ECONOMIC VALUATION AND THE IMPACT OF LENGKUNG LANGIT 2 NATURE TOURISM ON THE COMMUNITY'S ECONOMY

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Abstract

Economic valuation can be used to assess the impact of an activity on natural wealth (assets) both those that can provide benefits as well as those that become an expense or cost. The purpose of this study is to calculate the cost of tourist travel, to analyze the factors that affect the number of tourist visits, the economic value based on the travel costs of Lengkung Langit 2 nature tourism, and the impact of Lengkung Langit 2 nature tourism on the community's economy. The research method used in this study is a survey method with 100 respondents as visitors. The research location was chosen deliberately in the Lengkung Langit 2 nature tourism, Bandar Lampung city. The data collection time was carried out from July to December 2022. The data analysis methods used were travel cost analysis, Poisson regression analysis, and calculation of the economic value. The travel cost incurred by visitors to Lengkung Langit 2 Nature Tourism is as much as IDR 65,770.00 per individual per visit. The factors that affect the number of visits to the Lengkung Langit 2 Nature Tourism area are distance and travel costs. The consumer surplus per individual per visit is IDR 483,996.00 and the economic value of Lengkung Langit 2 Nature Tourism calculated using the Travel Cost Method (TCM) is IDR 35,017,101,187.00. The Income Multiplier Keynesian value of 0.58 indicates that Lengkung Langit 2 tourism still has a low economic impact.

***Keywords*: :** *economic value, number of visits, travel costs, economic impact.*

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1. Introduction

The development of tourism in Indonesia has been growing rapidly nowadays. The development of the tourism sector is promising and it provides benefits to many parties from the government, the public and even the private sector. This is because tourism is a sector that is considered profitable to be developed as one of the assets that is used as a promising source for the government and the community around tourist objects.

Tourism growth not only adds value to the environment and the local economy, but also adds value to the welfare of society in general (Sonbait, et al., 2021). The tourism sector can be used as one of the leading sectors in the effort increase foreign exchange (Larsen & Wolff, 2016). Lampung being one of the provinces in Indonesia has natural and cultural potential that can be developed as tourist attraction. These potentials include beautiful nature and cool air, surrounded by green hills and mountains which are overgrown with various kinds of flowers and trees. Lampung also has unique and interesting cultures, as well as its customs. The Provincial Government of Lampung is intensively developing ecotourism and agrotourism. Efforts have been made to develop several existing ecotourism and

agrotourism and to develop areas that have potential for eco-tourism and agrotourism. Bandar Lampung is a strategic city for tourist visit because it has a lot tourist objects, some beautiful and interesting tourist sites are in the city of Bandar Lampung. Beaches, culture, mountains and adventure tourism in the forest is easily accessible. The objects are close to each other, making the visits or tours more diverse and the experience more varied as there are many places to see. Kemiling District is a district that offers various tourist attractions. The location of the urban forest area, deer breeding facility, and butterfly park are close to each other make it potential for the development of other tourist attractions (Rostiyati, 2013).

Ecotourism is a combination of the tourism market and the application of environmentally friendly practices in developing sustainable natural resources (Ouattara, Pérez-Barahona, & Strobl, 2018). The development of the attractiveness and extent of the ecotourism area must be followed by consideration and or fulfilling the demand from tourist or visitors. (Harianto, Masruri, Winarno, Tsani, & Santoso, 2020). One of the natural tourist attractions that is most in demand or visited by the people in Bandar Lampung City is Lengkung Langit 2 Nature Tourism. Lengkung Langit 2 Nature Tourism is located in Sumber Agung Village, Kemiling District, Bandar Lampung City. This natural tourist attraction was just inaugurated at the end of 2020.

The tourism sector can make a major contribution to the economy, both in terms of countries and tourist location areas. This contribution can be seen through the tourist activity. Tourists who come spend large amounts of money ranging from transportation expenses to buying products or services at tourist destinations, such as accommodation, food and beverages, souvenirs, to recreational activities. The development of Lengkung Langit 2 Nature Tourism is expected to give added value to the land use to become better tourism services. According to (Arjana, 2015) ,tourism activities can move tourism actors in the economic sector because there is a supply and demand for goods and services. Well-developed industrialization can certainly create wide employment opportunities. For this reason, it is appropriate that tourism can be used as an alternative driver of the economy so that it becomes a source of income for each region that has the potential to organize it in an effort to obtain or increase income for the community and the region. The presence of this tourist attraction should be an opportunity to attract tourists to Bandar Lampung City. It's just how the government manages and promotes tourism, so that not only the government gets the benefits from the tourism but the people around the tourist area can also feel the benefit from the existence of tourism. However, in its development there is still much that needs attention because necessary to study the impact that will have on the community's economy.

