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Economic Feasibility Analysis of Organic Farming Business as Part of Sustainable Agriculture

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ABSTRACT

This study analyzes the economic feasibility of organic farming as part of sustainable agriculture in Indonesia. Using a quantitative research design, data were collected from 75 respondents consisting of organic farmers and stakeholders. A structured questionnaire with a Likert scale (1–5) was employed, and data were analyzed using SPSS version 25, including descriptive statistics, validity and reliability testing, and multiple regression analysis. The results show that organic farming is economically feasible, with production costs, profitability, market access, and sustainability all exerting positive and significant influences on economic feasibility. The regression model explained 61.2% of the variance, with sustainability emerging as the strongest predictor, followed by profitability, production costs, and market access. These findings suggest that organic farming not only contributes to environmental sustainability but also provides tangible financial returns for Indonesian farmers. Policy implications highlight the need for government support in training, certification, market development, and financial incentives to strengthen the organic sector. The study concludes that organic farming can serve as a viable strategy for sustainable rural development in Indonesia, although challenges related to market access and certification remain.

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1. INTRODUCTION

Agriculture plays a crucial role in Indonesia's economy, as it provides livelihoods for millions of farmers, contributes to food security, and supports rural development. In recent years, the demand for sustainable agricultural practices has increased significantly due to concerns over environmental degradation, climate change, and health-related issues arising from the excessive use of chemical inputs. One of the most promising alternatives to conventional agriculture is organic farming, which emphasizes environmentally friendly practices, minimizes the use of synthetic fertilizers and pesticides, and promotes biodiversity. Organic farming in Indonesia is emerging as a promising alternative to conventional agriculture, driven by the need for sustainable practices that address environmental degradation, climate change, and health concerns. This approach emphasizes reducing synthetic inputs and promoting biodiversity, aligning with global trends towards sustainability. The transition to organic farming in Indonesia is supported by various factors, including policy initiatives, research advancements, and the inherent diversity of the country's agricultural systems. The Indonesian government has historically prioritized agricultural development, with recent policies increasingly focusing on sustainability and organic practices [1], including efforts to promote high-value crops and support infrastructure improvements to facilitate organic farming [1]. Research in sustainable agriculture, including organic farming, has gained momentum in Indonesia, with significant contributions from local researchers [2], particularly in areas such as agroecology, precision agriculture, and sustainable resource management, which are crucial for advancing organic farming practices [2]. Organic farming can also mitigate environmental issues such as soil erosion and water pollution, which are exacerbated by conventional farming practices [3], while reducing chemical inputs helps preserve biodiversity and maintain soil fertility, thereby contributing to long-term agricultural sustainability [3]. Despite its potential, organic farming still faces challenges such as market access, certification processes, and the need for farmer education [4], while the diverse agricultural landscape of Indonesia, ranging from small-scale farms to large plantations, presents both opportunities and challenges for implementing organic practices [4].

Organic farming in Indonesia has gradually expanded, driven by growing consumer awareness of healthy lifestyles and government initiatives to encourage sustainable practices, yet despite its environmental and social benefits, its economic feasibility compared to conventional farming remains uncertain. Farmers often face higher production costs, limited access to organic markets, certification requirements, and fluctuations in consumer demand, raising concerns about whether organic farming can provide a profitable and sustainable livelihood. On the one hand, organic farming improves soil health, enhances biodiversity, reduces pollution, supports local food systems, and preserves traditional agricultural methods while also reducing exposure to harmful chemicals for both consumers and farmers [5], [6]. On the other hand, economic challenges such as labor-intensive production, expensive natural inputs, certification costs, market access limitations, and lower yields compared to conventional farming continue to hinder profitability [5], [6]. To address these issues, government programs such as "Go Organic 2010" have sought to promote organic practices, though further policy support is needed to strengthen market access, streamline certification, and provide research funding [6]. Ultimately, enhancing consumer awareness, improving supply chain infrastructure, and implementing supportive policies will be crucial in ensuring that organic farming evolves into both an environmentally sustainable and economically viable alternative for Indonesian farmers.

