Jurnal Ekonomi Syariah Vol. 10. No. 1. Mei 2025
P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

The Role of Ikhlas in The BDI Model: Enhancing Green Agriculture Practices Among Rural Communities

Riska[1*], Syaparuddin Razak[2], Ismail Keri[3]

[1,2,2]*Faculty of Islamic Economics and Business, State Islamic Institute of Bone, South Sulawesi, Indonesia*

*riska4928@gmail.com

Abstrak

Introduction to The Problem: This study explores the role of sincerity in the BDI (Belief, Desire, Intention) model to promote green agriculture among rural communities in Kecamatan Palakka. The study addresses the need to understand how belief, desire, ikhlas (sincerity), and intention influence decisions to adopt green agricultural practices.
Purpose/Objective Study: The main objectives are to identify the effects of belief, desire, ikhlas, and intention on adopting green agriculture and to examine the mediating role of intention in this relationship.
Design/Methodology/Approach: An integrative approach combining quantitative methods and Islamic economics was employed. Data were collected via a questionnaire survey of 152 respondents with experience or potential in green agriculture and analyzed using Structural Equation Modeling (SEM).
Findings: The results indicate that belief, desire, and ikhlas significantly influence intention and the decision to adopt green agriculture. Intention serves as a strong mediator, with sincerity, belief, and desire enhancing the willingness and commitment to green farming practices.

Paper Type: Research Article
Keywords: BDI model; sincerity; green agriculture; Islamic economics; SEM

Introduction

Sincerity encourages us to genuinely pay attention to environmental well-being. In the context of developing green agriculture, this means prioritizing environmentally friendly practices, such as the use of organic methods, efficient water management, and biodiversity preservation (Razak, 2019). This can be demonstrated through three aspects: First, sincerity is the key to making work feel less burdensome and gaining Allah's approval (Buntok, 2021) and (Puspitasari et al., 2021). Second, increasing green agriculture productivity and environmental considerations (Admin Uma, 2022) and (Supriyo, 2022). Third, sustainable agriculture using eco-friendly techniques toward a greener future (Sari, 2023) and (Hikmah et al., 2021). Thus, agricultural practices based on the principle of sincerity not only offer benefits in terms of high-quality yields but also consider environmental well-being. By recognizing the importance of sincerity in environmental well-being, farmers can become agents of change that positively impact ecosystems and local communities.

P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

This study adopts the BDI (Belief, Desire, Intention) model framework to explore the attention to environmental well-being expressed through the concept of sincerity in developing green agriculture among rural communities (Mascardi et al., 2017). BDI stands for Belief, Desire, and Intention. This model was first developed by Michael Bratman in 1987 (Al-hussein et al., 2021). Belief: Refers to the agent's knowledge or understanding of the surrounding world, including information about the state of the environment, goals, or their own abilities and those of other agents. Desire: Refers to what the agent wants or desires, which can include goals they wish to achieve, desired states, or outcomes. Intention: Refers to the agent's plan or decision to act based on their beliefs and desires. The BDI model allows individuals to process information, evaluate their goals and desires, and make appropriate action decisions based on those beliefs and desires. (Chen et al., 2020)

So far, research on the attention to environmental well-being expressed through the concept of ikhlas in building green agriculture among rural communities has not received sufficient attention from researchers. However, several previous studies related to this research tend to focus on three main areas: farmer empowerment, labor, and green agriculture policies. Research on farmer empowerment, conducted by Hernita Fajar Oktavia, Zainal Abidin, et al., and Marry Christyanto, et al., shows that farmer empowerment aims to enhance their understanding and skills in the use of organic fertilizers, covering the entire process of production and application. Additionally, empowerment plays a crucial role in increasing community capacity by providing relevant agricultural information and encouraging active participation in farmer groups (Fajar Oktavia, 2020), (Abidin & Rohman, 2020) and (Christyanto & Mayulu, 2021). Research on labor, including studies by I Gusti Ngurah Made Sugiantara et al., Deltha Airuzsh Lubis, and Sudrajat et al., demonstrates that the effectiveness of farmer work is influenced by the availability of labor, experience, interaction, and training. The government focuses on improving labor productivity for national competitiveness; however, issues related to the continuity of new generations of farmers affect labor availability (Sugiantara & Utama, 2019), (Lubis, 2021) and (Sudrajat et al., 2020). Research on green agriculture policies, conducted by Gabriella Susilowati, Ismi Imania Ikhsani et al., and Fitri Lesia Herdini et al., indicates that green agriculture policies aim to increase agricultural production while maintaining environmental sustainability. Additionally, these policies are expected to improve the economic conditions and well-being of farmers gradually and sustainably through various strategies, including commodity selection, productivity enhancement, and education (Susilowati, 2020), (Ikhsani et al., 2020) and (Herdini & Masduki, 2021).

This study aims to complement previous research that has not sufficiently addressed the investigation of environmental well-being expressed through the concept of ikhlas in building green agriculture among rural communities. Thus, this study is considered the first of its kind, designed to explore the attention to environmental well-being expressed through the concept of ikhlas in developing green agriculture among rural communities. Therefore, this study focuses on the role of ikhlas in advancing green agriculture among rural communities within the framework of the BDI (Belief, Desire, Intention) model.

P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

Literature Review

Theoretical Background

This study utilizes the BDI (Belief, Desire, Intention) model to explore individual decision-making, especially in adopting green agriculture (Chen et al., 2020). The belief stage involves the development of perceptions and convictions that guide behavior, such as a farmer's belief in the benefits of organic farming (Deochake, 2023). The desire stage captures the emotional and motivational drivers pushing individuals toward specific goals, like a farmer's aspiration to improve crop yields while safeguarding the environment (Mascardi et al., 2017). The intention stage reflects the decision to act on these beliefs and desires, translating them into concrete actions such as adopting organic farming practices (Nguyen et al., 2024). By examining the interplay of belief, desire, and intention, the BDI model offers valuable insights into how these factors influence behavior. This understanding is essential for crafting effective strategies to encourage the adoption of sustainable farming practices and support the advancement of environmentally friendly agricultural systems.

Green Agriculture and Rural Communities

Green agriculture encompasses farming practices that emphasize environmental sustainability, resource efficiency, and soil and crop health. This approach includes reducing chemical pesticide use, incorporating organic materials, and conserving soil and water resources. The aim is to enhance agricultural productivity in a sustainable manner while preserving ecosystem balance (Razak, 2019). For rural communities, green agriculture is vital as it improves both economic and social conditions, given their heavy reliance on farming. By adopting green practices, these communities can boost crop yields and quality, safeguard natural resources, and improve overall living conditions (Razak & Utami, 2020). Furthermore, green agriculture supports local food security and opens avenues for economic diversification, such as organic product development and eco-tourism. This contributes to the creation of more sustainable and resilient rural communities, fostering long-term growth and environmental stewardship (Syaparuddin, 2018).

