

# Aspects of Business Law, MSME Development and Travel Cost on Nature Tourism in Sidomulyo Village

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# ABSTRACT

This study examines the benefits visitors perceive from tourism objects in Sidomulyo Village, Pronojiwo District, and Lumajang Regency from a business and legal perspective, MSME development by the community surrounding the tourism location, and the willingness of visitors to pay to preserve and develop tourism potential, which is closely related to tourism travel costs. This study used a descriptive quantitative research method. SPSS 21 was used to analyze the data in this analysis. Multiple linear regression and legal approach analysis is one of the analytical techniques. The legal approach method is used to study tourism policies. This research concluded that the potential of natural tourist places in Sidomulyo Village, Pronojiwo District, and Lumajang Regency still have excellent development opportunities. It can be proven that travel costs, mileage, and income affect the level of visits to tourist places. In comparison, the level of education does not affect the number of visits. The value of the benefits obtained by visitors to Sidomulyo Village tourism attractions remains greater than visitors' willingness to pay. Through building up quality MSMEs and Pokdarwis (Tourism Awareness Group) institutions, the local community must continue learning more about developing village tourism.

**Keywords**: Business Law; MSME Development; Travel Expenses

# **1. INTRODUCTION**

Re-arrangement of tourism needs to be carried out by all components of tourism. Communities and the government must collaborate to maximize tourism potential. East Java is a region rich in tourism potential. Apart from the tourist attractions of Mount Bromo, there are still many tourist objects that present beauty and uniqueness. Several places in East Java offer nature tourism as a destination that always has something to offer. The natural tourism potential is waiting to be developed in Pronojiwo District, Lumajang Regency.

As natural tourism attractions, the natural resources of Waterfall and Goa Tetes must be continuously explored and enhanced. Increasing human activities will harm the beauty of nature; therefore, its use must be prudent. The form of natural beauty will alter, which may diminish the environment's functionality as a source of pleasure.

Tumpak Sewu Waterfall and Goa Tetes are two natural tourist attractions that have yet to be significantly modified. These two attractions are located in the Pronojiwo District village of Sidomulyo. This village is located on the southern slopes of Mount Semeru, is agriculturally fertile, and has considerable potential for village tourism development. Both of these tourism opportunities are well-known domestically and internationally. It has been demonstrated that many foreign tourists have visited. People refer to the Tumpak Sewu Waterfall as a "thousand-layered waterfall" because it is a collection of several waterfalls that originate from various springs. Goa Tetes is a breathtaking waterfall with an alluring combination of stalagmites and stalactites. This cave is also one of the potential resources in the Pronojiwo subdistrict's Sidomulyo Village. These two tourist attractions are close to one another, allowing us to enjoy them in a single village.

The government needs to manage this tourist attraction optimally. Still, aspects of infrastructure for tourism-related objects need to be improved. This is why the community's perception of this village's tourism potential needs to be higher. The manager makes an effort to construct tourist signboards at the entrance gate, repair and expand public facilities, and create adequate parking areas. In addition, it is hoped that the development of this tour will increase economic activity in the vicinity of this village's tourism attraction. Tourism is a highly complex, multifaceted social phenomenon that affects everyone. The economic aspect receives the most attention and is almost the only aspect that is considered significant (Hadiwijoyo, 2012).

Aspects of business law are crucial in tourism management. The location of tourist attractions and administrative

districts is essential for tourism development. Moreover, Micro Small, and Medium-Sized Enterprises (MSMEs) are crucial to the region's tourism development. The approach based on travel expenses will make it simpler for the government to develop tourism-promoting policies. The travel cost approach applies the valuation method in environmental economics, mainly for recreation areas. According to this theory, individuals, not governments, are the best judges of what they want. The travel cost approach is an evaluation that considers travel expenses and time spent visiting tourist attractions. This strategy also reflects the community's willingness to pay for goods and services provided by the environment, which can contemplate the value tourists offer when they visit tourist attractions.

Estimating the value of tourism in Sidomulyo Village necessitates accounting for the time and money visitors spend traveling to and from the tour. The greater a person's distance from a tourist destination, the lower the demand for its services. Tourists who are located closer to tourist attractions will be better able to visit and enjoy the environment. This approach to determining the value of a tourist attraction based on travel costs employs a number of variables. In addition to distance, the number of visitors as the dependent variable, travel expenses, education level, and income level are also considered (Suparmoko and Ratnaningsih, 2011).

# 2. LITERATURE REVIEW

### 2.1 Aspects of Business Law

Understanding the legal aspects of business entails basing all business activities on the law. In order for legal indicators to become evaluative tools for businesses. In other words, laws and regulations serve as the primary measurement standard in the business world. (Taufiq, 2022).

## 2.2 Micro small and Medium Enterprises

According to Law No. 20 of 2008, Micro Enterprises are productive businesses owned by individuals and/or individual business entities that meet the Law's criteria for Micro Enterprises. Small Business is an economic enterprise that stands on its own and is conducted by individuals or business entities that are not subsidiaries or branch companies that are owned, controlled, or become a part of Medium or Large Businesses either directly or indirectly. Medium Business is a productive economic business that are owned, controlled, or become a part of stands alone, conducted by individuals or business entities that are not subsidiaries or business entities that are not subsidiaries or business entities that are not subsidiaries or business of companies that are owned, controlled, or become a part of either directly or indirectly with Small Businesses or Large Businesses in terms of total net worth or annual sales. According to Inna Primiana, microbusinesses are the primary forces that can aid in the development of Indonesia.