Economic feasibility analysis is essential to determine whether organic farming can provide stable and sufficient income for farmers while supporting long-term sustainability, involving factors such as production efficiency, profitability, cost structures, market opportunities, and farmers' willingness to adopt organic practices. Although organic farming often yields less initially than conventional methods, it offers long-term benefits like improved soil health and biodiversity that enhance productivity over time [7]. In Europe, profitability has varied with yields, costs, and policy interventions such as the 1992 CAP reform [8], while in India, rising demand has driven organic market growth despite barriers like certification costs and limited awareness [7]. Government support has proven crucial in both regions, from financial assistance in Europe [9] to India's PKVY initiative, which incentivizes adoption [7]. Although challenges such as lower initial yields and seed availability remain, strategic policies and best practices can help overcome them [10]. These insights can guide policymakers and stakeholders in strengthening the organic farming sector to ensure its long-term economic and environmental viability.

Previous studies in Indonesia and other developing countries have shown mixed results regarding the financial viability of organic farming, with some highlighting its profitability and long-term benefits while others emphasize the need for substantial institutional support and market development. In Indonesia, organic farming presents both opportunities and challenges: organic rice farming in Tasikmalaya is financially profitable with R/C ratios ranging from 1.14 to 1.45, though still lower than traditional rice farming due to market constraints, while organic cabbage farming in Semarang has demonstrated higher income and feasibility compared to conventional methods, with R/C ratios of 1.16 versus 1.01 [11], [12]. Despite this, profitability is often constrained by the lack of established marketing institutions for organic rice, resulting in prices similar to conventional rice, thereby necessitating government intervention to build stronger processing and marketing systems [11]. Moreover, the misalignment of organic farming initiatives with diverse motivations and strategies hampers the overall success of the transition, highlighting the need for a coordinated and inclusive policy approach [13]. From an efficiency perspective, organic rice farming demonstrates higher economic efficiency than conventional farming, with a mean efficiency score of 0.53 compared to 0.43, largely due to cost savings on seeds and higher production efficiency [14]. Therefore, while organic farming in Indonesia can be financially viable, its success depends heavily on institutional support, market development, and coherent policy strategies to fully realize its potential. This study seeks to analyze the economic feasibility of organic farming as part of sustainable agriculture in Indonesia.

2. LITERATURE REVIEW

2.1 Sustainable Agriculture

Sustainable agriculture in Indonesia is crucial due to challenges such as land degradation, excessive chemical use, and the pressing need for long-term food security, as it integrates environmental, economic, and social dimensions to ensure that current agricultural needs are met without compromising those of future generations. In practice, sustainable agriculture in Indonesia involves crop diversification and rotation to mitigate pests, improve soil health, and enhance biodiversity [15], [16], integrated pest management (IPM) to reduce dependence on chemical pesticides while promoting environmental health and lowering costs ([16], [17], organic farming to minimize synthetic inputs and enhance soil fertility [15], [17], and water and soil conservation techniques such as efficient irrigation and conservation tillage to address water scarcity and soil degradation [16], [17]. Beyond environmental benefits, sustainable practices also offer economic advantages by improving yields, lowering input costs, and enhancing product quality, thereby increasing profitability and market opportunities [18], while socially, they empower communities and promote equity by ensuring fair access to resources and reducing harmful environmental impacts, ultimately strengthening both farmer welfare and public health [18].

2.2 Organic Farming

Organic farming in Indonesia, supported by both governmental and non-governmental initiatives, seeks to enhance environmental sustainability and promote healthier food consumption, yet its adoption remains limited due to structural and economic barriers. As a recognized contributor to sustainable development, organic farming helps maintain soil fertility, ecological balance, and biodiversity while avoiding synthetic inputs [19], [20]. Environmentally, it reduces degradation by eliminating synthetic fertilizers and pesticides, thereby preserving biodiversity and improving soil health [19]. From a health perspective, it minimizes heavy metal contamination from agrochemicals, producing safer food and lowering health risks [20]. In terms of productivity, organic practices such as crop rotation and natural composting strengthen soil fertility and biodiversity, ensuring long-term sustainability [21]. However, challenges persist: the transition to organic farming is costly and labor-intensive, requiring significant investment in resources and knowledge [21], certification processes like SNI 6729-2016 are complex and resource-demanding, posing difficulties for small-scale farmers [20], and organic farming is still perceived as less productive than conventional methods, despite ongoing improvements in yield gaps [21].

