

Community Empowerment through Agricultural Innovation: A Community Service Initiative with KWT Cengkehan in Wukirsari Village

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Abstract.

This article explores the community service initiative conducted with the Cengkehan Women Farmers Group (KWT Cengkehan) in Wukirsari Village, aiming to empower local women through agricultural innovation and economic development. The primary objective of the initiative was to address key challenges faced by the group, including limited product diversification, inadequate packaging, and a lack of effective marketing strategies. A participatory observation method was employed to assess the group's operations, with a focus on understanding their challenges and identifying potential solutions. The findings highlight the need for enhanced capacity building in product development, packaging, and digital marketing, with a particular emphasis on the importance of improving human resources. Despite these challenges, the group has significant potential to expand its market reach by adopting digital marketing tools and diversifying its product offerings. The results suggest that with the right training and resources, KWT Cengkehan can increase its competitiveness and broaden its market presence, ultimately contributing to the economic empowerment of local women.

Keywords: *Product Diversification; International Community Services; Rural Empowerment; Capacity Building; Sustainable Agriculture*

I. INTRODUCTION

Agriculture is one of the primary sectors supporting the economy of rural communities in Indonesia. Various communities focused on agriculture have been proven to improve the quality of life of their members through various economic, social, and environmental empowerment initiatives. For instance, a study by Mawarni et al. (2017) shows that agricultural communities actively involved in the production and processing of agricultural products can increase the average income of their members by up to 35% compared to before joining the community.

The Women Farmers Group (KWT) plays a vital role in developing this sector through various agricultural activities, product diversification, and processing agricultural products into value-added products. According to Silamat et al. (2024), processing agricultural products into

processed goods is a strategic step in increasing the market value and income of rural communities.

However, KWT Cengkehan in Wukirsari Village faces several challenges in these practices. One of the primary challenges is the limited ability to diversify agricultural products and the low creativity in creating innovative processed products. This is compounded by a lack of human resources with the competence to market processed products widely outside the local area. Furthermore, KWT Cengkehan has not yet fully optimized online marketing through various marketplaces, which could expand the product reach beyond just the Jogja region, extending to other areas. This results in KWT Cengkehan's products being relatively unknown outside their village, preventing the full economic potential of their agricultural activities from being realized.

In addition, the income levels of the surrounding communities in Wukirsari Village are relatively low, making empowerment through the Women Farmers Group an essential solution to improve the economic welfare and quality of life of the community. By enhancing product diversification, creativity in processing agricultural products, and marketing skills through digital platforms such as online marketplaces, it is hoped that this will significantly increase the income of KWT members and the surrounding community.

This phenomenon shows that although agricultural activities managed by the Women Farmers Group have significant potential, without support in human resource development and effective strategies for diversification and marketing, these agricultural endeavors are unlikely to reach their full potential. Therefore, community service focused on enhancing product diversification capacity, agricultural processing creativity, and digital marketing competence is highly relevant and necessary for KWT Cengkehan in Wukirsari Village.

II. METHODS

Location, time, and subject of research

The location of this community service activity is Wukirsari Village, located in Bantul, Yogyakarta. This village is known for its agricultural activities and has a significant number of farming communities. The activity was conducted from May 19th to May 22nd, 2025.

The subject of research for this activity is KWT Cengkehan, a group of women farmers in the village. The focus of the research is to assess the challenges and opportunities faced by the group, particularly in terms of product diversification, innovation in processing agricultural products, and marketing strategies, especially for online marketing.

Data collection methods

In this community service activity, data was collected using the participatory observation method, where the researchers were directly involved in the daily activities of the community. This method allowed for an in-depth understanding of the practices, challenges, and dynamics within the Women Farmers Group (KWT) Cengkehan. By actively participating in the group's activities, the researchers were able to observe the processes of agricultural product diversification, innovation in product processing, and the existing marketing strategies. This hands-on approach facilitated a more comprehensive and contextual understanding of the group's needs and the barriers they face in expanding their market reach. Participatory observation is widely acknowledged as a valuable method for collecting data in community-based research, as it allows researchers to gather authentic and reliable insights from within the natural setting of the subjects (Kiger & Varpio, 2020; Lune & Berg, 2017)



Figure 1. Interview with KWT Cengkehan Members

Data analysis methods

In this community service activity, data were analyzed using a qualitative approach, specifically employing participatory observation methods. The collected data were categorized into key themes such as product diversification, innovation in processing agricultural products, marketing strategies, and challenges faced by KWT Cengkehan. Thematic analysis was utilized to identify patterns and main themes in the data, such as difficulties in introducing new products or accessing broader markets (Braun & Clarke, 2021). Additionally, data triangulation, involving interviews and secondary data, was applied to ensure the validity of the findings (Lohr, 2021).

