

APPLICATION OF ANALYTIC HIERARCHY PROCESS (AHP) METHOD IN COMPARING STAKEHOLDER PERCEPTIONS OF TOURISM IMPACT IN MENTAWAI ISLANDS

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Abstract

Tourism has become one of the important industries in the Mentawai Islands. Some people depend on the tourism sector. The tourism sector does not come without any consequences or impacts, both positive and negative. Each tourism stakeholder has a perception of the tourism impact. It is necessary to trace stakeholders' perceptions of the impact of tourism on a tourist destination so that these perceptions can be a reference in tourism development that can represent the interests of all parties. This study explored stakeholder perceptions of tourism impact in the Mentawai Islands. The stakeholders studied in this study are local governments and local communities. This quantitative research used the Analytic Hierarchy Process (AHP) approach to obtain priority impacts from both stakeholder groups. Analyzing stakeholder perceptions seldom use the AHP method. The method is different from quantitative methods in general. A mathematical approach determines stakeholder perceptions of tourism impacts instead of statistical approaches. The tourism impact focused on three main impacts, i.e., economic, socio-cultural, and environmental impacts. The study shows that local governments' perceptions of the tourism impact are dominant in the economic impact (40.14%). Meanwhile, the local community's perceptions tend to the environmental impact (40.24%). When compared, several impact criteria are considered equally important by both stakeholder groups. Based on this, the comparison of these two stakeholder perceptions can be a reference in the development of tourism in the Mentawai Islands.

Keywords: AHP, Mentawai, perception, tourism impacts

INTRODUCTION

Indonesia is well known as a world-class tourism destination. Tourism development in Indonesia had very dynamic over the past few decades. This situation impacts the national economy and increases the country's foreign exchange. Tourism is one of the fastest-growing industries in the world and is an economic driver in many developing countries. Tourism provides job opportunities and can encourage the improvement of other industries that support the tourism industry itself (Baiquni et al., 2013).

The tourism sector and the economy have a good reciprocal relationship or provide mutual benefits and impacts on the economy are caused by many things such as employment, income, government, and foreign direct investment (Yazdi et al., 2017). Based on data from Statistics Indonesia (BPS, n.d.), the tourism contribution positively impacts the country's foreign exchange contribution, which contributed 16,426 billion US dollars in 2018. In addition, the proportion of tourism's contribution to GDP from 2015-2017 shows a figure of more than four percent per year.

In addition to having a good impact on the economy on a national scale, tourism also impacts the socio-economic community. There is a positive influence of tourism on society. This influence can be on improving the quality of community education, opening new jobs, and increasing business opportunities (Hamzah et al., 2018). The existence of tourism also has an impact on the quality of life of the community as a positive impact (Woo et al., 2016). Income from the tourism sector is not only obtained from the amount of tourist expenditure but can also encourage foreign investment (Paramati et al., 2016).

Tourism in Indonesia has been known to foreign countries and has become one of the favorite destinations for tourists. One of the tourist destinations in Indonesia is the Mentawai Islands. Surfing tourism has become the main attraction in the Mentawai Islands. Surfers come from around the world to get experience riding the beautiful waves. In general, tourism in the Mentawai Islands has a good impact on the regional economy but also has a negative impact that comes with it (Towner & Davies, 2018). Unequal income distribution and the participation of local communities that are lacking are some of the negative impacts of tourism that are found (Towner, 2016a; Towner & Davies, 2018; Towner & Milne, 2017). This condition is also caused by poor tourism management which stimulates these negative impacts (Towner, 2016b).

The impact of tourism activities occurs in various sectors. These impacts can be positive or negative, based on research done by Darmawan et al. (2020). Determination of tourism impact needs to consider the standing point of the assessor (Mason, 2020). Both determine depending on the position of the assessment (Mason, 2020).

The discussion of the impact of tourism is a complex one. The Tourism Area Life Cycle (TALC) concept suggests that the tourism impact will differ over time. The impact felt at the beginning of its development is more dominant positive than negative, when the negative impacts become more visible then it needs to be rejuvenated (Butler, 1980). This concept has been proven by many researchers. Research in Tunisia showed that the further tourism exists, the more it causes many negative effects (Widz & Brzezińska-Wójcik, 2020).

