

# Empowering the "Persatuan" Women Farmers' Group in Local Food Production and Marketing to Support Village Economic Self-Reliance

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**Abstract:** This community engagement program aimed to strengthen the entrepreneurial capacity of the Persatuan Women Farmers Group (Kelompok Wanita Tani/KWT) in Bonto Tengnga Village, Sinjai Borong District, Sinjai Regency, through the development of local food production and marketing to support sustainable rural economic independence. The group experienced several challenges, including limited business management skills, inadequate financial record-keeping, suboptimal production quality, unattractive packaging and branding, and restricted market access. A participatory empowerment approach was implemented through sequential stages comprising socialization, needs assessment, business management and financial literacy training, production improvement, packaging and branding development, digital marketing training, mentoring, monitoring, and program evaluation. The program focused on enhancing the production of banana and sweet potato chips as value-added local food products. Program outcomes demonstrated significant improvements in participants' knowledge and practical skills in business planning, financial administration, hygienic food processing, product quality enhancement, attractive packaging design, and digital marketing through social media platforms. Members also showed greater awareness of business sustainability and institutional strengthening, enabling them to manage their enterprises more systematically. Furthermore, the adoption of improved production techniques and digital promotion increased product competitiveness and expanded market opportunities beyond the local community. Overall, the program successfully enhanced the organizational capacity and entrepreneurial competence of the women farmers' group, contributing to value-added local agricultural products, increased household income opportunities, and the promotion of sustainable village economic empowerment.

**Keywords:** women farmers' group; community empowerment; local food processing; business management; digital marketing; rural economic development.

## 1. Introduction

Community empowerment through local food-based entrepreneurship has become an increasingly important strategy for promoting inclusive rural development and achieving sustainable economic growth. Across developing countries, women play a strategic role in strengthening household food security, increasing agricultural productivity, and generating family income through small-scale agro-processing enterprises. The Food and Agriculture Organization (FAO) emphasizes that strengthening women's participation in agricultural value chains not only improves food resilience but also contributes significantly to poverty reduction, gender equality, and rural economic transformation (FAO, 2023). Likewise, the Sustainable Development Goals (SDGs), particularly Goals 1 (No Poverty), 2 (Zero Hunger), 5 (Gender Equality), and 8 (Decent Work and Economic Growth), encourage governments and higher education institutions to develop community empowerment programs that increase the economic capacity of rural women through innovation, entrepreneurship, and sustainable food systems.

Local food processing has recently received considerable attention because it creates value-added agricultural products while reducing dependence on external markets. Agricultural commodities with relatively low economic value can be transformed into competitive commercial products through appropriate processing technologies, attractive packaging, product diversification, and effective marketing strategies. Previous studies have demonstrated that value-added agro-processing significantly increases farmers' income while strengthening rural resilience against market fluctuations (Porter & Kramer, 2022; Rahman et al., 2024). However, many rural communities continue to experience limitations in transforming local agricultural resources into market-oriented products because of inadequate entrepreneurial capabilities and institutional support.

Women's Farmers Groups (Kelompok Wanita Tani—KWT) have emerged as important community organizations supporting rural economic development in Indonesia. Beyond their traditional role in household food production, KWTs increasingly function as community-based enterprises responsible for processing agricultural commodities, developing local food products, and creating employment opportunities for women. Their contribution has expanded from subsistence farming toward micro-enterprise development and community-based agribusiness. Consequently, strengthening the organizational and entrepreneurial capacities of KWTs has become a strategic priority for rural development policies.

Despite their significant potential, many Women's Farmers Groups continue to encounter substantial barriers that limit business sustainability. Recent studies indicate that most KWT-based enterprises operate with weak business management systems, limited financial literacy, low adoption of food processing technology, inadequate product standardization, unattractive packaging, and poor marketing capabilities (Abdi et al., 2025; Farman et al., 2025). These limitations reduce product competitiveness and constrain access to broader regional and national markets. Furthermore, many community enterprises still rely on conventional marketing methods despite the rapid expansion of digital commerce and social media platforms.

Digital transformation has fundamentally changed marketing practices among micro, small, and medium enterprises (MSMEs). Social media platforms, electronic marketplaces, and digital branding enable community enterprises to reach wider consumer segments while reducing promotional costs. Previous research consistently reports that digital marketing positively influences market expansion, customer engagement, and business sustainability among rural entrepreneurs (Ciniru et al., 2025; Solihin et al., 2022). Nevertheless, digital adoption among community-based producer groups remains relatively low because of limited digital literacy, insufficient training, and inadequate mentoring. Consequently, many rural food products remain confined to local markets despite possessing strong commercial potential.

