



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

Riska¹, Syaparuddin Razak², Ismail Keri³

¹ State Islamic Institute of Bone, Indonesia, riska4928@gmail.com

² State Islamic Institute of Bone, Indonesia, safarb135@gmail.com

³ State Islamic Institute of Bone, Indonesia, ismailkeri48@gmail.com

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*Corresponding author email:

riska4928@gmail.com

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Abstract

Introduction: This study aims to examine the importance of ikhlas (sincerity) in the BDI (Belief, Desire, Intention) decision-making model for green agriculture development among rural people in Palakka District. Green agricultural techniques, including the use of organic practices, water-saving management, and biodiversity conservation, are significant in maintaining environmental health. **Research Methods:** An integrative approach with quantitative methods combined with an Islamic economic perspective was used in this study. Data were collected through a questionnaire survey completed by 152 respondents from rural communities with experience or potential in green agriculture. The data were then analyzed using Structural Equation Modeling (SEM) techniques. **Results:** The results show that ikhlas, desire, and belief significantly influence intention and decision to implement green agriculture, with intention acting as a mediator of this relationship. **Conclusion:** In conclusion, the study indicates that the addition of the value of ikhlas alongside belief and desire can increase the intention and decision of rural communities to implement green agriculture. The inference in practice is that policies that incorporate spiritual values within green agricultural development can encourage active community participation. Findings contribute to the formulation of policies for sustainable agriculture, with a focus on prioritizing spiritual values toward sustainable environment.

INTRODUCTION

Sincerity (*ikhlas*) is naturally associated with sustainability principles because it promotes authentic, long-term decision-making in the public interest, including environmental protection. In the context of sustainable agriculture, this translates to prioritizing environmentally friendly methods such as organic farming, water conservation, and biodiversity conservation. The relevance of *ikhlas* to sustainability can be examined along three extremely critical dimensions. Firstly, sincerity is an inspirational idea that eliminates drudgery from work while aligning one's behavior with the pursuit of God's pleasure (Buntok, 2021) and (Puspitasari et al., 2021). Second, the addition of sincerity in agricultural practice results in enhanced productivity in the green agriculture sector, aside from adopting eco-friendly practices (Admin Uma, 2022) and (Supriyo, 2022). Third, sustainable agriculture, relying on the principles of ecology such as using organic inputs and ecosystem-based resource management, allows for the transition towards a sustainable future for agriculture (Sari, 2023) and (Hikmah et al., 2021). Agricultural practices based on *ikhlas* not only yield good quality products but also preserve ecological balance. Internalizing *ikhlas* as a philosophy enables farmers to embrace a revolutionary role, which triggers positive ecological and social impacts on society.

Firstly, the employment of *ikhlas* in farm labor redefines farm work as an intentional and admirable act, rather than an economic necessity. Sincerity-inspired farmers labor without coercion, with a focus on the attainment of moral and spiritual ends. This perspective encourages perseverance, dedication, and a deep feeling of responsibility toward environmental and public well-being. Secondly, the process of improving green agricultural productivity is closely interrelated with mitigating ecological destruction. Environmentally friendly farming techniques are very significant in ensuring long-term productivity. To this end, active participation of farmers, especially in the production of staple foods such as rice, is imperative to the successful implementation of eco-agricultural systems. Third, sustainably oriented farm practices such as the utilization of organic fertilizers, efficient management of water, and biodiversity conservation are imperative to the maintenance of soil fertility, reduction of pollution, and enhancement of agroecological stability. Organic fertilizers reduce reliance on chemical fertilizers and enhance soil fertility, while optimal water management addresses the growing issue of water scarcity. Conservation of biodiversity enhances the stability and resilience of agroecosystems, thereby ensuring long-term agricultural productivity and enhancing rural residents' well-being.

In this study, the Belief–Desire–Intention (BDI) model is used to investigate how *ikhlas* promotes environmental awareness and sustainable agriculture among rural communities. The BDI model, originally developed by Michael Bratman (1987), conceives human agency in terms of three necessary components: belief, desire, and intention (Al-hussein et al., 2021). "Belief" is an agent's experience or knowledge of his or her world; "desire" characterizes the

ends or outcomes the agent desires to produce; and "intention" is the agent's determination to act by his or her beliefs and desires. The model facilitates a cognitive and behavioral approach to understanding how decisions are built and implemented in complex, goal-oriented situations (Chen et al., 2020).

