Jurnal Pengabdian Masyarakat Bestari (JPMB)
Vol. 5, No. 10 (October) 2026: 821-830

Improving Community Skills Through Training in Beverage Creation with Modern Packaging, Simple Cost Calculation, and Price Determination at Cendawan Beach, Lasiana Village, Kupang City, East Nusa Tenggara

Boiris Milyardo[1*], Friend Zakharia[2]
Politeknik Negeri Kupang
Corresponding Author: Boiris Milyardo; boiris.milyardo@gmail.com

A R T I C L E I N F O

Kata Kunci: Culinary Tourism, Community Empowerment, Local Beverage Innovation, Modern Packaging, Creative Economy.

Received : 5, August
Revised : 20, September
Accepted: 14, October

©2026 Milyardo, Zakharia (s): This is an open-access article distributed under the terms of the Creative Commons Atribusi 4.0 Internasional.

A B S T R A K

Cendawan Beach in Lasiana Village, Kupang City, East Nusa Tenggara holds culinary tourism potential that has not been optimally utilized. Local vendors in this area face limitations in product innovation, packaging techniques, and business financial management. This community service program was developed as a direct response to these challenges, targeting 25 micro-entrepreneurs through a community-based tourism approach and creative economy principles. The training was conducted in four stages, covering the creation of locally based beverages such as lontar orange juice and palm sugar milk coffee, implementation of modern packaging using cup sealer machines, production cost calculation, and branding-based marketing strategies. The results showed significant skill improvements among all participants, both in technical production and business management capacity. Vendors experienced increased income as consumer interest grew toward more innovative and attractively packaged products. The tourism area also became more organized and clean, creating a more memorable visiting experience for tourists. This program demonstrates that locally based training integrated with business capacity building can effectively drive sustainable economic growth within coastal communities.

INTRODUCTION

The culinary tourism sector has developed into one of the most dynamic growth segments within the global tourism industry ecosystem. This phenomenon is reflected in data released by the United Nations World Tourism Organization (World Tourism Organization, 2017), which revealed that the contribution of gastronomic tourism to global tourism revenue increased by more than 30% and showed a consistent growth trend from year to year. More than merely serving as an attraction for travelers, culinary tourism has proven capable of creating sustainable economic opportunities for local communities around tourist destinations. This view is reinforced by Cruz et al. (2016), who emphasized that the culinary sector holds a strategic position as a major supporting element within the overall tourism system. In this context, transforming local food and beverage products into organized tourist attractions is a crucial step that requires serious attention from various stakeholders. Recent studies have also strengthened this argument; Baharuddin et al. (2025) stated that integrating local culinary products into tour packages significantly increases tourist satisfaction and loyalty toward a destination.

Cendawan Beach, located in Lasiana Village, Kupang City, East Nusa Tenggara, has tourism potential that has not yet been fully explored. The presence of mangrove forest areas, beautiful green open spaces, as well as various sports and recreational activities makes this location a favorite destination for both local residents and tourists from outside the area. Nevertheless, the substantial economic potential of the culinary sector in the area has not been fully optimized. This condition stems from the limited skills and knowledge of local business actors in developing beverage product innovations, as well as their limited understanding of modern packaging techniques, production cost calculation mechanisms, and competitive pricing strategies. In line with this, Ariani et al. (2022) highlighted that limited economic literacy and production skills among micro-business actors in tourist destinations are structural obstacles most frequently encountered in efforts to develop community-based culinary tourism.

This community service program was specifically designed to improve the capacity of residents in the Cendawan Beach area through training in beverage creation complemented by modern packaging techniques, simple cost calculation, and appropriate selling price determination. By emphasizing an empowerment approach rooted in local wisdom, this program is projected not only to enhance the appeal of culinary tourism at Cendawan Beach but also to strengthen the economic foundation of the local community sustainably. Trupp et al. (2025) emphasized that training programs based on local wisdom combined with business capacity building have proven more effective in creating long-term economic impacts for small business actors in tourist destinations.