Most topics about the impact of tourism only discuss the impact that arises on these tourist destinations. Tourism has a much further impact. Even tourism can have an impact

on tourists themselves. The tourism impact on tourists is in the decision-making for future trips. Tourists have a lot of consideration in determining the destination and activities they want to do because they are influenced by previous travel experiences (Mason, 2020).

In general, the impact of tourism is widely discussed in various literature, at least related to three sectors, namely economic, socio-cultural, and environmental as stated by Mason (2020) and Luštický and Musil (2016). Tourism is an activity to accommodate the movement of people who travel. The more humans move, the more benefits tourism will benefit to the economy, both micro and macro (Damanik et al., 2022). It makes tourism no longer seen as an activity but as a prospective commodity (Yoeti, 2008). The economic impact has a broad scope because it relates to the stakeholders' welfare involved (Mason, 2020). Positive tourism activities' impacts are contributions to generating foreign exchange, government revenues, job creation, and contributions to regional development (Mason, 2020).

The economic impact of the tourism sector on developed countries can be said to be small because it has a variety of other sources of income. As for developing countries, the economic impact can be huge due to various things, such as a lack of natural resources. So many developing countries depend on tourism as the leading foreign exchange earner (Williams & Lew, 2014).

Social and cultural local communities can initially become tourist attractions, especially in developing countries. Various ways of life and local culture make each tourist destination unique and in great demand for tourists. However, as time goes by, tourism continues growing will cause problems (Yoeti, 2008). The concept of the Tourism Life Cycle explains that tourism development will eventually arrive at a phase of decline (Butler, 1980).

Some of the social impacts of tourism are job creation, revitalization of undeveloped areas, preservation of local architecture, and help to promote the conservation of areas that need to be protected (Mason, 2020). Additionally, negative socio-cultural impacts are often studied by researchers. Negative impacts, from urbanization and stratification, are found in many developed tourist areas (Yoeti, 2008). Environment and tourism have a complex relationship. The interdependence between the two becomes very clear when the environment uses as a tourist attraction, and the existence of tourism encourages environmental preservation (Mason, 2020). Speaking of environmental impacts, one important thing that needs to be understood is the concept of the carrying capacity of tourist sites.

There are three types of carrying capacity used as a reference (Mason, 2020). First, environmental carrying capacity (physical) is a capacity related to how many people can be in a place. Second, ecological carrying capacity is a measure of damage to natural habitats. Measures how long a habitat can last until it is completely damaged. Finally, perceptual carrying capacity is a very subjective carrying capacity. This capacity cannot be measured quantitatively but only by the tourists' perception. The carrying capacity of this perception is a level of crowds that tourists can tolerate before choosing to go elsewhere.

Each stakeholder can differently feel the impact of tourism. Differences in interests and roles make stakeholders have their views and perceptions of the impact of tourism. Stakeholders' perceptions of the impact of tourism can also be in the form of expectations

from these stakeholders. Stakeholders as entities that can influence or be influenced by a development plan policy based on Freeman's concept, their perception of the impact of tourism has become particularly important. The stakeholders' concept has been developed until now (Jones et al., 2002). Stakeholders are considered crucial in tourism development. Many researches indicated potential conflict among stakeholder groups (Wang & Yotsumoto, 2019). Based on this reason, all stakeholders' roles and interests need to be mapped to conduct a sustainable tourism destination (Roxas et al., 2020).

Tracking stakeholder perceptions of tourism impacts related to approaches to sustainable tourism (Luštický & Musil, 2016). Understanding stakeholders' perceptions of tourism impacts is also the key to sustainable tourism development (Luštický & Musil, 2016). Based on this, it is necessary to explore stakeholder perceptions of the impact of tourism, especially for destinations that are still developing. Tourism authorities are perception tracing to accommodate all stakeholder interests.

Research on stakeholder perceptions of tourism impacts is not new (Luštický & Musil, 2016). There has been a lot of research on this topic conducted in various qualitative and quantitative approaches as done by several previous researchers, some of them are Styliadis et al. (2014), Vareiro et al. (2013), Gonzalez et al. (2018), and Darmawan et al. (2020). Those researches identify the perception of specific stakeholder groups.

This study tried to reveal the perceptions of tourism stakeholders in the Mentawai Islands with the AHP method and compare them with the perceptions of two stakeholder groups. Those stakeholder groups that become the main object of this study are Local Government and Local Community. This research approach with the AHP Method is novel research conducted in the Mentawai Islands, especially in exploring stakeholder perceptions of the impact of tourism.