## 2.3 Environmental Economics

According to the Law on Environmental Management No. 32/2009 (UUPLH), an environment is a spatial unit containing all objects, forces, conditions, and living things, including humans and their behavior, which have an impact on nature, the continuation of life, human welfare, and other living things.

Environmental economics is the study of human activities in utilizing the environment so that the environment's function or role can be maintained or even improved over time. Environmental economics studies the unintended or unknown consequences of decisions regarding using natural resources.

## **2.4 Environment Function**

#### 2.4.1 The Environment as a Source of Raw Materials

Since 1997, the natural resources in Indonesia that have experienced the most significant reduction in reserves are forest resources, which are proven to be cut down annually in the millions of hectares and have been burned in huge quantities since 1992. Similarly, every year oil, natural gas, and coal are extracted from the earth, so its reserves have also diminished unless new oil wells, natural gas sources, or coal mining reserves are obtained or discovered as a result of exploration efforts.

## 2.4.2 Environment as an assimilator

As an assimilator, the environment disposes of waste naturally, preventing future environmental contamination. According to the UUPLH, environmental pollution is introducing or incorporating living organisms, substances, energy, and/or other components into the environment due to human activities above established environmental quality standards.

#### 2.4.3 Environment as a Source of Entertainment or Pleasure

The natural environment is the ultimate source of pleasure and amusement and the origin of life. Every living thing that awakens in the morning enjoys the crispness of clean air and the warmth of the morning sun. They are thankful for God's magnificent gift. People who visit natural attractions such as beautiful and incredible mountain locations and beautiful beaches with sand and clear sea water will have a great time (Suparmoko & Ratnaningsih, 2011).

## 2.5 Reasons for the Deterioration of Environmental Functions

The characteristics of the environment have caused humans to exploit the environment excessively, thereby weakening the function of the environment. There are several characteristics or characteristics that stand out and are attached to the environment.

#### 1. Public Goods

The existence of public goods has resulted in the neglect of natural resources and the environment, as there are no or very few private parties or individuals who seek to maintain or promote their sustainability.

#### 2. Joint Ownership or Public Property (Common Property)

Individual rights (private rights) and common rights (public rights) can be distinguished among an asset's property rights (common property). Individuals and corporations have individual rights. A group of people owns common rights collectively. In modern society, "Common Property" is government-owned or -held. In rights or shared ownership, there are either rules or none. Joint ownership can be interpreted as the property of no one and everyone (common property is no one's property and is every one property) because such a system of ownership encourages the overexploitation of natural resources and the environment.

#### 3. Externalities

When external benefits need to be taken into account in a manager's decision-making, it has caused the goods or services produced to be insufficient. When there are external costs that are not taken into account, the goods or services produced are excessive. This renders these activities inefficient, mainly if the externality consists of external costs the community must bear. For actual efficiency, the external costs must be internalized into the costs of each company that engages in these activities.

#### 4. Underappreciated (Priceless)

The environment is frequently undervalued or has no price because it is a free good with no market transactions. A clear example is the environment's ability to provide beauty, store water, manage water, and reduce carbon in forest ecosystems. The capacity to protect the coastline from erosion, serve as fish habitat, etc.

# 2.6 Assessment Method Application

There are several approaches to applying natural resource valuation methods in environmental economics, including 1) the Market Price Approach and 2) the Market Replacement Approach (Value of substitutes and complementary goods). The market price approach includes the following: a) The "actual market price" approach is a method that assigns a monetary value to the effects of environmental quality changes on natural and artificial goods and services. b) The human capital approach considers people to be one of the capital resources. Changes in environmental quality can affect the health of humans, animals, and plants. c) Opportunity cost-based approaches, such as those that provide valuable benefits from natural resource conservation or environmental preservation, then compare whether new natural resource management will be able to create benefits equal to the value of conservation or preservation. To evaluate the environment of tourist attractions, the Temporary Market Replacement Method focuses on transportation or travel costs. This strategy assumes that the travel expenses and time sacrificed by tourists to reach specific tourist attractions are environmental values for which tourists are willing to pay.

# 2.7 Survey Technique

Several survey techniques that can be used to determine environmental values include the auction approach, the direct survey approach, and the Delphi approach.

#### 1. Auction

This method is commonly employed when determining a project's willingness to pay (WTP). In other words, an auction is used to determine community preferences so that the value of environmental goods and services can be determined and reflected in the compensation paid or the willingness to accept compensation resulting from the existence of a project.

Various techniques can be employed to quantify the concept of value. Fundamental to all economic valuation techniques is the willingness of individuals to pay for environmental services or resources (Munasinghe, 1993). Assessment (valuation) is the process of developing concepts to estimate the value of goods and services (Djijono, 2002). Benefit assessment techniques are based on consumers' willingness to pay for repairs or accept compensation in the presence of a decline in environmental quality in natural systems and the quality of the surrounding environment (Hufschmidt et al., 1987). Individual preferences are reflected in the willingness to pay or receive; the willingness to pay and receive are raw materials in economic valuation (Pearce & Moran, 1994).

2. Direct Survey Interviewing respondents (visitors) directly regarding their willingness to pay after what has been consumed from the available goods and services.

#### 3. The Delphi approach

This approach is widely used in decision-making and is based on the opinions of experts. This approach to determining environmental values is determined by the experience, knowledge, and life experiences of the interviewed experts (Suparmoko and Ratnaningsih, 2011).

