



Development of Nusa Ra Island as a Marine Tourism Object in Increasing Regional Original Income (PAD) in South Halmahera Regency

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Article Info

Article history:

Received Oct 4, 2024

Revised Dec 12, 2024

Accepted Dec 23, 2024

OnlineFirst Dec 29, 2024

Keywords:

Development

Reg Hal-Sel

SO Strategy

Tourist Attraction

Tourism Management

ABSTRACT

Purpose of the study: The purpose of this study is to understand, investigate, identify, and explain the formulation of research questions. This study aims to explain the development of tourism real estate carried out by the Tourism Office to increase local revenue in South Halmahera Regency.

Methodology: This qualitative descriptive study uses inductive analysis to understand tourism management in the Banda Naira Islands. Data were collected through observation, purposive sampling interviews, and documentation, and analyzed using the Miles & Huberman model (reduction, presentation, conclusion drawing). The focus of the study includes constraints, strategies, and potentials of tourism management, with optimization of SO (Strengths-Opportunities) strategies to maximize local potential.

Main Findings: Research shows that tourism development in the Banda Naira Islands is not optimal, especially in terms of tourist attractions, accessibility, facilities, and management. The potential for marine and historical tourism is great, but the lack of artificial attractions, transportation facilities, and facilities such as information centers, public toilets, and waste management are obstacles. Destination management is also not structured. An SO (Strengths-Opportunities) strategy is recommended with institutional strengthening, infrastructure improvement, and stakeholder collaboration to optimize local potential and tourist attractions.

Novelty/Originality of this study: This research presents novelty in the development of Nusa Ra Island as a marine tourism with a sustainable approach that integrates nature conservation, local community empowerment, and promotion through digital technology.

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1. INTRODUCTION

Law Number 23 of 2014 concerning Regional Government is the legal basis for the development of regional autonomy in Indonesia. This law regulates that regional governments carry out their duties in accordance with the principles of autonomy and joint government, with the aim of improving welfare through service, justice, and equitable development. [1], [2], [3]. Regional governments are given the authority to manage regional resources independently, including exploring Regional Original Income (PAD) from taxes, asset management

results, and cooperation with third parties. In this case, the tourism sector has the potential to contribute to PAD, although it has not yet become a major contributor. [4], [5].

Tourism is considered a strategic sector that can support the national economy through job creation and increased investment. [6], [7]. Therefore, the government is trying to develop this sector with various policies, such as inventorying and promoting tourist attractions, in accordance with Presidential Regulation Number 9 of 1969, Indonesian tourism is expected to develop into an important industry that not only generates foreign exchange, but also accelerates regional development in various aspects, including economic, legal, and socio-cultural.

South Halmahera Regency, which consists of an archipelago with abundant natural resources, has great potential in the tourism sector. [8], [9]. The region is known for its natural beauty, including the Nusantara Island tourist attraction which offers white sand beaches and marine parks rich in biota. The tourism potential in this region can contribute significantly to (PAD) if managed properly by the local government, which includes managing attractions, infrastructure, and tourism promotion. [10], [11].

Tourism development on Nusara Island requires support from the government through the Ministry of Culture, Tourism and Sports. [12], [13]. Steps that can be taken include nature conservation, human resource development, active promotion, and improvement of tourism facilities. If managed well, Nusa Island has the potential to become a leading tourist destination that can significantly increase the PAD of Hakmahera Selatan Regency [14], [15].

Based on previous research conducted by Fefri Y. Roslin et al [16], [17], where there is a gap with the current research. In previous research, the focus of the research was the strategy for developing the Buntu Burake tourist attraction in Tana Toraja, including improving facilities, increasing tourist attractions, and empowering MSMEs to support PAD. The approach is more focused on managing local resources and cultural attractions, while in this study, the focus of the research is the development of Nusa Ra Island tourism in South Halmahera Regency to increase Regional Original Income (PAD). This study prioritizes aspects of sustainability that include nature conservation, empowering local communities, and digital technology-based promotion. Therefore, there is a gap where this study tends to highlight aspects of sustainability and technology-based innovation, while previous research emphasizes collaborative strategies and MSMEs, with the development of tourist attractions as a competitive advantage.

