



Analysis of Multiplier Effect Tourism in the National Tourism Strategic Area of Pulisan Beach, East Likupang

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Abstract. This research is to find out the multiplier effect of tourism activities on the community's economy from tourism activities on the Pulisan beach, which is a study of tourism geography in the perspective of planning and utilizing regional-based geographic physical potential. This study uses a multiplier effect analysis to determine the direct effect, indirect effect and induced effect. To determine the multiplier effect, the Keynesian income multiplier formula and the income multiplier ratio I and II are used. This research uses a mixed method (mixing method), data collection using survey techniques, in-depth interviews and observations. The research strategy in mixed methods uses a sequential explanatory strategy which in this strategy, data analysis from each method still uses quantitative and qualitative data analysis techniques. The results of the study indicate that tourism activities have an impact on the community in the form of increasing income (direct effect), opportunities to intervene as tourism service providers (Indirect Effect) and the formation of network nodes and productivity of tourism activities (Induced Effect). The results of the Multiplier Effect calculation show that the Keynesian Income Multiplier ratio is 3.0, which means that tourism activities have a direct impact on people's income. The results of the calculation of the Income Multiplier Ratio I obtained 1.2 and the Income Multiplier II Ratio with 1.6 results which explained that the impact of tourism had an influence on the community's economy at the Pulisan beach tourism object in the Likupang National Tourism Strategic Area.

Keywords: Multiplier Effect · Tourism · Local Economy

1 Introduction

Tourism can provide opportunities and opportunities for community participation and economic growth for the surrounding community, so it is known that tourism has an impact on the community's economy. Regarding the impact on the community, the contribution obtained from tourism development for regional income has been predicted for its magnitude and potential, but the direct impact of tourism on the community and the impact of tourism on the community need to be specifically identified. This can be a benchmark in the development of tourism potential to be more sustainable. It is undeniable that the presence of a tourism object or tourism potential that is developed in the

area can have a significant impact on the environment and the surrounding community. According to Hartono (1974) tourism has three aspects of influence, namely economic aspects (sources of foreign exchange, taxes), social aspects (job creation) and cultural aspects [1].

Tourism is one of the new industries, which is able to provide rapid economic growth in terms of employment opportunities, income, standard of living and in activating other production sectors in tourist receiving countries [2]). The benefits obtained by the community from tourism development are micro-level benefits from tourism, the benefits of the tourism sector are divided into two levels, namely the macro or national level which is expected to increase national income and foreign exchange. At the micro level tourism can create jobs, income distribution and national balance.

The Manado-Likupang National Tourism Strategic Area (KSPN) is one of the top 10 tourism destination development priorities that are currently being developed. The acceleration of infrastructure development is a program of the Forward Indonesia Cabinet 2019–2024 by determining areas with tourism potential to be prioritized for development. The superpriority of a tourist area is supported by several pillars, namely, first; central and regional institutional support, Second; Third infrastructure and funding; Community participation of tourism actors and the fourth investment [3]. The determination of Likupang to be a national tourism strategic area (KSPN) by the government is based on the existence of existing tourist objects which are dominated by marine tourism objects such as Pulisan beach, Paal beach and several other tourist objects. Thus, Likupang in the implementation of tourism area development using a 4 (four) pillar approach will have the support to become a tourist area that can contribute to regional development.

The plan to develop existing tourism objects as part of the national tourism strategic area will increase the public's interest in traveling, therefore the contribution and direct impact of tourism activities that are felt by the community economically need to be known as development considerations. So far, no studies have been found on the impact and influence of the increasing tourism activities on tourist objects in the Likupang tourism strategic area, especially on the Pulisan beach. Regarding tourism sustainability, development planning must be based on the goals and contributions of tourism objects that have been developed as a response to the consequences of the influence of tourism activities. Based on this, an assessment of the multiple impacts of existing tourism objects on Pulisan beach needs to be carried out so that the magnitude of the impact on community economic growth can be used as a basis for planning and developing tourism potential in a sustainable manner.

