

WILLINGNESS TO PAY OF THE QUALITY IMPROVEMENT AND DEVELOPMENT OF TIRTAMAYA BEACH IN INDRAMAYU

WILLINGNESS TO PAY PERBAIKAN KUALITAS DAN PENGEMBANGAN OBJEK WISATA PANTAI TIRTAMAYA DI INDRAMAYU

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ABSTRACT

This study aims to measure the willingness to pay of the visitors for any objects in the tourism place in Tirtamaya Beach and to perceive factors which affect the willingness to pay. This study uses primary data with number of respondents 270 as random sampling. Willingness to Pay can be estimated by using the Contingent Valuation Method (CVM) approach. Based on the analysis, the average value of willingness to pay per person is IDR 10,000 which is obtained by dichotomous choice. Factors that significantly influence the amount of Willingness to Pay for responses of the visitor are income and recreation budget that have a positive and significantly influence. Age and distance, has negative and significantly influence. While the level of education, visitor satisfaction and visiting hours insignificantly have no significant influence on Willingness to Pay.

Keywords: Willingness To Pay; Contingent Valuation Method; Tirtamaya Beach

INTRODUCTION

A. Background

Tourism is one of the most important economic sectors for a country. It is denoted as the second largest sector in the world after oil and gas. Initially, tourism sector cannot be separated from economic, social and environment aspect. Tourism can be defined as an activity of people or group taking journey and staying from one place to another which only takes in short period of time as an effort to encounter harmony and happiness from social, cultural,

natural, and scientific dimensions (Kodhyat, 1983 in Spillane, 1985). According to the Law Number 10 year 2009 concerning tourism. Tourism happens in various kind of activities which are supported by facilities and services that have been provided by local governments, local communities, tourists, and the central government.

Indonesia as an archipelagic country deserves natural and cultural diversity which certainly potential to attract local and foreign tourists. West Java is one of Province which has big potential in tourism sector, especially Indramayu Regency. Indramayu Regency is located on the coast, which is strategic to become a tourism destination. However, Indramayu Regency's potential has not properly developed like other West Java regions such as Bandung, Bogor, and Garut. Nevertheless, tourism destinations in Indramayu cannot be underestimated. Indramayu has attractive and interesting tourism objects such as Biawak Island, Karangsong Mangrove Forest, Tirtamaya Beach, Bali Beach (Balongan Indah), Tjimanoek Park, Bojongsari Waterboom, Indramayu Canal, Tugu Perjuangan Indramayu, Bumi Patra, and other historical places.

Table 1. 1
Number of Foreign and Domestic Tourists in West Java
Province in 2012-2016

Year	Number of Tourists		Total
	Foreign	Domestic	
2012	1.905.378	42.758.063	44.663.441
2013	1.794.401	45.536.179	47.357.580
2014	1.962.639	47.992.088	49.954.727
2015	2.027.629	56.334.706	58.362.335
2016	4.428.094	58.728.666	63.156.760

Source: BPS West Java Province, 2017

Table 1.1, shows an increasing number of tourist, for both foreign and domestic, in West Java since 2012 to 2016. It indicates the potential of West Java is tourism sector for foreign and domestic tourists. Then, it can be seen that every area which is visited by tourists will get positive impact for area development. The benefits of the tourism sector one of as a resource of income for regional development. Optimize the potential benefits, it is necessary to collaborate between the local and central government to maintain the preservation of natural resources in the region (Sasmi, 2016).

Table 1. 2
Growth of number of visitors Tourist Attractions in
Indramayu Regency

No	Name of tourist attraction	Number of visitors			
		2009	2010	2011	2012
1	Water Park Bojongsari	125.000	147.243.000	126.642	145.534
2	Pantai Tirtamaya	38.965	42. 630	33.345	52.300
3	Koloni Kera Banjar	8040	10.572	13.324	14.500
4	PulauBiawak	1670	185	230	370
5	Situ Bolang	22.53	5.000	55.000	56.420
6	Pantai Glayem	23.648	35.700	42.000	61.000
7	Pantai Karangsong	1032	11.457	12.400	10.522
8	Pantai Balongan Indah	12.300	23.400	24.637	30.465
9	WisataSindangAyu	24.647	27.500	31.000	29.840

Source: DISPORABUDPAR Indramayu Regency 2013

Table 1.2 shows us about the number of tourist in each tourist attractions in Indramayu since 2009 to 2012. Tirtamaya Beach experienced an increasing number of tourists since 2009, as many as 38,965 to 42,630 in 2012. However, in 2011 there was a decrease in the number of visitors which only reached 33,345 people, but increase again in 2012 reach to 52,300 people. These numbers indicated that Tirtamaya Beach has significantly developed based on the tendency of the realization number of visitors. Tirtamaya beach is \pm 60 km

far from the city of Indramayu, it is towards the city of Cirebon. Tirtamaya beach it can be reached by both private vehicles and public transportation.

