

WILLINGNESS-TO-PAY ANALYSIS OF THE SITUTIRTAMARTA NATURAL TOURISM ATTRACTION, KUTASARI DISTRICT, PURBALINGGA REGENCY

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Abstract

This study aims to analyze visitors' Willingness to Pay (WTP) at the Situtirtamarta Natural Tourism Attraction, Kutasari District, Purbalingga Regency. The study employed a quantitative approach using a survey method. The research sample consisted of 100 respondents selected through an accidental sampling technique. Data were collected through the distribution of questionnaires to visitors of the tourism attraction. Data analysis was conducted using the Contingent Valuation Method (CVM) to estimate visitors' willingness to pay for improvements in facility quality and tourism destination management. The results showed that the average visitors' WTP value was IDR 4,020 per visit. Most respondents were willing to provide an additional contribution with a WTP value of IDR 5,000. These findings indicate that visitors are willing to make financial contributions to support the management and improvement of tourism facilities. The estimated WTP value can serve as useful information for destination managers in formulating management policies and planning facility improvements that align with visitors' needs and preferences. This study contributes to the development of tourism economic valuation research, particularly regarding the application of the Contingent Valuation Method (CVM) in measuring visitors' willingness to pay at natural tourism destinations.

Keywords: Willingness to Pay, Contingent Valuation Method, Economic Valuation, Natural Tourism, Situtirtamarta

INTRODUCTION

Tourism is one of the sectors that plays an important role in promoting economic growth, creating employment opportunities, increasing community income, and supporting regional development (Yunita & Hasri, 2022). Therefore, tourism can increase foreign exchange earnings, generate employment, and stimulate the growth of the tourism industry, which in turn can drive economic development (Purnomo, 2022). In addition to contributing to regional revenue and national foreign exchange earnings, the tourism sector also generates a multiplier effect on various other sectors, including transportation, trade, accommodation, and micro, small, and medium enterprises (MSMEs) (Spillane, 2004). Following the decline caused by the COVID-19 pandemic, Indonesia's tourism sector has shown a positive recovery trend. The increasing mobility of communities and the growing number of tourist visits indicate that tourism remains a sector with significant potential to be further developed as a source of regional economic growth. One natural tourism destination with considerable development potential is the Situtirtamarta Natural Tourism Attraction, located in Karangcegak Village, Kutasari District, Purbalingga Regency. This tourism destination is managed by the Kelompok Sadar Wisata (Pokdarwis) Tirta Mandiri and is known as a tourism attraction based on natural spring water resources that serve both as a tourist attraction and as a water source for the surrounding community. The uniqueness of its natural resources makes Situtirtamarta one of the tourism destinations with significant ecological and economic value for the local community.

In its management, Situtirtamarta continues to face various challenges, including limited supporting facilities, the maintenance of tourism infrastructure, and the need to improve service quality for visitors. Efforts to improve and develop tourism facilities require adequate financial support to ensure that the quality of the destination is maintained and capable of meeting visitors' needs. The implementation of entrance fees at tourism destinations aims not only to encourage visitors to enjoy nature but also to involve them in environmental conservation efforts, so that Willingness to Pay (WTP) can contribute to tourism management and the development of sustainable tourism (Nurulita et al., 2025). Therefore, information is needed regarding the extent to which visitors are willing to make financial contributions through entrance fees or additional charges to support the management and improvement of the tourism destination.

One approach that can be used to measure the economic value of a tourism destination is Willingness to Pay (WTP) analysis. WTP refers to the maximum amount an individual is willing to pay to obtain benefits from a good or service, including environmental and tourism services that do not have a direct market value (Fauzi, 2004). The Willingness to Pay (WTP) method represents an individual's willingness to pay for environmental conditions or for the valuation of natural resources and services with the objective of improving environmental quality (Yunita & Hasri, 2022). In the context of tourism, WTP analysis can be used to determine the extent to which visitors are willing to pay for improvements in the quality of tourism services and facilities. Information regarding WTP values is important for destination managers as a basis for determining appropriate entrance fee policies and as a consideration in planning tourism destination development.