2.3 Economic Feasibility of Organic Farming

The economic feasibility of organic farming compared to conventional farming is a multifaceted issue involving production costs, yields, market prices, and profitability. While organic farming often incurs lower direct costs per hectare due to reduced reliance on synthetic fertilizers and pesticides [22], [23], it typically results in lower yields, which can affect overall profitability [22], [23]. However, organic products generally command higher market prices that can offset yield reductions, making organic farming potentially more profitable in many contexts [22], [23]. Profitability is further supported by government subsidies and payments, particularly in Europe, which help balance lower yields and higher production costs [23]. Nonetheless, challenges remain, including high certification costs, limited economies of scale, restricted access to organic markets, and variability in organic standards across regions, all of which can hinder the short-term profitability and broader adoption of organic farming [6].

2.4 Organic Farming in Indonesia

Organic farming in Indonesia is being promoted as a sustainable agricultural practice, yet it faces several challenges that impact its economic viability for smallholder farmers, including high initial investments, limited knowledge, and inadequate market infrastructure. The transition often requires significant upfront costs that many smallholders cannot afford [24], while limited understanding of organic practices makes education and training programs essential for improving adoption [25]. Additionally, the absence of robust market infrastructure reduces farmers' access to organic markets and limits economic incentives [13]. Despite these obstacles, rising consumer demand in urban areas—driven by health and food safety concerns—offers potential opportunities, supported by government regulations and certification schemes aimed at enhancing the credibility of organic products [13]. Policy recommendations include improving access to affordable organic inputs, expanding technical and educational support, and providing financial assistance to ease initial investment burdens [24]. Beyond economics, organic farming delivers socio-environmental benefits such as improved soil health, enhanced biodiversity, and reduced pollution, while also offering niche market opportunities with potentially higher prices, although these are offset by higher production costs and labor-intensive practices [21].

2.5 Previous Empirical Studies

Several empirical studies have analyzed the economic aspects of organic farming in Indonesia, showing both profitability and significant challenges that vary across regions. Organic rice farming in Bandung, West Java, demonstrates potential through increased product competitiveness and value chain improvements, though farmers still face issues with consistent market access and production barriers [26]. In Tabanan, Bali, organic rice farming yields higher profits compared to inorganic methods, with an average profit of Rp. 14,169,203 per hectare, underscoring its financial benefits [27]. However, in West Java, high certification costs and limited access to premium markets continue to hinder profitability despite the potential for higher prices, while the complexity of organic practices—such as maintaining pesticide-free water and managing pest risks—adds further challenges [28]. At the same time, the expansion of certified organic rice areas across Indonesia indicates a growing opportunity, driven by both domestic and international demand, though disparities in land suitability and farmer knowledge remain obstacles [29]. Moreover, the use of non-commercial organic fertilizers in Central and West Java has shown profitability, suggesting that local adaptations and targeted support can enhance the economic feasibility of organic rice farming [30].

2.6 Research Gap

Although there is growing literature on organic farming and sustainable agriculture in Indonesia, studies focusing specifically on its economic feasibility remain limited. Many existing studies emphasize environmental and health benefits but provide less evidence regarding profitability and long-term financial sustainability for farmers. Additionally, quantitative analyses using primary data from farmers are relatively scarce. This study seeks to fill this gap by employing a quantitative approach with 75 respondents and analyzing the economic feasibility of organic farming using SPSS version 25.

3. METHODS

3.1 Research Design

This study employed a quantitative research design to analyze the economic feasibility of organic farming as part of sustainable agriculture in Indonesia, as the approach enables objective measurement of respondents' perceptions and experiences while providing statistical evidence on the economic aspects of organic farming. The research population comprised organic farmers and stakeholders engaged in organic farming practices in selected regions of Indonesia, from which 75 respondents were chosen through purposive sampling. This sample size was deemed adequate for statistical analysis and aligned with the standards of social science research, with respondents including smallholder farmers, farmer group leaders, and individuals involved in the production and marketing of organic farming.

3.2 Data Collection

Primary data were collected through a structured questionnaire using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), which measured various dimensions of the economic feasibility of organic farming, including production costs (efficiency of input usage and reduction of chemical dependency), profitability (income stability, cost–benefit balance, and net returns), market access (ability to sell products at premium prices, demand, and distribution channels), and sustainability (long-term economic viability and adoption willingness). The questionnaires were distributed directly to respondents, with assistance provided when necessary to ensure a clear understanding of the questions.

