The Effect of Green Product and Perceived Price on Purchase Intention Through Green Perceived Value at BUMDes Maju Jaya, Kampar, Riau

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Abstract.
Agricultural sector plays an important role in Indonesia's economic development, particularly in supporting food security and rural livelihoods. However, excessive use of chemical fertilizers has led to soil degradation and environmental damage, encouraging the development of organic fertilizers as a sustainable alternative. Although organic fertilizers are more environmentally friendly and relatively affordable, their adoption among farmers remains low, indicating a gap between environmental awareness and actual purchasing behavior. Previous studies show that purchase intention toward green products is influenced by green product attributes and perceived price, but the findings remain inconsistent. In addition, limited research has examined green perceived value as a mediating variable in explaining farmers' purchase intention, especially in the context of village-owned enterprises (BUMDes). Therefore, this study examines the effect of green product and perceived price on purchase intention through green perceived value in organic fertilizer produced by BUMDes Maju Jaya, Kampar, Riau.
Keywords: *Green Product, Perceived Price, Green perceived Value and Purchase Intention.*

I. INTRODUCTION

Environmental issues caused by the excessive use of chemical fertilizers have become an important concern in sustainable agricultural development. The intensive use of chemical fertilizers may reduce soil fertility, pollute water resources, and damage agricultural ecosystems. This condition has encouraged the increasing demand for environmentally friendly products, including organic fertilizers as an alternative for sustainable agriculture. In the context of green marketing, organic fertilizer is categorized as a green product because it is produced by considering environmental sustainability and natural resource conservation. One of the institutions developing organic fertilizer is BuMDes Maju Jaya in Kampar Regency, Riau, which utilizes oil palm frond waste as raw material for organic fertilizer production. The utilization of palm waste not only helps reduce environmental pollution but also provides additional economic value for rural communities. Nevertheless, the use of organic fertilizer among farmers remains relatively low compared to chemical fertilizers. Data on fertilizer prices indicate that organic fertilizer is relatively more affordable than non-subsidized chemical fertilizers.

Table 1. Comparison of Organic and Non-Organic Fertilizer Prices

No	Fertilizer Type	Category	Price per Kg
1	Urea (subsidized)	Subsidized/Chemical	2,250
2	NPK (subsidized)	Subsidized/Chemical	2,300
3	NPK for Cocoa (subsidized)	Subsidized/Chemical	3,300
4	Organic Fertilizer (subsidized)	Subsidized/Organic	800
5	Non-subsidized Urea	Non-subsidized Chemical	10,500–16,500
6	ZA Fertilizer (repackaged)	Non-subsidized Chemical	9,000
7	Compost/Solid Organic Fertilizer	Organic	4,500–8,000
8	"Guano" Organic Fertilizer	Premium Organic	29,000

Source:(BPS Riau by researchers, 2024)

Although the price of organic fertilizer is relatively lower, pre-survey results show that most consumers still perceive organic fertilizer as expensive. This indicates a gap between the actual price and consumers' price perceptions.

Table 2. *Pre-survey Results on the Perception of Organic Fertilizer Prices*

No	Price Perception Category	Number of Respondents	Percentage
1	Perceived as Expensive	24	80%
2	Perceived as Reasonable	6	20%
	Total	30	100%

Source:(Pre-survey by researchers, 2026)

The pre-survey findings indicate that perceived price is one of the factors influencing the low purchase intention toward organic fertilizer. In the context of green marketing, green product and perceived price are important factors affecting consumers' purchase intention. In addition, green perceived value plays an important role in shaping consumers' perceptions of the environmental and functional benefits of environmentally friendly products.

This phenomenon indicates that purchase intention toward organic fertilizer is influenced by several factors, including green product, perceived price, and green perceived value. According to the Theory of Planned Behavior proposed by Icek Ajzen, purchase intention is influenced by individuals' beliefs and perceptions regarding a product.

Green products that provide environmental benefits are expected to enhance consumers' green perceived value and encourage purchase intention. Several previous studies have shown that green product and perceived price influence purchase intention. However, prior findings remain inconsistent. Some studies reported that green product significantly affects purchase intention, while others found insignificant results. In addition, most previous studies only examined direct relationships without considering the mediating role of green perceived value. Based on this research gap, the novelty of this study lies in integrating green perceived value as a mediating variable in the relationship between green product and perceived price on purchase intention toward organic fertilizer products produced by BUMDes Maju Jaya, Kampar Regency, Riau.

