

# Community Empowerment Strategy as an Effort to Achieve Food Security Through Melon Picking Agrotourism

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## **ABSTRACT:**

**Background:** Food security is a crucial issue in Indonesia. Kebocoran Village, Banyumas, is developing melon-picking agrotourism as an innovative solution to address food security challenges and improve community well-being.

**Aims:** This study aims to analyze the community empowerment strategies implemented by the Mina Pisang Farmers Group through the melon picking agrotourism program.

**Methods:** This research is a field study using a descriptive qualitative approach. Primary data was obtained through interviews with farmer groups and village government officials. Data collection techniques used were observation, interviews, and documentation.

**Result:** The integrated empowerment strategy uses the 5P approach (Enabling, Strengthening, Protecting, Supporting, and Maintaining). Enabling includes land access and melon cultivation training. Empowerment is carried out through technical training to increase farmer capacity.

**Conclusion:** The Mina Pisang Farmers Group's 5P-based empowerment strategy has been successfully implemented. This program significantly strengthens village food security through land optimization, food diversification (melons), and simultaneously improves community welfare in a sustainable manner.

**Keywords:** Food security, Community Empowerment, Agrotourism, Farmer Groups

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**INTRODUCTION**

Food security is a fundamental issue that is highly pressing at both the national and global levels. Food is a basic human right and a primary prerequisite for social and economic stability and the sustainable development of a nation (Dhal & Kar, 2025; Lin & Wang, 2025; Pandey & Mishra, 2024; Saleem et al., 2025; Vignesh et al., 2024). Amidst the challenges of climate change, shrinking agricultural land, and fluctuating global commodity prices, efforts to ensure the availability, access, utilization, and stability of food at the household and village levels are becoming increasingly urgent. (Atanda et al., 2025; Kabato et al., 2025; Mihrete & Mihretu, 2025; Naseem & Rizwan, 2025; Wang & Tong, 2025) Therefore, research that focuses on strategies to increase local food security is crucial for creating an independent and empowered society (Boadi et al., 2025; FAO et al., 2024; Hassan et al., 2025; Kompas et al., 2024; Ogwu et al., 2024; Touch et al., 2024).

Gap between Ideal Practices and Real Conditions Ideally, food security should be achieved through optimizing the potential of local resources and community independence (Ejiohuo et al., 2024; Mamasoliev, 2024; Odoms-Young et al., 2024; Rashid et al., 2024). However, in reality in many rural areas, there is a significant gap (Cooke et al., 2025; Davies & Reid, 2024; Ghimire et al., 2024; Hernández-Moreno et al., 2024). Much village land is not yet managed productively, farmer groups still depend on external assistance, and innovation in conventional agriculture is still minimal, which directly weakens the economic and food resilience of the community. (Antriyandarti et al., 2024; Gwacela et al., 2024; Lu & Carter, 2024; Sarker et al., 2024) This gap shows that conventional approaches to food security are often inadequate without creative and integrated empowerment strategies.

However, despite the growing implementation of agrotourism programs in rural Indonesia, most existing studies focus either on food security from a macro or production-oriented perspective, or on agrotourism primarily as an economic activity. There is limited empirical research that examines how community empowerment strategies operate in practice to link agrotourism with sustainable food security at the village level, especially within specific local contexts such as Kebocoran Village. This gap makes it difficult to assess whether agrotourism initiatives truly function as empowerment-driven food security strategies or merely as short-term income-generating projects.

Therefore, this study seeks to address this research gap by analyzing the community empowerment strategies implemented by the Mina Pisang Farmers Group through melon-picking agrotourism in Kebocoran Village. By focusing on local practices and stakeholder involvement, this research aims to provide a contextualized understanding of how empowerment-based agrotourism can contribute to village-level food security in a sustainable manner, offering insights that may be relevant for similar rural communities.

The selection of a Community Empowerment Strategy is the core of this research because the success of this melon-picking agrotourism program depends heavily on the participation, initiative, and independence of the Mina Pisang Farmers Group members. Empowerment is not merely the provision of capital or technical training, but rather a process aimed at building capacity (individual and institutional) so that the community is able to solve problems and manage its own resources in the long term. Therefore, analyzing the right strategy is key to understanding the sustainability of the proposed food security model.

