

Students' Perceptions of Sustainable Tourism Trends in Indonesia

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Abstract

This study aims to analyze students' perceptions of sustainable tourism development in Indonesia, focusing on the economic, socio-cultural, and environmental dimensions. Using a quantitative survey method, data were collected from 128 students across several universities in Indonesia through online and offline questionnaires. Descriptive statistical analysis was employed to identify perception patterns and awareness levels toward sustainable tourism principles. The results indicate that students generally have a positive perception of sustainable tourism. The economic aspect gained the highest mean score (2.10), reflecting optimism toward tourism's role in improving livelihoods and supporting regional economic growth. The socio-cultural dimension (mean 2.24) showed positive attitudes accompanied by awareness of social and cultural risks. The environmental dimension (mean 2.20) revealed that students appreciate tourism's potential to foster environmental awareness while acknowledging possible ecological degradation. These findings suggest that Indonesian students possess a balanced and critical understanding of sustainability principles and highlight the importance of integrating sustainability education into tourism curricula to prepare responsible future professionals.

Keywords: sustainable tourism, students' perception, sustainability education, Indonesia.

A. INTRODUCTION

Sustainable tourism emphasizes the balance between the development of the tourism industry, environmental preservation, social welfare, and long-term economic growth (Liu, 2003). According to the UNWTO, this concept considers economic, social, and environmental impacts while meeting the needs of tourists, the tourism industry, local communities, and the environment both in the present and in the future (UNWTO, 2007).

There are three main pillars of sustainable tourism: economic, socio-cultural, and environmental. From the economic perspective, tourism should provide benefits for local communities, create employment opportunities, and support small and medium enterprises. The socio-cultural aspect highlights the importance of respecting local culture, involving the community in tourism management, and fostering positive interactions between tourists and local residents. Meanwhile, the environmental aspect focuses on nature conservation, waste management, the use of renewable energy, and controlling the negative impacts of tourism on ecosystems (Amerta, 2018; Choi & Sirakaya, 2006; World Tourism Organization, 2004).

In addition to these three main pillars, there are additional principles that support sustainable tourism, such as education and awareness about sustainability, inclusiveness and fairness in community participation, and multi-stakeholder collaboration among the government, private sector, academia, and local communities. By implementing these principles, the tourism industry can grow without damaging the environment or local culture while ensuring fair economic benefits for local communities (Briassoulis, 2001; Hunter, 1995; World Tourism Organization, 2004).

Globally, sustainable tourism has gained increasing attention from both tourists and the tourism industry. The GSTC report shows that more tourists are now choosing destinations based on sus-

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tainability criteria, such as environmental certification or eco-friendly policies adopted by tourism service providers (Global Sustainable Tourism Council et al., 2024). Organizations such as UNWTO and WTTC also continue to promote the transition toward greener tourism (Saarinen, 2021).

Awareness of the importance of sustainable tourism has grown due to social media and global campaigns highlighting the negative impacts of poorly managed tourism. With this trend, the tourism sector is expected to serve not only as an economic source but also as a means to maintain ecological balance and improve the welfare of local communities (Abad-Segura et al., 2020).

Context of Sustainable Tourism in Indonesia

Indonesia has a wide range of tourist destinations that have implemented sustainability principles to maintain a balance between economic growth, cultural preservation, and environmental protection. Bali, for instance, has developed community-based tourism villages and adopted policies to reduce single-use plastics. Labuan Bajo has also taken conservation measures by limiting the number of tourists visiting Komodo Island and requiring a conservation contribution. Meanwhile, in Borobudur, restrictions on the number of visitors entering the temple structure are aimed at reducing the impact of overtourism, while surrounding tourism villages involve local communities in culture- and nature-based tourism activities.

However, this sector faces major challenges, including resource exploitation, overtourism, and low public awareness of sustainable tourism (Yamin et al., 2021). Overtourism puts immense pressure on the environment and infrastructure, leading to problems such as traffic congestion and pollution in Bali or ecological threats in Komodo Island. Environmental degradation, pollution, and land conversion caused by uncontrolled tourism development have also become serious issues. Moreover, ineffective regulations and weak monitoring make it difficult to implement sustainability policies optimally. To ensure the sustainability of tourism in Indonesia, collaboration among the government, industry, academia, and local communities is essential to create a tourism model that generates economic benefits without sacrificing the environment or cultural values.

