

Constructing Cleanliness Awareness through Eco-Tourism Education Modules

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Abstract

Eco-tourism plays a vital role in promoting sustainable travel, environmental conservation, and community development. However, one of the recurring challenges in eco-tourism destinations is the lack of consistent cleanliness awareness among stakeholders, which negatively impacts environmental quality, tourist satisfaction, and the long-term sustainability of natural attractions. This study aims to explore how cleanliness values can be constructed and integrated through eco-tourism education modules, with a focus on shaping responsible attitudes and behaviors. The research employs a library-based qualitative methodology, analyzing secondary data from journal articles, books, policy documents, and case studies related to eco-tourism, environmental education, and sustainable tourism practices. Through thematic content analysis, the study identifies four strategic pillars essential for constructing cleanliness awareness: community participation, tourist involvement, educational content, and technology integration. The results suggest that an integrated educational framework—incorporating interactive learning, local engagement, and digital tools—can effectively instill cleanliness values among both tourists and local communities. This approach not only strengthens ecological preservation but also enhances the overall quality and sustainability of eco-tourism destinations. The study concludes by proposing a conceptual model to guide the development of future eco-tourism education modules aimed at fostering a cleanliness-conscious tourism culture.

Keyword: Al-Quran and Al-Sunnah, Self-confidence, Islamic Studies, Educational interventions

Introduction

Eco-tourism has become an essential approach in promoting responsible travel that not only supports local economies but also preserves the environment and respects cultural heritage. As one of the fastest-growing sectors in global tourism, eco-tourism emphasizes sustainability, conservation, and community empowerment. A critical yet often underexplored element within this framework is the role of cleanliness awareness—a fundamental value that directly affects the quality, sustainability, and appeal of eco-tourism destinations.

Cleanliness in eco-tourism is more than just aesthetic; it represents a commitment to environmental ethics and sustainable living. In destinations such as Pulau Redang, where natural beauty and ecological balance are central to tourism appeal, maintaining cleanliness is vital for preserving biodiversity and ensuring positive tourist experiences. Therefore, integrating cleanliness education into eco-tourism practices is essential to fostering responsible behavior among both tourists and local communities.

This article explores how cleanliness values can be constructed and embedded through the development of eco-tourism education modules. By examining existing literature, best practices, and conceptual models, the study proposes an integrated framework that emphasizes four strategic pillars: community participation, tourist involvement, educational content, and technology integration. These elements work together to nurture a cleanliness-conscious tourism culture, contributing to both ecological integrity and socio-economic development.

Through a library-based (qualitative) research approach, this article aims to highlight the importance of cleanliness education within eco-tourism and provide practical insights for designing effective educational modules. The findings are expected to guide stakeholders—including educators, tourism operators, and policymakers—in building sustainable and environmentally responsible tourism programs.

Methodology

This study employs a library research methodology to examine the construction of cleanliness awareness through eco-tourism education modules. The research is based entirely on the analysis of secondary data sources, including academic journal articles, books, government reports, and case studies related to eco-tourism, environmental education, and cleanliness awareness. Relevant literature was carefully selected to identify key concepts, strategies, and best practices that contribute to cleanliness within eco-tourism contexts. The data were analyzed using a qualitative content analysis approach, focusing on interpreting meanings, identifying recurring themes, and synthesizing findings from various scholarly works. This method allows the researcher to build a conceptual framework and provide theoretical insights without conducting fieldwork or primary data collection.

Discussion

Eco-tourism has emerged as a significant area within the tourism sector, driven not only by the need for economic viability but also by the pressing necessity for environmental conservation. The importance of maintaining cleanliness and fostering environmental awareness within this context cannot be overstated. Cleanliness in eco-tourism settings correlates with the quality and sustainability of tourism practices, influencing both tourist perceptions and local ecosystems. This synthesis explores the multidimensional aspects of cleanliness awareness in eco-tourism education modules, supported by existing literature.

Eco-tourism is a form of responsible travel that emphasizes environmental conservation, cultural appreciation, and community empowerment. Wahyuni et al. highlight that eco-tourism is distinct from merely nature-focused tourism; it intertwines ecological preservation with cultural awareness, ultimately fostering resilience in local communities by providing economic opportunities while minimizing adverse environmental impacts (Wahyuni et al., 2023). Consequently, integrating cleanliness awareness into eco-tourism education can help prepare stakeholders, including tourists and local communities, to actively participate in sustainability practices.