In addition to the research focus that contains gaps, there are also gaps in the research aspects. In line with previous research, the research method used is qualitative with a SWOT approach to analyze internal and external factors that influence the development of tourism objects. Data collection techniques involve interviews, observations, and documentation with a focus on government and community synergy strategies, while in this study the method used is qualitative with a descriptive approach. Data collection techniques include observation, interviews, and documentation. Data are analyzed systematically through a process of reduction, data presentation, and drawing conclusions based on triangulation [18], [19], [20].

This research offers an innovative approach in sustainable tourism development by integrating environmental conservation, local economic empowerment, and multi-sectoral synergy involving government, private sector, community, and academics to create inclusive, data-based policies. The main novelty is the use of digital technology for sustainability promotion, management, and monitoring, as well as a community-based approach that ensures direct benefits for local communities. This model not only supports economic growth through optimizing unique local potentials, but also maintains the sustainability of the ecosystem and the competitiveness of Indonesian tourism in the global market. This prototype can be adapted by other tourism destinations, responding to the challenges of globalization and climate change [21], [22], [23].

The results of this study provide a strategic contribution to the development of sustainable tourism, especially in areas that have local potential but have not been optimally managed. An innovative approach that integrates environmental conservation, local economic empowerment, and multi-sectoral synergy provides practical guidance for the government, business actors, and communities in creating inclusive and data-based policies. In addition, the use of digital technology as a tool for promoting and monitoring sustainability has the potential to accelerate the transformation of tourism into a sector that is more adaptive to the challenges of globalization and climate change. This development model is also a reference for application in other tourist destinations in Indonesia to increase the competitiveness of national tourism in the international market.

The urgency of this research lies in the urgent need to address the gap in tourism management that impacts local economic growth, environmental conservation, and the welfare of local communities. The limitations of synergistic strategies between the government and the community, the minimal use of digital technology, and the suboptimal conservation and management of local potential are the main obstacles in creating sustainable tourism. This research is relevant to answering global challenges, such as climate change and increasing competition in tourist destinations, which require data-based innovation and cross-sector collaboration [24], [25].

This study aims to identify internal and external factors that influence tourism management and development in the research area, as well as to explain the obstacles and potentials in realizing sustainable tourism based on environmental conservation, local economic empowerment, and digital technology. This study also focuses on

developing a multi-sectoral synergy model between the government, private sector, community, and academics to create inclusive policies in tourism management. In addition, this study provides recommendations for innovative strategies that can be adapted by other destinations to increase tourism competitiveness in the international market, while offering a prototype of sustainable tourism management as a solution to the challenges of globalization and climate change[26], [27].

2. RESEARCH METHOD

The type of research used is descriptive and aims to provide a clear picture of the problem being studied and to interpret and explain the data systematically. This study uses analytical methods, observational methods and direct interviews in the field with primary and secondary data obtained from related agencies. [28], [29]. The author uses a qualitative descriptive approach in this study because the problem is related to social and human phenomena, namely social phenomena that are logically based on causal relationships that occur in society. The phenomena described are based on field observations and observation results. (in this case the authorized agency is the development of tourist attractions by the Ministry of Tourism and Sports). This is basically observational. According to Moleong (2005:4), basically the descriptive type is a research approach where the data collected is in the form of words and pictures rather than numbers. This data can be obtained from interviews, field notes, photos, videos, personal documents, notes or memos and other documents.