Another important issue concerns business governance and institutional management. Sustainable rural enterprises require not only production capabilities but also financial accountability, business planning, legal compliance, product certification, and organizational management. Weak institutional governance frequently prevents community organizations from accessing government assistance programs, financial institutions, and modern distribution networks. Several studies have shown that strengthening institutional capacity through continuous mentoring significantly improves organizational performance, business sustainability, and entrepreneurial resilience among rural producer groups (Kurniawan, 2025; Rahayu et al., 2025).

Bonto Tengnga Village, located in Sinjai Borong District, Sinjai Regency, possesses considerable agricultural resources, including bananas, sweet potatoes, coffee, cloves, tobacco, and other local commodities that provide substantial opportunities for value-added food processing. In addition, the village has favorable environmental conditions supporting sustainable agricultural production and rural tourism development (Nisa et al., 2024). These characteristics create an enabling environment for developing community-based food enterprises capable of increasing local economic value.

One of the village's most active community organizations is the Persatuan Women's Farmers Group, whose members have initiated household-scale production of banana chips, sweet potato chips, and other local snacks. Although these activities demonstrate entrepreneurial potential, field observations revealed several critical challenges. Production processes remain largely traditional, financial records are rarely maintained systematically, packaging lacks commercial attractiveness, branding is underdeveloped, and marketing activities remain restricted to neighborhood consumers and local retail outlets. Moreover, product legality, business licensing, halal certification, and digital

promotion have not been fully implemented. These constraints substantially reduce the competitiveness of local food products despite abundant raw material availability.

Although previous community empowerment programs have addressed individual aspects such as financial management, product packaging, or entrepreneurship training, most interventions have been fragmented and sector-specific. Few programs have adopted an integrated empowerment framework combining business management, financial literacy, production improvement, packaging innovation, branding development, digital marketing, institutional strengthening, continuous mentoring, and program evaluation within a single intervention. Consequently, existing empowerment initiatives often generate temporary improvements without ensuring long-term organizational sustainability.

The present community engagement program addresses this practical gap by implementing a comprehensive capacity-building model integrating entrepreneurial management, local food processing, product quality improvement, packaging innovation, branding, digital marketing, institutional strengthening, and continuous mentoring. Rather than focusing exclusively on technical production skills, the program simultaneously strengthens managerial competencies, organizational governance, and market-oriented business development, thereby enhancing the sustainability of community enterprises.

The novelty of this community engagement initiative lies in the integration of multiple empowerment components into a holistic rural entrepreneurship model tailored to the specific characteristics of Women's Farmers Groups. The program combines value-added food processing, business management training, financial administration, attractive packaging design, digital branding, social media marketing, and institutional capacity building supported by participatory mentoring and periodic evaluation. This integrated approach is expected to generate more sustainable outcomes than conventional training programs that address only one aspect of enterprise development.

Accordingly, this community engagement program aims to enhance the entrepreneurial capacity of the Persatuan Women's Farmers Group in Bonto Tengnga Village by strengthening business management, improving local food production quality, developing attractive product packaging and branding, expanding digital marketing capabilities, and reinforcing institutional governance. Ultimately, the program seeks to improve product competitiveness, increase household income opportunities, strengthen rural women's economic participation, and contribute to sustainable village economic independence through community-based local food enterprises.

## 2. Literature Review

### 2.1 Community Empowerment in Rural Economic Development

Community empowerment has become a fundamental strategy for promoting sustainable rural development by strengthening local capacities, encouraging participation, and improving economic resilience. Rather than viewing communities as passive beneficiaries, empowerment emphasizes enabling individuals and community organizations to identify problems, mobilize local resources, make collective decisions, and develop sustainable economic activities. Zimmerman (2000) conceptualizes empowerment as a multidimensional process that enhances individuals' control over their lives while strengthening organizational and community capacities. In rural contexts, empowerment programs are closely associated with improving agricultural productivity, entrepreneurship, and household welfare. Recent studies demonstrate that participatory empowerment significantly enhances farmers' adaptive capacity, entrepreneurial behavior, and community resilience against socioeconomic challenges (Rahman et al., 2024). Empowerment initiatives are particularly effective when they integrate capacity building, institutional strengthening, and continuous mentoring instead of relying solely on short-term technical training.