Although relevant, *ikhlas*'s contribution to environmental sustainability via green agriculture is seldom discussed in academic contexts. Nevertheless, existing research indirectly informs the present study through three interrelated areas: farmer empowerment, agricultural labor, and green policy models. In the matter of empowering farmers, research by Hernita Fajar Oktavia centers on the improvement of farmers' capacity for recognizing and making use of organic farm inputs (Fajar Oktavia, 2020). Additional interventions by Zainal Abidin and Mojibur Rohman highlight the organic fertilizer production process from material selection to practical usage and technical recommendation (Abidin & Rohman, 2020). In terms of farm workers, Deltha Airuzsh Lubis calls attention to the government's strategic emphasis on labor productivity as an instrument to develop national competitiveness and accelerate economic growth (Lubis, 2021). Conversely, (Sudrajat et al., 2020) reveal the danger posed by generational transformation in rural society by its younger generation whose interest in agricultural professions is declining, thus threatening the continuation of local farm labor systems. Finally, research such as that of Gabriella Susilowati proves the objectives of green agricultural policies in a balance between productivity and environmental accountability (Susilowati, 2020). Further research by (Ikhsani et al., 2020) attests to the fact that green agriculture policy entails multi-faceted policies such as commodity planning, food and fiber production, market development, structural adjustment, foreign policy coordination, provision of infrastructure, and agricultural education.

Green farming involves farming activities that focus on environmental sustainability, resource conservation, and soil and crop well-being. Green agriculture involves minimizing chemical pesticide application, using organic substances, and retaining soil and water resources. Its objective is to improve agricultural output sustainably while maintaining ecosystem equilibrium (Razak, 2019). For rural regions, green agriculture is critical since it increases economic as well as social well-being, given their over-reliance on agriculture. Through adopting green technology, rural regions are in a position to increase crop quality and yield, preserve natural resources, and improve overall standards of living (Razak & Utami, 2020).

In short, this study seeks to fill an important gap in the literature by exploring the less-examined connection between *ikhlas* and environmental consciousness in rural agricultural development. It is therefore presented as a pioneering addition to the literature, presenting an integrative framework to the contribution of moral–spiritual values, here *ikhlas*, to environmentally sustainable agricultural systems development using the BDI framework.

RESEARCH METHOD

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.

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	Be1
		2. Water management efficiency	Be2
		3. Biodiversity preservation	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	De1
		5. Irrigation system implementation	De2
		6. Environmental welfare concern	De3

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

Source: Primary data processed, 2024

To confirm the conceptual research model proposed in this study, the questionnaire was designed 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. 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.

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. 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. The second step comprised structural model analysis, necessitating a statistically significant weighted P-value < 0.05 and an R-squared 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.

Belief and Intention in The 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). 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.

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. 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). Understanding how desire influences intention is key to designing effective strategies to support the transition to green agriculture. 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 Practices

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). 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 learning and implementing new methods (Busro, 2022). 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). 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

Conceptual Model of Study

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.

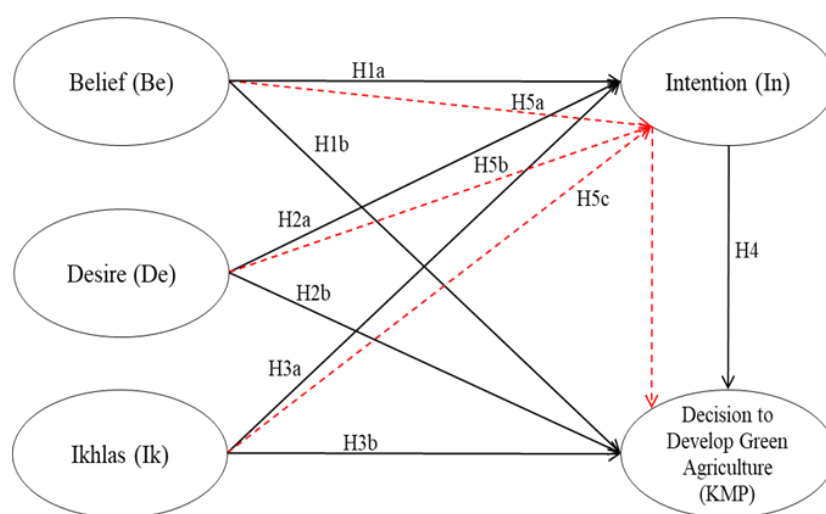


Figure 1. Conceptual Model of Study
Source: Prepared by author, 2025

RESULT AND DISCUSSION

RESULT

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. 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%