Values in monetary units will never in themselves provide easy answers to difficult decisions, and should always be seen as additional information, complementing quantitative and qualitative assessments, to help decision makers by giving approximations of the value of ecosystem services involved in the trade-off analysis. However, even if we do not have a ‘precise’ value for, for example, Types of biological diversity habitats we can assess broadly how valuable it is as an ecosystem service relative to other services, or the costs of the absence of that service, in a articular decision-making situation (Rizal & Dewanti, 2017).

Based on the explanation above, it is important to carry out an economic valuation analysis using the TCM method, with this method it can be seen the value of direct benefits from visitors to Lengkung Langit 2 Nature Tourism. Economic valuation can be used to assess the impact of an activity on natural wealth (assets) both those that can provide benefits as well as those that become a n expense or cost. If the value of the economic benefits generated by natural resources and ecosystems is greater than the costs, then it can be a consideration to support actions for the protection and preservation of these objects. Economic valuation can be an important instrument that can influence government, social, individual and collective decision-making (Zambrano-Monserrate et al., 2018). In addition, an economic impact analysis is also needed to determine the impact that will be caused on the community's economy.

2. Methods

Study area

The location of this research was at Lengkung langit 2 Nature Tourism in Sumber Agung Village, Kemiling District, Bandar Lampung City. The research was carried out in July 2022-December 2022.

Data collection procedure

Respondents in this study consisted 100 visitors. The method used was a non-probability method with the purposive sampling method because the population elements used as samples had certain considerations and characteristics (Silaen & Widiyono, 2013). Non-probability sampling is a technique that does not provide equal opportunities or opportunities for each element or member of the population to be selected as a sample according to predetermined criteria by means of accidental sampling, namely anyone who happens to meet the researcher can be used as a sample.

Data analysis

Travel Cost Analysis

Travel costs are all costs incurred by visitors to visit tourist attractions in one trip, including transportation costs, consumption costs during recreation, entrance ticket fees and other costs. Overall, the visitor's travel cost to Lengkung Langit 2 Nature Tourism is calculated uses the following formula:

TTC = TC + PF + CC + ETF + RRF.....(1)

Information:

TTC = Total Travel Cost (IDR/visit)

TC = Transportation Cost (IDR)

PF = Parking Fee (IDR)

CC = Consumption Cost (IDR)

ETF = Entrance Ticket Fee (IDR)

RRF = Rides Rental Fee (IDR)

Calculation of the average cost of a visitor's trip to Lengkung Langit 2 Nature Tourism uses the following formula (Ekwarso, Aqualdo, & Sutrisno, 2010):

ATC = ∑ TTC/N .....(2)

Information:

ATC = Average visitor trip cost

TTC = Total visitor travel costs

N = Number of visitors interviewed

Factors affecting the number of visits

Factors Influencing Number of Visits to Lengkung Langit 2 Nature Tourism to determine the influence of the variable visitor travel costs, education, average income per month, age, distance to tourist sites, facilities, tourist satisfaction on the number of visits to Lengkung Langit 2 Nature Tourism. Poisson regression equation can be guessed as follows:

PBS = exp(β0+β1X1+β2X2+β3X3+β4X4+β5X5+β6 D1+β7D2+ μ……..…(3)

Information:

PBS = Number of visits to Lengkung Langit 2 Nature Tourism in the last year

X1 = Distance of residence to tourist location

X2 = Age

X3 = Education

X4 = Income

X5 = Travel cost (travel costs)

