

Gender Relations and Women's Empowerment in Farmer Women Groups: A Case Study in Tamanmartani, Kalasan, Sleman Regency

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Abstract

The empowerment of women through Women Farmer Groups (Kelompok Wanita Tani / KWT) is essential for strengthening household economic resilience and promoting sustainable rural development. Guided by Empowerment Theory (Zimmerman, 2000), which emphasizes participation, capacity building, and control over resources, and the Gender and Development (GAD) perspective (Moser, 1993), this study examines the empowerment process, gender dynamics, and socio-economic impacts of KWT activities in Tamanmartani Village, Sleman Regency, Indonesia. A qualitative case study approach was applied through in-depth interviews, observation, and document analysis. The findings indicate that women's empowerment is fostered through entrepreneurship training, institutional strengthening, business mentoring, and partnership development, enhancing participants' technical skills, self-confidence, economic independence, and decision-making capacity. Improved access to productive resources and collective participation strengthens women's agency within households and communities, contributing to more equitable gender relations and greater family support for women's productive roles. However, challenges remain, including limited access to financial capital, product innovation, business legality, certification, and standardized production facilities, which constrain market expansion and long-term sustainability. The study concludes that KWT represents an effective community-based empowerment model that enhances women's socio-economic status while transforming gender relations. Sustainable empowerment requires gender-responsive policies, stronger multi-stakeholder collaboration, and institutional support to improve the competitiveness of women-led rural enterprises across diverse local contexts.

Keywords: Women Empowerment; Women Farmer Groups; Gender Relations; Community-based Empowerment

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Introduction

Rural women play an essential role in agricultural production systems, engaging in everything from managing homesteads and handling post-harvest tasks to participating in household economic activities. Their involvement is vital for ensuring family food security and promoting economic sustainability within communities. Nonetheless, the considerable contributions of women in agriculture have not been matched by proper social acknowledgment, access to essential resources, or sufficient institutional support (Kabeer, 1999; Mosse, 2007). Limited access to funding, technology, education, and decision-making authority has resulted in women being sidelined in rural development efforts (Razavi, 2020). This scenario indicates that a lack of gender-sensitive development could further exacerbate existing social and economic disparities.

To address this issue, the Women Farmers Group (KWT) serves as a platform for empowering women in the community through training, agricultural productivity, food processing, and the establishment of social networks. In Indonesia, farmer groups (KWT) have emerged as a key means for enhancing rural women's capabilities as they offer opportunities for improving technical abilities, broadening social connections, and bolstering their negotiating power within the social framework of the community (Mardikanto and Soebianto, 2013). Research has demonstrated that women's engagement in these farmer groups leads to increased household income, enhanced social capital, and a shift in gender dynamics at the local level (Duflo, 2012; Suprihatin and Dartiara, 2021). Nevertheless,

the impact of KWTs on enhancing women's empowerment is inconsistent. Multiple research efforts have shown that certain KWTs encounter challenges related to institutional factors, product innovation, business sustainability, and formal legality, which restrict their growth potential and competitive edge (Pranadji, 2019). Additionally, gender-based power dynamics within households and communities frequently influence women's participation and autonomy in economic endeavors. In certain scenarios, women's engagement in groups may escalate domestic responsibilities without accompanying improvements in their management of resources (Moser, 1993; Pranarka and Prijono, 1996).

The Tamanmartani Village, located in the Kalasan District of Sleman Regency, is primarily an agricultural region with about 381 hectares dedicated to rice cultivation within an overall area of roughly 784 hectares. The women residing in this locale are actively engaged in farming and product processing; however, they continue to face challenges accessing financial resources, training opportunities, and decision-making in production and marketing. Various KWTs (Women's Groups) have been formed in this community, exhibiting distinct features, such as the Sumber Boga KWT, which emphasizes aloe vera processing in Tamanan Hamlet; the Tunas Harapan KWT, which promotes a variety of food crops and fruits; and the Lumbung Mataraman KWT, which is still in its initial stage. Although these groups hold substantial economic potential, a thorough assessment of their success in enhancing family economic empowerment and women's societal status remains to be done.

Theoretically, this study is grounded in Empowerment Theory proposed by Zimmerman (2000), which emphasizes empowerment as a process of enhancing participation, capacity building, and the ability of individuals and groups to gain control over resources and make decisions that affect their lives. This theory is employed to analyze how the activities of Women Farmer Groups (Kelompok Wanita Tani / KWT) strengthen women's capacities, economic independence, and participation in household and community decision-making. The study also adopts the Gender and Development (GAD) perspective developed by Moser (1993), which views empowerment as a process of transforming gender relations by promoting equitable access to and control over productive resources, economic opportunities, and participation in development. Integrating these two theoretical perspectives provides a comprehensive framework for analyzing women's empowerment, gender dynamics, and the socio-economic impacts generated through the activities of Women Farmer Groups in Tamanmartani Village, Sleman Regency, Indonesia.