Moreover, the concept of eco-tourism is rooted in sustainable development, which challenges practitioners to operate within ecological limits while enhancing socio-economic prosperity for local populations (Batool et al., 2021). Ajani et al. corroborate the need for educational modules that elevate understanding of eco-labeling and certification processes in tourism, as these mechanisms instill a sense of responsibility and environmental stewardship among both managers and tourists (Ajani et al., 2019). This educational focus is essential in nurturing environmental concern and establishing effective waste management practices, which are necessary for maintaining a pristine eco-tourism environment (Batool et al., 2021). The cleanliness of tourist destinations plays a crucial role in their overall appeal and sustainability. Raco et al. elucidate the relationship between cleanliness and marine tourism, pointing out that efforts to maintain clean environments influence visitor satisfaction and the consequent health of marine ecosystems (Raco et al., 2022). Similarly, Dhakal notes that an increase in tourism, while beneficial for local economies, may simultaneously escalate sanitation challenges that need to be addressed through proactive cleanliness campaigns (Dhakal, 2023). Thus, integrating a robust cleanliness awareness curriculum into eco-tourism education modules can empower local stakeholders to uphold the quality of their tourist destinations.

Furthermore, many eco-tourism practices inherently involve educational components that underline the importance of cleanliness in preserving natural beauty and biodiversity. By involving local communities in cleanliness initiatives, as highlighted by Yılmaz et al., eco-tourism can lead to a collective effort to enhance environmental quality, thereby supporting both ecological and economic sustainability (Yılmaz et al., 2019). Moreover, informing tourists about their behavioral impacts on the environment is crucial, as indicated by the research from Syufa'At et al., emphasizing cleanliness as a reciprocal responsibility shared between visitors and host communities (Syufa'at et al., 2024).

When designing eco-tourism education modules that emphasize cleanliness, a multifaceted approach should be employed. The framework must include theoretical instruction, practical

applications, and community participation to ensure that stakeholders internalize the significance of cleanliness. For instance, utilizing interactive methods such as workshops and on-site demonstrations can enhance engagement and learning outcomes among both tourists and local residents (Rahmawati et al., 2023). By doing so, educational initiatives can cultivate a collective sense of accountability towards maintaining clean environments.

Furthermore, leveraging eco-labeling as an educational tool can effectively communicate the values of cleanliness and sustainability. According to Cerqua, eco-labels serve as indicators of environmental quality, informing tourists about the cleanliness and sustainability of their chosen destinations (Cerqua, 2016). Implementing education on eco-labeling in tourism curricula can create a stronger link between consumer choices, tourism business practices, and environmental preservation efforts, fostering a greater commitment to cleanliness. To assess the effectiveness of eco-tourism education modules focused on cleanliness awareness, it is crucial to implement various evaluation methods. Incorporating feedback from participants, measuring changes in knowledge and practices, and monitoring environmental outcomes can provide valuable insights into the impact of these educational initiatives (Sun & Hou, 2021). For example, comparing cleanliness levels in locations before and after the implementation of educational programs may reveal the practical benefits of instilling cleanliness consciousness within tourist destinations.

Furthermore, qualitative assessments through interviews and surveys can help gauge shifts in attitudes regarding cleanliness and environmental responsibility among both tourists and local communities. This feedback loop not only refines the educational content but also ensures that it resonates with the cultural and situational contexts of the specific tourist areas (Raco et al., 2022). A dynamic approach that adapts to new findings will reinforce the relevance of cleanliness awareness in eco-tourism education.

Community involvement is paramount in the successful implementation of cleanliness-focused eco-tourism education. Yilmaz et al. emphasize that collaborative efforts between tourism stakeholders, including accommodation providers and local residents, can lead to enhanced cleanliness and environmental standards (Yilmaz et al., 2019). Educational modules should encourage active participation from local communities, equipping them with the knowledge and tools to maintain cleanliness standards while fostering their cultural heritage. Furthermore, involving tourists in cleanliness initiatives, such as beach clean-up days or habitat restoration projects, will not only promote awareness but also strengthen the relationship between visitors and local communities. This participatory approach aligns with the fundamental principles of eco-tourism, which aim to create shared benefits from tourism activities while ensuring environmental preservation (Wu & Xue-cheng, 2023). Such community-based initiatives exemplify how eco-tourism can foster a holistic understanding of cleanliness, unity, and collective responsibility towards the environment.

Modern eco-tourism education modules can also leverage technology to enhance cleanliness awareness. Digital platforms such as mobile applications can facilitate communication about cleanliness practices, offer educational resources, and provide real-time updates on environmental conditions at tourist sites. For instance, apps that track cleanliness ratings and eco-label statuses of tourist attractions can empower travelers to make informed decisions based on sustainability practices (Rahmawati et al., 2023). Furthermore, utilizing social media

can spread awareness about cleanliness initiatives, engage stakeholders, and promote responsible tourism behaviors in real time (Cubillas-Para et al., 2023).