2 Methods

The method in this research is a mixed method that uses two approaches, namely qualitative and quantitative, using both methods in the form of mixed research in order to obtain comprehensive and measurable results [4]. This research was conducted at the Pulisan Beach, East Likupang District, North Minahasa Regency, at an astronomical location of $125^{\circ} 8'48.97''\text{E} - 1^{\circ}40'56.29''\text{N}$ in the National Tourism Strategic Area (KSPN Likupang). The population in this study were all tourists who attended and people who had businesses around the tourist attraction area, while the sampling technique in this study

was the purposive sampling method. Primary data were collected using the following techniques: Survey, Interview, Observation. In determining the quantitative sample size, the Slovin formula is used with a critical value (margin of error) of 1%. Qualitatively the sampling technique used is area sampling technique (cluster random sampling). This technique is used because the area that is the object of research is known, so it is possible to get the same opportunity in data acquisition. The analytical technique used is multiplier effect analysis [5], to measure the impact of the veranda from tourism activities, using 2 types of multipliers as follows:

Keynesian local income multiplier, namely the amount of tourist spending on tourist objects with the same equation;

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$$\text{Keynesian Income Multiplier} = \frac{(D + N + U)}{N}$$

–

$$\text{Ratio Income Multiplier Type 1} = \frac{(D + N)}{N}$$

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$$\text{Ratio Income Multiplier Type 2} = \frac{(D + N + U)}{D}$$

The Income Multiplier Ratio is the direct impact value obtained from tourist spending on the local community in the form of an indirect multiplier and an induced impact with the equation.

E: visitor expenses (Rupiah) D: local income obtained directly from E (Rupiah) N: local income obtained indirectly from E (Rupiah) U: local income obtained induced from E (Rupiah).

Data analysis in this study refers to a mixed methods research strategy, namely by using a sequential explanatory strategy that is used to explain and interpret quantitative results based on the results of qualitative data collection and analysis [4].

3 Results

3.1 Tourist Expenditure

Tourists who are respondents in this study are domestic tourists, who net on weekend tourist visits not during the holiday season (low season). The results obtained can be seen in Fig. 1.

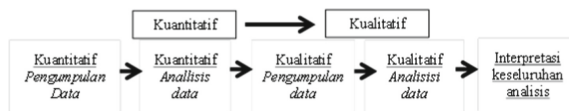


Fig. 1. Sequential Explanatory Strategy

Table 1. Proportion of Expenditure of Tourists from Pulisan Beach

Component	Proportion (Rp)
Total cost of visitors (E)	1.315.000
Average visitor expenditure	109.583
Total cost in location	750.000
Leakage	560.000
Total direct income (D)	2.500.000
Total indirect income (N)	500.000
Advanced total income (U)	1.000.000

Tourists who visit Pulisan beach attractions are dominated by tourists who have visited the tourist attraction more than 1 visit. The economic background of tourists as measured by the income per month and the expenditure can be seen in Table 1. From these results it can be seen that tourists who visit this tourist attraction are middle and upper economic tourists, which will later become a determining factor in making decisions about which tourist destinations to visit from several countries.

Based on the results above, the perception of tourists based on the indicators of questions based on the attractiveness criteria of a proposed tourist attraction can be explained as follows:

a. Attractions

Tourist perceptions related to the attractions found on the Pulisan Likupang beach, are considered sufficient to attract tourists, this is considered by tourists to provide a relaxation function and offer natural beauty. This attraction makes Pulisan beach an option to be visited many times by the same tourists in a year.

b. Accessibility

The high interest in visiting Pulisan beach attractions is influenced by the ease of accessibility shown by the affordability of tourist objects. The positive response of tourists to the accessibility to Pulisan beach attractions is supported by good road conditions and also the ease of reaching tourist objects thanks to the support of available information. The affordability to Pulisan beach attractions is considered easy to reach using private vehicles, while for tourists who do not have private transportation and want to visit Pulisan beach attractions, they can also use public transportation although it takes longer.

c. Tourist Facilities (Amenities)

The availability of public facilities at tourist attractions also influences visits and decisions to travel to Pulisan beach attractions. Respondents' responses regarding the support of tourist facilities showed positive results which were influenced by the availability, adequate parking space, toilets and the presence of tourism service providers who made it easy for tourists to fulfill their needs.