There are three objects in this study, as objects of data collection. The first is the employees at the Nusa Ra Island tourist attraction, who are responsible for the management and administration of the tourist attraction. Then the local residents around Nusa Ra Island, who may be involved or affected by the development of marine tourism.[30], [31]. And finally, tourists who visit Nusa Ra Island, as parties who utilize tourist attractions and contribute to regional income (PAD). These three data collection objects will provide different perspectives, but complement each other to assess the impact of the development of Nusa Ra Island tourist attractions on increasing PAD in South Halmahera Regency.

Data collection techniques in this study were observation, interviews, documentation, and triangulation. In this study, researchers applied triangulation techniques, namely a combination of three different data collection techniques, namely observation, interviews, and documentation. Researchers conducted observations to obtain a more accurate picture of the subject being studied, where researchers collected data at the relevant location or agency. Interviews were conducted on three data collection objects, namely employees, residents and tourists. Finally, data collection in the form of documentation carried out by researchers is a written legacy, as well as taking pictures or photos and laws that are relevant to the focus of the study..

Data analysis techniques carried out by researchers in the form of data collection, interview and observation techniques are used to obtain data from data sources. Researchers can directly assess the data obtained during the interview. If the response is insufficient or unsatisfactory, researchers can repeat the query until the data is considered valid. Furthermore, data reduction is the process of improving data by eliminating data that is no longer needed or relevant, and adding data that is considered missing. In terms of themes and patterns, data reduction requires summarizing, selecting the most significant elements, and focusing on them. As a result, the data to be reduced presents a more definite depiction, making it easier for researchers to obtain additional data and trace it if needed. Then the data presentation is information that allows researchers to draw conclusions from their findings. Seeing the presentation of data can help in interpreting what is happening and allowing you to do anything with the analysis or take additional action depending on what you have learned. Finally, drawing conclusions and verifying data is the last step in the data analysis stage. If the initial findings found are still temporary, then data verification is carried out, and if it is not followed by strong supporting evidence to support the next data collection steps, then changes will be made. If the conclusions reached initially are regularly supported by reliable evidence when the research team returns to the location to collect data, then the findings are credible or can be trusted. In qualitative research, findings may be able to answer research questions set at the beginning of the investigation. Sometimes the findings achieved are not enough to solve the problem. This is because the problems that arise in qualitative research are temporary and can develop after the research enters the field, which is in line with the nature of qualitative research itself[32], [33].

3. RESULTS AND DISCUSSION

3.1. Results

Since separating from Maluku and becoming a province in 1999, North Maluku has focused on developing the tourism sector. South Halmahera, one of the regencies on Halmahera Island, has hundreds of beautiful, pristine islands, including Nusa Ra Island. Nusa Ra is specifically designated as a marine tourism area and is one of the destinations worth visiting in Eastern Indonesia. The island is about 30 hectares in size and only takes one hour to get around. Although relatively small, Nusa Ra has marine tourism potential that is being developed, one of which is Nusa Ra Beach. This beach is one of 102 coastal points in South Halmahera that are

being developed as leading tourist destinations. Its natural beauty is stunning, with clear sea water with blue and turquoise gradients, and a stretch of soft white sand decorated with rows of coconut trees. Banyan trees growing on the edge of the beach and the backdrop of the mountains add to the uniqueness of this beach. Nusa Ra is located in a strategic location, only about one kilometer from Labuha City, the capital of South Halmahera, on Bacan Island. The entrance fee to this beach is very affordable, only IDR 3 thousand per person. The beauty of the beach and its easily accessible location make Nusa Ra increasingly popular among tourists. In the last three years, rapid development has been seen in Nusa Ra with the establishment of 16 accommodation units in the form of cottages in the form of stilt houses. This development shows that Nusa Ra has great potential to become a leading marine tourism destination in Eastern Indonesia.