The increasing number of visitors every year will affect the environmental conditions of tourist attractions. Moreover, if visitors do not aware to the sustainability of the tourist attraction. In general, the more the number of visitors, the more garbage is generated. Therefore, it is necessary to improve the facilities, infrastructure, and management of tourism objects so that the sustainability of Tirtamaya Beach can be obtained.

The limitation of attractive tourism places that can be visited in Indramayu region makes the majority of its citizens prefer to go out of town or visit tourist attractions in other places outside Indramayu. Although Indramayu is located in West Java, which is counted as part of Pasundan Land with its own most Indramayu citizens use Javanese language as language of instruction. Indramayu has cultural traditions, arts and natural potential that can be made as an attraction for tourism. Its natural resource potential consists of agriculture, fisheries and petroleum management.

Tourism development needs to be supported not only for the economic orientation. Tourism has a very big role in ensuring the balance of national culture so the national pride can arise as a competitive advantage in the global era. The development of national cultural and tourism activities, as one of the manifestations of Pancasila and the preamble of 195 constitution of republic Indonesia as a vision and mission that will guide all parties in developing

Indonesian culture and tourism coordinated in facing the challenges of global change and competitiveness.

RESEARCH METHODOLOGY

This study uses primary data. Collected using questionnaire and interviews with several visitors around the Tirtamaya Beach. Determination or retrieval of all research objects is done by random sampling.

The sample calculation is determined using the formula of Isaac and Michael (Sugiono, 2007) which is shown as follows:

$$S = \frac{\lambda^2 \cdot N \cdot P \cdot Q}{d^2(N - 1) + \lambda^2 \cdot P \cdot Q}$$

Where:

λ^2 : error rate of 5%

P = Q: 0.5

d: 0.05

N: population

S: number of samples

$$S = \frac{(1.645)^2(19900)(0.5)(0.5)}{(0.0025)(19900 - 1) + (1.645)^2(0.5)(0.5)}$$

$$S = \frac{49.7475 + 0.676506}{13462.47}$$

$$S = \frac{50.42401}{13462.47}$$

$$S = 266.9854$$

$$S = 267$$

Research Model

A. Contingent Valuation Method

The Contingent Valuation Method (CVM), which is a survey method, which directly interviews visitors about willingness to pay for improving the quality and development of Tirtamaya beach.

B. Binary Logistic Regression

Then this study was carried out empirically the formula of the Logistic Regression Model which was compiled based on the following equation:

$$\log\left(\frac{p}{1-p}\right) = \beta + \sum_{j=1}^n \beta_j X_j + \sum_{k=1}^m \gamma_k D_k + e$$

$$\log\left(\frac{p}{1-p}\right) = \beta + \beta^1 \text{Age} + \beta^2 \text{income} + \beta^3 \text{edu} + \beta^4 \text{distance} + \beta^5 \text{freq} + \beta^6 \text{utilitas} + \beta^7 \text{Cost} + \beta^8 \text{Time} + e$$

Where:

p = Willingness to pay

For quality and development improvements ($p = 1$, if the respondent accepts payment for environmental improvements; $1 - p = 0$, if the respondent does not need to pay for quality improvement and development)

$1 - p =$ Not willing to pay for environmental improvements $p / ((1 - p)) =$ Odds Ratio (Risk)

X_j = vector free variable ($j = 1, 2, \dots, n$)

D_k = vector dummy variable ($k = 1, 2, \dots, m$)

α, β_i and $\gamma_k = e =$ the estimated parameters of the random logistic function.

RESEARCH RESULTS AND DISCUSSION

1. Descriptive Statistics Analysis

Descriptive Variable Statistics

	N	Min	Max	Mean	Std. Deviation
Age	270	15	58	29.11	10.545
Income	270	1000	2500	1515.74	289.729
level of education	270	6	16	12.32	2.116
Distance	270	7	75	37.62	13.575
frequency of visits	270	1	4	1.65	0.725
visitor satisfaction	270	0	1	0.82	0.383

recreation budget	270	10	150	54.30	26.339
visiting hours	270	1	4	2.05	0.567
WTP	270	0	1	0.74	0.441
Valid N (list wise)	270				

Classification Accuracy Test

Observed		WTP		Percentage
		Disagree	Agree	
WTP	Disagree	3	68	26,29
	Agree	4	195	73,71
Overall Percentage				100

