

# Development of Local Banana Chips Business Groups Based on Regenerative Agriculture Through Integrated Marketing Communication in Alue Krueng Village, Aceh Jaya Regency

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## Abstract

The economic potential of banana-based micro-enterprises in rural areas often remains underutilized due to limited knowledge of product innovation, marketing strategies, and gender-inclusive empowerment. This community service program aims to strengthen regenerative entrepreneurship by fostering sustainable banana chip-based businesses in rural communities through integrated empowerment and digital marketing approaches. This program contributes to enhancing community resilience by developing a sustainable model of banana chip entrepreneurship that empowers women, promotes digital marketing skills, and maximizes the use of local natural resources. It fosters the creation of new socio-entrepreneurial groups that are independent, inclusive, and adaptive to market demands. The method applied was participatory community engagement using a descriptive qualitative approach, involving field observations, interviews, and training workshops. Data were collected from primary and secondary sources, analyzed thematically, and implemented in collaboration with community groups. Criteria for inclusion included active micro-entrepreneurs in banana processing, while exclusion applied to non-productive or non-resident actors. The type of community service strategy used in this study is the Participatory Action and Learning Action Research (PALAR) approach, which is a form of community-based empowerment involving the active participation of the community as the main agents of transformation. This approach was chosen because it has proven effective in strengthening community empowerment through reflective and adaptive collaboration tailored to local contexts. The program resulted in the creation of four new banana chip product variants, increased knowledge and skills in e-commerce, packaging innovation, and digital promotion, especially among women participants. Community members reported increased income potential, market access, and a shift toward environmentally friendly production practices. This program successfully addressed the research objectives by increasing local entrepreneurial capacity, promoting gender-sensitive innovation, and offering a replicable model for other rural regions aiming to enhance economic sustainability through agro-based micro-enterprises.

**Keyword:** banana chips, community empowerment, digital marketing, gender inclusion, regenerative entrepreneurship

## INTRODUCTION

Empowering communities through local economic development has become a strategic approach to improving the welfare of agrarian villages, particularly in rural areas of developing countries. One sector with great potential in this regard is the processing of local agricultural products into high value-added goods, such as banana chips, which have seen increasing global

demand due to their nutritional content and flexibility in processing and distribution (Istiyanti et al., 2024). In Indonesia, micro, small, and medium enterprises (MSMEs) in agro-industry still face various challenges, especially in terms of market access and effective product promotion strategies (Ruswaji & Cahyono, 2020). In this context, the development of business groups based on regenerative agriculture not only addresses the need for sustainable food systems but also presents an innovative model by integrating ecological and economic aspects of local communities (Aulia et al., 2024).

Despite this significant potential, a serious gap persists between the production capacity of rural communities and successful market penetration. A major issue is the weak application of marketing strategies that are adaptive to changes in consumer behavior and the advancement of digital technologies (Ghozi & Almu'tasim, 2020). This gap is further exacerbated in rural communities with limited access to training, promotional infrastructure, and product legality. Previous studies have emphasized the importance of legality and packaging innovation in increasing the added value and competitiveness of local agricultural products (Harimurti et al., 2022). Additionally, the dominance of middlemen in distribution chains makes it difficult for MSMEs to gain optimal profit from their products (Prasditio et al., 2023).

To address these challenges, the Integrated Marketing Communication (IMC) approach becomes highly relevant for rural MSMEs. IMC is a strategic approach that integrates all marketing communication elements, both online and offline, to deliver product messages consistently and effectively across distribution channels (Saputra et al., 2023). This approach has also proven to enhance the adaptive capacity of small businesses in building brand image and consumer trust (Rakhmawati et al., 2024). Theoretically, IMC is rooted in integrated communication theory that combines interpersonal communication, sales promotion, advertising, public relations, and digital marketing into a cohesive system responsive to market dynamics (Aji, 2015). Through this synergy, micro-agricultural enterprises can reach wider consumers while creating a positive perception of product value.

