Tourist Participation: Causality of Tourism Object Development and Promotion of Geopark Silokek Tourism at Sijunjung Regency

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ABSTRACT
This paper aims to explain the level of tourist visitor participation in the development of the Silokek Geopark tourism in Sijunjung Regency. The level of participation was analyzed using Arnstein's typology at the planning, implementation, and monitoring stages of program evaluation. In addition, it also explains the influence of visitor satisfaction, support for environmental conservation and preservation, tourism costs and participation in improving community welfare on visitor participation in the development of tourist objects. As well as the advantages of nature-based tourism objects, the risk of crime, geographic location and facilities such as tourist attractions on tourism promotion. Data obtained based on observations of visitors and using accidental sampling method. The analysis model uses simultaneous equations. The results showed that the level of visitor participation at the planning and implementation stages was included at the informational level, while at the monitoring and evaluation stage it was only at the consultation level. It was found that participation in tourism object development and participation in promoting tourism objects have a significant reciprocal relationship. Visitor satisfaction, support for environmental conservation and preservation, infrastructure, and participation in improving community welfare have a significant effect on participation in the development of tourist objects, and the advantages of nature-based tourism objects and facilities such as tourist attractions have a significant effect on tourism promotion. The results of this study recommend the Sijunjung Regency Government and the community in developing sustainable tourism objects.

Keywords: Community participation, Tourism object development, Geopark tourism.

1. INTRODUCTION

In the last few decades, tourism activity has grown quite rapidly in various countries and has attracted the interest of experts to research it. This is based on several regions or countries that have benefited from the development of tourism activities such as increasing income and the welfare of the surrounding community. Through the development of tourism activities, it will have an impact on economic activities in the area. The tourists who come to an area will increase the consumption of the area so that the production sector will increase, the use of facilities such as transportation services and lodging will also increase and supporting economic activities such as the handicraft industry will also increase. There was an increase in the use of resources and the increasing number of available jobs so that they were able to absorb more labor. Thus, the development of tourism activities will stimulate the economy of the surrounding community with the ultimate goal of increasing community income and welfare. This argument has become an issue that is widely debated by experts who see how the impact of developing tourist objects on the income and welfare of the surrounding community.

To get optimal benefits from tourism activities on people's income and welfare, it is necessary to develop tourism objects that involve several related parties such as the government which plays a more dominant role in providing facilities and infrastructure to support tourism activities such as road access and transportation. The next party that has a direct relationship with the development of tourist objects is the surrounding community because the parties who will feel the direct impact of tourism activities are the surrounding communities. The participation of the surrounding community is one of the determinants of the success of developing tourist objects. People who are around the
tourist attraction will interact directly with the tourists. In addition, the community also plays a role in providing various facilities and developing various businesses related to tourism activities including lodging facilities, restaurants, entertainment businesses, handicraft businesses and other related businesses. The level of community participation in developing tourist objects is motivated by several factors. Research conducted by [1] shows that motivation has the greatest positive effect on the low level of community participation. Opportunity has the greatest influence on the high level of community participation. Among the dimensions of ability, namely awareness and knowledge, it was found that citizens who are more aware are more interested in low community participation, while citizens who are more knowledgeable are more interested in high community participation. Research conducted by [2] states that provision roads and infrastructure have a positive influence on community support for tourism development in Pakistan through satisfaction and the estimated benefits that will be gained from road and infrastructure development. This shows that community satisfaction and the estimated benefits obtained from tourism through the provision of roads and infrastructure are the determining factors for community involvement in tourism.

The area of Sijunjung Regency is also known as the city of the confluence of rivers, which is the place where the flow of the Batang Ombilin, Batang Sukam, and Batang Palangki rivers are joined, which are intended for the community to carry out their daily lives and have mining potential, including gold in the watershed of the Sijunjung district. The people of Sijunjung who are in the Batang Sukam Nagari Silokek River have long been mining gold by traditional gold panning without destroying the watershed and not destroying the environment but since the advancement of times and technology, the community around the Batang Sukam Nagari Silokek River have used heavy equipment to do this, mining which results in destruction of watersheds, environmental destruction, soil pollution, air pollution due to smoke from heavy machinery to extract gold from riverbeds. Water and soil pollution occurs in mining activities which are carried out using mercury as the material used to separate gold ore and sand.