Given this background, this research is crucial for assessing the extent to which the KWT in Tamanmartani Village has functioned as an instrument of transformational empowerment, or whether it remains at a functional and instrumental stage. This study aims to analyze the process of women's empowerment through KWT Sumber Boga, KWT Tunas Harapan, and KWT Lumbung Mataraman, with a focus on the integration of gender perspectives in group formation,

member participation patterns, strengthening of social capital, decision-making mechanisms, and distribution of access to and control over resources.

This study employed a qualitative approach with a case study design to explore the women's empowerment process, gender dynamics, and socio-economic impacts of Women Farmer Groups (Kelompok Wanita Tani / KWT) in Tamanmartani Village, Sleman Regency, Indonesia. The research was conducted from November to December 2025. Informants were selected through purposive sampling and included 12 participants, consisting of KWT leaders and members, village government representatives, and agricultural extension officers. Data were collected through in-depth semi-structured interviews, participant observation during KWT activities, and documentation review, including organizational records, training reports, meeting minutes, and government documents. To ensure data credibility, source triangulation, method triangulation, and member checking were employed. Data were analyzed using Miles and Huberman's interactive model, involving data reduction, data display, and conclusion drawing and verification. The analysis was guided by Empowerment Theory (Zimmerman, 2000) to examine women's participation, capacity building, and decision-making, while the Gender and Development (GAD) perspective (Moser, 1993) was used to analyze gender relations, as well as women's access to and control over productive resources within KWT activities.

Through this approach, the study is expected to provide theoretical contributions to the development of women's empowerment and gender studies in the agricultural sector, as well as practical contributions to the formulation of policies and strategies for strengthening KWT that are more inclusive, gender-equitable, and sustainable.

Finding and Discussion

Women's empowerment is a gradual process aimed at increasing women's capacity, independence, and bargaining power in social and economic life. This process generally occurs through three main stages: the foundational stage, the capacity transformation stage, and the social transformation stage (Friedmann, 1992; Pranarka and Prijono, 1996). Research indicates that the three women's farmer groups (KWT) represent different stages of empowerment.

KWT Lumbung Mataram (Basic Stage Empowerment)

Established in July 2025, KWT Lumbung Mataram is a newly established women's farmer group that focuses on growing various vegetables such as spinach, water spinach, mustard greens, long beans, cucumbers, and more. This KWT is still in the foundational stage through the transfer of basic knowledge, a crucial initial step in the community empowerment process, especially for groups with no previous farming experience. KWT Lumbung Mataram has 24 members, some of whom lack basic farming skills, resulting in varying skill levels among members. Through mentoring and hands-on learning, KWT members, who initially lacked agricultural skills, gradually learned to understand and practice

basic vegetable cultivation techniques, from land preparation and planting to plant care. At a minimum, members could grow vegetables for their families at home. This knowledge transfer process reflects a participatory learning approach that prioritizes hands-on experience as the primary means of enhancing individual capacity (Kolb, 2015). In the context of empowerment, this improvement in basic skills serves as the foundation for building community confidence and independence in managing local resources (Suharto, 2017).

The power relationship between the KWT and the men's farmer groups remains interdependent. This is because the group's operations are still under the strict supervision of the men's farmer groups (men), particularly in crop planning and heavy land management. The men's farmer groups play a role in directing crop planning, particularly in determining which commodities to cultivate based on market forecasts. This pattern reflects a top-down mentoring model that is still necessary in the early stages of group development, particularly to minimize economic risk and maintain business sustainability (Chambers, 1997). However, excessive reliance on a single actor has the potential to limit collective learning and decision-making if not balanced with a continuous strategic knowledge transfer process (Geovani and Herwina, 2024).

In the early stages of program implementation, the group's primary outputs remained dominated by social rather than economic outcomes. The most tangible benefits the members experienced were the formation of social capital in the form of harmonious relationships (*guyub rukun*), increased mutual trust, and strengthened internal group

networks. Harvests were still pooled into a cash fund and used for collective purposes, such as making group T-shirts, purchasing seeds, and covering other planting costs. Furthermore, there was an increase in basic agricultural knowledge, particularly regarding vegetable cultivation techniques and simple land management. However, to date, the economic profit-sharing mechanism has not yet been implemented, as all group income is still allocated to a joint fund as a form of initial capital accumulation (Woolcock, 2018; Pranadji and Sumarti, 2019; Putnam, 2020).

This situation indicates that the primary focus of empowerment remains on strengthening social capacity as a foundation for future economic development. From a community development perspective, social capital serves as a crucial prerequisite for the success of empowerment programs, as it strengthens group participation, commitment, and sustainability (Mardikanto and Soebianto, 2013; Aldrich and Meyer, 2015). Thus, the accumulation of capital within a group's coffers can be understood as a collective strategy for strengthening long-term economic independence.

Beyond social output, group empowerment also places a strong focus on building social cohesion through the values of *guyub rukun* (community harmony) and the practice of *gotong royong* (mutual cooperation). These values serve as the primary foundation for agricultural activities, group management, and deliberative decision-making. Consistently built social cohesion fosters a sense of belonging, solidarity, and loyalty among

members, ultimately strengthening the stability of the group organization (Putnam, 2000; Widodo and Rachman, 2021).

