

Economic Impact of Tourism Development in Samosir Regency, North Sumatera, Indonesia

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Abstract: Samosir Regency's small contribution of the tourism industry to regional revenue shows that the development of tourism is still not optimal, both in terms of tourism objects, government and community role. This research aims to identify and evaluate the economic impact of tourism development in Samosir Regency, North Sumatera, Indonesia. The method used in this research was the interval score with a median division of 100 respondents in Samosir Regency related to tourism. The primary data derived from questionnaires and interview results, while secondary data were from study-related local government offices. Using Spearman correlation, data analysis was conducted. The findings showed that simultaneously tourism products and tourism visits had a positive and significant impact on the economy. The relationship between tourism products and tourism visits on the economy is very significant and able to explain the economy by 67.70%.

1 INTRODUCTION

In the national economy, the tourism sector is a strategic industry that contributes to government revenue, ranks third after petroleum, natural gas and

oil palm (Indonesian Ministry of Tourism and Culture, 2017). Table 1 shows the contribution of the tourism industry to the foreign exchange of Indonesia between 2012 and 2016.

Table 1: Contribution of the tourism sector to the foreign exchange of Indonesia

| Time | Torism (in trillion IDR) | Total (trillion IDR) | % |
|------|--------------------------|----------------------|------|
| 2012 | 296,97 | 8.615,70 | 3.45 |
| 2013 | 326,24 | 9.546,13 | 3.42 |
| 2014 | 419,08 | 10.569,70 | 3.96 |
| 2015 | 476,48 | 11.526,33 | 4.13 |
| 2016 | 500,19 | 12.406,77 | 4.03 |

Source: Report on Performance of the Indonesian Ministry of Tourism, 2017.

As a strategic domestic industry, tourism has a multiplier effect caused by tourism activities such as employment in the tourism industry, as well as indirect effects such as tourism development supporting economic activities such as accommodation, restaurants, money exchange services and others. In nearly all areas with tourism opportunities in Indonesia, this situation can be discovered (Siallagan, 2011).

In North Sumatera, the number of international visitors reached 270,792 people during 2017, which indicates an increase of 37,149, or around 15.96

percent from 2016. In 2017, Samosir Regency has a total of 75 tourist attractions.

Table 2: Contributions of Public Recreation and Entertainment Area Levies to Samosir Regency's local income, 2012-2017.

| Time | Tourism (in million rupiahs) | Local Income(in million rupiahs) | % |
|------|------------------------------|----------------------------------|------|
| 2012 | 164,92 | 11.239,88 | 1,47 |
| 2013 | 171,01 | 15.288,45 | 1,12 |
| 2014 | 200,57 | 22.887,37 | 0,88 |
| 2015 | 223,02 | 17.463,54 | 1,28 |
| 2016 | 270,89 | 9.887,31 | 2,74 |
| 2017 | 365,90 | 17.483,83 | 2,09 |

Source: Regional Revenue, Finance and Asset Management Agency, Samosir Regency, 2018

Table 2 shows that the contribution of tourism levies to Samosir Regency's local income is below 3 percent, and then the contribution of tourism development is very small in terms of regional income. This may also show that tourism has not given direct profits to regional incomes. The aim of this research is to evaluate the economic impact of tourism development in Samosir regency.

2 LITERATURE REVIEW

According to Todaro (2010), development is in an economic context of domestic and regional development. Under Law No. 10 of 2009, tourism is a range of tourism activities and promoted by numerous facilities and services provided by the community, entrepreneurs, government and regional government. According to Soekadijo (1996), tourism development goals are to encourage the development of several sectors, including:

1. Changing or establishing new businesses, such as transportation, accommodation and tourism services
2. Expanding the market of local products
3. Give the workforce a beneficial effect, as tourism can grow new employment.
4. Accelerate economic flow in the hosting country industry, thus further generating a multiplier effect.

Tourism development in Samosir Regency is strongly related to the Lake Toba area management. According to Sastrawati (2003), by considering the aspects of the regional framework, the principle of developing a tourist area is the basis for organizing the region. A hypothetical model of integrated tourism development that focuses on a model of community empowerment can be created based on assumptions about tourism development potential. Basics for considering this model, including (1) environmental conservation, (2) revitalization of historical and cultural heritage, (3) empowerment of

the society. The model framework formulated consists of (a) diversification, (b) attractiveness, (c) integration, and (d) intersectoral participation (Wurianto, 2006)

Tourism products are all products designed or consumed during a tourism visit. Tourist services are a range of attractions, transportation, accommodation and entertainment products. Potential tourism is all products (natural, cultural, artificial) that require a lot of handling that attracts visitors (Damanik et al., 2018). Tourist attractions and objects are several activities and facilities that can attract tourists to a certain area or location (Marpaung & Bahar, 2002).

