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STRENGTHENING SMES' FINANCIAL REPORTING LITERACY THROUGH CROSS-BORDER COLLABORATION IN ACCOUNTING REPORTING TRAINING BASED ON ACCOUNTING STANDARDS TO SUPPORT SDG 9

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Abstract

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in the Indonesian economy, yet they still face serious challenges in financial reporting literacy and compliance with accounting standards. This community service program aims to strengthen MSMEs' financial reporting literacy through cross-border collaboration in accounting reporting training based on International Accounting Standards to support SDG 9 (Industry, Innovation, and Infrastructure). The activities were carried out in Panglipuran Village, Bangli Regency, Bali, with Loloh beverage MSMEs as the main partner and in collaboration with the University Malaysia Trengganu. The implementation methods included outreach, theoretical and practical training on calculating cost of production based on PSAK No. 14 and IAS No. 2, the use of digital financial recording technology, mentoring, evaluation, and program sustainability strategies. The results showed improved MSMEs' understanding of basic accounting concepts and cost of production calculations, a shift in financial recording practices from manual to structured, and stronger business credibility for market access. The training successfully provided an understanding of how to identify production cost components and determine the appropriate selling price. This program contributes to strengthening MSME institutional capacity, improving business competitiveness, optimizing digital services, and achieving SDG 9 in the local context of Panglipuran Village.

Keywords: MSMEs, Financial Reporting Literacy, International Collaboration, Cost of Production, SDG 9

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in national economic development. In Indonesia, MSMEs account for more than 99% of all business units and absorb around 97% of the national workforce, contributing more than 60% to Gross Domestic Product (GDP) (Ministry of Cooperatives and SMEs, 2024). These figures confirm that MSMEs are the backbone of Indonesia's economy and cannot be ignored in any economic development policy.

However, despite their vital role, most MSMEs still face structural challenges related to financial management, particularly in financial reporting literacy (Odetayo,et.al.2020) The current condition among MSMEs shows that financial records are often kept informally, inconsistently, or not at all. Many MSME owners rely on simple cash records without structured documentation of assets, liabilities, income, and business expenses. This weakens business decision-making, limits transparency, and reduces MSMEs' ability to access external financing from banks or investors.

Empirical research consistently shows that low financial literacy and inadequate accounting practices are among the main causes of MSME failure and stagnation (Bongomin et al., 2017; Fatoki, 2014). A study previously conducted by the proposing team on MSME financial literacy in various

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regions of Indonesia revealed that MSMEs face significant obstacles in understanding and applying standardized financial reporting due to limited access to practical training and ongoing mentoring.

The problem becomes more complex in the context of globalization and cross-border economic interaction. MSMEs are increasingly exposed to international markets, global supply chains, and cross-country partnerships that require standardized and comparable financial information. However, most MSMEs still lack adequate understanding of accounting reporting based on International Accounting Standards or internationally recognized frameworks for MSMEs. This gap creates barriers to cross-border collaboration, limits market expansion, and reduces MSMEs' competitiveness at the global level.

The target partners in this community service program are MSMEs in Panglipuran Village, Bangli Regency, Bali. Based on the initial observation results and in-depth discussions with local MSME partners, three priority issues were jointly agreed upon for resolution: (1) weak business management and financial reporting, (2) inefficient production planning and cost management. The main goal of this program is to strengthen MSME financial reporting literacy through cross-border collaboration in accounting reporting training based on International Accounting Standards to support SDG 9.

METHOD AND PROCEDURES

This community service program employed a cross-border collaborative capacity-building approach. The approach was selected to strengthen the capabilities of micro, small, and medium-sized enterprises (MSMEs) through knowledge transfer, skills development, and the creation of a supportive environment for sustainable business development. The program adopted a community empowerment-based model that emphasized the active participation of partners throughout all stages of implementation.

The program was conducted in Panglipuran Village, Bangli Regency, Bali Province, Indonesia, approximately 1,200 km from Jakarta State University (UNJ). The program was implemented over eight months, from January to August 2026. The target partners were MSMEs in Panglipuran Village operating in various sectors, including handicrafts, culinary products, tourism, and agriculture. The program also involved an international collaboration partner, Dr. Rohila Norhamizah Awang from Universiti Malaysia Terengganu, who contributed an international perspective and supported the development of cross-border business networks.