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

Criteria	Category	Frequency	Percent
	> IDR 20 million to IDR 25 million		
	> IDR 25 million to IDR 30 million		
	>IDR 30 million		

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 factor against correlations with other factors. All variables exhibit good discriminant validity, with each variable having the highest correlation with its factor compared to other variables.

Table 4. Results of Fornell-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

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

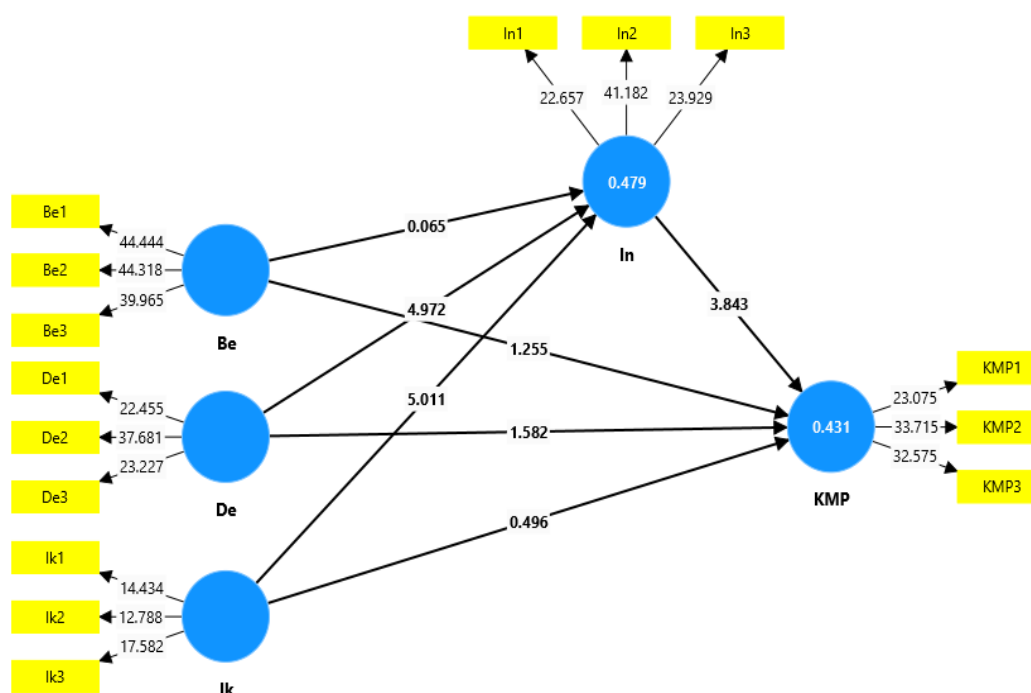


Figure 2. Smart-PLS Analysis Result

Source: Primary data processed, 2024

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

DISCUSSIONS

Table 6 is the test of structural model results employed to test for direct effects between study variables on green agriculture. From the analysis, Belief does not have any significant effect on Intention or on the Decision to Develop Green Agriculture (KMP) as it has P-values of 0.948 and 0.241, respectively. Both of these are much larger than the threshold significance of 0.05 and hence the statistically significant influence of belief is negligible on Intention as well as on Decision-Making. The finding concurs with research documented by (Jeerat et al., 2023) as well. Desire shows statistically significant influence upon Intention (P = 0.000) and upon KMP (P = 0.004). The values of P, being below 0.05, establish these effects to be statistically significant. This is in agreement with the findings of (Asiedu-Ayeh et al., 2022). Additionally, the variable Ikhlas (sincerity) also has a significant influence on Intention (P = 0.000) and KMP (P = 0.023), demonstrating the key role sincerity plays in the decision-making process. Additionally, Intention has a significant influence on KMP (P = 0.000), demonstrating that possessing a strong intention is a key contributor to making the decision to adopt green farming practices. This is supported by the findings of (Wang et al., 2022).

