
RESEARCH ARTICLE

Marine Tourism Sustainability Strategy with Triple Helix Support: A Case Study of West Sulawesi Marine Tourism

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ABSTRACT

The tourism sector is one of the sectors that has been severely affected during the Covid-19 pandemic, especially marine tourism in Indonesia. In this work, a case study of marine tourism in the West Sulawesi region of Indonesia was used to conduct a qualitative reanalysis which raises concerns about the sustainability of existing tourism in the area. This study, in general, aims to get answers on tourism sustainability strategies in areas that prioritize marine tourism as their main income, using a case study of marine tourism in the West Sulawesi region of Indonesia. The strategy was obtained based on the results of observations and qualitative conclusions of interviews with stakeholders within the scope of the marine tourism area. This research uses a qualitative method with *deep interview* techniques processed by inductive means. Several people were selected in this interview process, in accordance with the concept of the *triple helix*, which is a model that combines three elements represented by government, academics and industry players. Based on the results of interviews and analyses, several conclusions can be drawn, including; marine tourism management requires strong cooperation and collaboration from the government, local residents, and tourism industry players and is supported by academics; it also requires a strong commitment not only from increasing tourist visits but also nature conservation efforts in order to ensure the sustainability of the industry, and it requires a strong commitment not only from increasing tourist visits but also nature conservation efforts in order to ensure the sustainability of the tourism industry, and lastly, a sustainable marine tourism business necessitates a comprehensive and coordinated plan, as well as the strong support and dedication of all the linked triple helix parts so that these three factors can serve as the foundation for a complete marine tourist sector strategy.

KEYWORDS

Marine Tourism, Sustainability, Indonesia, West Sulawesi

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1. Introduction

The tourism sector is one of the sectors that has been severely affected during the COVID-19 pandemic, especially in Indonesia, which has resulted in a very large decrease in the number of tourists. It was recorded that the number of visits decreased from 90% in 2019 (before the pandemic) to 1.5 million per year in 2020 (Firmansyah, 2022). This then reversed direction during the post-pandemic period, namely, a significant increase even though it had not reached the numbers before the pandemic (Kominfo, 2022; Rachman, 2022). This makes it necessary to have a better strategy so that the number of visits can return to what it was before the pandemic.

Especially for marine tourism in Indonesia, which is the mainstay of many types of tourism in the post-pandemic period (King et al., 2021), still does not show an increase that can match the number of visits in the pre-pandemic period. So, in general, a reanalysis of what has happened during the pandemic and post-pandemic is needed so that the number of visits can return to normal. This

is because marine tourism has a very large potential for visits but also has the potential for natural damage, which makes it quite vulnerable, both in terms of ecosystem damage and long-term sustainability of tourism, both in terms of management and in terms of maintenance of the place by local residents (Dimitrovski et al., 2021) that the number of visits can return to normal. This is because marine tourism has a very large potential for visits but also has the potential for natural damage, which makes it quite vulnerable, both in terms of ecosystem damage and long-term sustainability of tourism, both in terms of management and in terms of maintenance of the place by local residents, so that a comprehensive solution is also needed so that marine tourism can take place in a sustainable manner, especially in this post-pandemic period.

In this work, a case study of marine tourism in the West Sulawesi region of Indonesia was used to conduct a qualitative reanalysis. Mamuju is the capital city of West Sulawesi, a province on the island of Sulawesi. This province has at least 69 islands with a great deal of marine tourism potential, but it has not yet been professionally managed because it is still dependent on local residents. In spite of this, the government has attempted to implement policies that strongly support the sustainability and growth of marine tourism in the area. This policy has resulted in the development of six leading tourism areas, of which five are marine tourism destinations. Therefore, case studies in the region are ideally suited for answering this research topic, given the said conditions.

However, in the post-pandemic period, the level of visits in the area has not returned to normal, and even some locals find it difficult to market their tourism (King et al., 2021). This raises concerns about the sustainability of existing tourism in the area. Moreover, the management of tourism in the area is dominated by local residents, so a strong breakthrough is still needed so that tourism, especially marine tourism, in the area can be further improved. Because the management of marine tourism can be said to be difficult because, if not done carefully, it can cause damage to the ecosystem; on the other hand, a lot of tourist visits are still needed to support the regional economy, especially in the post-pandemic period.

