



## STAKEHOLDER PERCEPTIONS OF THE FAILURE OF ORGANIC RICE CULTIVATION IN PURBALINGGA REGENCY FROM THE FINANCING ASPECT

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**Abstract.** Organic rice cultivation in Penolih Village, Purbalingga Regency, received INOFICE Organic certification (2018-2020), but the certification was revoked in 2021. This study aims to examine stakeholders' perceptions of the role of financing in the failure of organic rice cultivation in Penolih Village, Purbalingga Regency. Data were obtained through Focus Group Discussions (FGDs) involving farmers and administrators of the Mekarsari Farmers' Group (Gapoktan Mekarsari), Penolih Village officials, Kaligondang District Extension workers, and the Purbalingga Regency Agriculture Office. The research method used was qualitative-descriptive with FGDs. The results of the discussions indicated that although capital is a crucial need, most farmers still rely on personal funds. Access to banking and cooperative financing is considered suboptimal due to complicated procedures, collateral requirements, and mandatory membership. Government assistance is limited to grants, fertilizer subsidies, and technical training, while financial literacy training is unevenly distributed. The majority of stakeholders believe that the failure of organic rice cultivation is caused by marketing aspects, low farmer independence, and high certification costs. The practice of obtaining capital through middlemen remains widespread, leaving farmers tied to the debt bondage system. The main obstacles to agricultural financing are collateral and complex bureaucracy. Therefore, solutions are proposed to simplify credit procedures, increase capital support, strengthen farmer group cash flows, and partner with the private sector and village-owned enterprises (BUMDes). These findings indicate that farmers in Penolih Village need not only financially support but also support for independence in farm management and market strengthening.

**Keywords:** agricultural financing, FGD, failure of organic rice cultivation, stakeholders

### 1. Introduction

Intensive agricultural technology has adversely affected environmental damage, climate change, and soil degradation [1,2]. Organic farming systems have emerged as a solution, incorporating a sustainability and biodiversity approach [3,4]. The primary goal of organic farming systems is to preserve the environment and maintain soil fertility by minimizing the negative impacts of chemical inputs. Furthermore, the implementation of organic farming systems also aims to improve product quality and consumer health. Conventional farming systems, currently prevalent in several regions in Indonesia, conceal potential environmental and economic risks that may arise in the future [5]. Previous research has shown that rice farming profitability tends to be higher in areas with lower climate change impacts than in areas with greater impacts [6]. The complexity of climate change issues makes this challenge even more complex, but organic farming systems offer holistic solutions to improve farmer resilience and well-being [6,7].

In Indonesia, rice cultivation is one of the most important agricultural sectors and is closely associated with national food security. Therefore, the implementation of organic farming principles in rice cultivation has become increasingly important as an effort to address environmental challenges while maintaining sustainable agricultural productivity. Sustainable organic rice cultivation requires commitment from farmers and support from various parties. Financing is crucial for sustainable organic rice cultivation, given the higher initial capital requirements for organic farmers compared to conventional farmers, coupled with the high cost of organic certification. However, several government programs and financial institutions have attempted to provide sufficient capital support. However, these programs and support are not evenly distributed and are inaccessible to smallholder farmers in Indonesia. This is due to the financing programs often offering high interest rates and collateral guarantees. As a result, most farmers choose to use their own capital or borrow from middlemen, ultimately weakening their bargaining power and hindering the growth of their farming businesses [8]. This situation demonstrates the complexity of agricultural financing issues related to institutional constraints and policy bias.