#### 2.8 Economic Valuation

In general, it can be defined that economic valuation is basically an attempt to give a quantitative value to goods and services produced by natural resources and the environment regardless of whether the market value is available or not (Susilowati, 2002). The roots of this valuation concept are actually based on neoclassical economic theory, which emphasizes the satisfaction or needs of consumers. Based on this neoclassical thinking, it is argued that the assessment of each individual on goods and services is nothing but the difference between the willingness to pay (WTP) and the costs of supplying those goods and services (costs in transit).

The travel cost approach is a way of assigning value to goods that have no price. According to Ward (2000) in (Rahardjo, 2002), the most widely used valuation method, especially for measuring the economic value of nature tourism, is the travel cost method. This method estimates the total economic value of tourist areas based on the assessment given by each individual or community for the invaluable pleasure (in Rupiah) from the costs incurred to visit a tourist attraction, including both opportunity costs and direct costs such as transportation costs, food, and beverage consumption, hotels, entrance tickets, etc.

The travel cost method is an economic evaluation used to calculate the value of certain goods or services that cannot be obtained through market prices, such as forest parks, ecosystems, and beaches. It assumes that the value of a site is proportional to the number of people willing to pay to access it. It is the preferred method because actual behavior and choices are considered when determining environmental values. Initially introduced by Clawson (1959), this technique has been modified by several researchers.

The fundamental concept of the travel cost approach is that the price of access to tourist attractions is the travel time and expenses visitors must incur to visit them (Garrod & Willis, 1999). This is known as a willingness to pay as measured by the disparity in travel costs.

They are calculating the estimated average PAP yields the willingness and ability to pay visitors for the environmental benefits they perceive. The data on visitors' willingness to pay was derived from primary questionnaire data. In addition, the estimated average WTP will be calculated from these data using the formula for estimating WTP.

The average value that will be issued by respondents who are willing to pay is calculated using the formula below.

$$n$$

$$\sum Wi$$

$$EWTP = i = 1$$

Information :

EWTP = Average WTP value of visitors

Wi = Amount of WTP that is willing to be paid

 $\underline{i} = \text{Respondents}$  who are willing to pay

n = number of respondents

п

## **3. DATA EXPOSURE AND ANALYSIS**

## 3.1 Overview of the Research Area

Sidomulyo Village can be found in the Pronojiwo District of the Lumajang Province. With a community area of 1,183.5 ha. Sidomulyo Village has village boundaries; namely, it borders Perhutani Land to the north, Kaliuling Village to the south, Sidorenggo Village to the west, and Pronojiwo Village to the east. Sidomulyo Village is situated 600 meters above sea level in the highlands. With annual precipitation of 2400 mm and average air temperatures between 17 and 280C. In Sidomulyo Village, specifically in Krajan Hamlet, the tourist attraction Goa Tetes is located. This object is a tourist attraction with distinct, multicolored stalactite and stalagmite formations. Since 1996, the Drop Cave has become one of the tourism opportunities in Sidomulyo Village.

#### **3.2 Data exposure**

1. Characteristics of Respondents by Age

The majority of 34% or 17 respondents were aged between 20-24. Approximately 30% were 15-19, 26% were 25 and 29, and those over the age of 29 were the least likely to respond, which amounted to 10% or five respondents being aged over 26. Since the lack of infrastructure in the natural tourism object, the teenage age dominates because the teenage age has a better physique than those over the age of 29.

2. Characteristics of Respondents Based on Gender

The Sidomulyo Village tourism object that dominates visits is from male respondents, namely 66% or a total of 33 respondents. As for female respondents, 34% or 17 respondents. Since road access to tourist attractions is relatively tricky due to slippery, mossy roads that require a robust physique, there are fewer female respondents than male respondents.

3. Characteristics of Respondents Based on Occupation

The respondents who work as students for the largest proportion of respondents in this study, namely 29 people or 58%, followed by respondents who work as private employees, who account for 15 people or 30%. Respondents who work as housewives are three people or 6%, and respondents who work as civil servants account for two people or 4%. While the least number are visitors with a professional background as an entrepreneur, who account for one person or 2%.

4. Characteristics of Respondents Based on Education

Respondents who are educated at the high school level dominate visits to Sidomulyo Village Tourism objects, namely 56% or 28 people. For respondents with a tertiary level of education by 40% or a number of 20 people. Respondents with a junior high school education level were 4% or two people.

5. Characteristics of Respondents Based on Income

The majority of the Sidomulyo Village tourism's visitors object are respondents with an income of less than IDR500,000, namely 60% or 30 people. The average respondent is still not working or is still a student or student who does not have a salary or income per month. The income of respondents with the amount of IDR500,000-999,999 is 2% or 1 people. For income of IDR 1000,000-IDR 1,499,999, it is 10% or 5 people. While respondents with income more than IDR1,499,999 amounted to 28% or 14 people.

6. Characteristics of Respondents Based on Distance of Residence from Sidomulyo Village Tourism Object

The reference for determining the distance above is based on research that has been done (Hadi, 2015). It can be seen from the table above that the distance from 0 to 19.99 km is 22% or 11 respondents. For the distance traveled by respondents as far as 19.99-39.99 by 8 percent or a number of 4 respondents. Meanwhile, respondents with a vulnerable distance of residence from tourist objects dominated by more than 39.99 km, namely 70% or a total of 35 people. This was because more respondents brought relatives and friends to visit tourist attractions in Sidomulyo Village.

