Corporate Social Responsibility Program in Ecotourism Development of Mempawah Mangrove Park

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Abstract

Mangrove ecotourism has various functions and benefits. It also plays an important role in human life environmentally, socially, culturally, and economically. In maintaining the coastal ecosystem of mangrove forests through the development of Mempawah Mangrove Park ecotourism, Mempawah Regency is inseparable from the involvement of Corporate Social Responsibility Program carried out by several companies. This research aimed to formulate priority criteria and optimal alternatives for the Corporate Social Responsibility Program in developing Mempawah Mangrove Park ecotourism in Mempawah Regency. 38 respondents were taken by purposive sampling. This study used qualitative descriptive analysis, namely Analysis Hierarchy Process (AHP) using Expert Choice 11 Software. The results showed that the main priority of the Corporate Social Responsibility program in developing Mempawah Mangrove Park ecotourism was the social and cultural aspects. The second priority is environmental aspect, the third is education aspect, and the last is economic aspect. The top alternative priority in corporate social responsibility program in the development of Mempawah Mangrove Park ecotourism is to attract visitors. The second alternative priority is the mangrove ecotourism conservation program, the third is the knowledge transfer about mangroves to visitors and the community around Mempawah Mangrove Park ecotourism, and the last is for community welfare.
INTRODUCTION

Mangrove ecotourism is beneficial for human life in terms of environmental, social, cultural and economic aspects. Ecotourism objects aims at conservation, preservation of life, and the welfare of local residents (Yulianda, et al. 2018). Ecotourism act as an alternative tourism or special interest tourism with natural tourism objects and attractions (Tuwo, 2011). In general, mangrove forests in Mempawah Regency are located in 4 sub-districts: Sungai Pinyuh District, Mempawah Hilir District, East Mempawah District, and Sungai Kunyit District. The existence of mangroves in Mempawah Regency is still natural and in good condition. This situation is a consideration to get a very priority position to be developed into a natural tourist destination. The term mangrove forest has two different meanings; the first is a plant or forest community that is resistant to salinity and tides of sea water level, and the second as an individual species (Ghufran M., 2012). Coastal ecotourism development is a shared responsibility for sustainable environmental preservation. One form of responsibility in protecting this environment is the Corporate Social Responsibility program carried out by the company through the stakeholders involved.

Coastal ecotourism development through Mempawah Mangrove Park ecotourism object is one of the Corporate Social Responsibility Program activities carried out by several companies. The business activities carried out are aimed at the economic or technical aspects of the company (Mardikanto, 2014). The purpose of companies in carrying out the Corporate Social Responsibility program is for sustainable environmental and economic development (Noor, 2011). The function of CSR is a form of corporate responsibility for policy makers to behave ethically, avoid bad impacts, and maximize positive impacts that summarize environmental, economic and social aspects (triple bottom line) in order to achieve sustainable development (Wibisono, 2007). This shows that the CSR program aims to increase the development of coastal ecotourism based on sustainable tourism, especially in the Mempawah Mangrove Park ecotourism area. As one of the coastal ecotourism objects, the corporate social responsibility program in mangrove forests is considered not optimal. Mempawah Mangrove Park Ecotourism is expected to develop well.

Mangrove ecotourism is one of the most important factors for the development of local people's income which allows it to be used as additional income for an area. Mangrove ecotourism development can be optimally successful if it is supported by the role of stakeholders to play an active role in the development of tourism objects, including mangrove ecotourism in Pasir Village, Mempawah Hilir District, Mempawah Regency. Mangrove forest in Mempawah Regency has the potential to become a Mangrove Park and is required to be able to improve for development and management in accordance with the concept of sustainable ecotourism. Therefore, a Corporate Social Responsibility program is needed in developing Mempawah
Mangrove Park ecotourism. As one of the supports for coastal ecotourism, the Corporate Social Responsibility program is considered not optimal because it still focuses a lot on environmental aspects, especially mangrove planting, while other aspects are still minimal. Other aspects such as socio-culture, education, and economy also need to be done for the development of Ecotourism in Mempawah Mangrove Park.