Theoretically, this program is based on the concept of community-based tourism (CBT), which places local community empowerment at the core of participatory tourism destination management (Mowforth et al., 2007). This concept emphasizes that the community is not merely an object of development, but an active subject that also determines the direction and form of tourism

management in its environment. Tohopi et al. (2025) added that consistent implementation of CBT principles can encourage the development of a sense of collective ownership and shared responsibility for the sustainability of tourist destinations. On the other hand, this program is also rooted in the creative economy theoretical framework proposed by Howkins, 2001), in which innovation and creativity are regarded as the main driving forces in creating high-value-added products. The synergy between the CBT approach and the creative economy is expected to produce a culinary tourism ecosystem that is not only aesthetically attractive but also economically resilient. Budhiyani et al. (2025) confirmed that collaboration between community-based approaches and creative economy principles in the context of community service has been proven to produce broader and more measurable positive impacts compared with conventional one-way approaches.

METHOD

The community service activity at Cendawan Beach was designed through four systematic stages to address limitations in community knowledge regarding product innovation, packaging, and business management. The Preparation Stage began with an initial survey to identify the conditions, potential, and problems of partners related to beverage products, packaging, and marketing. Subsequently, a training module was developed covering the theory and practice of beverage creation, modern packaging, cost calculation, and marketing strategies, accompanied by the provision of equipment such as blenders, packaging equipment, and raw materials (Sjölander-Lindqvist et al., 2021). The Implementation Stage included socialization and motivation for participants regarding the importance of product innovation, followed by training in preparing beverages based on local ingredients such as lontar orange juice and palm sugar milk coffee while maintaining hygiene standards. Participants also received training in modern packaging using bottle sealers and label printers, production cost calculation, selling price determination, as well as simulations of branding and marketing strategies (Susesti et al., 2025).

The Assistance Stage was carried out through direct assistance in production and marketing, as well as periodic monitoring and evaluation through field visits to monitor participant progress and provide improvement feedback (Sheoran, 2025). The Evaluation and Sustainability Stage included assessing participant performance in terms of skill improvement, documenting activities through photographs/videos and written reports published through local online and print media, as well as establishing community business groups/tourism awareness groups (pokdarwis) to ensure the sustainability of production and marketing, including collaboration with distributors and local cafés (Vuksanović et al., 2024).

RESULTS AND DISCUSSION

Training Activity Results

The community service activity conducted at Cendawan Beach, Lasiana Village, Kupang City successfully generated significant and measurable impacts

for the participating local vendors. The program was comprehensively designed by considering the actual needs of the community in the coastal tourism area, which had previously lacked adequate access to culinary-based entrepreneurship training. The entire series of activities was conducted systematically and covered four interconnected main aspects, namely training in beverage creation, improvement of product packaging quality, production cost calculation and selling price determination, as well as the introduction of modern branding-based marketing strategies. These four aspects were selected because they represent the most fundamental challenges faced by micro-business actors in the tourism culinary sector, while also constituting the main pillars for building competitive and sustainable businesses.

Training in Beverage Creation

The creative beverage-making training session became the core of the entire program. Participants were directly guided to design and produce new beverage variations with high selling value while reflecting the richness of local ingredients available in East Nusa Tenggara. Several beverage products successfully developed during the training included lontar orange juice, palm sugar milk coffee, and mango smoothie. These three types of beverages were selected because they combine easily available local ingredients with modern serving techniques capable of attracting a broader range of consumers. Product innovation based on local ingredients such as this has proven to be an effective strategy for increasing the competitiveness of micro-businesses in the tourism culinary sector (Kartini et al., 2025).

Hygiene standards in the production process also received serious attention during this training session. Hygiene concerns not only the quality of the product directly but is also closely related to consumer trust and business reputation in the long term (Rachmadina et al., 2025). The hands-on practice carried out by all participants produced satisfactory results, with all participants able to meet the hygiene criteria established by the implementation team. Figures 1 and 2 document the training atmosphere, which was enthusiastic and interactive, showing the active involvement of participants in every stage of the beverage-making process. Such active involvement is an important indicator of successful knowledge and skill transfer in community-based training programs, because practical and direct learning has proven more effective than approaches that are purely theoretical (Fitri et al., 2025).



