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ANALYSIS OF TOURISM STAKEHOLDERS' WILLINGNESS TO PAY FOR ENVIRONMENTAL CONSERVATION: A CASE STUDY OF PULAU WEH NATURE TOURISM PARK

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Abstract

This study examines the willingness to pay among tourism operators for environmental conservation within Pulau Weh Nature Tourism Park and delineates the factors influencing this willingness. A quantitative methodology was employed, utilizing structured interviews via questionnaires administered to 48 tourism operators, including tour guides, dive operators, hotel and guesthouse proprietors, as well as restaurant and café owners in Iboih Village. Stratified random sampling was employed to select participants from a population of 148 tourism operators.

Keyword: Willingness To Pay; Tourism Operators; Environmental Conservation; Pulau Weh Nature Tourism Park; Contingent Valuation

Abstrak

Penelitian ini mengkaji kesediaan membayar di kalangan pelaku usaha pariwisata untuk konservasi lingkungan di Taman Wisata Alam Pulau Weh dan mengidentifikasi faktor-faktor yang memengaruhi kesediaan tersebut. Metode kuantitatif digunakan, dengan melakukan wawancara terstruktur melalui kuesioner yang diberikan kepada 48 pelaku usaha pariwisata, termasuk pemandu wisata, operator selam, pemilik hotel dan penginapan, serta pemilik restoran dan kafe di Desa Iboih. Sampling acak berstrata digunakan untuk memilih peserta dari populasi 148 pelaku usaha pariwisata.
Kata Kunci: Kesediaan Membayar; Operator Pariwisata; Konservasi Lingkungan; Taman Pariwisata Alam Pulau Weh; Penilaian Kontingen

1. Introduction

Sabang City, located at the westernmost tip of Indonesia, has significant potential in marine and coastal tourism. Pulau Weh Nature Tourism Park is a conservation area with high ecological value, characterized by diverse marine ecosystems, including coral reefs and various unique fish species (Adibrata et al., 2023). Covering 1,274.18 hectares, the park was designated as a conservation area through the Decree of the Minister of Agriculture Number 928 KPTS UM 2 1982 and is managed according to Government Regulation Number 68 of 1998 concerning Nature Reserve Areas and Nature Conservation Areas (Aris et al., 2017).

The tourism sector in Pulau Weh Nature Tourism Park has experienced significant growth, with tourist arrivals increasing from 126,290 visitors in 2020 to 269,824 visitors in 2024 (BPS Kota Sabang, 2025). This growth is supported by tourism infrastructure concentrated in Iboih Village, which serves as the center of tourism activities and hosts 68 business units and 148 tourism stakeholders. These stakeholders include tour guides, dive operators, hotel owners, lodging providers, food stalls, and restaurants (BPS Kota Sabang, 2024). However, the rapid increase in tourism activities has the potential to generate negative environmental impacts, such as pollution and coral reef degradation. Previous studies indicate that while tourism contributes to economic development, it may also increase carbon emissions due to transportation activities and intensive resource consumption (Aliasuddin et al., 2025).

Environmental conservation within protected areas necessitates sustainable funding mechanisms that are not solely dependent on government budgets. Willingness to pay (WTP) constitutes a significant economic instrument for assessing the participation of tourism stakeholders in supporting conservation initiatives. Paudel et al. (2023) describe WTP as the maximum amount an individual is prepared to pay for environmental improvements or to prevent a decline in environmental quality as part of environmental economic valuation. This metric is crucial as it reflects the level of environmental concern articulated in monetary terms and has the potential to serve as a funding source for conservation programs, including the management of environmental services, the development of environmentally sustainable infrastructure, and community empowerment initiatives.

Previous studies have predominantly concentrated on the WTP of tourists or visitors (Sanjaya & Saptutyningsih, 2019; Simarmata et al., 2022; Hindayani et al., 2021). In contrast, research examining the WTP of tourism stakeholders who directly benefit from environmental services remains limited. Tourism stakeholders such as tour guides, dive operators, hotel owners, lodging providers, food stalls, and restaurants are highly dependent on environmental quality for the sustainability of their businesses. Therefore, this study aims to analyze the WTP of tourism stakeholders and the factors influencing it in Pulau Weh Nature Tourism Park. This research incorporates environmental knowledge as an additional explanatory variable, complementing demographic characteristics such as income, education, age, and number of dependents (Fauzi, 2014). The findings of this study are expected to support the formulation of collaborative participation-based policies and to serve as a reference for the development of conservation financing models in other tourism areas, in line with the Long Term Management Plan for Pulau Weh Nature Tourism Park.