Previous research stated that the priority factors in mangrove ecotourism management through stakeholders are social factors, while economic, environmental, and institutional factors are supporting factors for the creation of sustainable mangrove ecosystem management (Tabalessy and Schaduw 2013). Previous research also stated that the implementation of the Corporate Social Responsibility program of the Nihiwatu Resort includes social, economic and environmental factors (Roru, Darma, & Suardana, 2018). The results of mangrove ecotourism are expected to develop well in accordance with sustainable tourism.

Mangrove ecotourism development can run optimally and succeed if it is supported by stakeholders who play an active role in the development of mangrove ecotourism in Pasir Village, Mempawah Hilir District. Mempawah Regency has the potential for natural tourism, namely Mempawah Mangrove Park. However, the roles of stakeholders in the area have not been very active in carrying out the Corporate Social Responsibility program. On the other hand, ecotourism is required to be able to improve for the development of management according to the concept of sustainable ecotourism. Therefore, a Corporate Social Responsibility program is needed in the development of the Mempawah Mangrove Park ecosystem so that the desired goals are achieved.

Departing from the not yet optimal activities of the Corporate Social Responsibility program, the purpose of this study is to determine the priority aspects and optimal alternatives of the Corporate Social Responsibility program in the development of Ecotourism in Mempawah Mangrove Park in Mempawah Regency. This research is important and useful for providing information and input for companies in providing Corporate Social Responsibility programs and formulating targeted policies in optimizing the development of Mempawah Mangrove Park ecotourism.

**RESEARCH METHODS**

This research was conducted from October to November 2019 in the Ecotourism area of Mempawah Mangrove Park, which is located in Pasir Village, Mempawah Hilir District, Mempawah Regency. This location was chosen because the Corporate Social Responsibility program in Mempawah Regency was only carried out in the Mempawah Mangrove Park area. The research method used was descriptive method with a qualitative approach. The descriptive method aims to provide or describe information that is currently happening with scientific procedures to answer it actually (Sugiyono, 2015). Descriptive research functions to examine the status of a group of people, an object, a situation and condition, an idea, or a class of events at this time (Umar, 2003). The sampling technique used was Non Probability Sampling (Nurliza, 2019). The sampling technique used in this study was purposive sampling. Respondents taken were divided into two, namely ordinary informants consisting of
5 respondents from each company who provided a corporate social responsibility program for the object was Mempawah Mangrove Park ecotourism. Next are 33 key-persons, namely those who feel the impact of the corporate social responsibility program on Mempawah Mangrove Park ecotourism, namely the government through the Culture and Tourism Office, the Environmental Service, managers, communities, and visitors. Data were collected using a questionnaire with interview techniques. Analytical Hierarchy Process (AHP) is a process of identifying, understanding, and predicting the overall system interaction (Royan, 2004). The Analytical Hierarchy Process has many advantages in explaining a decision-making process, because it can be graphically depicted and it is easy to understand for all parties involved to make policies (Marimin, 2005). Meanwhile, according to Supriadi, et al, (2018) The advantages of the Analytical Hierarchy Process (AHP) are the advantages due to their high flexibility, especially in the decision-making process. Analysis Hierarchy Process analysis technique was done using Expert Choice 11. In this analysis, the inconsistency ratio value must be <0.1; if> 0.1, then the survey must be repeated (Saaty, 2008) with a weight value of 1-9. The weighted value 1 explains that it is equally important, this shows that the attribute value weight has the same scale, the value is 1; the weight value of 9 describes the case of the absolute important attribute when compared to other scales (Table 1)