Belief and Intention, decision to adopt green agriculture practices

Belief and intention play fundamental roles in a farmer's decision to adopt green agriculture practices. Beliefs about ecological and economic benefits, such as improved soil health through the use of organic fertilizers, can significantly influence a farmer's intention to implement these practices (Muliasari et al., 2021). Beliefs about long-term advantages, such as environmental sustainability and cost savings, reinforce this intention. Furthermore, beliefs about the importance of environmental stewardship encourage the adoption of environmentally friendly farming methods, including organic practices, efficient water management, and biodiversity conservation (Detia Tri Yunandar et al., 2020a). Thus, deep-seated beliefs among farmers act as a primary driver in the decision to shift to sustainable agriculture practices, underscoring the significance of psychological factors in the transition to environmentally friendly farming systems (Detia Tri Yunandar et al., 2020b). Based on this argument, the following hypotheses can be proposed:

H1a: Belief has a significant impact on the intention to adopt green agriculture practices.

H1b: Belief has a significant impact on the decision to adopt green agriculture practices.

P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

Desire and intention in the decision to adopt green agriculture practices.

Desire and intention play crucial roles in encouraging farmers to adopt environmentally friendly agricultural practices. The desire to improve soil health, reduce environmental impact, or enhance crop efficiency motivates farmers significantly (Sumarno, 2016). For instance, a desire to protect local biodiversity or minimize the use of harmful pesticides leads farmers to set concrete intentions, such as adopting organic farming methods. This process transforms personal values and goals into measurable commitments, often supported by social encouragement, technical knowledge, and awareness of long-term benefits (Mubarak et al., 2023). Furthermore, desire serves as a primary driver in decisions related to green agriculture, including the use of organic fertilizers, water-efficient irrigation systems, and biodiversity conservation. Farmers motivated by environmental awareness are more likely to seek and apply sustainable methods, driven also by the economic advantages of green products, which often command higher market prices. Understanding how desire influences intention is key to designing effective strategies to support the transition to green agriculture (Insani et al., 2018). Based on this argument, the following hypotheses can be proposed:

H2a: Desire has a significant impact on the intention to adopt green agriculture practices.

H2b: Desire has a significant impact on the decision to adopt green agriculture practices.

Ikhlas and Intention in the Decision to Adopt Green Agriculture

Ikhlas and intention are interrelated in motivating the adoption of green agriculture practices. Ikhlas, referring to the purity of intention and sincerity, drives farmers to adopt environmentally friendly practices based on personal beliefs and environmental awareness, rather than external incentives like economic gain (Busro, 2022). Intention, or the determination to act, emerges after farmers recognize the benefits. Ikhlas strengthens intention, ensuring that sincere commitment is more enduring. It provides a deep moral and spiritual foundation, making actions more sustainable and resilient to challenges (Saefurridjal et al., 2023). Additionally, ikhlas significantly influences a farmer's decision to shift to green agriculture. Sincere intention not only promotes personal gain but also supports environmental sustainability and community well-being, fostering a strong commitment to eco-friendly methods (Saefurridjal et al., 2023). This sincerity also enhances motivation to innovate and find the best solutions, even when facing challenges (Hidayah et al., 2023). Based on this argument, the following hypotheses can be proposed:

H3a: Ikhlas has a significant impact on the intention to adopt green agriculture practices.

H3b: Ikhlas has a significant impact on the decision to adopt green agriculture practices.

Intention and the decision to adopt green agriculture practices

Intention serves as the foundational element in the decision to adopt green agriculture practices. A strong intention to protect environmental well-being and contribute to ecosystem sustainability drives individuals to take concrete steps towards eco-friendly farming practices (Septiani et al., 2021). This intention arises from an awareness of the importance of maintaining ecological balance and a belief in the positive impact of their actions. Farmers with a genuine intention to reduce their carbon footprint and promote green agriculture are more committed to

Jurnal Ekonomi Syariah Vol. 10. No. 1. Mei 2025
P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

learning and implementing new methods (Busro, 2022). Additionally, a strong intention to set a positive example and inspire others influences the decision to adopt green agriculture. They aim to demonstrate the success of these practices and encourage others to follow suit. The intention to lead change within the agricultural community also reinforces the determination to overcome barriers in transitioning to green agriculture (Jannah et al., 2019). Based on this argument, the following hypothesis can be proposed:

H4: Intention has a significant effect on the decision to adopt green agriculture practices.

Intention as a Mediator

Intention acts as a crucial mediator in connecting belief, desire, ikhlas, and the decision to adopt green agriculture practices. Intention represents the desire or goal to perform an action or achieve a specific outcome (Arsalan, 2023). A person's belief about environmental well-being influences their perspective on green agriculture. Strong belief in the importance of environmental care leads individuals to adopt eco-friendly practices, such as organic methods, efficient water management, and biodiversity conservation, driving their decision to pursue green agriculture (Detia Tri Yunandar et al., 2020b). Desire to engage in green farming often arises from various factors, such as the wish to produce healthier, chemical-free agricultural products, motivated by awareness of the negative impacts of conventional farming (Insani et al., 2018) . Ikhlas plays a significant role in maintaining consistency and determination in choosing green practices despite challenges. The decision to adopt green agriculture is influenced by the extent of one's sincerity and commitment to this choice (Hidayah et al., 2023). Therefore, intention is essential in aligning belief, desire, ikhlas, and decision-making in the context of green agriculture. Based on this argument, the following hypothesis can be proposed:

H4: Intention can mediate the relationship between:

a. Belief and the decision to adopt green agriculture practices

b. Desire and the decision to adopt green agriculture practices

c. Ikhlas and the decision to adopt green agriculture practices

Conseptual Model of Study

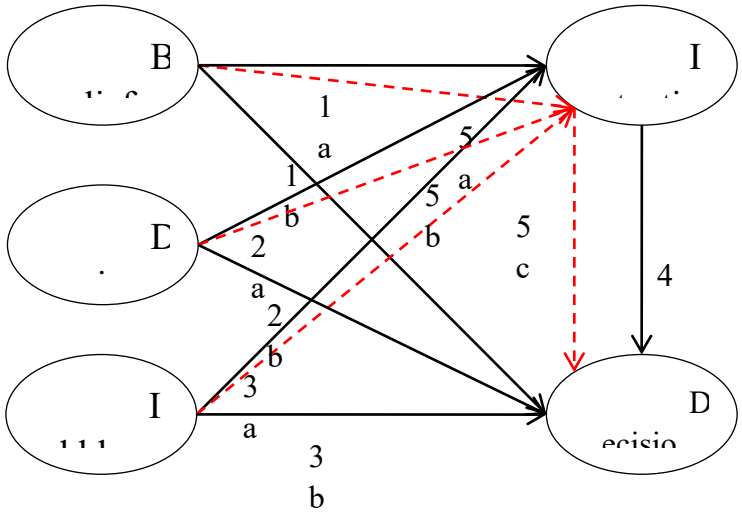

Figure 1. Conseptual Model of Study

Jurnal Ekonomi Syariah Vol. 10. No. 1. Mei 2025
P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

Building upon the hypothesis development, the conceptual model, as illustrated in Figure 1, outlines that Belief (Be), Desire (De), and Ikhlas (Ik) function as three exogenous variables influencing Intention (In) and the Decision to Develop Green Agriculture (KMP). Intention (In) subsequently affects the Decision to Develop Green Agriculture (KMP), which serves as the endogenous variable in this study. Intention (In) also mediates the relationships between Belief (Be), Desire (De), and Ikhlas (Ik) with the Decision to Develop Green Agriculture (KMP). The primary objective of this study is to enhance the understanding of farmers' behavior in green agriculture and to provide a foundation for stakeholders to design more effective agricultural development strategies.