7. Attraction of Sidomulyo Village Tourism Object

As much as 62 percent or a number of 31 respondents from the entire sample came to the Sidomulyo tourism object because of the beauty of the tourist object. Respondents' interest based on being close to home was 16 percent or a total of 8 respondents. While the interest of respondents to visit on the basis of cheap travel costs is 22 percent or as many as 11 respondents.

8. Characteristics of Respondents Based on Visit Group

By 70 percent or some 35 respondents the visit was made with friends. Then for the second visiting group which dominates is the visiting group with family by 30 percent or a number of 15 respondents. Meanwhile, for self-visit groups and groups there were none or at 0 percent. Because at the time of the survey the respondents were more often alone or more when visiting Sidomulyo Village tourism objects. And there are no visiting groups with entourage because the transportation route is relatively narrow so that large vehicles such as tourist buses cannot pass it.

9. Characteristics of Respondents Based on Transportation Used to Sidomulyo Village Tourism Object

Based on the diagram above, the dominant transportation of respondents is motorcycles 74 percent or as many as 37 respondents. Respondents visited by using private car transportation by 20 percent or a number of 10 respondents. For transportation by using a rental car by 6 percent or a number of 3 respondents. While respondents who use public transportation and other transportation do not exist or at 0 percent. Due to entering the location of a tourist object with a relatively narrow road for large vehicles such as buses, it is easier to use motorbikes or cars to enter the Sidomulyo Village tourist attraction, Pronojiwo District, Lumajang Regency.

10. Characteristics of Respondents Based on Travel Costs to Tourism Objects in Sidomulyo Village

The reference for determining the category of travel expenses above is based on research that was conducted by Hadi in 2015. From the table above the travel expenses of the respondents amounted to IDR0-49,999 by 56 percent or a number of 28 respondents, this travel expense dominated the entire sample because the respondent's visit group come with family and friends so travel costs can be borne together which results in relatively less travel costs. While respondents with travel cost IDR49,999-99,999 by 30 percent or a number of 15 respondents. While respondents with travel expenses> IDR99,000 by 14 percent or a number of 7 respondents.

11. Characteristics of Respondents Based on Number of Visits to Tourism Objects in Sidomulyo Village

The number of visits that dominate is 1 time per year, namely 62 percent or a number of 31 respondents. While the lowest number was the respondent's visit of 8 times by 2 percent or 1 respondent.

## 4. DATA ANALYSIS

## 4.1 Multiple Linear Analysis

From the data that has been collected from respondents through questionnaires, the variables that have been determined in this study were analyzed using regression on the SPSS 21 statistical application. This aims to determine the level of independent variables in this case travel costs, mileage, education, and income affects the dependent variable, namely the level of visits. The regression equation of this study is as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 (Dummy) + b_4 X_4 + \epsilon$$

$$Y = 4,373 - 0,00001395 X_{1} - 0,017 X_{2} - 0,495 X_{3} + 0.0000003145 X_{4} + e$$

From the equation above it can be explained that:

a. A constant value of 4.373 indicates that when the added value of travel costs, distance traveled, education and income of the respondents is constant, the level of tourist visits to Sidomulyo Village is 4.373. Assuming that other variables are held constant.

b. The regression coefficient value of the travel cost variable (X1) is -0.00001395, which means that every time there is an increase of one unit in travel costs, it will cause a decrease in the level of tourist visits to Sidomulyo Village by 0.00001395. Assuming that other variables are held constant.

c. The regression coefficient value of the mileage variable (X2) is -0.017, which means that every time there is an increase of one unit in mileage, it will have the potential to cause a decrease in the level of visits by 0.017. Assuming that other variables are held constant.

d. The regression coefficient value of the education level variable (X3) is -0.495, which means that every time there is an increase of one unit in the level of education, it will have the potential to cause a decrease in the level of visits by 0.495. Assuming that other variables are held constant.

e. The regression coefficient value of the income variable (X4) is 0.0000003145 which means that every time there is an increase of one unit in income, it will have the potential to cause an increase in the level of visits by 0.0000003145. Assuming that other variables are held constant.

# **4.2** Model Testing (Coefficient of Determination R<sup>2</sup>)

The results of testing the model found a value *Ajusted R-Square* of 0.523 which means that the changes that occur in the dependent variable (visit level) can be explained by the independent variables (travel costs, mileage, education, and income) of 52.3 percent. These results indicate that 52.3% of tourist visits to Sidomulyo Village, Pronojiwo District, Lumajang Regency, namely Goa Drops and Tumpak Sewu are influenced by travel costs, distance traveled, level of education and income. While the remaining 47%, the level of tourist visits to Sidomulyo Village, Pronojiwo District, Lumajang Regency is influenced by other factors or variables that are not included in this study.

## 4.3 Data Normality Test

Based on the results of the Kolmogorov-Smirnov test that has been carried out by researchers, it is known that the value of significance (Asymp. Sig. 2-tailed) is 0.310 and it can be stated that the data used is normally distributed.

### 4.4 F-test

From the results of the F-test it is known that the significance value is 0.000. With the provision that if the sig value is less than 5 percent or 0.05 then it passes the test f. From the table it is known that the significance value is 0.000 which means less than 5 percent, this means that together the variables of travel costs, distance traveled, level of education and income have a significant effect on the level of visits to Sidomulyo Village tourism objects.