Gotong royong, as a form of local social capital, serves not only as a collective work mechanism but also as a space for intensive interpersonal communication. Through regular interaction, group members can build shared understanding, strengthen empathy, and minimize the potential for internal conflict (Mulyana, 2018; Suryadi and Hapsari, 2020). The Lumbung Mataram KWT (Group of Farmers) work system prioritizes mutual cooperation in all activities, from planting to harvest. Each day, members are assigned to work, pairing skilled and less skilled members to transfer knowledge about farming methods. Even members who are unable to attend scheduled work due to personal concerns can join another group the following day. This practice fosters an inclusive and supportive work climate, providing each member with a relatively equal opportunity to participate in group activities.

Furthermore, the current state of group empowerment indicates that the capacity-building process is still in its infancy. The primary focus of empowerment has not yet been entirely directed toward strengthening economic independence, but rather toward building social power by improving basic agricultural skills and strengthening group solidarity. For women, this is a new experience, especially for those who have traditionally worked as farmers, assisting their husbands in farming. These women have the opportunity to organize, learn management skills, and sharpen

leadership skills. Within Friedmann's (1992) framework, this stage represents the initial phase of empowerment, emphasizing strengthening the social base before entering the stage of mastering economic resources.

However, the continued dependence on male farmer groups in crop planning and strategic decision-making indicates that women's agency has not yet fully developed. Women are still in a transitional position from objects to subjects of development. This condition aligns with the concept of empowerment as a gradual process involving increased access, participation, and control over resources (Kabeer, 1999; Cornwall and Rivas, 2015; Hidayati and Wibowo, 2022).

Thus, although groups have made significant progress in social cohesion and basic capacity building, key challenges remain: transforming social capital into sustainable economic capital and strengthening women's bargaining power within decision-making structures. Strengthening leadership capacity, economic literacy, and access to external networks are crucial strategies for driving the transition to more substantive and gender-equitable empowerment (Kabeer, 2016; Saptandari and Holzner, 2020; Nurhayati, Prasetyo and Lestari, 2023).

KWT Tunas Harapan (Capacity Transformation Empowerment)

The Tunas Harapan Women Farmers Group (KWT) was established in 2020 at the initiative of a local figure, the Head of Neighborhood Association (RT) 04, who expressed concern for and interest in fruit cultivation. This initiative was then expanded through the involvement of housewives in the surrounding area, with mentoring support from

agricultural and livestock extension workers, coordinated by the Agricultural, Fisheries, and Forestry Extension Center (BP4K). The role of local actors and professional mentors in establishing this group reflects the importance of community leadership and external facilitation in fostering the growth of community-based economic institutions (Mardikanto and Soebiato, 2019; Anwar and Prasetyo, 2020).

Over time, KWT Tunas Harapan in Karangmaja Hamlet has developed various fruit and vegetable commodities grown in residents' yards by optimizing limited land. This pattern of yard utilization aligns with the concepts of family farming and urban farming, which aim to increase food security and household income (Saptana and Ashari, 2017; Susanti, Wahyuni and Prakoso, 2021). The commodities developed include black sapote, mango, guava, butterfly pea flowers, and various vegetables such as mustard greens and chilies. Black sapote later developed into a superior commodity for the group, processed into various value-added products, such as dodol (sweetened sticky rice), chips, fruit ice, various cakes, and pudding. This product diversification demonstrates a transformation from an orientation focused on meeting household food needs to a commercialization strategy based on processing local agricultural products. Post-harvest processing and product innovation are crucial for increasing the competitiveness of agriculture-based micro-enterprises and expanding market access for women's groups (Handayani and Rahmawati, 2019; Yuliani, Setiawan and Maulana, 2022).

This transition also reflects the increased entrepreneurial capacity of group

members to manage local resources productively. Through the development of superior products, KWT not only strengthens the economic position of its members but also contributes to strengthening local economic identity and the development of an agriculture-based creative economy (Pratama and Nugroho, 2021). Some KWT members have even been able to produce their own processed products, thus contributing to family income.

The empowerment process for the Tunas Harapan KWT (Tunas Harapan Farmer Group) is carried out through various forms of intensive training, facilitated by agricultural extension workers and other supporting institutions. This training covers aspects of cultivation, processing, product packaging, and basic business management. This process has significantly increased the technical capacity of members, particularly in mastering local food production and processing techniques (Suryani and Kurniawan, 2020; Lestari, Nugroho and Wijaya, 2023).

However, the main challenge in the empowerment process still lies in protecting or protecting the business, particularly regarding product legality, food certification, and limited access to capital. The lack of distribution permits, PIRT certificates, and halal labels hinders the expansion of marketing networks into formal markets, such as minimarkets, cooperatives, and digital platforms (Rachmawati and Widodo, 2021; Fauziah, Sari and Hidayat, 2022). Furthermore, there is a classic problem of business capital. Expanding the business requires substantial capital, and

the group has not yet decided to seek funding from outside the KWT.

