

ECONOMIC VALUATION OF LAKEY BEACH GREEN TOURISM, DOMPU REGENCY: TRAVEL COST METHOD

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ABSTRACT

The purpose of this research is to calculate the economic value and to examine whether travel costs, individual income, travel time, age, and education affect the frequency of visit to the Lakey beach tourist objects. This research was conducted in Dompu Regency, West Nusa Tenggara Province in 2017.

This study uses primary data with interview method to 100 respondents. The calculation of economic value is done by approach of travel cost method to Lakey beach tourist objects in Dompu Regency. Analyzer in this research is multiple linear regression. The results showed that the economic value of Lakey beach tourist objects in Dompu Regency is IDR 190,192,740,117.18. Travel cost, average income per month, travel time, age, years of education tourists affect the frequency of visiting to the Lakey tourist object in Dompu Regency.

Keywords: *Economic Valuation, Travel Cost Method, individual income, travel time, age, years of education, visiting frequency.*

INTRODUCTION

Tourism is one of the important things for a country. By tourism, a country or more, especially the local government where the tourist attraction is getting income from the income of every tourist attraction. The development of the tourism sector in a country will attract other sectors to develop as well because its products are needed to support the tourism industry, such as agriculture, livestock, plantation, people's crafts, increased employment opportunities, and so forth. Chains whose activities are related to the tourism industry are capable of generating foreign exchange and can also be used as a means to absorb labor so as to reduce unemployment and increase employment rates.

In tourism activities, there are some reviews that can be perceived benefits. From an economic point of view, the tourism sector can provide regional income derived from taxes, user charges, fees, and increase foreign

exchange for the country due to foreign tourists visiting. People around the place of tourism can also generate income that can support their economy. From a social point of view, the tourism sector can provide employment opportunities for the needy workers. This can reduce the number of unemployment cases very much. From a cultural perspective, the tourism sector can introduce local culture and customs of the region, so as to increase the community to preserve and uphold domestic culture in order to get to the international scene.

In this era of globalization, nature tourism is one of the most popular travel options. Visible changes of travel interest from mass tourism (mass tourism) that rely on 5S (sun, sea, sand, scenery, and sex) leads to environmentally sound tourism and sustainable tourism. This is indicated by the changing interest in the international tourism market that leads to environmental tourism activities in the natural tourist areas of Africa and Asia Pacific (Dirawan and Darmawan, 2006). But with the increasing number of economic development of a country, it must be faced with issues concerning aspects of nature and environmental sustainability. The shrinking availability of natural resources, the existence of pollution and the transition of green land into economic land are examples of development that are not in harmony with the sustainability of the natural environment.

Therefore, a concept of environmentally sound development or sustainable development is required in accordance with a fundamental approach to implementing development objectives without reducing environmental risks and the use of natural resources (McIntyre, 1993). By paying attention to the sustainability of the environment and nature that is not only oriented toward the present generation but also the future. Sustainable development is essentially aimed at seeking equitable development by taking into account the main pillars of economy, social, and environment.

Sustainable tourism developed in certain geographical areas can be a fundamental tool in economic development and poverty reduction in certain areas. It is also possible to create a business that sells goods and services through areas that have culture and environmental resources, offering low-scaled opportunities to create employment opportunities especially for women and youth (World Tourism Organization 2002). The concept of sustainable development is known as a model called green economy. Green economy model is known as the concept of development that is

environmentally friendly (economy to green requirements) in other words to prevent adverse impact on the surrounding environment.

According to the United Nations Environmental Program (UNEP, 2011) the green economy is an economy that results in improved social welfare and social justice for humans and is able to reduce environmental risks and ecological scarcity. Green economy model in the concept of sustainable development can be applied one of them on the tourism sector. Tourism is one of the sectors that do not escape from the application of sustainable development of nature conservation (sustainable).

West Nusa Tenggara (NTB) Province is a province that has a strategic location and has many tourist attractions that offer natural beauty, which is still maintained naturalness and authenticity. West Nusa Tenggara Province is one of the destinations of national and international tourist destinations because many tourist attractions have its own peculiarities. Examples are include three exotic islands on Lombok island commonly referred to as Three Gili (Gili Air, Gili Meno, and Gili Trawangan), Mata Jitu Waterfall, Kenawa Island, Lakey Beach, Sade Traditional House, Senggigi Beach, Satonda Island and others. Each region in NTB that has these different potentials and advantages, in its tourism development prioritizes the natural and cultural richness of each region.

One of the regions in NTB that contributes to the income in the tourism sector is Dompu Regency. Dompu Regency is located in the middle of the island of Sumbawa which borders Sumbawa and Saleh bay in the west, Bima regency in the north and east, and the Indian Ocean in the south. The atmosphere in Dompu Regency in some areas is still quite cool and fresh, but in some other areas there is a barren atmosphere like savanna, and also the location of the area close to the beach so many tourist attractions that offer an atmosphere of natural beauty. This nature-based attraction is what attracts tourists to visit such places as frequently visited destinations. The following is the table data showing the average number of visitors to the tourist attraction in Dompu Regency.

Table 1.1

**The Data of Tourist Visits on Tourism Objects in Dompu Regency
2012-2016**

Years	Tourist visits		Total
	Domestic Tourists	Foreign Tourists	

2012	40.569	5.366	45.935
2013	47.131	5.488	52.619
2014	119.759	6.068	125.827
2015	156.297	6.510	162.807
2016	177.264	7.503	184.767

Source: Statistics of Culture and Tourism of Dompu Regency

From table 1.1 above shows that the data of tourist visits from the Department of Tourism during the last 6 years in Dompu Regency increased every year. Data in 2012 amounted to 45,935 visits. And data in 2016 as many as 184,767 tourist visits.