METHODOLOGY

This research uses a mathematical quantitative approach with the Analytic Hierarchy Process (AHP) method. Tracking stakeholder perceptions is not yet common. The AHP method, developed in the 1970s, was the first mathematical method used in decision-making systems (Saaty, 1988). Primary data in this study were collected using questionnaires as part of quantitative research methods (Sugiyono, 2013). This research questionnaire was adjusted according to the data analysis of the AHP method. Filling out questionnaires is carried out by pairwise comparison of each impact and criteria by providing assessments or known as judgments (Saaty, 2004). They are based on the fundamental scale of AHP in Table 1.

Table 1. AHP Fundamental Scale

No	Importance	Definition
1	1	Equal
2	3	Moderate
3	5	Strong
4	7	Very Strong
5	9	Extreme
6	2,4,6,8	Values between two adjacent consideration values

Source: Processed from various sources (Purwohandoyo & Sadali, 2018; Saaty, 1988, 2004)

Hernawati et al. (2021) briefly explained the steps in using the AHP method. Starting from identifying the problem to be solved; finding criteria and sub-criteria; performing pairwise comparisons on each element of criteria and sub-criteria; and calculating and normalization of ratio consistency values. The result of the pairwise comparison is into data which is then analyzed to see the priority of tourism impacts as a perception from stakeholders. The pairwise comparison result and priority impact are in Table 3 and Table 5. Every criterion from the tourism impact compares with one another. The result is in Table 4 dan Table 6, then the comparison between the two stakeholder groups is in Table 7.

As research variables commonly found in quantitative research with statistical methods, research variables with the AHP method are described using a conceptual framework known as the AHP hierarchy. The conceptual framework discussed in this study on the impact of tourism from economic impacts, socio-cultural impacts, and environmental impacts. This conceptual framework into a research questionnaire. AHP Conceptual Framework is in Table 2 below.

Table 2. AHP Conceptual Framework

No	Impacts	Criteria
1	Economics	Job Creation (EK1) Equal Income Distribution (EK2) Increased investment (EK3) Infrastructure and service improvements (EK4) Economic diversification (EK5)
2	Socio-Cultural	Increased local participation (SB1) Increased pride in local traditions (SB2) Strengthening local values and traditions (SB3)
3	Environment	Stimulate Biodiversity Maintenance (LK1) Local Architecture Conservation (LK2) Stimulate Environmental Awareness (LK3) Conservation Areas Promotion (LK4)

Source: Processed from various sources (Mason, 2020; Towner & Davies, 2018)

The research sample of the AHP method is not the same as the statistical method. The selected sample is an expert figure who can represent one stakeholder group (Purwohandoyo & Sadali, 2018). Samples determination refers to the concept of Rules of Thumb that is suitable for big area of research coverage and unidentified population (Tipton

et al., 2017). The interviews were conducted 14 times (n=14) from both stakeholder groups combined.

Research data collected with questionnaires were then processed using AHP analysis. The data analyzing process was carried out with the help of special data processing software for the AHP method, namely SpiceLogic Analytic Hierarchy Process software. The results of this research data processing are using descriptive analysis. A descriptive describes all samples or stakeholder groups and the results are general and concluding (Sugiyono, 2013).

Stakeholders as research objects are identified by looking at all entities that will affect and be affected by tourism development in the Mentawai Islands. The approach used is based on the understanding of stakeholders (Freeman, 1984). This research is limited to two stakeholder groups, i.e., local government, and local communities. This restriction clarifies perceptions of the impact of tourism on both stakeholder groups.

The study was conducted in 2022 and was in the Mentawai Islands (Figure 1). The islands have a lot of tourism potential, especially marine tourism, which has developed since the 80s, and is very interesting to be researched further. Speaking about tourism in the Mentawai Islands, it will not be separated from surfing tourism. In addition, surfing dominating tourist activities, surfing tourism is also the core of tourism activities in the archipelago-shaped regency. Many tourists attractions support tourism development. Statistics Indonesia (BPS) recorded 194 tourist attractions in the Mentawai Islands. Administratively, Mentawai Islands has ten sub-districts with a population of 87.623 inhabitants in 2020 (BPS Kab. Kepulauan Mentawai, 2021).

