

## Exploring the Experiences of Tourism Students in Implementing Green Practices in Islands Destinations

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### Abstract

This study aims to explore the role and lived experiences of tourism students in implementing green practices within island-based marine tourism destinations. As members of the educated younger generation, tourism students occupy a strategic position in promoting environmental sustainability through conscious and responsible travel behavior. The research focuses on examining students' understanding, attitudes, and participation in environmentally friendly practices in the context of marine and island tourism. Utilizing a quantitative approach supported by survey methods, the study gathers data on students' awareness, behavioral tendencies, and perceptions regarding sustainability issues. The findings reveal that students not only possess a strong conceptual understanding of green practices but also actively engage in conservation activities, environmental education, and collaboration with local communities. Their involvement contributes to reducing environmental impact, increasing tourist awareness, and strengthening community-based governance. Furthermore, the study highlights the critical synergy between students and local communities in sustaining ecological and socio-cultural integrity at island destinations. These insights offer valuable input for higher education institutions, tourism policymakers, and destination managers to enhance sustainability initiatives through cross-sector collaboration and experiential learning.

**Keywords:** tourism students; green practices; tourism experience; sustainable tourism; island destinations

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## INTRODUCTION

In recent years, global concern over environmental degradation caused by tourism activities has intensified, prompting urgent calls for more sustainable and responsible tourism practices. Reports from international bodies such as the United Nations World Tourism Organization (UNWTO) and the Intergovernmental Panel on Climate Change (IPCC) highlight tourism's significant contributions to greenhouse gas emissions, biodiversity loss, and water overuse, especially in ecologically fragile areas such as coastal and island regions (Gössling & Peeters, 2015; Gössling et al., 2012; Lenzen et al., 2018). The carbon footprint of global tourism alone accounts for approximately 8% of global emissions, making it a substantial contributor to climate change (Lenzen et al., 2018). These alarming figures underscore the need for a paradigm shift in how tourism is planned, managed, and experienced.

In response to these environmental pressures, the concept of green tourism has emerged as a central strategy within the broader sustainable development agenda. Green practices in tourism refer to efforts aimed at minimizing negative environmental impacts through responsible resource use, waste reduction, and energy efficiency (Al-sakkaf, Al-Attas, Khalufi, & Murshid, 2024; Maniktala & Sharma, 2024). These practices are not only environmentally beneficial but also align with growing consumer expectations for eco-conscious travel options (Chin, Chin, &

Wong, 2018; Nekmahmud & Farkas, 2022). Furthermore, scholars argue that embedding sustainability indicators and green performance metrics into tourism operations is critical for achieving long-term resilience and competitiveness in the industry (Baker & Mearns, 2017; Dwyer, 2024). As such, the transition toward greener tourism models is not merely a policy preference but an environmental imperative.

Many island destinations in Indonesia face a unique combination of environmental and socio-economic challenges that make them particularly vulnerable to the adverse effects of tourism. These challenges include limited waste management infrastructure, fragile marine and terrestrial ecosystems, and increased pressure from over-tourism, particularly during peak seasons (Sharpley, 2012; Weaver, 2017). The case of Gili Trawangan in Indonesia illustrates how unregulated tourism growth can lead to environmental degradation and strain local resources, including fresh water and waste systems (Dodds, Graci, & Holmes, 2010). Similarly, on Pari Island, tourism development has created a paradox where economic benefits are achieved at the expense of long-term ecological sustainability (Utami et al., 2024).

In Buluh Island, poor waste management practices have resulted in marine pollution, threatening both biodiversity and the attractiveness of the destination (Putera, Rofii, Lawi, Rini, & Putra, 2024). The seasonal nature of island tourism further amplifies these problems, as resources must accommodate fluctuating tourist volumes without sufficient time for recovery (Agius & Briguglio, 2021). These complex dynamics reveal the urgent need for sustainable tourism approaches that prioritize long-term environmental management, community involvement, and adaptive policy frameworks tailored to the island context (Boujnan et al., 2024; Gallo & Donato, 2025; Twining-Ward & Butler, 2002).

In response to that issues, higher education institutions have begun integrating sustainability-focused content, including modules on waste management, marine ecosystem protection, and responsible visitor behavior, into tourism curricula. Students' direct experiences during island-based marine tourism activities often serve as real-world applications of the theories they learn in class. Their involvement in green practices not only reinforces educational objectives but also aligns with the evolving expectations of the tourism industry for a workforce equipped with environmental awareness and sustainability competencies.

While extensive research has been conducted on green practices within the tourism industry, particularly from the perspectives of tourism operators and policymakers, there remains a notable gap in empirical studies that explore the lived experiences of students in implementing such practices. For instance, research on Small Island Chalets (SICs) in East Peninsula Malaysia has primarily focused on the environmental challenges faced by accommodation providers and the variability of green practices across different islands, underscoring the vulnerability of the sector to climate change but not addressing student involvement (Dianasari, 2022).

Similarly, studies on green campus development, such as that of Bali Tourism Polytechnic, highlight student support for initiatives related to energy, water, and waste management, yet they tend to emphasize student perceptions rather than concrete experiences or actions. This leaves a critical gap between theoretical environmental education and the practical application of sustainability principles in real-world tourism settings. Exploring students' firsthand experiences offers valuable insights into how academic learning translates into sustainable behavior, especially in sensitive island environments where ecological impacts are more pronounced. By focusing on student engagement in implementing green practices during island-based tourism activities, this study contributes a novel perspective that addresses a previously underexplored dimension of sustainability education and practice in tourism.

Building upon the identified research gap, this study is directed toward three interrelated objectives. First, it seeks to explore students' understanding of green practices, particularly their knowledge of environmentally responsible behavior and the significance of conserving island tourism destinations. Second, the study examines students' personal experiences during sea

travel, including the types of activities they engage in and their level of awareness and application of sustainable behaviors in practice. Third, the research aims to identify the key factors that motivate and facilitate students' active participation in implementing green practices, especially in marine tourism contexts. By addressing these aspects, the study provides a comprehensive picture of how sustainability education translates into real-world behavior among future tourism professionals. Ultimately, the goal is to enhance understanding of students' roles in advancing sustainable tourism and to support the development of educational strategies that strengthen their awareness and active involvement in environmental conservation efforts.