Students' Perceptions and Roles in Sustainable Tourism Development

Students play an important role in the implementation of sustainable tourism in the future. As the generation that will contribute to this industry, their understanding of sustainability principles is a key factor in determining the direction of tourism development (Hales & Jennings, 2017). Factors influencing students' perceptions of sustainable tourism include formal education, social media, and personal travel experiences. Courses that discuss sustainability can shape their perspectives, while social media further strengthens awareness of the negative impacts of mass tourism and the importance of more responsible travel practices (Arrobas et al., 2020; Hales & Jennings, 2017). Although students' awareness of sustainable tourism is increasing, there remains a gap between theoretical understanding and practical application. Many understand the concept but have not yet fully applied it in their daily practices (Camargo & Gretzel, 2017). Therefore, this research is needed to examine the extent to which students understand the concept and how factors such as education, experience, and social media influence their perceptions.

Studies on students' perceptions of sustainable tourism trends play a crucial role in developing tourism policies, educational curricula, and industry practices. Evaluating their awareness can help identify the gap between theories taught in universities and their implementation in the field, thereby encouraging more practical learning methods such as case studies or fieldwork (Bowen & Dallam, 2020; Mínguez et al., 2021; Rezapouraghdam et al., 2022a). Furthermore, this research can provide insights for educational institutions in designing curricula that align with industry needs and global trends, particularly with the growing demand for sustainable tourism. Higher education institutions must equip

students with relevant skills in management, technology, and sustainability to prepare them for future industry challenges.

Research Objectives

This research aims to analyze student's perceptions of sustainable tourism trends in Indonesia. Specifically, this study identifies the level of student awareness regarding sustainability in the economic, social, and environmental aspects, as well as the factors that influence it, such as formal education, tourism experience, and social media. In addition, the research assesses the extent to which students apply sustainability principles in their tourism activities and explores their preferences and expectations for future sustainable tourism practices.

The results of this research are expected to provide insights for educational institutions, the tourism industry, and the government in increasing awareness and involvement of the younger generation in the development of more sustainable tourism. By understanding the students' views, various parties can design policies, educational strategies, and industry innovations that are more aligned with the evolving sustainability principles at the global and national levels.

Students play a vital role in supporting and implementing sustainable tourism principles, both as tourists and as prospective professionals in the tourism industry. As part of the younger generation who are familiar with technology and information, students can become agents of change in increasing awareness and sustainability practices in the tourism sector. However, studies specifically examining the role of students in sustainable tourism are still limited in Indonesia. This lack of academic review means there is no in-depth understanding of the factors that influence students' perceptions and behavior towards sustainable tourism.

Therefore, this research is important to fill the literature gap by examining how factors such as education, travel experience, and the influence of social media shape students' attitudes and decisions in choosing and applying sustainable tourism practices. The results of this study are expected to provide strategic recommendations for universities, the government, and tourism industry players in designing policies and programs that encourage the active involvement of students in sustainable tourism in Indonesia.

Research on sustainable tourism has been widely conducted in various countries, especially related to policy, environmental impact, and the role of local communities in its implementation (C. J. Hunter, 1995; Streimikiene et al., 2021; Yamin et al., 2021). Several studies highlight how sustainable tourism education can increase student awareness of more responsible travel practices. Furthermore, previous research has also examined the influence of social media in shaping tourists' preferences for eco-friendly destinations (Agyapong & Yuan, 2022; Clark et al., 2023; Ráthonyi, 2013).

However, research specifically highlighting the role of students in sustainable tourism is still limited, especially in Indonesia. Studies on how students, as a group with wide access to information and technology, can become agents of change in supporting tourism sustainability are still rarely found in academic literature.

B. RESEARCH METHOD

This research uses a quantitative approach with a survey design to measure student perceptions of sustainable tourism and the factors influencing it. The quantitative approach is chosen because it allows researchers to collect a large amount of data, analyze the relationship between variables, and identify patterns or trends that can be generalized in a wider population.

The survey will be conducted by distributing questionnaires online and offline to students from various universities in Indonesia. This approach allows researchers to obtain more varied data and reduce

the bias that may arise if only focusing on one region or specific educational institution. The data collected will be analyzed using statistical techniques to examine the relationship between the variables that have been determined in the conceptual research model.

