

Optimization of packaging and marketing of Awaina Shrimp Paste as a leading product of Langsa City

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ABSTRACT

Indonesia's coastal resources provide livelihoods for many communities, including Langsa City in Aceh Province, known for its shrimp paste production. Terasi Awaina, a local shrimp paste business, faces challenges with outdated packaging and limited marketing reach. This community service project aimed to optimize Terasi Awaina's packaging and marketing strategies. Conducted over six months, the project involved surveys, practical training, outreach, and mentoring to enhance the business's operations and market appeal. Training focused on modern packaging techniques and establishing an official business website. The results showed significant improvements in participants' knowledge and skills, increased production efficiency, and expanded market reach. Modern packaging and a professional online presence boosted sales and competitiveness. This project demonstrates the potential for technological and digital solutions to drive sustainable development in traditional industries, contributing to economic growth and improved livelihoods in rural communities.

Keyword: marketing, packaging innovation, shrimp paste

ABSTRAK

Sumber daya pesisir Indonesia memberikan mata pencaharian bagi banyak komunitas, termasuk Kota Langsa di Provinsi Aceh yang dikenal dengan produksi terasinya. Terasi Awaina, sebuah usaha terasi lokal, menghadapi tantangan dengan kemasan yang ketinggalan zaman dan jangkauan pemasaran yang terbatas. Proyek pengabdian masyarakat ini bertujuan untuk mengoptimalkan strategi kemasan dan pemasaran Terasi Awaina. Dilaksanakan selama enam bulan, proyek ini melibatkan survei, pelatihan praktis, penyuluhan, dan pendampingan untuk meningkatkan operasi dan daya tarik pasar usaha ini. Pelatihan difokuskan pada teknik kemasan modern dan pendirian situs web resmi bisnis. Hasilnya menunjukkan peningkatan signifikan dalam pengetahuan dan keterampilan peserta, efisiensi produksi yang meningkat, dan perluasan jangkauan pasar. Kemasan modern dan kehadiran online yang profesional meningkatkan penjualan dan daya saing. Proyek ini menunjukkan potensi solusi teknologi dan digital untuk mendorong pembangunan berkelanjutan di industri tradisional, berkontribusi pada pertumbuhan ekonomi dan peningkatan mata pencaharian di komunitas.

Keyword: inovasi kemasan, pemasaran, terasi



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1. Introduction

Indonesia, as an archipelagic country, boasts abundant coastal resources and marine products, providing a livelihood for many coastal communities, including Langsa City in Aceh Province. The village of Gampong Simpang Lhee, predominantly inhabited by fishermen, is known for its production of tiny shrimp, a key ingredient in the local shrimp paste, known as Terasi. Shrimp paste, a fermented product made from shrimp and salt, is a staple seasoning in Indonesian cuisine, valued for its rich umami flavour. Hygienic technology for shrimp paste processing innovation is crucial in home industries, as demonstrated in the study in Pulau Kampai [1]. Despite technological advancements, the shrimp paste industry still heavily relies on traditional methods such as fermentation, drying, and grinding. These practices, though effective for production, often

fail to incorporate modern marketing and packaging solutions, limiting market potential. The use of screw press technology in shrimp paste businesses can enhance production efficiency and reduce waste [2].

Despite meeting household industry standards, Terasi Awaina, a local shrimp paste business, struggles with simple and unattractive packaging, and lacks an official business website to expand its market reach. These shortcomings have constrained the business's ability to capitalize on the growing demand for high-quality, well-packaged shrimp paste, both domestically and internationally. Previous studies highlight the need for modernizing production and marketing techniques to enhance the competitiveness of traditional food products in broader markets [3].

The primary issue facing Terasi Awaina is the outdated and inadequate packaging of its shrimp paste products. Simple, unattractive packaging not only diminishes the perceived quality of the product but also limits its shelf life and market appeal. Additionally, the absence of a professional online presence hinders the business's ability to reach a wider customer base, which is essential for scaling operations and increasing sales. Addressing these challenges is critical for enhancing the business's market position and ensuring sustainable growth [4].

To tackle these problems, it is imperative to adopt modern packaging solutions and establish an official business website. Modern packaging techniques can significantly improve the product's aesthetic appeal, extend its shelf life, and facilitate distribution. Meanwhile, a professional website can serve as a vital marketing tool, providing information about the product, purchasing options, and contact details, thereby broadening the market reach. Implementing these solutions aligns with the broader goals of promoting inclusive economic growth and creating decent jobs, as outlined by USU LPPM's priority objectives [5]

Modern packaging technology offers numerous advantages for traditional food products. Advanced packaging materials and designs can enhance the durability and attractiveness of the product, making it more appealing to consumers. Research indicates that innovative packaging can significantly increase consumer preference and willingness to pay a premium for products, thereby boosting sales and profitability. For Terasi Awaina, adopting such technology could involve using vacuum-sealed packaging, tamper-evident features, and attractive labelling to improve both the visual appeal and shelf life of the shrimp paste.

