

Empowering Sinar Harapan UMKM Coconut Processing and E-Commerce Development in Bongohulawa Village, Gorontalo

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Abstract

The Sinar Harapan MSME in Bongohulawa Village has been producing coconut oil due to its easy availability and its conventional sales system. The number of members of the Sinar Harapan MSME is 20. With this program, the membership of Sinar Harapan MSME is expected to increase in the future due to advancements in production and sales systems. The specific purpose of this community service is to develop e-commerce-based marketing strategies and expand market reach. The method used in this service involves training and mentoring on the e-commerce system's processing. The results obtained from this service are based on a questionnaire completed by 100 participants, which indicates that 83% of respondents strongly agree with the quality of the coconut oil produced.

Keywords

E-Commerce; Empowerment; Marketing; MSME; Product



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1. INTRODUCTION

Indonesia is a country rich in plantation products, one of which is coconut (*Cocos nucifera* L.) (Hansang, Tooy, and Ludong 2022). Coconut plants grow easily in tropical areas like Indonesia, and almost all parts of them can be used, both as food and for other needs (Suswanto and Wati 2022). This makes coconut a strategic resource with high potential to support the national economy. Various parts of the coconut plant, including the flesh and water, fiber, shell, and stem, have diverse uses, with the flesh being the part of the highest economic value. Coconut water, often considered waste, is actually rich in nutrients and offers numerous health benefits (Sejahtera et al. 2022). Coconut meat can be processed into value-added products such as virgin coconut oil, which is increasingly in demand due to its health benefits, including helping with weight loss, maintaining a diet, and its antioxidant, antiviral, antiprotosomal, and antibacterial properties (Virgin et al. 2021). As an antioxidant, anti-virus, anti-protozoa, and anti-bacterial (Clarentina Cholin 2022).

Bongohulawa Village, Gorontalo, has significant potential for coconut production, yielding high-quality fruit. However, this potential has not been fully utilized by local MSMEs. Some of the main obstacles faced by MSMEs include limited knowledge of coconut processing, leading most to sell only copra; a lack of product diversification, resulting in low sales value; and a limited understanding of digital marketing and e-commerce, which limits market access. This situation poses a significant challenge for MSMEs in enhancing innovation, skills, competitiveness, and income, despite the region's vast potential for coconuts.

In response to these conditions, the "Sinar Harapan" MSME empowerment program is designed to provide solutions through several key focuses. This program aims to enhance coconut processing skills, enabling MSMEs to produce value-added products such as pure coconut oil and brooms from coconut fiber. Additionally, it aims to introduce e-commerce and digital marketing, enabling products to reach a broader market. Expected benefits include increasing MSME production capacity and skills, product diversification, enhancing economic value, expanding the market through digital marketing, increasing MSME income, and promoting sustainable local economic growth and community welfare. With the implementation of this program, MSMEs in Bongohulawa Village are expected to optimize the potential of coconuts, expand their market reach, and significantly improve community welfare.

The existence of a digital transaction system has opened up new opportunities for UMKM to reach a wider and more diverse market, transcending traditional geographical boundaries (Lenti Susana Saragih et al.). Through digital marketing,

companies can plan campaigns quickly. Digital marketing also enables businesses to communicate in a transactional manner at any time and from anywhere (Rohmawati et al., 2021), allowing them to understand consumer behavior, preferences, and needs effectively (Haryanto et al., 2024).

2. METHODS

The PKM team partnered with the Sinar Harapan MSME in Bongomeme District, Gorontalo Regency, which has 20 members, namely 15 women and five men, in the Family Welfare Movement (PKK). The age of the Sinar Harapan MSME PKK members ranges from 38 to 50 years. The initial preparation stage involves coordinating with the team regarding task division, liaising with the head of Sinar Harapan MSME, and preparing the necessary facilities and infrastructure for use. The schedule for implementing this activity spans approximately 4 months, from August to November.