D1 = Facilities

1 = Good

0 = Not good

D2 = Satisfaction Level

1 = Satisfied

0 = Dissatisfied

β0 -β7= Regression coefficient

μ = Errors

Poisson regression is said to contain overdispersion if the variance value is greater than the average value. Overdispersion has the same effect as violating the homoscedasticity assumption in the linear regression model, if overdispersion occurs in discrete data but Poisson regression is still used, the estimation of the regression coefficient parameters remains consistent but inefficient because it impacts the standard error value (Fitriana, Abidin, & Endaryanto, 2017). The parameter estimator of the Poisson regression coefficient for data that doesn't contain overdispersion will produce the right estimator. In contrast to the

estimation of the coefficient parameter for data containing overdispersion, the absolute error value is slightly larger. This indicates that overdispersion has quite an effect on the estimation of the regression coefficient parameter. According to (Safitri, Rahmi, & Devianto, 2014), the presence or absence of overdispersion can be seen from the Deviance or Pearson Chi-square value divided by the freedom degree, if it is greater than 1 then it indicates a variant value that is greater than the average value or overdispersion occurs.

Economic Value Analysis

The analytical tool used is the Individual Travel Cost Method (TCM) which is based more on primary data obtained through surveys and statistical techniques. To calculate the economic value using the travel cost method by calculating the consumer surplus value per individual per year. According to (Fauzi, 2014),to calculate the value of individual consumer surplus using the formula:

$CS = \frac{v2}{2\beta TC}$..... .....(4)

Information :

CS = Consumer/individual/visit surplus

βTC = Travel cost coefficient

V = Number of visits

The travel cost coefficient is the value of the travel cost coefficient resulting from the demand function which is analyzed using Poisson regression. Based on this theory, the economic value of Lengkung Langit 2 Nature.

Tourism is the total value of the benefits received by all visitors so that the estimated economic value of Lengkung Langit 2 Nature Tourism is calculated using the following formula:

EV = CS x AV……...…(5)

Information:

EV = Economic Value (IDR/year)

CS = Consumer Surplus (IDR/year)

AV = Average visits per year (person)

Economic Impact

The method for answering the fourth objective of this study is to calculate the economic impact on the community around Lengkung Langit 2 nature tourism by using quantitative descriptive analysis. The analytical tools used are Keynesian Local Income Multiplier and Ratio Income Multiplier. According to META (2001) the economic impact of tourism on the local community's economy has two types of multipliers, namely: 1. Keynesian Local Income Multiplier, which is a value that shows the amount of visitor spending that has an impact on increasing local community income. 2. Ratio Income Multiplier, which is a value that shows how much the direct impact felt by the local community from visitor spending has an impact on the local community's economy. This multiplier measures the direct impact, Mathematically it can be formulated as follows.

Income Multiplier Ratio, Type I = $\frac{D+N}{D}$ ……..(6)

Income Multiplier Ratio, Type II = $\frac{D+N+U}{D}$= ……...(7)

Information :

D = Local revenue obtained directly from E (Rupiah)

N = Local income obtained indirectly from E (Rupiah)

U = Induced local income from E (Rupiah)

The Keynesian Local Income Multiplier value, Ratio Income Multiplier Type 1, Ratio Income Multiplier Type 2, has the following criteria:

If the value is less than or equal to zero (≤ 0), then the tourism has not been able to provide an economic impact on tourism activities.

If the value is between zero and one ($0 < x < 1$), then the tourism has a low economic impact value.

If this value is greater than one (≥ 1), then the tourism is able to have an economic impact on the tourism

3. Results and Discussion

Travel Expenses for Nature Tourism Visitors

Travel costs are all costs incurred by visitors during tourism activities (Arifa et al., 2019). The cost of travel for the Lengkung Langit 2 Nature Tourism includes transportation costs, consumption costs, entrance ticket fees, and vehicle rental fees. Travel costs for visitors to

the Lengkung Langit 2 Nature Tourism can be seen in Table 1.

Table 1. Travel costs for visitors to the Lengkung Langit 2 nature tourism

Classification	**City of Bandar Lampung**		**Outside the City of Bandar Lampung (IDR)**	**Whole (IDR)**
	In Kemiling District (IDR)	Outside Kemiling District (IDR)		
Transportation	13,333.33	27,352.94	25,862.07	26,500.00
Parking	5000.00	6985.29	9137.93	7550.00
Consumption	11666.67	13,705.88	20172.41	15,520.00
Entrance ticket	15,000.00	15,000.00	15,000.00	15,000.00
Rent a Rides	0.00	294,12	3,448.28	1200.00
Total cost	45,000.00	63,338.24	73,620.69	65,770.00