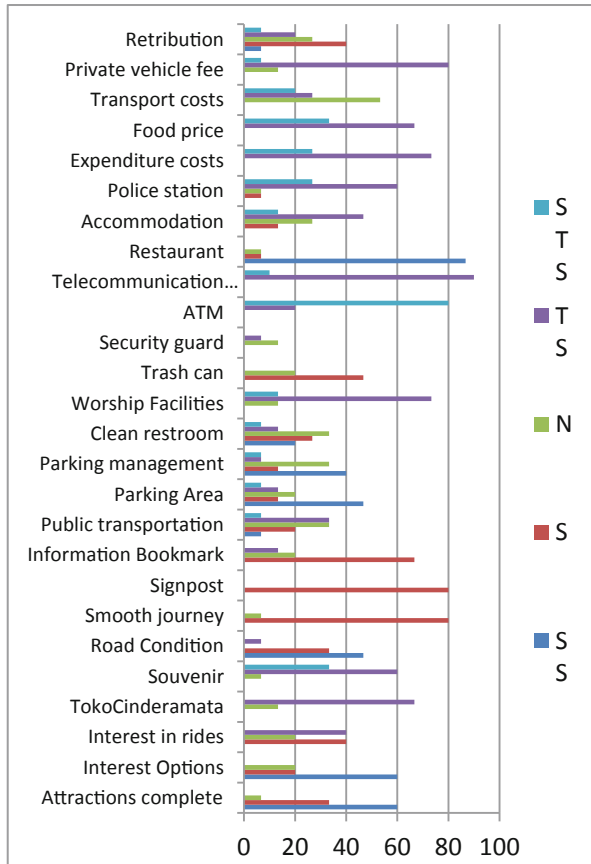


Fig. 2. Tourist perception of Pulisan beach

d. Supporting Facilities

Some tourism support facilities at Pulisan beach attractions are considered to be lacking such as the availability of adequate communication networks, limited electricity and clean water and also lodging for tourists who want to stay overnight. Other supporting facilities are considered very good such as security and cleanliness.

e. Cost

Tourist responses regarding the cost of travel to Pulisan beach attractions are considered quite high but are considered worth it even though they have to pay more for transportation. Retribution and tourist spending in tourist attraction areas are considered affordable, this condition is the basis for tourists' decisions to travel in groups to reduce costs.

3.2 Multiplier Effect

Based on the data obtained in Table 1, the results in the test using the multiplier effect analysis on the Pulisan beach tourism object are presented as follows:

Table 2. Multiplier Effect Calculation Results

Criteria	Score	Description
<i>Keynesian Income Multiplier</i>	3.0	Tourism activities have an economic impact on the community
<i>Ratio Income multiplier I</i>	1.2	The economic impact is said to have had a major impact on the community's economy
<i>Ratio Income Multiplier II</i>	1.6	

a. Keynesian Multiplier Effect Calculation:

$$= \frac{2,500,000 + 500,000 + 1,000,000}{1,315,000}$$

$$= 0.3$$

b. Calculation of Ratio Income Multiplier Effect Type I:

$$= \frac{2,500,000 + 500,000}{2,500,000}$$

$$= 1,2$$

c. Calculation of Ratio Income Multiplier Effect Type II:

$$= \frac{2,500,000 + 500,000 + 1,000,000}{2,500,000}$$

$$= 1.6$$

Based on the calculation of the multiplier effect, the Pulisan beach tourism object is known to have a multiple impact, which can be stated from the results of the Keynesian Income Multiplier, Ratio Income Multiplier I and Ratio Income Multiplier II which results are more than (≥ 1). The calculation of the Keynesian Multiplier shows a ratio value of 3.0 which means that every time there is an increase in tourist spending, it will have a direct impact of 3.0 on the income of the community around the Pulisan beach tourist attraction. This result can be said to be high because the acquisition value is more than or equal to one (≥ 1) indicating the influence of expenditure on income. In the value of Ratio income multiplier I obtained a value of 1.2 which means that every single expenditure (in rupiah) at the recipient of the business unit will have an impact on an increase of 1.2 (in rupiah) to the income of the population around the tourist attraction. Furthermore, the value of Ratio Income Multiplier II obtained a value of 1.6 which indicates that if there is an increase of one rupiah in business unit revenues, it will result in an increase of 1.6 rupiahs in the income of business owners, tourism sector community income and also public consumption expenditures. Business actors in tourism objects on a local scale.

4 Discussion

4.1 Tourist Contribution

The activities of tourists in their visits to the Pulisan beach tourism object managed to have a multiple impact felt by the people involved in the implementation of tourism. Similar conditions are considered to occur in other tourist objects in the Likupang tourism strategic area. Potential factors contained in the Pulisan beach tourism object affect the decision of tourists to travel to this tourist attraction. The attraction that is owned by the Pulisan Likupang beach tourist attraction which is by tourists presenting the function of relaxation and natural beauty, besides the rides and the availability of tourist services makes visitors recover and plan their visit. Considering the existence of similar tourist objects in the Likupang tourism strategic area which has the same attraction, of course, it can influence the decision to visit domestic tourists, thus improving services and variations of other tourist services need to be considered by tourism managers and the community at Pulisan beach tourism objects. Services and infrastructure support are considered capable of attracting tourist visits, which are known to be available at this tourist attraction. The intensity of visits and positive trends found in Pulisan beach attractions, elements of attraction possessed by Pulisan beaches in terms of natural beauty which Yoeti [6] provides an attraction which is then packaged well by community management.