Tourism can be categorized based on its purpose (Fandeli, 2002):

- a. Nature tourism is a tourist activity that aims at experiencing natural or panoramic landscapes.
- b. As a tourist attraction and emphasis on educational features, cultural tourism is a tour of cultural heritage.
- c. For the protection of natural assets (coastal regions including beaches and oceans, hills, conservation zones) and tourism industries, ecotourism is environmentally focused tourism.

Some features of ecotourism that differentiate it from ordinary tourism include (Damanik et al., 2018):

- a. All tourism activities are based on the conservation of nature
- b. Tour service providers not only promote attractions but also provide them with possibilities to respect the environment better.
- c. A tourist attraction is the foundation of tourism
- d. Tourism activities are aimed to raise money for the conservation of tourist objects and attractions
- e. Travel by local transport and accommodation
- f. This means the number of tourists and business services managed in the form of small scale tourism

2.1 Regional Development

The economy (Sevilla, 1984) is one aspect that promotes regional development. Therefore, in regional development initiatives, economic and regional planning experts are concerned with the most significant issue in the process of economic growth and equitable development (Sirojuzilam, 2011). In relation, Rustiadi (2007) asserts that one of the most significant aspects indicating development in one region is economic. Among the multiple economic indicators, the most significant indicator is people's income in a region. Community income can also explain business chances and job opportunities in a region simultaneously.

3 METHODOLOGY

Descriptive and verification research is the technique used in this study. All Samosir Regency communities, such as Tourism Managers, Hotel and Other Accommodation Entrepreneurs, Lake Transportation Managers, Land Transportation Managers, Transportation Managers, Arts, and Culture Tourism Services, Health Offices, Regional Financial and Asset Income Offices, Samosir Regency Regional Plan, were regarded to be associated with tourism in Samosir Regency. The sample was conducted with up to 100 individuals using the Taro Yamane equation (Yamane, 2012) Analysis of the relationship between factors is conducted using the formula of Spearman correlation.

4 RESULT AND ANALYSIS

4.1 Population

Table 1: Samosir Regency area, population and density per sub-district

| No. | Sub-district | Land Area (km ²) | Population (people) | Density (people/km ²) |
|------------------------|------------------|---------------------------------|------------------------|--------------------------------------|
| 1 | Sianjur Mulamula | 140.24 | 9,501 | 67.75 |
| 2 | Harian | 560.45 | 8,158 | 14.56 |
| 3 | Sitiotio | 50.76 | 7,376 | 145.31 |
| 4 | Onanrunggu | 60.89 | 10,748 | 176.52 |
| 5 | Nainggolan | 87.86 | 12,332 | 140.36 |
| 6 | Palipi | 129.55 | 16,744 | 129.25 |
| 7 | Ronggurnihuta | 94.87 | 8,680 | 91.49 |
| 8 | Pangururan | 121.43 | 30,648 | 252.39 |
| 9 | Simanindo | 198.20 | 20,309 | 102.47 |
| Samosir Regency | | 1,444.25 | 124,496 | 86.20 |
| 2015 | | 1,444.25 | 123,789 | 85.71 |
| | 2014 | 1,444.25 | 123,065 | 85.21 |
| 2013 | | 1,444.25 | 122,449 | 84.78 |
| 2012 | | 1,444.25 | 121,613 | 84.20 |

Source: Statistics Central Bureau of Samosir Regency, 2017.

4.2 Tourism

Table 2. Travelers visiting Samosir Regency by tourist type

| No. | Tourist | Time | | | | |
|-------|-----------|---------|---------|---------|---------|---------|
| | | 2012 | 2013 | 2014 | 2015 | 2016 |
| 1 | Foreigner | 25,297 | 25,662 | 30,450 | 34,248 | 35,823 |
| 2 | Domestic | 119,530 | 124,117 | 140,637 | 141,215 | 154,905 |
| Total | | 144,827 | 149,779 | 171,087 | 175,463 | 190,728 |

Source: Statistics Central Bureau of Samosir Regency, 2017.

Every year, with its vision of "Samosir Becoming an Innovative Area of Environmental Tourism

Destinations," the local government of Samosir Regency carries out numerous initiatives directed at

enhancing tourism in this region, focusing on the potential of cultural tourism, in particular, Batak culture, as well as the potential of lovely natural resources. As shown in the table above, the number

of visitors visiting Samosir Regency.

In 2016, Samosir Regency runs 86 hotels and accommodations with 1,775 rooms and 2,865-bed facilities.

Table 3: Total Local Income from Tourist Levy, Hotel / Restaurant and Bar Permit fees

| No. | Time | Total (in million rupiahs) |
|-----|------|----------------------------|
| 1 | 2012 | 164,92 |
| 2 | 2013 | 171,01 |
| 3 | 2014 | 200,57 |
| 4 | 2015 | 223,02 |
| 5 | 2016 | 270,89 |
| 6 | 2017 | 365,90 |

Source: Agency for Regional Revenue, Finance and Asset Management, Samosir Regency, 2018.