Furthermore, limited business capital also limits the group's ability to increase production capacity, improve packaging quality, and innovate in processing technology. This situation indicates that empowerment has not been fully integrated with micro-enterprise support systems, such as financial institutions, business incubators, and digital marketing networks (Wulandari, Hartono and Mulyadi, 2020; Hapsari and Setyawan, 2023).

From an empowerment perspective, the protection aspect is a crucial dimension determining the sustainability of group businesses, as it serves to protect business actors from market risks, competition, and regulatory uncertainty (Alsop and Heinsohn, 2015; Kabeer, 2016). Without adequate regulatory and financial support, the technical capacity gains achieved may not develop optimally.

Therefore, strengthening collaboration among KWT (Micro-Economic Groups), local governments, microfinance institutions, and the private sector is necessary to build a more inclusive business ecosystem. Assistance with legal compliance, access to financing, and digital marketing are key strategies in driving the transformation of KWT Tunas Harapan into a competitive and sustainable community-based business (Nurjanah, Kurniawan and Pratiwi, 2022; Pramesti and Santoso, 2024).

Product diversification and processing are important strategies for increasing the added value of agricultural products and strengthening community economic

independence. Empowerment practices extend beyond planting and also include processing the produce into various products such as dodol (sweetened sticky rice), chips, ice cream, and bakpia (a type of baked cake). These efforts demonstrate a shift from primary production patterns to the development of market-oriented, community-scale agro-industries. Product diversification not only increases the economic value of commodities but also expands employment opportunities and reduces dependence on a single primary product (Suharto, 2017). Furthermore, creativity-based processing of local products is part of strengthening the creative economy, which utilizes local resources sustainably.

The success of this product processing and diversification is supported by relatively broad access to training. The Tunas Harapan KWT (Family Welfare Group) has received various training programs from multiple agencies. Collaboration with members of the Yogyakarta Provincial DPRD (Regional People's Representative Council) resulted in a 32-day training through the Mobile Training Unit (MTU) program and a grant for cooking utensils. Training from relevant agencies covering product processing, packaging, and marketing skills is delivered in stages. This training plays a crucial role in improving technical capacity, managerial knowledge, and awareness of product quality and marketing standards. According to Chambers (2017), locally needs-based training is key to the empowerment process because it enables communities to develop competencies relevant to their social and economic context. Capacity building through training also contributes to increased group confidence and competitiveness in facing

market dynamics (Geovani and Herwina, 2024).

From a gender perspective, women's access to productive training plays a strategic role in strengthening their bargaining position and agency within the household and community economic sphere. Inclusive and gender-responsive training can encourage women to actively participate in decision-making, business management, and the development of social and economic networks (Cornwall and Rivas, 2015; Kabeer, 2016). In the context of the Tunas Harapan Women's Group (KWT Tunas Harapan), capacity building through training contributes to transforming women's roles from mere producers to more independent and empowered economic actors.

Furthermore, the collective learning process that occurs during training activities also strengthens solidarity and social support among members. Intensive interactions during training create space for shared reflection, the exchange of experiences, and the strengthening of the group's identity as a community of productive women. This aligns with the view that women's empowerment is not only about improving technical skills, but also about strengthening critical awareness, self-confidence, and control over resources (Saptandari and Holzner, 2020). Therefore, the training received by the Tunas Harapan Women's Group (KWT Tunas Harapan) not only improves product quality and business competitiveness but also serves as a crucial instrument for promoting gender equality and strengthening women's roles in local economic development.

Another prominent aspect of the Tunas Harapan Women's Group (KWT Tunas

Harapan) empowerment practices is the high level of member participation in group management. This participation is realized through participatory planning mechanisms held regularly in group meetings, including the meeting held on the 10th of each month, serving as the primary forum for joint decision-making. Furthermore, a management rotation system is implemented, allowing each member the opportunity to learn leadership skills, organizational management, and collective responsibility. This management pattern reflects the application of democratic and inclusive principles within the group's organization, contributing to strengthening institutional capacity and organizational sustainability (Mardikanto and Soebiato, 2019).

From a gender perspective, women's active participation in management structures and decision-making is an important indicator of their increased agency and bargaining power in the community's public sphere. Women's substantive involvement in group leadership contributes to governance that is more responsive to members' needs and encourages a more equitable distribution of power (Cornwall and Rivas, 2015; Kabeer, 2016; Saptandari and Holzner, 2020). Saptandari & Holzner, 2020). Recent studies also show that women-based organizations with participatory systems tend to be more adaptive and sustainable because they prioritize the values of collaboration, empathy, and social solidarity (Geovani and Herwina, 2024).

Furthermore, conflict management within groups is carried out independently through deliberation and open communication,

demonstrating a high level of social maturity and strong interpersonal communication skills among members. The ability to manage conflict internally is an important indicator of social empowerment, reflecting trust, openness, and solidarity within the group (Suryadi and Hapsari, 2020). In the context of women's groups, participatory conflict management also strengthens psychological safety and encourages members to express their opinions without fear of marginalization (Hidayati and Wibowo, 2022).