## **LITERATURE REVIEW**

### **Concept of Role and Tourism Student Experiences in Marine Tourism**

Role means an expectation and responsibility attached to a person or group in a social context, such as the role of family, organization and others. Role or commonly called role is a dynamic aspect if a person or group carries out their rights and obligations according to their position, then it can be said to be carrying out a role. Students are young intellectuals who have a role in social change. UNWTO (2018) states that the younger generation has a major role in realizing inclusive and sustainable tourism development. The role of students refers to active contributions in supporting and managing tourism activities through scientific and social approaches. (Hales & Jennings, 2017). The role of students is not only in the context of education but also supports and manages the sustainability of activities, especially in the field of tourism.

Students as a generation that will bring innovative ideas and advance tourism to the international level. Students are also researchers who can create tourism destination development through a scientific approach. Tourism students as part of society have energy, creativity and a spirit of innovation that can be directed to raise local values and support sustainable tourism. Students can identify tourist attractions, develop local tourism products. Create educational programs that focus on environmental conservation and the role of students in integrating information technology in destination promotion. Stating that the role of students as a moral force that is an example in maintaining integrity, ethics, academics, to demonstrate behavior and concern for sustainability (Febriani et al., 2022). In this case, the role of students cannot be underestimated because they are the young generation who will help society in achieving common goals.

Marine tourism is not only related to recreational activities or the role of the local community, but also activities specifically related to the protection of marine biota, coastal areas, and island environmental areas. Students as an intellectual generation have the task of contributing to the development of marine tourism in promoting tourist attractions. Increasing tourist visits, expanding marketing reach. Marine tourism depends on natural conditions and coastal environments, the younger generation can play a role in conservation activities such as activities to reduce plastic use, pay attention to community waste, educate tourists about the importance of maintaining underwater ecosystems. UNWTO (2018) States that the younger generation is the key to maintaining the sustainability of tourism resources through the principles of sustainable tourism. Providing tourism awareness values, especially in educating the community through Community Service.

Community service activities are a means to apply science, will have an impact on the public's view of environmental sustainability. Community service can help develop more innovative tourism potential through marine conservation programs. (Iswadi Athar et al., 2023). The presence of students through community service can increase public awareness of the importance of preserving marine ecosystems and strengthen the economic capacity of the community. Community service is a bridge between academic development, community empowerment and preservation of marine tourism areas. The role of students as researchers can contribute in the form of recommendations for scientific tourism sustainability. Students can create innovative tourism products in creating attractive marine tourism products, such as snorkeling, diving, sea-

food culinary tour packages that can increase the appeal of visitors who are exploring the island for the first time.

The relationship between the role and experience of students in this case, through the roles and activities carried out will have a positive impact on the experience gained. Sustainable experience as a potential means to gain competitive advantage and increase the sustainability of goals and perceived values.(Dabamona & Cater, 2019). In this case, the experience gained by students in reciprocal activities deepens awareness of the complexity of marine tourism management. Paying attention to damage to marine ecosystems, the socio-economic dynamics of local communities, the challenges of maintaining sustainability amidst the rapid development of global tourism. Students' experience in Visiting marine tourism areas can provide an opportunity to implement the concept of green practices in real terms. In snorkeling or diving activities, you can apply the principle of not touching things that can damage coral reefs and keeping your distance from marine life and ensuring that all equipment used is environmentally friendly. In exploring the island students can practice the principle of leave no trace, which is not leaving trash or any objects in tourist attractions. Through this involvement, students build a culture of sustainable tourism that is not only oriented towards exploration but also conservation. The more intensively students carry out their roles, the wider the experience gained, ultimately forming innovative results and bringing significant changes, especially in island destinations.

### **Concept of Green Practice**

In this increasingly developing era, awareness of environmental issues is increasing among consumers. Awareness of the importance of environmental sustainability has also increased significantly. Climate change, environmental degradation, and the destruction of biodiversity are current social issues and encourage various sectors, including tourism, to take an environmentally friendly approach. Green practices are a major concern that will have an impact on the sustainability of the island. Green practices are actions, policies and practices carried out by individuals, organizations with the aim of reducing negative impacts.(Viralta et al., 2023). Green practices are a series of actions taken to support the sustainability of the ecosystem for the preservation of natural resources, reduce pollution, minimize the use of energy and materials that damage the environment.

According to Moise et al (2018) green practices can be the use of renewable energy using more environmentally friendly sources, such as solar power, and reducing dependence on fossil fuels. Using products that are easily recycled can reduce waste such as plastic, paper and others. Maintaining environmental sustainability in a wise way such as carrying out environmentally friendly activities such as planting trees or reforestation. This action can be in the form of efforts to reduce energy consumption, minimize the use of recycled products and increase efficiency in the use of marine resources. Green practices include concrete steps aimed at maintaining the sustainability of tourist destinations, especially island destinations that have vulnerable ecosystems. The principle of reduce, reuse, recycle in waste management is an integral part of a green strategy where tourists and industry players are invited to reduce waste, reuse items that can be processed, recycle materials that can be used(Li et al., 2011). This practice not only reduces the amount of waste that ends up in the sea or on land but supports the creation of a circular economy. Extending the life cycle of products and preventing the exploitation of new resources especially in marine tourism areas. The implementation of green practices is an important step to ensure environmental, social and economic sustainability in tourist destinations.(Merli et al., 2019).

Green practices include efforts such as energy use, waste management and use of environmentally friendly goods. The implementation of green practices must be implemented by the tourism industry, especially from the operational side. Green practices are also integrated into the Company's policies to build a work culture that is oriented towards sustainability. Island destinations depend on the quality of the natural environment and the uniqueness of local cultures and face

major challenges due to mass tourism activities such as marine pollution, exploitation of natural resources mostly caused by overtourism. The implementation of green practices ensures the sustainability of destinations by implementing the use of renewable energy in tourism facilities, environmentally friendly solid and liquid waste management and clean water conservation. The importance of implementing green practices in marine tourism destinations will increase economic added value through the creation of green jobs that can strengthen the positive image of destinations in global tourism and will be long-term for local communities.