The measurement of Willingness to Pay is commonly conducted using the Contingent Valuation Method (CVM), an economic valuation method that estimates the value of a good or service based on preferences directly stated by respondents through a hypothetical scenario (Davis, 1963). This method is widely used in environmental and tourism economic valuation studies because it is capable of capturing the value that society assigns to resources that are not directly traded in the market.

Previous studies on Willingness to Pay (WTP) in the tourism sector have shown that visitors' willingness-to-pay values can be used as a basis for decision-making in tourism destination management. Various studies have also demonstrated that visitors' socioeconomic characteristics, such as income level, age, education, and frequency of visits, can influence the magnitude of the WTP value. However, research on Willingness to Pay at the Situtirtamarta Natural Tourism Attraction remains very limited. In fact, information regarding visitors' WTP values is needed to support more effective and sustainable destination management.

Based on the foregoing discussion, this study aims to analyze the Willingness to Pay value of visitors at the Situtirtamarta Natural Tourism Attraction, Kutasari District, Purbalingga Regency. The findings are expected to provide information regarding visitors' willingness to pay, which can be used as a reference for destination managers in formulating management policies and planning the future development of the tourism destination.

LITERATURE REVIEW

Willingness to Pay (WTP) refers to the maximum amount an individual is willing to pay to obtain certain benefits or to maintain the quality of a good or service (Pebrianti et al., 2023). This concept is widely used in economic valuation studies to measure the value of resources that do not have a direct market price, including environmental resources and tourism services (Davis, 1963). In the context of tourism, WTP reflects visitors' willingness to pay a certain amount of money to enjoy, preserve, or improve the quality of a tourism destination.

The analysis of WTP is important because it provides an overview of the economic value that visitors assign to a tourism destination. The results of Willingness to Pay analysis can be used as an indicator of the extent of consumers' willingness to pay for a particular good or service (Pranata & Karmeli, 2024). This information can serve as a basis for determining entrance fee

policies, destination management strategies, and tourism facility improvement plans. The higher the WTP value held by visitors, the greater the potential revenue that can be utilized to support the sustainable management and maintenance of tourism destinations (Schmidt & Bijmolt, 2020). The concept of WTP is based on individual preferences regarding the benefits derived from a good or service. In the tourism sector, these benefits may include facility convenience, environmental attractiveness, safety, cleanliness, and recreational experiences obtained during visits. Therefore, WTP values are often used as indicators to assess the extent to which visitors value the existence and quality of a tourism destination. In welfare economics theory, WTP reflects the value that individuals assign to a particular good or service (Nurulita et al., 2025).

One of the most widely used methods for measuring Willingness to Pay is the Contingent Valuation Method (CVM). CVM is an economic valuation method that estimates the value of a good or service based on preferences directly expressed by respondents through a hypothetical scenario (Fauzi, 2004). Through this method, respondents are presented with a description of a particular condition or change in an object and are subsequently asked to state the maximum amount they are willing to pay. The CVM is widely applied in environmental and tourism studies because it is capable of measuring the economic value of resources that are not directly traded in the market. In tourism research, CVM is used to assess visitors' willingness to pay entrance fees, conservation fees, or additional contributions intended to improve the quality of tourism services and facilities. The results of these measurements can then be used to calculate the average WTP value, which reflects the level of economic appreciation that visitors assign to a tourism destination.

The application of the CVM in this study was intended to estimate the Willingness to Pay value of visitors to the Situtirtamarta Natural Tourism Attraction. The resulting value is expected to provide information regarding visitors' willingness to make financial contributions toward the management and development of the tourism destination and may serve as a reference for destination managers in making decisions related to pricing policies and tourism destination management.