Within Indonesia, community empowerment has increasingly been implemented through community-based organizations, including Women's Farmers Groups (Kelompok Wanita Tani/KWT). These organizations serve not only as agricultural production units but also as platforms for entrepreneurship, knowledge exchange, and collective marketing. Nevertheless, empirical evidence indicates that many empowerment programs remain fragmented and fail to address managerial, technological, and marketing challenges simultaneously, thereby limiting their long-term sustainability.

## 2.2 Women Farmers Groups and Local Economic Development

Women's Farmers Groups represent an important institutional mechanism for enhancing women's participation in rural economic development. Their contribution extends beyond household food production toward value-added agro-processing, community entrepreneurship, and income diversification. According to FAO (2023), increasing women's participation in agricultural value chains contributes directly to food security, gender equality, and poverty reduction. Previous studies consistently report that women's participation in community enterprises increases household income while strengthening social capital and collective decision-making. Women-led enterprises generally exhibit stronger collaboration, better resource sharing, and greater commitment to community welfare than individually managed businesses (Khasanah, 2020). Despite these advantages, Women Farmers Groups continue to face substantial barriers, including inadequate entrepreneurial competencies, weak organizational governance, limited financial management, insufficient market access, and low technological adoption. These constraints reduce their competitiveness and restrict opportunities for business expansion. Consequently, strengthening organizational capacity has become a strategic priority for sustainable rural development policies.

## 2.3 Value Addition through Local Food Processing

Agricultural value addition refers to transforming raw agricultural commodities into products with higher commercial value through processing, packaging, branding, and quality improvement. Value-added agriculture has become an essential strategy for increasing farmers' income while reducing dependence on commodity price fluctuations. Local food processing generates multiple economic benefits. First, it increases product shelf life and marketability. Second, processing creates employment opportunities within rural communities. Third, value-added products generally command higher selling prices than unprocessed commodities. Previous studies indicate that rural food processing significantly improves household income, business sustainability, and local economic resilience (Porter & Kramer, 2022). However, successful value addition requires more than production technology alone. Product quality, food safety standards, attractive packaging, consistent branding, and effective marketing strategies are equally important determinants of competitiveness. Without these supporting components, processed food products often fail to penetrate wider commercial markets.

## 2.4 Entrepreneurial Capacity and Business Management

Entrepreneurial capacity is widely recognized as a critical determinant of microenterprise performance. It encompasses managerial knowledge, business planning, financial management, production control, market orientation, innovation capability, and strategic decision-making. Recent research demonstrates that entrepreneurial training positively influences business productivity, profitability, and sustainability among rural enterprises. Financial literacy, in particular, enables entrepreneurs to manage cash flow, determine production costs, calculate selling prices, and evaluate business performance more effectively. Business management also includes organizational planning, resource allocation, risk management, and institutional governance. Community enterprises lacking systematic management frequently experience difficulties in maintaining production continuity,

accessing financial institutions, and expanding market networks. Therefore, integrated business management training is considered an essential component of sustainable community empowerment.

## 2.5 Packaging, Branding, and Product Competitiveness

Packaging has evolved from a protective function into a strategic marketing instrument capable of influencing consumer purchasing decisions. Modern consumers increasingly evaluate products based on visual appearance, product information, and perceived quality communicated through packaging. Branding complements packaging by establishing product identity, consumer trust, and market differentiation. Strong brands create emotional connections with consumers while enhancing perceived product quality. Previous empirical studies reveal that improvements in packaging and branding substantially increase product attractiveness, customer satisfaction, and purchasing intentions. Community enterprises adopting modern packaging technologies generally experience improved market acceptance and higher product prices compared with enterprises relying on traditional packaging methods (Farman et al., 2025). Nevertheless, many rural producer groups continue to utilize simple packaging with limited product information, reducing their competitiveness within modern retail markets.