Tourism activities that are not managed according to sustainable principles can cause environmental degradation such as overdevelopment which leaves behind natural coastal vegetation.(Quinn et al., 2019). Therefore, green practices need to be implemented not only operationally but also in management in the tourism industry by using strict regulations. This will have an impact on development in coastal areas and protection of conservation areas. Green practices have a positive impact on socio-economic development in tourist destinations. The concept of green jobs is also part of this where new jobs are created based on ecotourism. Jobs such as nature conservation, waste management and energy production that can help strengthen the local economy. In the context of the islands, the implementation of green practices also contributes to the preservation of the traditional culture of the local community. The use of natural materials and principles of living in harmony with nature and modern sustainable concepts. This can also enrich cultural values and help improve the welfare of local communities.

Overall, green practices are a holistic approach that encompasses individual behavior and the adoption of environmentally friendly technologies and the implementation of sustainability policies.(Hu et al., 2023). This practice can shape the future of responsible tourism especially in island destinations. Marine tourism implements green practices by tourism students as part of their experience in tourist destinations. Not only enriching academic competence but also professionalism that contributes significantly to environmental conservation efforts and tourism development at local to global levels. Green practices are related to natural resource conservation efforts such as mangrove rehabilitation, conservation of endangered marine species and area management through education. In this case, tourism students not only play an important role but also provide benefits as agents of change who can educate the wider community about the importance of environmentally friendly behavior. Green practices can have a major impact on the tourism sector which is an asset and needs to be maintained.

### **Concept of Island Destination**

Island destinations are one form of tourist destination that has unique characteristics. There are many attractions that are visited by tourists today, especially the island has unique characteristics and activities. Island destinations refer to tourist areas consisting of clusters of small islands that have unique natural, cultural, and social attractions. Island destinations offer a different tourism experience compared to mainland destinations such as biodiversity, beautiful beaches and unique local culture. The main attraction of island destinations lies in the quality of resources such as coral reefs, white sand beaches and mangrove forests. Island destinations face major challenges, especially the capacity of environmental carrying capacity and limited infrastructure that causes high dependence on conservation. Island destinations in the modern era are required to improve the quality of services in strengthening the principles of green tourism to answer the demands of tourists who are aware of the sustainability of tourism. Island destinations are the main choice for tourists who want nature-based tourism and provide a different experience from urban tourism.

Island destinations need to pay attention to conservation activities, especially in developing environmental education programs for tourists. This concept aims to maintain a balance between conservation needs and mutually supportive tourism activities. On the island, conservation or tourism management requires an active role of the community, in this case by students. Therefore, adaptive management strategies and scientific approaches to maintain the balance of tour-

ism conservation. Destinations like this not only support global conservation targets regulated by the convention on biodiversity and sustainable development (Spatz et al., 2014). Without strict regulations, destinations will experience overtourism to social conflict, so in this case cooperation is needed between tourism stakeholders.

Island destinations also face major challenges related to sustainability, the environmental carrying capacity of islands tends to be limited due to their sensitive ecosystems and small geographic space. Infrastructure such as transportation access, waste management and energy supply are often inadequate so that the pressure on the environment is very large when there is a surge in tourists. This condition can cause environmental damage due to pollution to socio-cultural disruption. Therefore, the management of island destinations must be oriented towards the implementation of green practices. One important approach in managing island destinations is adaptive management (Garmestani et al., 2023). Flexible management based on dynamic environmental conditions.

In managing tourism areas, the involvement of local communities and tourism actors include students is very important. Students who study conservation practices play a strategic role in the concept of environmental education to tourists. Through educational programs such as creating beach cleaning campaigns, marine ecosystem training and introducing green or environmentally friendly practices in marine activities. Island destinations integrate environmental education programs for tourism products not only to extend the cycle of tourist visits but also to raise awareness of the importance of nature sustainability as well as biodiversity conventions, especially life under the sea. Uncontrolled tourism activities such as excessive construction of facilities on the coast, illegal harvesting of marine biota and environmentally unfriendly tourist behavior can destroy the main attraction of the island. Therefore, cooperation is needed between the government, destination managers, local communities, academics and tourism industry actors to tourism students to build sustainability and apply the principles of environmentally friendly green tourism. Emphasizing the importance of managing island conservation areas with a holistic approach that not only protects certain species but also considers the socio-economic welfare of local communities. By involving stakeholders, island destinations can develop sustainably by maintaining their natural beauty.

There are challenges in realizing the sustainability of island destinations and their management strategies, namely by calculating the limited environmental carrying capacity, dependence on natural resources and minimal supporting infrastructure and the impact of mass tourism which causes environmental pollution. Especially for small island destinations with their limited size and sensitive ecosystems, they will be very easily disturbed or damaged. Especially with the many uncontrolled tourism activities such as littering, not paying attention to the surrounding nature to building excessive facilities. In addition, climate change is also a major threat to marine tourism including rising sea levels, coral bleaching and storms that usually occur.

In the marine area there are other challenges such as socio-economic inequality where local communities often only become spectators of the tourism movement without getting fair benefits. Lack of community participation in the tourism planning and management process often results in conflict due to social dissatisfaction (Arroyo et al., 2023). The knowledge gap about sustainable tourism practices among local tourism actors and tourists can worsen this condition. There are still island destinations that do not have effective waste management policies and adequate access to clean water. This challenge shows that without proper management, destinations will lose their unique appeal.