Figure 1. Training Atmosphere for Beverage Creation at Cendawan Beach



Figure 2. Participants' Hands-On Practice in Beverage Preparation

Improving Packaging Quality

The product packaging aspect is no less crucial in building the identity and appeal of a product in the market. In this session, participants were intensively introduced to the use of more representative modern packaging, including vacuum bottles and environmentally friendly packaging, which are increasingly favored by consumers. Well-designed and visually appealing packaging has been proven to significantly increase consumer purchase interest, particularly for beverages sold in tourist areas where visual experience is an important part of purchasing decisions (Lestari et al., 2022). Beyond aesthetics, the adoption of environmentally friendly packaging also reflects business actors' awareness of environmental sustainability issues, which have now become a major concern among modern consumers.

The changes in packaging clearly reflected a shift in the participants' business orientation, from merely selling products without a strong identity toward efforts to build a consistent and sustainable brand image. Figure 3 shows a packaging demonstration using a modern cup sealer machine provided by the implementation team as part of the supporting facilities for the training program.



Figure 3. Demonstration of Cup Sealer Machine Use in Packaging Training

Cost Calculation and Price Determination

The inability to accurately calculate production costs is one of the most common fundamental problems encountered by micro-business actors, and this condition directly affects inappropriate price setting, potentially jeopardizing business continuity (Nofrianti et al., 2025). Recognizing this issue, the cost calculation training session was designed to provide participants with a concrete and applicable understanding of how to prepare a detailed and measurable production cost structure. The material covered the identification and calculation of raw material costs, labor components, and overhead costs, which are often overlooked by small business actors. After understanding all cost components, participants were then guided to determine rational, competitive, and profitable selling prices based on the calculations. As a follow-up to this session, participants began implementing a simple cost-recording system in their daily business activities. This step represented an important beginning in developing more orderly and structured financial management habits. The ability to accurately calculate costs and establish appropriate prices is a fundamental aspect that cannot be overlooked in managing a micro-business that aims to grow sustainably (Julita et al., 2025).

Marketing Strategy

As the closing part of the training series, participants received guidance on marketing strategies focused on building product branding to expand market reach. The material covered the importance of brand visual consistency, ways to introduce products to broader consumer segments, and the use of marketing approaches relevant to local business conditions. Strengthening brand identity and implementing targeted marketing approaches are considered highly relevant to supporting the growth of micro-businesses amid increasingly intense market competition (Sudiarti et al., 2025). Through this session, participants were also directed to understand that consistency in building product identity is a long-term investment that will organically shape consumer loyalty.

Outputs Achieved

The overall implementation of the activity produced a number of concrete, measurable outputs that directly affected the improvement of community capacity. First, new beverage product variations were created and documented in the form of systematic written recipes, so they can be used as references for further training and future product development. Second, a comprehensive training module was prepared, covering complete guidelines for beverage preparation, modern packaging techniques, production cost calculation mechanisms, and branding-based marketing strategies. A well-structured training module has consistently proven effective in improving participants' understanding and knowledge retention in community-based empowerment programs (Titaley & Nurhaeny, 2023).

Third, 25 participants from the Cendawan Beach vendor community demonstrated significant improvements in skills related to both the production and marketing of creative beverages. This achievement is in line with the main objective of the program, considering that improving human resource capacity at the community level is a benchmark of success for community empowerment programs based on local potential and wisdom (Sutopo et al., 2025). Fourth, the entire implementation process was fully documented in the form of training photographs and videos as well as written activity reports, which can be utilized as promotional materials for the program and as references for implementing similar activities in other locations.

Economic Impact and Facility Improvement

The economic impact of this program was clearly reflected in the increased income of local vendors as a result of growing consumer interest in the products they offered. Innovations applied to product taste and packaging directly contributed to increased selling value and higher sales volume than before. Community economic empowerment through local culinary product innovation has proven to be an effective strategy for increasing the income of micro-business actors in tourist areas, while also strengthening the economic resilience of coastal communities sustainably (Fakfare et al., 2026). In addition to the measurable economic impact, culinary business locations in the Cendawan Beach area also underwent significant improvements, becoming cleaner, more orderly, and

overall much more attractive to visitors. This condition indirectly contributed to a higher-quality tourism experience and has the potential to attract more visitors to the area.