The questionnaire in this study consists of four main parts, adopted from Dibra and Oelfke (Dibra & Oelfke, 2013). The first part focuses on the importance of sustainable tourism development in Indonesia. The second part is structured based on the main goals of sustainable tourism development, namely maximizing positive impacts and minimizing negative impacts of tourism sector development. In this section, there are 43 attitude statements related to the economic, socio-cultural, and environmental impacts of tourism development in Indonesia. All statements in this section are measured using a five-point Likert scale, with a scoring range from "strongly agree" (1) to "strongly disagree" (5). The third part asks students to rank various proposals based on their level of importance in the development of sustainable tourism in the future. The last part of the questionnaire contains demographic profile data of the student respondents.

The population in this study includes students from various universities in Indonesia who have an interest or experience in tourism. Students are chosen as the research subjects because they play an important role in adopting and encouraging sustainable tourism practices in the future. In addition, students generally have wider access to information regarding sustainable tourism, both through formal education and social media. Sampling is conducted using the purposive sampling technique, which is the selection of respondents based on certain criteria relevant to the research objective. These criteria include students who are currently pursuing higher education in Indonesia, have travel experience within the last year, and have an understanding or have received material regarding the concept of sustainable tourism.

The sample size will be determined using the Slovin formula to ensure a representative number of respondents with a certain level of error tolerance. Assuming the student population that meets these criteria is quite large, the minimum required sample size is approximately 100 respondents at a 95% confidence level and a 5% margin of error. To achieve an adequate and representative sample size, the questionnaire will be distributed through various communication channels, such as academic platforms, social media, and cooperation with lecturers or student organizations related to the tourism field. This approach aims to ensure sample diversity and obtain wider coverage of students in various regions in Indonesia.

Data collection in this research is carried out through online and offline questionnaires to widely reach respondents and obtain representative data. The online questionnaire is distributed through digital platforms such as Google Forms shared via academic groups, social media, and tourism student networks, allowing respondents to fill out the questionnaire with flexibility of time and place and reach a larger number of respondents at low cost. Meanwhile, the offline questionnaire is given directly to students at several universities with tourism-related study programs through cooperation with lecturers and student organizations, to accommodate those who are less active in online surveys and ensure sample diversity. With a combination of these two methods, the research is expected to collect accurate and representative data to understand student views on sustainable tourism trends and the factors that influence their mindset and travel behavior.

The responses collected in this study were analyzed using descriptive statistical techniques. To facilitate interpretation, the five-point Likert scale was divided into equal intervals of 0.80, calculated using the formula (maximum score minus minimum score) divided by the number of scale categories, that is $(5 - 1) \div 5 = 0.80$. Accordingly, the mean scores were interpreted using the following ranges: 1.00–1.80 indicated strongly agree, 1.81–2.60 agree, 2.61–3.40 neutral, 3.41–4.20 disagree, and 4.21–5.00 strongly disagree. The mean values obtained were then arranged from the lowest to the highest in the corresponding tables to highlight the level of respondents' agreement.

C. RESULTS AND ANALYSIS

Results

This study involved 128 respondents, all of whom were university students from various higher education institutions across Indonesia. The respondents came from diverse regions, including Java, Sumatra, Kalimantan, Sulawesi, and Bali, making the findings representative of students' perceptions from different social, cultural, and geographical contexts in Indonesia. Tabel 1 presents the characteristics of the students involved in the study.

Table 1. Demographic Profile of Respondents (N = 128)

Category	Characteristic	Frequency (n)	Percentage (%)
Gender	Female	77	60%
	Male	51	40%
Age	21–25 years	114	89%
	> 25 years	14	11%
Education	Undergraduate	128	100%
	Good Understanding	104	81%
Knowledge Level	Moderate Understanding	19	15%
	Low/Unfamiliar	5	4%

Sources: Data Processed, 2026

Based on demographic characteristics on table 1, all respondents were active undergraduate students studying in the fields of tourism, management, and economics. In terms of gender, 60% of the respondents were female, while 40% were male. This composition reflects the general trend in tourism-related higher education in Indonesia, which tends to have a higher proportion of female students.

Regarding age, most respondents were between 21 and 25 years old (89%), while the remaining 11% were over 25 years old. This indicates that the majority of respondents were mid-to senior-level students who already possessed a broad academic understanding of tourism concepts and practices in Indonesia.