This study aims to thoroughly examine the strategy for strengthening banana chip enterprises based on regenerative agriculture in Alue Krueng Village through the Integrated Marketing Communication approach. The research questions addressed include: (1) how to enhance the production and marketing capacity of the business group; (2) the extent of entrepreneurs' understanding and capability in implementing IMC; (3) what obstacles are encountered in packaging, branding, and product legality; and (4) how effective is the application of IMC in expanding both offline and online market reach. The study uses a descriptive qualitative

approach based on community engagement with participatory techniques as the foundation for analysis and reflection.

This article contributes to the scientific literature by offering a model for implementing IMC in the context of small-scale enterprises based on regenerative agriculture, which remains limited in prior studies. In addition to strengthening the theoretical dimension of IMC application in the agribusiness sector, this study presents a contextual, adaptive, and applicable empowerment model for use in other rural communities. Its alignment with regenerative principles makes the approach not only economically driven but also ecological and sustainable (Mudege, 2017). Thus, this article offers novelty in integrating IMC and regenerative agriculture systems as a holistic and long-term impactful local economic empowerment strategy (Istiyanti et al., 2024).

## METHOD

The type of community service strategy used in this study is the Participatory Action and Learning Action Research (PALAR) approach, which is a form of community-based empowerment involving the active participation of the community as the main agents of transformation. This approach was chosen because it has proven effective in strengthening community empowerment through reflective and adaptive collaboration tailored to local contexts (Aulia et al., 2024). The strategy is implemented through a series of structured activities, including joint problem identification, collaborative action planning, activity implementation, and cyclical participatory evaluation.

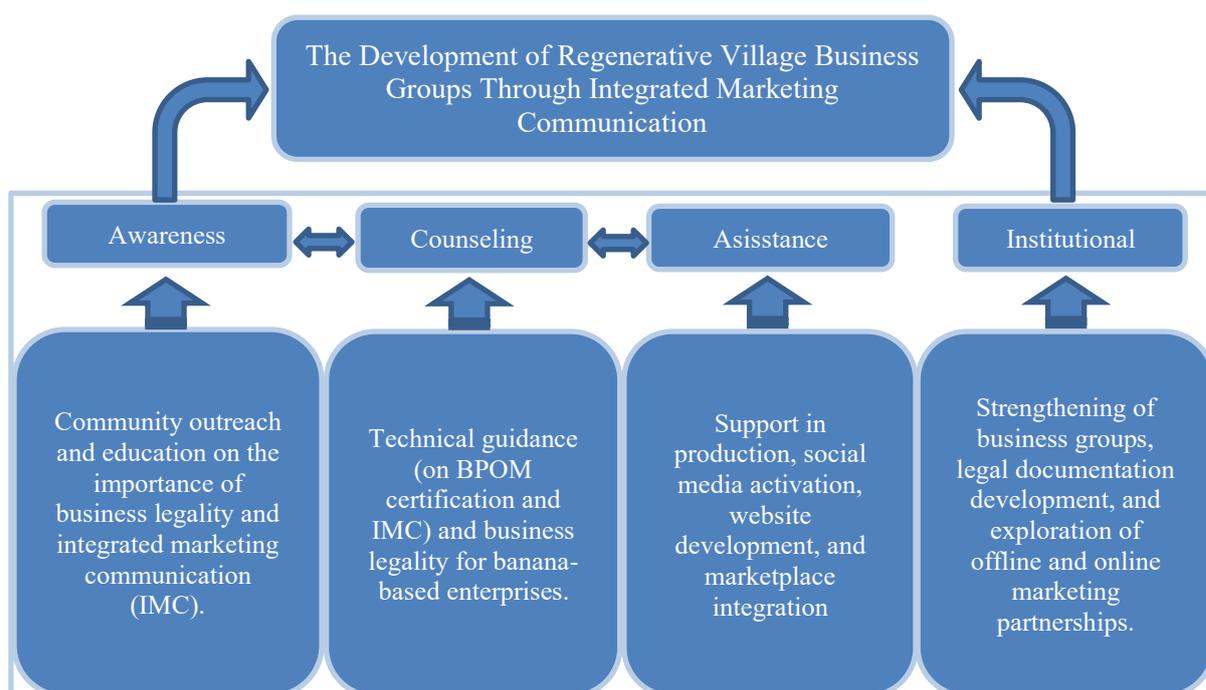


Figure 1. Empowerment Method and Activity Stages

The stages of activities carried out in the field include:

1. Updating data and conducting field observations to strengthen the development strategy of the "Aku Pisang" banana chips enterprise based on local potential and regenerative agriculture principles.
2. Conducting training and technical assistance related to advanced processing, innovative packaging, branding, and diversification of banana chip product variants.
3. Providing assistance in obtaining extended business legality, including SPP-IRT (Household Food Industry Permit) and halal certification from MUI.
4. Developing an integrated marketing system both offline and online through social media, websites, and marketplaces.
5. Producing digital content and implementing integrated promotional activities based on Integrated Marketing Communication (IMC) that highlight the advantages of healthy and eco-friendly products.
6. Establishing strategic partnerships with local marketing partners such as souvenir shops and village cooperatives.

7. Success indicators include:

- The product has obtained official legal permits
  - The number and quality of product variants have increased
  - Online sales channels are actively utilized (Shopee, Tokopedia, WhatsApp, Instagram, website)
  - At least three partnerships have been established with offline marketing partners
8. Program results dissemination and periodic consultations with village authorities are carried out quarterly.
9. Post-program activities, such as data updates and further market exploration, are conducted two months after the program ends to ensure sustainability.

With this methodological approach, the study not only produces community-based empirical findings but also presents an applicable and measurable intervention model to support the strengthening of regenerative-based MSMEs through integrated marketing communication strategies [(Haeran et al., 2023)

## **RESULTS AND DISCUSSION**

### **1. Result**

Community service programs focusing on the development of micro-enterprises in banana chip production in rural areas have demonstrated concrete outcomes in improving production capacity, marketing, and the economic empowerment of local communities. Using a participatory approach, various interventions were carried out, including training in production, product diversification, packaging, online and offline marketing strategies, as well as financial and institutional assistance.

First, in terms of production, there was an increase in the community's technical skills in processing bananas into high-value chips. The technical training activities enhanced participants' competencies across production stages, from raw material selection, slicing, frying, to packaging. This aligns with the community program in Suwayuwo Village, where the training led to improved product quality in terms of taste and professionally designed packaging, resulting in increased sales through the introduction of new flavors like cheese and chocolate (Rakhmawati et al., 2024).

Second, in terms of marketing, there was a transformation in product distribution strategies through the use of digital platforms and enhanced packaging quality. In Dilem Village, Mojokerto, interventions involving online and offline marketing training, along with packaging design support, successfully expanded market reach and reduced reliance on middlemen (Ghozi & Almu'tasim, 2020). Similar efforts in Giripeni, Yogyakarta, resulted in a 34.83% increase in value added and a 31.11% increase in net profit from banana chip sales (Istiyanti et al., 2024).

Third, in terms of institutional empowerment, the establishment of new community business groups and the strengthened role of women in entrepreneurship were significant achievements. For example, in Ngunut Village, Karanganyar, banana chip production training led to the creation of a new business structure managed by a women's group, which improved skills in packaging and business management (Prasditio et al., 2023). Similarly, in Rantau Puri Village, women's

empowerment programs utilizing kepok bananas to produce chips, crackers, and banana steak developed resource-based skills (Harimurti et al., 2022).

Fourth, in terms of business sustainability, several programs showed positive business feasibility analyses. In Lambur Luar Village, the training program on processing horn bananas into sweet chips achieved a benefit-cost ratio (R/C) of 3.4, indicating strong economic viability (Haeran et al., 2023). In addition, the empowerment program in Wanakerta Village demonstrated the importance of local needs assessment and cross-sector collaboration to support the success of creative economy-based banana chip MSMEs (Damiri et al., 2021).

Fifth, the integration of regenerative approaches and local entrepreneurship showed positive results. The study in Alue Krueng Village, Aceh Jaya, revealed that combining regenerative agriculture with banana waste-based entrepreneurship strengthened the local economy, improved environmental quality, and led to the establishment of regenerative-based business groups (Aulia et al., 2024).

