

## **Cultural Diversity and Local Wisdom as the Foundation for Sustainable and Green Tourism Development in Medan**

**Debby Rizky\***

Universitas Deztron Indonesia

Email: debbyrizky3@gmail.com

### **Abstract**

This study examined how cultural diversity and local wisdom shape sustainable and green tourism in Medan, Indonesia. Medan is known as one of the most multicultural cities in the country, home to Batak, Malay, Javanese, Indian Tamil, Minangkabau, and Chinese communities. Each group brings its own traditions, values, and views on nature, adding to the city's cultural richness and environmental awareness. The research uses a qualitative descriptive approach, drawing on data from social media content, tourism documents, and online campaigns that promote Medan's cultural attractions. Through thematic analysis, the study finds that cultural diversity supports three key aspects of sustainability: social inclusion, cultural preservation, and care for the environment. Local values such as *gotong royong* (mutual cooperation), *dalihan na tolu*, and respect for nature reflect principles that are closely related to green tourism. The findings suggest that tourism development in Medan can become more inclusive, community oriented, and environmentally conscious when it embraces cultural pluralism and traditional knowledge as essential parts of its strategy.

**Keywords:** Cultural diversity, local wisdom, sustainable tourism, green tourism.

---

### **A. INTRODUCTION**

Tourism has evolved from mass, consumption-oriented travel toward more responsible and sustainability-based paradigms (UNWTO, 2020). Sustainable tourism emphasizes harmony between environmental protection, cultural preservation, and socio-economic well-being, while green tourism promotes low-impact practices, ethical behavior, and ecological sensitivity (Neto, 2021; Mihalic, 2020). These approaches align with the Sustainable Development Goals (SDGs), particularly Goals 11 (Sustainable Cities and Communities) and 12 (Responsible Consumption and Production).

In Indonesia, the government has intensified efforts to promote sustainable tourism under the Ministry of Tourism and Creative Economy's Green Tourism Program and Community-Based Tourism (CBT) initiatives (Kemenparekraf, 2022). While much of Indonesia's sustainable tourism discourse focuses on natural destinations such as Bali, Lombok, or Raja Ampat, urban multicultural centers like Medan have received less attention, despite their cultural richness and potential for inclusive tourism growth.

From a managerial perspective, tourism operators and hospitality enterprises can incorporate local wisdom and cultural values into their branding strategies and guest experiences. The alignment of tourism services with ethical, cultural, and environmental principles not only enhances authenticity but also strengthens destination competitiveness in the era of responsible tourism demand.

Medan, the capital of North Sumatra, is home to diverse ethnic groups included Batak (Toba, Karo, Mandailing), Malay Deli, Javanese, Indian Tamil, Chinese, and Minangkabau. Each ethnic groups are following with unique traditions, languages, culinary expressions, and

environmental worldviews. This diversity shapes not only the city's socio-cultural life but also its potential for sustainable tourism. As noted by Su et al. (2023), cultural diversity in tourism can strengthen social cohesion and environmental awareness when properly integrated into destination management.

Local wisdom (*kearifan lokal*) plays a crucial role in this context. Values such as gotong royong (collective cooperation), dalihan na tolu (Batak philosophy of social balance), and Malay Deli customs of respect toward nature (*adat resam Melayu*) are deeply embedded in local practices and can support sustainable environmental ethics (Hadi et al., 2022). These philosophies mirror principles of participatory and ethical tourism by promoting care, cooperation, and stewardship.

Previous research has examined sustainable tourism from ecological or economic perspectives (Miller et al., 2019; Hall, 2020), but few studies explicitly explore how cultural diversity and traditional values underpin sustainable tourism in urban, multicultural contexts. For instance, research by Soini and Dessein (2016) proposed cultural sustainability as the fourth pillar of sustainable development, yet empirical evidence from Indonesian cities remains rare.

Digital transformation adds another dimension to this discussion. Social media platforms have become influential arenas for destination branding and public discourse on sustainability (Kim & Stepchenkova, 2020). Tourism narratives on Instagram, TikTok, and YouTube often highlight cultural festivals, heritage, and ecological campaigns, shaping how both locals and outsiders perceive Medan's identity as a cultural and sustainable destination (Rahman & Fitriani, 2023).

