

Tourism business managers' practices for sustainable municipal tourism development

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Abstract

This study investigated the sustainable practices of tourism business managers in achieving municipal tourism development in Candelaria, Quezon. Employing a quantitative-descriptive research design, the study surveyed 35 experienced tourism business managers selected through purposive sampling to assess their sustainability practices, challenges, and perceived opportunities. The findings revealed that the respondents consistently implemented sustainable practices aligned with the Sustainable Development Goals (SDGs), particularly in promoting economic growth, environmental stewardship, and social development. Despite this strong commitment to sustainability, the respondents identified several challenges, including overconsumption of water and energy, inadequate transportation infrastructure, and a shortage of skilled tourism personnel. At the same time, they recognized significant opportunities to strengthen the tourism sector through technological innovation, multi-stakeholder collaboration, and enhanced community engagement. The study concludes that a gap exists between the competencies developed through tourism management education and the practical demands of the tourism industry. Consequently, it recommends that higher education institutions offering tourism management programs integrate sustainability-oriented and industry-responsive learning experiences into their curricula, with particular emphasis on risk management, digital literacy, and community-based tourism strategies. Aligning academic preparation with industry sustainability competencies will better equip future tourism professionals to contribute to resilient, responsible, and sustainable tourism development. The findings provide valuable insights for curriculum enhancement and serve as a strategic reference for municipal tourism planning and sustainable tourism development initiatives.

Keywords: *sustainable tourism, tourism business managers, tourism education, community-based tourism*

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1. Introduction

Tourism has become a major driver of economic growth, cultural preservation, employment generation, and community development across many municipalities worldwide. In the Philippines, the local tourism industry significantly contributes to the growth of small and medium enterprises (SMEs), infrastructure development, livelihood opportunities, and foreign currency generation. As one of the fastest-growing industries globally, tourism continues to drive economic development and socioeconomic advancement, particularly in emerging nations where financing opportunities remain limited (Thommandru, 2023). The expanding services sector in the Philippines creates crucial opportunities for tourism entrepreneurs and local communities to participate in sustainable economic activities. However, the rapid expansion of tourism has raised concerns about environmental degradation, sociocultural disruption, resource depletion, and the unequal distribution of economic benefits. These challenges highlight the growing need for sustainable tourism development that balances economic advancement with environmental protection, cultural preservation, and social responsibility (Camilleri, 2026; Đurić et al., 2025).

At the municipal level, tourism industries play a critical role in implementing sustainable tourism practices because they directly interact with local government units (LGUs), tourists, community members, and local businesses. Tourism business managers are key actors in this process, as they influence operational decisions, environmental practices, service delivery, strategic planning, and community engagement within tourism establishments and destinations. Their practices largely determine whether tourism development contributes positively to sustainability goals or leads to long-term environmental and social challenges. Moreover, sustainable tourism businesses require entrepreneurs and managers to possess multi-dimensional capabilities that encompass education, resource optimization, innovation, and strategic partnerships (Qiu, 2025).

Despite the recognized importance of sustainability, higher education institutions (HEIs) face a substantial disconnect in how future tourism professionals are prepared. Many tourism management curricula remain heavily focused on standardized technical and operational competencies (such as hotel front-office operations, food and beverage service, and basic ticketing), offering limited exposure to practical, sustainability-oriented management approaches used by tourism practitioners in real-world municipal settings (Elshaer & Marzouk, 2026). This creates a critical research gap. While existing literature extensively covers macro-

level sustainable tourism policies, there is a lack of empirical, localized studies linking the day-to-day sustainable practices, operational challenges, and perceived opportunities of municipal tourism managers directly to the specific competencies taught in higher education curricula. Consequently, this study addresses this gap by investigating the actual sustainable practices of tourism managers in Candelaria, Quezon, and using an Input-Process-Output (IPO) framework to derive concrete, evidence-based implications for curriculum enhancement and academic planning.

2. Literature Review

2.1 The Strategic Role of Tourism Business Managers in Local Economies

Tourism business managers function as critical operational nodes within local tourism destinations, translating macro-level sustainability policies into concrete business practices. SMEs represent a substantial share of local economies, generating direct and indirect employment, fostering entrepreneurship, and keeping tourism revenue within host communities (Thommandru, 2023). However, the operational success and innovative capacity of these establishments depend heavily on managers' strategic decisions, professional expertise, and cooperative networks. As McLeod et al. (2024) demonstrate, the structural characteristics of a manager's social and professional networks significantly shape the adoption of innovative business methods and sustainable operations. Through information brokerage, tourism managers align local economic incentives with environmental and social priorities, establishing resilient business models in dynamic markets.