Methodology

Research Design

This study used Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) approach to investigate the role of Ikhlas (sincerity) in the BDI (Belief, Desire, Intention) model in promoting green agriculture among rural communities. The use of SEM-PLS was chosen due to its capability to comprehensively assess the relationships between variables while accounting for both direct and indirect influences among them. This approach enables the creation of path models that offer enhanced explanatory power regarding the interconnections among the variables under investigation.

Measurement

Table 1. Measurement of Constructs

Constructs	Operational Definitions	Indicators	Codes
Belief (Be)	Belief refers to the rural community's conviction about the attributes or characteristics of green agriculture that influence their decision to develop green agriculture. Belief includes the positive perceptions held by the rural community regarding green agriculture, such as the belief that green agriculture supports the use of organic methods, efficient water management, and biodiversity conservation (Detia Tri Yunandar et al., 2020).	1. Organic method utilization 2. Water management efficiency 3. Biodiversity preservation	Be1 Be2 Be3
Desire (De)	Desire refers to the strong willingness of the rural community to develop green agriculture. Desire reflects the aspirations and motivations felt by the rural community towards green agriculture, based on their understanding and experience of the benefits and need for environmentally friendly farming practices (Olawuyi, 2020).	4. Organic fertilizer application 5. Irrigation system implementation 6. Environmental welfare concern	De1 De2 De3

Jurnal Ekonomi Syariah Vol. 10. No. 1. Mei 2025
P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

Intention (In)	Intention is the clear and measurable commitment of the rural community to develop green agriculture. Intention reflects the readiness and determination of the rural community to take concrete actions based on their beliefs and desires (Nguyen et al., 2024).	7. Green agriculture adoption 8. Attending training 9. Chemical reduction	In1 In2 In3
Decision to Develop Green Agriculture (KMP)	The decision to develop green agriculture represents the concrete actions undertaken by the rural community to establish farming practices that are environmentally sustainable and adhere to Islamic principles. This decision encompasses the planning, execution, and rationale behind the commitment to green agriculture (Septiani et al., 2021).	10. Agricultural development planning 11. Reasons for developing agriculture 12. Consistency in agricultural development	KMP1 KMP2 KMP3
Ikhlas (Ik)	Ikhlas refers to actions performed with genuine intent to benefit the environment and the rural community, without expecting any reward or recognition from others (Chizanah, 2011).	13. Sincere intentions 14. Not expecting rewards 15. Attention to environmental welfare	Ik1 Ik2 Ik3

To confirm the conceptual research model proposed in this study, the questionnaire was designed with two main sections. The initial part provides a brief overview of the study's purpose, guidelines for completing the questionnaire, and its connection to socio-demographic information, including respondent age, marital status, occupation, education, and income. The second part, aimed at constructing the model structure, includes a multiple-option item scale using a five-point Likert Scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). This section comprises 15 questions: 3 related to Belief (Be), 3 concerning Desire (De), 3 focusing on Intention (In), 3 addressing the Decision to Develop Green Agriculture (KMP), and 3 measuring Ikhlas (Ik). The measurement of these constructs is provided in Table 1.

Data Collection, Population, and Sample

The data collection for this study was conducted over one month, specifically in June 2024, using the convenience sampling technique. To gather information, questionnaires were distributed among rural community respondents in South Sulawesi, Indonesia, via an online platform, particularly Google Forms, which were then shared through WhatsApp. A total of 152 complete responses were recorded on Google Forms, establishing the sample size for this research. This indicates the involvement of 152 respondents from the rural communities in South Sulawesi. As suggested by (Hair et al., 2017), the recommended minimum sample size for conducting multivariate analysis is ten times the number of research instruments. This study successfully meets that criterion (Schermelleh-Engel et al., 2003).

Jurnal Ekonomi Syariah Vol. 10. No. 1. Mei 2025
P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

SEM-PLS Analysis

The analysis employed Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) approach via Smart PLS software version 4.0.8.9 (Ringle, C. M., Wende, S., and Becker, 2022). Divided into two steps, the first involved measurement model analysis for validity and reliability. Convergent validity required factor loading scores above 0.7, CR exceeding 0.7, and AVE surpassing 0.5 (Gottems et al., 2018). Discriminant validity included cross-loading and the Fornell-Larcker criterion. Reliability was assessed using Cronbach's alpha score, considering values above 0.6 as reliable (Chawla, Deepak, 2019). The second step comprised structural model analysis, necessitating a statistically significant weighted P-Value < 0.05 and an R-Square value of 0.75 (strong), 0.50 (moderate), 0.25 (weak), 0.90 (overfit). Adjusted R-Square values above 0.25 and 0.50 indicated relevance with small, medium, and large predictions (Hair et al., 2017).

The model equations are detailed as follows:

1. The model equations for direct effect:
   $KMP = \beta0 + \beta1In + \epsilon$ ...(1)
   $In = \beta0 + \beta1Be + \beta2De + \beta3Ik + \epsilon$ ... (2)
2. The model equations for indirect effect:
   $KMK = \beta0 + \beta1In + \epsilon$ ... (3)
   $In = \beta0 + \beta2Be + \beta3De + \beta4Ik + \epsilon$ ... (4)
   Which:

KMP is the endogenous variable influenced by the mediation variable, In. Be, De, and Ik are exogenous variables that affect In. In serves as the mediation variable in the model. The structural coefficients are represented by β, which indicates the strength of the relationships between variables. The model error, denoted by ϵ, reflects the deviations from the model's predictions.

Results and Discussion

Results

Demographic profile of the respondents

Table 2 shows that this study involved 152 participants, with the majority being male (59.9%) and 40.1% female. Most respondents were between 30 and 39 years old (27.0%), followed by those aged 40 to 49 (26.3%). The majority of respondents were married (86.2%) and worked as farmers (84.9%). In terms of education, most respondents had an elementary school education (65.1%), and the majority had a monthly income of less than IDR 5 million (91.4%). This profile provides a general overview of the socio-economic characteristics of the respondents involved in this study.