Based on Table 1, the overall average result for visitor travel costs per individual per visit to the Lengkung Langit 2 Nature Tourism is IDR 65,770.00. Calculation of the average size of a visitor's trip to go to the Lengkung Langit 2 Nature Tourism uses the formula as below (Ekwarso, 2010).

$$ATC=\sum\frac{TTC}{N} \quad \text{.....(8)}$$

Information:

ATC = Average visitor trip cost

TTC = Total visitor travel costs

N = Number of visitors interviewed

$$ATC=\frac{6.577.000}{100}$$

= IDR 65,770.00

Factors influencing the number of Lengkung Langit 2 Nature Tourism

The number of visits is the number of visitor visits as measured in units of visits per year. Before reviewing and analyzing the factors that influence the number of visits to the Lengkung Langit 2 Nature Tourism, a data distribution test was carried out used the Kolmogorov-Smirnov test, Equidispersion test, and Overdispersion test. The Asymp. Sig on the Kolmogorov-Smirnov test shows a value of 0.165 which means it is greater than 0.05. Then, it is accepted so that the data is Poisson distributed. The results of the Mean value is 3,750 and the Variance shows a value is 2,048. It can be said that the results of the Mean and Variance on the number of visits are different. It can be concluded because the results of the Mean and Variance in the Equidispersion test are different, the data must be tested for Overdispersion or Underdispersion to find out whether the data is over or under. The Overdispersion or Underdispersion test is a test that must be carried out when the values of the Mean and Variance in the Equidispersion test are not the same or different. In the Overdispersion or Underdispersion test rules, if the Deviance/df value and Pearson Chi-Square/df value is more than 1 then the data is overdispersion, whereas if the Deviance/df value and Pearson Chi-Square value are below 0 then the data is underdispersion (Rahmadeni & Sari, 2018). The results of the Overdispersion or Underdispersion test in this study can be seen in Table 2.

Table 2. Overdispersion or Underdispersion Test Results

Goodness of Fit				
		Value	**Df**	**Value/df**
	Deviance	32,021	92	0.348
	Scaled Deviance	32,021	92	
	Pearson Chi-Square	32,677	92	0.355
	Scaled Pearson Chi-Square	32,677	92	
	Likelihood logs	-172,730		

Whether or not there is overdispersion can be seen from the Deviance or Pearson Chi-square value divided by the degrees of freedom. If the deviation value is greater than 1 then it indicates a variance value that is greater than the average value or overdispersion occurs (Darnah, 2011). Table 2 shows that the Deviance/df value is 0.348 and the Pearson Chi-Square/df value is 0.355. These results indicate that the Deviance/df or Pearson Chi-Square/df value is less than 1 so that it can be concluded that in the built model there is no overdispersion in the response variable or the variance value does not exceed the average value.

Based on Table 3, the simultaneous test (Likelihood Ratio) the Chi-Square Prob value is 0.002014 which means that simultaneously the distance, age, education, income, travel costs, facilities, and visitor satisfaction affect the opportunity for the number of visits to the Lengkung Langit 2 Nature Tourism at the 99 percent confidence level.

Table 3. Results of Generalized Poisson Regression

Parameter	B	std. Error	Sig.
(Intercepts)	1,713	0.5002	0.001
Distance (X1)	-0.005876	0.0018	0.001
Age (X2)	0.001	0.0059	0.893
Education (X3)	0.009	0.0265	0.740
Revenue (X4)	-0.000000012358	0.000000035094	0.725
Travel Expenses (X5)	-0.000003874**	0.0000017745	0.029
Facility (D1)	-0.005	0.1953	0.979
Satisfaction (D2)	-0.103	0.2614	0.693
Log Likelihood Ratio			-172,730
Prob > Chi-Square			0.002014

Information:

** = 95 percent confidence level

The partial test is carried out by looking at the sig value of each variable in Table 3, if the sig value is more than 0.1 then this variable has no significant effect on the number of tourist visits Lengkung Langit 2 Nature Tourism. The explanation for each variable tested as follows.

Distance (X1)

The distance variable has a coefficient value of -0.006 and a significant value of 0.001 = a sig value of less than 0.1, so it can be concluded that the hypothesis is accepted, with the interpretation of distance having a significant effect on the number of visits at a confidence level of 99 percent. So that the closer the distance between the visitor's house and the tourism location will increase the average chance of the number of tourist visits to Lengkung Langit 2 Nature Tourism.