## 2.6 Digital Marketing for Rural Microenterprises

Digital transformation has fundamentally changed marketing practices across all business sectors, including rural microenterprises. Social media platforms, electronic marketplaces, and mobile commerce provide cost-effective opportunities for expanding market access beyond geographical limitations. Digital marketing enables community enterprises to communicate directly with consumers through product photographs, promotional content, customer engagement, and online transactions. Studies consistently demonstrate that digital marketing positively affects sales growth, brand awareness, customer loyalty, and business sustainability. However, adoption remains relatively limited among rural enterprises because of insufficient digital literacy, technological infrastructure, and entrepreneurial confidence. Capacity-building programs focusing on digital skills have therefore become increasingly important for strengthening rural business competitiveness (Ciniru et al., 2025).

## 2.7 Institutional Strengthening and Sustainable Community Enterprises

Institutional capacity determines the sustainability of community-based enterprises. Strong institutions facilitate collective decision-making, financial accountability, production coordination, resource sharing, and external collaboration. Institutional strengthening includes organizational management, legal compliance, leadership development, business licensing, halal certification, and networking with government agencies, universities, and private sector partners. Continuous mentoring is equally important because organizational learning requires long-term assistance rather than one-time training. Studies indicate that mentoring significantly improves knowledge retention, innovation adoption, and organizational performance compared with stand-alone training programs (Abdi et al., 2025). Consequently, sustainable empowerment should combine technical assistance with organizational development to ensure long-term business continuity.

## 2.8 Research Gap and Conceptual Framework

Although previous studies have investigated financial literacy, packaging innovation, entrepreneurial training, digital marketing, and community empowerment separately, relatively few have integrated these components into a comprehensive empowerment model specifically designed for Women's Farmers Groups in rural Indonesia. Existing programs frequently concentrate on one intervention while neglecting institutional governance and long-term mentoring. Furthermore,

empirical evidence concerning integrated empowerment models that simultaneously improve business management, local food processing, packaging innovation, branding, digital marketing, institutional strengthening, and participatory mentoring remains limited. This practical and scholarly gap indicates the need for a holistic community empowerment framework capable of generating sustainable economic impacts. Accordingly, this community engagement program adopts an integrated empowerment approach consisting of seven interconnected components: (1) needs assessment, (2) entrepreneurial management training, (3) financial literacy, (4) local food production improvement, (5) packaging and branding development, (6) digital marketing, and (7) continuous mentoring and evaluation. The framework is expected to enhance organizational capacity, increase product competitiveness, expand market access, and strengthen village economic independence through sustainable local food enterprises.

### 3. Research Methods

This community engagement program employed a Participatory Action Research (PAR) approach, which actively involves community members as collaborative partners throughout problem identification, planning, implementation, evaluation, and continuous improvement. PAR is widely recognized as an effective methodology for community empowerment because it combines participatory learning, collective decision-making, and action-oriented problem solving to generate sustainable social and economic outcomes. The program was conducted from April to June 2026 in Bonto Tengnga Village, Sinjai Borong District, Sinjai Regency, South Sulawesi, Indonesia. The implementation partner was the Persatuan Women Farmers Group (Kelompok Wanita Tani/KWT Persatuan), consisting of women engaged in household-scale processing of local agricultural commodities, particularly banana and sweet potato chips. Participants were selected purposively based on their active involvement in the group and willingness to participate throughout the empowerment activities. The program involved all active members of the KWT together with village officials, agricultural extension officers, and the university community service team to ensure collaborative implementation and sustainability.

#### 3.1 Research Design

The study adopted a participatory community empowerment design consisting of iterative planning, implementation, reflection, and evaluation cycles. This design enabled continuous interaction between the facilitators and community members while ensuring that every intervention addressed the actual needs and priorities identified by the beneficiaries. The empowerment framework was organized into seven sequential stages:

1. Community socialization and stakeholder engagement.
2. Participatory needs assessment and problem identification.
3. Business management and financial literacy training.
4. Local food production improvement and product diversification.
5. Packaging, branding, and product identity development.
6. Digital marketing capacity building.
7. Monitoring, mentoring, reflection, and program evaluation.

The cyclical implementation reflects the fundamental principles of Participatory Action Research, whereby findings from each stage informed subsequent interventions to improve program effectiveness.

### 3.2 Data Collection

Multiple qualitative data collection techniques were employed to enhance the credibility of findings through methodological triangulation. These techniques included:

- Participatory observation, conducted during production activities, training sessions, and mentoring to document changes in participants' skills and business practices.
- Semi-structured interviews with KWT members, village leaders, and facilitators to identify existing constraints, evaluate program implementation, and assess perceived benefits.
- Focus Group Discussions (FGDs) to explore participants' experiences, formulate collective solutions, and validate intervention priorities.
- Documentation, including attendance records, financial recording templates, product photographs, packaging designs, social media promotion materials, and field notes documenting the implementation process.