Table 2. Demographic Profile of the Respondents

Criteria	Category	Frequency	Percent
Sex	Male	91	59,9%
	Female	61	40,1%
Age	20 yrs. to 29 yrs.	28	18,4%
	30 yrs. to 39 yrs.	41	27,0%
	40 yrs. to 49 yrs.	40	26,3%
	50 yrs. to 59 yrs.	25	16,4%

	60 yrs. to 69 yrs. 70 yrs. to 79 yrs.	18	11,8%
Marital status	Single	21	13,8%
	Married	131	86,2%
Occupation	Lecturer Teacher Civil Servant Private Employee Employee Military/Police Entrepreneur/Businessperson Retired Farmer Other	2 5 129 16	1,3% 3,3% 84,9% 10,5%
Education Level	Elementary School Junior High School Senior High School Diploma Bachelor's Degree Master's Degree Doctorate	99 13 34 1 5	65,1% 8,6% 22,4% 0,7% 3,3%
Monthly income	<IDR 5 million IDR 5 million to IDR 10 million >IDR 10 million to IDR 15 million > IDR 15 million to IDR 20 million > IDR 20 million to IDR 25 million > IDR 25 million to IDR 30 million >IDR 30 million	139 13	91,4% 8,6%

Source: Primary data processed, 2024

Measurement model assessment

Table 3 presents the validity and reliability of the constructs in this study. All variables show high outer loadings, indicating strong relationships between the indicators and the constructs. Cronbach's Alpha and Composite Reliability values for Belief (Be), Desire (De), Intention (In), and Decision to Build Agriculture (KMP) exceed commonly accepted thresholds, indicating good internal consistency. AVE values for each variable also meet convergent validity standards, with Belief (Be) and KMP showing the highest values. The Ikhlas (Ik) variable has a slightly lower AVE but remains within an acceptable range.

Table 3. Validity and Reliability for Constructs

Latent Variable	Indicator	Outer Loadings	Cronbach's Alpha	Composite reliability	AVE
Belief (Be)	Be1	0,900	0.882	0.882	0.809
	Be2	0,913			
	Be3	0,885			

Desire (De)	De1	0,837	0.790	0.791	0.704
	De2	0,856			
	De3	0,823			
Intention (In)	In1	0,844	0.830	0.830	0.747
	In2	0,904			
	In3	0,842			
Keputusan Membangun Pertanian (KMP)	KMP1	0,891	0.872	0.874	0.796
	KMP2	0,904			
	KMP3	0,881			
Ikhlas (Ik)	Ik1	0,834	0.761	0.763	0.673
	Ik2	0,854			
	Ik3	0,772			

Source: Primary data processed, 2024

Table 4 presents the results of the Fornell-Larcker Criterion test for five variables: Belief (Be), Desire (De), Ikhlas (Ik), Intention (In), and Decision to Build Green Agriculture (KMP). Discriminant validity is assessed by comparing the correlation of each variable with its own factor against correlations with other factors. All variables exhibit good discriminant validity, with each variable having the highest correlation with its own factor compared to other variables.

Table 4. Results of Forner-Larcker Criterion Test

Variable	Be	De	Ik	In	KMP
Be	0.899				
De	0.694	0.839			
Ik	0.381	0.465	0.821		
In	0.443	0.612	0.570	0.864	
KMP	0.466	0.554	0.415	0.604	0.892

Source: Primary data processed, 2024

Table 5 presents the results of the model fit test, comparing the saturated and estimated models across several key metrics. Both the SRMR (Standardized Root Mean Square Residual) and d_ULS (Unweighted Least Squares discrepancy) are identical for both models, with values of 0.086 and 0.892, respectively, indicating a similar level of fit. The d_G (Geodesic discrepancy) is also the same for both models at 0.461. The Chi-square value is 466.465 for both models, reflecting the goodness-of-fit of the model, while the NFI (Normed Fit Index) stands at 0.699, showing a moderately acceptable fit.

Table 5. Results of the Model Fit Test

Variable	Saturated model	Estimated model
SRMR	0.086	0.086
d_ULS	0.892	0.892
d_G	0.461	0.461
Chi-square	466.465	466.465
NFI	0.699	0.699

Source: Primary data processed, 2024

Jurnal Ekonomi Syariah Vol. 10. No. 1. Mei 2025
P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

Structural model assessment

Table 6 presents the assessment of direct effects within the structural model of this study. The analysis reveals that the influence of Belief (Be) on both Intention (In) and the Decision to Adopt Green Agriculture (KMP) is not statistically significant, as evidenced by P values exceeding the conventional threshold of 0.05. In contrast, the effects of Desire (De) on both Intention (In) and KMP, as well as the impact of Ikhlas (Ik) on both Intention (In) and KMP, are statistically significant, with P values below 0.05. These findings indicate that Desire and Ikhlas exert a meaningful and positive effect on both the intention to adopt and the decision to engage in green agriculture.

Table 6. Structural Model Assessment (Direct Effect Result and Decision)

Hypothesis	Relationship	Original sample	Standard deviation	T statistics	P values	Decision
H1	Be -> In	-0.006	0.098	0.065	0.948	Rejected
H2	Be -> KMP	0.136	0.116	1.177	0.241	Rejected
H3	De -> In	0.447	0.090	4.972	0.000	Accepted
H4	De -> KMP	0.370	0.125	2.965	0.004	Accepted
H5	Ik -> In	0.365	0.073	5.011	0.000	Accepted
H6	Ik -> KMP	0.191	0.083	2.297	0.023	Accepted
H7	In -> KMP	0.400	0.104	3.843	0.000	Accepted