The BDI system is highly consistent with Islamic economics principles. Environmental sustainability and Sharia values belief encourage farmers to embrace green agriculture as a way of expressing their faith in Allah and responsibility for taking care of the world. This is supported by the findings of (Mursid et al., 2024). Intention is also important, as true intention to protect the environment and improve people's welfare encourages farmers towards green agriculture. Hence, a strong belief in Islamic principles and sustainability influences desire and intention towards green behavior, making farmers make choices that are Islamic economic principle compatible and result in environmental conservation.

The practical implications of these findings underscore the necessity to develop empowerment programs that generate desire and sincerity to adopt environmentally friendly agricultural practices. Training sessions utilizing moral and spiritual values, such as the virtue of ikhlas and sustainability commitment, have the potential to encourage long-term intentions to aid in the conservation of the environment.

Table 7 gives structural model testing findings of indirect effects of Belief, Desire, and Ikhlas in using green agriculture, where Intention acts as a mediating factor. The Belief to Intention to KMP path of the analysis has a coefficient of -0.003 and a P-value of 0.953, well above the 0.05 significance level, indicating no significant indirect effect. This finding is consistent with (Rezaei-Moghaddam et al., 2020). In contrast, the Desire to Intention to KMP path shows a significant indirect effect, with a coefficient of 0.179 and a P-value of 0.004.

Similarly, the Ikhlas to Intention to KMP model also shows a high indirect effect, with a coefficient of 0.146 and a P-value of 0.001. Since both P-values are lower than the 0.05 limit, these findings show that Intention is a strong mediator of desire and sincerity and the decision to adopt green agricultural practices. These findings agree with studies conducted by (Sun et al., 2022) and (Olawuyi, 2020).

The BDI model, when augmented with Islamic economic principles, yields a sustainable and equitable route to green farming. Belief in the positive impact of green farming on the environment and human health results in its adoption. This is as proven by research by (Aqsa Tasgheer & Tehreem Fatima, 2022). The desire to protect the environment and enhance people's health also propels farmers towards green farming. Intention is reflected in concrete planning and strategic action, as affirmed by (Savari et al., 2023). By combining personal belief and aspiration with Islamic economic principles, green agricultural practices can be efficiently implemented, with profound social, economic, and environmental benefits, as well as maintaining livelihood and community wellbeing.

In the BDI approach, Ikhlas is profoundly meaningful. Belief refers to a person's honest, unadulterated conviction or knowing without hidden agendas, which creates action done with sincere intention. Desire means that one's longings are directed towards moral and altruistic purposes, not selfish gain or outside approval. Ikhlas means that such desires are directed towards doing good and making a positive contribution, not selfish gain. Intention means a resolve to act on the basis of desire and belief in sincerity, not seeking reward or praise. This definition is supported by the findings of (Toyoshima et al., 2020). Generally, Ikhlas in BDI theory is that belief, desire, and intention are guided by integrity and sincerity,

and they have a sense of commitment to doing what is right without anticipating any self-interest or admiration.

The pragmatic application of such research emphasizes that building strong and sincere intentions plays an important part in encouraging farmers to adopt green agriculture. Therefore, participatory and reflective training approaches that facilitate farmers' ecological and spiritual awareness can strengthen such intentions and enhance the efficacy of green agriculture initiatives. Policy implications suggest that alongside material incentives, government policies should also facilitate value-based intention development through education, outreach, and community participation. Developing value-based training models such as pesantren for agriculturalists or religion-based farming villages can serve as strategic sites to integrate religious, social, and environmental components in sustainable agricultural development.

CONCLUSION

This study contributes theoretically by empirically validating the BDI model within the context of green agricultural growth aligned with Islamic economic principles. It finds that not all components of the model equally influence behavior-while Belief did not significantly affect Intention or Decision-making, Desire and Ikhlas played crucial roles, highlighting the importance of intrinsic motivation and spiritual values. Empirically, evidence from Palakka District shows that affective and spiritual factors outweigh rational belief in influencing green agriculture adoption. These insights suggest that policies focused solely on increasing knowledge may be insufficient, instead, programs that nurture intention and sincerity through incentives, value-based training, and participatory methods are more effective. Future research should explore additional mediators like social norm or leadership and employ mixed-method or longitudinal designs to deepen understanding of sustainability oriented behaviors.

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