2.2 Conceptual Foundations of Sustainable Tourism Development

Sustainable development (SD) refers to strategic approaches that maximize resource efficiency, ensure equitable economic benefits, and drive corporate transformation to address present needs without compromising the ability of future generations to meet their own needs (Safdie, 2024; Ruggerio, 2021). Within the tourism sector, sustainable development requires a deliberate balance between tourist consumption and the environmental carrying capacity of the destination. As Gonella et al. (2024) argue, a sustainable economy relies on the interdependent choices of governments, consumers, and enterprises in promoting circular economic models, waste-to-energy technologies, and responsible procurement. Green business strategies must bridge corporate green motivations with sustainable development goals to enhance

organizational reputation, gain stakeholder support, and optimize long-term economic performance (Yousaf et al., 2021).

2.3 Dimensions of Sustainable Tourism: Economic, Environmental, and Social Balance

Economic development. Economic sustainability in tourism aims to generate lasting financial benefits for local communities while minimizing economic leakage, where tourism spending flows out of the destination. Key principles include local hiring, local sourcing, and long-term investments in green technologies and public infrastructure (Qiu, 2025; Seraj et al., 2025). Aligning economic goals with local capacity ensures community empowerment and economic resilience (Elmo et al., 2020).

Environmental development. Environmental sustainability focuses on minimizing the ecological footprint of tourism activities. This requires managing resource consumption, protecting natural habitats, preserving biodiversity, and implementing efficient waste-treatment systems (Waaje et al., 2025). However, as Trivino (2023) notes, embedding environmental stewardship into corporate policies and organizational culture remains a significant challenge, requiring strong leadership and continuous training.

Social development. Social sustainability emphasizes enhancing the quality of life, preserving the cultural identity, and fostering social inclusion in host communities. Involving local residents in planning processes ensures equitable distribution of benefits and mitigates sociocultural strain, promoting social cohesion and mutual respect between tourists and locals (Caro-Carretero & Monroy-Rodríguez, 2025; Sonuç, 2020).

2.4 Empirical Challenges in Municipal Sustainable Tourism

Despite high awareness, municipal tourism managers face multi-dimensional, interconnected barriers to sustainability. A critical constraint is the lack of public and corporate awareness of sustainability principles, which limits stakeholder participation and leads to tourist behavior that degrades local ecosystems (Dias, 2023). Economically, the tension between short-term profitability and the substantial initial capital required for green technologies represents a significant barrier (Budeanu et al., 2016). Furthermore, social and governance challenges, including overcrowding, weak stakeholder communication, and

insufficient support from LGUs, often hinder the execution of comprehensive sustainability plans (Lu, 2025; Zambrano-Mieles et al., 2025).

2.5 Strategic Opportunities for Tech-Driven and Collaborative Sustainability

Transitioning toward sustainability presents major opportunities for competitive advantage, operational cost savings, and destination resilience. Environmentally, managers can implement structured waste-reduction strategies, such as the '11 R formula' (rethinking, refusing, reducing, reusing, repurposing, recycling, regifting, repairing, refilling, rotting, repeating) and digital food-waste monitoring systems (Hajam et al., 2023). Collaborative governance and public-private partnerships (PPPs) represent powerful mechanisms to address structural challenges, align municipal development with business growth, and build inclusive local value chains (Ramukumba, 2025). Moreover, the integration of advanced technologies, such as data analytics, artificial intelligence, and online marketing tools, enables advanced service customization and disaster-preparedness, allowing establishments to adapt quickly to evolving trends and risk profiles (Mohd Amin et al., 2025).

2.6 Theoretical Framework

This study is anchored in the Three Pillars of Sustainability and the Triple Bottom Line (TBL) theory, which posit that long-term developmental viability is achievable only when economic growth, environmental protection, and social equity are structurally balanced (Safdie, 2024). In the context of business operations, TBL functions as an integrated accounting framework that measures how corporate activities impact the economic, environmental, and sociocultural dimensions of the host destination (Saulters, 2012). Crucially, a net-positive TBL implies that long-term benefits in community empowerment and ecological preservation outweigh the operational losses and socio-cultural strains induced by high tourist volumes.