Full participation of members in all stages of activities from planning and implementation to evaluation makes women not merely objects but primary subjects in the development and empowerment process. This pattern aligns with the participatory development paradigm, which positions communities as the primary actors in determining the direction and strategy for their community's development (Suharto, 2017; Mansuri and Rao, 2019). Through this active involvement, the group can develop reflective capacity and independence in facing various internal and external challenges.

Furthermore, the Tunas Harapan Women's Group (KWT) has entered a development phase, marked by product diversification and a division of labor across production, packaging, and marketing. This increasingly structured division of roles reflects the strengthening of members' psychological and economic power, particularly in building self-confidence, professionalism, and entrepreneurial orientation. The transformation from primary production activities to value-

added processing is a key indicator of successful local economic empowerment and community-based improvement in community welfare (Chambers, 1997; Sumodiningrat, 1999; Pratama and Nugroho, 2021).

From a gender perspective, strengthening women's economic capacity through business diversification also contributes to greater bargaining power within households and communities. Women with independent incomes tend to be more involved in family and social decision-making, thus fostering more equal and just gender relations (Kabeer, 2016; Nurhayati, Prasetyo and Lestari, 2023).

KWT Sumber Boga (Economic Independence/Social Transformation)

Founded in 2017, KWT Sumber Boga is a group that has reached the Empowering stage. It began as a community initiative to process aloe vera into the product "Alloeta" and has since built a business ecosystem spanning upstream to downstream.

KWT Sumber Boga has over 100 members, all of whom are women from the local hamlet. This high membership rate demonstrates the group's strong social base and the high level of community trust in the KWT institution. Within its organizational structure, KWT Sumber Boga has established a relatively mature management system, consisting of a core board, a production team, a marketing team, and several other support teams. This clear division of roles enables more effective and coordinated production and distribution.

In business management practices, the group has implemented a transparent and proportional wage system based on each

member's contribution. All strategic decisions, including those related to the division of labor, pricing, and the use of group funds, are made through deliberation at regular meetings. This decision-making pattern reflects the application of the principles of transparency, accountability, and active participation in the governance of community organizations (Mardikanto and Soebiato, 2019).

From a gender perspective, inclusive organizational structures and participatory management systems play a crucial role in strengthening women's positions in the public and economic spheres. Women's involvement in various strategic functions, such as production, marketing, and financial management, reflects greater agency and leadership in community-based business development (Cornwall and Rivas, 2015; Kabeer, 2016). Recent research also shows that women's business groups with transparent and democratic management systems tend to create more equitable working relationships and minimize practices of gender subordination (Saptandari and Holzner, 2020).

Furthermore, transparency in the wage system strengthens gender economic justice by ensuring that each member receives equal compensation commensurate with their workload and contribution. This system also helps reduce the potential for internal conflict and strengthens mutual trust among members (Duflo, 2012; Nurhayati, Prasetyo and Lestari, 2023). In the context of women's empowerment, fair income distribution is a key factor in increasing women's economic independence and bargaining power both within the household and within the community. Therefore, the production and

management dynamics implemented by the Sumber Boga Women's Group (KWT) not only support the group's operational efficiency but also serve as a strategic tool for transforming gender relations toward a more equal, participatory, and sustainable approach to local economic development.

In terms of resource access and control, members of the Sumber Boga KWT have relatively full authority over the entire production process, from raw material cultivation and product processing to waste utilization as organic fertilizer, as part of the circular economy concept. This management model demonstrates a high level of technical and ecological independence and reflects the group's ability to manage resources sustainably (Geissdoerfer et al., 2017; Widyastuti et al., 2022).

Although online marketing remains limited, the group's success in penetrating the local market through cooperatives and bazaars demonstrates considerable managerial capacity. To ensure the availability of raw materials, all members are required to grow aloe vera in their own yards. This collective policy represents an adaptive strategy to meet the high market demand for aloe vera products while simultaneously strengthening the household-based production base (Saptana and Ashari, 2017; Susanti, Wahyuni and Prakoso, 2021).

Furthermore, most production is directed to meet the village's internal needs, consistent with Tamanan Hamlet's status as a tourism village integrated with various sectors, such as arts, MSMEs, integrated agriculture, and the Women's Group (KWT). Through a joint

management system, these sectors synergize to meet economic and social needs. For example, processed aloe vera products are used as tourist souvenirs, while MSME products are consumed at banquets. This integration reflects a local economic model based on community collaboration that can strengthen village economic resilience (Pratama and Nugroho, 2021; Nurjanah, Kurniawan and Pratiwi, 2022).

From a gender perspective, the Sumber Boga Women's Group (KWT) has a relatively strong bargaining position in accessing external resources, particularly in obtaining training from relevant agencies. The group's established reputation means that training requests submitted by its management tend to receive a positive response from the government. This demonstrates women's increasing advocacy and negotiation capacity within public institutions (Cornwall and Rivas, 2015; Kabeer, 2016).

As part of a tourism village, the Sumber Boga Women's Group (KWT) also serves as a community learning center. The group regularly welcomes visits from tourists, communities, and other institutions to share knowledge related to aloe vera planting, harvesting, and processing. Furthermore, KWT members are frequently invited as resource persons in various training sessions held by government agencies and community groups. This role reflects the transformation of women from beneficiaries to knowledge agents and actors in local development (Saptandari and Holzner, 2020).

