



Impact of economic value of ecotourism development on Income MSMEs: studies in Ternate, North Maluku

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ABSTRACT

The aims of this study are: (1) to determine the effect of attractiveness on income; (2) To determine the effect of ecotourism value on income; (3) To determine the influence of the attractiveness and value of ecotourism on income. The population in this study is all parts of the population, amounting to 100 people. Meanwhile, the number of research samples was 70 people. As for this study, the respondents were visitors and sellers at the Jikomalamo Beach tour. The test tool used is multiple linear regression analysis (multiple regression) using the statistical package for social scientists (SPSS) as a statistical test tool. From the research results show that; (1) partially positive and significant effect on income; (2) partially the value of ecotourism has a positive and significant effect on income; and (3) simultaneously shows that the attractiveness and value of ecotourism has a positive and significant effect on income.

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1. INTRODUCTION

Indonesia is an archipelagic country in which almost 70 percent of its territory is water. Approximately 13,466 islands have a wealth of natural resources and biodiversity. This is a great potential for Indonesia which can be developed to improve the economy, one of which is tourism potential. The diversity of natural resources, flora and fauna, culture and historical heritage of Indonesia, is a force of attraction in the development of Indonesian tourism (Ministry of Tourism, 2022).

At the present time, it is undeniable that tourist attraction influences the world of tourism, especially in tourist destinations that are offered to the wider community. A tourism product requires development that is right on target in order to create a tourist destination that is widely known by the public as a tourist destination that is able to satisfy the tourist tastes of both domestic and foreign tourists (Darda & Bhuiyan, 2022)(Brillo & Simondac-Peria, 2021).

Tourism is a sector that is being seriously worked on by countries in the world in order to boost the national economy. Indonesia has great tourism potential because Indonesia is a vast archipelago, whose territory stretches from Sumatra to Papua. Tourism is a social, economic, political, cultural and technological phenomenon, so that this situation is of great concern to experts and development planners. Tourism is everything related to tourism including the exploitation of tourist objects and attractions as well as businesses - businesses related to this field (Bahiyah & Hidayat, 2018).

Says tourism development is ideas and ideas that are given a touch of creativity and innovation to increase the economic value of tourism aspects (attractions, objects, facilities, transportation, products and services) so that it will increase tourist visits and realize tourist satisfaction. It was at that time that the economic cycle occurred which would lead to prosperity (Cemporaningsih et al., 2020)(Danilwan et al., 2023)(Girinatha, 2022)(Turekulova et al., 2022).

Tourist attraction according to Law no. 10 of 2009 is everything that has uniqueness, beauty and value in the form of a diversity of natural, cultural and man-made wealth that is the target or destination of tourist visits. According to (Indriastuty et al., 2020) that a tourist attraction is something that has an attraction to see and enjoy which is worth selling to the tourist market. Ali (2012) explains tourism products as follows: "A tourism product is a package that is not only about the beauty or exoticism of a tourist spot, but in a broader sense. Tourism products include attractions, facilities when traveling, and also access to these tourist attractions (Hossain et al., 2023)(Santini et al., 2023).

Meanwhile according to (Lapian et al., 2015), that tourist attraction is the main focus of driving tourism in a destination. Tourist attraction as the prime mover that motivates tourists to visit a place. (Tazkia & Hayati, 2012), there are five elements of tourist attraction in the tourism industry that are very important, namely: *Attractions* (attraction), *Facilities* (necessary facilities), *Infrastructure* (infrastructure), *Transportations* (transportation), *Hospitality* (hospitality). According to (Nafi et al., 2017) Ecotourism is a type of tourism that became popular around the 1990s. Indonesia as a country with various kinds of natural uniqueness, Indonesia has quite good potential in developing this type of ecotourism, most foreign tourists come to Indonesia because of its natural beauty, natural resources provide an increase in the competitiveness of Indonesian tourism, in the World Economic Forum Indonesia ranks 2nd 14 in Potential *Natural Resources* in 2017. Ecotourism is nature-based tourism that involves education, interpretation of the environment and is managed in a sustainable manner. The existence of ecotourism in an area affects the lives of people around the area if it is managed properly, there will be an increase in welfare. Furthermore, the important part is the sustainability of the area, because these tourism activities must increase the carrying capacity of the environment (Tuasikal, 2020).