2. Research Methods

2.1. Research Object, Time, and Location

The research focus pertains to the WTP among tourism stakeholders for environmental conservation within Pulau Weh Nature Tourism Park. The specific stakeholders targeted in this study include tour guides and dive operators, proprietors of hotels and lodgings, as well as owners of food stalls, eateries, and restaurants situated in Iboih Village, Sukamakmue District, Sabang City, Aceh Province. The selection of these categories is predicated on their direct interactions with tourists and their influence on the sustainability of tourism within the conservation area. The research was conducted from May to June 2025, utilizing questionnaire data collection over a period of five working days. Iboih Village was chosen as the research site due to its status as the epicenter of tourism activity in Pulau Weh Nature Tourism Park, and its considerable concentration of tourism stakeholders (Ridwan, 2025).

2.2. Data Collection Technique

The research adopted a quantitative survey methodology utilizing structured interviews with questionnaires, involving 48 respondents selected from a population of 148 tourism stakeholders at a 90% confidence level and a 10% margin of error. A stratified random sampling approach was employed, ensuring an equal distribution of 16 respondents within each category: tour guides and dive operators, hotel and lodging owners, as well as owners of food stalls, eateries, and restaurants (Etikan & Bala, 2017).

Primary data were collected through questionnaires covering demographic characteristics, environmental knowledge (6 Likert scale items), and willingness-to-pay values using the open-ended question method in the contingent valuation approach. Secondary data were sourced from the Sabang Tourism Office, BPS Kota Sabang (Statistics Indonesia), BKSDA Aceh (Natural Resources Conservation Agency), WCS (Wildlife Conservation Society) Indonesia Program, KSDAE Strategic Plan documents 2020–2024, and relevant previous research.

2.3. Data Analysis Technique

WTP values were analyzed utilizing the Contingent Valuation Method (CVM) with an open-ended question technique, subsequently aggregated to the population of tourism stakeholders for the purpose of estimating annual contribution, employing the formula outlined by (Erfrissadona et al., 2020):

$$TWTP = \sum_{i=1}^{n} WTP_i \left(\frac{n_i}{N}\right) P$$

Where:

TWTP = Total WTP
WTP_i = Individual WTP value of the i-th respondent
n_i = Number of samples at a certain WTP value
N = Total number of samples
P = Total population of tourism stakeholders in Pulau Weh Nature Tourism Park

i = Tourism stakeholder respondents willing to pay for environmental conservation

Factor analysis was performed utilizing multiple linear regression with WTP designated as the dependent variable. The independent variables included age (AGE), income (INC), number of dependents (FS), education (EDU), and environmental knowledge (ENV). Prior to the estimation of the model, standard assumption tests were conducted, which encompassed normality assessment using the Kolmogorov-Smirnov test (significance > 0.05), evaluation of multicollinearity (tolerance > 0.10 and Variance Inflation Factor (VIF) < 10), heteroscedasticity analysis based on residual patterns, as well as the linearity of relationships among the variables (Ghozali, 2016). The model's performance was appraised through the coefficient of determination (R^2), the F-test for assessing the overall significance, and the t-test for examining individual parameter significance at a 5% level of significance. The multiple linear regression equation employed in this study is based on the framework presented by Erfrissadona et al. (2020) and is expressed as follows.

$$WTP = \beta_0 + \beta_1 AGE + \beta_2 INC + \beta_3 FS + \beta_4 EDU + \beta_5 ENV + \varepsilon$$

Where:

WTP	= Willingness to pay
β_0	= Constant
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$	= Regression coefficients
AGE	= Age
INC	= Income
FS	= Family size/Number of dependents
EDU	= Education
ENV	= Environmental knowledge
ε	= Error term