The model approach applied in this activity consists of several sequential stages, namely identification, participatory planning, capacity building, implementation and mentoring, evaluation, and sustainability. The activity begins with field observations and discussions with the community to identify key problems and local potential. This stage ensures that the program design is aligned with the actual needs and conditions of the community. Subsequently, participatory program planning is conducted by involving MSME actors and village officials to determine the types of training, target markets, and digital marketing strategies that best match the community's capabilities and local context.

The next stage focuses on strengthening MSME capacity through training activities covering product processing, packaging, pricing strategies, and the introduction and utilization of e-commerce as a medium for promotion and sales. Implementation is carried out through direct mentoring, which includes creating online store accounts, uploading products, managing orders, and applying basic digital marketing strategies, enabling MSMEs to manage their online sales independently. Monitoring and evaluation are then conducted to assess improvements in MSME skills, the effectiveness of e-commerce utilization, and changes in sales volume. The results are used as a basis for refining strategies and ensuring program sustainability. The success of the method implementation is evaluated using a Likert-scale questionnaire administered before and after the activity to measure the level of community participation, increases in participants' knowledge and skills, and the ability of MSMEs to manage their online stores independently. The questionnaire data are analyzed descriptively to assess the achievement of program indicators.

3. FINDINGS AND DISCUSSION

The following section presents the results of the community service activities carried out by the implementation team. The program began with an activity preparation stage, which involved an initial site survey to identify the problems and potential of the partner. The activity was conducted in Bongomeme District, Gorontalo Regency, with Sinar Harapan MSME serving as the program partner.

The next stage was the extension activity, through which partners were expected to gain an initial understanding of the potential and benefits of coconut-based products. This understanding served as a foundation for the subsequent stages of training and practical product processing activities. The extension material was delivered in a single, 120-minute face-to-face session.



Figure 1. Presentation of material and discussion

The activities depicted in the image demonstrate the active participation of MSMEs in Bongohulawa Village in understanding the utilization of coconuts as a value-added product and the introduction of e-commerce as a marketing tool. The image supports the discussion by providing visual evidence that the outreach and mentoring activities were implemented in a participatory manner. The outreach phase also included training on coconut processing, particularly the production of Pure Coconut Oil. This training was conducted under the direct guidance of the implementation team, enabling participants to follow each step of the process easily. The resulting Pure Coconut Oil was clear and odorless, indicating that the production process was successful.



Figure 2. Pure Coconut Oil Making Practice

After enhancing production skills, the next stage focuses on strengthening marketing capabilities through the use of e-commerce. In addition, broom-making

training was conducted to utilize coconut fiber waste by transforming materials with no economic value into products with higher economic potential. The process of making brooms from coconut fiber is relatively simple and requires only basic equipment. The coconut fibers are soaked for approximately 30 days, separated from the outer husk, and then sun-dried until completely dry. Following the acquisition of basic knowledge in the earlier training sessions, subsequent activities emphasized more applied training to develop participants' skills further and strengthen the partners' practical competencies.



Figure 3. Broom Making Training

The activities shown in the image illustrate the active engagement of participants in the learning process, indicating an increased level of understanding and readiness among MSME partners to develop processed coconut-based products and utilize digital technology for marketing, including broom products. Furthermore, product packaging training was conducted as part of the workshop on coconut product processing. During this training, participants learned techniques for attractive and proper packaging and storage of products. Attractive and informative packaging serves as a crucial marketing strategy, as consumers' initial perceptions of a product are often shaped by its packaging.



Figure 4. Packaged Coconut Products

The image above illustrates the process of creating food product packaging. The label also lists the product's benefits, including its ability to support overall body health and its use for both consumption and skincare. It also includes information on the net weight/contents, production date and information, and instructions for use and storage.