Empowerment is more emphasized on the people's economic aspect, because the community is expected to be able to develop and also direct all potential resources, especially in (Mubyarto & Kartodirdjo, 1998). He also stated that the community knows more about the condition of the area and the type of business that in the future will form an institution and also a service system for the community around the area. Community empowerment through ecotourism activities still needs to be encouraged to provide an understanding based on empirical evidence of the impacts and benefits of ecotourism activities for community empowerment, especially in coastal villages (Rianto et al., 2021).

Income theory shows the total amount of money received by a person or household during a certain period of time (usually one year). Income consists of wages or labor receipts, income from assets such as rent, interest and dividends, as well as transfer payments or receipts from the government such as social benefits, or unemployment insurance (Asmuruf et al., 2015).

According to (Susanti & Aidar, 2017), equitable community income as a target is a problem that is difficult to achieve, but reduced inequality is one of the benchmarks for successful development. A fairly good indicator for measuring the level of distribution of people's income is the distribution of people's income among population groups (income groups). People's income is very dependent on business field, job rank and position, level of general education, productivity, business prospects, capital and others. These factors are the cause of differences in the level of income of the population. Revenue from the tourism sector is a source of funds for an area where tourism is located. The higher the number of tourist visits, it means that the field of tourist spending is increasing which results in an increase in the demand for goods or services needed by tourists. This process results in increased employment, which means that it will increase people's income. With the increase in the income of the local community, the welfare of the community also increases (Fuentes et al., 2022)(Norkuziyev, 2022)(Susilowati et al., 2019).

North Maluku has lots of beautiful destinations and can amaze anyone. Some have hidden locations, so few tourists know about these places. Like Jikomalamo Beach, with the beauty of an underwater paradise hidden in Ternate.

Unlike most, Jikomalamo Beach only has a coastline of about 100 meters. Even so you won't be disappointed, the sand that stretches across this bay is still very clean. Sunbathing all day, will not bore you. Jikomalamo Beach began to develop in 2015. The government has also built various facilities such as access to the beach which used to be from a dirt road but is now smooth on asphalt. Making it easier for tourists who will visit.

Jikomalamo Beach is a relatively new tourist destination in Ternate City . However, with its beauty and uniqueness, the people of Ternate City have made this beach a popular tourist spot. Therefore, you can visit with your family, friends or community. Jikomalamo Beach is located in Sulamadaha Village, Ternate Island District, Ternate City, North Maluku. To get to this Jikomalamo beach attraction, you have to travel about 10 kilometers from downtown Ternate. If using a vehicle, the travel time is about 20 minutes to 30 minutes. The distance between this beach and Sulamadaha beach is only about 2 kilometers.

One of the Ternate Island areas that have been developed as a tourist attraction is the Jikomalamo Beach Area. Tourist visits to the Jiko Malamo Beach area in general continue to increase every year. Jikomalamo Beach is used as a new beach tourism object in the city of Ternate which has only been developed in the last few years and has received a good response from the community, especially the location community in Ternate City and its surroundings, so that tourist visits have shown an ever-increasing increase.

Table 1. Data on the Number of Tourist Visits at Jikomalamo Beach 2017-2019

No	Year	Number of Visits
1	2017	72,001
2	2018	86,330
3	2019	92,300

Data Source: Ternate City Tourism Office (2020)

The current trend is that visits to Jikomalamo Beach are more in demand compared to tours in other cities of Ternate, so this change in visiting trends occurs due to the better facilities and attractiveness of Jiko Malamo Beach attractions.

Tourism is a complex activity, which can be viewed as a large system consisting of various components such as political, economic, social, cultural and so on in a relationship that is interdependent and interrelated (*interconnectedness*). As a system, between components in the system, where a change in one of the subsystems will also cause changes in other subsystems, until finally a new harmony is found again (Rani, 2014).