Thus, this study aimed to explore how cultural diversity and local wisdom in Medan shaped the foundation for sustainable and green tourism development, particularly through social media representations. The objectives were:

1. To identify how Medan's cultural pluralism is represented in online tourism narratives.
2. To analyze the presence of local wisdom values in sustainability messaging.
3. To discuss how these cultural-environmental elements contribute to green tourism discourse.

## **B. RESEARCH METHOD**

### **1. Research Design**

This study employed a qualitative descriptive research design, as it allows for an in-depth understanding of social meanings, cultural expressions, and environmental narratives. The approach was interpretive, focusing on the relationships between culture, sustainability, and digital tourism representation.

### **2. Research Setting and Data Sources**

The research was conducted virtually, focusing on tourism-related content about Medan, Indonesia, as represented in online media. The primary data sources included:

**Social Media Content:** Posts from Instagram, TikTok, and Facebook featuring hashtags such as *#WisataMedan*, *#BudayaMedan*, *#GreenTourism*, and *#SustainableTourism*.

**Official Sources:** Publications and digital campaigns by the Medan Tourism Office (Dinas Pariwisata Medan).

Community Accounts: Content created by local communities, cultural groups, and influencers promoting Medan's culture and sustainability.

The timeframe for data collection was January to October 2025, ensuring relevance to current tourism and sustainability trends.

### **3. Sampling Procedure**

A purposive sampling technique was used, focusing on content that explicitly highlighted both cultural diversity and environmental or sustainability values. Out of approximately 200 posts reviewed, 52 posts were selected as representative cases for analysis based on the following criteria:

Visual and textual relevance to cultural and environmental themes.

- Engagement level (likes, comments, and shares).
- Authenticity of source (official or community-based accounts).

### **4. Data Collection**

Data were collected by capturing screenshots and metadata (date, caption, hashtags, engagement metrics). Next the researcher collected archiving video transcripts or captions containing sustainability keywords (e.g., "eco-friendly," "heritage," "clean city," "community"). Contextual information were recorded from comment threads where relevant discussions about sustainability appeared.

### **5. Data Analysis**

Data analysis followed thematic analysis procedures (Braun & Clarke, 2006):

- Familiarization: Reading and viewing all selected data multiple times.
- Coding: Identifying key expressions related to cultural identity, local wisdom, and sustainability.
- Theme Development: Grouping codes into higher-level themes: (1) Cultural Pluralism, (2) Local Wisdom and Ecology, (3) Community Empowerment, and (4) Digital Sustainability Narratives.
- Interpretation: Comparing findings with existing literature on sustainable and green tourism.
- To enhance trustworthiness, triangulation was applied by cross-verifying social media data with official reports and previous academic studies. Researcher reflexivity was maintained through field notes and iterative discussion.

### **6. Ethical Considerations**

All social media content analyzed was publicly accessible. The study did not involve direct interaction with individuals; hence, ethical clearance was not mandatory. However, privacy was respected by anonymizing account names unless they represented official organizations.

## C. FINDINGS AND DISCUSSION

### 1. Cultural Pluralism as Medan's Tourism Identity

Analysis revealed that cultural diversity was a central narrative in Medan's digital tourism discourse. Posts frequently celebrated Batak traditional music (*gondang sabangunan*), Malay Deli architecture, Indian Tamil temple festivals, and Chinese heritage events such as the Hungry Ghost Festival. This aligns with findings by Richards (2022), who noted that cultural pluralism strengthens destination distinctiveness and social sustainability by promoting inclusivity and intercultural understanding.

For Medan, cultural pluralism acts as a form of cultural capital (Bourdieu, 1990), shaping the city's branding as "Little Indonesia." These narratives mirror what Su et al. (2023) described as inclusive tourism storytelling, where diversity itself becomes a value proposition for sustainability.

### 2. Local Wisdom and Ecological Ethics

Local wisdom surfaced as a recurring theme, represented through keywords like *gotong royong*, "*bersih lingkungan*" (clean environment), and "*peduli alam*" (care for nature). Posts featured communities cleaning rivers or public spaces before cultural festivals included an application of *gotong royong* rooted in Malay and Batak traditions.