Additionally, the study incorporates the Models of Sustainability by Todorov and Marinova (2009), which bridge static models of environmental limits with the dynamic, policy-making criteria proposed by Boulanger and Bréchet (2005): economic development, ecological economics, social development, and environmental protection and improvement. These frameworks collectively guide the analysis of how municipal tourism managers navigate resource overconsumption, infrastructural gaps, and regulatory demands to establish resilient,

inclusive, and sustainable enterprise operations that can actively inform curriculum development in higher education.

3. Methodology

3.1 Research Design

To systematically investigate and quantify the sustainability practices, challenges, and opportunities of municipal tourism business managers, this study employed a quantitative-descriptive research design. Descriptive research is optimal for gathering empirical data to identify, describe, and report the current status of a specific population or operational phenomenon (McCombes, 2023). This method is well-suited for this study because it enables the systematic analysis of how demographic characteristics, operational sustainability, and structural challenges interact to shape academic implications for tourism management education.

3.2 Participants and Sampling Design

The target population of this study consisted of experienced tourism business managers operating in the Municipality of Candelaria, Quezon. Purposive sampling was used to select thirty-five (35) managers from private tourism establishments, including hotels, resorts, restaurants, and cafes. To ensure legal capacity and high data reliability, the inclusion criteria required that all participants be at least eighteen (18) years of age and that their respective establishments had been operational for a minimum of five (5) years. This ensured that the respondents possessed extensive, first-hand managerial experience and a deep understanding of local tourism dynamics, resource constraints, and municipal administrative processes.

The local tourism workforce in Candelaria, Quezon, exhibits a mature, highly educated, and relatively stable demographic profile. The balanced concentration of managers in mid-career age brackets (31–50 years old), combined with high educational attainment (82.86% college graduates) and partnerships as the primary business type, establishes a solid foundation for sustainable decision-making. Furthermore, female leadership (45.71%) represents a major driver of sustainable and collaborative management styles, which are crucial for integrating environmental, social, and economic responsibility into local operations.

3.3 Research Instrumentation and Validation

The primary data-collection tool was a self-developed, structured questionnaire designed to assess the variables of interest. The instrument was structured into four distinct sections:

Part I: Demographic profile of the respondents (including age, gender, marital status, highest educational attainment, and business type).

Part II: Sustainable tourism practices, consisting of 15 items evaluated across three dimensions (economic growth, environmental management, and social development) using a 4-point Likert scale (ranging from Always [4] to Never [1]).

Part III: Perceived operational challenges, containing 15 items across three core sub-domains (environmental, infrastructure/accessibility, and human resource/governance) evaluated on a 4-point Likert scale (ranging from Strongly Agree [4] to Strongly Disagree [1]).

Part IV: Perceived business development opportunities, consisting of 15 items across four dimensions (environmental sustainability, partnership/governance, technology/risk management, and community engagement/visitor experience) using a 4-point Likert scale (Strongly Agree [4] to Strongly Disagree [1]).

To establish the reliability and validity of the instrument, formal face and content validation was conducted by three research experts from different HEIs. Following their expert recommendations, the questionnaire was pilot-tested with twenty (20) tourism managers from Manila and Quezon Province (outside the main sample) to verify its readability, semantic clarity, and internal reliability prior to actual deployment.

3.4 Data Gathering and Ethical Protocols

Data gathering was conducted systematically following strict administrative and ethical clearances. The researchers obtained formal clearance by submitting written request letters to the general managers and owners of the participating establishments in Candelaria, Quezon. The questionnaires were administered face-to-face to ensure high response rates and to allow the researchers to clarify any ambiguities for the respondents in real time.

In strict compliance with the Philippine Data Privacy Act of 2012, all participants were guaranteed complete anonymity and confidentiality. Respondents were provided with informed consent forms and explicitly given the option to remain anonymous to safeguard their identities, prevent social desirability bias, and ensure highly honest, unbiased responses. No

personal data, individual responses, or identifying establishment characteristics were disclosed or shared with third parties.

3.5 Data Analysis Plan

The quantitative data were checked for completeness, coded, and tabulated using Microsoft Excel, and analyzed using descriptive statistics. The level of sustainable practices and perceived challenges were evaluated using median scores to provide robust measures of central tendency, as the Likert-scale data are ordinal.