II. METHODS

This study uses a quantitative approach to examine the effect of green product and perceived price on purchase intention through green perceived value toward organic fertilizer produced by BUMDes Maju Jaya. The research was conducted at BUMDes Maju Jaya, which produces organic fertilizer made from oil palm frond waste in Pandau Village.The population in this study consists of farmers in Pandau Village, Kampar Regency. The sample was determined using a purposive sampling technique with the criteria that respondents were familiar with or had previously used organic fertilizer produced by BUMDes Maju Jaya. The total sample in this study consisted of 81 respondents. The type of data used in this study is primary data obtained through questionnaires distributed to respondents. The research instrument was developed based on the theoretical indicators of each variable and measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The variables in this study consist of green product (X1) and perceived price (X2) as independent variables, purchase intention (Y) as the dependent variable, and green perceived value (Z) as the mediating variable. The research model developed to examine the relationship among these variables can be seen in the following figure:

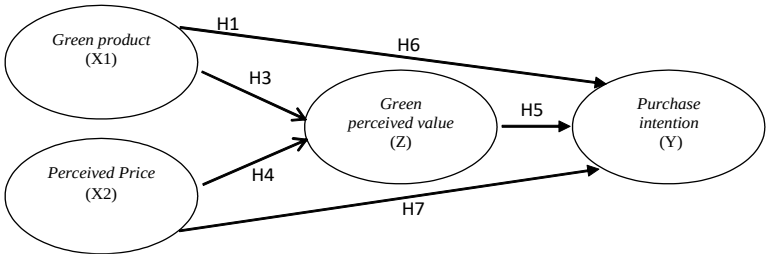

Fig. 1. Research Model

Data analysis was conducted using the Partial Least Square–Structural Equation Modeling (PLS-SEM) method with the assistance of SmartPLS. This method was selected because it is capable of simultaneously analyzing structural relationships among latent variables and does not require normally distributed data. Model evaluation was carried out through two stages, namely outer model evaluation and inner model evaluation. Convergent validity was assessed based on loading factor values (> 0.70) and Average Variance Extracted (AVE > 0.50), while construct reliability was tested using Composite Reliability and Cronbach's Alpha (> 0.70). The structural model was evaluated through the coefficient of determination (R^2), effect size (f^2), and path significance testing using the bootstrapping procedure. The relationships among variables were considered significant when the t-statistic value was ≥ 1.96 at a 5% significance level (two-tailed).

III. RESULT AND DISCUSSION

Result

The respondent characteristics in this study describe the profile of respondents from BUMDes Maju Jaya Kampar who have used or are familiar with organic fertilizer products. Respondent profiles are categorized based on gender, age range, and highest level of education. This demographic mapping aims to provide a comprehensive overview of respondents' backgrounds, which serves as an important foundation for interpreting findings related to green product, perceived price, green perceived value, and purchase intention.

Table 3. Respondent Characteristics

Category	F	(%)	Category	F	(%)
Gender			**Education Level**		
Male	44	54,32	Elementary School (SD)	14	17,28
Female	37	45,68	JuniorHigh School (SMP)	15	18,52
Total	**81**	**100**	Senior High School (SMA)	39	48,15
			Bachelor's Degree	13	16,05
			Master's Degree	0	0,00
			Total	**81**	**100**
Age					
> 25–30 Years	6	7,41			
> 30–40 Years	27	33,33			
40–45 Years	48	59,26			
Total	**81**	**100**			