<table>
<thead>
<tr>
<th>Level of importance</th>
<th>Definition</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equally important</td>
<td>The two elements have the same effect</td>
</tr>
<tr>
<td></td>
<td>A little bit more important</td>
<td>Experience and judgment are very favorable to one element compared to the partner</td>
</tr>
<tr>
<td>3</td>
<td>More Important</td>
<td>One element is very popular, practically and overtly dominates with its partner element</td>
</tr>
<tr>
<td>5</td>
<td>Very important</td>
<td>One element proves to be very favorable and in practical terms its dominance is very evident compared to that of its partner.</td>
</tr>
<tr>
<td>7</td>
<td>Absolutely more important</td>
<td>One element proves to be absolutely preferable to its counterpart in the highest belief.</td>
</tr>
<tr>
<td>2,4,6,8</td>
<td>Middle value</td>
<td>Given if there is doubtful judgment between two adjacent levels of interest</td>
</tr>
</tbody>
</table>

Source : Saaty (2008)

The variables or aspect measured are environmental, social and cultural, educational, and economic aspect.

RESULT AND DISCUSSION
Classification of the characteristics of the respondents is based on gender, age, and education
Table 2. Characteristics of Respondents

<table>
<thead>
<tr>
<th>Characteristics of Respondents</th>
<th>Information</th>
<th>Frequency (Person)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>26</td>
<td>68.42</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>12</td>
<td>31.58</td>
</tr>
<tr>
<td>Age</td>
<td>18-27</td>
<td>10</td>
<td>26.31</td>
</tr>
<tr>
<td></td>
<td>28-37</td>
<td>8</td>
<td>21.05</td>
</tr>
<tr>
<td></td>
<td>38-47</td>
<td>16</td>
<td>42.11</td>
</tr>
<tr>
<td></td>
<td>&gt;48</td>
<td>4</td>
<td>10.53</td>
</tr>
<tr>
<td>Education</td>
<td>Master</td>
<td>1</td>
<td>2.64</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>11</td>
<td>28.95</td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>17</td>
<td>44.73</td>
</tr>
<tr>
<td></td>
<td>Middle School</td>
<td>4</td>
<td>10.52</td>
</tr>
<tr>
<td></td>
<td>Elementary</td>
<td>5</td>
<td>13.16</td>
</tr>
</tbody>
</table>

Source: Processed primary data, (2019)

In table 2, it can be seen that of the 38 respondents, the most dominant gender is male. Age is one of the benchmarks for each individual in carrying out the activities, especially with regard to physical activities. For the age of the respondents, the most dominant was 38 to 47 years old. This indicates that the respondent’s age is in the productive adult age. Education has an important role in one’s abilities and expertise. Through education, an individual’s knowledge, personality, creativity and initiative have been developed and can make the right decisions. Respondents of this study have diverse educational backgrounds. The dominant educational background is high school level followed by undergraduate.

Corporate Social Responsibility Program in Ecotourism Development of Mempawah Mangrove Park

During 2015-2019, related to the development of Mempawah Mangrove Park ecotourism, the companies have provided assistance from environmental, social and cultural, educational, and economic aspects. One of them was in the form of a reading house. The reading house functions as an educational medium through books that have been provided to the community and visitors to be more active in protecting mangrove forests as well as being used as an introduction media from an early age for children to introduce mangrove forests. Through this reading house children are taught to get to know mangroves more closely through drawing activities that are carried out at the reading house. In collaboration with the school, five selfie spot units were built to attract visitors to the Mempawah Mangrove Park ecotourism area. Photo spot functions to capture moments through taking pictures. A kindergarten unit is built to attract children to visit again in this ecotourism area. Five buoy units are prepared for visitors who want to cross the island of Penibung to feel safe when crossing the sea which takes approximately 30 minutes by boat. The company also provided sixty cans of paint to beautify existing photo spots and to maintain materials such as wood so that they do not rot easily. In addition, a three-hundred-meter tracking area was built for accessibility from one photo spot to another. 100 million in cash were also given for ecotourism development, such as purchasing mangrove seedlings, crossing boats, widening roads, and making photo spots. In addition to those previously mentioned, ten boxes of honeycomb were also
provided which were useful for training the skills of local residents so that they could try to cultivate honey from kelulut bees and six units of trash cans to keep the Mempawah Mangrove Park ecotourism clean. The company also funds festivals at Mempawah Mangrove Park to preserve local culture, planting two hundred thousand mangrove seedlings and conservation activities in the form of adding 20 meters of land to Desa Pasir which was previously affected by abrasion of 2 km. Five boat engines are also provided to empower local residents to increase their income through crossings for visitors and are used to search for marine products such as fish, crabs, and so on. The program also funded the making of thirty educational banners, two toilets, clean water supply, and awareness raising activities to protect the mangrove ecosystem.