RESEARCH METHODS

This study employed a quantitative approach using a survey method. The research was conducted at the Situtirtamarta Natural Tourism Attraction located in Karangcegak Village, Kutasari District, Purbalingga Regency. A quantitative approach was selected because the study aimed to analyze visitors' Willingness to Pay (WTP) for the Situtirtamarta Natural Tourism Attraction. The population of this study consisted of all visitors to the Situtirtamarta Natural Tourism Attraction. The sampling technique used was accidental sampling, in which respondents were selected based on visitors who happened to be encountered by the researcher at the study site and were willing to participate in the survey. A total of 100 visitors were included as respondents in this study.

The data used in this study consisted of both primary and secondary data. Primary data were collected through the distribution of questionnaires to visitors of the Situtirtamarta Natural Tourism Attraction. The questionnaire included questions regarding respondents' characteristics as well as their Willingness to Pay (WTP) for the management and improvement of the tourism destination. Meanwhile, secondary data were obtained from management documents, government publications, scientific articles, and various literature sources relevant to the research topic.

Data analysis was conducted using the Contingent Valuation Method (CVM). This method was employed to estimate economic value based on respondents' willingness to pay a specified amount under a hypothetical scenario presented in the questionnaire. Respondents were provided with several predetermined price options established by the researchers. The proposed bid amounts were determined based on the researchers' own assessment. The following are the bid values offered by the researchers.

Table 1. Bid Values for the Situtirtamarta Natural Tourism Attraction

No.	Bid Value	Benefits Obtained
1.	IDR 1.000	Improved waste management through the provision of organic and inorganic waste bins and the recruitment of two additional cleaning staff.
2.	Rp. 5.000	Improved waste management through the provision of organic and inorganic waste bins and the recruitment of two additional cleaning staff; the addition of new park benches, the development of photo spots, and the provision of secure storage lockers.
3.	Rp. 8.000	Improved waste management through the provision of organic and inorganic waste bins and the recruitment of two additional cleaning staff; the addition of new park benches and secure storage lockers; renovation of changing rooms to enhance comfort and maintenance; hospitality training for destination managers to improve service professionalism; and the installation of customer complaint service posters.

Source: Processed Primary Data, 2026

Through this approach, information regarding the magnitude of visitors' Willingness to Pay (WTP) for the Situtirtamarta Natural Tourism Attraction was obtained. The results of the analysis were subsequently used to calculate the average WTP value, which reflects visitors' level of willingness to pay. The average value was calculated using the following formula:

$$EWTP = \frac{\sum_{i=1}^n W_i}{n}$$

Keterangan:

EWTP = Estimated Mean *Willingness to Pay (WTP)* Value

W_i = *Willingness to Pay (WTP)* Value of the i -th

N = Number of Respondents/Samples

i = The i -th Respondent Willing to Pay ($i = 1, 2, 3, \dots, n$)

After obtaining the estimated mean *WTP* value, data aggregation was performed using the following formula:

$$TWTP = \sum_{i=0}^n WTP_i n_i$$

Where:

TWTP = Total *Willingness to Pay (WTP)*

WTP_i = *Willingness to Pay (WTP)* Value of the i -th Sample

N = Number of Samples Willing to Pay a Given *WTP* Value

I = Respondents Willing to Pay the Specified *WTP* Value

The collected data were subsequently analyzed descriptively to describe respondents' characteristics and the distribution of Willingness to Pay (WTP) values. The results of the analysis are presented in the form of tables and narrative descriptions to provide an overview of visitors' willingness to pay for the Situtirtamarta Natural Tourism Attraction.

RESULTS AND DISCUSSION

Visitors' Willingness to Pay (WTP) for the Situtirtamarta Natural Tourism Attraction

The Willingness to Pay (WTP) analysis was conducted to determine visitors' willingness to provide additional payments to support the management and improvement of facilities at the Situtirtamarta Natural Tourism Attraction. A hypothetical market scenario for WTP was developed to help respondents better understand the tourism conditions, thereby enabling each respondent to provide a more accurate WTP value (Simarmata & Hutabalian, 2024). All respondents were provided with information describing a hypothetical situation involving improvements in tourism facilities, such as enhanced cleanliness of toilets and changing rooms, improved environmental cleanliness, the provision of park benches, and other supporting facilities. Through this approach, respondents were asked to indicate their willingness to pay an additional fee as a contribution to improving the quality of the tourism destination.