3.6 Conceptual Framework: The IPO Model

The study is structured around an Input-Process-Output (IPO) model to illustrate the flow of data and its integration into academic planning. The Input stage includes the demographic characteristics of the tourism managers (age, gender, marital status, educational attainment, business type), their self-reported sustainable tourism practices, and the perceived operational challenges and business development opportunities. The Process stage involves the systematic face-to-face collection, statistical analysis, and thematic interpretation of the quantitative data to identify recurring operational patterns and structural needs. Finally, the Output stage focuses on formulating industry-responsive and sustainability-oriented implications for higher education, including structural curriculum enhancements, active-learning modules, and strategic partnerships to bridge the academic-industry readiness gap.

4. Findings and Discussion

Table 1 details the specific environmental challenges encountered by local tourism business managers. The respondents generally agree that environmental barriers represent a persistent challenge to operational continuity, yielding an overall median score of 3.20 ('Agree'). The single most critical environmental challenge identified is the overconsumption of water and energy, which obtained a median of 4.00 ('Strongly Agree'). This reflects the serious operational and financial pressures that inefficient resource use places on local enterprises, driving up utility bills and operating overheads. This finding is highly aligned with Aldhamiri (2026), who noted that hospitality establishments are under severe regulatory and economic pressure to limit utility footprints.

Table 1*Environmental challenges encountered by local tourism business managers*

Statements	Median	Interpretation
We experience hazards and potential disasters caused by rising global temperatures and extreme weather events that disrupt our tourism operations.	3.00	Agree
We are exposed to environmental and human health risks due to air, water, and land pollution from waste contamination.	3.00	Agree
We experience challenges related to the overconsumption of water and energy, which threatens resource sustainability and increases operational costs.	4.00	Strongly Agree
We encounter issues with overcrowding of tourists at key destinations, which negatively impacts visitor experience and resource management.	3.00	Agree
We are affected by fertilizer runoff that pollutes drinking water sources and poses significant risks to environmental and public health.	3.00	Agree
Composite Median Score	3.20	Agree

Additionally, respondents agreed that they face risks from extreme weather disasters, waste pollution, and tourist overcrowding (3.00, 'Agree'). Improper tourist behavior, such as waste generation and pollution, remains a major challenge due to public apathy and poor localized environmental management systems (Baloch et al., 2023). Uncontrolled visitor overcrowding also degrades the quality of local ecosystems and water resources. As Papadopoulou et al. (2023) and Mihalic and Kuščer (2022) suggest, managing tourist overcrowding is vital to preserving regional carrying capacity and sustaining long-term tourist loyalty and resident satisfaction. Proactive environmental strategies and disaster-preparedness protocols are therefore indispensable for municipal tourism managers (Đurić et al., 2025).

Table 2 details the infrastructure and accessibility challenges faced by the surveyed managers. The empirical findings show that the respondents strongly agree that infrastructural constraints represent a severe operational hurdle, yielding a composite median of 3.60 ('Strongly Agree'). Specifically, poor road quality and limited transportation options received a median of 4.00 ('Strongly Agree'). Inadequate transportation infrastructure directly impairs traveler safety and comfort, acting as a major barrier that limits accessibility to key attractions and degrades regional destination image. This is strongly supported by Want (2026), who notes that infrastructural gaps and traveler safety perceptions represent the primary factors shaping destination attractiveness. Similarly, Jipa et al. (2025) emphasized that road transport remains

the sole mobility option in areas disconnected from rail networks, making continuous infrastructure development essential for regional tourism competitiveness.

Table 2

Perceived infrastructure and accessibility challenges

Statements	Median	Interpretation
We experience reduced comfort and safety in tourist travel due to limited transportation options and poorly maintained roads.	4.00	Strongly Agree
We encounter challenges in coordination and marketing due to limited internet access and unreliable communication networks in remote areas.	3.00	Agree
We experience competitive pressure and the need for continuous adaptation due to the rapid growth of online booking platforms and digital marketing.	4.00	Strongly Agree
We recognize the importance of designing and building digital environments that accommodate the needs and preferences of people with different abilities and impairments.	4.00	Strongly Agree
We face barriers to inclusion and equal opportunity due to a lack of awareness of the needs and preferences of people with disabilities, as well as the benefits of accessible infrastructure.	3.00	Agree
Composite Median Score	3.60	Strongly Agree

The rapid digitalization of marketing and booking platforms also places high competitive pressure on managers, obtaining a median of 4.00 ('Strongly Agree'). This requires establishments to continuously upgrade digital systems and upskill their workforces. Furthermore, respondents strongly agreed on the ethical and operational importance of building digital environments to accommodate persons with disabilities (4.00, 'Strongly Agree'), although they agreed that a lack of public awareness represents a major barrier to implementing accessible physical and digital infrastructures (3.00, 'Agree'). As Salman et al. (2026) demonstrated, attitudinal barriers and limited exposure to accessible transport technologies significantly hinder the social integration of individuals with disabilities.