3. Results and Discussion

3.1. Research Results

3.1.1 Analysis of Tourism Stakeholders Willingness to Pay (WTP)

a. Level of Respondents WTP

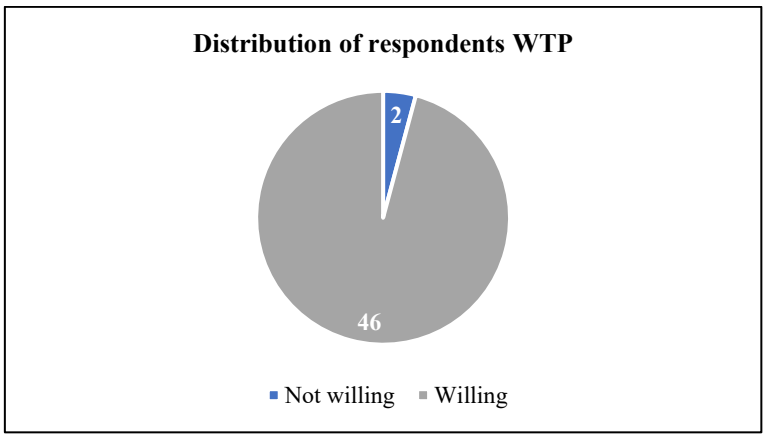

Figure 1. Distribution of respondents WTP
Source: Primary data analysis, 2025

Of the 48 respondents, 46 (95.8%) were willing to pay contributions, indicating a very high level of financial participation in environmental conservation. It is a good result for environmental conservation.

b. Distribution of Respondents WTP Values

Table 1. Distribution of Respondents WTP Values

Number of Respondents (People)	Percentage (%)	WTP Value (IDR)	Total WTP (IDR)
2	4.2	0	0
4	8.3	10,000	40,000
8	16.7	100,000	800,000
4	8.3	1,000,000	4,000,000

3	6.3	150,000	450,000
3	6.3	20,000	60,000
4	8.3	200,000	800,000
2	4.2	2,000,000	4,000,000
2	4.2	30,000	60,000
3	6.3	300,000	900,000
6	12.5	50,000	300,000
4	8.3	500,000	2,000,000
2	4.2	70,000	140,000
1	2.1	800,000	800,000
48	100		14,350,000

Source: Primary data analysis, 2025

A total of 46 out of 48 respondents (95.8%) expressed WTP, with highly varied amounts. The lowest WTP was IDR 10,000, while the highest was IDR 2,000,000. The most common WTP value was IDR 100,000 (16.7%), followed by IDR 50,000 (12.5%) and IDR 1,000,000 (8.3%). The total collected WTP from all respondents amounted to IDR 14,350,000.

c. Average WTP Value of Respondents

$$WTP = \frac{(WTP_1 \times N_1) + (WTP_2 \times N_2) + (WTP_3 \times N_3) + \cdots + (WTP_n \times N_n)}{n}$$

$$WTP = \frac{0+40{,}000+800{,}000+4{,}000{,}000+450{,}000+60{,}000+800{,}000+4{,}000.000+ 60{,}000+900{,}000+300{,}000+2{,}000{,}000+140{,}000+800{,}000}{48}$$

$$WTP = \frac{14{,}350{,}000}{48}$$

$$WTP = \text{IDR } 298{,}958.30$$

The average WTP value of IDR 298,958.3 per person per month shows that tourism stakeholders in Pulau Weh Nature Tourism Park are willing to spend about IDR 300,000 monthly to support environmental conservation

d. Annual WTP Value Aggregation

After estimating the average monthly WTP, the combined values were used to calculate the potential annual conservation fund. The monthly WTP as follows:

TWTP = EWTPi × P
TWTP = IDR 298,958.30 × 148 (population per year)
TWTP = IDR 44,245,828.4 × 12
TWTP = IDR 530,949,940.8

The annual WTP aggregation was calculated by multiplying the mean WTP value of IDR 298,958.30 by the total number of tourism stakeholders, which is 148 individuals, and by 12 months. This calculation yields a total annual WTP of IDR 530.95 million. This figure indicates the estimated potential contribution that may be collected to support conservation initiatives within Pulau Weh Nature Tourism Park.