Source: Processed Data, 2026

Analysis of respondents' demographic characteristics provides an important overview in understanding consumer behavior toward organic fertilizer products produced by BUMDes Maju Jaya Kampar. Based on gender, respondents in this study were predominantly male, accounting for 54.32% of the total respondents, while female respondents accounted for 45.68%. This indicates that male respondents still play a dominant role in agricultural activities and decision-making related to fertilizer use. In terms of age,

the majority of respondents were in the 40–45 years age group (59.26%), followed by those aged 30–40 years (33.33%), and 25–30 years (7.41%). This shows that most respondents are in a productive and experienced age group, enabling them to evaluate product quality, price suitability, and product benefits before making purchasing decisions. Based on educational background, most respondents had completed Senior High School (48.15%), followed by Junior High School (18.52%), Elementary School (17.28%), and Bachelor's Degree (16.05%). This indicates that respondents generally have sufficient educational background to understand environmentally friendly agricultural products, including the benefits and application of organic fertilizers. Overall, the demographic characteristics of respondents reflect that the majority of consumers of organic fertilizer products are productive-age farmers with adequate educational backgrounds to understand the value and benefits of green products.

Table 4. Summary of Research Variable Descriptions

Variable	Average Category	Score
Purchase Intention (Y)	4,17	High
Green Perceived Value (Z)	4,52	Very Good
Green Product (X1)	4,48	Very Good
Perceived Price (X2)	3,99	Good

Source: Processed Data, 2026

Descriptive results show that Green Product and Green Perceived Value are at a very good level, while Purchase Intention is at a high level. However, Perceived Price indicates a relatively lower condition compared to other variables, suggesting that respondents still consider price as an important factor influencing their evaluation and decision-making in adopting green products.

1. Measurement Model Evaluation (Outer Model)

The measurement model evaluation stage was conducted to ensure that the instruments used in this study were valid and reliable before proceeding to structural testing. A visualization of the measurement model test results using SmartPLS can be seen in Figure 2 below:

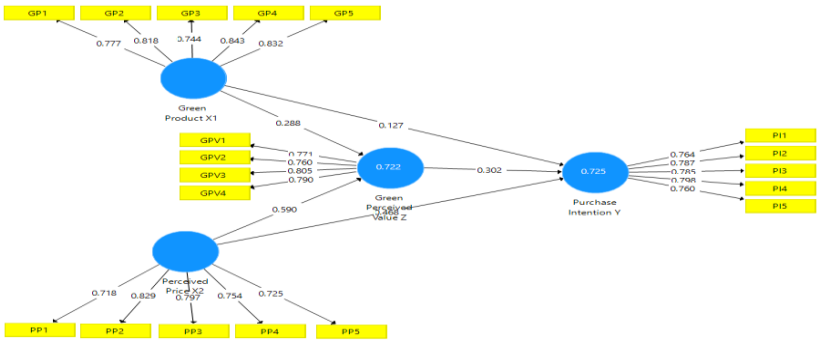

Fig. 2. Measurement Model

To summarize the test results of the measurement model in the figure above, Table 3 presents the results of the convergent validity and reliability evaluation of the instrument:

Tabel 4. Measurement Model Evaluation Result (*Outer Model*)

Variabel	Indikator	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability
Green Product (X1)	GP1 - GP5	0,777 – 0,843	0,646	0,863	0,901
Perceived Price (X2)	PP.1 - PP.5	0,718 – 0,829	0,586	0,822	0,876
Green Perceived Value (Z)	GPV.1 - GPV.4	0,771 – 0,805	0,611	0,788	0,863
Purchase Intention (Y)	PI.1 - PI.5	0,764 – 0,798	0,607	0,838	0,885

Source: Output SmartPLS, 2026

Based on table 4, the results of the measurement model evaluation (outer model) confirm that the research instrument used has fully met convergent validity standards. All indicators forming the variables Green Product, Perceived Price, Green Perceived Value, and Purchase Intention show excellent outer loading values and have exceeded the minimum threshold. According to Hair et al. (2019), meeting the outer loading criteria > 0.70 proves that each indicator is able to accurately measure its latent variable. Furthermore, the reliability of this measurement is strengthened by the Average Variance Extracted (AVE) values obtained from all variable constructs that are above the minimum feasibility standard (0.50). As emphasized by Hair et al. (2019), achieving this AVE criterion indicates that most of the indicator variation has been successfully explained by its latent construct, so the instrument is declared convergently valid.