However, the group's economic empowerment still faces structural barriers, particularly related to business legality. The

processed products of the Sumber Boga Women's Farmers Group (KWT Sumber Boga) do not yet have distribution permits from the Food and Drug Authority (BPOM) and lack production facilities that meet food industry standards. These limitations prevent the products from being widely marketed in souvenir shops and formal markets. From a gender perspective, legal barriers and business infrastructure often act as structural inequalities that limit the expansion of women's businesses, despite well-developed technical and social capacity (Duflo, 2012; Hidayati and Wibowo, 2022).

This situation suggests that strengthening women's access to and control over production resources needs to be balanced with more gender-responsive policy and institutional support, particularly in the areas of certification, financing, and the provision of production facilities. Without adequate structural interventions, women's economic potential is at risk of being hampered and not developing optimally (Kabeer, 2016; Nurhayati, Prasetyo and Lestari, 2023).

Thus, the access and control practices established by the Sumber Boga Women's Farmer Group (KWT Sumber Boga) demonstrate significant progress in women's economic empowerment. Participation in KWT has also enhanced women's time-management skills, enabling them to balance productive activities with domestic responsibilities. The women remain actively involved in KWT programs while continuing to perform household duties, such as cooking and childcare, particularly as many of their children are now older and require less intensive care. Although not all husbands have assumed a greater share

of domestic work, they generally support their wives' participation in KWT activities. Before attending meetings or training sessions, many women communicate household responsibilities and provide instructions on tasks completed or still needing attention, thereby minimizing misunderstandings and maintaining family harmony. These findings suggest that women's participation in KWT has strengthened their organizational and economic capacities without substantially altering the traditional division of domestic labor. Therefore, while KWT has contributed to women's empowerment through increased participation, skills, and economic opportunities, the transformation of gender relations within the household remains gradual. Business sustainability and expansion also require stronger institutional support and gender-responsive policies to foster a more equitable and sustainable transformation of gender relations in the economic sector.

Representing a phase of independence, the integration of agricultural activities with educational tourism demonstrates the strengthening of women's political power and their position in the public sphere. Women are not only producers but also educational actors and managers of village economic networks (Friedmann, 1992).

The empowerment program implemented by the KWT (Women's Women's Group) has significantly increased women's capacity, including knowledge, technical skills, and leadership. The ongoing, tiered training process has been shown to improve members' self-efficacy and encourage independence in agricultural and food processing activities at the household level (Bandura, 1997; Lestari,

Nugroho and Wijaya, 2023). This increased self-efficacy provides a crucial foundation for women to develop self-confidence, the courage to take initiative, and the ability to manage their own businesses.

In addition to participating in KWT collective activities, the group actively encourages members to develop their own processed products to support their family's economic system. Management provides intensive mentoring to help members become self-sufficient in producing and marketing their own products. This ensures that women are not solely dependent on group income but also have an alternative source of income based on their skills. This mentoring approach aligns with the concept of empowerment, which emphasizes simultaneously strengthening individual and collective capacity (Kabeer, 2016; Rowlands, 2016).

Table 1.
Comparison of Women's Empowerment Characteristics Across the Three Women Farmer Groups (KWT) in Tamanmartani Village.

Aspect	KWT Lumbu ng Mataram	KWT Tunas Harapan	KWT Sumber Boga
Year Established	2025	2020	2017
Stage of Empowerment	Foundational	Transitional	Advanced/Transformational
Main Focus	Basic agricultural knowledge	Entrepreneurship development and	Business expansion, product diversification,

	dge and social cohesion	institutional strengthening	and market development
Women's Capacity	Basic farming skills through mentoring	Improved entrepreneurial, managerial, and organizational skills	High managerial competence and business independence
Economic Outcomes	No profit sharing ; collective capital accumulation	Income generation has begun but remains limited	Stable income generation and diversified products
Decision-Making	Still guided by men's farmer groups	Increasing participation of women in organizational decisions	Women independently manage organizational and business decisions
Gender Relations	Traditional gender roles remain dominant	Growing family support for women's participation	Greater bargaining power and more egalitarian household decision-making, although domestic responsibilities remain primarily women's responsibility
Institutional Capacity	Newly established organization	Developing governance and external partnerships	Strong institutional management and extensive partnerships
Main Challenges	Limited farming experience and	Business legality, certification, and capital	Business scaling, product innovation, certification, and wider

	dependence on men's farmer groups	access	market access
Theoretical Interpretation	Capacity building and participation	Strengthening agency and institutional participation	Strengthening agency and institutional participation

KWT also serves as a marketing facilitator for members' products. In various bazaar activities, for example, not only are group-processed products marketed, but members' own products are also included. This practice reflects gender-based economic solidarity that encourages the growth of women's businesses in an inclusive and equitable manner (Cornwall and Rivas, 2015; Nurhayati, Prasetyo and Lestari, 2023). Through this mechanism, women gain greater opportunities to realize their economic potential.