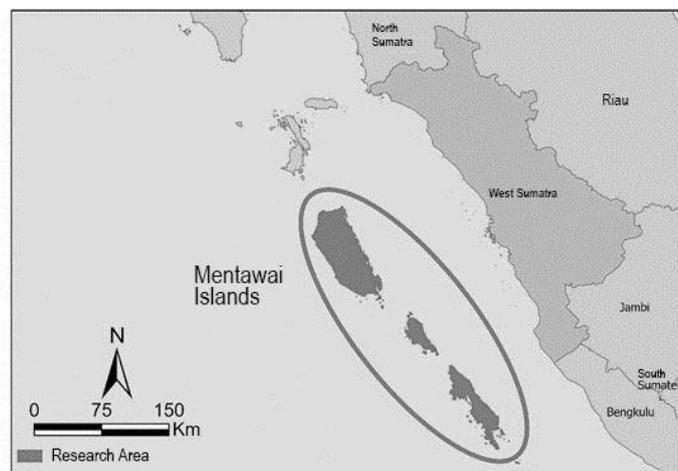


Figure 1. Research Location
Source: Processed from primary data, 2023

FINDINGS AND DISCUSSION

Local Government Stakeholders

Local governments have the authority to make development decisions to improve the welfare of their communities. Development decisions and policies are in various fields, including tourism development policy. Local governments, as important stakeholders in tourism development in the Mentawai Islands, can have their perceptions of the impact of

tourism. Local governments' perceptions of tourism impact can provide an overview of development policies to be taken.

As mentioned above, questionnaires as a tool to collect data from the respondents. AHP collected, combined, and analyzed judgments made by respondents from local government stakeholders. The compilation of pairwise comparison can be seen in Table 3 below. The table shows that pairwise comparison between tourism impacts can be analyzed way further and generate priority of tourism impacts.

Based on the AHP analysis result conducted on the assessment given by the local government, the perception of the most crucial tourism impact is on the economy. The importance of the economic impact is 40.14% (Figure 2). The value of this level of importance explains that local governments think that tourism should have a positive impact on the regional economy.

Table 3. Compilation of Pairwise Comparison from Local Government Stakeholders

	Economic	Socio-Cultural	Environmental	Priorities
Economic	1.00	2.11	0.89	0.40
Socio-Cultural	0.47	1.00	1.61	0.30
Environmental	1.12	0.62	1.00	0.30

Source: Processed from primary data, 2023

The socio-cultural impact is the impact with the second priority, with an importance level of 30.35% (Figure 2). The socio-cultural impact on local governments is also important because the government indirectly must preserve local culture.

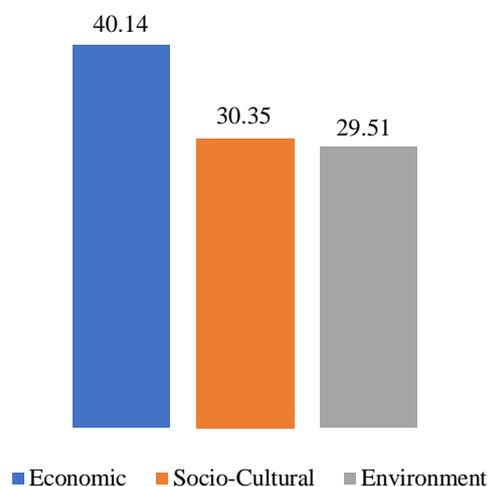


Figure 2. Local Government Perception on Tourism Impact

Source: Processed from primary data, 2023

The third priority is the environmental impact. The importance of this impact is 29.51% (Figure 2). Local governments play a significant role in environmental conservation because they have the authority to make regulations regarding it for the sustainability of tourism.

The general economic impact is the most significant impact for local governments. This economic impact is spelled out in several criteria. These criteria provide a specific picture of the economic impact criteria that are priorities for local governments.

The most important economic impact criteria are improved infrastructure and services (EK4) and increased employment (EK1). Local governments assume that improving regional infrastructure aims to meet the basic needs of the community. The existence of tourism increases the needs and movement of the community, so it also contributes to increasing the need for infrastructure and services. Therefore, this criterion is important for local governments. The importance was at 34.99% (Table 4).

Job creation (EK1) is a second-priority criterion. The importance of this criterion is 22.93% obtained from the processed AHP data (Table 4). It explains that the local government views that tourism activities in the Mentawai Islands can have a good impact on job creation. The importance of other criteria in economic impact is in Table 4 below.