In terms of knowledge level about sustainable tourism development, 81% of respondents stated that they had a good understanding of the concept, 15% said they had a moderate understanding, and 4% admitted they were not yet fully familiar with it. This data shows that most students are already aware of and understand the sustainability concept, which encompasses three main dimensions: economic, socio-cultural, and environmental.

When asked to assess the importance of applying sustainability principles in Indonesia's tourism development, all respondents showed a very high level of agreement. The statement "Tourism development in Indonesia will only succeed if it is carried out sustainably" obtained an average score of 1.12 with a standard deviation of 0.29, indicating a strong belief that the long-term success of national tourism depends on balancing economic growth, social welfare, and environmental preservation.

Furthermore, the statement "Only through sustainable development can tourism become one of the main ways for Indonesia to achieve rapid and sustainable economic growth" received an

average score of 1.55 with a standard deviation of 0.56. These results indicate that students view tourism as one of the key sectors that can drive inclusive and environmentally conscious national development.

The following table summarizes the mean scores across the three pillars of sustainable tourism. Mean scores are interpreted based on the 0.80 interval scale where 1.81–2.60 indicates "Agree".

Table 2. Summary of Students' Perceptions by Dimension

Dimension	Mean Score	Interpretation	Key Perceived Positive Impact	Key Perceived Risk
Economic Dimension	2.10	Agree	Job creation and investment	Profit leakage and inflation
Environmental Dimension	2.20	Agree	Conservation awareness	Pollution and habitat loss
Socio-Cultural Dimension	2.24	Agree	Cultural preservation	Cultural erosion and social ills
Overall Perception Average	2.18	Agree		

Sources: Data Processed, 2026

Overall result on table 2, students' perceptions of tourism development in Indonesia show a positive attitude. The overall average score for all perception items was 2.18, suggesting that respondents evaluated tourism more positively than negatively. The average score for all positive impacts was 1.98, while for negative impacts it was 2.40.

When viewed through the lens of the three main dimensions of sustainable development, students showed the most positive attitude toward the economic impacts of tourism, with an average score of 2.10, followed by environmental impacts (2.20) and socio-cultural impacts (2.24). This pattern is consistent with the findings of Dibra and Oelfke (2013) in Albania, which also revealed that students were more optimistic about tourism's economic contributions compared to its social and environmental dimensions.

Analytically, Indonesian students assessed that the most evident positive impact lies in the economic aspect (average 1.95), while the strongest negative impact is felt in the environmental aspect (average 2.35). In the socio-cultural dimension, students showed a more cautious perspective, with the average perception of negative impacts at 2.65, indicating awareness of possible social and cultural changes due to increased tourism activities.

Analysis

The results of the descriptive analysis on the economic dimension show that students have a predominantly positive perception of tourism's contribution to economic development. The average score obtained for all statements in this dimension is 2.10 on the 1–5 Likert scale, which indicates a high level of agreement with the view that tourism can be a main driver of the national and local economy.

The statements that received the highest scores include: "Tourism provides more decent job opportunities as well as new business development opportunities for the community," "Tourism attracts more investment and spending," and "Tourism creates new markets for local products." This shows that students assess the tourism sector as having significant economic leverage,

especially in terms of job creation, increasing community purchasing power, and diversifying income sources at the local level.

In addition, students also assess that tourism can contribute to increasing state and local government revenue through taxes, levies, and various other forms of indirect income. Statements such as "Central government revenue increases along with tourism growth" and "Tourism increases local government tax revenue" received average scores in the range of 2.0–2.2, showing respondents' belief that tourism plays an important role in strengthening the government's fiscal capacity.

This finding is consistent with the research results of Dibra and Oelfke (2013) in Albania, which also found that students in that country view tourism as one of the strategic sectors in expanding employment, increasing community income, and boosting investment growth in related sectors. Their study noted an average score for the economic dimension of 2.10, almost identical to the results of this study, which indicates a similarity in perception across geographical contexts regarding the economic role of tourism in supporting sustainable development.

Nevertheless, beneath this positive view, Indonesian students also show a critical awareness of the potential negative economic impacts that can arise from uncontrolled tourism activities. Some items such as "Tourism development increases construction costs and land prices in tourist areas" and "The cost of living for residents increases due to tourism" received higher scores (approaching 2.5–3.0), indicating that some respondents recognize the risk of local inflation and social inequality due to poorly regulated tourism growth.