## **2. Discussion**

The main outcomes of this community engagement program indicate that intensive training and mentoring in banana chip processing and marketing have significantly enhanced the technical skills, entrepreneurial awareness, and economic potential of the target community. These findings align with the program's objective to empower the community through asset-based local development and integrated marketing approaches. Positive changes were observed in participants' improved knowledge of production techniques, the adoption of better packaging methods, and engagement in digital marketing strategies previously inaccessible to micro-entrepreneurs in the village. This demonstrates that structured interventions can bridge capacity gaps in managing local food micro-enterprises.

Within the theoretical framework of participatory empowerment and local economic development, this activity underscores the relevance of the Asset-Based Community Development (ABCD) approach, which emphasizes local potential and capacities over socio-economic deficits (El-Faradis, 2022). This approach effectively shifts community perception from being passive recipients to active agents in banana chip production and marketing. The findings also reinforce the theoretical understanding that entrepreneurship training based on technology and packaging innovation significantly contributes to the economic sustainability of small-scale households (Ok & Murwanti, 2024).

Compared to previous studies, these results broaden the scope beyond the technical aspects of banana chip processing, such as product durability based on frying media or packaging types (Khanvilkar et al., 2016), and increasing economic value through local agricultural processing (Istiyanti et al., 2024). Unlike those monodisciplinary studies, this program's findings show that the impact of community service goes beyond production improvement to include market behavior transformation through Integrated Marketing Communication (IMC). This aligns with recommendations from a study in West Lombok, highlighting the importance of marketing and labeling workshops as part of post-pandemic MSME empowerment strategies (Saputra et al., 2023).

The scientific contribution of this article lies in its integration of rural women's entrepreneurship with community-based digital marketing strategies. This combination is

relatively underexplored in the context of local food product enterprises such as banana chips but has proven to foster sustainable social and economic transformation (Effendi et al., 2025). The approach also reinforces the relevance of STEM and educational methods in enhancing entrepreneurial motivation and attitudes in rural communities, as discussed in STEM-based education studies in peripheral schools (Amri et al., 2021).

However, this activity has its limitations. The intervention was limited to a single village, and the short duration of mentoring posed challenges in measuring long-term impacts. Moreover, there was no structured measurement of digital marketing adoption in quantitative terms. These limitations align with critical reflections from studies in Trenggalek and Mojokerto, which emphasize the importance of sustained mentoring and multi-stakeholder involvement to broaden the impact of women and MSME empowerment programs (Rining & Trisna, 2020); (Ghozi & Almu'tasim, 2020).

As an implication, this activity can be replicated in other communities that have potential local commodities but face similar challenges in production and marketing skills. Community engagement practitioners are encouraged to integrate simple technology, digital literacy, and branding training into a unified intervention package. For future research development, quantitative studies using pre-test and post-test designs and tracking business growth through microeconomic indicators are highly recommended, following the evaluation models used in Kulonprogo (Istiyanti et al., 2024) and Cipayung (Sandrasari, 2019).

## **CONCLUSION**

The results of this community service activity, which focused on strengthening micro-entrepreneurship based on banana chips, demonstrate that a regenerative approach combined with integrated marketing communication can enhance production capacity, product innovation, and market access for local entrepreneurs in rural areas. The support provided through training in processing, packaging, digital marketing, and gender-based empowerment has significantly increased the value-added of products and the economic empowerment of women. The synergy between the use of local resources, digital marketing strategies, and an understanding of social entrepreneurship has produced an empowerment model that is not only profit-oriented but also socially and environmentally sustainable for the target village community.

Theoretically, this article contributes to the development of the concept of regenerative entrepreneurship by integrating principles of community empowerment, sustainability, and social innovation into the practices of micro, small, and medium enterprises (MSMEs) based on local products. The findings also expand the scope of study in the field of Integrated Marketing Communication (IMC) in the micro sector by emphasizing the importance of collaborative, contextual, and locally driven approaches. Practically, the model applied in this activity can be replicated in other village contexts with similar characteristics, serving as an alternative strategy for developing MSMEs based on local commodities that are adaptable to the challenges of the digital era and market dynamics.

Going forward, further development is needed in integrating information technology into village microenterprise management, as well as in strengthening distribution networks and systematically building local product branding. Future research is recommended to evaluate the

long-term impact of this regenerative model intervention on household economic resilience, shifts in gender roles, and active youth involvement in sustainable local economic development.

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