Table 1.2
Comparison of Visitor Attraction in Dompu Regency in 2016

No.	Name of research object in Dompu Regency	Number of visitors
1.	Madaprama	17.689
2.	Ria Beach	32.107
3.	Lakey Beach	38.203
4.	Felo Janga Beach	11.065
5.	Tambora Mountain	16.035
6.	Satonda Island	22.503
7.	Hodo Beach	5.098
8.	Matompo Hill	4.072
9.	Nisa Pudu Island	2.188
10.	Savana of Sarae Nduha	31.807

Source: Statistics of Culture and Tourism of Dompu Regency

From table 1.2 above shows that the most visited tourist attraction is Lakey Beach with the number of visitors as much as 38,203 compared with other tourist objects in Dompu Regency. And the least visited tourist attraction is Nisa Pudu Island as much as 2,188. This is because the island of Nisa Pudu is located in the middle of the sea with a distance of approximately 1 hour journey, and the only transportation that can be used to reach this place only by using a small bot owned by local fishermen who live on the coast of Soro.

It also indicates that tourism of Dompu Regency has potential, and can provide great opportunities for increasing local and community income. By reading the growth rate of tourist visits, it is necessary a concept of

sustainable tourism development (green tourism) so that tourists remain interested to visit the tourist destinations in Dompu Regency. Judging from the most number of visitors and this potential would make the author became interested in researching about the existing Lakey beach tourism object in Dompu Regency. It requires the involvement of the Local Government, the actors of the tourism sector and the participation of surrounding communities in developing and optimizing the potential of natural tourism while maintaining the principles of tourism development that are responsible for the preservation of the local environment and culture. So that the existence of tourism sector in Dompu Regency can be used continuously.

In terms of valuing this environment, it is necessary to know or suspect the value of environmental goods and services. Davis and Johnson (1987) provide definitions of valuations that are activities related to the development of concepts and methodologies to predict the value of goods and services. Travel cost method is used to estimate the economic value of tourist area based on the valuation given by each individual or society from the cost incurred to visit a Tourist Objects. Thus, the willingness to pay people to visit this location can be expected based on various travel expenses. In assessing the tourist object in Dompu Regency, it is used non-market valuation technique because the tourism object in this regency includes tourism object which has no market value. The non-market valuation technique is a technique based on the concept of willingness to pay (WTP) to measure benefits by providing an economic valuation of environmental goods that also have the typical characteristics of public goods (Turner et al., 1994). This non-market valuation technique uses TCM method (Travel Cost Method) so that later will be able to know the value of direct use from tourists to Tourism Object in Dompu Regency.

Based on the phenomena above this research aims; 1) to know the cost of travel influences the number of visits at the Lakey beach in Dompu Regency 2) to know the education influences the number of visits at the Lakey beach in Dompu Regency 3) to know the income affects the number of visits at Lakey beach in Dompu Regency 4) to know time travel affects the number of visits at Lakey beach in Dompu Regency 5) to know the age affects the number of visits at Lakey beach in Dompu Regency 6) to know the perceptions of respondents affect the number of visits at Lakey beach in Dompu Regency 7) measuring the magnitude of economic value seen from consumer surplus and total economic value Lakey beach in Dompu Regency seen from travel expenses and seen from Contingent Valuation Method.

LITERATURE REVIEW

THE CONCEPT OF GREEN TOURISM

According to the United Nations Environmental Program (UNEP), it defines the green economy as an economy that improves human welfare and social justice, while significantly reducing environmental risks and ecological scarcity. Ecological green economy is a model of economic development based on sustainable development and ecological economic knowledge.

THE CONCEPT OF SUSTAINABLE DEVELOPMENT

The concept of sustainable development by the Ministry of Environment (1990) development that is basically more economic oriented) can be measured sustainability based on three criteria, namely:

- 1) No waste of natural resource use or depletion of natural
- 2) No pollution and other environmental impacts;
- 3) Activities should be able to increase the useable resources or replaceable resource.

DEFINITION OF TOURISM

In a broad sense, tourism is a recreational activity outside the domicile to escape from routine work or seek other atmosphere. As an activity, tourism has become an essential part of the basic needs of advanced societies and a small portion of the people of developing countries. Tourism is growing in line with social, cultural, economic, technological and political changes (Damanik and Webber 2006).

TOURISM IMPACT

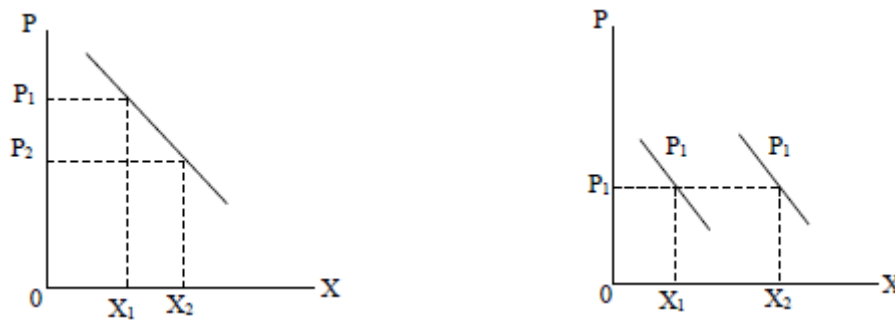
According Faizun (2009) the impact of tourism is the changes that occur to the community as a component in the environment before there are tourism activities and after the tourism activities. According to Cohen 1984, the impact of tourism on socio-economic conditions of local communities there are eight major groups namely: Income of foreign exchange, Income of society, Employment opportunities, Price, Distribution of benefits, Ownership and control, General development, Government revenue.

THE DEMAND OF TOURISM

The demand for tourism is the total number of people traveling to use tourism facilities and services in places far from where they live and work

(Mathieson and Wall, 1982). The demand for tourism affects all sectors of the economy, including: individuals (individuals), small and medium enterprises, private companies, and government sectors (Sinclair and Stabler, 1997).