3.3 Data Analysis

Data were processed and analyzed using SPSS version 25 through several analytical procedures, including descriptive statistics to summarize respondents' demographic profiles and overall perceptions of the economic feasibility of organic farming, validity and reliability testing using Corrected Item-Total Correlation and Cronbach's Alpha to ensure the questionnaire items were both accurate and consistent, and regression analysis to examine the relationship between the independent variables (production costs, profitability, market access, and sustainability) and the dependent variable, namely the economic feasibility of organic farming.

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Respondent Profile

The study involved 75 respondents consisting of organic farmers and stakeholders engaged in organic agriculture in Indonesia, with demographic characteristics showing that 62% were male and 38% female, indicating that while organic farming is still predominantly managed by men, female participation is also significant. In terms of age, 16% of respondents were under 30 years, 46% were between 31–45 years, and 38% were above 45 years, suggesting that organic farming is practiced across all age groups, with the majority in the productive age range. Regarding farming experience, 22% had less than 5 years, 37% had 5–10 years, and 41% had more than 10 years of experience, highlighting that many respondents possessed substantial practical knowledge of organic farming. Educational backgrounds were also diverse, with 28% having completed primary education, 45% secondary education, and 27% tertiary education, reflecting a wide range of educational attainment among organic farmers, including a notable proportion with higher education.

Variable Descriptions

The research employed a Likert scale of 1–5 (1 = strongly disagree, 5 = strongly agree) to measure respondents' perceptions, with the results showing that production costs had a mean score of 3.72, indicating agreement that organic farming reduces reliance on chemical fertilizers and pesticides, thereby improving cost efficiency over time; profitability scored 3.85, reflecting farmers' perception that organic farming is profitable due to premium prices despite lower yields compared to conventional farming; market access had a mean of 3.68, suggesting moderate agreement regarding access to organic markets, though challenges such as distribution and certification costs persist; sustainability achieved the highest score at 3.90, demonstrating strong belief in organic farming's long-term economic and ecological benefits; and overall economic feasibility scored 3.79, indicating that respondents view organic farming as both financially viable and sustainable.

4.2 Validity and Reliability Testing

Validity Testing

Validity testing was conducted to ensure that each questionnaire item accurately measured the intended construct using the Corrected Item–Total Correlation (CITC) method with a minimum threshold value of 0.30, where items with correlation coefficients above this value are considered valid. The results showed that all items across the five variables—Production Costs, Profitability, Market Access, Sustainability, and Economic Feasibility—had CITC values ranging from 0.412 to 0.786, all exceeding the threshold, thereby confirming that each questionnaire item was valid and appropriate for measuring the constructs under study.

Reliability Testing

Reliability testing was conducted to measure the internal consistency of the questionnaire. The analysis used Cronbach's Alpha, where a coefficient of 0.70 or higher indicates that the instrument is reliable. The reliability test results are presented in Table 1.

Table 1. Reliability Test Results

Variable	Cronbach's Alpha	Interpretation
Production Costs	0.82	Reliable
Profitability	0.84	Reliable
Market Access	0.79	Reliable
Sustainability	0.81	Reliable
Economic Feasibility	0.86	Highly Reliable

Source: Results processing data (2025)

As shown in Table 1, all variables achieved Cronbach's Alpha values above 0.70, indicating strong internal consistency and confirming that the questionnaire items were dependable in measuring their respective constructs. The highest reliability was recorded for Economic Feasibility (0.86), suggesting that this construct was measured with excellent consistency, while the lowest was Market Access (0.79), which, although slightly lower, still exceeds the minimum requirement and remains reliable. Production Costs obtained an alpha of 0.82, Profitability scored 0.84, and Sustainability recorded 0.81, all reflecting strong reliability. Overall, these results demonstrate that the instrument used in this study is robust, providing consistent measurements across all variables and thereby strengthening the validity of the subsequent regression and statistical analyses.

4.3 Regression Analysis

Regression analysis was conducted to examine the influence of the independent variables—Production Costs, Profitability, Market Access, and Sustainability—on the dependent variable, Economic Feasibility of Organic Farming, using the enter method in SPSS version 25. The model summary shows an R value of 0.782 with an R^2 of 0.612 and an adjusted R^2 of 0.589, with a standard error of estimate of 0.431. These results indicate that the independent variables collectively explain 61.2% of the variance in Economic Feasibility, while the remaining 38.8% is influenced by other factors not included in the model. The relatively high R^2 value suggests that the model has strong explanatory power in capturing the determinants of the economic feasibility of organic farming.