The implementation consisted of three main stages: socialization, training and implementation, and technology introduction.

First, the socialization stage. This stage aimed to provide partners with an initial understanding of the importance of effective business management and systematic and accountable financial reporting in accordance with accounting standards applicable to MSMEs, particularly SAK EMKM. The socialization activities were conducted through face-to-face meetings covering business management, common financial reporting challenges, the importance of financial statements for business sustainability and access to financing, an introduction to SAK EMKM and IFRS for SMEs, and the use of simple digital technologies for financial recording. Participants actively contributed by explaining their business conditions and existing financial recording practices.

Second, the training and implementation stage. This stage focused on improving partners' competence in financial management and the preparation of simple and standardized financial information. The training consisted of theoretical and practical sessions. The theoretical sessions covered basic financial management, accounting principles, financial statement structures, account classification, SAK EMKM requirements, and an introduction to IFRS for SMEs. The practical sessions involved recording business transactions, preparing statements of financial position and income statements, understanding cash flows, and conducting simulations using digital applications. A learning-by-doing approach was adopted, with participants using actual or representative transaction data from their MSME activities.

Third, the technology introduction stage. This stage introduced simple digital technologies to support financial recording and reporting. Activities included identifying an appropriate digital financial recording application, installing and introducing its main features, and providing initial guidance on its use for transaction recording and financial information preparation. The technology selection emphasized simplicity, affordability, accessibility, and the ability of MSME owners to use the application independently.

RESULTS AND DISCUSSION

This section presents the results of the financial literacy strengthening activities for MSMEs in Panglipuran Village, particularly in relation to financial recording, production cost calculation, and financial reporting. The discussion further examines the implementation of the cross-border collaborative model and its potential contribution to strengthening MSME capacity and supporting Sustainable Development Goal (SDG) 9.

Initial Condition of MSME Financial Literacy in Panglipuran Village, Bali, Indonesia

One of the MSMEs involved in the program was a Loloh beverage business producing traditional Balinese herbal drinks. One of its well-known products is Loloh Cemcem, a traditional beverage made from cemcem leaves (wild kedondong), palm sugar, tamarind, chili, shrimp paste, salt, and young coconut flesh. The product has a distinctive combination of sour, salty, sweet, and slightly astringent flavors.

Loloh production in Panglipuran Village is generally operated as a home-based microenterprise. Production capacity varies among businesses. A relatively large producer may

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produce approximately 1,000–5,000 bottles per day, with products marketed both within Panglipuran Village and to customers outside the village. Other producers operate on a smaller scale and primarily serve daily demand from residents and tourists visiting the village.

The Loloh beverage business has long been part of the local community's economic and cultural activities. Several business owners have been involved in Loloh production for decades. The businesses are generally managed by local residents, including women and family-based enterprises, with recipes and production knowledge passed down through generations. Initially, Loloh was commonly prepared for household consumption, traditional ceremonies, energy drinks, and traditional herbal purposes. Its transformation into a commercial product has developed alongside the growth of Panglipuran Village as a tourism destination.

The educational backgrounds of MSME owners vary, ranging from secondary education to undergraduate degrees. However, observations during the program indicated that many business owners did not have formal backgrounds in accounting or business management. Consequently, several areas required further strengthening, including basic bookkeeping, production cost calculation, digital marketing, packaging, and financial management.

The development of Loloh MSMEs has also benefited from support from the Village Government through collaboration with various stakeholders. Previous assistance has included training related to packaging quality, hygiene, and business management. Nevertheless, several challenges remain.

First, seasonal demand affects sales, particularly during the rainy season or periods of unfavorable weather. Second, distribution limitations restrict the expansion of the market to areas that are geographically more distant, including parts of western Bali. Third, increasing competition among Loloh producers within the village creates pressure on product pricing and market positioning. Fourth, limited financial calculation skills, particularly in determining production costs, make it difficult for business owners to establish cost-based selling prices and evaluate actual business profitability.

These conditions demonstrate the importance of strengthening MSME financial literacy, particularly in production cost calculation, financial recording, and the use of digital tools.