CONCLUSION

The community service program at Cendawan Beach successfully improved the capacity of micro-business actors through training covering local beverage innovation, modern packaging, production cost calculation, and marketing strategies. A total of 25 participants demonstrated significant skill improvements in both production and business management. Products such as lontar orange juice and palm sugar milk coffee were successfully developed with more attractive presentations and accurately calculated prices. The impact was also felt directly—vendor income increased, the tourism area became more organized, and the economic foundation of the coastal community grew stronger and more sustainable.

RECOMMENDATIONS

The sustainability of this program depends heavily on the participants' commitment to consistently applying the knowledge they have acquired in their daily business practices. In the future, more intensive follow-up assistance is needed, particularly in financial management and the expansion of marketing networks through digital platforms. Collaboration among local governments, higher education institutions, and local business actors needs to be strengthened so that empowerment programs of this kind do not stop at the training stage. The establishment of active and well-organized business groups or pokdarwis will be the main key to maintaining the continuity of product innovation and the long-term economic growth of the Cendawan Beach community.

ACKNOWLEDGMENTS

The authors would like to thank Politeknik Negeri Kupang for the financial support of this research through DIPA Politeknik Negeri Kupang.

REFERENCES

Ariani, R. P., Ekayani, I. A. P. H., Suriani, N. M., & Kusyanda, M. R. P. (2022). Strategi Pengembangan Wisata Kuliner Desa Bukti Berbasis Potensi Lokal. *Jurnal Pendidikan Teknologi Dan Kejuruan*, *19*(1), 13–23. https://doi.org/10.23887/jptk-undiksha.v19i1.41207

Baharuddin, S., Fatmasari, & Kurniawaty. (2025). Authenticity and the Formation of Culinary Destination Brand Commitment. *Advances in Tourism Studies*, *3*, 139–153. https://doi.org/10.53893/ats.v3i3.78

Budhiyani, I. D. A. M., Kristiantari, M. G. R., & Yudiana, I. K. E. (2025). Pemberdayaan Anggota PKK dalam Meningkatkan Produktivitas Ekonomi Kreatif untuk Menunjang Desa Wisata. *International Journal of Community Service Learning*, *9*(2), 221–228. https://doi.org/10.23887/ijcsl.v9i2.86850

Cruz, A. D., Martinez, E. E. V., Hincapié, J. M. M., & Torres, F. R. (2016). Innovation in tourism companies, where are they and where are they going? An approach to the state of knowledge. *Intangible Capital*, *12*(4), 1088–1155.

https://doi.org/10.3926/ic.778

Fakfare, P., Sertsri, S., Hemapanpairo, K., & Worrachananun, M. (2026). Sustainable culinary tourism and tourist sustainability transformation in UNESCO Creative Cities of Gastronomy. *International Journal of Tourism Cities*, 1–20. https://doi.org/10.1080/20565607.2026.2641662

Fitri, N. K., Pratama, F. H., Purnomo, F., Roby, A. B., Hasanah, A., & Mangundjaya, W. L. (2025). Evaluasi Pelatihan: Menelaah Reaksi Peserta dan Proses Pembelajaran sebagai Indikator Efektivitas Pelatihan. *Jurnal Komunikasi Dan Ilmu Sosial*, *3*(2), 83–89. https://doi.org/10.38035/jkis.v3i2.2185

Howkins, J. (2001). The Creative Economy: How People Make Money from Ideas. In *Allen Lane* (p. 263). Allen Lane. https://books.google.co.id/books?id=hPLsAAAAMAAJ

Julita, Iznillah, M. L., Andini, F. K., Ningrum, D. S., Gusnawati, R. A., & Azzahra, F. (2025). Penguatan Kapasitas Produksi Dan Manajemen Usaha Berbasis Komunitas Melalui Pemberdayaan Kelompok Usaha Bersama. *Jurnal Abdi Insani*, *12*(8), 3723–3735. https://doi.org/10.29303/abdiinsani.v12i8.2781