In terms of reliability, this research instrument has also proven to have very strong internal consistency. This is demonstrated by the results of the Cronbach's Alpha test for all variables that have met strict statistical feasibility criteria. According to Garson (2016), meeting the minimum standard Cronbach's Alpha value (> 0.70) confirms that the indicator is reliable even though repeated measurements are carried out. The accuracy of this instrument is also absolutely supported by the Composite Reliability test, where all variables successfully exceeded the recommended critical value (> 0.70). In accordance with the view of Hair et al. (2019), meeting these criteria ensures a high level of reliability and internal consistency of each constructed construct. Therefore, because all instruments have been proven valid and reliable, the research data is certainly very suitable to proceed to the structural analysis stage (inner model).

2. Structural Model Evaluation (Inner Model) and Hypothesis Testing

The R-Square value indicates that the variables Green Product, Perceived Price, and Green perceived Value simultaneously explain 60.5% of the variation in Purchase Intention. A visualization of the structural model, showing the path coefficients between the variables, is presented in Figure 3 below:

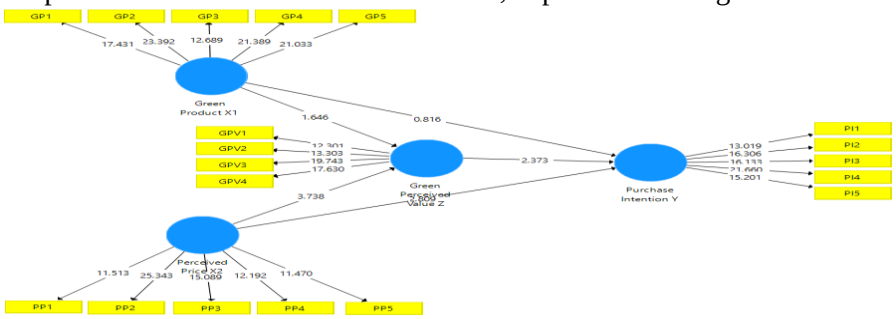

Fig. 3. Structural Model

The results of hypothesis testing using the bootstrapping procedure to see the significance of the relationship between variables in more detail are presented in Table 5 below:

Table 5. Hypothesis Testing Results (*Path Coefficients*)

Hypothesis	Path of Influence	Original Sample	T-Statistics	P-Values	Conclusion
H1	Green Product (X1) → Green Perceived Value (Z)	0.288	1.592	0.112	Rejected
H2	Perceived Price (X2) → Green Perceived Value (Z)	0.590	3.621	0.000	Accepted
H3	Green Product (X1) -> Purchase Intention (Y)	0.127	0.841	0.401	Rejected
H4	Perceived Price (X2) → Purchase intention (Y)	0.468	2.925	0.004	Accepted
H5	Green Perceived Value (Z) -> Purchase Intention (Y)	0.302	2.326	0.020	Accepted
H6	Green Product (X1) -> Green Perceived Value (Z) -> Purchase Intention (Y)	0.087	1.373	0.171	Rejected

Hypothesis	Path of Influence	Original Sample	T-Statistics	P-Values	Conclusion
H7	Perceived Price (X2) -> Green Perceived Value (Z) -> Purchase Intention (Y)	0.178	1.746	0.078	Rejected

Source: Output SmartPLS, 2026

Based on the results of hypothesis testing through the bootstrapping procedure, the findings of this study indicate that not all proposed hypotheses are supported. This decision is based on the t-statistic values and p-values obtained from each structural path.

A hypothesis is considered significant when the t-statistic exceeds 1.96 and the p-value is below 0.05. In the direct effect analysis, the results show that Green Product does not have a significant effect on Green Perceived Value (H1) and Purchase Intention (H3), as indicated by t-statistic values below the critical threshold and p-values above 0.05, leading to the rejection of both hypotheses. In contrast, Perceived Price is proven to have a positive and significant effect on Green Perceived Value (H2) and Purchase Intention (H4). Furthermore, Green Perceived Value (H5) also has a positive and significant influence on Purchase Intention, indicating its important role in shaping consumer behavioral intention.

In the indirect effect analysis, the results reveal that Green Perceived Value does not significantly mediate the relationship between Green Product and Purchase Intention (H6), as well as between Perceived Price and Purchase Intention (H7), since both indirect effects do not meet the required significance criteria. Therefore, mediation effects in this study are not supported.