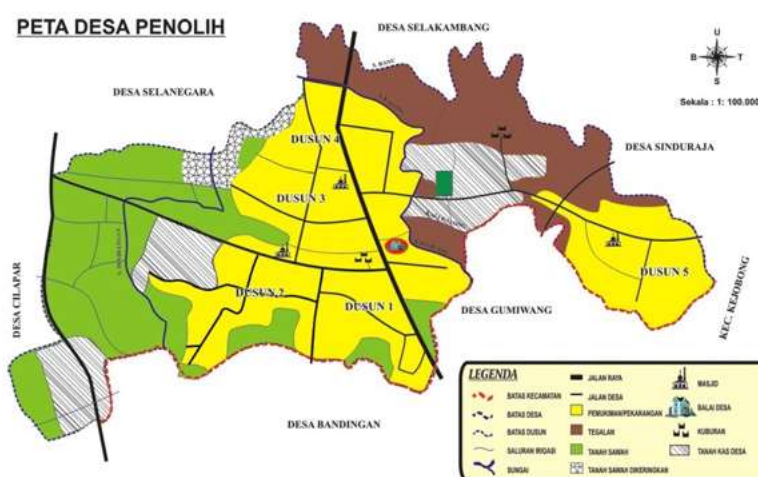


Figure 1. Penolih Village Map

The majority of Penolih Village residents are farmers, with rice as their primary source of income [9]. However, according to data [10], the majority of rice farmers in Purbalingga Regency are categorized as small farmers, also known as "small farmers." The term "small farmers" refers to farmers with land holdings of less than 0.05 hectares. The average landholding of rice farmers in Penolih Village is only 0.007 hectares (10), resulting in yields only sufficient to meet daily needs. The opportunity to increase income through organic rice cultivation presents a new hope for Penolih Village farmers. Although the majority of farmers are over 50 years old [10], they have successfully switched to organic methods due to the prospect of higher selling prices and efficiency in input costs. At its peak in 2018, 68 farmers obtained organic certification from INOFICE [10], with the price of organic rice reaching IDR 7,000/kg, far above the price of conventional rice at that time of IDR 3,500/kg. However, in 2021, the certification was not renewed, causing most farmers to return to conventional methods. By 2024, only 15 farmers remained growing rice organically [10]. This phenomenon is very unfortunate, considering that the process of obtaining organic certification again takes a long time, more than three years, while organic farming yields have been proven to provide higher economic value for farmers in Penolih Village. This indicates the existence of structural problems beyond just the technical aspects of cultivation. Therefore, this study was conducted to explore stakeholders' perceptions of the role of financing in the failure of organic rice cultivation in Penolih Village. The results are expected to provide input for the development

of more inclusive agricultural financing policies and support the sustainability of the organic farming system.

## 2. Methods

This study uses a qualitative-descriptive approach to explore in depth how stakeholders perceive the failure of organic rice cultivation from a financing perspective. The study was conducted in August 2025 in Penolih Village, Karangreja District, Purbalingga Regency. The location was selected purposively with the following considerations: 1) Rice farmers in Penolih Village who are members of the Mekarsari Farmers Group (Gapoktan Mekarsari) have been certified by INOFICE Organic (68 farmers); 2) in 2024, members of the Mekarsari Farmers Group had switched to conventional rice cultivation. The study was conducted through in-depth interviews using questionnaires with key informants. The questionnaire in this study focused on financing organic rice cultivation, access and constraints, the role of agricultural institutions, and the solutions offered. Key informants in the study were determined purposively, namely parties directly related to the failure of organic rice cultivation and its financing aspects. Key informants in this study's Focus Group Discussions (FGDs) included:

1. The Purbalingga Regency Agriculture Office
2. Field Agricultural Extension Workers from the Kaligondang District Agricultural Extension Agency
3. Members and Administrators of the Mekarsari Farmers' Group
4. Penolih Village Officials

Data for this study were collected through 1) Focus Group Discussions (FGDs) (to obtain information on key informants' perceptions and experiences regarding financing for organic rice cultivation in the field); and 2) In-depth interviews (to explore further information not yet revealed in the FGDs). The data analysis technique used the Miles & Huberman interactive model [11,12], which includes three stages, as shown in Figure 2. The Miles & Huberman interactive model was selected because this study aims to explore stakeholders' perceptions and experiences regarding the failure of organic rice cultivation from a financing perspective in a systematic and in-depth manner. This model is considered appropriate for qualitative-descriptive research because it allows researchers to continuously analyze, verify, and interpret data throughout the research process through interactive stages of data reduction, data presentation, and conclusion drawing. Compared to other qualitative analysis approaches, the Miles & Huberman model provides a more structured and flexible framework for organizing complex information obtained from FGDs and in-depth interviews, thereby facilitating the identification of key themes and relationships among stakeholders' perspectives.