These findings support Nanda et al. (2021), who argued that *kearifan lokal* (wisdom of Indonesia) functions as an ethical compass for ecological balance. Similarly, studies by Hadi et al. (2022) and Udayana et al. (2023) found that local environmental rituals help integrate cultural meaning into sustainability practice.

The integration of local wisdom into tourism not only preserves intangible heritage but also promotes responsible tourism behavior (Sharpley, 2020). Thus, Medan's local wisdom demonstrates how cultural ethics can evolve into modern environmental actions aligned with global sustainability frameworks.

### 3. Community-Based Tourism and Empowerment

Several digital campaigns showcased the empowerment of local communities managing tourism assets like traditional markets, culinary villages, and neighborhood festivals. These reflected principles of Community-Based Tourism (CBT), emphasizing local participation, fair benefit distribution, and cultural pride (Salazar, 2012; Giampiccoli & Mtapuri, 2020).

In the Medan context, communities in Kampung Madras and Kesawan heritage areas were shown organizing cultural events and clean-up programs supported by the municipal government. This supports Hall's (2020) argument that urban tourism sustainability requires cross-sector collaboration between residents, local government, and businesses.

### 4. Digital Narratives and Sustainability Communication

Social media analysis showed that sustainability was increasingly incorporated into tourism marketing. Hashtags such as #EcoMedan, #CleanCityMedan, and #BudayaHijau (Green Culture) appeared alongside cultural imagery. This integration creates digital hybridity such as a fusion of culture and environment in branding (Kim & Stepchenkova, 2020; Rahman & Fitriani, 2023). Digital storytelling thus acts as a bridge between tradition and modernity, amplifying cultural pride while educating audiences about environmental responsibility (Sihombing et al., 2024). However, as Mihalic (2020) cautioned, "green"

claims must be supported by real actions to avoid greenwashing. This remains a challenge for Medan's tourism agencies.

The four themes demonstrate that Medan's cultural diversity and local wisdom are essential components in building a sustainable and green tourism identity.

- Cultural pluralism provides a social foundation for inclusion and mutual respect.
- Local wisdom offers ethical guidance for environmental stewardship.
- Community-based practices ensure economic and social sustainability.
- Digital media serves as a communication and branding tool linking culture with ecological awareness.

These results corroborate previous studies emphasizing the integration of local culture into sustainability strategies (Richards, 2022; Soini & Dessein, 2016) while adding new insights from digital media analysis in a multicultural urban setting.

Although the findings are broadly consistent with previous investigations, such as those of Soini and Dessein (2016) who conceptualized culture as a fourth pillar of sustainability, and Su et al. (2023) who established links between diversity and community resilience, this study identifies a distinct research gap and conceptual advancement. Most previous works concentrated on rural or mono-cultural destinations, for instance, eco-village tourism in Bali (Udayana et al., 2023) or heritage-based community tourism in Yogyakarta (Nanda et al., 2021). The present research diverges from those approaches by examining an urban and highly multicultural environment in which sustainability narratives are constructed and circulated through digital media.

This distinction signifies a conceptual difference from the findings of Hall (2020) and Mihalic (2020), who described urban tourism sustainability as primarily policy-driven and top-down in nature. In contrast, the current study demonstrates that in Medan, sustainability discourse emerges organically from community and citizen engagement, particularly through the participatory use of social media. This bottom-up orientation indicates that cultural identity and local wisdom can become powerful agents for promoting environmental consciousness in digital public spaces.

Furthermore, while prior studies often portrayed culture as a static heritage commodity, this research presents culture as a dynamic communicative process that continuously evolves through digital interaction. The results therefore introduce the concept of digital cultural pluralism, where diverse cultural expressions and environmental ethics intersect within online tourism narratives. This perspective contributes to theoretical enrichment by linking cultural sustainability, digital communication, and green branding within the same analytical framework. It also highlights significant differences from earlier research by revealing how local communities in an urban multicultural setting such as Medan are capable of mobilizing cultural identity and ecological values to articulate a participatory model of sustainable tourism development.