Figure 1. Loloh MSME Product and Community Service Participants in Panglipuran Village

Cross-Border Collaboration Model and Training Process

1. Collaboration Actors and Roles

The community service program involved collaboration between the Jakarta State University Undergraduate Accounting Program, local MSME partners, the Panglipuran Village Government, BUMDes Panglipuran, and an international academic collaborator from Universiti Malaysia Terengganu. The university team was primarily responsible for developing and delivering financial literacy materials, facilitating training, and providing mentoring. The local partners contributed business information, transaction examples, and practical experience regarding MSME operations. The international collaborator contributed a broader perspective on MSME development and supported the cross-border dimension of the program.

This collaborative arrangement enabled the program to combine local business knowledge with academic and international perspectives. The collaboration was therefore not limited to the transfer of accounting knowledge but also encouraged the development of networks and perspectives that could support longer-term MSME development.

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Figure 2. Cross-Border Community Service Collaboration in Panglipuran Village, Bali

Figure 3. International Community Service Team and Local Partners in Panglipuran Village

2. Curriculum Design

Considering the time and budget limitations of the community service program, the training focused on two main areas: production cost calculation and an understanding of accounting standards relevant to inventory and production costs.

The training introduced the accounting treatment of inventory costs based on the applicable accounting framework. In the Indonesian context, PSAK 14 on Inventories is relevant to the recognition and measurement of inventory. The standard is aligned with IAS 2, which regulates inventories under the IFRS framework. For MSMEs, the discussion was simplified and adapted to the participants' level of financial literacy.

The training emphasized that production costs generally consist of direct materials, direct labor, and production overhead. Understanding these components is important for determining production costs and subsequently establishing appropriate selling prices and evaluating profitability.

3. Teaching Methods

The training employed a combination of lectures, discussions, hands-on exercises, and mentoring. Participants, particularly Loloh MSME owners, were encouraged to identify the resources and costs involved in producing their products.

The identification of production costs focused on the following components:

a. Purchase costs, including the purchase price of materials and directly attributable transportation and handling costs.
b. Conversion costs, consisting primarily of direct labor and other costs incurred to convert raw materials into finished products.
c. Production overhead, including the systematic allocation of fixed and variable production overhead.
d. Other directly attributable costs, referring to costs incurred to bring inventory to its present location and condition.

Through these activities, participants were encouraged to distinguish between production-related costs and other business expenses and to understand their implications for pricing and profitability.

4. Implementation Challenges

Several challenges were identified during the implementation of the program.

First, differences in financial literacy levels among MSME owners affected the pace at which accounting concepts could be introduced. Some participants were unfamiliar with the importance of systematic cost calculation and financial reporting. Second, technology acceptance remained a challenge. Some participants were accustomed to traditional manual recording methods and perceived digital financial applications as difficult or of limited immediate benefit.

Third, accounting terminology in English created additional difficulties when introducing IFRS-related concepts. Therefore, the training materials had to be adapted into simpler language and linked to practical examples that were familiar to the participants. These challenges indicate that MSME financial literacy programs require gradual implementation, practical examples, continuous mentoring, and technology that is appropriate to users' capabilities.

Impact of Training on MSME Financial Reporting Literacy

1. Improvement in Knowledge and Skills

One of the main outcomes of the community service program was increased awareness of the importance of production cost calculation, systematic financial recording, and financial reporting. Participants gained a better understanding of how production costs influence selling prices and business profitability.

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A simulation was conducted using the production of 250 bottles of Loloh. The simulation assumed total raw material costs of Rp200,000 and included other production-related costs as follows:

Cost Component	Value (Rp)
Raw materials	200,000
Bottles (250 × Rp1,000)	250,000
Water	13,000
Electricity	25,000
Labor	200,000
Total Production Cost	688,000

Based on a production volume of 250 bottles, the estimated unit production cost was calculated as:

Unit Production Cost = Total Production Cost ÷ Production Quantity

= Rp688,000 ÷ 250 bottles

= Rp2,752 per bottle

For practical recording purposes, the unit cost may be rounded to approximately Rp2,800 per bottle. The calculation provides a basis for MSME owners to evaluate whether their existing selling prices adequately cover production costs and provide an appropriate profit margin.

For example, assuming the desired margin is calculated on the production cost, a selling price of approximately Rp3,600 per bottle would represent a 30% markup, Rp3,900 approximately a 40% markup, and Rp4,100–Rp4,200 approximately a 50% markup. With an observed selling price of approximately Rp5,000 per bottle, the simulation indicates a positive margin before considering other business expenses that may not have been included in the production-cost calculation.