In general, this study aims to get answers to how tourism sustainability strategies are implemented in areas that prioritize marine tourism as their main income source. The strategy obtained based on the results of observations and qualitative conclusions of interviews with stakeholders within the scope of the marine tourism area, which in this case study is the West Sulawesi area, is expected to be a consideration for tourism industry managers to be able to maintain sustainability while increasing the potential of marine tourism in the area. At the same time, it can be reference material for tourism managers in other similar areas to be able to do the same.

2. Literature Review

Marine tourism is also often referred to as coastal tourism, which is defined as tourism with a focus on recreational activities located in the sea or beach area (Lemelin et al., 2020). Marine tourism is generally a mainstay for developing countries that have coastlines and biodiversity (Yuzbasioglu & Dogan, 2021). Especially Indonesia, which is famous for having worldwide marine tourism, such as in Bali, but still has many other hidden marine tourism potentials because Indonesia is an archipelagic country with beautiful beaches and abundant natural wealth (Wibawa et al., 2020).

The management of marine tourism is slightly different from tourism management in general because the potential of marine tourism also depends on the preservation of nature as one of the main attractions in it (Dimitrovski et al., 2021). So that the implementation of governance must also pay attention to many things, for example, waste management from tourists, which is one of the important elements in marine tourism governance (Johnson, 2002), another thing that distinguishes it is the marine tourism environment which is generally vulnerable to intentional or unintentional damage; So, the management of marine tourism nature conservation must also be a concern in the governance implemented in it (Vom Brocke et al., 2013).

Tourism management, in general, not only marine tourism but also other sectors, requires synergy between parties directly or indirectly related to tourism governance. The synergy comes from the government component as policymakers and area rulers, local residents who are generally also local tourism industry players, and academics as a counterweight in the implementation of tourism governance in general or what is often referred to as *triple helix* (Rojas-Berrio et al., 2022; Tusell-Rey* & Tejeida-Padilla, 2019). The appropriate collaborative role of the triple helix can ensure the sustainability of public policy in general and be able to help industry and the regional economy in general (Cai & Etzkowitz, 2020; Fitriana, 2017) so that the application of the triple helix in the tourism industry is very important to do.

3. Methodology

This research uses a limited qualitative method with *deep interview* techniques that are processed by inductive means. This technique conducts interviews with selected people who have a very intense involvement in the problem (Galletta, 2013). So it is hoped that these chosen people can provide opinions that are in accordance with the choice questions as well as conclusions and solutions can be drawn from the choice questions asked at the beginning. In addition, this technique is also able to produce

research conclusions that can focus more on the problem by combining the results of interviews with theoretical findings and appropriate conceptual points of view (Bingham, 2021).

There were several people selected in this interview process, namely the Tourism Office, the Head of the Destinasi Tourism Division, a Provincial and District Tourism Office in West Sulawesi, the manager of the marine tourism area, the Tourism Awareness Group (POKDARWIS) and representatives of the surrounding community. This selection is in accordance with the concept of the *triple helix*, which is a model that combines three elements in empirical research, which is represented by government, academics and industry players (Cai & Lattu, 2022). So, the results of the interview can be accounted for more because the elements involved have been balanced and are able to represent the expected conclusions of the research questions.

The interview process was carried out in the post-pandemic period, namely the beginning of 2022 and was carried out carefully, and the following data analysis steps were carried out: (1) tabulation of data by collecting data and generalizing, (2) reducing data by eliminating unnecessary interview results and filtering according to the research focus, (3) presenting data by conducting preliminary analysis and describing data that is considered relevant, and (4) drawing conclusions that verify data and theoretical analysis from the results of interviews that have been conducted (Miles et al., 2014). After the series of analysis processes are completed, the final stage is to apply the conclusions and answer the research questions that have been set at the beginning.