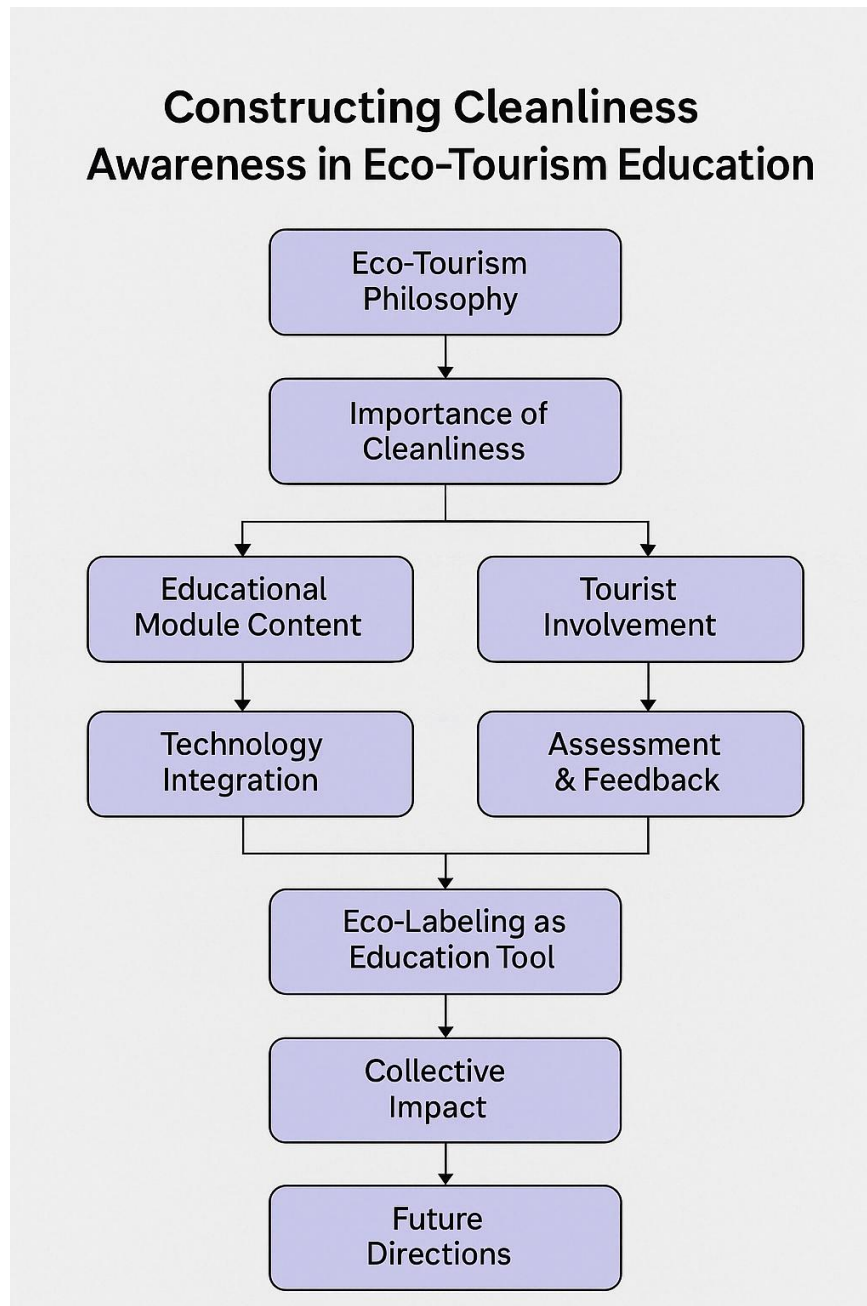
In addition to mobile applications, interactive educational tools like virtual reality can immerse users in eco-tourism environments, demonstrating the impacts of cleanliness on ecosystems and visitor experiences (Radzi et al., 2021). These innovative methods can enhance engagement and understanding while fostering a deeper connection to the environment, reinforcing the importance of maintaining cleanliness in eco-tourism settings. Here's a **comprehensive table** that summarizes the main themes, key points, and supporting references on **“Constructing Cleanliness Awareness through Eco-Tourism Education Modules.”**