Tourism development that has been carried out by the government and the private sector has increased the number of tourist arrivals from one region to another. In essence, there are four main areas that are affected by tourism development efforts, namely economic, social, cultural and environmental. One of the beneficial positive impacts in the economic field is that tourism activities bring in foreign exchange income for the State. In 2011, foreign exchange earnings from tourism are estimated to reach USD 8.5 billion, up 11.8% compared to 2010. This increase exceeds Indonesia's economic growth which is projected to be at the level of 6.5% and world tourism growth which is only 4.5% (Suryani, 2017).

Community participation around tourist objects can be realized in the form of trading businesses or services (Arintoko et al., 2020). A good cooperation is needed between the manager of the tourist attraction and the community around the tourist object. In this case, the community's seriousness is also needed to help create a good image for the tourist object, so that it will invite tourists to visit there. Friendliness, honesty of the community can create a distinct impression, so that it can generate requests to come back. Community participation is needed to create conditions that are conducive to tourism development (Thetsane, 2019)(Magigi & Ramadhani, 2013).

The development of tourism in an area will bring many benefits to the community, namely economically, socially and culturally (Nyaupane et al., 2006)(Masud et al., 2017). However, if the development is not properly prepared and managed, it will create various problems that make it difficult or even detrimental to the community. To ensure that tourism can develop properly and sustainably and bring benefits to humans and minimize the negative impacts that may arise, tourism development needs to be preceded by an in-depth study, namely by conducting research on natural resources. supporters (Wardiyanta & Hum, 2006).

From a social point of view, tourism activities will expand employment opportunities both from infrastructure development activities and from various business sectors that are directly or indirectly related to tourism (Happ & Bolla, 2022)(Štrba et al., 2022). Tourism will be able to grow and increase the recognition and love for their homeland, so that it can motivate an attitude of tolerance in association which is a strength in nation building, besides that tourism is also able to broaden the horizons of personal views on the values of life. From an economic point of view, tourism activities can contribute to regional revenues sourced from taxes, parking fees and tickets or can bring in foreign exchange from visiting foreign tourists (FaladeObalade & Dubey, 2014).

Ternate Island, which is known as a mountainous area bordering the shoreline, is currently also being developed as a beach tourism area. One of the aims of this is to improve the economy of the local community, most of whom work as farmers and fishermen. They are currently experiencing problems with decreasing agricultural/plantation yields because the long dry season has caused several plantation crops such as cloves and nutmeg, as well as fish catches due to *overfishing*. Therefore, the tourism sector is expected to contribute to people's income. Economically, an increase in tourist visits to tourism objects on Jikomalamo Beach is thought to be able to help the economy of the people who have experienced a decline in agricultural and fishing potential. This tourism sector is an alternative source of income for the community besides income from their main work as farmers and fishermen. Therefore, it is necessary to develop tourism that is not damage the environment, because this tourist area can provide economic benefits for the local community.

According to Arifiana (2016) , the beach tourism attraction that occupies the top priority in development is Marina Beach based on the highest combined potential score, followed by second place for Maron Beach and third for Tirang Beach. Marina Beach is the main beach in Semarang City and is the most visited because of easy road accessibility, the location is not far from the city center, there are many rides and supporting facilities, while Maron Beach and Tirang Beach are less attractive because of inadequate road accessibility and sufficient location. Far. From the background that has been stated above, the main problems that will be examined and will subsequently become the main objectives of this study are : Does Attractiveness affect the Income of Jikomalamo Beach Tourism Traders ? , Does the Ecotourism Value Affect the Income of Jikomalamo Beach Tourism Traders ? And Does the Attraction and Value of Ecotourism Affect the Income of Jikomalamo Beach Tourism Traders?

2. RESEARCH METHOD

The population is all areas and characteristics consisting of objects and subjects who have certain conditions related to the research problem and then studied and then to draw conclusions (Tigor, 2020). The population in this study is all parts of the population, totaling 100 people. Meanwhile, the number of research samples was 70 people (Qdais et al., 1997). As for this study, the respondents were visitors and sellers at the Jikomalamo Beach tour. Based on determining the number of respondents who will be sampled, the researcher uses the Solvin technique with the following formula:

$$n = \frac{N}{1 + N(e)^2} \quad (1)$$

Information:

n : Sample

N : Population

e : Estimated error rate

In this study, the percentage of 6.6% was used as the sampling error limit, so that based on this formula the number of samples and population was .

$$n = \frac{100}{1 + 100(0,066)^2}$$

$$n = \frac{100}{1,4356}$$

$$n = 69,6572$$

Based on the results of the calculation above with a population of 100 people, the sample in this study is 69.6572, but because the subject is not a fractional number, it is rounded up to 70 respondents.