Nagelkerke R Square Test Results

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	288,961 ^a	0,079	0,115

Hosmer and Lemeshow Test Results

Step	Chi-square	Df	Sig.
1	6,194	8	0,626

Simulta's Significance Test Results

		Chi-square	Sig.
Step 1	Step	22,151	0,005
	Block	22,151	0,005
	Model	22,151	0,005

Significance and Coefficient of Regression

		B	Wald	Exp (B)
Step 1 ^a	Age	(0.015) -0.025	2.704	0.975*
	Income	(0.001) 0.001	3.482	1.001*
	Level of education	(0.075) 0.069	0.842	1.071
	Distance	(0.013) -0.022	2.824	0.978*
	Frequency visit	(0.229) -0.398	3.009	0.672*

visitor satisfaction (1)	(0.396) -0.863	4.753	0.422**
Recreational budget	(0.009) 0.017	4.127	1.017**
Visiting Hours	(0.278) 0.214	0.591	1.238
Constant	(1.436) -0.576	0.161	0.562

Description: Dependent variable: *dummy* WTP; () shows the standard error coefficient; * Significance at level 10% ($\alpha = 0, 10$); ** Significance at level 5% ($\alpha = 0.05$); *** Significance at level 1% ($\alpha = 0.01$).

CONCLUSION, LIMITATIONS OF RESEARCH AND SUGGESTION

A. CONCLUSION

1. The willingness to pay of tourist of Tirtamaya beach is IDR 10.000. It comes from a questioner-based research with 270 respondents. One hundred and ninety nine of respondents stated that they are willing to pay as much as IDR 10.000 which has to be used for quality improvement and attraction development of Tirtamaya beach. However 71 respondents have satisfied with what have been provided now and argued that IDR 5.000 has been expensive enough.
2. Age variable has negative and significant influence on people's Willingness to pay for quality improvement and development of Tirtamaya beach. The older the age, the higher the awareness of people to prioritize their needs of entertainment in the sake of gaining family's happiness which makes them set a side price consideration.
3. Income variable has positive and significant influence on people's Willingness to pay for quality improvement and development of Tirtamaya beach. Visitor's whose high income level is willing to spend

more money as their contribution to preserve Tirtamaya beach. Since the visitors love to go to Tirtamaya beach to spend their time with family.

4. Education variable level has no significant influence on people's Willingness to pay for quality improvement and development of Tirtamaya beach. High educated visitors are willing to pay more than visitors with lower education level. Because, visitors with higher education level are interested in further discussion about environmental conservation.
5. Distance variable level has negative and significant influence on people's Willingness to pay for quality improvement and development of Tirtamaya beach. Visitor attends to consider the distance of tourism site because it implies the cost value.
6. Frequency of visit variable level has no significance influence on people's Willingness to pay for quality improvement and development of Tirtamaya beach. As the more visitors visit the beach, they will face boredom so prefer to find other tourism attractions.
7. Visitor satisfaction variable level has no significance influence on people's Willingness to pay for quality improvement and development of Tirtamaya beach. This finding can be used as input for managers of Tirtamaya beach to improve the facilities that can attract people to re-visit Tirtamaya beach.
8. Recreational budget variable level has positive and significant influence on people's Willingness to pay for quality improvement and development

of Tirtamaya beach. Visitors with high recreational budget tend to be willing to pay higher fee than visitors who have lower recreational budget.

9. Visiting hours variable level has no significance influence on people's Willingness to pay for quality improvement and development of Tirtamaya beach. Based on this research, the more people visit Tirtamaya beach the higher their willingness to pay for quality improvement and development of Tirtamaya beach.

B. LIMITATIONS OF RESEARCH

1. This research has only eight independent variables. It is suggested for further research to have more variables to achieve more comprehensive result.
2. This research has 270 respondents, where the more respondent the better.
3. Contingent Valuation Method (CVM) has been applied as the analysis method. It has emergence of bias as the weakness. Therefore, further research applied in differ analysis methods, and the research comparison could be appear.

C. SUGGESTION

From the results of the study, the authors provide several suggestions to improve the development of tourist attraction of Tirtamaya Beach in Indramayu Regency, including the following:

1. It is suggest for tourism sector in Indonesia to be able to minimize travel fares so that tourists can enjoy facilities at low rates. It also will reduce the

cost of travel to tourism objects and will increase the frequency of visitors to Tirtamaya Beach attractions.

2. It is expected that the manager of tourism sector can promote the Tirtamaya Beach tourism object using social media managed by the manager or cooperate with the media publisher and local social media accounts, this will broaden the community's insight regarding the existence of Tirtamaya Beach tourism objects.
3. It is expected that visitors can maintain order, security, and especially cleanliness when traveling to Tirtamaya Beach Tourism Object to be more comfortable to visit and enjoy the beauty of the Attractions.

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