Figure 5. E-Commerce Display for UMKM Products

Figure 5 above displays the web products to be marketed, along with the prices of village oil and brooms. The system created for online sales has been tested using black box testing. The following are the blackbox test results:

Table 1. Blackbox testing

No	System Activity Description	Function	Results
1	Click the home menu	Displays Web Pages	In Accordance
2	Click the Detail Button on the home menu	Displays complete information about the product page	In Accordance
3	Click the Buy Button on the home menu page	Displays the product purchase page in the form of the quantity to be purchased and price information	In Accordance
4	Click the MSME Information Menu	Displaying the Sinar Harapan MSME Information Page	In Accordance
5	Click the Konfirm Menu	Displaying the Product purchase confirmation page	In Accordance
6	Click the Check Receipt menu	Displaying the Product purchase receipt page	In Accordance

7 Click the Cart Menu Displaying the Product In Accordance purchase page

The use of e-commerce has been proven to increase market access for MSMEs by expanding consumer reach and simplifying the process of marketing products online.

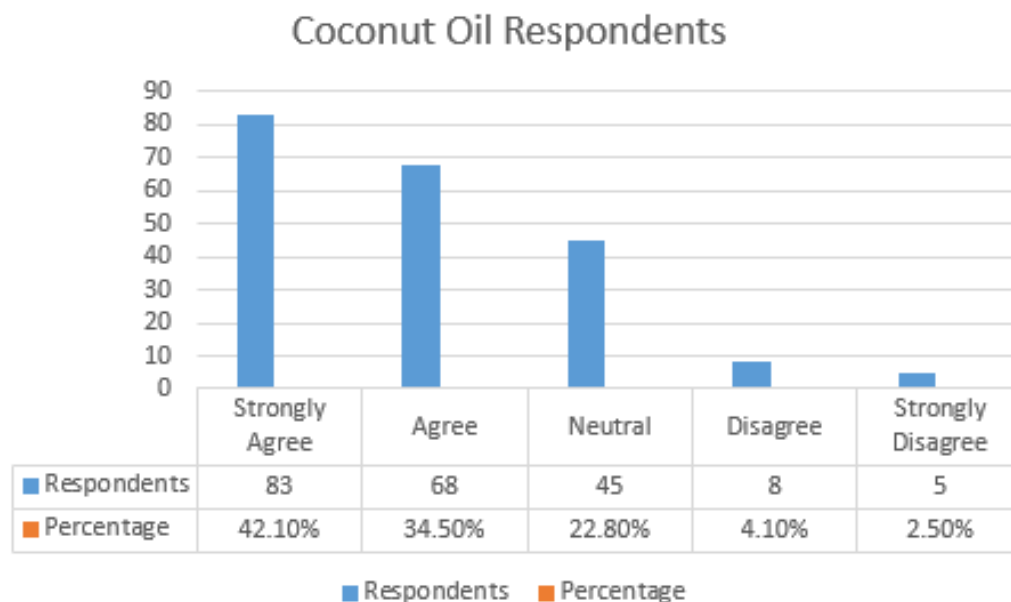


Figure 6. Questionnaire from respondents

Figure 6 above shows that 100 people filled out the questionnaire, indicating that 83 people strongly agreed about the quality of the coconut oil that had been made.

Table 2. Coconut Oil Quality Questionnaire – UMKM Sinar Harapan

Category	Respondents	Percentage
Strongly Agree	83	42.1%
Agree	68	34.5%
Neutral	45	22.8%
Disagree	8	4.1%
Strongly Disagree	5	2.5%

The questionnaire results showed that 83 respondents stated "Strongly Agree," indicating a high level of acceptance and positive perceptions of community service activities and the use of e-commerce. This finding indicates that the program is aligned with the needs of MSMEs and is easy to implement. Consequently, the use of e-commerce has the potential to support MSMEs' aspirations by expanding market access and increasing competitiveness.

4. CONCLUSION

This community service activity successfully enhanced the value of coconut products through processing and packaging, resulting in higher quality and increased sales value. Furthermore, MSMEs were able to integrate e-commerce as a marketing tool to expand market access. Thus, the objectives formulated in the introduction can be declared achieved. The impact of this activity is also reflected in the increased understanding and skills of MSMEs in managing their businesses more professionally. In the future, the results of this activity are expected to support the aspirations and competitiveness of MSMEs in Bongohulawa Village sustainably.

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