3.1.2 Analysis of Factors Influencing WTP

A multiple linear regression approach was utilized to assess the factors affecting WTP, after classical assumption tests were performed to ensure the validity of the model.

a. Classical Assumption Tests

1) Linearity Test

Table 2. Linearity Test Results

Anova Table			
		F	Sig.
WTP * AGE	Deviation from Linearity	1.971	0.151
WTP * INC	Deviation from Linearity	1.932	0.139
WTP * FS	Deviation from Linearity	1.174	0.331
WTP * EDU	Deviation from Linearity	0.178	0.948
WTP * ENV	Deviation from Linearity	0.834	0.579

Source: Primary data analysis, 2025

Based on the data in Table 2, the linearity test shows that all independent variables have deviation from linearity significance values above 0.05, including age at 0.151, income at 0.139, number of dependents at 0.331, education at 0.948, and environmental knowledge at 0.579. These results suggest there are linear relationships between each independent variable and WTP, confirming that the regression model's linearity assumption has been met.

2) Normality Test

Table 3. Normality Test Results

Test Statistic	Value
Kolmogorov-Smirnov Z	0.073
Asymp. Sig. (2-tailed)	0.200

Source: Primary data analysis, 2025

The Asymp. Sig. Kolmogorov Smirnov value of 0.200, which is greater than 0.05, indicates that the model residuals are normally distributed. Therefore, the regression model satisfies the normality assumption and is suitable for further analysis.

3) Multicollinearity Test

Table 4. Multicollinearity Test Results

Variable	Tolerance	VIF	Remarks
X1_AGE	0.710	1.408	No multicollinearity
X2_INC	0.563	1.777	No multicollinearity
X3_FS	0.757	1.320	No multicollinearity
X4_EDU	0.687	1.456	No multicollinearity
X5_ENV	0.836	1.196	No multicollinearity

Source: Primary data analysis, 2025

Based on Table 4, all independent variables have tolerance values above 0.10 and VIF values below 10. These results indicate that there is no strong correlation between independent variables, thus there is no multicollinearity problem in the regression model.

4) Heteroscedasticity Test

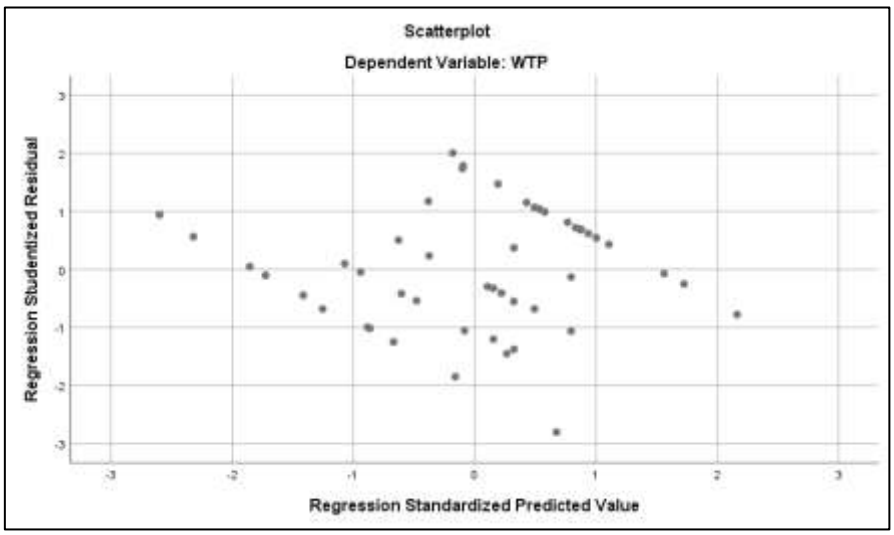

Figure 2. Heteroscedasticity Test Results
Source: Primary data analysis, 2025

Based on the scatterplot, the residual points are randomly scattered above and below the zero line and do not form a specific pattern such as funneling or waving. This indicates that the error variance is constant across all predicted values, thus there are no symptoms of heteroscedasticity.

b. Multiple Linear Regression Analysis

After all classical assumption tests were met, multiple linear regression analysis was conducted to examine the effects of independent variables on tourism stakeholders' WTP, including the coefficient of determination, the F test, the t test, and the interpretation of the regression model.