To face these challenges requires a destination management strategy that focuses on sustainable development based on conservation such as limiting areas that may be visited or tourist areas. Ecotourism development that emphasizes environmental education and management of tourism activities that have minimal negative impacts on the ecosystem. Marine tourism areas also need to pay attention to the use of more environmentally friendly technologies such as solar energy,

waste management and reducing the use of single-use plastics to support the principles of green practices. This participatory approach is the key to the success of marine tourism destinations. Involving local communities, academics and students in marine tourism management is essential to become the main actors in maintaining the sustainability of the destination. Education and training programs related to marine conservation, sustainable waste management to strengthen local regulations. Enforcement of regional regulations regarding strict supervision of tourism activities.

## RESEARCH METHODOLOGY

This study uses a mix method that combines qualitative and quantitative elements in one study. By combining the two methods, researchers will gain the strength of each approach to understand the formulation of the problem being studied. The combination of qualitative and quantitative methods needs to be based on the study being studied including the theory used. This combined method is used by the author because the data obtained is more qualitative than quantitative to facilitate the measurement of the data being sought. The data contained in qualitative data are primary and secondary data. Primary data is data obtained directly from informant sources at the research location, which comes from questions (interviews).

Primary data sources in this case are taken from the results of interviews with students of the State Tourism College. Researchers collect data personally and obtain primary data using interview techniques using guidelines/instruments. Secondary data is information collected indirectly from sources other than informants. Secondary data will be obtained in finished form or in the form of publications. Data such as academic literature reports such as journals and previous research are also benchmarks for this study. Other sources such as online including news articles and official websites are also one of the sources of research information.

Data collection techniques are the methods used to obtain the data needed in research. Qualitative research involves in-depth interviews, participant observation, document analysis to explore the meaning and context of the phenomena studied.(Rezkie, 2020). The selection of the right technique is very important to ensure that the data obtained is relevant, and can answer the questions and problems that are targeted. The data collection technique used for this study is interviews. Interviews by collecting information materials are carried out by conducting questions and answers verbally, face to face and also with a predetermined direction and purpose.(Nafisatur, 2024). In this case, interviews were conducted to understand the role of students in implementing green practices in marine tourism areas. Researchers asked open-ended questions to explore information ranging from general to specific regarding this research in depth both in terms of experience, views and feelings of informants regarding island destinations. Interviews were conducted with students who had visited and carried out activities on the island to gain perspective on existing environmentally friendly behavior.

This interview is the right way to find out the responses, beliefs and feelings of students as sources. The techniques needed when conducting interviews in data collection by creating interview instruments related to the research, especially the background regarding the related title. Determining the right interview schedule and contacting sources as informants related to the research. Compiling a list of questions and describing the formulation of the problems being studied. Preparing complementary tools such as paper as notes, voice recorders. The interview aims to determine student involvement, roles and experiences while traveling.

Documentation study is also a data collection technique carried out by analyzing documents related to the research topic in the form of journals, books, relevant articles. Document study is one of the important data sources in research because it can help understand the broader context and lead to clear goals. Documentation study aims to obtain secondary data that supports researchers in knowing the role of students in implementing green practices or environmentally friendly behavior. The documents to be studied include government regulations related to ma-

rine tourism management and reports from academics. Document collection is carried out with official sources such as Tourism Colleges. With this, researchers must still pay attention to the quality and accuracy of the data obtained. In the documentation study, researchers collect documents related to the role of the community in guiding and the potential of marine tourism. This documentation study technique is important to provide a broad and in-depth perspective on the problem being studied. In the data collection process, interviews and documentation are the main things, to obtain more accurate data and get some views from students from different study programs. With the available documentation study, it can help data results and provide a stronger basis for knowing the level of involvement of tourism students.

## **FINDINGS AND DISCUSSION**

### **Respondents Profile**

This study investigates the role and experiences of tourism students in implementing green practices within island-based marine tourism destinations. The respondents comprised students enrolled in various semesters of a tourism study program, selected to reflect diverse levels of academic exposure. A structured questionnaire was developed to assess their awareness, knowledge, attitudes, and participation in environmentally friendly behaviors during visits to island destinations. The majority of participants were mid-level students (semesters 3–5), representing 54.3% of the sample, followed by final-year students (semesters 6–8), with a smaller proportion from early semesters. This demographic distribution suggests that most respondents had acquired a foundational understanding of sustainability topics and may have engaged in field visits or on-site observations related to tourism practices.

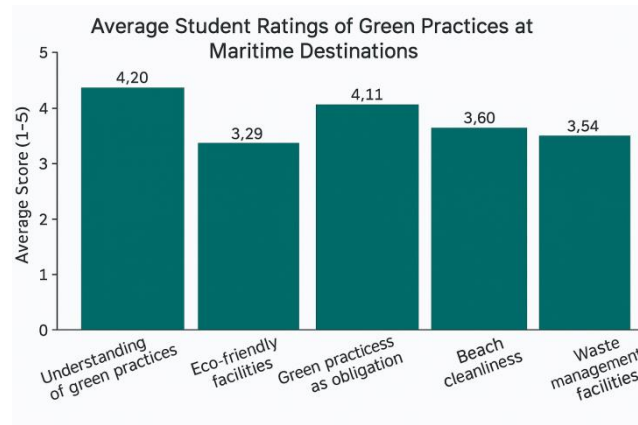
To capture students' perspectives on green practices, the study employed both quantitative and qualitative approaches. Open-ended questions allowed participants to articulate their views on the role of students in promoting environmentally responsible behavior, providing space for personal reflection and in-depth responses. Simultaneously, quantitative data were gathered via a Google Form-based questionnaire featuring Likert-scale items ranging from "strongly disagree" to "strongly agree." Sample questions included statements such as "I know what green practices are" and "I have visited island destinations," enabling the measurement of environmental knowledge, behavioral intent, and self-reported practices. The use of scaled responses facilitated the generation of numerical data and percentage-based analyses to support the study's findings.

In terms of tourism exposure and environmental awareness, 34.3% of students reported having visited marine tourism destinations "occasionally or rarely," while the remainder had varying degrees of familiarity. Despite differences in visitation frequency, environmental awareness was notably high; 88.6% of respondents confirmed that they consistently took their personal waste back with them, reflecting strong concern for environmental sustainability. Furthermore, 80% of respondents stated that they had observed green practices during their visits, including waste management initiatives, use of recycled materials, and marine conservation activities such as coral reef and mangrove protection. These findings suggest that while green practices are present at some destinations, their implementation is still limited and inconsistent.

