapan Ikan Dengan Keluhan Gangguan Pernapasan Pada Pekerja Sentra Ikan Salai Di Desa Koto Mesjid XIII Koto Kampar," *Sehat J. Kesehat. Terpadu*, vol. 1, no. 4, pp. 24–31, 2022, [Online]. Available: <http://journal.universitaspahlawan.ac.id/index.php/s-jkt/article/view/7784>
- [6] D. Darianto, "Analisa Faktor-Faktor yang Mempengaruhi Proses Pengasapan Pada Mesin Pengasapan Ikan Lele," *J. Mech. Eng. Manuf. Mater. Energy*, vol. 2, no. 2, p. 56, 2018, doi: 10.31289/jmemme.v2i2.2154.
- [7] N. Salindeho and I. Rumengan, "Peningkatan Mutu Ikan Asap di Desa Poigar Dua Kecamatan Sinosayang, Kabupaten Minahasa Selatan, Sulawesi Utara," *Media Teknol. Has. Perikan.*, vol. 8, no. 2, p. 39, 2020, doi: 10.35800/mthp.8.2.2020.28443.
- [8] A. Maria Ngabalin, "Digital Marketing Sebagai Strategi Pemasaran Perikanan di Desa Sathean," *J. Econ. Bus. UBS*, 12(6), 3889–3894., 2023, [Online]. Available: <https://doi.org/10.52644/joeb.v12i6.1376>
- [9] S. Wahyudi, R., Rusdwitasari, S., Mahfudz, M. I., Dewi, S. P., Aulia, L., Haryono, H., & Haryanti, "Peningkatan Mutu Lingkungan Industri Melalui Kuliah Kerja Nyata pada Industri Rumah Tangga Menuju Standar Kesehatan dan Keamanan Pangan pada Industri Kerupuk Subur, Banguntapan, Kabupaten Bantul. Jurnal Inovasi Pengabdian dan Pemberdayaan Masyarakat, 2(2)," 2022, [Online]. Available: <https://doi.org/10.54082/jipppm.49>
- [10] A. Maria Ngabalin, "Digital Marketing Sebagai Strategi Pemasaran Perikanan di Desa Sathean," *J. Econ. Bus. UBS*, vol. 12, no. 6, pp. 3889–3894, 2023, doi: 10.52644/joeb.v12i6.1376.

- [11] H. Fauzi, R. Neny Kusumadewi, H. S. Mulyani, and E. Prihartini, "Pemberdayaan Pelaku Umkm Melalui Optimalisasi Pengetahuan, Pemahaman, Inovasi Dan Pengenalan Digitalisasi Menuju Desa Yang Kreatif," *BERNAS J. Pengabd. Kpd. Masy.*, vol. 4, no. 4, pp. 3512–3516, 2023, [Online]. Available: <https://doi.org/10.31949/jb.v4i4.7020>
- [12] T. A. Triono, "Konsep Pemberdayaan Masyarakat Berbasis Potensi Lokal : Hamemayu Hayuning Bawana di Daerah Istimewa Yogyakarta," vol. 3, 2025.
- [13] A. Mills, G. Durepos, and E. Wiebe, "Case Study as a Methodological Approach," *Encycl. Case Study Res.*, no. December, 2013, doi: 10.4135/9781412957397.n28.
- [14] E. a. Fiantika, Wasil M, Jumiati, Honesti, Wahyuni, Jonata, *Metodologi Penelitian Kualitatif. In Metodologi Penelitian Kualitatif*, no. Maret. 2022. [Online]. Available: <https://scholar.google.com/citations?user=O-B3eJYAAAAJ&hl=en>
- [15] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qual. Res. Psychol.*, vol. 3, no. 2, pp. 77–101, 2006, doi: 10.1191/1478088706qp063oa.
- [16] World Health Organization., "Guidance on engagement of communities and civil society to end tuberculosis. World Health Organization.," 2023.

Diana Balqis

Muhammadiyah University of Sidoarjo, Indonesia

Email: dianablqs2001@gmail.com

*** Lailul Mursyidah (Corresponding Author)**

Muhammadiyah University of Sidoarjo, Indonesia

Email: lailulmursyidah@umsida.ac.id