Furthermore, respondents also expressed concern that the economic benefits of the tourism sector are not always enjoyed equally by the local community. Statements such as "Most of the profits from tourism development flow abroad" show the perception that the majority of the economic benefits are actually enjoyed by large investors, national private parties, or even foreign entities with greater capital. This reinforces the argument that economic sustainability in tourism depends not only on the size of the income generated but also on how that income is distributed among stakeholders.

Thus, students demonstrate a relatively balanced view: they acknowledge the important role of tourism in driving economic growth, but also understand the economic risks that accompany it if tourism development is not accompanied by fair and inclusive policies. This view demonstrates the maturity of students' thinking and their critical awareness of the principle of economic sustainability, which is an integral part of sustainable tourism development.

In the Indonesian context, this result can be interpreted as students having optimism about the very large economic potential of the tourism sector, especially in supporting regional economic growth, improving community welfare, and expanding the creative economy base. However, they also emphasize the need for government policies that can balance economic growth and benefit distribution. Efforts such as local community empowerment, support for micro and small enterprises in the tourism sector, and strengthening foreign investment regulations are considered important steps so that tourism development is not only oriented toward short-term profits but also provides sustainable economic impacts for future generations.

Student Perception of the Economic Impact of Tourism

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Students' Perceptions of the Socio-Cultural Impacts of Tourism

The results of the descriptive analysis show that students' perceptions of the socio-cultural impacts of sustainable tourism development tend to be positive. The overall mean score for this dimension is 2.24 on a 1–5 Likert scale, which means that most respondents agree that tourism provides significant socio-cultural benefits to local communities.

Some of the statements with the highest levels of agreement include "Tourism encourages the preservation of historical and traditional buildings," "Encounters with tourists increase mutual understanding and cultural exchange among communities," and "Community pride in their natural and cultural heritage increases because of tourism." The average scores for these statements range from 1.5 to 2.0, indicating that students believe sustainable tourism can play an important role in strengthening local cultural identity and enhancing public appreciation for their own cultural heritage values.

These findings are consistent with the study by Dibra & Oelfke (2013) in Albania, which also recorded an average score of 2.24 for the socio-cultural dimension. In that study, students

perceived tourism as having a dual role as a means of cultural exchange and as a mechanism for preserving local values. In the Indonesian context, this similarity is quite interesting because, despite differences in geographical and social settings, students in both countries share the understanding that tourism can serve as a bridge between modernity and tradition, between globalization and local wisdom.

In addition to strengthening cultural identity, students also believe that tourism can create new social opportunities for communities, such as increased cultural activities, the emergence of new public spaces for social interaction, and expanded access to education and employment for previously marginalized groups, including women. The statement "Women gain more economic empowerment as more job opportunities emerge in the tourism sector" obtained an average score of 2.3, showing recognition of tourism's positive impact on gender equality and women's economic empowerment.

However, students also expressed critical awareness of the potential negative social impacts of tourism. Some items with relatively higher scores (ranging from 2.6 to 3.2) reflect concerns about social changes resulting from the influx of tourists and the commercialization of culture. Statements such as "Tourism encourages locals to imitate tourists' lifestyles" and "Commercial demands from tourists cause changes in the form and style of traditional arts" show that students understand the risk of cultural erosion or the loss of local cultural values due to external cultural influences.

Furthermore, negative perceptions also appear in relation to social problems such as increased crime, drug abuse, prostitution, and alcoholism in tourist areas. The statement "Tourism increases social problems such as crime, drugs, prostitution, and alcoholism" received the highest score among the negative indicators (around 3.2 on average), indicating that students believe poorly managed tourism growth can lead to serious social consequences.

This analysis shows that students hold a fairly balanced perspective: they appreciate tourism's contribution to cultural preservation and social cohesion while also understanding the risks of social disruption and cultural degradation that may occur. Such a perspective indicates a critical awareness of the need to maintain a balance between socio-cultural benefits and social risks in tourism activities.

In the context of sustainable development, these findings emphasize the importance of tourism management strategies that are oriented toward local community participation. Students believe that involving the community in every stage of destination development from planning and management to evaluation can be an important step in minimizing negative social and cultural impacts. In addition, they highlight the importance of educating tourists to respect local norms and strengthening the role of traditional institutions in safeguarding cultural values amid the growth of the modern tourism industry.