Combining these techniques enabled comprehensive understanding of organizational, managerial, production, and marketing improvements achieved during the program.

### 3.3 Community Empowerment Intervention

The intervention emphasized integrated capacity building rather than isolated technical training. During the first phase, community needs were identified through participatory discussions and field observations. The identified problems became the basis for designing training modules tailored to the characteristics of the Women Farmers Group. Business management training introduced enterprise planning, production cost calculation, pricing strategies, profit analysis, financial recording, and simple bookkeeping. Production training focused on improving processing techniques, hygiene standards, product consistency, oil reduction methods, and quality control to increase product competitiveness. Packaging and branding sessions emphasized attractive package design, product labeling, brand identity, nutritional information, and compliance with food marketing requirements. Digital marketing training introduced social media utilization, product photography, promotional content development, online customer engagement, and marketplace utilization to expand market access beyond the local village. Following each training activity, continuous mentoring was conducted to assist participants in implementing newly acquired knowledge within their daily business operations.

### 3.4 Program Evaluation

Program effectiveness was evaluated using both process indicators and outcome indicators. Process evaluation assessed participant attendance, engagement, training implementation, mentoring activities, and completion of planned interventions. Outcome evaluation measured improvements in:

1. business management knowledge;
2. financial recording practices;
3. production quality and hygiene;
4. packaging and branding quality;
5. digital marketing capability;
6. institutional capacity of the Women Farmers Group; and
7. perceived business development and market expansion.

Evaluation was conducted through direct observation, interviews, participant reflections, documentation review, and comparison of conditions before and after program implementation.

### 3.5 Data Analysis

Qualitative data were analyzed using an interactive thematic analysis approach involving four sequential stages: data collection, data reduction, data display, and conclusion drawing/verification.

Information obtained from observations, interviews, FGDs, and documentation was first organized and coded according to the objectives of the community empowerment program. Similar themes were subsequently grouped into broader categories representing business management, financial literacy, production improvement, packaging and branding, digital marketing, institutional strengthening, and perceived program impacts. To improve analytical rigor, findings from different data sources were compared using source triangulation and method triangulation. Interpretations were continuously discussed among the research team and validated through participant feedback during mentoring and evaluation sessions, thereby enhancing the credibility, dependability, and confirmability of the findings.

### 3.6 Research Quality Assurance

The trustworthiness of the study was ensured through several strategies. Credibility was enhanced through prolonged engagement, triangulation, and member checking with participants. Transferability was supported by providing detailed descriptions of the study setting, participants, and intervention procedures. Dependability was maintained through systematic documentation of all program activities, while confirmability was strengthened by preserving field notes, interview records, and supporting documentation for verification purposes. Overall, the methodological framework enabled comprehensive evaluation of the integrated empowerment program while generating practical evidence regarding the effectiveness of participatory capacity-building interventions in strengthening rural women entrepreneurs and promoting sustainable village economic development.

## 4. Results and Discussion

### 4.1 Initial Assessment of the Partner Group

The community empowerment program began with an initial assessment to identify the strengths, constraints, and development needs of the Persatuan Women Farmers Group (Kelompok Wanita Tani/KWT) in Bonto Tengnga Village, Sinjai Borong District, Sinjai Regency. The assessment was conducted through field observations, semi-structured interviews, focus group discussions (FGDs), and documentation of the production process. This participatory approach enabled the research team to understand the actual conditions of the partner group while ensuring that the intervention program was designed according to community needs. The assessment revealed that the members had considerable experience in producing banana chips and sweet potato chips using locally available agricultural commodities. The abundance of raw materials provided a strong comparative advantage for developing local food-based microenterprises. However, despite the availability of production resources, the business remained at a subsistence level due to limited managerial capacity, insufficient financial literacy, inadequate production technology, unattractive packaging, weak branding strategies, and limited market access.

Furthermore, financial transactions were not systematically recorded, making it difficult for members to calculate production costs, determine product profitability, or evaluate business performance. Marketing activities were primarily conducted through traditional channels, such as neighborhood markets and local grocery stores, with minimal utilization of digital platforms. These findings indicate that the major challenge was not the availability of natural resources but rather the limited capacity of human resources and institutional management. Such conditions are consistent with community empowerment theory, which emphasizes that sustainable rural development depends more on strengthening human capital than merely providing physical resources.