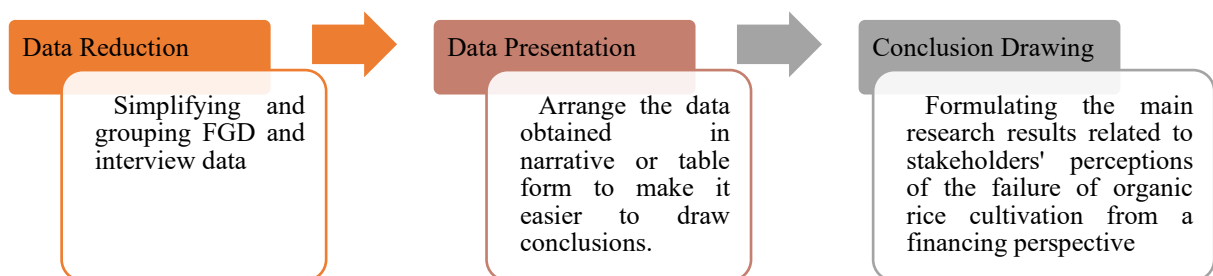


Figure 2. Data Analysis Techniques

## 3. Results And Discussion

A Focus Group Discussion (FGD) was held on August 12, 2025, in Purbalingga Regency. The results of this FGD provide a general overview of the financing dynamics of organic rice cultivation in Penolih Village, Purbalingga Regency. Although financing is a crucial aspect of

agricultural activities, stakeholder perceptions indicate that financing is not the primary cause of organic rice cultivation failure. Field findings indicate a correlation between capital availability, access to financial institutions, government assistance patterns, and non-financial factors such as marketing, farmer independence, and high certification costs, with indications of organic rice cultivation failure in Penolih Village (Figure 3). Therefore, the discussion on this matter will further elaborate on the position of financing aspects in relation to the sustainability of organic rice cultivation, while also offering alternative solutions that can be implemented.