Source: Primary data processed, 2024

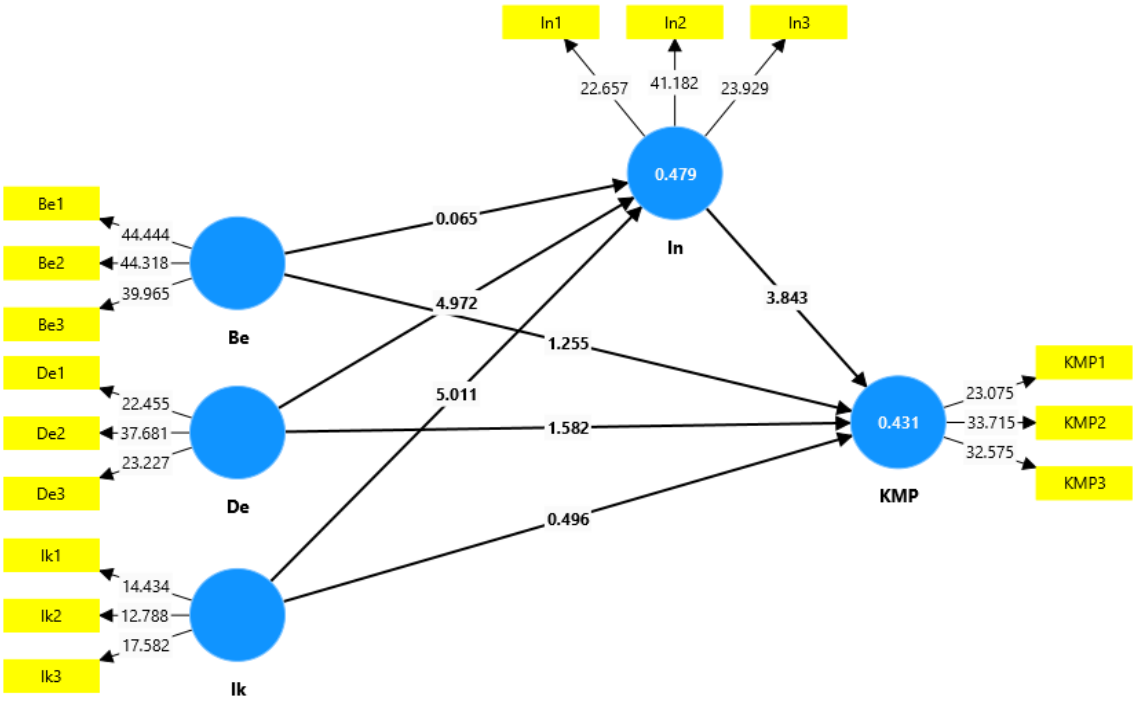

Figure 2. Smart-PLS Analysis Result

Jurnal Ekonomi Syariah Vol. 10. No. 1. Mei 2025
P-ISSN 2548-5032 e-ISSN 2714-769X
Doi: https://doi.org/10.37058/jes.v10i1.13251

Table 7 shows the results of the structural model assessment for the indirect effects of variables through Intention. Hypothesis 8 (H8), which proposes that Belief (Be) affects the decision to adopt green agriculture (KMP) through Intention, is not significant, with a coefficient of -0.003 and a p-value of 0.953. In contrast, Hypothesis 9 (H9) indicates that Desire (De) significantly impacts KMP through Intention, with a coefficient of 0.179 and a p-value of 0.004. Hypothesis 10 (H10) is also supported, showing that Sincerity (Ik) significantly affects KMP through Intention, with a coefficient of 0.146 and a p-value of 0.001. Desire and Sincerity have significant impacts, while Belief does not.

Table 7. Structural Model Assessment (Indirect Effect Result and Decision)

Hypothesis	Relationship	Original sample	Standard deviation	T statistics	P values	Decision
H8	Be -> In -> KMP	-0.003	0.043	0.060	0.953	Rejected
H9	De -> In -> KMP	0.179	0.061	2.908	0.004	Accepted
H10	Ik -> In -> KMP	0.146	0.045	3.261	0.001	Accepted

Source: Primary data processed, 2024

Table 8 shows the R-Square (also depicted in Figure 2) and Adjusted R-Square values for the variables In (Intention) and KMP (Decision to Build Green Agriculture). The R-Square value for In is 0.479, indicating that 47.9% of the variation in this variable can be explained by the model. For KMP, the R-Square value is 0.431, meaning that 43.1% of the variation in the decision to build green agriculture can be explained by the model. The Adjusted R-Square values are 0.468 for In and 0.416 for KMP, reflecting the model's explanatory power after adjusting for the number of variables, providing a more realistic view of the model's effectiveness in explaining data variability.

Table 8. R-Square and Adjusted R-Square Values

Variable	R-squared	Adjusted R-squared
In	0.479	0.468
KMP	0.431	0.416

Source: Primary data processed, 2024

Discussion

Table 6 presents the results of the structural model testing to assess the direct influence among variables in the study on green agriculture. The findings indicate that Belief (Be) is not significant for Intention (In) and the Decision to Develop Green Agriculture (KMP), with P-values of 0.948 and 0.241, respectively, suggesting that belief does not affect either intention or decision. This finding aligns with the results reported by (Jeerat et al., 2023). Conversely, Desire (De) significantly influences Intention (P-value 0.000) and KMP (P-value 0.004), indicating that strong desire affects both intention and decision to adopt green agriculture. This result is consistent with

the findings presented by (Asiedu-Ayeh et al., 2022). Ikhlas (Ik) is also significant, showing a strong influence on Intention (P-value 0.000) and KMP (P-value 0.023), highlighting the importance of sincerity in these decisions. This finding is consistent with research conducted by (Holdo, 2019). Lastly, Intention (In) has a significant impact on KMP (P-value 0.000), indicating that strong intention greatly influences the decision to participate in green agriculture. This aligns with previous research by (Wang et al., 2022). Overall, Desire and Ikhlas have significant impacts, whereas Belief does not.

The BDI framework is closely related to the principles of Islamic economics. Belief in the values of Sharia and environmental sustainability encourages farmers to adopt green agriculture practices as part of their faith in Allah to care for the earth. This statement is supported by the research findings of (Mursid et al., 2024). The desire to act in accordance with Islamic principles and the hope for blessed outcomes strengthens farmers' motivation to implement environmentally friendly methods. This aligns with the findings presented by (Imran Hayat et al., 2023). Intention plays a crucial role, as a sincere intention to protect the environment and enhance community welfare drives farmers to transition to green agriculture. This was also revealed in the study conducted by (Chi & Chien, 2022). Thus, strong belief in Islamic teachings and sustainability shapes the desire and intention for green practices, guiding farmers to make decisions in line with Islamic economic principles and contributing to environmental preservation.

Table 7 presents the results of the structural model testing to examine the indirect influence of Belief, Desire, and Ikhlas on the Decision to Adopt Green Agriculture through Intention as a variable. For the relationship from Belief to Intention to the Decision to Adopt Green Agriculture, the coefficient is minus 0.003, with a sample mean of minus 0.002 and a standard deviation of 0.043. The T-statistic is 0.060, with a P-value of 0.953, indicating no significant effect. Research by (Rezaei-Moghaddam et al., 2020) also shows similar results. Conversely, for the relationship from Desire to Intention to the Decision to Adopt Green Agriculture, the coefficient is 0.179, with a sample mean of 0.173 and a standard deviation of 0.061. The T-statistic is 2.908, with a P-value of 0.004, indicating a significant effect. This is consistent with the analysis conducted by (Sun et al., 2022). For the relationship from Ikhlas to Intention to the Decision to Adopt Green Agriculture, the coefficient is 0.146, with a sample mean of 0.142 and a standard deviation of 0.045. The T-statistic is 3.261, with a P-value of 0.001, indicating a significant effect. These results are supported by research conducted by (Olawuyi, 2020). The Intention variable plays an important role as a variable.