In Economy, the demand for tourism uses the elasticity approach of demand or income in describing the relationship between demand and expectation level or demand with other variables. This can be explained in curves as follows:



a. Factors Of Price Against Demand

b. Factors Of Non-Price Against Demand

Source: Ariyanto (2005)

FIGURE 2.1
Demand Curve of Tourist

The picture above shows the changes that occur on the demand curve. In panel a, changes along the demand curve apply when the price of the requested item becomes higher or decreases. While in panel b, the demand curve moves to the right or to the left if there is a change in the changes to the demand caused by non-price factors. As if the price of other goods, the income of buyers and various other non-price factors change, then the change will cause the demand curve to move to the right or left.

ECONOMIC VALUATION

The general economic valuation can be defined as basically an effort to provide quantitative value to goods and services produced by natural resources and environment regardless of whether market value is available or not (Susilowati, 2002 in Salma and Indah, 2004). The root of the concept of assessment is actually based on neoclassical economics (Neoclassical

Economic Theory) which emphasizes the satisfaction or needs of consumers. In this thinking it is argued that the assessment of each individual on goods and services is nothing but the difference between the willingness to pay and the cost for the demand for goods and services.

TRAVEL COST METHOD (TCM)

The Travel Cost Method is the basic concept of travel cost method that is the time and expense of travel expenses (Travel Cost Expenses) that must be paid by the visitors to visit the tourist spot which is the price for access to tourist attractions (Garrod and Willis, 1999). That sense is called Willingness To Pay (WTP) which is measured based on the difference in travel costs.

PREVIOUS STUDIES

Based on a study conducted by Yuwana (2010) entitled "Analysis of Visitation of Tourism Object of Dieng Plateau Area of Banjarnegara District" with the number of visits to Dieng Plateau attractions as the dependent variable and travel costs to Dieng Plateau attractions, travel to other tourist objects (Baturaden), visitor age, average income per month and distance are independent variables. The research conducted by Tazkia (2012) at Kalianget Hot Water Tourist Attraction is one of potential tourism object in Wonosobo regency because it has the second largest visitor number after Dieng Tourism Object. The objective of this research is to know the factors that influence the demand of the visit to Kalianget Hot Water Bath by using Individual Travel Cost Method method. Research from Mwebaze and Bennett (2011) entitled "valuing botanic collections: a combined travel-cost and contingent valuation survey in Australia. Economic value of biological collections in three major botanical gardens in Australia is estimated using the Travel Cost (TC) and Contingent Valuation (CV) method. The study used a cut-off data model to control the nature of integers and non-negative deductions from visits to botanical gardens in Canberra, Melbourne and Sydney.

HYPOTHESIS

- There is a negative influence of travel costs on the number of visits of individual tourists.
- There is a positive influence of education on the number of visits of individual tourists.
- There is a positive influence of Income on the number of visits of individual tourists.

- There is a negative influence of time travel to the number of visits of individual tourists.
- There is a positive influence of age on the number of visits of individual tourists.

RESEARCH METHODOLOGY

RESEARCH SUBJECT

Objective of this research is the visitors of Lakey beach. This study is conducted in Dompu regency, West Nusa Tenggara province. This research is began from July until August 2017.

DATA TYPES

Primary data is data obtained directly from sources related to research on the state of tourism in Lakey beach. Data obtained from interviews with respondents in the form of the manager, and filed questionnaires to tourists at the location of the object. Based on interviews and questionnaires, the research can determine the conditions in developing green tourism on Lakey beach and strategies in developing green tourism in Dompu Regency.

SAMPLING TECHNIQUE

Random sampling method is a method of sampling that gives equal opportunity for each element or member of the population to be elected as a random sample. The advantages of this sampling method is very easy sample selection, sample selection unit is one of a kind, misclassification can be avoided simply by picture outline of the population and a sample design the most simple and easy. The samples used in this research object is using random sampling method.

Due to the number of visitors of natural tourism object in Dompu Regency is not known yet, the sample in this research use incidental random sampling technique, that is sample research technique based on chance, anyone who accidentally met with the researcher and according to as data source, it can be used as sample. According Sugiyono (1997) said that the definition of the sample is part of the number and characteristics possessed by the population.

DATA COLLECTION TECHNIQUE

1. Literature study that is one of the way to get information or data with reading some literature or journal that related with the problem that is being sought.
2. Documentation means search Finding and collecting existing data, whether in books, magazines and newspapers, the Department of Tourism and Culture, BPS or data available on the Internet and other sources that related to this research.
3. Interview technique is how to collect data by interviewing respondents directly to be sampled to obtain the required data by distributing a list of questions to respondents who have prepared before.
4. Questionnaire technique is a structured question form given to the respondent in accordance with the research problem.

DEFINITION OF OPERATIONAL RESEARCH VARIABLES

1. Research Variables

Variables used in this study are dependent and independent variables. Dependent variable is the factors influenced by independent variable. While the independent variable is the factor that influence the dependent variable. Dependent variable used in this research is number of visits.

2. Operational Definition

The operational definition describes the method used by the researcher to measure the variables to be used. Many of the above-mentioned variables used in this study are as follows: number of visits, travel cost, income, time, age, perception of respondents.

HYPOTHESIS TEST AND DATA ANALYSIS

In this research, the number of tourist visit in Dompu Regency is estimated by using the Travel Cost Method which includes return trip transportation from residence to tourist object, consumption cost, parking fee, entrance fee, toilet entrance fee, and Miscellaneous expense. Primary data processing using computer software SPSS 15 and Microsoft Excel 2007.