**Value Determination of Pairwise Comparison Between Aspects**

Assessment of the importance level of the value for each aspect to fit the hierarchy at the first level is to analyze which criteria from the Corporate Social Responsibility program in the development of Mempawah Mangrove Park ecotourism in Mempawah Regency are the most prioritized.

Figure 1. Normality Graph of Pairwise Comparison Matrix Between Aspects 

Source: Processed primary data, 2019

Figure 1 explains as follows: social and cultural aspects have the highest value, namely 0.397 to be prioritized. The second priority is the environmental aspect with 0.290, the third priority is the educational aspect with 0.213 and the fourth is the economic aspect with 0.100. Mangrove ecotourism in the Ujungpangkah area carries out development in social aspects such as building tourism facilities and infrastructure that are not yet owned. They also build from an economic aspect such as increasing citizen participation in empowerment in tourist areas. Meanwhile, in the environmental aspect, they carry out planting and repairing mangroves for natural tourism activities. In the educational aspect, enforcement of sanctions and regulations to preserve mangrove forests is clarified. (Ali, 2018). Meanwhile, according to Karlina, (2015) ecotourism development is limited to the mangrove area of Tanjung Bara Beach. They prioritizing special mangrove ecotourism products and increasing mangrove ecotourism attractions and facilities. In addition, improving the quality of competent human resources for mangrove ecotourism is also carried out.
Value Determination of Pairwise Comparison for Environmental Aspects.

Figure 2 Normality Graph of Pairwise Comparison Matrix for Environmental Criteria

Source: Processed primary data, 2019

Figure 2 shows that from the environmental aspect, the sub-aspect that must be prioritized first is the conservation aspect. The second priority is the hygiene aspect and the last one is the biophysical aspect. Conservation aspect of Mempawah Mangrove Park Ecotourism is the development of ecotourism which is always based on environmentally friendly tourism. Therefore, the development of mangrove ecotourism is required to protect, maintain, and be responsible for the preservation of nature and its surroundings. That way, the preservation of mangrove ecotourism is automatically more inclined to the preservation of natural tourism objects and attractions. Thus, a good ecosystem that reflects its uniqueness remains an attraction for visitors to come to the place. From the Corporate social Responsibility program, what companies need to prioritize is the provision of planting and mangrove nursery methods. Ecotourism must pay attention to conservation aspects in order to achieve ecotourism that is environmentally based, namely by maintaining natural biological and physical characteristics of mangrove plants so that they can become the main attraction of ecotourism activities in mangrove forests (Wahyuni, 2015).

Biophysical aspects in Mempawah Mangrove Park ecotourism that need attention is the provision of mangrove seedlings from a more diverse corporate social responsibility program. This is done to increase the diversity of mangroves in the Mempawah Mangrove Park ecotourism area. Several types of mangrove trees that have been planted and can be found in Pasir Village include: *avicennia*, *rhizophora apiculata*, *rhizophora mucronata*, *rhizophora apiculata* and *sonneratia alba*. The various types of mangrove trees with shady leaf and bent trunk shapes, plus the unique flower and fruit forms of mangrove trees in mangrove forests are the main attraction for tourists (Wardhai, 2011).