As detailed in Table 3, human resource and governance constraints represent the highest-rated challenge category, with a composite median of 3.80 ('Strongly Agree'). Specifically, the lack of skilled tourism professionals, low community involvement, and insufficient participation from local government units (LGUs) all achieved a median of 4.00 ('Strongly Agree'). The persistent shortage of qualified workers directly limits service quality and operational growth. This is highly consistent with Elshaer and Marzouk (2026), who

documented a significant skills mismatch between university curricula and industry demands, underscoring the urgent need for a closer alignment of academic programs with modern sector requirements. Continuous vocational assessment and curricular updates are essential to address these skill gaps.

Table 3

Perceived human resource and governance challenges

Statements	Median	Interpretation
We experience limitations in delivering quality services due to a lack of skilled workers.	4.00	Strongly Agree
We encounter challenges in achieving sustainable tourism practices due to low levels of community involvement.	4.00	Strongly Agree
We experience difficulties in sustaining tourism development and meeting operational needs due to insufficient participation of local government units.	4.00	Strongly Agree
We experience the need to adapt to rapid changes in organizational management to meet evolving environmental requirements.	3.00	Agree
We face challenges due to local labor code policies that are not aligned with the principles of human stability.	4.00	Strongly Agree
Composite Median Score	3.80	Strongly Agree

Furthermore, the lack of LGU participation and low community engagement represent major governance barriers that hinder the implementation of long-term sustainable initiatives and the alignment of business strategies with municipal tourism policies. To overcome these barriers, organizations must adopt sustainability-driven green human resource management (GHRM) practices and develop organizational agility to rapidly adapt to regulatory changes (Jalali et al., 2026; Vadiathe et al., 2026). By incorporating green recruitment, targeted environmental training, and public-private dialogue, managers can foster a cohesive, sustainability-focused culture that supports both community growth and operational competitiveness (Nansamba & Rotich, 2026).

The data in Table 4 demonstrate that tourism managers recognize environmental sustainability as a major strategic pathway for business growth, yielding an overall median of 3.40 ('Agree'). Specifically, respondents strongly agreed that sustainable tourism must prioritize balanced economic growth without environmental degradation and enhance overall

service quality (4.00, 'Strongly Agree'). This implies that the transition toward sustainability is viewed not merely as an ethical choice but as an operational and competitive necessity. This is supported by Qamruzzaman et al. (2026), who highlighted the critical trade-offs between tourism expansion and carbon emissions, emphasizing that robust regulatory structures and sustainable policies are vital to ensure ecological stability. Similarly, Han et al. (2026) argued that shifting toward sustainable tourism models requires integrating ecological preservation with tourists' psychological identity, thereby building high destination attachment and long-term brand loyalty.

Table 4

Perceived environmental sustainability opportunities

Statements	Median	Interpretation
We see potential in transitioning to renewable energy sources, reducing greenhouse gas emissions across sectors, and developing climate-resilient infrastructure.	3.00	Agree
We recognize opportunities to reduce pollution and improve waste management practices to protect natural and cultural resources.	3.00	Agree
We prioritize the sustainable management of water and energy resources to ensure long-term operational efficiency.	3.00	Agree
We aim to maintain high and stable levels of economic growth that achieve positive outcomes without causing short- or long-term harm to the environment.	4.00	Strongly Agree
We support improvements in the quality of tourism through enhanced patterns of sustainable tourism development that contribute to environmental sustainability.	4.00	Strongly Agree
Composite Median Score	3.40	Agree

The findings in Table 5 reveal an exceptionally strong consensus, with all indicators receiving a median score of 4.00 ('Strongly Agree'). Cooperative governance and inter-industry collaboration are viewed as essential mechanisms to resolve operational challenges and build resilient local supply chains. By establishing partnerships with local transport providers, agricultural farms, and artisanal retail shops, managers can build tight, sustainable local value chains.