The results showed that the majority of respondents were willing to make additional payments to support the management and improvement of tourism facilities. Table 2 presents the bid values proposed by the researchers and the number of respondents who were willing and unwilling to pay the proposed bid values.

Table 2. Respondents Willing and Unwilling to Pay

Nomor	Bid Value	Respondents Willing to Pay	Respondents Unwilling to Pay	Total
1.	IDR 1.000	3	8	11
2.	IDR 5.000	51	15	66
3.	IDR 8.000	18	5	23
	Total	72	28	100

Source: Processed Primary Data, 2026

Out of the 100 respondents included in this study, 29 respondents were not willing to pay an additional amount. The majority of respondents selected IDR 5,000 as their preferred contribution toward the conservation or development of the tourism destination. This finding indicates that the amount is considered affordable by most visitors and is perceived as appropriate relative to the benefits obtained during their visit to Situtirtamarta. Respondents who selected the bid value of IDR 1,000 did so because it was the lowest amount offered; therefore, an increase in the entrance fee of IDR 1,000 was not considered burdensome for visitors or respondents.

Based on the results of the analysis using the Contingent Valuation Method (CVM), the average Willingness to Pay (WTP) value of visitors was estimated. This value indicates that respondents perceive benefits from the tourism destination and are therefore willing to provide additional contributions to support the management and improvement of the Situtirtamarta Natural Tourism Attraction. The average Willingness to Pay value was calculated by multiplying the bid values accepted by respondents by the number of respondents willing to pay each bid amount and then dividing the result by the total number of respondents willing to pay. Table 3 presents the Willingness to Pay values that respondents were willing to pay.

Table 3. Total Respondents Willing to Pay

No.	Bid Value	Respondents Willing to Pay	Total (a × b)
1.	IDR 1.000	3	IDR 3.000
2.	IDR 5.000	51	IDR 255.000
3.	IDR 8.000	18	IDR 144.000
	Total	72	IDR 402.000

Source: Processed Primary Data, 2026

Based on the results above, the estimated mean *Willingness to Pay (WTP)* value was obtained as follows:

$$\begin{aligned} \text{EWTP} &= \frac{\text{IDR 402.000}}{100} \\ &= \text{IDR 4.020,00} \end{aligned}$$

The estimated mean Willingness to Pay (WTP) value was IDR 4,020.00 per visitor. This value can serve as important information for destination managers in considering future tourism management policies. Such information may be used as a basis for evaluating entrance fees and for planning facility improvement programs that align with visitors' preferences and financial capabilities.

The final step in the Contingent Valuation Method (CVM) is to determine the total or aggregate value. In this study, the total value represents the aggregate WTP of all respondents who were willing to pay and was obtained by multiplying the estimated mean Willingness to Pay (EWTP) and the initial entrance ticket price by the number of respondents willing to pay. Tables 4 and 5 present the total WTP values of respondents on weekdays and weekends, respectively.

Table 4. Total Willingness to Pay (WTP) Value on Weekdays

No.	Description	Amount (IDR)	Number of Respondents (Persons)	Total WTP (IDR)
1.	EWTP	IDR 4.020,00	72	IDR 289.440,00
2.	Weekday Entrance Fee	IDR 5.000,00	72	IDR 360.000,00
3.	Total	IDR 9.020,00		IDR 649.440,00

Source: Processed Primary Data, 2026

Table 5. Total Willingness to Pay (WTP) Value on Weekends

No.	Description	Amount (IDR)	Number of Respondents (Persons)	Total WTP (IDR)
1.	EWTP	IDR 4.020,00	72	IDR 289.440,00
2.	Weekend Entrance Fee	IDR 7. 000,00	72	IDR 360.000,00
3.	Total	IDR 11.020,00		IDR 793.440,00