1. Regression Analysis

This research uses multiple regression analysis method, with quantitative qualitative data approach. To analyze the amount of data of individual visits to tourism object in Dompu Regency that is influenced

by the cost of travel to tourism object, years of education, income, time required, and visitor age visitor perception are formulated as follows:

$$\text{Visit} = f(\text{TC}, \text{Edu}, \text{Inc}, \text{Time}, \text{Age}, \text{Persp})$$

From the above formulation, the model for multiple regression analysis using quantitative qualitative data approach is as follows:

$$\text{Visit} = \beta_0 + \beta_1\text{TC} + \beta_2\text{Edu} + \beta_3\text{Inc} + \beta_5\text{Time} + \beta_6\text{Age} + \beta_7\text{Persp} + e$$

2. The classical assumptions test

a. Multicollinearity test

In the beginning, multicollinearity means the existence of a perfect or definitive linear relationship (correlation), among some or all of the explanatory variables of the regression model. Precisely the term multicollinearity refers to the existence of more than one definite linear relationship and the term of collinearity with respect to the existence of a linear relationship. But this distinction is rarely noticed in practice, and multicollinearity with respect to both cases (Gujarati, 2003).

b. Heteroscedasticity test

The heteroscedasticity test aims to test whether in the regression model there is an unequal Variance of the residual one observation to the other. If the Variance of the residual one observation to another observation remains, then it is called homoscedasticity and if different is called heteroscedasticity. A good regression model is homoscedasticity or no heteroscedasticity (Ghozali, 2002).

3. Hypothesis Test

a. T test

Test t is a form of partial regression coefficient test used to determine the influence of each independent variable in influencing the change of bound variable. In this test it is assumed that other independent variables are in constant state.

b. F test

F test is a test together to determine the influence of independent variables to the dependent variable.

c. R² test

Determination R² is used to measure the proportion of variation of variables described by the independent variables;

$$R^2 = \frac{\frac{\sum e_i^2}{N-K}}{\sum y_i^2 (N-1)}$$

The value of R^2 is located $0 \leq R^2 \leq 1$. The closer to 1, the better the model. Coefficient of determination is to know how big percentage of independent variable to dependent variable expressed in percentage form.

4. Consumer Surplus

According to Nichoson (2002), the consumer surplus is the value an individual receives for consumption that exceeds what is paid or the value one is willing to pay to obtain the right to consume something at the current price. Consumer Surplus/CS for linear demand function can be formulated as follows (Fauzi, 2006)

$$CS = \frac{\text{mean } V^2}{2\beta}$$

CS : Consumer Surplus

V : Average number of visits

β : Coefficient of travel cost

5. Calculation of Economic Valuation

In this study to calculate the economic valuation used the method of individual travel costs (Individual Travel Cost Method), namely by calculating the value of consumer surplus per individual per year.

To calculate the value of consumer surplus, use the formulation as follows:

$$TCS = CS \times N$$

TCS : Total Consumer Surplus

CS : Consumer Surplus

N : Population tourist visitors 1 year

RESULT AND ANALYSIS

1. Descriptive Variables

TABLE 5.1
Statistics Description Variable

Variables	Definition	Mean	Max	Min	Std. Deviation
VISIT	Level Of Visit Tourists	3.57	7	1	1.387
TC	Travel Cost	91030.00	200000	40000	38437.002

TIME	Time Required	45.02	85	15	18.465
INC	Income	1435400.00	3000000	450000	517301.506
AGE	Age	26.43	55	13	9.932
EDU	Years of Education	11.80	16	6	2.474

Source: primary data processed

From Table 5.1 can be explained that the level of tourist visits from 100 respondents have an average of 3.57 with a maximum value is 7 times of visit and the minimum value is 1 visit. Based on the research that has been done about the level of tourist visits of Lakey beach in Dompu Regency, so the result of research variables statistics description are above.

2. Classical Assumptions

a. Multicolienarity Test

TABLE 5.2
The Value of Tolerance and VIF

Variable	Definition	Collinearity Statistics	
		Tolerance	VIF
TC	Travel Cost	0.485	2.063
TIME	Time Required	0.540	1.852
INC	Income	0.597	1.676
AGE	Age	0.476	2.099
EDU	Education Level	0.446	2.242

Source: Primary data processed

Based on the above calculation, we could know that none of the variables that have tolerance value less than 0.1 which means there is no correlation between independent variables. The Variance Inflation Factor (VIF) calculation results also show that no independent variable has a VIF value greater than 10. Therefore, it can be concluded that there is no multicollinearity among independent variables in the regression model.

b. Heteroscedasticity Test

TABLE 5.3
Glejser Test

Variables	t-value	Sig.	Conclusions
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TC	-.553	0.581	There is no heteroscedasticity
TIME	-.548	0.585	There is no heteroscedasticity
INC	1.460	0.148	There is no heteroscedasticity
AGE	0.279	0.781	There is no heteroscedasticity
EDU	0.598	0.552	There is no heteroscedasticity

Source: Primary data processed

Based on table 5.3 based on the table above is known that the value of significant from all independent variables are more than 0.05, it means there is no heteroscedasticity in this regression model. So we can conclude that the regression model is fit for use.

3. Multiple Regression Analysis

a. Regression Factor Analysis Result

TABLE 5.4
Multiple Regression Analysis Result of Number of Visits

Variables	Coefficients (Beta)	Sig.
(Constant)	6.660	.000
TC	-1.28E-006	.010
TIME	-0.055	.000
INC	1.44E-007	.036
AGE	-0.023	.009
EDU	0.032	.030

Source: Primary data processed

Based on the above table the regression equation factors that affect the number of visits can be written as follows:

$$\text{VISIT} = 6.660 - 1.28\text{E-}006 \text{ TC} - 0.055 \text{ TIME} + 1.44\text{E-}007 \text{ INC} - 0.023 \text{ Age} + 0.032 \text{ EDU} + e$$

The above equation can be explained as follows:

- Travel Cost (TC) which has a negative coefficient of - 1.28E-006 means that if the cost of visitor travel increases then the number of individual visits will decrease. However, if travel costs are reduced then the number of individual visits will increase also with the assumption of ceteris paribus. The probability value (sig) of 0.010 or less than 0.05 indicates that this variable has a significant effect on the number of individual visits.
- Time (TIME) has a negative coefficient of -0.055 means that if the time required the longer the number of individual visitors will

be reduced. However, the less travel time demanded by the respondents, the number of individual visits will increase with the assumption of *ceteris paribus*. A probability value (sig) of 0.000 or less than 0.05 indicates that this variable has a significant influence on the number of individual visits.