## 4.5 T-test

a. The regression coefficient value of the travel cost variable (X1) is -0.00001395, which means that every time there is an increase of one unit in travel costs, it will cause a decrease in the level of tourist visits to Sidomulyo Village by 0.00001395. Assuming that other variables are held constant. The significance value of the travel expense variable is 0.011 < $\alpha$  (0.05) which shows that the travel cost variable partially has a significant effect on the level of tourist visits to Sidomulyo Village.

b. The regression coefficient value of the mileage variable (X2) is -0.017, which means that every time there is an increase of one unit in mileage, it will have the potential to cause a decrease in the level of visits by 0.017. Assuming that other variables are held constant. The significance value of the distance variable is  $0.000 < \alpha$  (0.05) which indicates that the distance variable partially has a significant influence on the level of tourist visits to Sidomulyo Village, Lumajang Regency.

c. The regression coefficient value of the education level variable (X3) is -0.495, which means that every time there is an increase of one unit in the level of education, it will have the potential to cause a decrease in the level of visits by 0.495. Assuming that other variables are held constant. The significance value of the education variable is  $0.079 > \alpha$ (0.05) which indicates that the education variable partially has no significant effect on the level of tourist visits to Sidomulyo Village.

d. The regression coefficient value of the income variable (X4) is 0.0000003145 which means that every time there is an increase of one unit in income, it will have the potential to cause an increase in the level of visits by 0.0000003145. Assuming that other variables are held constant. The significance value of the income variable is  $0.000 < \alpha$  (0.05) which indicates that the income variable partially has a significant influence on the level of tourist visits to Sidomulyo Village, Lumajang Regency.

## 4.6 Multicollinearity Test

It is known that all VIF values are <10, which means that there are no multicollinearity symptoms or there is no correlation between the independent variables (X).

## 4.7 Heteroscedasticity Test

It is known that the coefficient value of the variable X1 (travel expenses) is  $0.003 < \alpha = 0.05$  and the coefficient value of the variable X4 (income) is  $0.000 < \alpha = 0.05$ , which means that symptoms of heteroscedasticity have occurred. The emergence of heteroscedasticity symptoms makes this regression model unfit for use. So that this regression model can still be used, the symptoms of heteroscedasticity must be cured by the derivative method and repeating the glacier test. This derivative method must be carried out repeatedly until hetero symptoms are declared cured so that the regression model is feasible to use. So it must be treated by lowering the data value once.

After reducing the value of the magnitude of the coefficient values, nothing is significant or all are > 0.05. Thus the heteroscedasticity symptoms that previously occurred and disturbed this regression model have been cured and this regression model is feasible to use.

#### 4.8 Travel Cost Approach

The regression results between the level of visits (Y) and the independent variables produce a visit demand model, where the model is used as an equation for generating consumer surplus value. These equations can be seen in the equation below:

Y = -1,395X1 - 0,017X2 - 0,495X3 + 3,145X4 + 4,373

To calculate consumer surplus, the following formulation is used:

$$Dx = Qx = a - bP$$

So the equation to produce consumer surplus is: p(x) = 4.373 - 0.000013x

To produce a consumer surplus per individual, a certain interval is used with an upper limit, namely the highest travel costs of IDR150,000 and a lower limit, namely the lowest travel costs of IDR10,000 obtained based on the respondent's questionnaire. Here is the integral calculation for calculating consumer surplus:

150.000  
SK = 
$$\int 4,373-0,0000139 \text{ x dx}$$
  
10.000  
SK =  $\int 4,373-\frac{0,0000139}{x}x^2$   
10.000  
2  
SK = 4,373 (10.000)+ $-0,0000139$  (10.000)<sup>2</sup>  
2  
SK = [655.500-156.375]-[43.700-695]  
SK = 499.125-43.005  
SK = IDR456.120

From the results of the integral calculation to find the consumer surplus at the Sidomulyo Village Tourism Object, Pronojiwo District, Lumajang Regency, the consumer surplus per individual per year is IDR456,120. The average visitor has visited a tourist attraction in Sidomulyo Village, Pronojiwo District, Lumajang Regency per individual for the last 12 months (1 year) 1.92 times. So the consumer surplus per visit is IDR237,562.5.

Meanwhile, to calculate the average cost incurred by respondents who are willing to pay is calculated based on questionnaire data and uses the formula described in the previous section. Based on calculations from these data using the formula to calculate the average willingness to pay which has been explained in the previous chapter, then the average willingness to pay visitors to participate in maintaining and caring for nature tourism, in this case, the Sidomulyo Village tourism object, which is IDR35,580.

The consumer surplus felt by visitors is IDR456,120 per year or IDR237,562.5 per individual per visit is greater than the willingness to pay visitors, which is IDR35,580. Thus the consumer surplus is greater than the willingness to pay which means that Sidomulyo Village tourism is still relatively cheap when viewed from the customer satisfaction obtained, even though these tourist attractions still have very few facilities and are not supported by qualified technology but have stunning views.

## 5. RESULTS AND DISCUSSION

#### 5.1 Territorial Legal Aspects

It is known that the tourist attraction of Tumpak Sewu Waterfall is on the border of the Lumajang Regency and

Malang Regency. Tourist objects that are right on the border are often not optimally managed, claiming each other and usually, there are tourist points that are under the control of two different areas. In such conditions, it is necessary to take a well-coordinated way to share roles in its management. This will be able to save the substance of the tourism objects and still be able to attract tourists from various sides because there is already a division of roles and work on them. Awareness to manage on the basis of saving tourism objects will be more beneficial for both governments. The concept of advancing together which is currently becoming trending in all lines is very effective to do.