Socio-cultural impacts are impacts with a second priority for local governments based on their importance. Many studies have highlighted the negative socio-cultural impact of tourism (Hamzah et al., 2018). However, tourism can also have a good impact on the socio-culture of the community in several ways (Mason, 2020). Local governments' perceptions of socio-cultural impact criteria based on the results of AHP analysis are as follows.

One of the criteria for socio-cultural impact is the strengthening of local values and traditions (SB3). It is the highest priority criterion with an importance level of 42.04% (Table 4). Local governments think that tourism has a good impact on strengthening local values and traditions. It is a step in the preservation of culture itself. The local traditions and culture of the Mentawai Islands have become one of the regional tourist attractions, and increasing the value of local culture is a way to preserve it.

In addition, the criteria for increasing local participation (SB1) are the second priority criterion. Increasing local participation is a positive impact that can arise in the community due to tourism. Especially if people think that tourism has a positive impact that can be felt. As for the government's perception, this criterion has a level of importance of 31.67% (Table 4). Local participation is very important for local governments in tourism development. The importance of other criteria can be seen in Table 4 below.

Environmental aspects are the third priority for the government. The most prominent criterion is the Environmental Awareness Stimulation (LK3) criterion. Environmental awareness in the community can arise from direct interaction with tourists. Tourists indirectly educate the community on the importance of environmental awareness. Therefore, the local government agrees that tourism activities can stimulate that. This criterion is assessed as a criterion with top priority by local governments. The importance of this criterion is 34.93% (Table 4).

The second criterion is the promotion of conservation areas (LK4). A conservation area is a protected area to maintain biodiversity. Tourism activities can help promote conservation areas. However, it can also happen the other way around, i.e., conservation areas as tourist destinations. The government considers that the promotion of conservation areas (LK4) is a criterion with an importance level of 29.31% (Table 4).

Table 4. Local Government Perception on Tourism Impact Criteria

No	Impact	Criteria	Priority
1	Economics	EK1	22.93%
		EK2	14.39%
		EK3	16.72%
		EK4	34.99%
		EK5	10.97%
2	Socio-Cultural	SB1	31.67%
		SB2	26.29%
		SB3	42.04%
3	Environment	LK1	22.76%
		LK2	13.00%
		LK3	34.93%
		LK4	29.31%

Source: Processed from primary data, 2023

Local Community Stakeholders

A community is a group of people who live in an area with a specific social system. The community is an essential stakeholder in tourism development because it is an entity in direct contact with tourism activities. The community feels the impact of tourism, both positive and negative. The community in the Mentawai Islands has a perception of these tourism activities' impact as part of the stakeholders in the development of tourism. Every judgment from each respondent, interviewed from this stakeholder group, was combined, and presented in Table 5 below.

Table 5 Compilation of Pairwise Comparison from Local Community Stakeholders

	Economic	Socio-Cultural	Environmental	Priorities
Economic	1.00	1.88	0.61	0.34
Socio-Cultural	0.53	1.00	0.86	0.25
Environmental	1.63	1.16	1.00	0.40

Source: Processed from primary data, 2023

Based on the level of importance, environmental impacts are the impacts that are considered the most important by the community. The importance of environmental impact is 40.24% (Figure 3). It explains that environmental impact is the most significant aspect to consider the impact expected by the community from tourism activities.

The economic impact is the second priority, with an importance level of 34.3% (Figure 3). The community of Mentawai Islands brings economic impact as a second priority, making it a reason that this aspect is also crucial. This aspect has a significant impact, especially concerning daily income.

The last impact that becomes a reference in the study of the perception of the impact of tourism in the Mentawai Islands is the socio-cultural impact. The socio-cultural impact has an importance rate of 25.46% (Figure 3). Socio-cultural impacts are considered by society even though they are the lowest priority impacts. Based on this, it seems that socio-cultural impacts remain influential impact, but do not dominate.

The economic impact is very important for local communities. Some of the Mentawai Islands depend on tourism activities as a source of income. Local people's perceptions of economic impact can reflect expectations of tourism impact.