- Income (INC) has a negative coefficient of 1.44E-007 means that if visitor revenue increases then the number of individual visits will decrease. Similarly, if visitors Income visitors low number of individual visits will increase also with the assumption *ceteris paribus*. A probability value (sig) of 0.036 or less than 0.05 indicates that this variable has a significant influence on the number of individual visits.
- Age has a negative coefficient of -0.023 means that if the older the visitor age the number of individual visits will be reduced. However, the younger the visitor's age will increase the number of individual visits with the assumption of *ceteris paribus*. The probability value (sig) 0.009 or less than 0.05 indicates that this variable has a significant influence on the number of individual visits.
- Education (EDU) has a coefficient of 0.032 means the higher the visitor's education the number of individual visits will increase. Similarly, if the education of visitors the lower the number of visits decreased the assumption *ceteris paribus*. The probability value (sig) 0.030 or less than 0.05 indicates that this variable has no significant effect on the number of individual visits.

b. Coefficient of Determination (R²)

TABLE 5.5
Coefficient of Determination (R²)

R	R ²	R ² Adjusted
0.879(a)	0.773	0.761

Source: Primary data processed

Based on the results of the data that has been done can be known the number R square or coefficient of determination is 0.773 which means that 77.3% variation of the number of individual visits can be explained by the variation of travel costs, education, individual income, distance, age and perceptions of respondents. While the rest (100% - 77.3%) = 22.7% is explained by other factors outside this study.

c. Simultaneous Effect Test (F Test)

TABLE 5.6
The Simultaneous Effect Test (F)

F	Sig.	Information
63.896	.000(a)	Significant

Source: Primary data processed

The probability value at F arithmetic is 0,000 or less than 0.05 so H_0 is rejected. This shows that all independent variables of travel, education, individual income, distance, age, and respondent's perceptions used in the model together affect the dependent variable (number of visits).

d. Discussion

- The Influence of Travel Cost on the Number of Visits Individual Visitors Lakey Beach Tourism Object in Dompu Regency.

In the results of this study, the magnitude of travel costs incurred by visitors of Lakey beach has a negative effect on the number of individual visits. If the individual travel costs are higher than the number of individual visits, it will decrease with the assumption of *ceteris paribus*. This is in accordance with the initial hypothesis and in accordance with the demand theory of tourism factors that influence tourism according to Ariyanto in Kartika (2015) which states that the high price in a tourist destination, will give impact to tourists who will travel, so the demand for tourism will be reduced. Vice versa, if the price of a tourist destination is low then the demand for tourism will increase.

In this case the cost of travel is the price incurred by visitors to travel on the shores of Lakey. Where included in the cost of travel is the cost of fuel, consumption costs, entrance fees, parking fees, toilet costs and other expenses incurred during travel and travel on the shore of Lakey. The higher the costs will be the lower or decrease the number of individual visitors visit Lakey beach. This can be seen through the results of questionnaires interviews filled by respondents, where the more travel costs incurred will be the lower the number of tourist visits.

In addition, those who are high-income and married will be more burdensome to use the income to meet the daily needs because it already has a family dependents. To travel they will invite family members, the number of family members who travel will also increase the cost of travel is spent. Increased travel costs will reduce the desire for travel. Therefore the cost of travel will negatively affect the number of visits to Lakey beach tourism object. Not only that, the more distant a tourist attraction will be the cost of fuel for vehicles, consumption costs and other costs are greater. The greater the travel costs incurred caused a decrease in the number of tourist visits to Lakey beach Tourism Object.

The results of this study support and in accordance with the results of previous research conducted by Tazkia (2012) where the results showed that the variable travel costs negatively and significantly affect the demand for Kalianget Hot Water Tour of Wonosobo regency. In addition, the results of research conducted by Aprilian (2009) also showed similar results. Where the variable cost of travel has a significant negative effect on the number of individual visits Gunung Situ Mountain Nature Park. It is stated there that the cost of travel is a very important factor in the decision to conduct a recreational activity. The result of Igunawati research (2010) also showed the same result, that is the variable of travel cost negatively and significantly to the demand of Tirta Reservoir Tourism Reservoir Cacaban Tegal Regency. In a study conducted by Mujianto (2012) also obtained the result that travel costs negatively and significantly affect the number of visitors visit Turtle Bay visitors. In addition, research conducted by Badar (2012) also shows that the variable cost of travel negatively affect the intensity of visiting Borobudur Temple Tourism Object.

Nevertheless, there are also studies whose results do not fit this study. As research conducted by Rukmana (2012) which shows the result that the variable cost of travel has no significant effect on the number of visits to the Object Tour Padang Gardu Ketep.

- The Influence of Time on the Number of Visits Individual Visitors Lakey Beach Tourism Object in Dompou Regency.

Time required has a negative affect with the number of individual visits. The longer the travel time from the visitor's residence will decrease the number of visits. This result is consistent with the initial hypothesis which states that there is a negative and significant influence between of travel time required to the number of individual visits.

This time variable relates to the distance between the residence and the tourism object. The farther away a person's place of residence, the lower the visit rate and vice versa for tourists whose residence is adjacent to the place of recreation, then the level of visits to the recreation place will be higher (Hufschmidt et al., 1987).