The type of data used is primary data , namely data obtained and presented in the form of numbers. Data obtained from Jikomalamo Beach Visitors and Sellers. While the data sources used in this study are secondary data, namely data that comes from documentation sources and literature that has relevance to the research object, subject matter and writing material (Smith, 2008).

The techniques used in collecting research data were documentary (documentation studies), interviews and distribution of questionnaires to visitors and sellers at the Jikomalamo Beach tour (Polkinghorne, 2005). The analytical model used in this study is multiple regression analysis (Beasley, 2008)(Sharma et al., 2017)(Montgomery et al., 2021)(Ricciardi et al., 2022). This model is used to test the feasibility of the regression equation model and to find out whether partially the Attractiveness (X₁) and Ecotourism Value (X₂) variables have a significant effect on the Income variable (Y). The model built in this study is as follows :

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + e \quad (2)$$

note:

Y = Income
 X₁ = Attraction
 X₂ = Ecotourism Value
 α = Konstanta
 β₁ & β₂ = Koefficiency of Regresi
 N = Number Observasi
 e = Error

variables are used to scale the measurement of each variable, so that hypothesis testing can be done properly.

Attractiveness free variable (X₁)

The tourist attraction of Jikomalamo Beach is the potential to be one of the incentives for tourists to visit Jikomalamo Beach. Indicators of access to the location, lots of cool places, bay/hol coast, diver training and shooting spots.

Ecotourism value free variable (X₂).

Ecotourism is to measure a variable from a concept that exists in the tour, indicators of tourist identity, tourist destinations, tourist activities, resident participation, merchant income and management of ecotourism in Jikomalamo Beach Tourism.

Income dependent variable (Y)

Income is income earned/received expressed in rupiah/capita in a month, an indicator of the amount of money traders receive from their activities, usually obtained from sales or natural products around Jikomalamo Beach.

3. RESULTS AND DISCUSSIONS

Descriptive analysis in this study included: analysis of the characteristics of the respondents, analysis of descriptive statistics consisting of the maximum, minimum, mean and standard deviation values, as well as the categorization of the respondents' answers. The discussion regarding each descriptive analysis is presented as follows.

The analytical model used in this study is multiple regression analysis. This model is used to test the feasibility of the regression equation model and to find out whether partially the Attractiveness (X₁) and Ecotourism Value (X₂) variables have a significant effect on the Income variable (Y).

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + e \quad (3)$$

$$Y = 28.244 + 0.742 X_1 + 0.830 X_2$$

The t test is used to determine the effect of each independent variable (partially) Attraction (X_1) and Ecotourism Value (X_2) on Income variable (Y). The t test basically shows how far the influence of one explanatory/independent variable individually explains the variation of the dependent variable. To determine whether there is an influence of each independent variable individually on the dependent variable, a significant level of 5% is used. The test steps carried out are as follows.

Probability based decision making hypothesis (P-Value). By using the probability value, H_a will be accepted if the probability is less than 0.05 and H_a will be rejected if the probability is more than 0.05.

Attractiveness to income.

Variable X_1 Work motivation with t count of 3.597 and a significant value of 0.001. Statistical results t table at the level of significance. It can be seen that t count is known to be 3.597 more than t table 1.660 and the degree of confidence is 0.001 < than 0.05. so that it can be concluded that the Attractiveness variable (X_1) has an effect on Income (Y).

Value of ecotourism to income.

Variable X_2 Ecotourism value with t count of 5.776 and a significant value of 0.000. The statistical results of t table at the level of significance. It can be seen that t count is known to be 5.776 and more > than t table 1.660 and the degree of confidence is 0.000 < than 0.05. so that it can be concluded that the ecotourism value variable (X_2) has an effect on income (Y).

From the processed data, it can be seen that the partial effect of attractiveness on income has a t-count value of 3.597 and a t-table value of 1.660, which means that if the t-count is greater than the t-table, attractiveness has a positive effect on people's income and vice versa, thus it can be concluded that t-count > t-table or has a positive effect.