The BDI framework, combined with the principles of Islamic economics in green agriculture, results in a sustainable and just approach. Belief in the benefits of green agriculture, such as its positive impact on the environment and health, drives the adoption of these methods. A study conducted by (Aqsa Tasgheer & Tehreem Fatima, 2022) supports this. The desire to protect the environment and enhance social welfare strengthens motivation for green practices. Intention is realized in concrete planning and strategies. This is reinforced by research presented by (Savari et al., 2023). The principles of Islamic economics add dimensions of social justice, adherence to Sharia, and environmental responsibility, including ensuring fair distribution of benefits, avoiding harmful chemicals, and preserving natural resources. These findings are consistent with the study conducted by (Barom et al., 2018). By combining individual beliefs and

desires with the principles of Islamic economics, green agriculture practices can be effectively implemented, providing broad social, economic, and environmental benefits while supporting sustainability and community welfare.

In the BDI framework, ikhlas has a profound meaning. Belief reflects a person's conviction or knowledge that is sincere and pure, without hidden motives, which drives their actions to be carried out with genuine intent. This is supported by research conducted by (Georgeff et al., 1999). Desire indicates that a person's wish is directed toward a good or moral goal rather than personal gain or external praise. This finding aligns with research conducted by (Georgeff et al., 1999). Ikhlas means that this desire is more focused on positive contributions and the goodness produced rather than personal gain. This perspective is supported by a study conducted by (Afdillah, 2017). Intention reflects a plan to act based on belief and desire with sincerity, without expecting reward or recognition. This is consistent with research conducted by (Toyoshima et al., 2020). Overall, ikhlas in the BDI theory means that belief, desire, and intention are carried out with integrity and sincerity, reflecting a commitment to act in accordance with moral principles without expecting personal gain or praise.

Conclusion

The analysis reveals that Belief does not have a significant impact on the decision to adopt green agriculture among rural communities in Kecamatan Palakka, indicating that individual belief does not directly influence this decision. In contrast, Desire and Ikhlas have a significant effect on the decision, suggesting that these factors directly influence an individual's choice to engage in green agriculture. Intention has a very significant impact on the decision, emphasizing that strong intention plays a crucial role in making this decision.

Regarding the influence of Belief, Desire, and Ikhlas on Intention, Belief does not significantly affect an individual's intention to engage in green agriculture. However, Desire and Ikhlas significantly influence this intention, indicating that internal motivation and sincerity are key in shaping an individual's intention to participate in green agriculture. The mediation role of Intention shows that Belief does not mediate the relationship between these factors and the decision, whereas Desire and Ikhlas through Intention do show significant influence, highlighting the importance of Intention as a mediator in the decision-making process.

Therefore, it is recommended to enhance educational programs and awareness campaigns about the benefits of green agriculture, given that Belief does not significantly affect the decision. Additionally, effective strategies should be developed to boost Desire and Ikhlas, such as providing incentives and reward programs to strengthen internal motivation. Effective communication strategies and programs designed to strengthen Intention are also crucial for increasing individual commitment to green agriculture practices. Strengthening internal motivation, community involvement, and adopting participatory approaches in the implementation of green agriculture are essential steps to promote pro-environmental behavior and ensure the long-term sustainability of these initiatives.

References

Abidin, Z., & Rohman, M. (2020). Pemberdayaan Kelompok Tani Dalam Pembuatan Pupuk Organik Berbahan Baku Limbah Rumah Tangga. *Community Development Journal : Jurnal Pengabdian Masyarakat*, *1*(2), 89–94. https://doi.org/10.31004/cdj.v1i2.709

Admin Uma. (2022). *Peningkatan Produktivitas Pertanian Hijau dan Pertimbangan Lingkungan*. Fakultas Pertanian,UMA. https://pertanian.uma.ac.id/peningkatan-produktivitas-pertanian-hijau-dan-pertimbangan-lingkungan/

Afdillah, M. R. (2017). *Study Hadis Digital Hadis Tematik Ikhlas*. 1–23.

Al-hussein, L. M., Prof, A., & Madhlum, A. (2021). *Translation as a Complex Intersubjective System : Integrating Belief-Desire-Intention Model into Response- Based Approach to Translation Researcher Tabarek Raad Mahmood Department of Transsstlation , College of Arts , University of Basra Abstract : 97*, 47–75.

Aqsa Tasgheer, & Tehreem Fatima. (2022). Sustainable Development and Natural Resource Management for Environmental Stability: An Islamic Approach. *International Research Journal on Islamic Studies (IRJIS)*, *4*(1), 41–56. https://doi.org/10.54262/irjis.04.01.e03

Arsalan, M. Z. (2023). Niat Belajar Dalam Perspektif Pendidikan Islam. *Khazanah : Journal of Islamic Studies*. https://doi.org/10.51178/khazanah.v2i3.1441

Asiedu-Ayeh, L. O., Zheng, X., Agbodah, K., Dogbe, B. S., & Darko, A. P. (2022). Promoting the Adoption of Agricultural Green Production Technologies for Sustainable Farming: A Multi-Attribute Decision Analysis. *Sustainability (Switzerland)*, *14*(16). https://doi.org/10.3390/su14169977

Barom, M. N., Sciences, M., Gombak, J., & Lumpur, K. (2018). Conceptualizing A Unified Normative Framework For Social Responsbility In Islamic Economics. *International Journal of Economics, Management and Accounting*, *2*(2), 329–363. https://journals.iium.edu.my/enmjournal/index.php/enmj/article/view/615%0Ahttps://journals.iium.edu.my/enmjournal/index.php/enmj/article/download/615/297

Buntok, T. P. (2021). *Ikhlas merupakan kunci pekerjaan tak terasa berat dan mendapatkan ridha Allah*. Pengandilan Agama Buntok. https://pa-buntok.go.id/ikhlas-merupakan-kunci-pekerjaan-tak-terasa-berat-dan-mendapatkan-ridha-allah-serta-kepuasan-masyarakat-oleh-koordinator-area-ii-zona-integritas-pengadilan-agama-buntok/

Busro, M. (2022). Menghadirkan Niat dalam Segala Perbuatan. *Bunga Rampai Islam Dalam Disiplin Ilmu*.

Chawla, Deepak, and H. J. (2019). *Consumer attitude and intention to adopt mobile wallet in India–An empirical study." International Journal of Bank Marketing 37.7*. 1590-1618.