Regarding perceptions of sustainability and student responsibility, nearly all respondents (97.1%) affirmed the importance of environmentally friendly actions and waste reduction. When asked whether students play a significant role in advancing green practices, 97% responded positively, recognizing their potential as agents of change within the tourism sector. Additionally, 34 students expressed a personal sense of responsibility for maintaining environmental cleanliness during their visits. However, a gap remains between awareness and consistent behavior; for example, only 45.7% of respondents reported always using reusable water bottles, indicating challenges in translating values into everyday practice. Further assessment of student perceptions of environmental facilities and green implementation—rated on a scale of 1



to 5—provides additional insight into areas needing institutional or destination-level improvement (Figure 1).



**Figure 1.** Destination-level improvement

The findings of this study reveal a high level of cognitive awareness among tourism students regarding the importance of green practices, with an average rating of 4.2 out of 5. This suggests that, conceptually, students possess strong knowledge and awareness of sustainability principles. However, the average score of 3.28 for the availability of environmentally friendly facilities indicates a perceived lack of supportive infrastructure at island destinations, such as separate waste bins, eco-friendly restrooms, and educational signage. Respondents also demonstrated strong support for regulatory measures, as reflected in the 4.11 average score regarding the belief that green practices should be mandatory for all visitors. Satisfaction with beach cleanliness received a moderate score of 3.6, signaling that while many destinations are reasonably clean, improvements are still needed. Similarly, waste management facilities were rated at 3.54, highlighting the need for enhanced infrastructure and systems for collection, sorting, and disposal.

Although many students recognized and supported environmentally responsible behavior, a gap remains between attitudes and actual practice. While 95% of respondents agreed that student participation in green practices could positively influence destination sustainability, only 45.7% reported consistently using reusable drinking bottles. This disparity reflects the influence of external factors—such as facility availability and convenience—on behavioral implementation, as explained by theories of pro-environmental behavior. In line with this, 80% of students reported witnessing green initiatives at destinations, including waste segregation, recycling efforts, and marine conservation activities like coral reef and mangrove restoration. These observations further reinforce students' role as potential change agents within the tourism sector. Research by Wang et al. (2019) supports the idea that integrating sustainability education through field-based curricula significantly enhances students' environmental understanding and commitment.

Despite their environmental literacy, students reported limited access to the necessary infrastructure to support sustainable behavior. The lack of visible and functional green facilities creates a practical barrier, confirming that knowledge alone is insufficient to drive consistent action. This finding aligns with Amerta et al. (2020), who reported that in Bali, high environmental awareness among tourists and tourism operators is often hindered by inadequate infrastructure and logistical limitations. Similar challenges were echoed by students in this study, especially in reference to island destinations in eastern Indonesia, where waste management remains a major issue due to limited access, human resources, and transportation systems.

Students' responses also highlight the moral dimension of sustainability: the majority agreed that green practices should be viewed not merely as personal choices but as shared responsibilities and ethical obligations among tourists, tourism managers, and local communities. With average scores exceeding 4.0, students advocated for sustainability to become a collective norm within marine tourism. These views are consistent with findings from Ramli and Sudarmadi (2022), who found that young people are increasingly calling for stricter environmental regulations, such as bans on single-use plastics and mandatory use of refillable water bottles.

Finally, while perceptions of environmental quality at destinations were moderate, with scores of 3.6 for beach cleanliness and 3.54 for waste infrastructure, the data underscore the urgent need for more comprehensive, consistent, and structured environmental management. Isolated or symbolic efforts are insufficient to meet sustainability goals. Sustainable outcomes in marine tourism require the joint commitment of destination managers, local governments, and community stakeholders. Students, as emerging tourism professionals, not only represent future stewards of sustainable tourism but also serve as active participants during their field experiences. Their engagement with local communities during travel can expand the reach and impact of green practices beyond academic settings, emphasizing the critical role of collaborative education, infrastructure development, and policy support in shaping a truly sustainable tourism model.

The interview results showed that students have a fairly broad and diverse understanding of green practices in the context of tourism, especially in marine tourism areas or island destinations. Green practices are understood as various forms of efforts made to maintain environmental sustainability by reducing the negative impacts of tourism activities. This concept includes the wise use of natural resources, waste reduction, ecosystem preservation, and responsible behavior during tourism. Several students described green practices as conscious steps to not use single-use plastic, support local products, and ensure that waste is disposed of in its place. In the interview, one student stated that green practices are:

“Efforts to reduce negative impacts on the environment, such as reducing the use of single-use plastics and supporting local products” (FM, Interview April 28, 2025).

Another view states that green practices also include innovative approaches to waste, such as managing carbon or organic waste into products that have economic value and do not pollute the environment. This shows that students not only understand green practices from a conservation perspective, but also from a circular economy and local empowerment perspective. When asked about their direct experiences at marine tourism destinations, students gave various responses. Some had participated in beach clean-up activities initiated by local communities. This activity was considered very memorable because it provided a real contribution to maintaining environmental cleanliness. The student said that

“We cleaned up plastic waste together and collected items that shouldn't be on the beach. It felt very satisfying to be able to contribute to keeping the island clean” (TD, Interview April 28, 2025).

Another experience was witnessing local people processing coconut waste, such as coconut husks and shells, into souvenirs. This is seen as a form of green practice based on local wisdom and the community's adaptive efforts to deal with waste problems. Interestingly, although not all students were directly involved in green practices while traveling, they still showed sensitivity to environmental issues. Some students said that they often saw foreign tourists who actively carried out environmentally friendly actions, such as bringing refillable water bottles, not littering, and cleaning the beach voluntarily. Some even warned other visitors not to damage coral reefs. This shows that students have the awareness to observe, assess, and reflect on the behavior of other tourists that is in line with sustainability values. In the context of the role of students in tourism sustainability, the majority stated that student support for green practices is very im-

portant. Students are seen as the next generation who have the intellectual capacity, idealism, and concern to be the driving force of change. One other student said that

“Students as the next generation must be an example in supporting green practices. By participating in environmentally friendly activities, we can educate other tourists and help preserve the beauty of nature for future generations” (FM, interview, April 28, 2025).