Environmental cleanliness and the availability of clean water must be present in Mempawah Mangrove Park ecotourism. Environmental management efforts from the cleanliness aspect are also starting to be paid attention. With this, it is hoped that the Corporate Social Responsibility program can provide assistance in the form of pipes to distribute water to places of worship or toilets so that visitors can more easily access clean water. In addition, the barrel or water purification area is also very necessary so that the potential for the Mempawah Mangrove Park ecotourism area in terms of cleanliness can be fulfilled. The availability of clean water is a priority for ecotourism, because visitors need it for their personal needs (Dolorosa & Kurniati, 2019).
Determination of Pairwise Comparative Value for Social and Cultural Aspects.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attraction and Accessibility</td>
<td>0.7</td>
</tr>
<tr>
<td>Introducing Local Culture</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: Processed primary data, 2019

For social and cultural aspects, what must be prioritized to be optimized are the aspects of attraction and accessibility. The last priority is the aspect of introducing local culture. Attractions for ecotourism areas require some assistance from a corporate social responsibility program, namely in the form of facilities and infrastructure for services and attractions for ecotourism visitors to Mempawah Mangrove Park. The construction of facilities needs to get further attention from several aspects of the feasibility of the building such as: 1) adding and painting photo spots, 2) renovating the tracing area, 3) prayer rooms that need to be renovated, 4) increasing the number of toilets. The lack of photo spots results in reduced tourist visits. Mempawah Mangrove Park does not have adequate infrastructure to support tourism activities (Dolorosa & Kurniati, 2019). Based on information from interviews, tracking facilities are not equipped with safety fences, food stalls are not equipped with adequate trash cans, and toilet facilities are still lacking in terms of cleanliness. The increase in the number of photo spots has an impact on increasing interest in visiting the Mempawah Mangrove Park ecotourism area. Accessibility of roads to ecotourism needs attention, such as making cement so that tourists or visitors can easily reach the ecotourism location. The land for parking vehicles is narrow, so further improvements are needed. Mangrove ecotourism development must fulfill several factors, one of which is that the location that must represent suitability for ecotourism and accessibility (Putra, 2015).

Coastal residents have artistic and cultural traditions that can be used as tourist attractions. The understanding of cultural arts in question is the understanding of local traditions and participation in cultural and artistic ritual activities. Through the corporate social responsibility program, it is expected that Mempawah Mangrove ecotourism can hold regular events which aim to be a forum for performing arts and indigenous cultures from Mempawah Regency area. Art and cultural events are carried out as a step to preserve the original culture of the Mempawah area. In addition, this event can become an attraction for visitors to travel to Mempawah area. Therefore, these cultural performances must be held every year. Events that have been carried out are Mempawah Mangrove Festival and Galaherang Festival. Ecotourism development is able to increase the resilience of rural communities, social society, nature conservation, as well as preservation of customs and culture (Baskoro, 2016).
Value Determination of Pairwise Comparison for Educational Aspects

For the educational aspect, the sub-aspect that must be prioritized for optimization is the aspect of introduction to mangroves. The next priority is the legal aspect. In Ecotourism activities, visitors or tourists need to be introduced to the importance of protecting nature. When visitors see the beautiful landscapes in an area, as well as local residents, they can immediately recognize the flora and fauna, which can add to visitors’ insight as well as provide satisfaction with the beauty of mangrove forests. Education about the introduction of local mangroves needs to be poured closer through banners about the importance of protecting mangroves. The corporate social responsibility program at Mempawah Mangrove Park ecotourism can add banners containing knowledge of the importance of protecting coastal ecosystems. Inviting visitors to do activities at the reading house can be a bridge between the management and related institutions such as schools or colleges, which will be important in protecting the mangrove ecosystem. In addition, there is a need for socialization to local residents so that they are able to properly care for the existing mangroves. In line with this, research by Dolorosa & Kurniati, 2019 stated that to increase the aspect of knowledge about mangroves, various activities must be held such as traditional music festivals, mangrove painting competitions for children, and mangrove planting campaign campaigns. Legal Aspects in Education of Mempawah Mangrove Park ecotourism in CSR activities that have been implemented is by disseminating regulations and laws related to mangrove forest protection to visitors. Legal aspects of ecotourism are needed to protect the damage to coastal ecosystems (Putra, 2015).