South Halmahera has 30 sub-districts, with the district capital located on Bacan Island. The furthest sub-district from the capital is East Gane, which is 272.6 km away. Most of the population lives in coastal areas with an altitude of between 1 and 7 meters above sea level, especially in East Bacan and Cayoa sub-districts. South Obi sub-district is the largest, covering 12.34% of the total area, while South Cayoa sub-district is the smallest with an area of only 0.30%. South Halmahera Regency has 250 definitive villages and 6 Migration and Settlement Units (UPT). Labuha Village, located on the southern coast of Bacan Island, is one of the villages in Bacan District, as well as the capital of the district. Labuha Village has a population of around 7,249 people with an area of 2.40 km² and a density of 3,020.42 people/km² in 2020. Geographically, South Halmahera is located between 126°45'E to 129°30'E and 0°30'N to 2°00'S. This district is referred to as an archipelago because most of its territory consists of islands surrounded by water, including Lake Maluku, Lake Halmahera, and Lake Seram, which are separated by several straits. The land area of South Halmahera covers 8,779.32 km² or 22% of its total area, while its sea area is much larger, namely 31,484.40 km² or 78%. This district consists of six main islands, namely Obi, Bacan, Makian, Cayoa, Kasiruta, and Mandioli, with several islands located on the Halmahera peninsula. South Halmahera Regency has natural wealth in the form of islands scattered in the surrounding waters and offers great potential, both in the tourism sector and marine resources. The main islands are the center of economic and social activities for the people in this region.

Table 1. Area of South Halmahera Regency Based on Details of District Area

Subdistrict	Area by sub-district					
	Extensive (Km2)			Percentage		
	2018	2019	2020	2018	2019	2020
Obi Selatan	1,083.48	1,083.48	1,083.48	12.34	12.34	12.34
Obi	973.15	973.15	973.15	11.08	11.08	11.08
Obi Barat	610.93	610.93	610.93	6.96	6.96	6.96
Obi Timur	512.13	512.13	512.13	5.83	5.83	5.83
Obi Utara	106.49	106.49	106.49	1.21	1.21	1.21
Bacan	304.09	304.09	304.09	3.47	3.47	3.47
Mandoli Selatan	118.10	118.10	118.10	1.35	1.35	1.35
Bacan Selatan	160.21	160.21	160.21	1.82	1.82	1.82
Balang Lomang	53.31	53.31	53.31	0.61	0.61	0.61
Bacan Timur	270.86	270.86	270.86	3.09	3.09	3.09
Bacan Timur Selatan	213.43	213.43	213.43	2.43	2.43	2.43
Bacan Timur Tengah	278.98	278.98	278.98	3.18	3.18	3.18
Bacan Barat	180.78	180.78	180.78	2.06	2.06	2.06
Kayoa Barat	39.62	39.62	39.62	0.45	0.45	0.45
Kayoa	27.07	27.07	27.07	0.31	0.31	0.31
Gane Barat	403.67	403.67	403.67	4.60	4.60	4.60
Gane Barat Selatan	493.85	493.85	493.85	5.62	5.62	5.62
Genre Barat Utara	501.69	501.69	501.69	5.71	5.71	5.71
Kep Jorong	148.93	148.93	148.93	1.70	1.70	1.70
Gane Timur	656.27	656.27	656.27	7.48	7.48	7.48
Gene Timur Tengah	809.67	309.67	309.67	3,53	3,53	3,53
Gene Timur Selatan	304.15	304.15	304.15	3,46	3,46	3,46
Halmahera Selatan3	8779,32	8779,32	8779,32	100,00	100,00	100,00

In 2011, the population of South Halmahera Regency was 203,707 people. The sex ratio shows that males are higher than females. In 2011, the number of data showed that males reached 104,240 people while females reached 99,467 people. Bacan District is the district with the largest population, which is 19,991 people. While the district with the smallest population is North Kayoa District, with a population of 2,727 people. Education is one of the most important things in people's lives that plays a role in improving the quality of life. The higher the education of a society, the better the quality of its natural and human resources. Meanwhile, infrastructure

development in the aspect of education with the aim of organizing the teaching and learning process and improving the quality of human resources in the region is the commitment and management of various parties, both government and private. The number of Elementary Schools in Halmahera Regency is 316 schools, while the number of Junior High Schools in Halmahera Regency is 156 schools, while the number of Senior High Schools in Halmahera Regency is 88 schools. Below is a Map of South Halmahera Regency.