They believe that students are able to build collective awareness and inspire people to care more about environmental issues in tourist destinations. However, several challenges were also identified by respondents. One of the main challenges is the lack of supporting facilities for green practices in island destinations, such as separate trash bins, access to environmentally friendly products, and educational information for tourists. In addition, some students feel that universities have not provided training or applicable green practice curriculum. Education about green tourism is still predominantly in the form of theory, so students do not have enough direct practical experience in the field. In fact, there are also social obstacles, namely resistance or discomfort from local communities towards student behavior that actively seeks to protect the environment. One student said that

“The main challenge in implementing green practices when visiting islands is that people are sometimes uncomfortable with our actions” (TD, Interview, April 28, 2025).

As a proposed solution to the ongoing environmental challenges in island-based marine tourism, students emphasized the need for stronger collaboration between universities, local communities, and destination managers. They advocated for the development of structured programs such as field-based training and environmentally focused community service initiatives. In addition, students expressed the importance of delivering environmental education using inclusive approaches that engage and empower local communities, with the goal of fostering shared understanding and collective responsibility. Several respondents also recommended the enforcement of stricter regulations to address environmental violations within marine tourism areas, aiming to cultivate greater accountability among all stakeholders. Overall, interview findings revealed that students not only possess sound conceptual knowledge of green practices but also demonstrate a high level of interest in participating in sustainable tourism activities. Despite recognizing various systemic and social constraints, students acknowledged their potential as change agents in shaping environmentally responsible and sustainable tourism within island contexts.

This study affirms that students play a significant role in advancing the implementation of green practices in marine tourism destinations. Their contributions are reflected in a variety of activities, including participation in environmental education, promotion of sustainable tourism awareness campaigns, and involvement in direct conservation actions such as beach clean-ups and coastal vegetation planting. Beyond physical engagement, students also serve as communicators of environmental values—acting as behavioral influencers for tourists and local residents. Parallel to student involvement, local communities also play a vital role in destination sustainability through the application of indigenous ecological knowledge, responsible natural resource management, and active participation in monitoring tourism activities. These findings suggest that effective implementation of green practices cannot rely solely on institutional policies but must be supported by synergy between youth-led initiatives and community-based action.

As noted by Mosquera et al. (2014), public participation is a key driver of sustainable tourism management, particularly when local communities perceive a sense of ownership and accountability for their environment. Similarly, Coria and Calfucura (2012) emphasize that involving youth and community actors in ecotourism initiatives strengthens long-term sustainability by embedding practices within inclusive, locally rooted frameworks. Within this context, tourism students serve as vital intermediaries, bridging academic knowledge with community practices, and facilitating collaborative dialogues that enhance the effectiveness of destination environ-

mental management. The UNWTO (2020) has also called for the active engagement of youth and communities in building resilient and sustainable tourism destinations—highlighting the necessity of intergenerational collaboration in addressing global challenges such as climate change and increasing tourist volumes.

Ramkissoon (2020) underlines that a person's emotional involvement in sense of place can encourage pro-environmental actions. In this study, the involvement of students and the community showed a sense of attachment to the coastal environment. This can motivate them to protect and preserve the area. Thus, the results of this study show that collaboration between students and local communities is a major pillar in implementing green practices in marine tourism areas. The involvement of these two actors is not only important for environmental conservation, but also strengthens the identity and social sustainability of island destinations. In the context of island-based marine tourism destinations, students have a real contribution in encouraging the implementation of environmentally friendly practices. Activities such as educating tourists about the importance of protecting the marine environment, campaigns to reduce plastic waste, and involvement in beach clean-up programs are concrete forms of student participation.

A global report shows that more than 60% of the younger generation are willing to be directly involved in environmental actions, including in the tourism sector. This shows the collective awareness of student groups who not only understand environmental issues theoretically, but also directly engage in overcoming these problems in the field. In several coastal areas of Indonesia, students participate in community-based conservation activities, such as in the Seribu Islands, where collaboration between students and the community has succeeded in reducing the volume of waste by 35% within one year. This success is not only due to the technical approach, but also due to the active involvement of the younger generation in building environmental awareness through social and cultural approaches.

These findings emphasize that meaningful positive changes in marine tourism destinations can occur when students are provided with opportunities to participate actively in sustainability initiatives. The role of local communities is equally vital in the implementation of green practices. Across various coastal tourism villages in Indonesia, many communities have independently introduced waste management systems, banned the use of single-use plastics, and engaged in mangrove ecosystem conservation. Evidence from several small islands indicates that destinations with high levels of community participation demonstrate significantly better environmental outcomes compared to those managed primarily by external stakeholders. This suggests that when local residents are directly involved in environmental governance, their sense of ownership fosters stronger responsibility and commitment to the sustainability of their natural surroundings. International data also support this view, showing that destinations with inclusive, community-based management frameworks achieve higher levels of environmental sustainability. Thus, the collaboration between students—who bring academic insight, energy, and innovation—and communities—who offer contextual knowledge and cultural wisdom—creates a synergistic dynamic essential for maintaining the ecological carrying capacity of island and coastal tourism areas.

Enhancing the role of students in promoting green practices during travel is a strategic measure for strengthening sustainability in the tourism sector, particularly within vulnerable marine environments. As young adults in a formative stage of developing values and critical awareness, students possess strong potential as future change agents. However, realizing this potential requires an integrated approach that combines education, direct experiential learning, and cross-sector collaboration. Interviews conducted in this study indicate that students generally possess a solid understanding of the importance of green practices, particularly in island-based tourism. Nevertheless, active participation in environmental protection during travel remains inconsistent, and requires additional support and encouragement from educational institutions, destination managers, and other stakeholders. Integrating sustainability education into tourism cur-

ricula—through applied learning, fieldwork, and community engagement—can significantly enhance students' awareness and commitment. Activities such as coastal clean-ups, biodiversity conservation projects, and responsible tourism workshops not only provide hands-on experience but also foster emotional and ethical connections with the environment.