Age (X2)

Sig: 0.893 = sig value more than 0.1, it can be concluded that the hypothesis is rejected, which means that partially, age has no significant effect on the number of visits with a confidence level below 90 percent. The age variable in the model has no significant effect on the number of visits seen from the significance value at the test level of 10.7 percent. Someone who has an interest in traveling does not make his age a factor of the visit.

Education (X3)

Sig: 0.740 = a sig value of more than 0.1, it can be concluded that the hypothesis is rejected, which means that partially, education has no significant effect on the number of visits with a confidence level below 90 percent. The education variable in the model has no significant effect on the number of visits, that can be seen from the significance value at the test level of 26 percent. Based on this, a person's interest in traveling is not influenced by the level of education.

Revenue (X4)

Sig: 0.725 = sig value more than 0.1, it can be concluded that partially, income has no significant effect on the number of visits with a confidence level below 90 percent. The income

variable in the model has no significant effect on the number of visits seen from the significance value at the test level of 27.5 percent. Visitors will sacrifice their income to travel regardless of their income level.

Travel expanses (X5)

Sig: 0.029 = sig value less than 0.1, it can be concluded that the hypothesis is accepted, with the interpretation of travel costs having a significant effect on the number of visits at a confidence level of 95 percent. This can be caused because the cost variable can't be separated from the number of visits a person makes. The value of the Poisson regression coefficient for travel costs in the model is negative, this is in accordance with economic theory, if the price increases, the consumers will reduce the amount of goods they consume. This means that the greater the cost of travel, the lower the average chance of individual visits to tourist sites.

Facility (D1)

Sig: 0.979 = sig value greater than 0.1, it can be concluded that partially the facilities have no significant effect on the number of visits to the Langit 2 arch natural tour with a confidence level below 90 percent. Based on this, the significance value at the test level is 2.1 percent. This indicates that public facilities have no significant effect on the number of visits. Lengkung Langit 2 Nature Tourism party needs to improve its facilities and rides so that tourists are more comfortable and can return to visit.

Satisfaction

Sig: 0.693 = sig value greater than 0.1, it can be concluded that partially visitor satisfaction has no significant effect on the number of visits with a confidence level below 90 percent. Based on this, the significance value at the test level is 30.7 percent. This indicates that satisfaction has no significant effect on the number of visits.

Economic Value of Lengkung Langit 2 Nature Tourism

The economic value of Lengkung Langit 2 Nature Tourism is a value measured in IDR unit for indirect benefits that can be utilized by visitors, this value is a value that is not directly visible but has a considerable impact. This economic value also describes the extent to which the manager's ability to manage resources into tourist sites. Based on the consumer surplus value, in every visit to a tourist area, visitors get more benefits than they paid for. These benefits can be reflected in the form of beautiful scenery and comfort on the site. Calculation of the economic value of the natural tourism area of Lengkung Langit 2 Nature Tourism can be seen in Table 4.

Table 4. Economic value of Lengkung Langit 2 Nature Tourism

Information	Unit	Mark
Number of respondents (a)	Person	100
Average visits per year (b)	times per year	72,350
Travel cost coefficient (c)		0.000003874
Entrance ticket (d)	IDR/individual/visit	15,000
Consumer Surplus (e)	IDR/individual/visit	483,996
Ability to pay (d+e)	IDR/individual/visit	498,996
Payment to resources (f) = (bxd)	IDR/individual/visit	1,085,250,000
Economic value (g) = (bxe)	IDR/year	35,017,101,187

Economic valuation of ecosystem services is often used as a tool that has the potential to improve our collective choice of ecosystem services, as a factor in the costs and benefits (Balmford et al. 2011). To calculate the economic value of a recreational or tourism potential, the Travel Cost Method (TCM) is widely used to assess non-use benefits by calculating individual costs for travel. TCM is usually used to determine the non-use component of recreational areas by considering travel for recreation (Sari, Mulyana, Antoni, & Adriani, 2022).