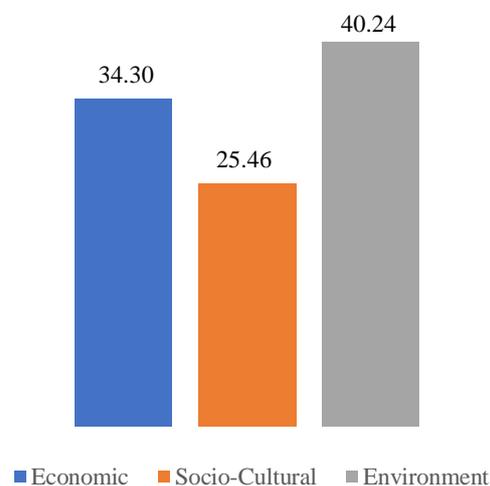


Figure 3. Local Community Perception on Tourism Impact
Source: Processed from primary data, 2023

Infrastructure and service improvement (EK4) is one of the highest-priority economic impact criteria. People assume this criterion has an importance level of 25.12% (Table 6). Improving service infrastructure is very important for the community because it is related to the basic needs of the community. Part of the stakeholders in the community agrees that tourism activities can improve regional infrastructure and other services. They expect an increase in infrastructure and services directly.

Another criterion is Economic diversification (EK5). Economic diversification in society means that people have more job opportunities or diverse economic activities. The importance of this criterion is 26.38% (Table 6). Based on the level of importance makes this criterion the criterion with priority. It indicates that the local community understands and agrees that tourism activities can provide more diverse job opportunities.

The socio-cultural impact on society is directly related to various aspects of life. Tourism can initially have a positive impact, but it is growing and can have a negative impact. The same is with socio-cultural impacts in society (Butler, 1980).

The first criterion is increased local participation (SB1). Local participation is part of the positive impact of tourism activities, directly related to the community. Local participation can also as community participation itself. The importance of this criterion based on the processed AHP was 35.34% (Table 6). It makes the criteria partly the criteria with priority.

Furthermore, criteria for strengthening local values and traditions (SB3). People think that strengthening the values and traditions of some of the impacts of tourism is important. The community gives importance to this criterion is 34.39% (Table 6). Therefore, it explains that the local community attaches importance to the good impact of tourism activities in strengthening values and traditions rather than binding pride.

The environmental impact of tourism has been in the spotlight in recent times. The environmental impacts raised are mostly negative impacts as well as socio-cultural impacts. On the other hand, tourism can also have a good impact on the environment.

One of the important criteria for environmental impact is the Stimulation of Biodiversity Maintenance (LK1). The importance of this criterion is 20% (Table 6). Based on value, the importance level is the second priority. However, when compared to the other two criteria (LK2 and LK4), the importance level is relatively the same. However, in general, it can be complementary to creating tourism activities that can have an impact on the environment.

The environmental impact criterion that is the only criterion that is considered important is Environmental Awareness Stimulation (LK3). The importance of this criterion is 42.25% (Table 6). Therefore, the criteria successfully explain that the community agrees that tourism activities can have a good environmental impact in terms of stimulating the community in increasing environmental awareness. This assumption is a good impact on tourism because if the community already has awareness of the importance of environmental conservation, other impacts will also arise by themselves. Given the high level of importance of this criterion, the community will be able to participate in the sustainable development of tourism.

Table 6. Local Community Perception on Tourism Impact Criteria

No	Impact	Criteria	Priority
1	Economics	EK1	18.88%
		EK2	9.78%
		EK3	19.84%
		EK4	25.12%
		EK5	26.38%
2	Socio-Cultural	SB1	35.34%
		SB2	30.27%
		SB3	34.39%
3	Environment	LK1	20.00%
		LK2	18.37%
		LK3	42.25%
		LK4	19.38%

Source: Processed from primary data, 2023

Comparison of Stakeholder Perceptions

The perceptions of the two stakeholder groups show fundamental differences in the impact of tourism. Local governments expect economic impact as a dominant impact of tourism activities. Another case is with local communities that are more concerned with environmental impacts.

This difference in perception illustrates that there are different points of view from local governments and local communities. The perception of each stakeholder group can be interpreted as an expectation of the good impact of tourism. Local governments have greater expectations of economic impact. It explains that tourism activities in the Mentawai Islands must be able to have an impact on the regional economy. It is evidenced by the existence of several local government policies in regional tourism management (PERDA

Kab. Mentawai No. 1/2015, 2015; PERDA Kab. Mentawai No. 2/2015, 2015; PERDA Kab. Mentawai No. 8/2015, 2015). The three regional regulations further regulate regional tourism and retribution on tourist attractions. It is noticeably clear that the purpose of the regulations is to be able to increase regional revenues.