Table 1. Initial Conditions of Persatuan Women Farmers Group

| Indicator             | Initial Condition                       |
|-----------------------|-----------------------------------------|
| Business management   | No structured business planning         |
| Financial management  | No bookkeeping system                   |
| Production technology | Entirely manual production              |
| Product packaging     | Simple plastic packaging without labels |
| Branding              | No product identity or logo             |
| Marketing             | Conventional local marketing only       |

Figure 1

### Initial Socialization and Needs Assessment Activities



## 4.2 Improvement of Business Management and Financial Literacy

Business management training constituted one of the principal interventions in this empowerment program. The objective was to improve entrepreneurial capacity by introducing basic concepts of business planning, cost calculation, pricing strategies, financial recording, cash flow management, and business evaluation. Training sessions adopted an adult-learning (andragogical) approach, combining lectures, discussions, simulations, and hands-on bookkeeping exercises. Instead of relying solely on theoretical explanations, participants directly practiced preparing financial records based on their own production activities. Following the training, significant behavioral changes were observed among participants. Members began separating household finances from business finances, recording daily income and expenditures, and calculating production costs more accurately. These improvements enabled the group to establish more rational selling prices and estimate business profits with greater confidence.

The implementation of simple bookkeeping also increased members' awareness of financial accountability and encouraged better business planning. This finding demonstrates that financial literacy serves as a fundamental component of sustainable microenterprise development because it facilitates informed decision-making and efficient resource allocation. From a theoretical perspective, these findings support entrepreneurial competency theory, which argues that managerial knowledge significantly influences the sustainability of small enterprises. Previous community empowerment studies similarly reported that improving managerial capability contributes substantially to business performance and institutional strengthening.

Figure 2

### Business Management and Financial Bookkeeping Training



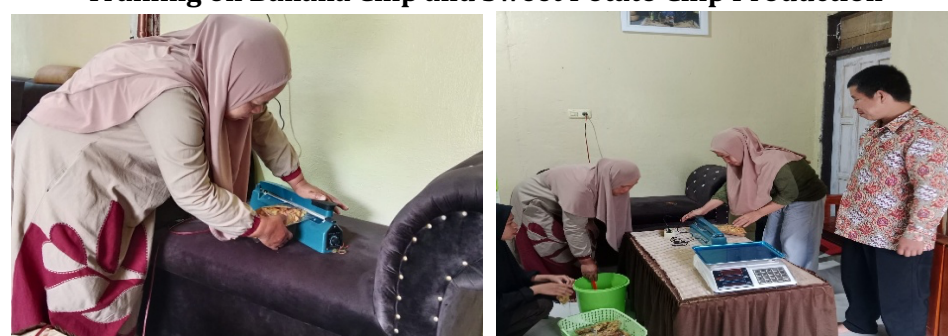
### 4.3 Enhancement of Local Food Production Capacity

Improving production quality represented another essential component of the empowerment program. Practical training focused on increasing members' technical skills in processing banana chips and sweet potato chips while maintaining food safety, hygiene, and product consistency. The intervention introduced standardized production procedures covering raw material selection, slicing techniques, frying temperature control, oil drainage, sanitation practices, and product storage. Members participated directly in demonstrations and practical sessions supervised by the service team. Following the training, several positive changes were observed. The produced chips exhibited improved texture, more uniform color, lower oil content, and better overall appearance compared with products manufactured before the intervention. Participants also demonstrated greater awareness of hygienic production practices, recognizing that food safety is an important determinant of consumer trust.

Another notable outcome was product diversification. Members began experimenting with different seasoning variations and packaging sizes, allowing them to target broader consumer segments. Product innovation is widely recognized as an effective strategy for increasing competitiveness among rural microenterprises because it creates additional value beyond raw agricultural commodities. The improved production process illustrates how appropriate technology transfer can enhance productivity without requiring expensive industrial equipment. Instead, relatively simple technical improvements were sufficient to increase product quality while maintaining production efficiency.