Those who distance and time travel far and have known how the state of the road it will think that will only feel tired on the road. So the number of visits will be less. But for those who distance and time travel closer it will be more frequent visits because it is accustomed also with the state of the road. In addition, long distances and long travel time will definitely cost for transportation and fuel high so that the desire to visit will be reduced. Conversely, close proximity and less travel time will cost less transportation and fuel, so they will visit more often.

- Influence of Income on the Number of Visits Individual Visitors Lakey Beach Tourism Object in Dompou Regency.

Based on the results of data, it can be concluded that the individual income has a positive influence on the number of individual visits on Lakey beach. The higher of visitor's income will impact the higher the number of visits. This is consistent with the existing theory, that is, if the income of a person is high, the tendency to choose tourist destination will be higher, and vice versa if the individual income is low then the tendency to choose tourist destination will be lower (Ariyanto in kartika (2015). In addition, in Sinclair and Stabler (1997) mentioned that the science of economics determines the demand for tourism is influenced by income and price Hypothesis which states that

income has a positive and significant effect on the number of visits of individual tourists are answered truth. It is estimated that the higher the visitor's income, the higher also the money set aside for the tour so that will increase the number of visitors visit Lakey beach.

The results of this study is supported by research conducted by Mujianto (2012), where in the results of his research indicates that individual income has a positive influence with the number of Turtle Bay individual visits. Mentioned there that the needs of tourism is not a basic requirement, so someone will travel if you have more income, thus the economic factor will be very influential. Another study conducted by Badar (2012) also showed the same results, namely the average monthly earnings have a positive effect on the intensity of visiting Borobudur Temple Tourism Object. In the Aprilian study (2009) also showed the same results, where the income has a positive and significant impact on the number of tourist visits. Mentioned there that it can happen because the average visitor TWA Situ Gunung has a relatively low income so that in line with the increase in visitor revenue it will tend to increase visits. In addition, in a study conducted by Ermayanti (2012) also showed the same results that income has a positive and significant impact on the level of visits per 1000 inhabitants.

In contrast to research conducted by Igunawati (2010), the results of his research indicate that income does not affect the amount of demand to Object Tour Tirta Reservoir Cacaban Tegal regency.

- Influence of Age Against the Number of Visits Individual Visitors Lakey Beach Tourism Object in Dompu Regency.

The results showed that visitor age had negative effect on the number of tourist visit. The older the visitor's age the desire or the number of tourist visits will decrease, and vice versa. This result is not in accordance with the initial hypothesis that age has a positive and significant effect on the number of individual tourist visits.

This can occur because it is estimated that the older the visitor's age the need is increasing so the desire for travel will decrease. In addition, from the results of filling the questionnaire it is known that the average number of respondents is aged under 25 years old. The younger have a more adventurous spirit than those who are older and the power they have is stronger than those who are older.

Smith (1996) in Aprilian (2009) states that youths have the characteristic of always looking for something new, adventurous in the face of challenge and wandering nature. The results of this study are supported by research conducted by Aprilian (2009) which shows the results that age negatively affect the number of visits to TWA Situ Gunung.

Nevertheless there are different research results, ie research conducted by Igunawati (2010) also shows the result that age does not affect the amount of demand to Object Tourism Tirta Reservoir Cacaban Tegal regency. In addition, in the research Mujianto (2012) also shows the results that age does not affect the number of individual tourists visit Teluk Penyu Cilacap regency.

- Effect of Education Level on the Number of Visits Individual Visitors Lakey Beach Tourism Object Dompu Regency.

Level of education visitors Lakey Beach tourism object in Dompu Regency has a positive relationship with the number of individual visits. The higher the education level of the last respondent the higher the number of tourist visits. The hypothesis that education has a positive influence on the number of individual visits proved true. This kind of thing can happen to visitors Tourism Object in Dompu because it is estimated that the higher the education the more stress they are in thinking, thus requiring refreshing to a quiet and beautiful place. In addition, for those who already work with higher education status then they will feel fatigue in working. Therefore it is necessary for them to calm the mind and recreate in order to refresh their energy and mind. Therefore the higher the level of last education will be the higher the number of tourist visits.

The results of this study in accordance with research conducted by Huda (2012) which shows that the same results with this study that education has a positive effect on tourism demand in South Sulawesi Province.

However, this study is not in accordance with research conducted by Mujianto (2012), where in his research education does not affect the number of visits of individual tourists. In addition, a study conducted by Ermayanti (2012) also showed different results that the level of education negatively affect the level of visits per 1000 inhabitants.

4. Calculation of Economic Valuation

TABLE 5.7
The Result of Regression Test of Travel Cost Variable

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	6.660	.333
Travel Cost	-1.28E - 006	.000

Source: Primary data processed

Consumer surplus can be obtained from the equation below:

$$CS = \frac{mean V^2}{2\beta}$$

$$= \frac{3.57^2}{-2(-0.00000128)} = 4,978,476.5625$$

Economic value can be obtained from the equation below:

$$\begin{aligned} \text{Economic value} &= \text{Consumer surplus} \times \text{Total tourist visitors 1 year} \\ &= 4,978,476.5625 \times 38,203 \\ &= 190,192,740,117.18 \end{aligned}$$

CONCLUSION

Based on the results of research that has been done, it can be taken conclusion as follows:

1. Travel costs have a negative and significant effect on the number of individual visits. If the individual travel costs are higher than the number of individual visits will decrease. The majority of visitors are students and students who have not been able to find their own money. The amount of travel costs with a low allowance will be taken into

consideration. Education has positive and significant effect. The higher the last education of the respondents the higher the number of tourist visits. The atmosphere that is served by Lakey beach tourism objects in Dompu Regency which is based on nature and beautiful natural scenery is an appropriate place to refresh the mind. The higher level of education will make them stress, the most people stress will more thinks that they want to travel. As for those who have worked, Lakey beach tourism object in Dompu Regency based on nature and green is a suitable place to release their fatigue in work. Income also has a positive and significant effect on the number of visits. If the visitor's income increases then the number of individual visits will increase. Beautiful tourist attractions in Lakey beach will attract many tourists. In addition to beautiful places, Lakey beach also offers cheap tourist attractions based on the cost of questionnaires by respondents. The travel time from the respondent's residence to the Tourism Objects in Dompu Regency has a negative and significant influence on the number of visits. The further distance and time required to the places, it will lower the number of visits. The longer travel time required will spend a long time and more energy, visitors will only feel fatigue on the road. Not only that, time and distance will cost a lot of fuel. So it will reduce the number of visits. Age negative affects the number of visits. The older the visitor's age, the number of visits will decrease. The older the visitor's age the more so the number of visits will decrease. Young people have more adventurous spirit than those who are old.