Moreover, institutional collaboration between universities and destination stakeholders is essential to reinforce the integration of green values. Joint initiatives such as community service programs, environmental campaigns, and student volunteering in tourism areas can bridge the gap between academic knowledge and on-the-ground realities. These activities encourage interaction between students and local communities, offering valuable insight into the socio-environmental challenges faced by island destinations. Universities can further reinforce pro-environmental behavior by cultivating green campus environments—such as reducing single-use plastics, providing waste separation bins, and promoting sustainability-themed student organizations. Familiarity with environmentally responsible habits on campus increases the likelihood of students adopting similar practices during travel. Social media platforms also present powerful tools for amplifying student-led green practices. By sharing visual narratives of their sustainable actions—such as using refillable bottles, participating in clean-up drives, or advocating for zero-waste tourism—students can influence peers and normalize sustainable travel behaviors. Furthermore, formal recognition of environmentally active students through certificates, awards, or internship opportunities at eco-conscious tourism organizations may serve as an incentive to boost participation and engagement.

Through these strategies, students can assume a more prominent role in driving the adoption of green practices in tourism, and act as influential models for broader societal behavior, particularly in marine and island destinations at risk of ecological degradation. In parallel, local communities continue to play an indispensable role in conservation efforts, driven by their emotional attachment to the natural environment and daily dependence on its resources. This sense of ownership often translates into consistent involvement in protecting marine ecosystems, coral reefs, and coastal forests. Students who participate in community-based sustainability initiatives frequently report heightened environmental sensitivity and a deeper appreciation for the importance of maintaining island ecosystems. These experiences reinforce the notion that environmental conservation extends beyond institutional policy and regulation; it is equally rooted in cultivating shared awareness, responsibility, and a collective sense of stewardship.

## CONCLUSION

The findings of this study underscore the significant role that students play in promoting the implementation of green practices within island-based marine tourism destinations. Through active involvement in conservation initiatives, environmental education, and collaboration with local communities, students emerge as agents of change capable of internalizing and disseminating sustainability values at the grassroots level. Their contributions extend beyond academic discourse, encompassing tangible actions such as waste reduction, raising environmental awareness among tourists, and reinforcing community-based environmental governance. Simultaneously, the active engagement of local communities—as stewards and long-term residents of these areas—proves essential in preserving both ecological integrity and social cohesion along coastal regions.

The collaboration between students and local communities fosters a synergistic relationship in which each party complements the other: students contribute contemporary knowledge and enthusiasm for change, while communities offer practical experience and deep-rooted local wisdom. This partnership enhances the effectiveness of green practice implementation and contributes to the long-term sustainability of tourism destinations—environmentally, socially, and economically. Overall, this study confirms that the successful realization of sustainable tourism in marine and island areas is inseparable from the active participation of both local residents and the emerging generation of tourism professionals. As such, it is imperative for destination man-

agers and policymakers to create inclusive spaces for collaboration and invest in strengthening the capacity of both students and local communities to jointly manage and protect fragile island ecosystems.

## REFERENCES

- Agius, K., & Briguglio, M. (2021). Mitigating seasonality patterns in an archipelago: the role of ecotourism. *Maritime Studies*, 20(4), 409-421. doi:10.1007/s40152-021-00238-x
- Al-sakkaf, M. A., Al-Attas, W. A., Khalufi, N., & Murshid, M. A. (2024). Defining green and responsible tourism destinations. In *The Role of Artificial Intelligence in Regenerative Tourism and Green Destinations* (pp. 51-69): Emerald Group Publishing Ltd.
- Baker, M. S. P., & Mearns, K. (2017). Applying sustainable tourism indicators to measure the sustainability performance of two tourism lodges in the Namib Desert. *African Journal of Hospitality, Tourism and Leisure*, 6(2). Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85029073724&partnerID=40&md5=03745124b98f28aca43884a3d6ced7aa>
- Boujnan, C., Hlal, M., Elmoumni, B., El Arrim, A., Sbai, A., & Bahkan, M. (2024). *Sustainable tourism development and coastal management in the Marchica lagoon (Eastern Moroccan Mediterranean coast)*. Paper presented at the E3S Web of Conferences.
- Chin, C. H., Chin, C. L., & Wong, W. P. M. (2018). The Implementation of Green Marketing Tools in Rural Tourism: The Readiness of Tourists? *Journal of Hospitality Marketing and Management*, 27(3), 261-280. doi:10.1080/19368623.2017.1359723
- Dabamona, S. A., & Cater, C. (2019). Understanding Students' Learning Experience On A Cultural School Trip: Findings From Eastern Indonesia. *Journal Of Teaching In Travel And Tourism*. <https://doi.org/10.1080/15313220.2018.1561349>
- Dodds, R., Graci, S. R., & Holmes, M. (2010). Does the tourist care? A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia. *Journal of Sustainable Tourism*, 18(2), 207-222. doi:10.1080/09669580903215162
- Dwyer, L. (2024). Measuring the Sustainability of Tourism (SF-MST): New Wine in an Old Bottle? *Sustainability (Switzerland)*, 16(14). doi:10.3390/su16145867
- Febriani, S., Nevi, F., Khoerunisa, A., Patika Sari, I., Emilia, S., Asbari, M., College Of Economics Development Insan, S., & Development Insan, S. (2022). Students Moral Education As “Moral Force” In Social Life. *Journal Of Information Systems And Management*.
- Garmestani, A., Allen, C.R., Angeler, D.G., Gunderson, L., & Ruhl, J.B. (2023). Multiscale Adaptive Management Of Social-Ecological Systems. *Bioscience*. <https://doi.org/10.1093/Biosci/Biad096>
- Gallo, P., & Donato, A. (2025). *Addresses for Public Governance and Sustainable Economic Growth for a New Identity of the Tremiti Islands*. Paper presented at the Advances in Science, Technology and Innovation.
- Gössling, S., & Peeters, P. (2015). Assessing tourism's global environmental impact 1900–2050. *Journal of Sustainable Tourism*, 23(5), 639-659. doi:10.1080/09669582.2015.1008500
- Gössling, S., Peeters, P., Hall, C. M., Ceron, J. P., Dubois, G., Lehmann, L. V., & Scott, D. (2012). Tourism and water use: Supply, demand, and security. An international review. *Tourism Management*, 33(1), 1-15. doi:10.1016/j.tourman.2011.03.015
- González-Viralta, D., Veas-González, I., Egaña-Bruna, F., Vidal-Silva, C., Delgado-Bello, C., & Pezoa-Fuentes, C. (2023). Positive Effects Of Green Practices On Consumers'