4. Results and Discussion

The first results of data processing from interviews show that there are at least five tourist destinations that are considered very potential, namely the Karampuang island area, Dato beach area, Gusung Toraja island, Kambunong island beach and Koa Koa beach. This is in accordance with the determination of the characteristics of the local government with a decree from the Governor of West Sulawesi, which states that tourism areas that are considered superior should have potential attractiveness, adequate access, there are quite decent tourism facilities and the presence of socio-cultural elements from the local community and have strong potential based on an increase in visits each year.

However, from this first result, it was also revealed that the government still did not optimally channel the results of tourism income tax into development for these areas. This is because there are many contradictory things between the results of one interview and another. The government, represented by the head of the local tourism office, stated that there are several areas that are actually not considered potential based on the number of tourist visits each year. So that the distribution of development still does not touch the tourism object directly. This was confirmed by the results of an interview with a community representative represented by the local POKDARWIS chairman, in this case from the Karampuang island tourist area, who stated that the management of marine tourism in the area is mostly managed by local residents and supported by local informal workers who still lack sufficient insight to develop stronger tourism potential in the future.

This is also the case in other regions, such as the Dato beach area, which actually has very strong tourism potential. This potential is justified by interviews from local communities who independently manage the marine tourism of Dato beach. Although access to the area has been supported by the local government, tourism management is still very traditional, so tourist visits are only dominated by local tourists. This management can be seen from the poor waste management and the existence of homestays or other lodging places that are still low in quality, so foreign tourist visits are still very minimal in the area. Whereas on the other hand, the available natural potential, both in terms of scenery and the available sea potential, is very good and can be developed into an international class marine tourism area. The same thing also happens in other areas, such as Koa Koa beach and marine tourism in Gusung Toraja.

The management of marine tourism requires the support and cooperation of numerous linked parties, including government and local citizens, because this can make the future sustainability of tourism more certain. Local community members have filed this request for help, but local government policies do not yet fully support it. This may be due to the fact that the government's attention is still divided between addressing the post-pandemic economy and infrastructure development in general, so tourism management, which should also benefit the regional economy, is not executed optimally.

The second summary of the interview findings is the challenge that arises in the management of marine tourism based on local residents. The maritime tourism environment must be protected in order to ensure the continued feasibility of the tourist region. Interviews with local people and local tourism actors in the Karampuang island region revealed the potential for marine tourism in their region, which serves as an illustration. Diverse marine life in the form of fish in very shallow waters creates the opportunity for scuba diving tourism that is quite inexpensive compared to other diving trips. However, this sort of tourism necessitates extensive upkeep by tourism management in order to preserve the marine habitat. However, the government acknowledges that it has not adequately educated local managers and the community on the correct administration of marine tourism in order to attract a large number of visitors while preserving the existing natural resources.

Another challenging situation is presented by tourism, which can lead to modifications in the traditions of religion and culture practised by the local community. In addition to the natural environment and the potential it offers, certain aspects of marine tourism in West Sulawesi also include cultural and religious ceremonies that can serve as tourist attractions in their own right. Conversations with members of the government have revealed that the government is taking measures to support this. This is evidenced by the development of tourism sites to expedite the rise of the regional revenue, which is especially important in the time immediately after the epidemic. On the other hand, effective socialization and engagement from local inhabitants are still required for this planning. This is especially true for local participants in the tourism business, who still require a significant amount of training on tourism governance, particularly marine tourism. It is, therefore, possible that careful planning will be in vain if the implementation does not have support from other key stakeholders, particularly decision-makers.

The last thing that is of concern is the marine tourism area located on an uninhabited island, namely the island of Kambunong. The island has no inhabitants, but it has an amazingly beautiful beauty and is very attractive to tourists. Because it is uninhabited, visitors generally choose transportation in the form of small boats to get to the place. The dilemma that occurs is that the island is fully managed by the government for the management of available marine tourism, but for the surrounding environment as a support of the island is fully managed by local residents, such as the provision of lodging, boat transportation and equipment rental. The synchrony between the two parties ultimately causes the available marine tourism potential to be less than optimal. The natural beauty available is still less exposed, so tourist visits are only limited to local tourists and are still considered less numerous than other similar marine tourism.