Table 4 shows that the consumer surplus per individual per visit is IDR 483,996 so that the average economic value of Lengkung Langit 2 Nature Tourism is IDR 35,017,101,187 per year. This value is lower than visitor payments

for Lengkung Langit 2 Nature Tourism which worths IDR 1,085,250,000. This phenomenon is in accordance with a research conducted by Firandari et al (2009) that natural resources used as tourist sites are often undervalued than they should be. According to a research conducted by Banapon (2008) the economic value of a tourism area is influenced by visitors who come to visit to enjoy the beauty of these resources. This is related to the level of satisfaction obtained by visitors to Lengkung Langit 2 Nature Tourism, so that the economic value is reflected in how much visitors are willing to pay to obtain satisfaction.

The economic value needs to be followed by the consumer surplus for the management of nature tourism. Consumer surplus is the difference between the consumer's ability to pay and the price that should be paid so that the ability to pay will be equal to the consumer's surplus plus the cost of the ticket paid. Based on the calculation, the value of the ability to pay visitors is IDR 498,996 per individual per visit. Therefore, the manager can still increase the price of the entrance ticket which is adjusted to the increased facilities in Lengkung Langit 2 Nature Tourism.

Economic Impact of Lengkung Langit 2

The number of visitors to national parks is the most prominent indicator of the contribution of these protected areas to the local economy (Bateman, et al 2011; Jones, et al 2003; Bateman, et al 2006; Balmford, et al 2015). The economic impact arising from tourism activities can be seen from the overall expenditure of visitors for transportation, parking, entrance ticket fees, and vehicle rental fees. The proportion of respondents' expenditure is divided into expenditure outside the tourist area and within the tourist area. According to Yoeti (2008) leakage is the part of money spent by tourists that is not spent again and does not affect local economic activity. The total cost of visiting visitors will be estimated from the total number of visits and the average visitor spending for one visit is around IDR 65,770.00. According to Yoeti (2008) Leakage is part of the money spent by visitors that does not benefit local tourism economic activities. Judging from the proportion of tourism costs, visitor spending at Lengkung Langit 2 experiences a leakage rate (Table 5) of IDR 1,917,275,000.00 per year. The level of leakage in Lengkung Langit 2 comes from visitor spending in the form of transportation costs and non-tourist consumption costs.

Table 5. Leakage of visitor spending in Lengkung Langit 2

Description	Mark
(a) Visitor expenditure outside tourist areas (%)	40,29
(b) Total visitor spending (IDR/day/person)	65.770,00.
(c). Total Visits per year (person)	72.350
Total Leakage per year (IDR) (a*b*c)	1.917.275.000,00

Immediate Economic Impact

Immediate economic impact obtained from visitor expenditure which is used directly by the owner of the business unit in the form of business unit income. The direct economic impact of Lengkung Langit 2 tourism can be seen in Table 6. The average total income of all business unit respondents is IDR 10,466,666.67 per month. The direct economic impact of all business units around tourist sites is IDR 14,300,000.00 per month.

Indirect Impact

Indirect economic impact is the impact obtained from the expenditure of business units in buying raw materials or equipment and maintenance of equipment to run their business again and labor income from Lengkung Langit 2 tourism which is obtained from the cost of admission tickets. The indirect economic impact can be seen in Table 6The total indirect economic impact from the business unit and workforce of the Lengkung Langit 2 is IDR 66,800,000 per month.

Continued Economic Impact

Continued economic impact from the existence of Lengkung Langit 2 tourism can be seen from the amount of labor expenditure in the Lengkung Langit 2 tourism area. The largest proportion of labor expenditure is consumption costs of IDR 1,680,000.00 (60.33%) of the

average total labor expenditure, while the proportion of labor expenditure for transportation costs is IDR 196,000.00 with a proportion of 7.04 percent of the average total labor expenditure. The continued economic impact (Table 6) from the existence of the Lengkung Langit 2 tour is IDR 55,689,666.00 per month.