Table

Framework for Constructing Cleanliness Awareness in Eco-Tourism Education

Theme	Key Focus/Strategy	Description	Supporting References
1. Eco-Tourism Philosophy	Sustainability Responsibility	& Promotes environmental conservation, cultural appreciation, and local empowerment.	Wahyuni et al. (2023); Batool et al. (2021)
2. Importance of Cleanliness	Environmental Tourism Impact	& Cleanliness affects tourist satisfaction, environmental health, and sustainability.	Raco et al. (2022); Dhakal (2023)
3. Educational Module Content	Theoretical & Practical Instruction	Combines theory, eco-labeling, waste management, and interactive teaching like workshops and fieldwork.	Ajani et al. (2019); Rahmawati et al. (2023)
4. Community Participation	Local Engagement & Cultural Integration	Encourages active involvement of local communities to enhance ownership and preserve cultural heritage.	Yilmaz et al. (2019); Wu & Xue-cheng (2023)
5. Tourist Involvement	Participatory Activities	Clean-up campaigns, restoration projects, and education to increase awareness and foster a sense of shared responsibility.	Syufa'at et al. (2024); Wu & Xue-cheng (2023)
6. Technology Integration	Mobile Apps, VR, Social Media	Use of digital platforms to enhance education, track cleanliness ratings, and engage users in real time.	Rahmawati et al. (2023); Radzi et al. (2021); Cubillas-Para et al. (2023)
7. Assessment Feedback	& Evaluation Tools	Uses surveys, interviews, and environmental metrics to evaluate module effectiveness and adapt content accordingly.	Sun & Hou (2021); Raco et al. (2022)
8. Eco-Labeling Education Tool	as Certification Awareness	Educates stakeholders on eco-labels to guide responsible behavior and enhance destination credibility.	Cerqua (2016); Ajani et al. (2019)
9. Collective Impact	Shared Responsibility	Promotes collaboration between stakeholders — tourists, locals, providers — to uphold cleanliness as a shared value.	Yilmaz et al. (2019); Syufa'at et al. (2024)
10. Future Directions	Innovation Adaptation	& Encourages ongoing innovation in content, technology, and pedagogy to ensure relevance and effectiveness.	Conclusion section

Result



The figure 1 titled "Constructing Cleanliness Awareness through Eco-Tourism Education Modules" illustrates an integrated framework designed to embed cleanliness values within eco-tourism practices. At the core of this model is the foundational philosophy of eco-tourism, which emphasizes sustainability, environmental conservation, cultural respect, and community empowerment. Cleanliness is positioned as a central tenet that supports sustainable tourism development.

The framework is driven by four primary strategic pillars: **community participation**, **tourist involvement**, **educational content**, and **technology integration**. Community participation ensures that local residents are actively engaged in both the development and implementation of cleanliness initiatives, fostering a sense of ownership and reinforcing local cultural values. Tourist involvement focuses on encouraging visitors to take responsibility for maintaining environmental cleanliness through participatory activities such as clean-up

drives and eco-friendly behavior campaigns. Educational content forms the backbone of the module, combining theoretical knowledge—such as eco-labeling and sustainability ethics—with practical skills including waste management and conservation practices. This content is delivered through interactive approaches like workshops, on-site demonstrations, and field-based learning.

Technology integration further enhances the module by using mobile applications, social media, and virtual reality to engage users, spread awareness, and promote responsible tourism practices. These components are implemented through structured tools such as workshops, community campaigns, and modular educational resources tailored to specific eco-tourism sites.

To ensure the effectiveness of these initiatives, a continuous evaluation process is integrated into the framework. This includes surveys, interviews, and environmental monitoring to measure changes in knowledge, attitudes, and behavior among stakeholders. Feedback obtained through these methods enables continuous improvement of the modules, ensuring their cultural relevance and practical impact.

The intended outcome of this holistic approach is the cultivation of a cleanliness-conscious eco-tourism culture. Such a culture supports ecological integrity, improves the quality of the tourist experience, and contributes to the socio-economic well-being of local communities. By linking education, community involvement, and technology, the model offers a sustainable path forward for embedding cleanliness awareness into eco-tourism education.

Conclusion

The integration of cleanliness awareness into eco-tourism education modules is vital for fostering sustainable tourism practices, protecting natural environments, and enhancing community involvement. The literature consistently emphasizes the interconnection between tourism practices and environmental sustainability, highlighting the importance of cleanliness as a foundational aspect of the eco-tourism experience. Through the implementation of comprehensive educational frameworks that engage local communities, leverage technology, and utilize participatory approaches, stakeholders can collectively cultivate a culture of cleanliness that benefits both ecological systems and tourism markets. As the eco-tourism industry evolves and expands, the emphasis on cleanliness awareness will serve to protect the natural landscapes that attract tourists and contribute to a sustainable future for local communities and ecosystems alike. The ongoing challenge lies in formulating effective strategies that engage stakeholders and translate cleanliness awareness into actionable practices that resonate within the eco-tourism paradigm.

This framing underscores the necessity to ground eco-tourism education in actionable concepts and community-driven initiatives, ultimately shaping a more sustainable future for the sector.

In advancing cleanliness awareness through eco-tourism education, it is imperative to adopt a multifaceted approach that encompasses diverse educational methods, community involvement, and technological integration. Future efforts should focus on analyzing the effectiveness of cleanliness initiatives, continually adapting teaching methods, and fostering

the necessary connections between stakeholders. Only through sustained commitment and innovation can eco-tourism fulfill its potential as a vehicle for environmental conservation and community empowerment.

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