Theoretically, the proposed concept of digital cultural pluralism extends the framework of cultural sustainability (Soini & Dessein, 2016) by situating culture within a digital communicative ecology. It redefines culture not as a static repository of traditions but as an adaptive system of meaning continuously reshaped through digital interaction. This theoretical advancement invites scholars to reconsider how digital participation reconfigures the social foundations of sustainable tourism.

The findings carry important implications for urban tourism policy. Local governments in Medan and similar multicultural cities could integrate cultural pluralism into their tourism master plans, ensuring that promotional narratives and development projects reflect both environmental and cultural sustainability. Institutional support for community-based tourism initiatives and cultural education programs would enhance social inclusion and sustain local identity while mitigating the risk of cultural commodification.

#### **D. CONCLUSION**

This study examined how cultural diversity and local wisdom contributed to the development of sustainable and green tourism in Medan, Indonesia. Drawing upon social media content, local tourism documents, and community narratives, the analysis demonstrated that Medan's multiculturalism serves as both a cultural resource and an ethical framework for sustainable tourism. The findings revealed that cultural pluralism not only enriches the city's tourism identity but also fosters inclusivity, social cohesion, and respect for ecological balance.

Local wisdom, manifested through values such as *gotong royong* (mutual cooperation), *dalihan na tolu* (social harmony), and reverence for nature, continues to guide environmentally responsible behaviors within communities. These values reinforce the moral foundation necessary for achieving sustainability goals. Moreover, digital media has become a powerful medium for communicating these principles, offering visibility to community-led initiatives and strengthening the city's image as an inclusive, culturally vibrant, and environmentally conscious destination.

The research underscores that sustainability in urban tourism cannot be achieved through policy or technology alone. It requires deep cultural engagement and the activation of local knowledge systems. The Medan case illustrates that environmental awareness and cultural identity are mutually reinforcing. When local communities integrate traditional wisdom into modern communication channels, they create a participatory model of green tourism that is both contextually grounded and socially transformative.

The study also contributes to theoretical understanding by proposing the concept of digital cultural pluralism, which captures how multiple cultural identities and environmental narratives coexist and interact within online spaces. This notion extends prior discussions of cultural sustainability by emphasizing the digital dimension of contemporary tourism discourse. Through this lens, sustainability is interpreted not merely as a managerial goal but as a lived cultural process continuously negotiated in digital and physical environments.

The study's reliance on digital content entails interpretive subjectivity inherent in qualitative research. Social media data, while valuable for revealing public narratives, may overrepresent certain socio-economic groups who are more digitally active. Acknowledging this limitation underscores the need for triangulation through field-based ethnography or participatory observation in future research.

However, the study recognizes several limitations. The use of qualitative content analysis based on social media data provides rich interpretive insights but does not capture the full spectrum of stakeholder perspectives, particularly those of policymakers, private sectors, and international visitors. The research also focused exclusively on Medan as an urban case study, which may limit the generalizability of the findings to other

Further research is also encouraged to investigate the long-term impacts of digital sustainability campaigns on tourist behavior and environmental outcomes. Quantitative

assessments could complement qualitative interpretations, allowing for more comprehensive evaluations of how cultural narratives influence actual sustainability practices. Additionally, exploring the intersections between artificial intelligence, data-driven tourism management, and local cultural preservation could open new pathways for understanding the evolving relationship between technology, culture, and sustainability. Future research could explore interdisciplinary approaches that merge cultural studies, data science, and sustainability governance. Understanding how algorithmic visibility, influencer culture, and virtual storytelling shape perceptions of sustainable tourism would deepen insights into the evolving relationship between culture, technology, and environmental ethics.

In conclusion, this study affirms that the success of sustainable and green tourism in multicultural urban environments depends on the integration of cultural diversity, local wisdom, and participatory communication. Medan's experience demonstrates that cultural heritage is not merely an attraction but a living system of values that can inspire collective environmental responsibility. By embracing cultural pluralism as a driver of sustainability, destinations can move beyond conventional tourism paradigms and build more inclusive, resilient, and ethically grounded forms of development.