Tourist attraction based on the Law of the Republic of Indonesia no. 10 of 2009 is everything that has uniqueness, convenience, and value in the form of a diversity of natural, cultural, and man-made assets that are targeted or visited by tourists. A tourist attraction must have 5 important elements so that tourists can feel satisfied in enjoying their trip, namely facilities, infrastructure, transportation, hospitality and attractions. However, of the five elements that are most seen by most tourists, namely facilities and attractions.

Efforts to develop and improve the implementation of tourism, namely through the development of objects and attractions, both in the form of developing existing tourist objects and creating new objects as objects and attractions. Tourist areas must have an attraction to attract tourists to visit the area.

Tourism Objects and Attractions are one of the important elements in the world of tourism. Where tourist objects and attractions can succeed in government programs in preserving the nation's customs and culture as assets that can be sold to tourists. Objects and tourist attractions can be in the form of nature, culture, way of life and so on which have attractiveness and selling points to be visited or enjoyed by tourists. In a broad sense, anything that has a tourist attraction or attracts tourists can be referred to as a tourist object and attraction.

The tourist object of Tobololo Beach is one of the tourist objects that are visited by many Ternate city people, Jikomalamo beach is also one of the people's choices when doing holiday activities with family. With its own characteristics and charm, it makes Jiko Malamo Beach a favorite of the people, besides that, with the large number of visitors arriving, it will be able to increase the economic income of the people around J Ikomalamo Beach who sell.

The economic impacts of tourism activities or various economic activities can be grouped into three categories, namely direct, indirect and secondary benefits. Direct benefits can result from direct tourist expenses, such as expenses for restaurants, lodging, local transportation and others. Furthermore, the business unit that receives the direct impact will require input (raw materials and labor) from other sectors, and this will have an indirect impact. Furthermore, if the sector employs

local workers, the expenditure of local workers will have a further impact on the tourist location (Rani and others 2014).

The impact of tourism on the socio-economic conditions of local communities can be categorized into eight major groups, namely: impacts on foreign exchange earnings, community income, employment opportunities, prices, distribution of benefits/benefits, ownership and control, development in general and government revenues.

Socio-economic impact on tourism development is an effort or way to advance and develop something that already exists. Tourism development in a tourist destination will always be calculated with the advantages and benefits for the people around it. Tourism development must be in accordance with careful planning so that it is good for the community, both from an economic, social and cultural perspective. Tourism can also provide benefits for both tourists and host communities and can raise living standards through the economic benefits it brings to the region (Ningsih, 2014).

From the explanation above, it can be seen that the socio-economic impact greatly influences development development in order to increase income which will trigger community welfare by developing the sector development of tourism which will later become the main attraction to increase visitors visiting the J Ikomalamo Beach tour.

From the processed data, it can be seen that the partial effect of ecotourism value on income has a t-count value of 5,776 and a t-table value of 1.660, which means that if the t-count is greater than the t-table, the value of ecotourism has a positive effect on people's income and vice versa, thus it can be concluded that $t\text{-count} > t\text{-table}$ or has a positive effect.

Activities around the ecotourism area give tourists insight into environmental education and then enjoy the beautiful environment and make tourists have a greater sense of nature. (Cemporaningsih et al., 2020) said that ecotourism is a special tourism activity. This particular form of tourism activity makes ecotourism often positioned as opposed to mass tourism. The difference with mass tourism is the product and market characteristics. These differences have implications for typical requirements, planning and management.

Ecotourism resources consist of natural resources and human resources which can be integrated into an integrated component for tourism utilization. Based on the utilization concept, tourism can be classified into three groups, namely:

(a). *Nature tourism* is a tourism activity aimed at experiencing natural conditions or panoramic attractions. (b). *Cultural tourism (Cultural Tourism)*, is tourism with cultural richness as a tourist object with an emphasis on educational aspects. (c). *Ecotourism (Ecotourism, Green Tourism or Alternative Tourism)*, is environmentally oriented tourism to bridge the interests of protecting natural resources/environment and the tourism industry.