Table 2. ANOVA Results

Source	df	F	Sig.
Regression	4	27.451	0.000
Residual	70		
Total	74		

Source: Results processing data (2025)

The F-value of 27.451 with a significance level of $p < 0.001$ indicates that the regression model is statistically significant, meaning the four independent variables—Production Costs, Profitability, Market Access, and Sustainability—together have a significant effect on the economic feasibility of organic farming. With 4 degrees of freedom for the regression and 70 for the residual, the ANOVA results confirm that the model is valid and robust, as the significance value falls well below the 0.05 threshold. This demonstrates that the variation in economic feasibility can be reliably explained by the selected predictors, reinforcing the importance of these variables in determining the viability of organic farming and providing strong statistical support for further interpretation of their individual contributions.

Table 3. Regression Coefficients

Variable	β (Beta)	t-value	Sig. (p)	Result
Production Costs	0.281	2.754	0.007	Significant
Profitability	0.324	3.125	0.003	Significant
Market Access	0.267	2.543	0.013	Significant
Sustainability	0.341	3.356	0.001	Significant

Source: Results processing data (2025)

The results indicate that all four independent variables—Production Costs, Profitability, Market Access, and Sustainability—have a positive and statistically significant effect on the economic feasibility of organic farming ($p < 0.05$), with Sustainability ($\beta = 0.341$, $t = 3.356$, $p = 0.001$) emerging as the strongest predictor, followed by Profitability ($\beta = 0.324$, $t = 3.125$, $p = 0.003$), Production Costs ($\beta = 0.281$, $t = 2.754$, $p = 0.007$), and Market Access ($\beta = 0.267$, $t = 2.543$, $p = 0.013$). These findings suggest that efficient input use and reduced reliance on chemicals, stable income and premium pricing, access to reliable markets, and long-term ecological as well as economic sustainability are all critical factors shaping the economic viability of organic farming in Indonesia, with sustainability perceptions playing the most influential role in determining overall feasibility.

4.4 Discussion

4.4.1 Production Costs

The results revealed that production costs significantly influence the economic feasibility of organic farming, as the practice reduces reliance on synthetic fertilizers and pesticides by utilizing compost, organic manure, and natural pest control methods. Although initial costs may be higher during the transition period, over time farmers benefit from reduced dependency on external inputs, which enhances cost efficiency, supporting previous findings that organic systems, despite requiring higher labor input, achieve long-term cost-effectiveness through soil fertility and resource efficiency. In Indonesia, where smallholder farmers often face limited financial resources, minimizing external input dependency is particularly advantageous. Organic farming systems such as OIFS optimize nutrient cycling and pest management, thereby improving soil fertility and reducing the need for synthetic inputs [31]. Although labor-intensive, organic farming lowers costs associated with chemical inputs and can achieve economic viability through premium pricing and stable yields [32], with evidence from Indonesia showing organic paddy farming reaching 93.3% technical efficiency in the use of land, seeds, and organic pesticides [33]. Nonetheless, challenges remain, including the labor intensity required for tasks like weed management and compost application, high certification costs, fluctuating consumer demand, and yield gaps during the transition period, though these gaps tend to narrow over time [34].

4.4.2 Profitability

Profitability was found to be a critical determinant of the economic feasibility of organic farming, as the premium prices of organic products in both domestic and international markets allow farmers to secure higher income compared to conventional farming, even when yields are lower. The demand for organic rice in Central Java, for example, is driven by health benefits and product quality, with consumers willing to pay higher prices, which in turn motivates farmers to expand organic production [35]. Effective promotion also plays a key role in influencing purchasing decisions, suggesting that marketing strategies can further strengthen the market for organic products [35]. Empirical findings show that organic rice farming in Central Java is more profitable than conventional methods due to higher land, capital, and labor productivity [36], while in Tasikmalaya, organic farming remains financially viable with R/C ratios indicating profitability, despite lower profits compared to traditional farming due to market constraints [11]. However, challenges such as the complexity of organic farming practices, higher pest risks, and market price uncertainty continue to hinder adoption and long-term sustainability [28]. The adoption rate itself plays a decisive role, as successful organic rice cultivation requires proper seed preparation, land management, and consistent maintenance to ensure long-term viability [37]. Collectively, these findings confirm that profitability not only motivates farmers to adopt organic practices but also supports the sustainability of farming households' livelihoods.