1) Coefficient of Determination (R^2)

Table 5. Coefficient of Determination (R^2) Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.738[a]	.545	.491	1.16484

Source: Primary data analysis, 2025

An R-squared value of 0.545 indicates that 54.5% of the variation in WTP is explained by age, income, number of dependents, education level, and environmental knowledge included in the regression model, while the remaining 45.5% is attributed to other factors outside the model.

2) F-Test (Simultaneous)

Table 6. F-Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	68.325	5	13.665	10.071	0.000
Residual	56.988	42	1.357		
Total	125.313	47			

Source: Primary data analysis, 2025

The regression results show an F-statistic of 10.071 with a significance level of 0.000, which is below the 0.05 threshold, demonstrating that the independent variables jointly exert a significant influence on WTP. Accordingly, the model is appropriate for explaining variations in WTP.

3) t-Test (Partial)

Table 7. t-Test Results

Variable	Coefficient (B)	Std. Error	β	t	Sig.	Remarks
Konstanta	-3.909	1.757		-2.225	0.031	
X1_AGE	0.104	0.252	0.051	0.411	0.683	Not significant
X2_INC	0.739	0.192	0.533	3.843	0.000	Significant
X3_FS	-0.488	0.175	-0.334	-2.794	0.008	Significant
X4_EDU	0.047	0.266	0.022	0.176	0.861	Not significant
X5_ENV	0.204	0.074	0.315	2.770	0.008	Significant

Source: Primary data analysis, 2025

The partial test results indicate that the variables of income, number of dependents, and environmental knowledge exert a significant influence on WTP ($p < 0.05$). Income and environmental knowledge demonstrate positive correlations, suggesting that higher income levels and enhanced environmental understanding are associated with increased WTP. Conversely, the number of dependents exhibits a negative correlation, implying that a greater dependent burden corresponds to a decreased propensity for WTP. Meanwhile, the variables of age and education do not display significant effects; therefore, statistically, they are not evidenced to have a direct role in determining variations in WTP within this model.

4) Multiple Linear Regression Model Analysis Results

$$WTP = (-3.909) + (0.104_{AGE}) + (0.739_{INC}) + (-0.488_{FS}) + (0.047_{EDU}) + (0.204_{ENV})$$

Where:
WTP = Willingness to Pay
AGE = Age
INC = Income
FS = Family size/Number of dependents
EDU = Education
ENV = Environmental knowledge

Based on the results of the multiple linear regression analysis, the aforementioned equation was derived. This equation demonstrates that, assuming other variables remain constant, a one-unit increase in income (INC) will augment WTP by 0.739 units, thereby establishing income as the most significant

determinant affecting tourism stakeholders' WTP. Environmental knowledge (ENV) also exerts a positive influence, with a coefficient of 0.204, indicating that enhanced understanding of conservation issues will elevate WTP. Conversely, the number of family dependents (FS) has a negative impact, with a coefficient of -0.488, suggesting that an increase in family dependents correlates with a decrease in WTP, likely due to budget allocation limitations. Meanwhile, age (AGE) and education (EDU) exhibit minimal and statistically insignificant effects on WTP, with coefficients of 0.104 and 0.047 respectively. The constant term of -3.909 indicates that if all independent variables were zero, WTP would be negative; however, this scenario is impractical, as in reality, all independent variables possess specific values that influence the level of WTP for environmental conservation among tourism stakeholders at Pulau Weh Nature Tourism Park

3.2. Discussion

3.2.1 Willingness to Pay (WTP) of Tourism Stakeholders in Pulau Weh Nature Tourism Park

The exceptionally high WTP, at 95.8%, exemplifies the collective awareness among tourism stakeholders concerning the significance of environmental preservation. This aligns with the findings of Adibrata et al. (2023), which indicate that tourism activities in coastal regions offer opportunities to conserve biodiversity and marine ecosystems. Moreover, tourism stakeholders acknowledge that the sustainability of their enterprises is heavily reliant on the environmental condition of Pulau Weh Nature Tourism Park.