Value Determination of Pairwise Comparison for Economic Aspects

For the economic aspect, the first sub-aspect that must be prioritized is the aspect of community empowerment, after that is the aspect of community skills. Ecotourism can open job vacancies for local residents and prevent poverty. The
income earned from ecotourism is from tourism services such as wages for boat crossing to the island, selling drinks, food, crafts and others. The involvement of the corporate social responsibility program is urgently needed by the related parties to provide several things that are still needed, such as engines for ferry boats, buoys for visitor safety, capital for business assistance for shops, and road repairs for parking. Local residents should not be an obstacle to ecotourism development since their role should not be separated in ecotourism programs. Community empowerment-based management is one of the natural management approaches that puts environmental knowledge and awareness for local residents as the initial foundation for management (Satria, 2009).

The potential for local products in the Mempawah Mangrove Park area in Pasir Village is waste management and making kelulut honeycombs. Making mangrove dodol (taffy made of sticky rice, coconut milk, and palm sugar) was discontinued. The results of the questionnaire show that residents in Pasir Village have the ability and desire to be involved in developing areas for economic activities in ecotourism such as waste management and honeycomb making. However, some residents admit that they do not have the skills to encourage the implementation of ecotourism. In the future, the preparation of local community resources related to skills to encourage existing services in ecotourism is needed. Stakeholders for corporate social responsibility program activities in Mempawah Mangrove Park ecotourism should conduct various trainings or share experiences with other communities. It aims to motivate, inspire, and improve knowledge in serving in order to optimize the economy and residents' income. According to Siswantoro et al. (2012) The skills of native residents in nature tourism activities have a position in efforts to optimize income.

**Value Determination of Alternative Pairwise Comparison**

As per Figure 6, the visitor attraction program is given top priority. This is due to the need for attention from the corporate social responsibility program to find out what visitors need and want to visit Mempawah Mangrove Park ecotourism object. For this reason, the development of attractions in Mempawah Mangrove Park needs improvement. The availability of unique and interesting artificial and natural photo spots such as natural scenery or beautiful places has its own privileges for visitors (Hastuti, 2017). Mangrove ecotourism preservation becomes the second priority because of the need to maintain and care for and increase the number of mangroves to be planted. Besides that, the cleanliness aspect in the preservation of the mangrove environment in the ecotourism object also needs attention. This program was created by paying attention to the frequent occurrence of environmental destruction. This occurs as a result of people's activities not paying attention to
environmental sustainability. The priority of ecotourism development needs to be done as an effort to conserve mangroves in order to make the environment better and to support the creation of a comfortable area for the survival of existing flora and fauna (Dewi & Rosyidie, 2012).

Knowledge program about mangroves for visitors and the community in Mempawah Mangrove Park ecotourism related to the benefits of protecting the mangrove forest ecosystem. This program is made by paying attention to the existence of a notification board or banner regarding the importance of preserving mangroves, so that visitors will be more disciplined in carrying out their tour activities. In addition, the notification board or banner is interesting to look at because it informs about the mangrove forest ecosystem. The fourth alternative priority is the welfare of the community. Communities who are affected by the development of ecotourism in Mempawah Mangrove Park are able to get income from these ecotourism activities and become additional livelihoods for the community. By increasing income, the community will be prosperous and able to meet their daily needs. Mangrove ecotourism is currently a medium to raise awareness of residents in order to develop natural potential into activities that can benefit local residents, nature, and tourism participants (Nugroho, 2015)

CONCLUSION

The conclusion from the results of this study shows that the first priority for the corporate social responsibility program in the development of Mempawah Mangrove Park ecotourism is from social and cultural aspects, environment, education, and economy. Meanwhile, the alternative in the corporate social responsibility program in developing Mempawah Mangrove Park ecotourism is the attraction of visitors’ interest. Attracting visitors is a top priority. Program implementers need to know what is needed by visitors to be interested in visiting Mempawah Mangrove Park ecotourism, while other alternatives are supporting alternatives.

RECOMMENDATION

Companies need to pay attention to what aspects are needed in providing a corporate social responsibility program for the development of Ecotourism in Mempawah Mangrove Park. The next program is expected to be able to provide improvements in terms of the social and cultural environment, education, and economy and bring Mempawah Mangrove Park ecotourism to a better direction.

REFERENCES