3.2. Discussion

The data collected by researchers in this study were collected using the direct question method. Interviews are data collection techniques that involve asking direct questions to respondents that can address the problems the author is investigating. The results of this study are combined through indicators that have been described previously. Several tourist attractions that have the potential to be developed in South Halmahera Regency, one of which is the Nusa Ra beach marine tourism object located in Botang Lomang Village, Bacan District, South Halmahera Regency. This tourist attraction is an icon of tourism in South Halmahera Regency, therefore the marine tourism site should continue to be developed professionally and developed so that its existence can be known by the wider population as well as becoming a contributor to the original regional income (PAD) of South Halmahera Regency. At first the author asked the head of the culture and tourism office of South Halmahera Regency, namely Mr. Dr. Mustafa A.H Ruhama S.Pd M.Sc regarding the general description of tourism in South Halmahera Regency and its advantages. The question is: What is the actual form of tourism in South Halmahera Regency and what factors make it superior? He answered: "South Halmahera is a regency with diverse tourism characteristics. The diversity of tourism includes natural tourism with the Nusa Ra Island tourist attraction as its icon, Barnavel Fort as historical tourism, artificial tourism, marine tourism, cultural tourism with its cultural attractions and special interest tourism. This is an extraordinary potential for us to develop into a superior tourism destination, especially in South Halmahera Regency. The advantages of tourism in Hal-sel can be seen with special specifications that are not available in other areas, one of which is Air Mata Belanda which has a very unique historical value, besides that we have historical tourism, namely Fort Barnavel, a relic of the Dutch era and also the remains of traditional houses, that is what makes the unique advantages that are not available in other areas.

This is reinforced by the statement of Mrs. Nurbaity Karmilla SE, MM as the Secretary of the Tourism Office that; "Hal-Sel Regency has extraordinary tourism advantages that can be developed and can help in increasing PAD". In accordance with the results of the researcher's observations that in South Halmahera Regency there are many interesting tourist attractions and can help in increasing local revenue. From her explanation and the results of the researcher's observations, it can be seen that the description of tourism in Hal-Sel is quite diverse with Nusa Ra Island as a tourism icon and other special specifications.

Furthermore, the author asked the Head of the Department, namely Mr. Dr. Mustafa A.H Rahaman S. Pd, M. Sc regarding the tourism potential of Hal-Sel Regency. The question is: What about the tourism potential of Hal-Sel Regency, has it been utilized more optimally? He answered: "Actually, the current condition of tourism in Hal-Sel has not been managed well, but from time to time the government together with the community has always tried to continue to promote/encourage tourism activities by involving tourism actors and related sectors to jointly develop tourism in Hal-Sel Regency. We hope that tourism will become a mainstay sector in driving the community's economy. Regarding its utilization, it has indeed been utilized so far. With the many visits, and others. With the many visits, and the community has also enjoyed the results of tourism activities, but in the future we will gradually continue to prepare adequate facilities and supporting facilities for the development of this tourism activity". This statement is almost similar to that conveyed by the Secretary of the Tourism Office, namely Mrs. Nurbaity Karmilla SE, MM; "the current condition of tourism is not good but the government and the community are trying very hard to improve the development of tourist attractions in the future".

Likewise, according to the results of observations made by researchers, the mainstay sector in driving the community's economy is tourism because tourism in South Halmahera has great potential, and likewise the South Halmahera district government is currently still in the development period in tourism, this is to increase Regional Original Income. From the explanation above, it is known that tourism in Hal-Sel has not been managed properly but has been utilized. Therefore, it is necessary to gradually prepare adequate facilities and supporting facilities to support tourism activities..