Source: Processed Primary Data, 2026

Based on the calculations above, it is recommended that the destination management increase the entrance fee on weekdays to IDR 9,020, which would generate a total value of IDR 649,440 per 72 visitors. On weekends, the management may increase the entrance fee to IDR 11,020, which would generate a total value of IDR 793,440 per 72 visitors. In this study, Willingness to Pay (WTP) was used to determine the amount that visitors are willing to pay as a source of funding for the conservation of the Situtirtamarta Natural Tourism Attraction. Using the Contingent Valuation Method (CVM) approach, the estimated mean WTP value was IDR 4,020.00 per visitor, indicating that the Situtirtamarta Natural Tourism Attraction could increase its entrance fee by this amount as a potential source of financing. According to Khansa and Farida (2016), an increase in entrance fees may affect the number of visits because not all visitors are willing to pay higher ticket prices, particularly those with limited financial capacity.

The findings of this study are consistent with the concept of Willingness to Pay, which states that willingness to pay reflects the value or benefits perceived by individuals from a particular good or service. The study by Nurulita et al. (2025) explained that visitors are willing to pay more because they perceive the current entrance fee as highly affordable and are therefore willing to contribute through WTP as a form of participation in sustainable development, ensuring that the beauty of the natural tourism destination can be enjoyed by future generations.

In the tourism context, the greater the benefits perceived by visitors from a tourism destination, the greater their willingness to make financial contributions to maintain or improve the quality of that destination. These findings also support previous studies. Purnomo et al. (2024) demonstrated that visitors are generally willing to pay more when the funds collected are used to improve the quality of facilities, comfort, cleanliness, and the overall management of tourism destinations.

Overall, the results indicate that the Situtirtamarta Natural Tourism Attraction has the potential to obtain financial support from visitors through a Willingness to Pay (WTP) mechanism. This potential can be utilized as a source of information in destination management decision-making, particularly regarding efforts to improve the quality of tourism facilities and services in order to provide a better visitor experience. Failure to appropriately consider WTP values may result in lost revenue opportunities if prices are set too low or reduced demand if prices are set too high (Klingemann et al., 2019).

CONCLUSION

This study aimed to analyze visitors' Willingness to Pay (WTP) at the Situtirtamarta Natural Tourism Attraction, Kutasari District, Purbalingga Regency. The results showed that the average WTP value of visitors was IDR 4,020.00 per visit. This value indicates that visitors are willing to make additional contributions to support the management and improvement of tourism facilities. The majority of respondents were willing to pay an additional fee of IDR 5,000.00, indicating that visitors

place considerable importance on the quality of services and facilities available at the tourism destination.

The estimated WTP value can serve as important information for destination managers in considering policies related to destination management and quality improvement. Visitors' WTP values may be used to evaluate pricing policies and as a basis for planning facility improvement programs that align with visitors' needs and preferences. Visitors' willingness to provide additional contributions indicates that the Situtirtamarta Natural Tourism Attraction delivers perceived benefits to its visitors and therefore has the potential to obtain financial support for the management and maintenance of tourism facilities. However, any policy involving fee adjustments should be accompanied by improvements in service quality and facilities to ensure that the benefits perceived by visitors are proportional to the contributions they provide.

From a theoretical perspective, this study contributes to the development of economic valuation research in the tourism sector, particularly regarding the application of the Contingent Valuation Method (CVM) in measuring visitors' willingness to pay at natural tourism destinations. This study has several limitations, as it focuses on only one location, employs the CVM approach, which is susceptible to hypothetical bias, and does not examine other factors that may influence willingness to pay. Therefore, future research is recommended to expand the study area, apply alternative valuation methods, and analyze additional factors such as visitor satisfaction, loyalty, and perceptions of service quality.

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