Chen, J. V., Hiele, T. M., Kryszak, A., & Ross, W. H. (2020). Predicting intention to participate in socially responsible collective action in social networking website groups. *Journal of the Association for Information Systems*, *21*(2). https://doi.org/10.17705/1jais.00604

Chi, S. Y., & Chien, L. H. (2022). Influence of Ecological and Quality Concerns on the Adoption Intention of Environment-Smart Agricultural Systems. *Applied Ecology and Environmental Research*, *20*(1), 363–381. https://doi.org/10.15666/aeer/2001_363381

Chizanah, L. (2011). Kajian Utama Ikhlas = Prososial ? (Studi Komparasi Berdasar Caps). *Fakultas UIN Maliki Malang*, *8*(2), 145–163.

Christyanto, M., & Mayulu, H. (2021). Pentingnya pembangunan pertanian dan pemberdayaan petani wilayah perbatasan dalam upaya mendukung ketahanan pangan nasional: Studi kasus di wilayah perbatasan Kalimantan. *Journal of Tropical AgriFood*, *3*(1), 1. https://doi.org/10.35941/jtaf.3.1.2021.5041.1-14

Deochake, S. (2023). Belief-Desire-Intention (BDI) Multi-agent System for Cloud Marketplace Negotiation. *Lecture Notes in Networks and Systems*, *583 LNNS*, 144–153. https://doi.org/10.1007/978-3-031-20859-1_15

Detia Tri Yunandar, Sunarru Samsi Hariadi, & Alia Bihrajihat Raya. (2020a). Nilai Keyakinan Diri dan Sikap Pemuda Terdidik terhadap Wirausaha Pertanian. *Prosiding Seminar Nasional Pembangunan Dan Pendidikan Vokasi Pertanian*, *1*(1), 282–289. https://doi.org/10.47687/snppvp.v1i1.147

Detia Tri Yunandar, Sunarru Samsi Hariadi, & Alia Bihrajihat Raya. (2020b). Nilai Keyakinan Diri dan Sikap Pemuda Terdidik terhadap Wirausaha Pertanian. *Prosiding Seminar Nasional Pembangunan Dan Pendidikan Vokasi Pertanian*, *1*(1). https://doi.org/10.47687/snppvp.v1i1.147

Fajar Oktavia, H. (2020). Pemberdayaan Petani dalam Mengurangi Residu Melalui Pertanian Ramah Lingkungan di BPP Tambun Utara, Kabupaten Bekasi. *Abdi Wiralodra : Jurnal Pengabdian Kepada Masyarakat*, *2*(1), 27–38. https://doi.org/10.31943/abdi.v2i1.21

Georgeff, M., Pell, B., Pollack, M., Tambe, M., & Wooldridge, M. (1999). The belief-desire-intention model of agency. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *1555*, 1–10. https://doi.org/10.1007/3-540-49057-4_1

Gottems, L. B. D., Carvalho, E. M. P. de, Guilhem, D., & Pires, M. R. G. M. (2018). Good practices in normal childbirth: Reliability analysis of an instrument by cronbach's alpha. *Revista Latino-Americana de Enfermagem*, *26*. https://doi.org/10.1590/1518-8345.2234.3000

Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, *1*(2), 107.

Herdini, F. L., & Masduki, M. (2021). Pengembangan Penanganan Pascapanen melalui Kelembagaan Pertanian sebagai Upaya Pembangunan Pertanian dan Pedesaan. *Buletin Pemberdayaan Masyarakat Dan Desa*, *1*(1), 32–37. https://doi.org/10.21107/bpmd.v1i1.12023

Hidayah, N., Rosidi, A. R., & Shofiyani, A. (2023). Konsep Ikhlas Menurut Imam Al-Ghazali dan Relevansinya Terhadap Tujuan Pendidikan Islam. *Urwatul Wutsqo: Jurnal Studi Kependidikan Dan Keislaman*, *12*(2). https://doi.org/10.54437/urwatulwutsqo.v12i2.957

Hikmah, Z. M., Sulistyono, E., & Susanti, Z. (2021). Pertumbuhan, Hasil dan Efisiensi Pemakaian Air Padi Inpari 33 pada Perlakuan Pupuk Anorganik dan Organik. *Jurnal Agronomi Indonesia (Indonesian Journal of Agronomy)*, *49*(3), 242–250. https://doi.org/10.24831/jai.v49i3.38323

Holdo, M. (2019). Sincerity as Strategy: Green Movements and the Problem of Reconciling Deliberative and Instrumental Action. *Environmental Politics*, *28*(4), 595–614. https://doi.org/10.1080/09644016.2018.1457294

Ikhsani, I. I. I., Tasya, F. E., Sihidi, I. T., Roziqin, A., & Romadhan, A. A. (2020). Arah Kebijakan Sektor Pertanian di Indonesia untuk Menghadapi Era Revolusi Industri 4.0. *Jurnal Administrasi*

Dan Kebijakan Publik, *5*(2), 134–154. https://doi.org/10.25077/jakp.5.2.134-154.2020

Imran Hayat et al. (2023). the Role of Islamic Environmental Ethics in the Alleviation of Climate Challenges and the Preservation of Ecosystem. *Russian Law Journal*, *11*(11s), 395–404. https://doi.org/10.52783/rlj.v11i11s.1967

Insani, F. R., Setiawan, I., & Rasiska, S. (2018). Determinan Partisipasi dan Peran Petani Muda dalam Pengembangan Pertanian Ramah Lingkungan di Desa Cisondari, Kecamatan Ciwidey, Kabupaten Bandung, Jawa Barat. *MIMBAR AGRIBISNIS: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, *4*(2). https://doi.org/10.25157/ma.v4i2.1133

Jannah, A. R., Toiba, H., & Andriatmoko, N. D. (2019). *Niat Adopsi Petani Dalam Menggunakan Teknologi Combine Harvester Intention of Adoption Farmers in Using Technology Combine Harvester*. *30*(2), 71–78. https://doi.org/10.21776/ub.habitat.2019.030.2.9

Jeerat, P., Kruekum, P., Sakkatat, P., Rungkawat, N., & Fongmul, S. (2023). Developing a Model for Building Farmers' Beliefs in the Sufficiency Economy Philosophy to Accommodate Sustainable Agricultural Practices in the Highlands of Chiang Mai Province, Thailand. *Sustainability (Switzerland)*, *15*(1). https://doi.org/10.3390/su15010511

Lubis, D. A. (2021). Produktivitas Tenaga Kerja Pertanian dan Industri Pengolahan: Lesson Learned Pandemi Covid-19. *Jurnal Manajemen STIE Muhammadiyah Palopo*, *7*(2), 45. https://doi.org/10.35906/jurman.v7i2.892

Mascardi, V., Demergasso, D., Ancona, D., Innocentini, M., Georgeff, M., Pell, B., Pollack, M., Tambe, M., & Wooldridge, M. (2017). Belief - Desire - Intention (BDI) Model. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *1555*(December).