The impact of empowerment is also evident in the dynamics of gender relations at the family and community levels, which show increasingly egalitarian patterns. Support from husbands and the social environment for women's productive activities reflects a process of negotiating more flexible and equal domestic roles. This aligns with the concept of an egalitarian partnership within the family, which positions men and women as partners in decision-making and household management (Duflo, 2012; Kabeer, 2016).

Recent research shows that women's economic independence significantly

strengthens their bargaining power within the family, including in decision-making regarding children's education, financial management, and the division of domestic labor (Razavi, 2020; Hidayati & Wibowo, 2022). In the context of the Women's Group (KWT), increasing women's economic capacity also contributes to more equitable and participatory social relations.

Furthermore, the values of mutual respect and harmony that develop within the group serve as social capital that strengthens cohesion and solidarity among members. This social capital is a crucial foundation for the sustainability of empowerment programs, as it creates a climate of mutual trust, emotional support, and collective cooperation (Putnam, 2000; Woolcock, 2018). From a gender perspective, women's community-based social capital also provides a safe space for women to learn from one another, share experiences, and develop critical awareness of their rights and roles in development (Cornwall and Rivas, 2015; Saptandari and Holzner, 2020).

Thus, empowerment through KWT not only increases women's technical and economic capacity, but also contributes to the transformation of more equal gender relations, strengthens women's social identity, and builds inclusive and sustainable communities.

Challenges in product innovation also hinder the competitiveness of women's businesses, particularly amid shifting consumer preferences and market competition. Limited access to technology, market information, and business networks tends to slow innovation development (Pratama and Nugroho, 2021; Nurhayati, Prasetyo and Lestari, 2023). This situation highlights the need for policy support

that is more responsive to the needs of women entrepreneurs.

Furthermore, legal constraints on businesses, such as the lack of BPOM distribution permits, halal certification, and adequate production standards, reflect an institutional void that limits the expansion of women's market access to the formal sector (Pranadji and Sumarti, 2019; Rachmawati and Widodo, 2021). From a gender perspective, complex regulations and high administrative costs often place additional burdens on women's micro-enterprises, exacerbating their economic vulnerability (Cornwall and Rivas, 2015; Kabeer, 2016).

Thus, although KWT has positively affected family economic resilience and women's empowerment, business sustainability still requires more comprehensive structural interventions. Strengthening access to inclusive capital, providing product innovation assistance, and facilitating gender-sensitive business legality are important strategies to encourage a more sustainable and equitable economic transformation for women (Duflo, 2012; Razavi, 2020; Nurjanah, Kurniawan and Pratiwi, 2022)

Transformational Empowerment in the Dynamics of KWT

Research results indicate that the three KWTs in Tamanmartani Village represent different stages of empowerment, ranging from the foundational phase, through capacity development, to economic independence. This variation reflects the empowerment process as a gradual and contextual spectrum, as proposed by Friedmann, who positions empowerment as

a process of strengthening the social, economic, and political power of the community (Friedmann, 1992).

The Lumbung Mataram KWT is in the functional empowerment phase, characterized by a focus on transferring basic knowledge, building social cohesion, and strengthening group solidarity. At this stage, empowerment still focuses on strengthening social power by improving farming skills and collective learning. The group's primary orientation is not yet toward economic independence, but rather on establishing a social foundation as a prerequisite for business development (Mardikanto and Soebiato, 2019).

The Tunas Harapan KWT exhibits characteristics of a transitional phase toward transformational empowerment. This group has developed entrepreneurial capacity through product diversification, post-harvest processing, and strengthened participatory governance. This reflects a strengthening of economic and psychological power, characterized by increased self-confidence, professionalism, and market orientation (Friedmann, 1992). However, limitations in legal status and capital indicate that the transformation process has not been fully institutionalized structurally.

Meanwhile, the Sumber Boga Women's Group (KWT) represents a phase of substantive empowerment and relative independence. The integration of production, processing, marketing, and involvement in the tourism village demonstrates the strengthening of women's political power and social legitimacy in the public sphere. Women act not only as producers but also as knowledge agents and

managers of local economic networks. This indicates that empowerment has transcended the technical dimension toward a broader transformation of social and economic relations.

Thus, the findings of this study strengthen the argument that women's empowerment through KWT is dynamic and progressive, influenced by the group's internal capacity, external support, and the local socio-cultural context (Kabeer, 2016).

Access and Control Analysis from the Harvard Analytical Framework Perspective

The Harvard Analytical Framework emphasizes the analysis of the division of labor, access to, and control over resources between men and women. In the context of the Tamanmartani Farmers' Group (KWT Tamanmartani), this framework allows for a more systematic mapping of gender-relations dynamics in agricultural activities and micro-enterprises.

Within the Lumbung Mataram Farmers' Group (KWT Lumbung Mataram), women have access to land, training, and production inputs, but male farmers still dominate control over strategic decision-making. Crop planning and commodity selection remain top-down, leaving women in a semi-autonomous position. This situation reflects the imbalance between access and control, as explained in the Harvard Framework, where women are often involved in production activities without having full authority over resources (March, Smyth and Mukhopadhyay, 1999; Kabeer, 2016).