- Satisfaction, Loyalty, Word-Of-Mouth, And Willingness To Pay. *Heliyon*. <https://doi.org/10.1016/J.Heliyon.2023.E20353>
- Hales, R., & Jennings, G. (2017). Transformation For Sustainability: The Role Of Complexity In Tourism Students' Understanding Of Sustainable Tourism. *Journal Of Hospitality, Leisure, Sport And Tourism Education*. <https://doi.org/10.1016/J.Jhlste.2017.08.001>
- Hu, C., Liang, M., & Wang, X. (2023). Achieving Green Tourism Through Environmental Perspectives Of Green Digital Technologies, Green Innovation, And Green Hr Practices. In *Environmental Science And Pollution Research*. <https://doi.org/10.1007/S11356-023-27254-0>
- Iswadi Athar, Lm, Nahar, Fh, & Martayadi, U. (2023). Exploring The Role Of Tourism Community Service Programs In Promoting Sustainable Tourism Practices In Lombok Island, Indonesia. *Pentahelix: Scientific Journal Of Tourism Service*. <https://doi.org/10.47492/Pentahelix.V1i1.2>
- Lenzen, M., Sun, Y.-Y., Faturay, F., Ting, Y.-P., Geschke, A., & Malik, A. (2018). The carbon footprint of global tourism. *Nature climate change*, 8(6), 522-528.
- Li, X., Deng, B., & Ye, H. (2011). The Research Based On The 3-R Principle Of Agro-Circular Economy Model-The Erhai Lake Basin As An Example. *Energy Procedia*. <https://doi.org/10.1016/J.Egypro.2011.03.242>
- Maniktala, J., & Sharma, A. (2024). Demand for Green Practices: Inception of Sustainable Tourism. In *Springer International Handbooks of Education* (Vol. Part F3475, pp. 649-658): Springer Nature.
- Merli, R., Preziosi, M., Acampora, A., Lucchetti, M. C., & Ali, F. (2019). The Impact Of Green Practices In Coastal Tourism: An Empirical Investigation On An Eco-Labelled Beach Club. *International Journal Of Hospitality Management*. <https://doi.org/10.1016/J.Ijhm.2018.08.011>
- Moise, M. S., Gil-Saura, I., & Ruiz-Molina, M. E. (2018). Effects Of Green Practices On Guest Satisfaction And Loyalty. *European Journal Of Tourism Research*. <https://doi.org/10.54055/Ejtr.V20i.342>
- Nafisatur. (2024). Research Data Collection Methods. *Research Data Collection Methods*.
- Nekmahmud, M., & Farkas, M. F. (2022). Green Marketing, Investment and Sustainable Development for Green Tourism. In *Tourism in Bangladesh: Investment and Development Perspectives* (pp. 339-361): Springer Nature.
- Putera, D. A., Rofii, E. A., Lawi, A., Rini, R. O. P., & Putra, A. A. (2024). *Enhancing Waste Management and Marine Ecosystem Protection for Tourism Sustainability on Buluh Island*. Paper presented at the BIO Web of Conferences.
- Quinn, T., Bousquet, F., & Guerbois, C. (2019). Changing Places: The Role Of Sense Of Place In Perceptions Of Social, Environmental And Overdevelopment Risks. *Global Environmental Change*. <https://doi.org/10.1016/J.Gloenvcha.2019.101930>
- Rezkia (2020). Steps For Using Qualitative Data Analysis Techniques. *Dqlab*.
- Salandri, L., Cascio Rizzo, G.L., Cozzolino, A., & De Giovanni, P. (2022). Green Practices And Operational Performance: The Moderating Role Of Agility. *Journal Of Cleaner Production*. <https://doi.org/10.1016/J.Jclepro.2022.134091>
- Sharpley, R. (2012). Island tourism or tourism on Islands? *Tourism Recreation Research*, 37(2), 167-172. doi:10.1080/02508281.2012.11081701

- Twining-Ward, L., & Butler, R. (2002). Implementing std on a small island: Development and use of sustainable tourism development indicators in samoa. *Journal of Sustainable Tourism*, 10(5), 363-387. doi:10.1080/09669580208667174
- Utami, P. B., Barid, V. B., Lukman, K. M., Gunawan, B., Ihsan, Y. N., Jogaswara, H., & Sjafrie, N. D. M. (2024). THE PARADOX BETWEEN ECONOMIC GAIN AND ENVIRONMENTAL SUSTAINABILITY: A CASE OF SMALL ISLAND TOURISM IN PARI ISLAND, INDONESIA. *Tourism in Marine Environments*, 19(1), 1-21. doi:10.3727/154427323X17026460566015
- Weaver, D. B. (2017). Core–periphery relationships and the sustainability paradox of small island tourism. *Tourism Recreation Research*, 42(1), 11-21. doi:10.1080/02508281.2016.1228559
- Zavaleta Chavez Arroyo, F.O., Sánchez Pantaleón, A.J., Navarro-Mendoza, Y.P., & Esparza-Huamanchumo, R.M. (2023). Community Tourism Conditions And Sustainable Management Of A Community Tourism Association: The Case Of Cruz Pata, Peru. Sustainability (Switzerland). <https://doi.org/10.3390/Su15054401>



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