Subsequently, the results of the thematic analysis were organized into a narrative that illustrated the dynamics and challenges faced by KWT Cengkehan, as well as the innovations applied by group members. These findings were interpreted with reference to relevant literature to provide evidence-based recommendations on how to improve product diversification, agricultural processing, and marketing. This approach is expected to provide deeper insights into the potential of KWT Cengkehan and the steps that can be taken to enhance the economic well-being of its members (Braun & Clarke; Kiger & Varpio, 2020)

III. RESULT AND DISCUSSION

The Origin and Role of Kelompok Wanita Tani (KWT)

Kelompok Wanita Tani (KWT), or Women Farmers Groups, is a community-based organization in Indonesia that plays a significant role in empowering rural women by fostering agricultural activities and supporting sustainable livelihoods. KWT was established as part of the broader movement to enhance rural women's participation in agriculture and economic development. The initiative was encouraged by the Indonesian government to address gender inequality in the agricultural sector and empower women, who are often seen as key players in rural economies but have historically had limited access to resources, decision-making, and economic opportunities.

The main objectives of KWT are to:

1. Empower women by enhancing their skills in agriculture, marketing, and business management.

2. Diversify agricultural products, enabling women to create value-added products from raw agricultural goods.
3. Promote sustainable agricultural practices that are environmentally friendly and economically viable.
4. Improve the economic welfare of rural women and their families by increasing their income through enhanced productivity and access to markets.

KWT operates under the guidance of local agricultural offices or community organizations, and the members typically consist of rural women involved in farming or small-scale agribusinesses. These groups often provide training in crop management, food processing, handicrafts, and marketing techniques. The empowerment of women through KWT has proven to help improve their confidence, decision-making abilities, and overall social standing in their communities.

Over time, KWT has evolved into a vital organization in many rural areas of Indonesia, helping bridge gaps in gender equity and fostering the economic independence of women. Through programs focusing on product diversification, innovation in processing agricultural products, and marketing strategies, KWT has helped many rural women not only improve their families' livelihoods but also contribute significantly to their local economies.

The formation of KWT groups, like KWT Cengkehan, typically follows a bottom-up approach where women come together to discuss common issues, learn new skills, and share resources. These groups often focus on specific agricultural products, depending on local resources, and work collectively to overcome challenges related to production and marketing. Through the collective efforts of the women, KWT groups contribute to rural development by improving the overall economic stability of their communities.

KWT Cengkehan and the Challenges They Faced

The Cengkehan Women Farmers Group (KWT Cengkehan) is a community-based organization operating in Wukirsari Village, Bantul, with a focus on family economic empowerment through the processing of agricultural products. KWT Cengkehan plays a significant role in transforming agricultural products into consumable goods or marketable commodities, with the goal of increasing the economic income of its members, the majority of whom are women or housewives. In its operations, KWT Cengkehan coordinates with the village authorities and other village enterprises, such as batik production and herbal tea manufacturing, to strengthen the local economic ecosystem. Despite its efforts to process products derived from local natural resources, KWT Cengkehan continues to face various challenges related to product quality, marketing, and the development of its members' capacities, which need to be enhanced to ensure the optimal growth of their business endeavors.

Based on the participatory observation conducted at the Cengkehan Women Farmers Group (KWT Cengkehan), several significant findings regarding the challenges faced by the group in their efforts to develop agricultural products and marketing strategies were identified. These findings describe the current conditions, as well as the structural challenges and resource limitations that constrain their capacity to grow further.

1. Lack of Product Diversification

One of the most significant findings is the **lack of product diversification** in the operations run by KWT Cengkehan. The group is still limited to producing a few types of products, which are typically household goods and traditional foods, such as balm, soap, and cookies. While these products can meet the needs of a limited local market, they are unable to fulfill the demands of a larger, more diverse market. This reveals an urgent need for product diversification to reach a broader market segment and meet the evolving demands of consumers. Product diversification is a key factor in increasing competitiveness; however, the group faces difficulties in developing more innovative product variations that align with market trends.



Figure 2. Products of KWT Cengkehan

2. Inadequate Packaging

Another identified issue is the **inadequate packaging** of the products. The current packaging is simple and does not effectively support product marketing, diminishing its visual appeal to consumers. Attractive and functional packaging is crucial as it serves not only to protect the product but also as a branding tool to attract market attention. At present, the design of KWT Cengkehan's product packaging tends to be monotonous and does not reflect the quality or added value of the products. This has become a major barrier in expanding their market, especially among consumers who are more discerning in choosing products based on packaging appearance. Therefore, improving packaging design is essential to enhance the product image and increase its marketability in a broader context.