Thus, students' perceptions reflect an understanding that the socio-cultural dimension is a key element in the concept of sustainable tourism. Tourism development that focuses solely on economic aspects while neglecting socio-cultural dimensions risks creating long-term social dysfunction. Therefore, there is a need for policies that integrate cultural preservation, community education, and the strengthening of local values as part of Indonesia's sustainable tourism strategy.

Students' Perceptions of the Environmental Impacts of Tourism

The analysis of the environmental dimension shows that students have a generally positive perception of the environmental impacts of sustainable tourism development, although this is accompanied by a strong awareness of the potential ecological threats that may arise. The overall mean score for this dimension is 2.20, indicating a fairly strong level of agreement with the view that tourism can serve as a means to enhance awareness and responsibility for the preservation of the natural environment.

Several statements with the highest scores fall under the category of positive impacts, such as "Tourism encourages attention to environmental management and maintenance regulations," "Tourism helps increase awareness and appreciation of the environment," and "Tourism serves as an incentive to protect and preserve natural resources." The average scores for these statements

range from 1.7 to 1.9, showing that the majority of students believe tourism, when managed sustainably, can strengthen ecological awareness among both local communities and tourists.

This view aligns with the findings of Dibra and Oelfke (2013) in Albania, which revealed that students also had positive perceptions of tourism's role in supporting environmental conservation and management efforts. In that study, the average score for the environmental dimension was 2.20, almost identical to the results of this research, indicating a cross-national similarity in perceptions of tourism's educational function in promoting environmentally responsible behavior.

In addition, Indonesian students believe that tourism can contribute to the improvement of public facilities and the enhancement of cleanliness standards in tourist areas. Statements such as "Because of tourism, roads and other public facilities are maintained to higher standards" received an average score of 2.3, suggesting a belief that tourism infrastructure development benefits not only tourists but also improves the quality of life for local residents.

However, students also demonstrate sensitivity to tourism's negative impacts on the environment. Some statements with higher scores (ranging from 2.5 to 3.3) indicate that respondents understand the ecological risks that may occur as a result of uncontrolled tourism activities. Examples include "The development of tourism facilities that do not comply with standards damages the natural environment," "Noise levels in tourist areas increase during holiday seasons," and "Tourism causes water pollution in rivers, lakes, and seas due to waste from tourism facilities."

Moreover, students expressed concern about the issue of environmental carrying capacity being exceeded in several popular tourist destinations. Statements such as "Tourism causes some tourist areas to transform into densely populated urban zones" and "Tourism increases traffic congestion in and around tourist areas during the holiday season" reflect apprehension about urbanization and spatial overcrowding resulting from tourism infrastructure development that is not balanced with sustainable spatial planning.

In a more serious context, students also highlighted long-term ecological impacts such as forest degradation, wildlife migration, and the depletion of natural resources. The relatively high scores for statements such as "Tourism development causes forest degradation around tourist areas" (2.7) and "Tourism development leads to shortages of energy and water in some areas near tourist destinations during the holiday season" (3.3) indicate that students recognize environmental sustainability as the most vulnerable component of tourism development.

These findings illustrate that Indonesian students possess a relatively high level of environmental awareness. They do not view tourism merely as a tool for economic growth but as a phenomenon that must be carefully managed to avoid ecosystem degradation. This awareness is a positive indicator for the younger generation, who will play an important role in the planning, management, and policymaking of tourism in the future.

In the context of sustainable tourism development, students' views reinforce the importance of applying the principles of eco-efficiency and sustainable management. The government and tourism industry stakeholders need to balance the growth of tourist arrivals with environmental capacity. Strategies such as integrated waste management, limiting visitor numbers in conservation areas, and using renewable energy sources at tourist destinations are concrete steps that align with students' aspirations for environmentally conscious tourism.

Thus, students' perceptions demonstrate a deep understanding that the sustainability of tourism is not measured solely by economic benefits or social stability but also by the ability to maintain ecological balance. The ecological awareness they display affirms that the younger generation in Indonesia holds a progressive perspective on the relationship between humans, tourism, and nature, a perspective that forms a vital foundation for the future of sustainable tourism in Indonesia.