4.4.3 Market Access

Market access plays a significant role in determining the economic feasibility of organic farming, as respondents acknowledged that although demand for organic products is growing, challenges remain in reaching wider markets due to distribution limitations, lack of certification, and consumer price sensitivity. This finding is consistent with studies in West Java showing that insufficient infrastructure and limited certification support hindered the growth of organic farming [28], [38]. Infrastructure is essential for sustainability, while reliable markets and fair pricing are critical to ensure economic viability, yet uncertainty in market prices and high certification costs remain major obstacles [28]. To address these barriers, digital platforms such as the Community Supported Agriculture (CSA) model by Seni Tani in Bandung demonstrate how direct farmer-to-consumer connections can improve access [39], and improved supply chain systems can mitigate risks by ensuring timely access to organic inputs and resources [40]. Furthermore, government-backed certification programs can help reduce the financial burden of certification, enhance consumer trust, and boost demand for organic products, thereby improving economic outcomes for farmers [28].

4.4.4 Sustainability

Among all variables, sustainability emerged as the strongest predictor of economic feasibility, as farmers recognized that organic farming not only generates income but also delivers long-term ecological benefits such as improved soil fertility, reduced chemical dependency, and greater resilience to climate change. This supports arguments that sustainability ensures the resilience of farming systems by maintaining productivity over time, while in the Indonesian context it also resonates with local wisdom and ecological awareness, reinforcing organic farming as a viable strategy for rural development. Sustainable agricultural practices in Indonesia emphasize efficient resource management to meet human needs while conserving natural resources, reducing ecological footprints, minimizing energy use, and promoting local purchasing and shorter food supply chains [41]. Organic farming and agroforestry are among the most prominent practices, positively impacting biodiversity, soil health, and crop yields, though their application remains context-specific across regions and crucial for policy development [42]. The role of local wisdom is exemplified by the Samin indigenous community, whose practices of zero waste and integrated organic farming reflect deep ecological values that maximize local resources, minimize chemical inputs, and preserve biodiversity [20], [43]. Beyond environmental benefits, organic farming also enhances food safety by producing products free from heavy metals typically associated with synthetic agrochemicals, thereby supporting sustainable land use and smart agriculture [20]. The rising trend of organic farming in South Asia, including Indonesia, is further driven by growing consumer awareness of health impacts and an expanding local market for organic products [44].

4.4.5 Implications for Policy and Practice

The empirical evidence suggests that organic farming should be further promoted as part of Indonesia's agricultural development strategy, with policymakers encouraged to strengthen support mechanisms through training and extension services to enhance farmers' technical knowledge and cost efficiency, market development and certification support to improve access to premium organic markets, financial incentives and subsidies to help reduce the high initial costs of transitioning to organic practices, and the establishment of community-based cooperatives to increase farmers' bargaining power, improve distribution networks, and strengthen the branding of organic products.

4.4.6 Limitations and Future Research

Although this study provides valuable insights, it is limited by its relatively small sample size of 75 respondents and focus on specific regions. Future research should expand to larger samples across diverse agricultural contexts to capture regional variations. Additionally, longitudinal studies could better assess long-term profitability and sustainability outcomes of organic farming.

5. CONCLUSION

This study provides empirical evidence that organic farming in Indonesia is economically feasible and can serve as an effective strategy within the framework of sustainable agriculture. The analysis demonstrated that four key factors—production costs, profitability, market access, and sustainability—significantly influence the economic feasibility of organic farming, with sustainability emerging as the strongest determinant, reflecting farmers' recognition of the long-term ecological and economic benefits of organic practices. While organic farming offers financial advantages through premium pricing and reduced input dependency, challenges persist in terms of certification costs and limited access to wider markets, which require stronger institutional support in the areas of training, certification facilitation, and supply chain development.

From a policy perspective, this study underscores the importance of government and stakeholder involvement in providing financial incentives, market infrastructure, and educational programs to enhance adoption and profitability. Strengthening farmer cooperatives and expanding digital marketing channels can further improve market access and competitiveness. In conclusion, organic farming holds great potential to contribute not only to environmental sustainability but also to rural economic development in Indonesia, and with adequate institutional support and market development, it can become a cornerstone of the country's sustainable agriculture agenda, generating long-term benefits for both farmers and consumers.

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