The average WTP value of IDR 298,958.30 per month is regarded as significant for voluntary contributions. In comparison to the research conducted by Simarmata et al. (2022), which identified an average tourist WTP of IDR 9,450.00 per visit, the value observed in this study is substantially higher, attributable to the fact that tourism stakeholders have a direct economic dependence on the conservation of the area. Nevertheless, this value is lower than the findings of Hindayani et al. (2021) at Kamojang Nature Tourism Park, which reported an average WTP of IDR 51,887 per visit. This disparity can be attributed to variations in geographical context and respondent characteristics.

The annual aggregate WTP potential of IDR 530.95 million constitutes a significant finding, demonstrating that WTP-based financing mechanisms possess considerable potential as sustainable sources of local funding. These funds may be allocated towards coral reef rehabilitation, waste management, ecosystem monitoring, and environmental education, in alignment with the KSDAE Strategic Plan 2020-2024 (Ditjen KSDAE, 2020). This outcome corroborates Fauzi (2014) assertion that WTP serves as a crucial approach for quantifying individual contributions to environmental enhancement and for developing effective environmental policies.

The variation in WTP values, ranging from IDR 10,000 to IDR 2,000,000, reflects the heterogeneity of economic capacities among tourism stakeholders. The clustering within the range of IDR 50,000 to IDR 100,000 suggests a moderate financial capacity for the majority of tourism stakeholders, while the existence of respondents with high WTP (≥IDR 1,000,000) indicates stakeholders possessing substantial economic capability and concern. This observation aligns with the findings of Lestari (2019), who noted that WTP varies among individuals due to factors such as education level, income, and the necessity for environmental services.

3.2.2 Effect of Income on WTP

Income is the most significant factor ($\beta = 0.533$, $p = 0.000$) affecting tourism stakeholders' WTP. This aligns with Sanjaya & Saptutyningsih (2019), who found that income has a positive and significant impact on visitors' WTP for environmental conservation at Teluk Kiluan tourist attraction, where higher income leads to greater WTP. Tourism stakeholders with higher income have greater financial capacity to fund environmental conservation without hindering the fulfillment of basic needs.

This finding is also supported by Triyono & Nugroho (2023) who explain that tourism activities not only provide economic benefits but also encourage ecosystem conservation efforts. Tourism stakeholders with higher income tend to view environmental conservation as a long-term investment that can increase the attractiveness of tourism areas and the sustainability of business income. The practical implications of this finding indicate that WTP-based contribution mechanisms can be designed proportionally based on income level, so that tourism stakeholders with higher economic capacity can make larger contributions and support the creation of a fair and sustainable environmental conservation financing system.

3.2.3 Effect of Number of Dependents on WTP

The number of dependents has a significant negative effect ($\beta = -0.334$, $p = 0.008$) on WTP. Tourism stakeholders with more dependents tend to allocate a large portion of their income to meet basic family needs such as education, health, and daily consumption, so that financial capacity to contribute to environmental conservation becomes limited. This finding confirms the argument of Priambodo & Najib

(2016) who state that individuals with more dependents tend to face budget constraints that reduce their WTP for environmental conservation programs.

However, the results of this study show variation with other studies such as Sadikin et al. (2017) who actually found a positive effect of the number of dependents on WTP in Gunung Rinjani National Park. The policy implication of this finding is the need to design a flexible and progressive contribution system, where tourism stakeholders with more dependents can make contributions in smaller amounts or through more lenient payment schemes to increase participation while maintaining the principle of fairness in environmental conservation funding.

3.2.4 Effect of Environmental Knowledge on WTP

Environmental knowledge is the second most important factor ($\beta = 0.315$, $p = 0.008$) after income. This finding is consistent with research by Li & Nitanan (2022) who found that attitude toward the environment is the most significant factor influencing WTP at Kampung Kuantan Firefly Park, Malaysia. This result is also consistent with Chen (2013) who states that environmental knowledge can encourage sustainable behavior and willingness to support conservation efforts. In the context of Pulau Weh Nature Tourism Park, tourism stakeholders with high environmental knowledge understand that coral reef damage and marine pollution directly impact the attractiveness of the area and the continuity of their businesses.