In the Tunas Harapan Farmers' Group (KWT Tunas Harapan), the balance between access and control has improved. Women have not only gained access to training, equipment,

and markets, but have also begun to participate in decision-making related to production and marketing. However, limited business legality indicates that women's control over the formal economic system remains partial. This indicates structural barriers that limit the expansion of women's agency (Cornwall and Rivas, 2015; Hidayati and Wibowo, 2022).

In contrast, in the Sumber Boga Women's Group (KWT), women have relatively full control over the production value chain, from raw materials to distribution. Wage transparency, deliberation in decision-making, and integration with the tourism sector strengthen women's bargaining power. From the Harvard Framework perspective, this situation demonstrates a balance between women's access, control, and economic benefits (Moser, 1993; Kabeer, 2016).

These differences in access and control show that women's economic empowerment is not simply about providing the means of production; it must be accompanied by strengthening their negotiation capacity, leadership skills, and institutional literacy.

Gender Relations, Agency, and Social Transformation

Analysis based on Kabeer's framework shows that women's empowerment in KWT occurs through three main dimensions: resources, agency, and outcomes (Kabeer, 2016). In the initial stage, resources increase through training and mentoring. Agency, then, develops through participation in decision-making and group leadership. In later stages, outcomes are reflected in economic

independence and improved social bargaining power.

In KWT Lumbung Mataram, women's agency remains in its early stages, marked by dependence on male actors. Women are still transitioning from objects to subjects of development. In KWT Tunas Harapan, agency develops through collective entrepreneurship and participatory governance. Meanwhile, in KWT Sumber Boga, agency has been institutionalized within organizational structures and external networks.

This transformation of agency also affects gender relations within families and communities. Women's increased economic contributions encourage a redistribution of domestic roles and strengthen their bargaining power in household decision-making. These developments show that women's economic independence contributes to more egalitarian gender relations.

Furthermore, the existence of KWT as a safe space strengthens women's critical awareness and solidarity. Collective interactions enable shared reflection on women's rights, roles, and aspirations in local development (Saptandari and Holzner, 2020).

Structural Challenges and Sustainable Empowerment

Despite significant achievements, women's empowerment through KWT (Women's Business Group) still faces structural challenges. Limited access to capital, business legality, and production technology are major obstacles to scaling their businesses. Weak institutional support hinders the consolidation

of women's political power within the development system (Friedmann, 1992).

Legal limitations, such as distribution permits and certification, also reflect institutional barriers that exacerbate the vulnerability of women's micro-enterprises. Complex regulations and high administrative costs often hinder small-scale business owners (Pranadji, 2019; Rachmawati and Widodo, 2021). Within the Harvard Framework, these barriers limit women's control over the formal market.

Furthermore, reliance on internal group capital demonstrates the weak integration of KWT with the inclusive financial ecosystem. Without gender-adaptive financing support, women's economic transformation has the potential to stagnate (Razavi, 2020; Wulandari, Hartono and Mulyadi, 2020).

Theoretically, this research strengthens the relevance of the transformational empowerment framework and the Harvard Analytical Framework for analyzing the dynamics of KWT. The integration of these two approaches provides a comprehensive understanding of the relationship among individual capacity, institutional structures, and the distribution of gender power.

Practically, the research findings emphasize the importance of an integrated empowerment approach that encompasses enabling, empowering, and protecting. KWT empowerment programs should focus not only on technical training but also on strengthening women's leadership, facilitating business legality, accessing inclusive financing, and strengthening market networks.

Strengthening collaboration between local governments, financial institutions, universities, and the private sector is a key strategy in building a sustainable and gender-responsive empowerment ecosystem (Nurjanah, Kurniawan and Pratiwi, 2022; Pramesti and Santoso, 2024).

Conclusion and Recommendation

This study shows that women's empowerment through Women Farmer Groups (Kelompok Wanita Tani / KWT) in Tamanmartani Village is a gradual, context-dependent process rather than a linear outcome of economic participation. The different stages of development observed in KWT Lumbung Mataram, KWT Tunas Harapan, and KWT Sumber Boga illustrate that empowerment evolves through increasing organizational capacity, participation, and institutional maturity. These findings extend Empowerment Theory (Zimmerman, 2000) by showing that empowerment in rural women's groups is shaped not only by capacity building and participation but also by interactions among individual agency, collective action, and institutional support. Furthermore, the study contributes to the Gender and Development (GAD) perspective (Moser, 1993) by demonstrating that women's economic participation does not automatically transform gender relations within households. Instead, gender transformation occurs incrementally through greater decision-making capacity, improved access to productive resources, and stronger family support, while traditional domestic responsibilities largely remain with women.

This finding suggests that empowerment should be understood as a multidimensional

process encompassing economic, social, and gender dimensions, rather than income generation alone. Practically, the study highlights the need for gender-responsive policies that strengthen women's leadership, facilitate business legality and certification, expand access to finance and digital markets, and integrate gender analysis into local development programs. Future research should adopt longitudinal approaches to examine how changes in household gender relations and women's agency evolve over time.

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