The establishment of an official business website is another crucial step in modernizing Terasi Awaina's marketing strategy. An effective online presence can enhance brand visibility, facilitate customer engagement, and streamline the purchasing process. Studies have shown that small and medium-sized enterprises (SMEs) with professional websites are more likely to experience growth in sales and customer base compared to those relying solely on social media platforms [2]. A dedicated website can provide comprehensive information about the product, showcase its unique qualities, and offer convenient purchasing options, thereby attracting a broader audience.

Additionally, integrating e-commerce capabilities into the business model can further amplify market reach and operational efficiency. E-commerce platforms can provide a seamless shopping experience, enabling customers to place orders online and have products delivered directly to their doorsteps. This approach not only expands the market but also enhances customer satisfaction and loyalty. Implementing these solutions requires a concerted effort in training and capacity building to ensure that the business can effectively utilize the new technologies and maximize their potential benefits [4].



Figure 1 Partner location conditions and old shrimp paste packaging.

2. Methods

The community service project was conducted over six months, from June to November 2023. The methods applied included surveys, practical training, outreach, and mentoring. Evaluation was carried out by distributing questionnaires before and after the community service activities to measure the outcomes and achievements. Participatory training and practice were conducted in groups through planning, monitoring, and evaluation. At the same time, the team facilitated equipment and expertise. The outreach methods involved approaching partners, discussing issues and finding solutions, conducting practical training to encourage active participation from partners, and monitoring and fostering the results of the community service.

The training modules were developed based on modern educational frameworks that prioritize competency-based learning. These frameworks aim to equip participants with practical skills in using new technologies and implementing efficient processes in shrimp paste production [6]. The training sessions emphasized the utilization of applied technologies like screw press machines for efficient shrimp paste processing, alongside modern packaging techniques and the establishment of an official marketing website [4]. Partners actively participated in all activities. The training participants were entrepreneurs and workers from the Awaina shrimp paste business unit in Gampoeng Simpang Lhee Village, Langsa, Aceh. The instructors included Salman Syarief, S.E., M.Si for the use and maintenance of the feed grinder, Dr. Raina Linda Sari, S.E., M.Si and Nurlaila Hanum, S.E., M.Si for product packaging, and Sukma Hayati Hakim, S.E., M.Si for website usage.



Figure 2 Experiment using a shrimp paste grinding machine and the new packaging product.

3. Results and Discussion

The community service project conducted in Gampoeng Lhee Village, Langsa, Aceh, over six months from June to November 2023, yielded significant positive outcomes. The pre- and post-implementation questionnaires revealed noticeable improvements in various areas of the shrimp paste business.

3.1. Increased knowledge and skills

Technology Application: Participants demonstrated a substantial increase in their knowledge and skills related to grinding raw materials using the feed grinder. Before the training, only 40% of participants were familiar with the machine's operation, while post-training, this number rose to 85%.

Product Packaging: The new packaging techniques were well-received, with 90% of participants successfully adopting and implementing the improved packaging methods, compared to only 30% who were aware of advanced packaging techniques before the training.

Website Usage: Awareness and usage of the official website for marketing purposes saw a dramatic increase. Initially, only 15% of participants had any experience with digital marketing; after the training, 80% of participants were actively using the website to promote their products.

3.2. Business performance

Efficiency and Productivity: The introduction of the feed grinder and new packaging methods led to a 40% increase in production efficiency. The business unit reported a reduction in processing time and waste, contributing to higher productivity levels.

Market Reach and Sales: The use of the official website expanded the market reach beyond the local community, resulting in a 20% increase in sales within the first three months of implementation. This digital presence allowed the business to attract new customers and retain existing ones more effectively.

The findings demonstrate the value of combining practical training and integrated technological solutions, which align with contemporary educational perspectives to enhance local business operations [7]. Educational methodologies were adapted to the specific needs of shrimp paste producers, emphasizing hands-on learning and participatory approaches to ensure effective technology adoption and skill enhancement [8]. The integration of community engagement strategies, including surveys, practical workshops, and mentorship programs, has proven instrumental in driving sustainable growth in the shrimp paste sector [5].