This finding provides practical implications that increasing environmental knowledge through education programs, training, and socialization can be an effective way to increase tourism stakeholders' participation in conservation funding. López-Mosquera et al. (2014) reinforce that the combination of environmental knowledge and moral attitudes is a strong factor influencing WTP for environmental protection. Capacity building programs related to marine conservation, tourism impacts on ecosystems, and sustainable business practices can increase awareness and willingness to contribute among tourism stakeholders, in line with the KSDAE Strategic Plan 2020-2024 (Ditjen KSDAE, 2020).

3.2.5 Effect of Age on WTP

Age does not have a significant effect ($p = 0.683$) on WTP. This finding contradicts research by Hindayani et al. (2021) who found that age is the most significant factor influencing tourists WTP for environmental conservation at Kamojang Nature Tourism Park. This difference in results can be explained by differences in respondent characteristics, where this study focuses on tourism stakeholders (tour guides, dive operators, hotel and restaurant owners) who have direct economic dependence on the area, while Hindayani et al. (2021) examined the WTP of tourists who only visit briefly.

In the context of Pulau Weh Nature Tourism Park, the homogeneity of respondents' age range (19-60 years) which represents productive age with relatively similar levels of maturity and responsibility causes economic factors (income and dependents) and environmental knowledge to be more dominant than age in determining WTP. Zhang et al. (2021) add that although older generations may have higher income, older generations often show lower WTP for environmental conservation due to shorter time perspectives and stronger preferences for current consumption. This is reinforced by Aminrad et al. (2013) who found that environmental education strongly correlates with environmental awareness, regardless of age group. The practical implication is that programs to increase tourism stakeholder participation need not focus on age segmentation, but rather on increasing economic capacity and environmental knowledge which have proven to be significant.

3.2.6 Effect of Education on WTP

Education does not have a significant effect ($p = 0.861$) on WTP. This can be explained by the fact that specific environmental knowledge related to marine conservation is more influential than formal education. Tourism stakeholders with low formal education but who have direct experience and practical knowledge about environmental conservation can have high WTP. The specifically measured environmental knowledge variable may have already accommodated the awareness aspect that should be explained by education. This finding is consistent with Nabela et al. (2024) that the level of formal education cannot guarantee one's willingness toward WTP. The practical implication is that awareness programs should focus on specific environmental knowledge through practical training, workshops, and field experiences relevant to marine conservation in Pulau Weh Nature Tourism Park, rather than relying solely on formal education.

3.3. Relation to Research Objectives

This research answers both formulated objectives while filling the identified research gap. Unlike the majority of studies that examine tourists' WTP (Sanjaya & Saptutyningsih, 2019; Simarmata et al., 2022; Hindayani et al., 2021), this study explores the WTP of tourism stakeholders as economic actors who depend directly on environmental quality, an aspect that is still rarely studied. The first objective

was achieved through identification of WTP values and annual fund potential, while the second objective was answered by determining factors influencing WTP. Theoretically, this research expands the study of environmental economic valuation by positioning tourism stakeholders as subjects who have different motivations and constraints from tourists. Practically, the findings provide a basis for designing conservation financing mechanisms that are appropriate to the diverse economic capacities of tourism stakeholders, and demonstrate the importance of environmental education programs in increasing conservation participation.

4. Conclusion

This research identifies the average WTP value of tourism stakeholders in Pulau Weh Nature Tourism Park at IDR 298,958.30 per person per month with a participation rate of 95.8%, generating an annual conservation fund potential of IDR 530.95 million. Multiple linear regression analysis shows that income and environmental knowledge have a significant positive effect on WTP, while the number of family dependents has a negative effect, whereas age and education level are not statistically proven to have an effect. This finding confirms that conservation financing mechanisms based on tourism stakeholder participation have the potential to become a sustainable local funding source if designed fairly, progressively, and supported by increased environmental knowledge. The limitation of this research lies in the scope of study which is still contextual to one conservation area, so that the characteristics of WTP obtained are greatly influenced by local social and economic conditions. Therefore, future research is recommended to examine the WTP of tourism stakeholders in different conservation area contexts to enrich understanding of WTP variation in supporting environmental conservation.

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