# 5.2 The Effect of Travel Cost on the Level of Tourist Visits

Based on the results of the study, it was found that travel costs had a negative and significant influence on the level of tourist visits to Sidomulyo Village. The negative influence in this study explains that if there is an addition to travel costs, there will be the potential for a decrease in the level of Sidomulyo Village Tourism visits. This indicates that someone prefers to travel with lower travel costs. These results are in accordance with the theory underlying the calculation of consumer surplus, namely travel costs. If the calculation of consumer surplus based on travel costs shows a greater value than willingness to pay which shows that

The benefits gained in visiting Sidomulyo Village tourism objects, Pronojiwo District, Lumajang Regency, are considered by consumers to be greater than the total costs that must be incurred by visitors. So if travel costs increase, it will affect the decrease in consumer surplus which also results in a decrease in the amount of consumer interest in visiting tourism in Sidomulyo Village, Pronojiwo District, Lumajang Regency.

This is in line with research that has been conducted (Salma and Susilowati, 2004) with the title Analysis of Demand for Natural Tourism Objects at Curug Sewu, Kendal Regency with an Approach Travel Cost, which states that the travel cost variable has a negative and significant effect. This explains that consumers (i.e. visitors to Curug Sewu) choose to make more tourist visits at lower travel costs as is the relationship between price and quantity of goods purchased (law of demand in economics).

These results have similarities with previous research (Raharjo and Gravitiani, 2012) with the title The Economic Value of Sangiran Museum, Central Java, Indonesia Application of Travel Cost Method, which states that travel costs have a negative and significant effect. Where the Sangiran Museum is located in the countryside, which is relatively far from the city. This causes an increase in travel costs, fuel costs, food, and other costs. Based on demand theory, the greater the travel costs, the lower the level of visits to these tourist objects.

The similarity of results between researchers and previous research shows that travel costs affect the level of visits where if there is an increase in costs, there will be a decrease in the level of visits. This happens, on average, visitors prefer low costs when they want to visit a tourist attraction, as is the relationship between price and the number of goods purchased, which is in accordance with the law of demand which states that the number of goods demanded in a certain period changes against the price. if this is assumed to be fixed (Samuelson and Nordhaus, 1998). So that the higher the price, the smaller the number of goods demanded or conversely the lower the price, the higher the number of goods demanded (McEachern, 2001).

# 5.3 The Effect of Mileage on the Level of Tourist Visits

Based on the results of the study, it was found that the distance traveled had a negative and significant effect on the level of tourist visits to Sidomulyo Village. The negative influence in the study explains that if there is an increase in mileage, it does not simultaneously increase the level of visits. The regression results yielded a significant effect on mileage. This means that distance can influence a person to visit the Sidomulyo Village tourism object. The distance can affect visitors to come tourist attractions, because the farther the distance, the greater the costs incurred by someone to visit Sidomulyo Village tourism objects.

These results have similarities with previous research conducted by (Raharjo and Gravitiani, 2012) entitled The Economic Value of Sangiran Museum, Central Java, Indonesia Application of Travel Cost Method, which states that distance has a negative and significant effect. The farther the distance traveled, the lower the desire to travel. This is also in line with previous research conducted by (Mateka, Indriayani, and Harahap, 2013) entitled Balekambang Beach Tourism Object, Malang Regency, East Java. In this study, it was concluded that the distance variable had a negative and significant effect on the number of tourist requests at the Balekambang Beach tourist attraction. Distance is something that is very influential on the choice of tourist attractions, the higher the distance to tourist attractions is lower. This is because visitors will prefer tourist attractions that are closer to where they live than having to go to places farther from where they live.

The similarity of the results of the researchers with previous research shows that the distance variable has a negative and significant effect. This shows if more visitors

choose to travel at a shorter distance. This is also related to travel costs. If the distance is farther, the costs incurred will be even greater.

# 5.4 The Effect of Education on the Level of Visits

Based on the results of the study, it was found that the level of education had a negative and insignificant effect on the level of visits to Sidomulyo Village. The negative influence in this study explains that if there is an increase in the educational level of visitors, it will not simultaneously increase the level of visits. The regression results yielded an insignificant level of education because those who came to visit had varied backgrounds, so it did not require certain

educated people to visit Sidomulyo Village tourism objects. And also, this tourism object is a natural tourism object that does not require a certain level of education to be able to visit and tour Sidomulyo Village tourism objects.

The results of this study are in line with research that has been conducted by (Salma and Susilowati, 2004) entitled "Analysis of Demand for Curug Sewu Natural Tourism Objects, Kendal Regency" with an Approach Travel Cost. Not the significance of the level of education to the level of the visit is due to the varying levels of education of visitors to Curug Sewu, Kendal Regency. These results are also in line with previous research conducted by (Mateka, Indriayani, and Harahap, 2013) entitled Balekambang Beach Tourism Object, Malang Regency, East Java. In this study, it was concluded that the last visitor education variable was negative and had no effect on the number of tourist requests at the Balekambang Beach tourist attraction. This is because the education variable only adds to a person's insight about tourist objects, not something that motivates that person to travel. If a person's education is high without being accompanied by high income and working time, it will not really affect the number of requests for Balekambang beach tourism objects.