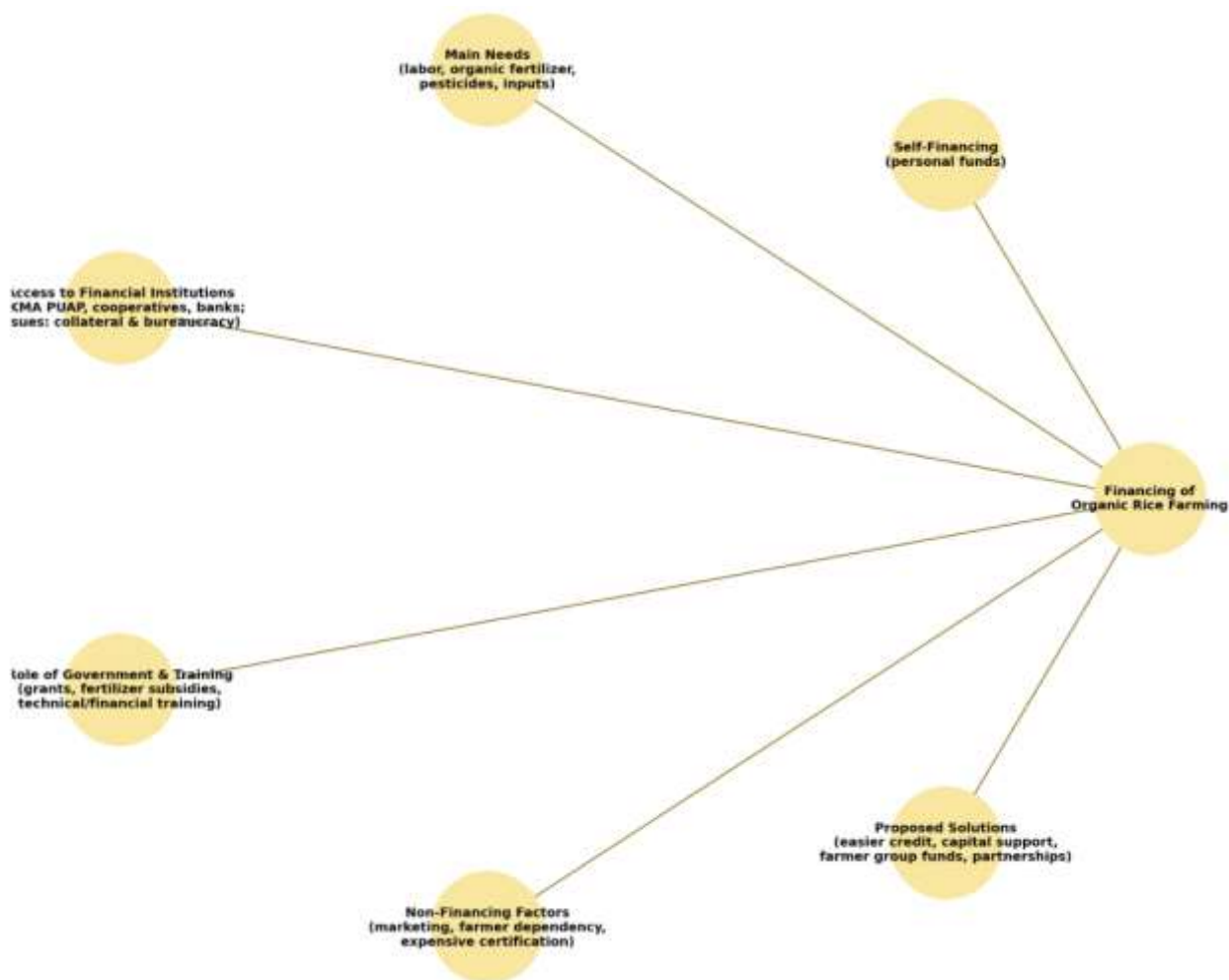


Figure 3. Stakeholders' Perceptions on Financing of Organic Rice Farming

### 3.1. Capital and Needs for Organic Rice Farming

The results of in-depth FGD interviews with stakeholders regarding the failure of organic rice cultivation in Penolih Village showed that most key informants agreed that capital is a crucial factor in the sustainability of organic rice cultivation in Penolih Village. However, most farmers still rely on personal funds as their primary source of capital for organic rice farming. Low levels of education, coupled with advanced age, make farmers reluctant or lazy to seek information or handle administrative matters to access additional capital for their farming. As a result, organic rice farming tends to struggle to develop, with many experiencing failures or switching to conventional methods. Farmers generally use capital to cover labor, organic fertilizer, pesticides, and other supporting inputs. These results align with previous research [13, 14, 15], which states that the continued use of personal capital for farming purposes will limit business development, resulting in stagnant or even declining farmer incomes. Thus, the role of financial institutions in providing access to financing is very important as a support for

developing organic rice farming businesses and reducing the risk of lack of additional capital [16,17].

### 3.2. Accessibility to Financing Institutions

The research results show that there are financing institutions around Penolih Village that are accessible to members of the Mekarsari Farmers Group (Gapoktan Mekarsari). These financing institutions include LKMA PUAP Mekarsari, cooperatives, banks, and the private sector. However, most farmers rarely take advantage of the easy accessibility of these financing institutions. Organic rice farmers in Penolih Village stated that the credit financing procedures at these institutions are very complicated administratively, requiring collateral as security and membership of a cooperative or related institution to apply for financing. One of the biggest obstacles to accessing credit financing in Indonesia is complicated bureaucratic or administrative constraints and collateral requirements, which are a limiting factor, especially for smallholder farmers, in accessing formal financing [16, 18, 19]. This has resulted in farmers choosing alternative routes to obtain financing for their farming businesses. One such approach is informal financing through collaboration with middlemen. The farmer in question will borrow a sum of money from the middleman for farming capital, which is then repaid using the farmer's harvest, which must be sold to the middleman. This is known as the Ijon System, which tends to be detrimental to farmers because the grain will be purchased by middlemen at a price that is relatively lower than the market price [20, 21].

### 3.3. Government Support and Financial Literacy

During organic rice cultivation from 2018 to 2020, government support was still considered minimal and not optimal. During FGDs with key informants, it was explained that government assistance so far has been limited to fertilizer subsidies, grants from educational institutions/agencies, training in organic rice cultivation techniques, and financial literacy. However, this government support in the form of assistance is very limited and uneven. For example, access to fertilizer subsidies is only available for inorganic fertilizers, and financial literacy training does not reach all farmers but only certain administrators. This has led to a lack of financial management literacy, and farmers are more likely to switch to conventional farming systems, arguing that they are cheaper. This limited financial literacy is also one of the reasons farmers are trapped in the ijon (property bond) system with middlemen. Financial literacy is a crucial factor in managing capital, understanding credit risk, and planning sustainable business development [22, 23]. The primary requirement for access to financing must emphasize improving farmers' financial management capacity [24].