2. Visitors of Lakey beach tourist object in Dompu Regency are mostly between the ages of 20 years to 30 years old, visitor income mostly ranges from IDR 1,000,000 to IDR 2,000,000, whereas the work of visitors is dominated by other work outside Governmental Employees, Private Employees, Housewife, Entrepreneur, and Students, other work such as trade, farm workers, fishermen and others. The last level of education that has been taken by the respondents is dominated by graduates at senior high school level or 12 years of schooling, and the travel time required by respondents from residence to tourist sites mostly ranges over 30 minutes.

SUGGESTIONS

1. Travel costs can be reduced by reducing transportation costs and retribution to the tourist object. Local government could be expected to

cooperate with transportation entrepreneurs to provide transportation accessible to tourist attractions.

2. The cost of time can be reduced by means of improving the means and infrastructure such as road access to the Objects become more smoothly so that the time required to the places more quickly arrive.
3. The coefficient of age variable shows a negative sign, so it can be concluded that the increasing of one's age, the lower the number of tourist visit to the tourism object, and vice versa. Most visitors are young tourists, so it is expected that the managers of tourist object can use market segmentation for young visitors so that the income of tourist attraction can increase.
4. Lakey beach need improvement of facilities and infrastructure, quality and facilities of tourist place. Such as the addition of toilet facilities, expanded and better worship places, more adequate parking spaces, and food stalls that provide more menu choices. It is hoped that this improvement will add more visitors' comfort to attract more visitors, not only young ones but older visitors as well.
5. To maintain the natural conservation of Lakey beach, it is better if visitors and tour managers can always maintain cleanliness, it is expected that managers can provide trash. The addition of the trash is intended to make visitors more aware of the cleanliness of the tourist attractions and could give a clean impression, thus increasingly adding to the beauty of the scenery. So that visitors who have visited will have the desire to come back to the tourist attractions.
6. Promotion of Lakey beach also need to improved. Besides of "word of mouth" promotion can be done by online. If seen from the web address of Tourism Office of Dompu Regency, almost no new posts. Promotions that offer natural beauty and sustainability are increasingly enhanced. To be better known by the public that Dompu Regency has a beautiful natural attractions.
7. In the development of tourist sites not only the role of visitors and managers are needed. Government support is urgently needed. Winding roads, narrow roads, and roads are damaged inhibiting the development of this tourist attraction. Therefore, improvement and extension of the road needs to be done. If the road has been repaired it will be even better if given public transportation. To make it easier to access visitors. Thus, to get to the tourist location will be easier. Good cooperation between visitors, managers and the government will have a good impact on the progress of tourist attractions and will promote the economy.

REFERENCES

- United Nations Environmental Program (UNEP). (2011). E-Waste. "Take Back System", Volume III.
- Abdullah, M. F. (2005). *Dasar-dasar Manajemen Keuangan, Edisi Kedua*. Malang: Penerbit Universitas Muhammadiyah.
- Aprilian, R. (2009). Analisis Permintaan dan Surplus Konsumen Taman Wisata Alam Situ Gunung dengan Metode Biaya Perjalanan. *Skripsi*. Bogor: Fakultas Ekonomi, Institut Pertanian Bogor.
- Ariyanto. (2005). *Ekonomi Pariwisata*. Jakarta: Penerbit Rineka Cipta.
- Badar, H. (2012). *Estimasi Nilai Ekonomi Wisata Warisan Budaya Candi Borobudur*. Yogyakarta: Universitas Muhammadiyah Yogyakarta.
- Charles R. Goeldner, J. R. (2009). *Tourism: Principles, Practices, Philosophies*. New Jersey: John Wiley and Sons.
- Cohen, E. (1984). *The Sociology of Tourism: Approches, Issues, and Finding*. California: Annual Review of Sociology.
- Damanik, J., & F. Weber, H. (2006). *Perencanaan Ekowisata: dari Teori ke Aplikasi*. Yogyakarta: Andi.
- Davis, L., & Johnson, K. (1987). *Forest Management. Third Edition*. McGraw-Hill Book. New York: Company.
- Dijiono. (2002). Valuasi Ekonomi Menggunakan Metode Travel Cost Taman Wisata Hutan di Taman Wan Abdul Rachman, Propinsi Lampung. In *Makalah Pengantar Falsafah Sains*. Bogor: Institut Pertanian Bogor.
- Fauzi, A. (2004). *Ekonomi Sumberdaya Alam dan Lingkungan*. Jakarta: PT. Gramedia Pustaka Utama.
- Fauzun, M. (2009). Dampak Perkembangan Kawasan Wisata Pantai Kartini Terhadap Masyarakat Setempat di Kabupaten Jepara. *Thesis Program Pasca Sarjana*. Semarang : Universitas Diponegoro.
- Gamal, S. (2002). *Dasar-Dasar Pariwisata*. Yogyakarta: Penerbit Andi.

Garrod, G., & Willis, K. G. (1999). *Economic Valuation of The Environment; Methods and Case Studies*. United Kingdom: Edward Elgar Publishing Limited.