Figure 3

### Training on Banana Chip and Sweet Potato Chip Production



### 4.4 Product Packaging and Branding Innovation

Packaging innovation emerged as one of the most visible outcomes of the empowerment program. Before the intervention, products were packaged in transparent plastic bags without labels, logos, nutritional information, or producer identity. Consequently, the products lacked differentiation from competing products available in local markets. Training activities emphasized the strategic role of

packaging as both a protective mechanism and a marketing communication tool. Participants learned basic principles of visual branding, color selection, product labeling, logo development, and information design. As a result of the mentoring process, members successfully redesigned their product packaging using modern labels containing product names, producer information, ingredients, production dates, and attractive visual identities. The improved packaging substantially increased the perceived value of the products and strengthened consumer confidence. Branding also contributed to establishing a distinct product identity that differentiates Persatuan Women's Farmers Group products from similar local products. Marketing theory suggests that branding enhances customer recognition, promotes loyalty, and supports long-term market positioning. Therefore, packaging improvement should not be viewed merely as aesthetic enhancement but rather as a strategic investment in product competitiveness.

#### 4.5 Adoption of Digital Marketing Strategies

One of the most significant transformations observed during the program was the adoption of digital marketing practices. Prior to the intervention, product promotion relied almost exclusively on interpersonal communication and direct sales within the local community. Consequently, market coverage remained extremely limited. Training sessions introduced participants to various digital marketing tools, including WhatsApp Business, Facebook Marketplace, Instagram, and basic product photography techniques. Participants also learned how to create promotional content, write persuasive product descriptions, and communicate effectively with online customers. Following the training, members demonstrated increased confidence in utilizing social media platforms to promote their products. Several participants successfully uploaded product photographs, responded to customer inquiries through digital platforms, and expanded their customer networks beyond the village. The adoption of digital marketing substantially improved market accessibility while requiring relatively low promotional costs. This finding supports previous studies indicating that digital transformation enables rural microenterprises to overcome geographical barriers and compete more effectively within wider markets.

#### 4.6 Institutional Strengthening and Program Sustainability

Beyond improving individual competencies, the program also strengthened the institutional capacity of Persatuan Women Farmers Group. Organizational development included clearer task distribution, routine financial administration, production documentation, business planning, and preparation for business legalization, including Business Identification Number (NIB) registration and halal certification. Institutional strengthening is essential because sustainable rural enterprises require effective organizational governance in addition to technical production skills. Through continuous mentoring, members gradually adopted collective decision-making mechanisms and developed greater organizational commitment. Monitoring activities conducted after the training indicated that participants consistently applied the acquired knowledge in daily business operations. The sustainability of these practices suggests that the empowerment program successfully promoted behavioral change rather than merely transferring technical knowledge.

#### 4.7 Discussion

The findings demonstrate that an integrated community empowerment approach significantly improved the entrepreneurial capacity of Persatuan Women Farmers Group across multiple dimensions, including business management, production quality, packaging innovation, branding, digital marketing, and institutional governance. Unlike conventional assistance programs that primarily focus on financial aid, this intervention emphasized capacity building and knowledge transfer.

Consequently, the observed improvements extended beyond technical production to include managerial behavior, organizational performance, and entrepreneurial mindset. These findings support the Community Empowerment Theory, which argues that sustainable economic development depends on strengthening community capacity through participatory learning and institutional development. Likewise, the Value-Added Agriculture framework explains that agricultural commodities generate greater economic returns when processed into higher-value products supported by effective branding and marketing strategies. The results are consistent with previous studies demonstrating that managerial training enhances the sustainability of women-led rural enterprises. Similarly, packaging innovation has been shown to increase consumer confidence and product competitiveness, while digital marketing expands market access and reduces transaction costs for micro and small enterprises.

Nevertheless, several challenges remain. Limited digital literacy among older members, insufficient production equipment, restricted working capital, and incomplete business legalization continue to constrain business expansion. Therefore, long-term collaboration among universities, local governments, financial institutions, and community organizations is necessary to sustain the achievements of this program. Overall, the empowerment program successfully transformed Persatuan Women Farmers Group from a traditional household production group into a more organized community-based enterprise with improved managerial capability, stronger institutional governance, higher-quality products, and broader market access. These achievements contribute not only to improving household income but also to promoting sustainable rural economic independence through the utilization of local food resources.