4.2 Tourist Attraction and Decision

The presence and decision of tourists to visit Pulisan beach attractions have a direct impact which by Spilane (1984) [7] can be in the form of foreign exchange earnings or community income. The impact obtained from tourism activities on the Pulisan beach is known to be in the form of direct income which is sought by the community through services for tourist needs such as food and resting places, besides that and other socio-economic impacts are the opportunity for village communities to be involved in tourism management, which is a job opportunity as an alternative to other activities. Primary economy as fishermen and farmers. Community involvement in the Pulisan beach tourism object is still in the form of involvement in providing the needs for the provision of tourism services, variations and other entrepreneurial activities are still needed in order to maximize the absorption of income which by Goeldner [8] comes from the money spent by tourists for tourist needs and affects the economy of the area. Tourism activities that occur in strategic national tourism areas and especially in Pulisan beach attractions provide an opportunity for intervention (intervening opportunities) from job opportunities and forms of entrepreneurial creativity from the surrounding community.

4.3 Multiplier Effect and Leakage

The known impact of the multiplier effect analysis can quantitatively confirm the tourism activities that take place at the tourist attraction. The keynesian multiplier effect calculation ratio of 3.0 shows that tourism activities have an impact on the economy of the

community at the tourist attraction. This value is closely related to the total consumption of tourists while they are in tourist objects which, if referring to the hierarchy of tourist expenditures according to the WTO, tourists spend on tourist objects in the form of accommodation, food and beverages, recreational facilities. Meanwhile, other tourist shopping segments that do not exist in Pulisan beach attractions such as souvenirs (shopping), travel packages, still need to be maximized. The multiple impacts that occur from tourism activities on the Pulisan beach are a form of the sum of other impacts which when referring to Stynes (1997) [9] in the form of: direct impacts, such as community income, indirect impacts in the form of opportunities for intervention by the community and further impacts in the form of increasing the economy of the surrounding community. Will enable economic growth around the tourist attraction. The continued impact can be seen from the growth of tourist attractions and tourist networks that increase tourist visits to tourist objects, such as the determination of the surrounding area as a strategic national tourism area describes as an output multiplier, namely things that trigger productivity and the network built by tourism. In addition to the positive multiplier impact on tourism activities on the Pulisan beach, it is also known that the form of leakage indicates that the absorption of tourist objects from tourist expenditures has not been maximized. Leakage is known from tourist shopping which is only intended for food and drink needs and tourism services. Shopping for souvenirs and tour package facilities that residents have not utilized to offer to tourists.

5 Conclusion

The multiple impacts on tourism activities on the Pulisan beach can be concluded as follows:

1. Conditions of tourist objects affect people's income, namely the urge to travel by tourists is influenced by interest and also the attractiveness of tourist objects. Conditions of tourist objects with low facilities and access also increase the burden of spending for tourists, with the characteristics of domestic tourists who are categorized as middle and upper class, cost is the dominant factor in determining travel decisions. The high cost burden, especially in the transportation aspect, also increases the leakage from the calculation of the potential profits of tourist areas. The presence of tourists may still be expected if local domestic tourists can organize their travel plans.
2. High tourist expenditure costs are not well absorbed in most tourist objects, absorption from tourist spending can be maximized from levies and facilities but does not function optimally. The facilities available in some tourist objects do not function optimally, so that this opportunity is captured by business actors around tourist objects to organize facilities independently, such as toilets and clean water, so that the income value of business unit actors shows a high value in several tourist objects.
3. Distance also affects the high leakage of spending. The leakage value is difficult to absorb by the community around the tourist attraction, but provides an opportunity for service providers of transportation facilities or can be used as a basis for providing public transportation services to tourist sites. Different from the destination where the community around the tourist attraction.

4. From the calculation of the multiplier effect, it is known that the ratio value of the Pulisan beach tourism object shows good results (≥ 3.0). With this ratio, it can be interpreted that tourism activities have an impact on the economic growth of the community around the Pulisan beach tourism object. Calculation of the impact of tourism to increase the economic growth of the community in tourism objects is based on:
 - a. tourist attraction in accordance with the interests of tourists, which in this study was found that beach attractions received high visits due to high interest from tourists to the beach.
 - b. Facilities available at tourist objects that contribute to business income and for business actors, so that the availability of facilities can meet the needs of tourists and expenditures that continue to circulate within the tourist attraction.
 - c. Distance affects the choice of tourists, the closer and the better the means to get to a tourist attraction, the higher the accessibility of a tourist attraction to encourage the interest of tourists to visit. The increase in people's income is greatly influenced by visits.

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