Ghozali, I. (2002). *Aplikasi Analisis Multivariate dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.

Ghozali, I. (2006). *Aplikasi Analisis Multivariate Dengan Program SPSS*. In *Cetakan Keempat*. Semarang: Badan Penerbit Universitas Diponegoro.

Gujarati, D. (2003). *Ekonometri Dasar*. In *Terjemahan: Sumarno Zain*. Jakarta: Erlangga.

Huda, N. (2012). *Analisis Faktor yang Mempengaruhi Permintaan Masyarakat Kota Makassar Terhadap Objek Wisata di Sulawesi Selatan*. *Skripsi*. Sulawesi Selatan: Universitas Hassanuddin Makassar.

Hufschmidt, M. (1987). *Lingkungan Sistem Alami dan Pembangunan (Reksohadoprodjo, penerjemah)*. Yogyakarta: UGM Press.

Igunawati, D. (2010). *Analisis Permintaan Objek Wisata Tirta Waduk Cacaban*. *Skripsi*. Semarang: Fakultas Ekonomi, Universitas Diponegoro.

Kartika, H. (2015). *Kembangkan Menoreh, Kulon Progo Butuh Perencanaan Strategis*. Retrieved Maret 23, 2017, from [Harian Jogja.com](http://harianjogja.bisnis.com/read/20150618/1/584/kembangkan-menoreh-kulonprogo-butuh-perencanaan-strategis): <http://harianjogja.bisnis.com/read/20150618/1/584/kembangkan-menoreh-kulonprogo-butuh-perencanaan-strategis>

Khan, H. (2006). Willingness to Pay for Margalla Hills National Park: Evidence from the Travel Cost Method. *The Lahore Journal of Economics*, 43-70.

Kusudianto, H. (1996). *Perencanaan Pembangunan Destinasi Pariwisata*. Jakarta: UI Press.

Mathieson, A., & Wall, G. (1982). *Tourism: Economic, Physical and Social Impact*. New York: Long Man Group.

Mayor, K., Scott, S., & Richard, S. (2007). *Comparing the Travel Cost Method and Contingent Valuation Method - An Application of Convergent Validity Theory to the Recreational Value of Irish Forest*. *Working Paper No. 190*. ESRI.

- McIntyre, G. (1993). *Sustainable Tourism Development Guide for Local Spain*: C.H.N. Meditheek.
- Mill, R., & Morrison. (1985). *The Tourism System*. New Jersey: Prentice-Hall Inc.
- Mwebaze, P., & Bennett, J. (2011). valuing botanic collections: a combined travel-cost and contingent valuation survey in Australia . *Journal on Annual ARRES National Conference*.
- Pendit, N. S. (1999). Ilmu Pariwisata : Sebuah Pengantar Perdana. In *Edisi Revisi. Cetakan 6*. Jakarta: PT Pradya Paramita.
- Pitana, I. G. (2009). *Pengantar Ilmu Pariwisata*. Yogyakarta: Andi.
- Priyanto, D. (2013). *Mandiri Belajar Analisis Data Dengan SPSS*. Yogyakarta: Mediakom.
- Salma, & Indah. (2004). Analisis permintaan Objek Wisata Alam Curug Sewu, Kabupaten Kendal dengan Pendekatan Travel Cost. *Jurnal Dinamika Pembangunan*, Vol 1 No. 2/Des 2004.
- Saptityningsih, E., & Selviana, R. (2017). Valuing Ecotourism of a Recreational Site in Ciamis District Of West Java, Indonesia. *JEJAK: Journal of Economics and Policy*.
- Sinclair, M. T., & Stabler, M. (1997). *Economics of Tourism*. London: Routledge.
- Sugiyono. (1997). *Statistik Untuk Penelitian*. Bandung: Alfa Beta.
- Suparmoko, M. (2000). *Keuangan Negara Dalam Teori dan Praktek*. Yogyakarta: BPFE Yogyakarta.
- Susilowati, I. (2002). *Metode Valuasi Lingkungan, Modul ekonomi Sumber Daya Alam dan Lingkungan (ESDAL)*. Semarang.
- Sutamihardja. (2004). Perubahan Lingkungan Global. *Perubahan Lingkungan Global; Program Studi Pengelolaan Sumber Daya Alam dan Lingkungan Sekolah Pascasarjana*. Bogor: Institut Pertanian Bogor (IPB).
- Tazkia, F. O. (2012). Analisis Permintaan Obyek Wisata Pemandian Air Panas Kalianget, Kabupaten Wonosobo dengan Pendekatan Travel Cost.

Skripsi S1. Semarang: Fakultas Ekonomika dan Bisnis, Universitas Diponegoro.

Wahab, S. (1989). *Pemasaran Pariwisata*. Jakarta: Pradya Paramita.

Wahab, S. (1997). *Pemasaran Pariwisata*. Jakarta: Pradya Paramita.

Yakin, A. (1997). *Ekonomi Sumber Daya dan Lingkungan*. Jakarta: Akademi Presindo, .

Yoeti, O. A. (1996). *Perencanaan dan Pengembangan Pariwisata*. In *Edisi Pertama*. Jakarta: PT. Pradnya Paramita.

Yoeti, O. A. (2008). *Ekonomi Pariwisata: Introduksi, Informasi, dan Implementasi*. Jakarta: Kompas.

Yuwana, D. M. (2010). *Analisis Permintaan Kunjungan Obyek Wisata (Studi Kasus Di Kawasan Dataran Tinggi Dieng Kabupaten Banjarnegara)*. Semarang: Fakultas Ekonomi Universitas Diponegoro.

Database:

Badan Pusat Statistik (BPS) Kabupaten Dompu (2017)

Dinas Kebudayaan dan Pariwisata Kabupaten Dompu (2017)

PERDA Kabupaten Dompu (2017)