Tourism promotion is an important part in supporting the success of tourist attractions. The South Halmahera Tourism Office has made various promotional efforts to introduce the Nusa Ra Island Tourism Object. The promotion is carried out through exhibitions at the national and regional levels, distribution of leaflets, brochures, information books, banners, pins, stickers, and installation of neon boxes at several airports such as Ternate and Usman Sadik Airports. In addition, they also use digital media such as making documentary films and official websites to expand the reach of promotion. The Tourism Office also collaborates with the Tourism Management Organization (TMO) and other parties to support promotional activities. The South Halmahera district government has involved tourists and related parties in an effort to introduce Nusa Ra Island to the wider community. According to observations, this collaborative effort has succeeded in increasing tourist visits, both domestic and international. In addition, the Tourism Office also held cultural and art events as part of promotional

activities. Based on information from the Head of Promotion and Marketing, the promotional steps that have been taken are considered sufficient to meet current needs. They emphasized the importance of a sustainable promotional strategy through print and electronic media, and cultural events to continue to increase the attractiveness of Nusa Ra Island tourist attractions.

The development of Nusa Ra Island tourism objects is the main focus of the Hal-Sel Tourism Office in an effort to increase local revenue (PAD) and attract more tourists. In interviews with several officials of the Tourism Office, such as Mrs. Suriyani Yusuf and Mrs. Nurbaiti Karmila, it was emphasized the importance of innovation and better management so that Nusa Ra Island does not lose the interest of tourists. The addition of facilities, such as parking areas and increased promotion, are strategic steps that must be taken so that this tourist attraction is increasingly well-known, both domestically and abroad. In addition, based on an interview with Mr. Badri Hamzah, efforts to retain tourists to stay longer on Nusa Ra Island need to be supported by cultural activities, agrotourism development, and facilities such as better accommodation and spots to enjoy the beauty of nature, such as sunrise. He also emphasized the importance of training for tourism staff to provide better service, which will improve visitor comfort. Overall, the development strategy of Nusa Ra Island must include close cooperation between local and central governments, NGOs, and the private sector. Sustainable development through additional infrastructure and improving service quality as well as more aggressive promotion is expected to strengthen Nusa Ra Island's position as an important tourism asset for Hal-Sel Regency.

Table 2. Retributions at Nusa Tenggara Island Tourist Attractions

No	Types of levies		Rp.
1	Entrance fee	Children	Rp. 2.000,-
		Adult	Rp.5000,-
2	Gazebo	Small	Rp. 5000,-
		Big	Rp.10.000,-
3	Bananboat		Rp. 50.000,-
4	Rent Cottage		Rp.500.000,-
5	Banen		Rp. 5.000/10.000,-
6	Snorkeling equipment		Rp. 50. 000,-
7	Diving equipment		Rp. 350.000,-

Nusa Ra Island tourist attraction receives income in the form of PNBP (Non-Tax State Revenue) regulated by Law No. 09 of 2018 concerning PNBP and its rates are regulated in PP No. 59 of 1998 which applies to the Ministry of Forestry and Plantations. The process of collecting levies is regulated through the Decree of the Minister of Forestry Number P.02/Menhut-11/2006 which directs the implementation of the administration of levies in the field of forest protection and nature conservation. Management of these funds includes reporting that must be carried out to the authorities routinely, both monthly, quarterly, and annually. The income graph from Nusa Ra Island is disappointing but tends to increase from year to year. In 2017, revenue was recorded at IDR 157,168,500, then increased in 2018 to IDR 217,948,500. Although there was a decrease in 2019 of IDR 190,543,000, the graph rose again in 2020 and 2021 with revenue of IDR 395,532,500 and IDR 476,801,500, respectively. The contribution of revenue from this tourist attraction also has a significant impact on other sectors such as hotel and restaurant taxes. Overall, revenue from the Nusa Ra Island tourist attraction shows a positive trend. In addition to the increase in the amount of revenue, the management and deposit of funds from levies and PNBP are strictly regulated in accordance with applicable regulations. This ensures that the revenue obtained is channeled to the state treasury and some is returned to the region in the form of General Allocation Funds (DAU).