Table 6. Economic Impact of Lengkung Langit 2

a. Immediate economic impact					
Business unit	Number of Samples (a)	Total Population (b)	Average income (IDR/month) (c)	Proportion (d)	Immediate economic impact (e = b*c)
Food vendors	3	3	1.916.667	18,31210191	5.750.000
Coloring Pictures	1	1	1.300.000	12,42038217	1.300.000
Shooting Doll Rides	1	1	3.400.000	32,48407643	3.400.000
Tire repairs	1	1	1.300.000	12,42038217	1.300.000
Roadside stall	1	1	2.550.000	24,36305732	2.550.000
Total	7	7	10.466.667	100	14.300.000
b. Indirect economic impact					
Type of Business	Amont Of Labor (a)	Income (b)	Total Income (c = a x b)	Expenditure Business Units in tourist area (d)	Indirect Economic Impact (e = c + d)
Business unit					
Food vendors	0	-	-	10.000.000	10.000.000
Coloring Pictures	0	-	-	2.000.000	2.000.000
Shooting Doll Rides	3	1.000.000	3.000.000	4.900.000	7.900.000
Tire repairs	1	1.000.000	1.000.000	3.250.000	4.250.000
Roadside stall	0	-	-	1.150.000	1.150.000
Lengkung Langit 2 Manager	2	5.000.000	10.000.000	-	10.000.000
Lengkung Langit 2 Management	3	3.000.000	9.000.000	-	9.000.000
Lengkung Langit 2 Supervisors	2	2.000.000	4.000.000	-	4.000.000
Lengkung Langit 2 Employee	11	1.500.000	16.500.000	-	16.500.000
Parking attendants	2	1.000.000	2.000.000	-	2.000.000
Total					66.800.000
c. Continued economic impact					
Labor	Amount Of Labor (a)	Average Totals Expenditure Of Labor (b)	Proportion Expenditure in tourist areas (%)	Proportion/100 (c)	Continued economic impact (IDR) (d = a*b*c)
Lengkung Langit 2 Manager	2	4.786.750	100	1	9.573.500
Lengkung Langit 2 Management	3	4.060.000	100	1	12.180.000
Lengkung Langit 2 Supervisors	2	3.094.500	100	1	6.189.000
Lengkung Langit 2 Employee	11	2.142.015	100	1	23.562.166
Parking attendants	2	2.092.500	100	1	4.185.000
Total					55.689.666

Multiplier Effect Value of Visitor Spending

The value of the multiplier effect can be used to measure the economic impact on the people of the tourist area. The multiplier effect can be seen from the amount spent by visitors during tours in Lengkung Langit 2 in Table 7.

Table 7. Visitor expenditure in Lengkung Langit 2

Description	Mark
Number of visits per month	6029,17
Proportion of visitor expenditure in tourism	0,60
Average visitor spending per individual (IDR)	IDR 65.770,00
Total expenses per year (IDR) (a*b*c)	IDR 236.765.375,00

The multiplier value of money flows that occur in Lengkung Langit 2 (Table 8) for the Keynesian Income Multiplier value is 0.58, which means that every time there is an increase in spending tourists by one rupiah, it will have a direct impact of 0.58 rupiah on the economy of the surrounding community. The value of the Type 1 Income Multiplier Ratio is 5.67, which means that every one rupiah increase in business unit revenue will result in an increase of 5.67 rupiah in the income of local workers (in the form of business owner income and labor wages).

Table 8. The multiplier effect of money flows that occur in Lengkung Langit 2

Multiplier		Value
Keynesian Income Multiplier	(D+N+U)/E	0,58
Ratio Income Multiplier Tipe 1	(D+N)/D	5,67
Ratio Income Multiplier Tipe 2	(D+N+U)/D	9,57

E : Visitor expenditure = IDR 236,765,375.00

D : Local income that is obtained directly = IDR 14,300,000.00

N : Local income obtained indirectly = IDR 66,800,000.00

U : Local income induced by E = IDR 55,689,666.00

Furthermore, the value obtained from the Type 2 Income Multiplier Ratio is 9.57, which means that if there is an increase of one rupiah in business unit revenue, it will result in an increase of 9.57 rupiah in the income of business unit owners, labor income, and labor consumption expenditure at the level local. The economic impact that occurred in this study is said to be low, it can be seen from the Keynesian Income Multiplier value obtained, which is equal to 0.58. According to META (2001) if the value is between zero and one ($0 < x < 1$), then the tourist location has a low economic impact value.

4. Conclusion

Average result for visitor travel costs per individual per visit to the Lengkung Langit 2 Nature Tourism is IDR 65,770.00, the factors that affect the number of visits to the Lengkung Langit 2 Nature Tourism area are distance and travel costs, the economic value of Lengkung Langit 2 based on the travel cost method is IDR 35,017,101,187 and the economic impact that occurred in this study is said to be low, it can be seen from the Keynesian Income Multiplier value obtained, which is equal to 0.58..

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