The findings of this study demonstrate that while Indonesian students are highly optimistic about tourism's economic potential, they possess a critical and balanced view of its socio-cultural and environmental risks. This "critical optimism" provides a foundation for several key policy implications and development strategies.

Strengthening Economic Inclusivity and Fiscal Policy

Students identified tourism as a primary driver for job creation and government revenue. However, their concerns regarding "leakage"—where profits flow to foreign entities—and rising local living costs suggest a need for more protective economic policies. The government should implement policies that incentivize tourism operators to prioritize local supply chains. This aligns with the student perception that tourism should create "new markets for local products". Strategies must focus on providing micro-credit and digital marketing training for local small businesses to ensure they can compete with larger investors.

Socio-Cultural Preservation and Community-Led Management

While students value tourism as a bridge for cultural exchange, they expressed clear concern over the "commercialization of culture" and the erosion of local values. Indonesia should scale the "tourism village" (Desa Wisata) model used in Bali and Borobudur. Policies should mandate that local traditional institutions (e.g., adat councils) have a formal role in the planning and evaluation stages of destination development. To prevent the "imitation of tourist lifestyles" noted by respondents, spatial planning should include "sacred zones" where tourism activity is limited to protect local traditions.

Environmental Carrying Capacity and Eco-Efficiency

The environmental dimension received the highest concern regarding negative impacts, such as waste and over-urbanization. Following the models in Labuan Bajo and Borobudur, the government should implement digital reservation systems to strictly enforce carrying capacity limits. This addresses the student concern about "spatial overcrowding". Policy-makers should offer tax breaks or faster permitting for tourism facilities that adopt renewable energy and integrated waste management, meeting the "eco-efficiency" standards students expect.

Educational Reform: Sustainability Literacy

There is a notable gap between theoretical understanding and practical application among students. Curriculum Integration: Higher education institutions must move beyond theory-heavy teaching to "practical learning methods" such as fieldwork and case studies centered on real-world Indonesian sustainability challenges. Since social media heavily influences student perceptions, the government and universities should collaborate on digital campaigns that highlight "responsible travel practices," turning students into "agents of change".

D. CONCLUSION

This study aimed to analyze students' perceptions of sustainable tourism development in Indonesia, encompassing three main dimensions: economic, socio-cultural, and environmental. Based on data analysis from 128 university students across various higher education institutions in Indonesia, it can be concluded that, in general, students hold positive perceptions toward sustainable tourism development.

Students believe that tourism has great potential to become a major driver of national economic growth. The economic aspect obtained the highest average score among the three dimensions (Mean = 2.10), indicating a strong belief that the tourism industry can increase community income, create employment opportunities, and strengthen regional economies. This reflects the young generation's optimistic view of the tourism sector's contribution to accelerating Indonesia's economic development.

In the socio-cultural aspect, students showed a positive yet cautious attitude. They acknowledged that tourism can strengthen the preservation of local culture and promote intercultural exchange but also recognized its potential to alter social values and lifestyles in tourist destinations. The average score of 2.24 reflects a balanced and moderate perception, combining appreciation for socio-cultural benefits with awareness of possible negative impacts.

Meanwhile, perceptions of the environmental aspect were relatively positive (Mean = 2.20), but accompanied by a high level of concern. Students viewed tourism as a means to raise awareness about the importance of environmental preservation; however, they also recognized the risks of natural degradation, pollution, and ecosystem damage if tourism is not managed under sustainable principles.

Overall, the findings of this study indicate that Indonesian students possess a strong awareness of the importance of applying sustainable tourism development principles. They understand that the success of tourism should not only be measured by economic gains but also by how well it maintains a balance between economic progress, cultural preservation, and environmental protection.

These findings support those of Dibra and Oelfke (2013), who concluded that young academics generally have positive views of the sustainable tourism concept while emphasizing the importance of careful and well-planned management to minimize potential negative impacts. In the Indonesian context, this serves as an important indication that the younger generation future practitioners and policymakers already possesses a high level of awareness regarding the direction of sustainable tourism development.

As a practical implication, the results of this study can serve as input for higher education institutions and the government in designing policies and curricula that emphasize sustainability-oriented education in the tourism sector. Increasing sustainability literacy, providing training in environmentally friendly practices, and encouraging student involvement in sustainable tourism projects are expected to help develop human resources who are not only economically competent but also socially and environmentally responsible.

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