In relation to ecotourism, Damanik and Weber (2006) compiled three basic concepts about ecotourism, namely as follows: First, outdoor travel and in natural areas that do not cause environmental damage. Second, this tour prioritizes the use of facilities created and managed by the community in the tourist area. Third, this tour pays great attention to the natural environment and local culture.

Tourism activities that can be developed with the concept of marine ecotourism can be grouped into two, namely beach tourism and marine tourism. According to Yulianda (2007), beach tourism is a tourism activity that prioritizes coastal resources and culture of coastal communities such as recreation, sports and enjoying the scenery, while marine tourism is a tourism activity that prioritizes underwater resources and seawater dynamics.

The value of ecotourism is very important to be developed through tourism excellence which will have an impact on people's welfare. Community activities really support the value of ecotourism which can develop Jikomalamo Beach tourism. The more organized the tourism situation at J ikomalamo Beach, it will trigger an increase in the number of visitors arriving, thus it will be able to increase the income of the surrounding community who carry out trading activities.

4. CONCLUSION

Based on the results of the discussion that has been described previously, the conclusions obtained from this study are: partially the Attractiveness variable has a positive effect on income on Jikomalamo Beach tourism. Attractiveness to Income have a significant value according to statistical results. Attractiveness to Income have a significant value, it can be seen that t count is known to be 3,597 more than t table 1.660. So that it can be concluded that the Attractiveness has an effect on Income.

The Ecotourism Value variable has a positive effect on income at Jikomalamo Beach tourism. Statistical results, Ecotourism value with a t count of 5,776 and a significant value of 0.000. It can be seen that t count is known to be 5,776 and more > than t table 1.660, so that it can be concluded that the Ecotourism Value has an effect on Income. Simultaneously the Ecotourism Attraction and Value variables have a positive effect on Income by 24.3%, which means Ecotourism Attraction and Value will increase Jikomalamo Beach Tourism Revenue.

Tourist attraction is everything that has uniqueness, convenience, and value in the form of a diversity of natural, cultural, and man-made assets that are targeted or visited by tourists. A tourist attraction must have 5 important elements so that tourists can feel satisfied in enjoying their trip, namely facilities, infrastructure, transportation, hospitality and attractions. However, of the five elements that are most seen by most tourists, namely facilities and attractions.

Efforts to develop and improve the implementation of tourism, namely through the development of objects and attractions, both in the form of developing existing tourist objects and creating new objects as objects and attractions. Tourist areas must have an attraction to attract tourists to visit the area. Tourism Objects and Attractions are one of the important elements in the world of tourism. Where tourist objects and attractions can succeed in government programs in preserving the nation's customs and culture as assets that can be sold to tourists. Objects and tourist attractions can be in the form of nature, culture, way of life and so on which have attractiveness and selling points to be visited or enjoyed by tourists. In a broad sense, anything that has a tourist attraction or attracts tourists can be referred to as a tourist object and attraction.

In light of the after effects of the review and the finishes of this review, the creators propose a few ideas that can be utilized to give contribution to the public authority of Ternate City. As a thought for Money through expanding Fascination and Ecotourism, there are a few ideas that should be conveyed by specialists, including the accompanying. For nearby government, from the aftereffects of this review, to keep up with pay or increment pay, nearby legislatures and neighborhood networks ought to add or keep up with existing foundation in Jikomalamo Ocean side the travel industry to acquire a rising number of guests.

For the following analyst, In this review, analysts utilized the Appeal and Ecotourism Worth factors in expanding pay, for additional examination, this exploration can foster this examination in expanding Jikomalamo Ocean side Income by utilizing different factors to build the quantity of guests to Jikomalamo Ocean side the travel industry.

The findings of this study can be used as material for consideration by the North Maluku regional government in developing the economic value of tourism potential that is oriented towards increasing the income of MSME actors in the tourism sector. The results of the mapping in this study can also provide an illustration that local government efforts are needed to pay more attention to regencies/cities that have potential tourist attractions and a low level of attention and concern to manage them properly and sustainably.

This research is limited to areas based on available data, namely the Jikomalamao Ternate tourist attraction, and only examines the relationship between several variables. For future researchers, it is hoped that this will expand the object of research and provide better ideas about the management of ecotourism objects that are oriented towards increasing MSME income in North Maluku.

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