Table 3. Development of Visitors Coming to Nusa Tenggara Island Tourist Attractions

No	Month	Year				
		2017	2018	2019	2020	2021
1	January	355	706	1,123	1,945	2,821
2	February	396	465	1,006	940	1,236
3	March	834	852	1,165	1,276	1,198
4	April	608	1,600	1,624	1,649	3,179
5	May	2,068	1,966	1,722	1,918	2,027
6	June	1,795	2,743	1,956	2,390	2,347
7	July	1,724	2,781	3,981	3,031	4,065
8	August	2,249	2,652	2,961	3,765	3,636
9	September	1,143	4,102	3,245	4,207	2,398
10	October	3,408	1,897	1,719	1,899	3,386
11	November	818	2,076	1,182	2,227	1,780
12	December	1,081	2,335	2,089	2,936	3,042

Total	16,479	24,179	23,773	28,274	31,117
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The development of tourism facilities on Nusa Ra Island has had a positive impact on the socio-economic conditions of the community, especially in terms of education, social interaction, employment opportunities, and increased income. One of the residents interviewed, Mr. Suhaim, Head of Indomut Village, said that the development of tourism in the area has brought significant changes in terms of education, employment, and community income. The local community also feels the positive impact of the development of this tourist attraction, especially in terms of improving the economy. In addition, the government is now paying more attention to education in the village, as well as opening up wider job opportunities for local residents. This is in line with the statements of several residents who feel the change. Based on observations and interviews conducted by researchers, it can be concluded that tourism development on Nusa Ra Island has improved the standard of living of the community. This increase is not only seen from the increase in per capita income, but also from the government's attention to education and increasing job opportunities for local residents.

In addition to the positive impacts, tourism development on Nusa Ra Island also has negative impacts on the social and economic conditions of the community. One of the most visible impacts is social change, where foreign cultures begin to influence the behavior of local youth. The Head of Indomut Village, Mr. Suhaim, said that many young people imitate foreign cultures that are not in accordance with local customs, such as freedom in pairing up. In addition, there are issues of pollution and security that are also of concern. Local people also feel the changes in the environment that are less beautiful due to the development of tourism. Foreign cultures that conflict with local customs are now starting to be adopted by the younger generation, which is disturbing the community. In addition, security in tourist areas is a challenge, especially with the potential for theft and other disturbances that can harm visitors. From the results of interviews and observations, it can be concluded that although tourism increases community income and attention to education, negative influences such as cultural changes and environmental degradation also need to be considered. In accordance with Gee's theory (1989), the more tourism develops, the greater the potential for positive and negative impacts on the local community and environment.

In line with previous research conducted in 2021[34] there is a gap when viewed from the findings and discussions. The gap is also seen in the focus and research methods. Where previous research tends to focus on the physical and operational aspects of tourism (facilities and attractions), while this study highlights the integration of environmental aspects and community empowerment as an important part of the strategy. The gap in the research method is seen in the limitations of internal and external strategies that are technical in nature, while this study broadens the scope to the socio-economic impact holistically.

So the gap between previous and current research when viewed from the research findings is that previous research shows that the development of tourist facilities and attractions has a direct impact on increasing tourist visits and Regional Original Income (PAD). While this study noted that tourism development not only increases Local Original Income (PAD) but also provides social impacts such as improving education, employment, and community living standards. However, it also identified negative impacts such as cultural change and environmental degradation [35], [36].

Both studies have made significant contributions in the context of tourism development, but there are differences in the focus of the research, where the previous study emphasized the development of physical facilities and tourist attractions, while this study emphasizes the integration of socio-economic and sustainability aspects. This gap analysis shows the importance of a multidimensional approach in developing the tourism sector to achieve sustainable benefits for the community and the environment.