# 5.5 The Effect of Income on the Level of Tourist Visits

Based on the results of the research conducted, it was found that the level of income has a positive and significant influence on the level of tourist visits to Sidomulyo Village. The positive influence in this study explains that if there is an increase in visitor income then at the same time it can increase the level of visits to Sidomulyo Village tourism objects. These results are in accordance with demand theory where the level of income is related to the amount of demand for an item, if the level of income increases it will affect the increase in the number of requests for goods and vice versa. So in connection with the results of this study, which indicate that an increase in visitor income can increase the level of visits to tourism in Sidomulyo Village, Pronojiwo District, Lumajang Regency.

This is in line with research that has been conducted (Salma and Susilowati, 2004) with the title Analysis of Demand for Natural Tourism Objects at Curug Sewu, Kendal Regency with an Approach*Travel Cost*, which states that the income variable has a positive and significant effect. This means that the higher a person's income, the higher the number of visits to Curug Sewu Nature Tourism, as the relationship between the number of requests and income (*income*) in demand theory. One of the demand factors besides price according to (McEachern, 2000) is income, which usually increases in income will lead to an increase in demand. The coefficient value of the income variable is positive, it can be concluded that Curug Sewu is a normal item, so the higher the visitor's income, the greater the number of visits to Curug Sewu.

The same results were also found in research that had been conducted (Mateka, et al., 2013) entitled Balekambang Beach Tourism Object, Malang Regency, East Java, which stated that the income variable had a positive and significant effect.

This is because income is the most important thing in terms of traveling or visiting tourist attractions. People with high incomes will visit tourist attractions more often than people with low incomes. When someone who has a large income has planned to visit tourist attractions, even though the distance is far, it is not a problem because he can afford to buy or pay for his trip.

## 5.6 The Effect of Variables on the Level of Visits

From the results of the research described in the previous chapter, based on a simultaneous test, it is stated that simultaneously the variables of travel costs, mileage, level of education, and income have a significant effect on the level of tourist visits to Sidomulyo Village, Pronojiwo District, Lumajang Regency.

The results of this study are in accordance with the results of previous research conducted by Nugroho (2010) in his research entitled "Economic Valuation of Glagah Beach Tourism with the Travel Cost Approach in Glagah Village, Temon District, and Kulon Progo Regency." In this study, it was stated that in the regression results, the variables travel costs, income, education, distance, and age jointly affect the level of population visits per year. The findings are supported by research conducted by Raharjo and Gravitiani (2012), titled "Economic Value of Sangiran Museum, Central Java, Indonesia: Application of Travel Cost Method," which found that the variables of travel costs, education, income, distance, and age all have an impact on the level of visits.

## 5.7 Development of Micro, Small and Medium Enterprises (MSMEs)

The development of MSMEs in Sidomulyo Village is still not showing good progress. The absence of good coordination between MSME actors in tourism is influenced by the existence of *Pokdarwis* (Tourism Awareness Group). *Pokdarwis* as a tourism component is very strategic in mobilizing the community to be aware of and have positive behavior towards tourism objects in their environment. It should be realized that the state of flora and fauna, as gifts from God Almighty, as well as ancient and historical heritage, art, and culture belonging to the Indonesian people, our resources and capital for tourism development to increase the prosperity and welfare of the people, as contained in the Pancasila. and the Preamble to the 1945 Constitution of the Republic of Indonesia.

Tourism is the whole activity related to tourism and is multidimensional and multidisciplinary in nature, emerging as a manifestation of the needs of each person and country as well as interactions between tourists and the local community, fellow tourists, the government, regional governments, and entrepreneurs. MSMEs as institutions that are in the area also determine the development of the tourist area.

Business ethics plays an important role in giving trust to groups or individuals who have an interest in the development of MSMEs in tourist areas. MSMEs in Sidomulyo Village have not realized the role of brands in increasing tourism competitiveness. The development of the business world that MSMEs must realize is that business exists to serve the community, not the other way around.

# 6. CONCLUSION AND SUGGESTION

## 6.1 Conclusion

This study provides the following conclusions, namely:

1. Natural tourism objects in Sidomulyo Village have not been optimally managed because community awareness has not yet been formed in owning tourism objects and is located on the border of two regencies, namely Lumajang and Malang.

2. MSME development has not been maximized in supporting the existence of natural tourism objects and does not yet have awareness of the importance of brands to increase tourism competitiveness.

3. Variables that have a significant effect on the level of visits to Sidomulyo Village tourism objects: travel costs, mileage variables, and income variables. The variable that has no significant effect is the education level variable.

Simultaneously, the variables of travel costs, distance traveled, level of education, and income jointly affect the level of visits to Sidomulyo Village tourism objects. This means that tourism objects have the potential to provide greater benefits than visitors' willingness to pay when visiting them.

## 6.2 Suggestion

Recommendations that can be submitted include:

1. For natural tourism sites are located on the border of two regencies, namely Lumajang and Malang, it will develop significantly if there is a division of roles in managing the view of tourism objects.

2. The development of MSMEs in tourism objects will achieve a good reputation if MSMEs have credibility, reliability, responsibility, and trustworthiness. Entrepreneurship training and business ethics are needed for MSME actors around the Sidomulyo Village natural tourism object.