Tourism development can be seen from several points of view based on the factors that influence it. Research conducted by [3] analyzes the factors that influence the development of sustainable tourism in Vietnam. The results showed that sustainable tourism development was influenced by factors including the quality of tourism services, tourism facilities or materials, infrastructure development, quality of human resources working in the tourism sector, community involvement, managerial capacity of state (regional) management and tourism resources. Social or community involvement has the most dominant impact on sustainable tourism development in Vietnam, followed by tourism resources, quality of human resources working in the tourism sector, quality of tourism services, tourism facilities or materials, infrastructure development and managerial capacity or state (regional) management.

[4] concluded that infrastructure has a significant positive effect on tourism development. The higher the scale of infrastructure or the availability of infrastructure, the higher the tourism development will be. GDP and population from the region of origin have a significant positive effect on tourism demand in tourist destination areas. Natural resources have a positive effect on the development of tourist objects. The richer the availability of natural resources, the higher the level of tourism in the area. This is because natural resources are one of the determining factors for tourists to visit an area. Services have a positive influence on tourism development. This is because the services received by tourists will determine whether they will visit again. The better the service received and consistent, then this will have a positive effect on the development of tourist objects. Bilateral real exchange or price differences between regions has a positive effect on the development of tourist attractions. Traveling to areas where the currency is depreciating will benefit tourists because for tourists it will result in lower costs. Distance has a negative effect on the development of tourist objects. This is because the farther the distance, the higher the transportation costs incurred.

Companies related to activities in the tourism sector have a major contribution to the development of tourism objects. [5] analyzed the development of a tourist destination based on the competitiveness and innovation of the tourism companies involved. In this research, it analyzes the relationship between tourism development and the knowledge and innovation of service providers related to tourism activities. To assess tourism development, it is measured based on hotel growth because hotels are the main accommodation. The results showed that the knowledge and innovation of service providers related to tourism are the dominant factors affecting tourism development. The higher the competition and innovation from service providers related to tourism, it will encourage tourism development.

Apart from factors related to the surrounding community and related facilities as well as the industry in the tourism sector, the government is also a determining factor in tourism development. The government as the owner of the power and the maker of regulations has a direct relationship with tourism development in an area. [6] analyze how the role of government and organizational development plays a role in tourism development. The results show that collaboration between the government and organizations (companies and communities) related to tourism has a positive effect on tourism development.
2. METHOD

The location of the research was conducted in the Geopark Nagari Silokek tourism, Sijunjung Regency, West Sumatra Province. Data obtained from a survey conducted to visitors using questionnaires and interviews with the number of respondents is 70. The research sample uses accidental sampling techniques, visitors who make visits to tourist objects.

In order to analyze the level of community participation in this research, we will use 8 steps of Arnstein’s to describe that, consist of:

a. Manipulation
b. Therapy
c. Informing
d. Consultation
e. Placation
f. Partnership
g. Delegated power
h. Citizen control

And also this analysis doing with the purpose to give information about community participation in planning stage, implementing stage and monitoring of the development program based on questionnaire. Question show in questionnaire and there are 8 answer choice and score range from 1 to 8, where 1 means lower score and 8 is higher score.

Next step in order to determine level of participation will have used range of Arnstein of each stage with first eliminated maximum and minimum score, where number of planning question is 1, implementation is 3, monitoring and evaluation is 1. And formula used of minimum score is number of question times 1 times number of respondent, and maximum score is number of questions times 8 times number of respondents.

Table 1. Maximum and Minimum Score of Arnstein Typology

| Stages                     | Score | Result |
|----------------------------|-------|--------|
| Planning                   | Min   | 70     |
|                            | Max   | 560    |
| Implementation             | Min   | 210    |
|                            | Max   | 1680   |
| Monitoring and Evaluation  | Min   | 70     |
|                            | Max   | 560    |

Source: Author’s Processed Results

Furthermore, to determine the level of community participation, it is adjusted to the level of participation according to the Arnstein Ladder by determining the interval for each rung. The interval is calculated by the formula of interval is maximum score minus minimum score and divided by 8 (eight).

Table 2. The Interval of Each Stage of the Arnstein Typology

| Stages                     | Interval |
|----------------------------|----------|
| Planning                   | 61.25    |
| Implementation             | 183.75   |
| Monitoring and Evaluation  | 61.25    |

Source: Author’s Processed Results

The level of community participation is known by calculating the total score obtained from the overall answers of the respondents. The total score of acquisition at each stage determines the level of community participation at that stage. The results of the score calculation are put into the appropriate category according to Arnstein’s ladder. Research was also conducted to examine the reciprocal relationship between development participation and tourism promotion. Researchers want to see how the influence of visitor satisfaction (X1), conservation support to preserve the environment (X2), tourism costs (X3) and participation in improving community welfare (X4) on community participation in the development of tourist objects (Y1). Also look at the influence of natural tourism (X5), the risk of crime (X6), geographic location (X7) and tourist attraction facilities (X8) on participation in promoting tourist objects (Y2) by using OLS (Ordinary Least Square) includes the partial test and simultaneous test. First, use the test on the level of achievement of the respondent to describe the character of each research variable. The level of achievement of respondents is classified into the following groups:

Table 3. Level of Respondent Achievement (LRA) Classification

| No. | LRA               | Criteria        |
|-----|-------------------|-----------------|
| 1   | < 56%             | Not Good        |
| 2   | 56% - 75%         | Good Enough     |
| 3   | 76% - 100%        | Good            |

The thinking framework in this study is as follows:

Figure 1. Thinking Framework

Based on the above framework, simultaneous Equation model can be formed as follows:

\[ Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \epsilon_1 \]  
\[ Y_2 = \beta_0 + \beta_1 X_5 + \beta_2 X_6 + \beta_3 X_7 + \beta_4 X_8 + \epsilon_2 \]

Where:

\[ \alpha_1, \beta_1 \] : regression coefficients

\[ \epsilon_1, \epsilon_2 \] : Error disturbance

Equation 1 aim to see the relationship and effect of visitor satisfaction, conservation support to preserve the environment, tourism costs, participation in improving community welfare and promotion on community participation in the development of tourist objects. While equation 2 aim to see relationship and effect of natural tourism, the risk of crime, geographic location, tourist attraction facilities, and community participation in the development of tourist objects on participation in promoting tourist objects. With the variables used in this...
study are variables from the survey results with the type of ratio data.

3. RESULTS AND DISCUSSION

3.1. Level of Respondent Achievement

From the result of processing data show that all variables are in good criteria, where LRA value for Y1 (91.43%), X1 (85.71%), X2 (89.00%), X3 (88.67%) X4 (90.86%), Y2 (89.86%), X5 (82.95%), X6 (80.10), X7 (85.57%), X8 (84.86%).

3.2. Level of Community Participation

Table 4. Level of Community Participation

| Stages                        | Level     |
|-------------------------------|-----------|
| Planning                      | Informing |
| Implementation                | Informing |
| Monitoring and Evaluation     | Consultation |

Source: Author’s Processed Results

At the planning stage, visitors are asked to know their involvement in tourism development planning. At the planning stage, visitors were asked about their involvement in tourism development planning, from the results of the interviews, it was found that 62% of visitors had been involved in tourism development efforts, 14% stated that there were programs socialized by the government and the community, and 12% claimed not to know. From the analysis, community participation in the planning stage is at the informing level.

Respondents who were involved in program planning, admitted that their involvement is only as a listener/recipient of information in the event program socialization. From the results of the analysis of the respondents’ answers, it is known that the level of community participation is included in the informing level. According to Arnstein (1969), at this level the government has provided information about rights, responsibilities and choices to society. Information provided usually at the final stage in planning, so that the community owns little chance of influencing the program that was designed.

At the implementation stage, visitors are asked questions about involvement in implementing tourism development programs, overcoming problems related to tourism development and implementing tourism development, visitors are currently at the informing stage. The low level of community involvement in program implementation is related close to the low level of community involvement in the planning process of development programs. This results in a lack of community ownership of the program being rolled out, resulting in a lack of community responsibility for the success of the program. Involvement community in development planning encourages the community to voluntarily participate actively (not just mobilization) in development activities, so that what is expected from a program development will be easier to achieve.

At the monitoring and evaluation stage, visitors are asked whether they participate in providing evaluation and monitoring of tourism development efforts. At this stage the visitors are at the consultation level. Low community participation at the monitoring and evaluation stage programs are also due to community involvement in planning program is also low. As a result, people do not feel they belong program, so that it is even in the implementation, monitoring and evaluation stages the level of community participation becomes low.

3.3. Regression Result Analysis

The following Table 5 present the analysis of the influence visitor satisfaction, conservation support to preserve the environment, tourism costs, participation in improving community welfare and promotion on community participation in the development of tourist objects.