3. Limited Marketing and Access to Larger Markets

Marketing is also a significant challenge for KWT Cengkehan. Currently, the marketing of products is limited to the local market around the Yogyakarta area, relying solely on village networks and word-of-mouth promotion. The marketing efforts have not utilized digital technology or online platforms, which are becoming increasingly important for expanding market reach. KWT Cengkehan's products, despite their potential, are not widely recognized outside their local area. The marketing strategies are still dependent on village infrastructure without a structured system, either traditional or digital, to penetrate wider markets. In this context, the use of digital marketing technology and e-commerce platforms becomes crucial to increase product visibility and expand access to larger markets.

4. Limited Human Resources and Access to Technology

One of the major obstacles faced by KWT Cengkehan is the **limited human resources (HR)** capable of supporting more advanced initiatives in product diversification, packaging innovation, and digital marketing. The majority of KWT Cengkehan's members are over 45 years old, which makes them less flexible in learning new technologies or adapting to rapidly changing market trends. Additionally, access to technological tools, such as computers or laptops, and adequate internet connectivity is limited due to the village's distance from urban centers. This limitation hinders the members' ability to access training or information that could help them improve product development and modern marketing strategies. Without improvements in HR capacity capable of addressing these issues, KWT Cengkehan will struggle to grow in line with the increasing demands of a competitive market.

5. The Need for Human Resource Development

Based on the findings above, it can be concluded that **HR development** is one of the primary priorities that KWT Cengkehan must address. Without enhancing members' skills in areas such as packaging design, digital marketing, and product management, KWT Cengkehan will find it difficult to adapt to the demands of a larger market. Therefore, training and capacity development in these areas are essential. Empowerment programs focused on increasing HR capacity to address these challenges will have a significant impact on KWT Cengkehan's ability to improve the quality and competitiveness of their products.

6. Potential for Expanding Market Reach

Despite facing various challenges, the findings also indicate that with the fulfillment of HR needs, the products of KWT Cengkehan have a significant potential to **penetrate larger markets**. By improving product diversification, enhancing packaging, and implementing effective online marketing, KWT Cengkehan can increase their competitiveness and expand their market reach beyond the Yogyakarta area. This, of course, requires better capacity development in managing product innovations and marketing strategies, as well as the utilization of technology that can facilitate access to larger markets.

IV. CONCLUSION

The findings from the community service activities conducted with the Cengkehan Women Farmers Group (KWT Cengkehan) reveal several key challenges faced by the group, particularly in product diversification, packaging, marketing, and human resource development. These challenges highlight the need for capacity building in areas such as product innovation, marketing strategies, and digital marketing. Despite these challenges, the activities also show promising potential for empowering the community, especially in improving economic opportunities for the members, particularly women and housewives in Wukirsari Village.

The impacts of the community empowerment activities are evident in the enhanced awareness of the group's limitations and strengths, with a clear understanding of the areas requiring improvement. By addressing these issues—such as investing in human resource development, improving product diversification, and adopting digital marketing strategies—the group's potential to reach a broader market and improve its economic standing can be realized. These empowerment efforts not only

benefit the members of KWT Cengkehan but also contribute to the local economic development of the village by fostering sustainable practices and creating more income opportunities.

For future community empowerment efforts, it is recommended that capacity building programs be prioritized, focusing on skills such as product development, digital literacy, and effective marketing techniques. Additionally, facilitating access to technology and improving the infrastructure for digital marketing will be crucial for expanding the market reach of local products. Furthermore, introducing new business models and innovation-driven practices could stimulate further growth within similar community groups.

From a theoretical perspective, this research contributes new findings regarding the application of community empowerment in rural settings, emphasizing the importance of integrating modern marketing strategies and digital technologies. It also proposes a model for rural economic empowerment, which combines product diversification with digital marketing, aiming to create more sustainable and scalable economic opportunities for rural women's groups. These findings offer a foundation for future research on empowering rural communities through a more holistic approach, blending traditional practices with innovative technologies.

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REFERENCES

- Braun, V., & Clarke, V. The Sage Handbook of Qualitative Research Edited by NK Denzin, YS Lincoln, M. Giardina and GS Cannella Chapter 19 (pp. 385-402) Thematic Analysis.
- Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide.
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical teacher*, 42(8), 846-854.
- Lohr, S. L. (2021). *Sampling: design and analysis*. Chapman and Hall/CRC.
- Lune, H., & Berg, B. L. (2017). *Qualitative research methods for the social sciences*. Pearson.
- Mawarni, E., Baruwadi, M., & Bempah, I. (2017). Peran kelompok tani dalam peningkatan pendapatan petani padi sawah di desa iloheluma kecamatan tilongkabila kabupaten bone bolango. *AGRINESIA: Jurnal Ilmiah Agribisnis*, 2(1), 65-73.

Silamat, E., Ginting, A. P., & Sutrisno, E. (2024). The Effect of Agricultural Extension and Post-Harvest Processing Technology in Increasing Farmers' Income and Farm Business Sustainability in Rural Bandung Regency. *West Science Interdisciplinary Studies*, 2(07), 1490-1499.