Kartini, L. P., Rumadana, I. M., Kristiana, N. I., & Sunada, I. N. (2025). Beyond the Plate: Culinary Innovation as a Pathway to Sustainable and Inclusive Rural Tourism. *Proceeding Treasure*, *1*(1). https://ejournal.ppb.ac.id/index.php/prcd/article/view/2260

Lestari, N. P. E. B., Santosa, N. A., & Suharno, A. R. (2022). Peran Ilustrasi Bertema Indonesia Pada Produk Minuman Terhadap Respon Emosi Konsumen Dalam Membeli Dan Memahami Produk. *Jurnal Bahasa Rupa*, *6*(1), 11–19. https://ejournal.instiki.ac.id/index.php/jurnalbahasarupa/article/view/972

Mowforth, M., Charlton, C., & Munt, I. (2007). Tourism and Responsibility: Perspectives from Latin America and the Caribbean. In *Routledge* (p. 256). Taylor & Francis. https://books.google.co.id/books?id=iaV8AgAAQBAJ

Nofrianti, N., Games, D., & Rahman, H. (2025). Efektivitas Pelatihan Kewirausahaan Dalam Mengembangkan Kemampuan Manajerial Pelaku Usaha Mikro Dan Kecil (UMK) Perempuan di Sektor Kuliner Sumatera Barat. *Paradoks : Jurnal Ilmu Ekonomi*, *8*(4), 478–484. https://doi.org/10.57178/paradoks.v8i4.1827

Rachmadina, S., Zahrah, H., Daniswara, F., & Mahmudah, U. (2025). Dampak Label Halal Palsu Terhadap Kepercayaan Konsumen dan Reputasi Bisnis Lokal. *PENG: Jurnal Ekonomi Dan Manajemen*, *2*(4), 4183–4191. https://doi.org/10.62710/dst3zr21

Sjölander-Lindqvist, A., Jong, A. de, Puig, R. G., Romeo, G., & Skoglund, W. (2021). Gastronomy And Creative Entrepreneurship In Rural Tourism: Encouraging Sustainable Community Development. *A Research Agenda For Heritage Planning*, 187–198. https://doi.org/10.4337/9781788974639.00029

Titaley, S., & Nurhaeny, A. (2023). Efektivitas Program Pemberdayaan Masyarakat Bagi Kelompok Nelayan Dalam Pengembangan Desa Pesisir (Studi Kasus : Desa Larike). *Journal Teknik Mesin, Elektro, Informatika, Kelautan*

Dan Sains, *3*(2), 79–86. https://doi.org/10.30598/metiks.2023.3.2.79-86

Tohopi, R., Ngabito, F. M., & Mukdin, N. B. (2025). Implementasi Community-Based Tourism sebagai Strategi Pembangunan Pariwisata Berkelanjutan. *Jurnal Ilmiah Ilmu Sosial*, *11*(1), 159–171. https://doi.org/10.23887/jiis.v11i1.94077

Trupp, A., Salman, A., Stephenson, M. L., Chan, L. F., & Gan, J. E. (2025). A Systematic Review of Challenges Faced by Micro and Small Enterprises in Tourism Destinations: Producing Solutions through Resilience Building and Sustainable Development. *Tourism Planning and Development*, *22*(3), 301–323. https://doi.org/10.1080/21568316.2024.2307970

Vuksanović, N., Demirović Bajrami, D., Petrović, M. D., Radovanović, M. M., Malinović-Milićević, S., Radosavac, A., Obradović, V., & Ergović Ravančić, M. (2024). The Role of Culinary Tourism in Local Marketplace Business—New Outlook in the Selected Developing Area. *Agriculture (Switzerland)*, *14*(1). https://doi.org/10.3390/agriculture14010130

World Tourism Organization. (2017). UNWTO Tourism Highlights 2017 Edition. *Madrid: UNWTO*. https://www.untourism.int/archive/global/publication/unwto-tourism-highlights-2017