The exercise helped participants understand that selling prices should not be determined solely by competitors' prices or market perceptions but should also consider the actual costs incurred in producing the product.

2. Changes in Recording and Reporting Practices

Improved financial literacy is expected to encourage MSME owners to adopt more structured financial recording practices. Prior to the program, some business owners primarily recorded cash inflows and outflows using simple methods. Following the training, participants demonstrated greater awareness of the need to distinguish business transactions, identify production costs, and prepare more systematic financial information.

However, changes in financial recording and reporting practices cannot be achieved through a single training session. Consistent implementation requires continuous mentoring, simplified accounting procedures, and the gradual adoption of accounting standards appropriate to MSME capabilities.

3. Impact on Business Decision-Making

Improved financial literacy can support more informed business decision-making. In particular, the knowledge obtained through the program can assist MSME owners in:

a. Determining selling prices based on production costs;
b. Managing cash inflows and outflows;
c. Planning business development, expansion, and investment; and
d. Improving confidence when communicating and negotiating with external stakeholders.

Thus, financial literacy is not only related to administrative compliance but can also function as a managerial tool for supporting business sustainability.

Contribution to SDG 9: Industry, Innovation, and Infrastructure

The program contributes to SDG 9 through the strengthening of MSME capabilities in business management, digitalization, and innovation. MSMEs are an important component of local economic development, and improving their financial management capabilities can support more sustainable business operations.

From an innovation perspective, the introduction of digital financial recording provides an initial step toward the digital transformation of MSME management. Digital financial records can help business owners organize transaction data, monitor business performance, and support more informed decisions.

The program's contribution to SDG 9 can be viewed through three aspects.

1. Optimization of digital services. Improved financial literacy can increase MSME owners' ability to utilize available digital tools for recording and managing business transactions.
2. Improved access to financing. More systematic financial records can improve the availability of financial information required when MSMEs seek financing from formal institutions, including banks and government-supported programs.
3. Support for financial technology adoption. Increased familiarity with digital financial management may encourage MSMEs to adopt appropriate financial technology solutions that support business operations and financial management.

Therefore, the program contributes to SDG 9 at the local level by strengthening MSME capacity to utilize digital technology and improve business management practices.

Sustainability of the Program

The sustainability of the program requires continued support after the initial training activities. Several strategies can be implemented to maintain and extend the program's impact. First, the program can establish peer-learning or study groups among MSME owners to facilitate knowledge sharing and continued practice. Second, MSMEs can be encouraged to use simple digital accounting applications consistently in their daily transactions. Third, continued assistance from the Village Government, BUMDes, universities, and other stakeholders can provide periodic guidance and problem-solving support.

In addition, potential long-term challenges should be periodically evaluated, including MSME governance, managerial capacity, the availability of funds for further training, technology adoption, and changes in relevant regulations. A continuous mentoring model would therefore be more appropriate than a one-time training approach.

CONCLUSION

The community service program demonstrated the need to strengthen financial governance among MSMEs, particularly Loloh beverage MSMEs in Panglipuran Village, Bangli, Bali. The program provided participants with practical knowledge regarding production cost calculation, financial recording, and the importance of standardized financial information.

Several conclusions can be drawn. First, continuous assistance is required to strengthen MSME owners' knowledge and skills in financial management and to support the sustainability of their businesses. Second, improvements in financial recording and reporting practices are important for enabling MSMEs to evaluate business performance and prepare for business expansion. Third, improved financial literacy can support more informed managerial decision-making, particularly in determining selling prices, managing cash flows, and planning business development. Fourth, the program contributes to SDG 9 at the local level by encouraging digitalization, improving MSME financial management capabilities, and supporting innovation in business and financial services.

Implications

The program provides practical support for the application of collaboration and financial literacy concepts in the MSME context. The results reinforce the importance of integrating financial literacy, production cost calculation, accounting standards, and collaborative capacity building into MSME development programs.

Practically, the program equipped MSME owners with skills to identify production costs, calculate unit production costs, and use cost information as a basis for determining selling prices. The introduction of digital financial recording also provides an initial foundation for improving MSME financial governance.

The findings suggest that community-based MSME financial governance should be developed through continuous collaboration involving universities, local governments, business organizations, and technology providers.

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