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This study aims to identify, describe, and comprehensively analyze the community empowerment strategies implemented by the Mina Pisang Farmers Group in an effort to improve food security through melon-picking agrotourism. In terms of theoretical contribution, the results of this study are expected to enrich the scientific literature on Islamic Community Development and local asset-based development models. In terms of practical contribution, this research can serve as a reference and strategic guide for village governments, management institutions, and other farmer groups in replicating effective and integrated agrotourism models to achieve food self-sufficiency.

### METHOD

#### Research Design

This research uses a field research type with a qualitative descriptive approach. A qualitative design was chosen to gain a holistic understanding of the processes and meanings behind the implemented community empowerment strategies. Descriptive research aims to systematically, factually, and accurately describe the facts and relationships between observed phenomena, particularly those related to the implementation of the 5P approach in melon-picking agrotourism as a food security effort.

#### Participant

The key participants (key informants) in this study were those directly involved in the formulation and implementation of empowerment and agrotourism strategies. Participants included:

1. The chairman and several core members of the Mina Pisang Farmers Group who actively manage agrotourism.
2. Representatives of the Kebocoran Village Government (Village Head or related apparatus) who play a role in policy and program support.
3. Community leaders or representatives from local Non-Governmental Organizations (NGOs) if any are involved in the mentoring.

#### Population and the methods of sampling

Because this is a qualitative study, the concept of population is replaced by the concept of social situations consisting of places, actors, and activities. The sampling method used was purposive sampling, where informants were selected based on their expertise, knowledge, and direct involvement with the research focus (empowerment strategies and food security).

#### Instrument (Instrument):

The main instrument in this qualitative research is the researcher themselves (human instrument). Supporting instruments used to collect and record data include:

1. Interview Guidelines (contains a list of structured and unstructured open questions).
2. Observation Guidelines (to record work processes, interactions, and activities at agrotourism locations).
3. Documentation (camera, sound recorder, and documents related to the Farmer Group and Village Government).

#### Procedures and Time Frame (Procedures and Time Frame)

The research procedure involves several main stages:

1. Preparation Stage: Arranging research permits and preparing research instruments (interview/observation guidelines).
2. Data Collection Stage (Field Work): Conducting participatory observations and in-depth interviews with key informants at the research location (Kebocoran Village).

3. Data Analysis Stage: Analyzing the data that has been collected continuously during the data collection process.
4. Report Preparation Stage: Compiling research findings and conclusions in the form of a thesis. (The research time period is generally determined by the institution, for example: Data collection is carried out for 2-3 months during the relevant academic semester).

### **Analysis Plan**

The data analysis technique used is the Miles and Huberman model (or similar), which is interactive and occurs simultaneously with the data collection process. The analysis stages include:

1. Data Reduction: The process of selecting, focusing, simplifying, and abstracting data obtained from field notes, interviews, and documentation.
2. Data Display (Data Presentation): Organizing data in the form of a matrix, narrative, or chart to facilitate understanding of the relationship between variables.
3. Conclusion Drawing/Verification: Drawing temporary conclusions which are then verified and validated with other data to produce a credible final conclusion regarding the empowerment strategy.

## RESULTS AND DISCUSSION

### Result

This study describes the community empowerment strategies implemented by the Mina Pisang Farmers Group in Kebocoran Village through the melon-picking agritourism program. Data were obtained through field observations, in-depth interviews with key informants, and document analysis.

The empowerment strategy used an integrated 5P approach consisting of enabling, strengthening, protecting, supporting, and maintaining. During the enabling stage, the Mina Pisang Farmers Group was granted access to previously unproductive village land for melon cultivation. This stage also included initial training activities related to land preparation, planting techniques, and basic crop management.

The Strengthening Stage aimed to increase the capacity of farmer group members by providing technical training in melon cultivation, pest management, harvesting techniques, and basic organizational management. Training activities were conducted jointly by farmer group members and external facilitators. The Kebocoran Village Government's involvement in the Protecting component included providing formal recognition and policy support for the agritourism program. This support included administrative facilitation and integrating the program into village development planning documents.

The Supporting stage involved providing physical and nonphysical resources to sustain program implementation. Physical support included constructing simple agricultural infrastructure, such as greenhouses and visitor facilities. Non-physical support came in the form of promoting melon-picking agritourism through village networks and local events.