3.3. Methodological effectiveness

The application of pre- and post-project assessments offered detailed insights into the learning trajectories of participants, emphasizing the relevance of qualitative analysis in evaluating educational outcomes. This data-driven approach ensured that the training addressed the actual needs and knowledge gaps of the participants.

Practical Training and Mentoring: Hands-on training sessions facilitated by experienced instructors allowed participants to gain confidence in using new technologies and techniques. The continuous support and mentoring ensured that the participants could apply what they learned effectively in their daily operations.

3.4. Participant engagement and active learning

The active involvement of participants in all stages of the project, from planning to evaluation, fostered a sense of ownership and commitment. This participatory approach not only enhanced the learning experience but also motivated the participants to implement the changes in their businesses actively.

The practical nature of the training, combined with real-time problem-solving and collaborative learning, resulted in a more engaged and empowered participant group.

3.5. Sustainable development and future implications

The project's success in increasing productivity and market reach underscores the potential for technological and digital solutions to drive sustainable development in traditional industries. By equipping local businesses with modern tools and knowledge, such initiatives can contribute to economic growth and improved livelihoods in rural communities.

Future projects can build on this model by incorporating additional elements such as financial management training, advanced marketing strategies, and continuous technological upgrades to further enhance business performance and sustainability.

4. Conclusions

This project successfully enhanced operational efficiency and market competitiveness by adopting competency-based approaches tailored to the specific needs of the shrimp paste business in Gampoeng Lhee Village. The positive results and feedback from participants affirm the value of integrating practical training, technology, and participatory approaches in community development initiatives.

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References

- [1] A.F. Dewinta, P.C. Ayu, V.R. Manurung, "Hygienic technological innovation of shrimp paste processing for home industry in Pulau Kampai Village, Langkat District." *Journal Saintech Transfer*, vol. 07, no. 02 (2024) 001-007.
- [2] Dharma, S., Safrida, E., & Sebayang, R. "Rancang bangun mesin giling dan cetak terasi, pendampingan manajemen dan pemasaran." [Design of shrimp paste milling and molding machines, management and marketing assistance]. *Jurnal Penelitian Dan Pengabdian Kepada Masyarakat UNSIQ*. vol. 7, no. 1, pp. 11–15. 2020.

- [3] M. Ningrum, M. Munawir, N. Fadillah, “Identifikasi kualitas terasi Langsa berdasarkan warna menggunakan radial basis function neural network.” [Identification of the quality of Langsa Terasi based on color]. *Jurutera Scientific Journal*, vol. 7, no. 01, pp. 01–06. 2020.
- [4] F. Fajriani, H. Fajri, N. Sari, S.T. Anda, T.A. Fadly, I.R. Nila. “Peningkatan produksi usaha terasi Awaina di Kota Langsa menggunakan teknologi screw press machine sebagai pencetak terasi.” [Increasing production of Awaina shrimp business in Langsa City using screw press machine technology as a shrimp printer]. *Abdi Journal*, vol. 8, no. 2, pp. 161-164. 2023.
- [5] R. Sebayar, E. Safrida, S. Dharma. “Penerapan teknologi tepat guna mesin pencetak terasi pada pengrajin terasi di Desa Beringin Sumatera Utara.” Application of appropriate technology for shrimp paste printing machines to shrimp paste craftsmen in Beringin Village, North Sumatra. *In Proceedings of the SENIAS Community Service Seminar*, April 2020. 2020.
- [6] Agustinar, R. Zuliani, Suryani, “Sosialisasi penggunaan teknologi produksi dan pemasaran terasi berdaya saing nasional pada masyarakat Desa Kuala Penaga Aceh Tamiang”. [Socialization of the use of production technology and marketing of nationally competitive shrimp paste to the Kuala Penaga Aceh Tamiang Village community]. *Malik Al-Shalih: Jurnal Pengabdian Masyarakat*. vol 2 no. 1 2023.
- [7] W. Rahmawati, A. F. Firman, “Perjalanan transformasi digital untuk meningkatkan produktivitas dalam operasional bisnis”. [Digital transformation journey to improve productivity in business operations]. *Jurnal Bahana Manajemen Pendidikan*. vol. 12, no. 1. 2023
- [8] M. Firdaus, C. A. Intyas, Yahya. “Peningkatan kapasitas produksi terasi rebon di desa ketapang, kotamadya probolinggo”. [Capacity building of rebon paste production in ketapang village, probolinggo municipality]. *Pengabdianmu Jurnal Ilmiah Pengabdian kepada Masyarakat*, vol. 6 no. 3, 2021.