### 3.4. Stakeholder Perceptions of Causes of Failure

During in-depth interviews with key informants, the majority of stakeholders interviewed, including the head and members of the Mekarsari Farmers Group (Gapoktan Mekarsari), Penolih village officials, Kaligondang BPP extension workers, and the Purbalingga Regency Agriculture Office, stated that the main cause of the failure of organic rice cultivation in Penolih Village was not due to financing factors but rather due to marketing aspects, farmers' lack of environmental awareness, and certification costs. Farmers who have cultivated organic rice in Penolih Village often struggle to market their crops, ultimately forcing them to sell their organic rice to traders or middlemen at the same price as inorganic rice. Farmer awareness of organic rice cultivation and environmental preservation is also still low. The average rice farmer in Penolih Village wants instant results, such as high rice production in the first year of harvest. Furthermore, they are not yet able to cultivate organic rice independently, still relying on mentoring and assistance from extension workers, agencies, and universities. This is exacerbated by the expensive and complicated cost of organic certification, which has led farmers to switch to conventional rice farming. These results indicate that social and

institutional factors play an important role, as do financial factors, in supporting the sustainability of organic rice cultivation [25, 26] in Penolih Village.

### 3.5. Obstacles and Solutions in Financing

The main constraints of formal financing factors identified as one of the causes of the failure of organic rice cultivation in Penolih Village are collateral requirements and complicated administrative procedures. Several alternative solutions compiled by key informants from the results of discussions during the FGD are 1) Simplifying credit procedures, such as reducing the number of documents that farmers must attach (credit only requires using an ID card) and accelerating the credit disbursement process to just a few working days [16,27]; 2) Adding capital assistance, for example, such as the government facilitating free organic certification; 3) Optimizing cash contributions from farmer groups (gapoktan) through the implementation of mandatory cash contributions from harvest results, then the collected money is reinvested to provide credit for members of the gapoktan who have difficulty with capital; 4) Establishing partnerships with the private sector and BUMDes, for example, Gapokta collaborates with a private party that collects organic rice that provides initial capital for farmers with an agreement that the farmers' harvest will be purchased at the organic rice market price. This strategy is considered quite relevant to the concept of integrated, institutional-based agriculture, where capital support is balanced with economic institutional strengthening so that farmers can be independent and not dependent on any party.

### 3.6. Implications of Research Findings

Based on in-depth interviews and focus group discussions (FGDs), it was found that while financing is a crucial factor in the sustainability of rice farming in Penolih Village due to its link to capital availability, the failure of organic rice cultivation in Penolih Village is caused by marketing, institutional factors, and farmer behavior. Therefore, the government must focus on an integrated strategy that combines inclusive financing, financial literacy support, strengthening agricultural institutions in both upstream and downstream sectors, and creating sustainable and accessible market access for farmers and consumers.



Figure 3. Focus Group Discussion

## 4. Conclusion

The results of this study indicate that, although financing is a crucial factor in the sustainability of organic rice cultivation in Penolih Village, Purbalingga Regency, it is not the

primary cause of failure. Most farmers still rely on personal capital to run their farms. Farmers' access to formal financing from cooperatives, banks, and LKMA is hampered by collateral requirements, complex administrative procedures, and membership obligations. To date, government support has been limited to fertilizer subsidies, grants, and technical training, while financial literacy is unequal. The majority of stakeholders stated that the failure of organic rice cultivation in Penolih Village is primarily due to weak marketing aspects, low farmer independence, and high certification costs. Informal financing practices through middlemen also persist, resulting in a decline in farmers' bargaining power. Therefore, financing issues must be viewed as part of a broader problem, such as the interrelationships between capital, institutions, farmer behavior, and market access. Under these conditions, an integrated strategy is needed to simplify credit procedures, facilitate organic certification, optimize farmer group cash flows, and strengthen partnerships with Village-Owned Enterprises (BUMDes) and the private sector. This effort is expected to not only improve the financing aspect but also strengthen market access and farmer independence so that organic rice cultivation in Penolih Village can be continued in the future.

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