Finally, the maintenance stage focused on ensuring program continuity. These efforts included developing derivative melon products, establishing small-scale independent business units managed by the farmer group, and holding routine coordination meetings to evaluate ongoing activities. The implementation of the 5P strategy was observed throughout all stages of the melon-picking agritourism program in Kebocoran Village, as evidenced by consistent activities, stakeholder involvement, and supporting records collected during the field study.

### Discussion

The findings of this study suggest that the Mina Pisang Farmers Group's community empowerment strategy, which involves melon-picking agritourism, has strengthened village-level food security. Applying the 5P framework shows how access to land, capacity building, institutional protection, resource support, and sustainability mechanisms can be implemented simultaneously in a rural agritourism setting. These results align with previous studies on agritourism-based development that emphasize combining agricultural production and tourism activities to enhance food availability and diversify household income sources, improving economic access to food (Pehin Dato Musa & Chin, 2021; Qiu et al., 2021; Widawski et al., 2023).

Compared with other agritourism and food security studies, the Kebocoran Village case demonstrates both similarities and unique characteristics. Similar to findings from rural agritourism initiatives in other regions, this study supports the argument that community participation and empowerment are critical factors that link agritourism to food security outcomes (Cavalleri et al., 2022; Garwi, 2024). Unlike studies that focus on economic gains or visitor numbers, however, the present research highlights empowerment as the central mechanism through which agritourism contributes to sustainable food security. This distinction strengthens the study's theoretical contribution by positioning the 5P empowerment strategy as a socio-institutional process that enables long-term community resilience, not merely as a managerial tool.

From a practical standpoint, the results imply that melon-picking agritourism could serve as a replicable model for other rural villages with comparable agricultural potential. Integrating food production and tourism activities provides a pathway for land optimization and food diversification

while maintaining community control over local resources. Nevertheless, the effectiveness of this model depends on continuous mentoring, institutional support, and innovation, especially in developing diversified derivative products and adopting improved cultivation technologies. These findings align with the broader agritourism literature, which emphasizes that innovation and partnerships are crucial for sustaining agritourism programs beyond their initial implementation phase.

Despite these contributions, several limitations should be acknowledged. First, this study employed a descriptive qualitative approach within a single case study, limiting the generalizability of the findings to other contexts. Additionally, the analysis lacked quantitative measurements of food production growth, income changes, and nutritional outcomes. This constrains the ability to assess the program's magnitude of impact on food security and community welfare. These limitations imply that, while the findings offer valuable contextual insights, they should be considered exploratory rather than conclusive evidence.

Based on these considerations, future research is encouraged to adopt quantitative or mixed methods designs to statistically examine the relationship between agritourism-based empowerment strategies and food security indicators. Comparative studies across multiple villages or regions would also be valuable in identifying the most effective components of empowerment strategies under different socioeconomic conditions. In terms of policy and practice, continued development of product diversification, expansion of partnerships for technological innovation, and sustained involvement of the local government in mentoring and capacity building are recommended to ensure the long-term sustainability of agritourism as a food security strategy.

## **CONCLUSION**

This study concludes that the Community Empowerment Strategy implemented by the Mina Pisang Farmers Group in Kebocoran Village has been successfully implemented as a concrete effort to improve Food Security through the development of Melon Picking Agrotourism. This success is supported by the implementation of the 5P integrated approach (Enabling, Strengthening, Protecting, Supporting, and Maintaining) which serves as a systematic framework for building local independence. This strategy is not only able to optimize the use of unproductive village land for food production (melons), but also creates income diversification through the tourism sector, thereby strengthening economic access and food availability for the community. Thus, Melon Picking Agrotourism has proven effective as an innovative model that integrates social, economic, and environmental aspects, making it a sustainable solution to achieve local asset-based food security.

## **AUTHOR CONTRIBUTION STATEMENT**

FS was the main contributor in designing the research concept, collecting and analyzing field data in Kebocoran Village, and writing the initial and final drafts of the manuscript. DP1 was responsible for validating the research methodology, supervising ethics, and refining the discussion structure. Meanwhile, DP2 played a role in critically reviewing the theoretical substance of Islamic Community Development and aspects of Food Security, as well as final approval of the manuscript. All authors have read and approved the final version of the manuscript.

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