4.2.1 Effects of Tourism Products (Y1) and Tourism Visits (Y2) on Community Economy (Z1)

Table 4: The coefficient of tourism products and tourism visits to the community economy

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | | Collinearity Statistics | |
|-------------------|-----------------------------|------------|---------------------------|-------|------|--------------|---------|------|-------------------------|-------|
| | B | Std. Error | Beta | | | Zero-order | Partial | Part | Tolerance | VIF |
| | | | | | | | | | | |
| (Constant) | .087 | .821 | | .105 | .916 | | | | | |
| Tourism 1 product | .627 | .087 | .588 | 7.192 | .000 | .797 | .590 | .415 | .497 | 2.012 |
| Tourism visit | .321 | .089 | .294 | 3.594 | .001 | .711 | .343 | .207 | .497 | 2.012 |

a. Dependent Variable: Community economy

Source: SPSS calculation results

The data processing obtained a constant value ($a = 0.087$), a coefficient of regression ($b_1 = 0.627$; $b_2 = 0.321$). So that multiple linear regression equation models Economic Impact Of Tourism Development In Samosir Regency, North Sumatera, Indonesia:

$$Z_1 = 0.087 + 0.627Y_1 + 0.321Y_2 + e.$$

The details of full data analysis can be seen above in the table of results of multiple linear regression coefficients calculation.

The relationship between the variables of Tourism Products and Tourism visits to Community Economy is identified from the calculated value of 0.823, which shows a very strong correlation between the two variables. The value of the determination coefficient (R^2) is 0.677, which implies that the variable Tourism Products and Tourism Visits can explain the Community Economy variables at 67.70%, while other factors explain the remaining 32.30%.

Table 5: Tourism Products and Tourism visits to the Community Economy (R^2 Test)

| Model Summary | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .823 ^a | .677 | .671 | .992 |

a. Predictors: (Constant), Tourism visit, Tourism product

b. Dependent Variable: Community income

4.2.2 Effects of Variable Tourism Products and Tourism Visits to Community Economies

In this case, the F_{test} is used to determine the simultaneous impact on the Community Economy (Z_1) between the variables of Tourism Products (Y_1) and Tourism Visits (Y_2).

$H_0 : b_i = 0$. This implies that the variable Tourism Products (Y_1) and Tourism Visits (Y_2) simultaneously did not impact the Community Economy (Z_1) positively and significantly.

$H_a : b_i \neq 0$. This implies that the variable Tourism Products (Y_1) and Tourism Visits (Y_2) simultaneously impact the Community Economy (Z_1) positively and significantly.

Table 6: Coefficient of Determination (R^2 Test) Tourism Products and Tourism Visits to the Community Economies

| Model Summary ^b | | | | | | | | | |
|----------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .643 ^a | .413 | .401 | 1.193 | .413 | 34.183 | 2 | 97 | .000 |

a. Predictors: (Constant), Tourism visit, Tourism product

b. Dependent Variable: Community economies

Source: SPSS calculation results

It is known from the data analysis results that the F_{value} is 34.183 and the $F_{statistic}$ is 1.38 at the significance level ($\alpha = 0.000$). F_{value} is bigger than $F_{statistic}$, then H_0 is rejected. Finally, it can be noted that the variable Tourism Products (Y_1) and Tourism Visits (Y_2) have a positive and significant impact on the Community Economy (Z_1) simultaneously.

5 DISCUSSION

Tourism Products and Tourism Visits impact on the Community economy simultaneously

The findings showed that the variable Tourism Products (Y_1) and Tourism Visits (Y_2) simultaneously affected the Community Economy (Z_1) positively and significantly. Samosir Regency's Gross Regional Domestic Product (GRDP) per capita based on current price in 2016 amounted to IDR 27.65 million, up from IDR 25.4 million in 2015, IDR 23.06 million in 2014 and IDR 18.796 million in 2012.

Samosir Regency's average per capita expenditure per month from 2012-2016 tends to increase. It was IDR 432,413 in 2012— IDR 507,772 in 2013 — IDR 663,333 in 2014 —. But the average monthly expenditure decreased to IDR 623,938 in 2015,-then increase to IDR 780,085 in 2016.

6 CONCLUSION

Based on the theoretical description, data analysis, and discussion results, it can be stated that Tourism Products and Tourism Visits have a positive and significant impact on the Community economy simultaneously. Relationship between Tourism Products and Tourism Visits to Community Economies is very significant, including relationship classification. The Community Economy can be explained by 67.70 percent by tourism products and tourism visits.

SUGGESTION

The coefficient of tourism visits appears to be smaller in its contribution to the tourism-related community economy, therefore the government of North Tapanuli Regency prepares to target tourism visits while improving tourism-related products to enhance the community economy of the Samosir regency.

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