3. An important factor in increasing natural tourism objects in Sidomulyo Village is solving the waste problem, improving the road infrastructure, and children's play facilities, preparing homestay, IT-based promotion management

# 7. REFERENCES

- Clawson, M. 1959. Methods of Measuring the Demand For And The Value Of Outdoor Recreastion. Washington, D.C.: Resources For The Future. Djijono. 2002. Economic Valuation Using the Travel Cost Method for Taman Wisata
- Forest in Wan Abdul Rachman Park, Lampung province. Introductory Paper to the Philosophy of Science for the Postgraduate / Doctoral Program, Bogor Agricultural Institute. (On line). (<u>http://rudict.tripod.com/sem023/adnan\_wantasem.htm</u>), accessed on August 8, 2016.
- Garrod, G. & Willis. K. G. 1999. Economic Valuation of The Environment : Methods and Case Studies. United Kingdom: Edward Elgar Publishing Limited.
- Ghozali, I. 2001.Multivariate Analysis Application with IBM SPSS 19 program. Semarang: Diponegoro University Publishing Agency.
- Gujarati, D. 2003. Basic Econometrics. Jakarta: Erlangga.
- Hadi, S.P. 2015.Economic Valuation of Many Mountain Tourism Objects in Batu City with an Individual Travel Cost Approach.Essay. Faculty of Economics and Business, University of Brawijaya. (On line). (<u>http://jimfeb.ub.ac.id/index.php/jimfeb/article/view/2375</u>), accessed 15 November 2016.
- Hadiwijoyo, S.S. 2012. Community Based Tourism Planning (A Conceptual Approach). Yogyakarta: Science Graha.
- Hufschmidt, M.M., Dkk. 1987Natural and Development Systems Environment. Translation. Yogyakarta: UGM Press.
- Limae, S.M., Ghesmati. H. R. R. & Yamini, N. 2014. Economic Evaluation of Natural Forest Park Using The Travel Cost Method. Journal Of Forest Science. University of Guilan, Someh Sara, Iran. (Online), (<u>http://www.agriculturejournals.cz/publicFiles/125766.pdf</u>), accessed 01 December 2016.
- Mateka, J.A., dkk. 2013.Balekambang Beach Tourism Object, Malang Regency, East Java. Journal of Agribusiness, (Online), 1 (1): 12-22, (<u>http://api.studentjournal.ub.ac.id/index.php/api/article/view/1/2</u>), Accessed July 15, 2016
- McEachern, W. 2001. Introduction to Microeconomics. Jakarta: Salemba Empat. Munangsihe, M. 1993.Environmental Economics and Sustainable Development. World Bank Environment Paper Number 2. Washington D.C. :The World Bank. Nazir, M. 2003. Research methods. Jakarta: Salemba Empat.
- Nugroho, P.S. 2010. Economic Valuation of Glagah Beach Tourism with the Travel Cost Approach in Glagah Village, Temon District, Kulon Progo Regency.Essay. Surakarta: Faculty of Economics, Universitas Sebelas Maret Surakarta. Pearce, D. & Moran, D. 1994.The Economics Value of Biodeversit. IUCN.
- Pramudito, A. 2010.Travel Cost Application in Nature Tourism: Jumog Waterfall, Karanganyar Regency. Essay. Surakarta: Faculty of Economics, Universitas Sebelas Maret Surakarta.
- Rahardjo, A. 2002. Estimating the Economic Value of the Tawangmangu Tourism Park: Application of the Individual Travel Cost Method. Journal of Human and Environment. (Online), 9 (2): 79-88, accessed 20 August

2016.

- Raharjo, M. & Gravitiani, E. 2012. The Economic Value of Sangiran Museum, Central Java, Indonesia Application of Travel Cost Method. International Journal on Social Science Economics & Art, (Online), 2 (2) : 39-43, (<u>https://eprints.uns.ac.id/889/</u>), accessed August 19, 2016.
- Samuelson, W.A. & Nordhaus, W. D. 1998. *Economics*. New York: Mc.Hill Samuelson, W.A. & Nordhaus, W. D. 2003. *Microeconomics*. Seventeen Edition. Jakarta: PT. Global Education Media.
- Sangadji, E.M. & Sofia. 2010.Research Methodology: A Practical Approach to Research.(Octaviani, H.S. Ed.). Yogyakarta: Andi.
- Sinambela, L.P. 2014. Quantitative Research Methodology. Yogyakarta: Science Graha. Sugiyono. 2012. Quantitative Qualitative Research Methods and R&D.Bandung: Alphabet.
- Suparmoko, M. 2012. Natural Resource and Environmental Economics: A Theoretical Approach. Yogyakarta: BPFE.
- Suparmoko, M. & Ratnaningsih, M. 2011. Environmental Economics. Yogyakarta: BPFE.
- Salma, I.A. & Susilowati, I. 2004. Analysis of Demand for Curug Sewu Nature Tourism Objects, Kendal Regency Using the Travel Cost Approach. Journal of Development Dynamics, (Online), 1 (2): 153-165, (<u>http://eprints.undip.ac.id/13978/</u>), accessed August 14, 2016.
- Susilowati, I. 2002.Environmental Valuation Method, Natural Resources and Environment (ESDAL) Economics Module. Semarang.

Taufiq, Muchamad, 2022. Business Law in the 5.0 Era, Lumajang : Widya Gama Press

- Taufiq, Muchamad, National Seminar on Ethics and Business Communication for MSMEs delivered at STIE Atma Bhakti Surakarta on October 1, 2022.
- Law of the Republic of Indonesia Number 10 of 2009 concerning Tourism Law of the Republic of Indonesia Number 20 of 2008 concerning Micro, Small and Medium Enterprises

Law of the Republic of Indonesia Number 32 of 2009 concerning Environmental Protection and Management

Zuriah, N. 2006. Social and Educational Research Methodology: Theory of Application. Jakarta: Earth Script.