Overall, from the seven hypotheses proposed, only three hypotheses are accepted (H2, H4, and H5), while four hypotheses are rejected (H1, H3, H6, and H7). These findings indicate that Perceived Price plays a more dominant role compared to Green Product in influencing Purchase Intention, either directly or indirectly through Green Perceived Value.

IV. DISCUSSION

Conceptually, the findings of this study are in line with the integration of the Theory of Planned Behavior (TPB), Product Attribute Theory, and Perceived Value Theory in explaining consumer behavior toward organic fertilizer products. In this framework, Green Product and Perceived Price represent external product attributes that influence consumer evaluation, Green Perceived Value reflects consumers' internal cognitive assessment, while Purchase Intention represents the final behavioral response.

The empirical results show that Green Product does not have a significant effect on Green Perceived Value (H1) and Purchase Intention (H3). This indicates that environmentally friendly product attributes alone are not sufficient to enhance consumers' perceived value or stimulate purchase intention. In the context of agricultural consumers, especially farmers, practical considerations such as effectiveness, productivity, and economic benefits tend to be more dominant than environmental attributes. This suggests that green product characteristics have not yet been fully recognized as a strong value-enhancing factor in organic fertilizer products.

In contrast, Perceived Price is proven to have a positive and significant effect on both Green Perceived Value (H2) and Purchase Intention (H4). This finding indicates that consumers place strong emphasis on price fairness and affordability when evaluating product value. When the price is perceived as reasonable and aligned with expected benefits, consumers tend to perceive higher value and develop stronger intentions to purchase. This confirms that economic considerations remain a key determinant in consumer decision-making.

Furthermore, Green Perceived Value has a significant positive influence on Purchase Intention (H5). This finding supports Perceived Value Theory, which emphasizes that consumers' purchase intention is strongly driven by their evaluation of the benefits received. In this case, green perceived value plays an important role in shaping positive behavioral intentions toward organic fertilizer products.

However, the mediation analysis reveals that Green Perceived Value does not significantly mediate the relationship between Green Product and Purchase Intention (H6), as well as between Perceived Price and

Purchase Intention (H7). This indicates that the indirect effect through perceived value is not strong enough to explain the relationship between these variables. In particular, Perceived Price tends to influence Purchase Intention more directly rather than through the mediation of perceived value.

Overall, the findings of this study suggest that economic factors, particularly price perception, play a more dominant role compared to environmental product attributes in influencing consumer purchase intention. Therefore, marketing strategies for organic fertilizer products should not only emphasize environmental benefits but also highlight affordability and economic value to enhance consumer acceptance.

V. CONCLUSION

This study shows that green product does not have a significant effect on green perceived value and purchase intention. These findings indicate that environmentally friendly product attributes are not the main factors influencing consumers in assessing value and determining purchase intention toward organic fertilizer products.

In contrast, perceived price has been proven to have a positive and significant effect on green perceived value and purchase intention, indicating that price suitability and affordability play an important role in consumers' purchasing decisions.

In addition, green perceived value has a positive and significant effect on purchase intention, which confirms that consumers tend to purchase products when they perceive valuable environmental and functional benefits from the product.

The main findings of this study show that green perceived value is not able to mediate the influence of green product and perceived price on purchase intention. This finding indicates that consumers are more likely to directly consider product quality, functionality, and price suitability rather than indirectly through perceived environmental value.

Overall, this study confirms the importance of perceived price and green perceived value in influencing purchase intention toward organic fertilizer products produced by BUMDes Maju Jaya. Theoretically, this study supports Perceived Value Theory and Theory of Planned Behavior (TPB) by showing that consumers' purchase intentions are influenced by perceived value and price suitability. However, this study also indicates that environmentally friendly product attributes alone are not sufficient to directly encourage consumers' purchase intention.

Practically, BUMDes Maju Jaya is advised to maintain competitive pricing strategies, improve product quality and effectiveness, and strengthen consumers' perceptions regarding the benefits and value of organic fertilizer products. In addition, companies should improve educational and promotional efforts related to environmental benefits so that consumers can better understand the added value of environmentally friendly products.

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