Another case is the perception of local people who prioritize environmental impacts. Many of the respondents who were representatives of local communities complained about poor environmental conditions. So, this is evidence in public perception that the environmental impact is considered very significant.

Table 7. Comparison of Perceptions between stakeholders

No.	Impacts	Priority		Criteria	Priority	
		Local Government	Local Community		Local Government	Local Community
1	Economic	40.14%	34.30%	EK1	22.93%	18.88%
				EK2	14.39%	9.78%
				EK3	16.72%	19.84%
				EK4	34.99%	25.12%
				EK5	10.97%	26.38%
2	Socio-Cultural	30.35%	25.46%	SB1	31.67%	35.34%
				SB2	26.29%	30.27%
				SB3	42.04%	34.39%
3	Environment	29.51%	40.24%	LK1	22.76%	20.00%
				LK2	13.00%	18.37%
				LK3	34.93%	42.25%
				LK4	29.31%	19.38%

Source: Processed from primary data, 2023

The comparison of stakeholder perceptions can explain in more detail each tourism impact criterion. The economic impact is a priority for local governments. The priority economic impact criteria are job creation (EK1) and infrastructure and service improvement (EK4). In contrast to the perception of local people who prioritize job creation (EK4) and economic diversification (EK5). This situation illustrates that the two stakeholders have different perceptions of economic impact in general and in more detail on each criterion (Table 7).

The socio-cultural impact of tourism can be felt differently by each stakeholder (Table 7). The local government's perception of socio-cultural impact is a manifestation of the government's functions and duties in conservation. Meanwhile, in the community as an entity that feels directly the impact is a perception of the good or bad impact caused. Although both stakeholder groups consider socio-cultural impacts to be the least priority among other impacts, both stakeholders agree that the criteria important for socio-cultural impacts are increasing local participation (SB1) and strengthening local values and traditions (SB3).

As can be seen in Table 7, environmental impact, as well as the socio-cultural impact that the perception of local government reflects its functions and duties. But for local people, it is an illustration of how tourism should have an impact on the environment, not the other way around. Environmental impact is a top priority for local communities.

The priority criteria for local communities are stimulation of biodiversity maintenance (LK1) and stimulation of Environmental Awareness (LK3). Likewise, local government stakeholders prioritize the stimulation of Environmental Awareness (LK3) and the promotion of conservation areas (LK4). In general, it seems that the government makes the promotion of conservation areas one of the important criteria because it relates to the functions and duties of the government itself.

Although there are differences in perception between local governments and local communities, it is obvious in the impact of tourism. However, there are similar perceptions of several criteria for these impacts. Infrastructure and service improvement (EK4) is a priority economic impact criterion by both stakeholder groups. Increasing local participation (SB1) and strengthening local values and traditions (SB3) are important criteria for socio-cultural impact on local governments and local communities. Meanwhile, on environmental impact, the criteria for Stimulate Environmental Awareness are the criteria that both stakeholder groups agree that these criteria are important.

CONCLUSION

The perception of stakeholders that there is a tourism impact reflects how the stakeholder sees the tourism impact, both positive and negative. Each stakeholder can have a different perception from other stakeholders. The different roles of each stakeholder cause the difference in stakeholders.

The results of this study have succeeded in explaining the differences in stakeholder perceptions of the impact of tourism in the Mentawai Islands. Local governments view economic impact as a top priority, while local communities prioritize environmental impact. When compared in more detail, several impact criteria are considered equally important by both stakeholder groups. Based on this, the comparison of these two stakeholder perceptions can be a reference in the development of tourism in the Mentawai Islands. Especially, to find out the expectations of each Stakeholder to be accommodated.

The results of this study use as guidance in tourism development policy-making. By knowing the perception of each stakeholder, decision-making can be done wisely and involve the needs and all parties. However, further and in-depth research is needed to understand stakeholder perceptions of the impact of tourism. Given the limitations of this study, the impact of tourism highlighted is positive. Therefore, it is also important to conduct research related to stakeholder perceptions of the negative impacts of tourism. In addition, this study used mathematical quantitative methods that have the disadvantage of not being able to explain perceptions from stakeholders in depth. As a recommendation, further research can be carried out with qualitative methods to explain the phenomenon of tourism impact more comprehensively.

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