According to the findings of interviews and preliminary research conducted in each of the five tourist areas, it is possible to conclude that the element of collaboration between the *triple helix* that is anticipated to exist within the tourism industry (Tusell-Rey* & Tejeida-Padilla, 2019), particularly marine tourism, has not yet been fully implemented. Academics who are able to provide alternative solutions to both the government and the local tourism industry players should act as mediators to help resolve the lack of optimal cooperation that exists between the two groups. This will allow the two groups to work together more effectively. For instance, for the protection of the natural environment in marine tourism areas, the governance of which must be initiated by the government but must also have the support of local residents. In addition, academics have an obligation to provide assistance from a scientific point of view regarding the methods of their preservation and the steps that must be taken by industry players in order for tourism to continue to function optimally without causing damage to the environment.

Another example that can be done is the socialization of tourism governance, especially marine tourism, which has special specifications in its management. The results of interviews and preliminary analysis show the low quality of waste management levels in the tourist area, so it is one of the causes of the lack of foreign tourist visits to date. In addition, the provision of the local tourism industry, which includes the existence of *tour guides*, the provision of regional souvenirs, rental of diving equipment or decent lodging, is a problem that must be addressed and implemented in better governance. This cannot be fully handled by local residents because it requires interference from the government through careful policy and planning. Academics are also needed to provide training or provide a specialist workforce capable of running the local tourism industry for the sustainability of marine tourism in the future.

So, based on the results of the analysis, initial research questions on methods for sustainable marine tourism can be answered, particularly for case studies in the West Sulawesi region. First, it is possible to mediate with academics and facilitate collaboration between local governments and local inhabitants as the principal marine tourist sector participants. The projected outcome of this collaboration would be the growth of a more streamlined local sector supported by a solid infrastructure, allowing it to attract more tourists, notably foreign tourists, and so boosting the area economy as a whole. The results of government policies in the form of local marine tourism planning must also be better disseminated and implemented with the assistance of academics so that local residents can be assisted in comprehending and implementing them in their respective regions.

The second strategy is to make priorities in the handling and management of marine tourism in an integrated manner. An example is an increase in tourism visits, both local and foreign, which should not reduce efforts to conserve marine tourism. For example, the preservation of fish in the sea, maintaining the beauty of the beach and the natural charm available. In addition, the increase in tourism visits should also not affect the local culture, both cultural rituals and religious rituals that have been carried out over the previous years. So with good priorities, the sustainability of tourism can last a long time and can even continue to be developed without damage to nature or existing cultural heritage. This requires in-depth cooperation and discussion between the government and local residents so that there is no confusion in the implementation of tourism governance, as well as being a good synergy for both parties. Academics are also obliged to help when there is a discussion as a mediator as well as a party that gives theoretical consideration so that the priorities set do not intersect with each other. Academics are also required to conduct an in-depth

analysis, both in the context of research activities and community service, in order to produce appropriate recommendations for the local tourism industry.

5. Conclusion

Based on the results of interviews and analyses, several conclusions can be drawn, including: (1) marine tourism management requires strong cooperation and collaboration from the government, local residents, and tourism industry players and is supported by academics; (2) marine tourism management requires a strong commitment not only from increasing tourist visits but also nature conservation efforts in order to ensure the sustainability of the industry, and (3) marine tourism management requires a strong commitment by policy implementation reward and punishment in order to protect the marine environment by the local community (4) marine tourism management requires a strong commitment to bringing a balance of positive impact without negative influence (5) a sustainable marine tourism business necessitates a comprehensive and coordinated plan, as well as the strong support and dedication of all the linked triple helix parts so that these three factors can serve as the foundation for a complete marine tourist sector strategy.

The findings of the research not only serve as the foundation for the making of decisions and the next policy draft for local governments but also serve as the foundation for marine tourism managers, particularly those who are dependent on the natural potential of the coast or sea. The next research finding on marine tourism management contributes by increasing local people's income through the marine tourism business. In addition, the results of this research can also be used by academics as the primary basis for additional research. This research can include the creation and enhancement of tourist policies or governance in both a general and specialized sense. In addition, the findings of this research could be taken into account during the process of developing marine tourism infrastructure. This would make it possible to ensure the long-term viability of the marine tourism industry, which continues to place emphasis on the protection of natural areas rather than merely concentrating on the expansion of tourist numbers.

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