## 5. Conclusion

### 5.1 Conclusion

This community service program successfully enhanced the capacity of the Persatuan Women Farmers Group (Kelompok Wanita Tani/KWT Persatuan) in Bonto Tenggara Village, Sinjai Borong District, Sinjai Regency through an integrated empowerment approach combining business management, financial literacy, production improvement, product packaging and branding, digital marketing, mentoring, and program evaluation. The implementation demonstrated that strengthening managerial, technical, and marketing competencies simultaneously is essential for improving the competitiveness of rural microenterprises based on local agricultural resources. The results indicate substantial improvements in participants' knowledge and practical skills related to business planning, financial record-keeping, production standardization, hygienic food processing, product quality enhancement, attractive packaging design, and digital marketing utilization. Members also showed increased awareness regarding the importance of business sustainability, institutional management, and continuous innovation as key factors supporting enterprise development. Furthermore, the empowerment process strengthened the organizational capacity of the women farmers' group by promoting collaboration, participatory learning, and collective decision-making. These improvements contributed not only to higher product quality and broader market opportunities but also to increased confidence among members in managing their businesses independently. Consequently, the program has laid a strong foundation for developing competitive local food enterprises capable of supporting sustainable rural economic development. Overall, this community empowerment initiative demonstrates that integrating capacity building, technological adoption, entrepreneurship education, and digital commercialization can effectively improve the economic resilience of rural women while creating greater value from locally available agricultural commodities.

## 5.2 Theoretical Contributions

The findings provide several practical implications for rural development stakeholders. For local governments, the program highlights the importance of integrating entrepreneurship development into village economic empowerment policies. Financial assistance alone is insufficient without strengthening managerial capacity, marketing capability, and product competitiveness. For higher education institutions, this program demonstrates that community service activities become more impactful when universities function not merely as knowledge providers but also as long-term development partners. Continuous mentoring and participatory engagement significantly increase the sustainability of empowerment outcomes compared with one-time training activities. For community organizations and women's groups, the integrated empowerment model offers a practical framework that combines technical production skills, financial management, branding strategies, and digital marketing. This holistic approach enables rural enterprises to respond more effectively to changing consumer preferences and increasingly competitive markets. The program also contributes to broader rural economic development by promoting value-added processing of local agricultural products, thereby increasing household income opportunities while strengthening local food security and community resilience.

## 5.3 Practical Implications

Although implemented as a community service initiative, this program contributes conceptually to the literature on community empowerment, women entrepreneurship, and rural development. The findings reinforce the argument that sustainable empowerment requires simultaneous intervention across multiple dimensions, including human capital development, organizational strengthening, technological innovation, market access, and institutional collaboration. Unlike conventional empowerment programs that focus primarily on production training, the integrated model implemented in this study demonstrates that business sustainability emerges from the interaction between managerial competence, product innovation, digital capability, and institutional support. Therefore, the findings enrich existing community empowerment frameworks by emphasizing the importance of combining capacity development with digital transformation and entrepreneurship-oriented interventions.

## 5.4 Research Limitations

To maximize the long-term impact of the program, several policy recommendations are proposed. First, local governments should facilitate easier access to business legalization, halal certification, food safety certification, and product registration to enable rural enterprises to compete in wider markets. Second, relevant government agencies should provide appropriate production equipment and technology to improve production efficiency, product consistency, and food safety standards. Third, universities are encouraged to establish sustainable mentoring programs that include business incubation, innovation coaching, digital entrepreneurship training, and market networking beyond the completion of community service activities. Fourth, collaboration among universities, village governments, cooperatives, financial institutions, and private-sector partners should be strengthened to create an integrated rural entrepreneurship ecosystem capable of supporting long-term business growth.

## 5.5 Directions for Future Research

Despite its positive outcomes, this community service program has several limitations. The evaluation primarily focused on short-term improvements in participants' knowledge, skills, and production practices following the intervention. Long-term economic impacts, including sustained

income growth, business expansion, market penetration, and organizational resilience, were not comprehensively measured during the implementation period. Future community service initiatives should incorporate longitudinal monitoring and quantitative impact assessment to evaluate the sustainability of empowerment outcomes over time. Additional indicators such as household income, business profitability, employment generation, customer satisfaction, digital sales performance, and enterprise survival rates would provide stronger empirical evidence regarding program effectiveness. Future studies may also compare integrated empowerment models across different women farmers' groups, agricultural commodities, and geographical contexts to identify best practices and develop scalable community empowerment strategies. Incorporating digital innovation, e-commerce ecosystems, green production technologies, and social entrepreneurship perspectives will further enrich future research on sustainable rural economic development.

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