Mubarak, A., Hidaya, F., & Syarif, S. (2023). Intensi Berwirausaha Petani Di Kota Tarakan. *National Multidisciplinary Sciences*, *2*(3). https://doi.org/10.32528/nms.v2i3.291

Muliasari, R. M., Aulia, A. N., Setiawan, A. P., & Ibanah, I. (2021). Faktor-faktor yang Memengaruhi Niat Pembelian Produk Pangan Organik : Sebuah Studi Literatur. *Jurnal Penelitian Ilmu Sosial Dan Eksakta*, *1*(1), 47–63. https://doi.org/10.47134/trilogi.v1i1.11

Mursid, M. C., Aziz, F. A., & Anjani, D. (2024). The role of sharia economics in realizing sustainable green economic development. *Journal of Infrastructure, Policy and Development*, *8*(5), 1–9. https://doi.org/10.24294/jipd.v8i5.5012

Nguyen, L. L. H., Khuu, D. T., Halibas, A., & Nguyen, T. Q. (2024). Factors That Influence the Intention of Smallholder Rice Farmers to Adopt Cleaner Production Practices: An Empirical Study of Precision Agriculture Adoption. *Evaluation Review*, *48*(4), 692–735. https://doi.org/10.1177/0193841X231200775

Olawuyi, S. O. (2020). *Eco-Friendly Agricultural Practices : Evidence From Smallholder Farmers in Seyi Olalekan Olawuyi , University of Fort Hare*. *23*(5), 590–611.

Puspitasari, C. A., Yuliati, L. N., & Afendi, F. (2021). Pengaruh Green Marketing, Kesadaran Lingkungan Dan Kesehatan Terhadap Keputusan Pembelian Produk Pangan Organik Melalui Sikap. *Jurnal Aplikasi Bisnis Dan Manajemen*, *7*(3), 713–722. https://doi.org/10.17358/jabm.7.3.713

Razak, S. (2019). Measuring the Welfare Level of Local Comunnity Who Take Sustainable Business Financing Based on Local Wisdom In the Islamic Microfinance Institution. *INFERENSI: Jurnal Penelitian Sosial Keagamaan*, *13*(1), 1–24.

https://doi.org/10.18326/infsl3.v13i1.1-24

Razak, S., & Utami, S. (2020). Strengthening the Traditional Markets: Evidence From Bosowasi Region, South Sulawesi. *INFERENSI: Jurnal Penelitian Sosial Keagamaan*, *14*(2), 221–248. https://doi.org/10.18326/infsl3.v14i2.221-248

Rezaei-Moghaddam, K., Vatankhah, N., & Ajili, A. (2020). Adoption of pro-environmental behaviors among farmers: application of Value–Belief–Norm theory. *Chemical and Biological Technologies in Agriculture*, *7*(1), 1–15. https://doi.org/10.1186/s40538-019-0174-z

Ringle, C. M., Wende, S., and Becker, J.-M. 2022. (2022). *SmartPLS 4*. Oststeinbek: SmartPLS GmbH.

Saefurridjal, A., Purwaningsih, D., Marpuah, M., & Miladiah, S. S. (2023). NIAT ATAU MOTIVASI DALAM KEPEMIMPINAN PENDIDIKAN. *Jurnal Ilmiah Mandala Education*, *9*(1). https://doi.org/10.58258/jime.v9i1.4380

Sari, M. (2023). *Pertanian berkelanjutan dengan teknik-teknik ramah lingkungan menuju masa depan yang lebih hijau*. Mertani. https://www.mertani.co.id/id/post/pertanian-berkelanjutan-dengan-teknik-teknik-ramah-lingkungan-menuju-masa-depan-yang-lebih-hijau

Savari, M., Damaneh, H. E., Damaneh, H. E., & Cotton, M. (2023). Integrating the norm activation model and theory of planned behaviour to investigate farmer pro-environmental behavioural intention. *Scientific Reports*, *13*(1), 1–14. https://doi.org/10.1038/s41598-023-32831-x

Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *MPR-Online*, *8*(2), 23–74.

Septiani, H. L. D., Sumarwan, U., Yuliati, L. N., & Kirbrandoko, K. (2021). Minat Petani Mengadopsi Sharing Economy Peer-To-Peer Lending Sebagai Alternatif Pembiayaan Pertanian. *Mix: Jurnal Ilmiah Manajemen*, *11*(1), 1. https://doi.org/10.22441/mix.2021.v11i1.001

Sudrajat, Ega Agista, D., & Rohmah, S. (2020). Persepsi Petani Terhadap Nilai Socio-Culture Lahan dan Pengaruhnya Terhadap Regenerasi Petani dan Ketersediaan Tenaga Kerja Pertanian di Desa Duren. *Mkg*, *21*(2), 183–201. http://dx.doi.org/10.23887/mkg.v21i2.29297

Sugiantara, I. G. N. M., & Utama, M. S. (2019). Pengaruh Tenaga Kerja, Teknologi Dan Pengalaman Bertani Terhadap Produktivitas Petani Dengan Pelatihan Sebagai Variabel Moderating. *Buletin Studi Ekonomi*, 1. https://doi.org/10.24843/bse.2019.v24.i01.p01

Sumarno, N. (2016). Green Agriculture dan Green Food sebagai Strategi Branding dalam Usaha Pertanian. *Forum Penelitian Agro Ekonomi*, *28*(2). https://doi.org/10.21082/fae.v28n2.2010.81-90

Sun, X., Lyu, J., & Ge, C. (2022). Knowledge and Farmers' Adoption of Green Production Technologies: An Empirical Study on IPM Adoption Intention in Major Indica-Rice-Producing Areas in the Anhui Province of China. *International Journal of Environmental Research and Public Health*, *19*(21). https://doi.org/10.3390/ijerph192114292

Supriyo, A. (2022). Inovasi Pertanian Ramah Lingkungan Terhadap Produktivitas Padi Sawah. *Proceedings Series on Physical & Formal Sciences*, *4*. https://doi.org/10.30595/pspfs.v4i.496

Susilowati, G. (2020). Kebijakan Pertanian Hijau melalui Peningkatan Konsumsi Jamur. *Jurnal*

Analisis Kebijakan, *4*(2), 26–39.

Syaparuddin. (2018). Revitalizing Buginese Local Wisdom in the Development of Local Economy: Constructing Paradigm and Models. *IOP Conference Series: Earth and Environmental Science*, *175*(1). https://doi.org/10.1088/1755-1315/175/1/012142

Toyoshima, F., Barton, A., & Grenier, O. (2020). Foundations for an Ontology of Belief, Desire and Intention. *Frontiers in Artificial Intelligence and Applications*, *330*, 140–154. https://doi.org/10.3233/FAIA200667

Wang, X., Lu, P., Tang, J., Gao, X., Liao, W., & Weng, Z. (2022). Drivers of farmers' intentions to use eco-breeding: Integrating the theory of planned behavior and the norm activation model. *Frontiers in Environmental Economics*, *1*. https://doi.org/10.3389/frevc.2022.1035176