Table 5. Model Estimation Results (1)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 2.906421    | 1.275944   | 2.277858    | 0.0000|
| X1       | 0.771151    | 0.103010   | 4.690725    | 0.0022|
| X2       | 0.430162    | 0.135595   | 3.193851    | 0.0009|
| X3       | -0.065687   | 0.121111   | -0.542374   | 0.5894|
| X4       | 0.159556    | 0.140077   | 1.425168    | 0.0721|
| Y2       | 0.211800    | 0.121520   | 2.742917    | 0.0062|

Source: Author’s Processed Results

The equation model can be arranged as follows:

\[ Y_1 = 2.906421 + 0.771151X_1 + 0.430162X_2 - 0.065687X_3 + 0.159556X_4 + 0.221800Y_2 \]  

From the result above can be seen, visitor satisfaction, conservation support to preserve the environment, participation in improving community welfare and promotion has positive relationship and significant influence on community participation in the development of tourist objects, however tourism cost has negative relationship and not significant influence to community participation in the development of tourist objects.

The following Table 6 present the analysis of effect of natural tourism, the risk of crime, geographic location, tourist attraction facilities, and community participation in the development of tourist objects on participation in promoting tourist objects.

Table 6. Model Estimation Results (2)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 2.603666    | 1.243259   | 2.109498    | 0.0000|
| X5       | 0.343855    | 0.091202   | 0.402274    | 0.0004|
| X6       | -0.052749   | 0.098909   | -0.533022   | 0.5957|
| X7       | -0.104824   | 0.103458   | -0.513200   | 0.3148|
| X8       | 0.122876    | 0.104398   | 1.177004    | 0.0016|
| Y1       | 0.242979    | 0.132742   | 2.830456    | 0.0018|

Source: Author’s Processed Results
The equation model can be arranged as follows:

\[ Y_1 = 2.603666 + 0.343855 X_5 - 0.052749 X_6 - 0.104824 X_7 + 0.122876 X_8 + 0.242979 Y_1 \]  

(4)

Based on the result above can be seen, natural tourism, tourist attraction facilities, and community participation in the development of tourist objects has positive relationship and significant influence on participation in promoting tourist objects, however the risk of crime and geographic location has negative relationship and not significant influence on participation in promoting tourist objects. The results of this study also indicate that participation in developing tourism has a reciprocal relationship with promotion. Participation in tourism development has a significant effect on promotional activities. And promotion has a significant influence on participation in tourism development.

Apart from the participation of the government and the surrounding community, visiting tourists also have an important role in developing tourist objects. This is because tourists are consumers of these tourist objects. Every tourist who visits will interact directly with the manager of the tourist attraction and supporting facilities. The service and quality of the facilities provided will provide a level of satisfaction for tourists in the form of feedback. The sustainability of tourism activities is very dependent on the tourists who will visit. When tourists get satisfaction that exceeds their expectations, they are likely to return to visit again in the future or provide recommendations for these attractions to others. Based on research [7] it is concluded that socio-cultural sustainability is the strongest predictor of tourist satisfaction followed by institutional and economic sustainability. It is important to ensure significant cultural exchanges between tourists and local communities while their interactions are necessary to be completely positive and peaceful. Tourist perceptions of the economic dimension seem to influence their satisfaction with the industry.

Research conducted by [8] with the title "Tourism and local welfare: A multilevel analysis in Nepal's protected areas" concluded that people who work in sectors directly related to tourism have a much higher consumption value than people who work in non-tourism sector where consumption is here used as an indicator measuring the welfare of the community.[9] in their research concluded that tourism expansion increases local real income in the short term, but this causes a decrease in local natural resources which erodes income over time, especially for households engaged in the natural resource sector. This research shows that tourism activities increase people's income but also cause a decrease in natural resources which will reduce people's income in the business sector that utilizes natural resources. So that the sustainability of natural resources must be considered in order to provide benefits in the term with the existence of tourism activities. Research conducted by[10] shows a positive relationship between tourism development and an increase in the quality of life of the community as well as the direct contribution of the travel and tourism sector to GDP and employment.

4. CONCLUSION

Level of community participation in planning, implementation and monitoring program evaluation is low. The results of the analysis are according to the stairs Arnstein points out that in the program planning and implementation stage, participation community is included at the informing level, while at the while at the monitoring stage and the evaluation reaches only the consultation level. From regression analysis can be seen, visitor satisfaction, conservation support to preserve the environment, participation in improving community welfare and promotion has positive relationship and significant influence on community participation in the development of tourist objects, however tourism cost has negative relationship and not significant influence to community participation in the development of tourist objects. Also, natural tourism, tourist attraction facilities, and community participation in the development of tourist objects has positive relationship and significant influence on participation in promoting tourist objects, however the risk of crime and geographic location has negative relationship and not significant influence on participation in promoting tourist objects. The results of this study also indicate that participation in developing tourism has a reciprocal relationship with promotion. Participation in tourism development has a significant effect on promotional activities. And promotion has a significant influence on participation in tourism development.

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