The novelty of this research brings a new approach to the development of Nusa Ra Island tourism by integrating three main aspects, namely environmental conservation, local community empowerment, and digital technology-based promotion. This approach emphasizes the sustainability of tourism by utilizing technology as the main tool in tourism promotion and overcoming the geographical challenges of the archipelago. This research also contains novelties in the form of an analysis of the socio-economic impacts of tourism development, including improving people's standard of living through education, employment opportunities and increased income, which are often ignored in previous tourism research[37], [38].

This research has an impact on three aspects. The first is for the local government where the proposed sustainable management strategy can be a guideline in developing other tourist destinations in similar areas. The government can allocate resources for HR training, infrastructure improvement, and digital-based promotion to optimize PAD potential. Secondly for the local community where Empowerment through active involvement in the tourism industry opens up employment opportunities, increases income, and encourages a sense of ownership of the management of the surrounding environment. And finally for further researchers, these findings provide an empirical basis for further studies related to tourism sustainability in island and remote areas. This could include research on mitigating the negative impacts of foreign cultures and pollution management strategies.

This study has several limitations that need to be considered. First, the study mostly uses qualitative descriptive methods with interviews, observations, and documentation, but is not accompanied by comprehensive

quantitative measurements to evaluate the financial impact in more detail. This can limit the depth of analysis of the economic contribution of tourism development on Nusa Ra Island. Second, the scope of the study is limited to Nusa Ra Island, so generalizing the results to other tourist destinations in South Halmahera or the Eastern Indonesia region requires caution. In addition, although studies have identified negative impacts such as local cultural degradation and environmental pollution, solutions or mitigations to address these challenges have not been discussed in depth. Finally, although digital promotion has been optimized, the limited physical accessibility and infrastructure in the region remain major obstacles that have not been fully resolved, which can significantly affect efforts to increase the number of tourist visits [39], [40].

Further research is recommended using a mixed-method approach to evaluate the economic impacts in detail, including the financial contribution of tourism to local income and community welfare. Similar studies need to be expanded to other destinations in South Halmahera or Eastern Indonesia to increase the generalizability of the results. In addition, focusing on mitigating negative impacts such as local cultural degradation and environmental pollution is important through strengthening environmental awareness and cultural protection. Research can also explore solutions to improve accessibility and infrastructure, such as transportation, basic facilities, and communication networks to support digital promotion. Special studies are needed to evaluate the effectiveness of digital promotion in attracting tourists and its impact on tourist visits. Finally, the developed prototype of the sustainable tourism model needs to be validated and adapted in various destinations to ensure the flexibility, sustainability, and competitiveness of Indonesian tourism.

4. CONCLUSION

Nusara Island has great potential to increase the Local Original Income (PAD) of Hulsell Regency if it is managed more professionally. Based on research, the development carried out by the Tourism Office includes several efforts, including improving the quality and quantity of human resources (HR) in the field of nature tourism through training, both through training at certain institutions and internal training (inhouse training). In addition, other efforts are to complete facilities and infrastructure in tourist areas, such as trader stalls, information centers, toilets, transportation access, and villas for tourists. Although the facilities are available, they are still not adequate. Promotional efforts are also carried out through exhibitions at the national and regional levels, distribution of promotional materials such as leaflets, brochures, banners, and installation of neon boxes at airports. In addition, promotions through electronic media, such as making documentary films and websites, are also optimized. In the future, the development of arts and culture, infrastructure improvements such as roads, provision of clean water, electricity, prayer rooms, and renovation of public facilities and tracking paths are also the focus to attract tourists with special interests. To strengthen the contribution of this research, further studies can explore mitigation solutions for negative impacts, quantitative measurement of economic impacts, and the development of collaboration models between the government, community, and private sector.

ACKNOWLEDGEMENTS

The author would like to thank all parties who have contributed and helped in completing this research. The author hopes that this research can be a reference for further research.

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