## REFERENCES

- Badan Pusat Statistik. (2019). Neraca Satelit Pariwisata Nasional (Nesparnas) 2017. *Badan Pusat Statistik*.
- Badan Pusat Statistik. (2021). Tourism Satellite Account Indonesia 2016–2019. *Badan Pusat Statistik*.
- Bourdieu, P. (1990). The logic of practice. *Stanford University Press*.
- Erfurt-Cooper, P., Sigurdsson, H., & Lopes, R. M. C. (2015). Volcanoes and tourism. In H. Sigurdsson, B. Houghton, S. McNutt, H. Rymer, & J. Stix (Eds.), *The encyclopedia of volcanoes (2nd ed., pp. 1295–1311)*. Academic Press. <https://doi.org/10.1016/B978-0-12-385938-9.00075-4>
- Giampiccoli, A., & Mtapuri, O. (2020). Community-based tourism: Origins and present trends. *African Journal of Hospitality, Tourism and Leisure*, 9(1), 1–15.
- Hall, C. M. (2020). Constructing sustainable urban tourism: Place, politics and practice. *Tourism Geographies*, 22(1), 16–30. <https://doi.org/10.1080/14616688.2019.1665577>
- Hadi, W., Satria, D., & Sutikno, B. (2022). Local wisdom and sustainable tourism: The role of community participation in East Java, Indonesia. *GeoJournal of Tourism and Geosites*, 41(2), 356–364. <https://doi.org/10.30892/gtg.41202>
- Kim, H., & Stepchenkova, S. (2020). Effective digital destination marketing: Search engine optimization and online content strategy. *Journal of Travel Research*, 59(1), 78–98. <https://doi.org/10.1177/0047287518824159>
- Marisha, D. Y. (2020). Collaborative governance pemerintah daerah dan masyarakat dalam pengelolaan Pantai Duta di Kabupaten Probolinggo. *Universitas Muhammadiyah Malang Repository*. <http://eprints.umm.ac.id/id/eprint/59027>
- Mihalic, T. (2020). Conceptualising overtourism: A sustainability approach. *Annals of Tourism Research*, 84, 103025. <https://doi.org/10.1016/j.annals.2020.103025>
- Nanda, M. D., Rahmawati, T., & Astuti, D. (2021). Cultural heritage and local wisdom as driving factors of sustainable tourism in Yogyakarta, Indonesia. *International Journal of Cultural Tourism Research*, 3(2), 112–128.
- Richards, G. (2022). Cultural tourism: A review of recent research and trends. *Journal of Tourism Futures*, 8(2), 193–208. <https://doi.org/10.1108/JTF-04-2021-0091>
- Salazar, N. B. (2012). Community-based cultural tourism: Issues, threats and opportunities. *Journal of Sustainable Tourism*, 20(1), 9–22. <https://doi.org/10.1080/09669582.2011.596279>

- Sharpley, R. (2020). Tourism, sustainability and the limits of moral consumption. *Tourism Recreation Research*, 45(3), 319–330. <https://doi.org/10.1080/02508281.2019.1665109>
- Sihombing, R., Manurung, H., & Ginting, L. (2024). Digital storytelling and cultural identity in Medan's tourism promotion. *Journal of Tourism and Cultural Change*, 22(1), 25–41. <https://doi.org/10.1080/14766825.2024.1123589>
- Soini, K., & Dessein, J. (2016). Culture-sustainability relation: Towards a conceptual framework. *Current Opinion in Environmental Sustainability*, 8(2), 167. <https://doi.org/10.3390/su8020167>
- Su, M. M., Wall, G., & Xu, K. (2023). Cultural diversity and inclusive tourism: Reimagining sustainability in multicultural destinations. *Journal of Sustainable Tourism*, 31(7), 1423–1441. <https://doi.org/10.1080/09669582.2022.2056482>
- Udayana, I. P., Wirawan, I. M. A., & Purnama, A. G. (2023). Rituals and ecological consciousness: The role of Balinese local wisdom in sustainable tourism. *Geojournal of Tourism and Geosites*, 46(1), 89–101. <https://doi.org/10.30892/gtg.46108>