Table 5*Perceived partnership and governance opportunities*

Statements	Median	Interpretation
We build partnerships with transport service providers, restaurants, and local product businesses to strengthen local value chains.	4.00	Strongly Agree
We collaborate with local government units to address tourism-related issues and align strategies for sustainable growth.	4.00	Strongly Agree
We establish networks or alliances with tourism associations and non-governmental organizations to share best practices and advocate for sustainable tourism policies.	4.00	Strongly Agree
We support government programs and promote sustainable livelihoods to achieve shared objectives, including fostering innovation, enhancing employee engagement, and advancing social responsibility.	4.00	Strongly Agree
We advocate for policies that create lasting impacts across business networks and the tourism industry while strengthening collaboration in government taxation policies.	4.00	Strongly Agree
Composite Median Score	4.00	Strongly Agree

As Aslan (2026) suggests, integrating circular economy concepts with local supply chains allows enterprises to transition from linear waste models to sustainable, resource-efficient systems. Furthermore, formal collaboration with LGUs, NGOs, and tourism associations ensures proper alignment of business operations with municipal policies. This is supported by Ramukumba (2025), who argued that multi-stakeholder collaborative governance offers a superior alternative to top-down administrative planning, allowing SMEs to actively participate in strategic destination planning and advocate for fair tax policies (Nansamba & Rotich, 2026).

As detailed in Table 6, technological innovation and robust risk-management protocols are recognized as highly critical opportunities, achieving a composite median of 4.00 ('Strongly Agree'). Upgrading digital systems directly enhances service speed, online visibility, and strategic marketing capacity. Crucially, the use of real-time monitoring tools, data analytics, and artificial intelligence-powered engines enables managers to move away from outdated demographic-based marketing to highly personalized client experience, tracking customer behaviors and maximizing satisfaction. Digital systems also support evidence-based decision-making, trend analysis, and operational resilience.

Table 6*Perceived technological and risk-management opportunities*

Statements	Median	Interpretation
We upgrade technology to enhance online communication, marketing, and service delivery.	4.00	Strongly Agree
We develop contingency plans for disaster preparedness to reduce operational risks.	4.00	Strongly Agree
We utilize data analytics and digital tools to monitor tourism trends and support evidence-based decision-making.	4.00	Strongly Agree
We provide tools that help communities become technologically literate, stay ahead of trends, and maintain business continuity.	4.00	Strongly Agree
We enable businesses to adapt quickly and stay ahead of the competition through real-time monitoring and effective safety protocols for sustained success.	4.00	Strongly Agree
Composite Median Score	4.00	Strongly Agree

Additionally, developing structured disaster-preparedness plans is recognized as essential to mitigate operational risks in areas prone to natural hazards. In modern tourism, digital transformation cannot succeed in isolation; it must be backed by a digital-literate workforce, adaptive work habits, and active support from public sector institutions to enhance municipal service delivery (Polukhina et al., 2025). Empowering local communities with technology tools further ensures shared resilience and business continuity during market crises.

The data in Table 7 demonstrate a strong consensus, with all indicators achieving a median of 4.00 ('Strongly Agree'). Integrating local residents in strategic planning and designing authentic, visitor-centered experiences serve as primary drivers for sustainable municipal tourism. Empowering community members promotes cultural heritage protection and ensures that economic benefits are shared equitably. Offering highly authentic, culturally immersive experiences (such as regional culinary tours, agricultural activities, and heritage storytellers) enhances destination attractiveness and fosters a powerful emotional connection and personal identity among visitors, driving long-term customer loyalty (Solomon et al., 2026).

Encouraging ethical travel practices and training local tour guides are also critical components. Well-trained tour guides are indispensable for the sustainable management of cultural sites, educating visitors on ecological and sociocultural sensitivity, and mitigating

negative impacts. Aligning community empowerment with ethical traveler behaviors creates a cohesive, responsible local tourism ecosystem (Jalali et al., 2026).

Table 7

Perceived community engagement and visitor experience opportunities

Statements	Median	Interpretation
We empower and integrate local communities in planning and developing sustainable tourism initiatives.	4.00	Strongly Agree
We encourage responsible travel practices among tourists to promote ethical and respectful behavior.	4.00	Strongly Agree
We offer meaningful travel experiences that highlight sustainability and cultural authenticity.	4.00	Strongly Agree
We create authentic and sustainable tourism products that benefit the local community and encourage visitors to appreciate and preserve natural resources.	4.00	Strongly Agree
We promote culinary tourism to generate economic opportunities for local restaurants, food producers, and farmers, thereby strengthening the local economy.	4.00	Strongly Agree
Composite Median Score	4.00	Strongly Agree

5. Implications for Higher Education and Curriculum Design

The rich empirical findings in this study have profound implications for HEIs offering tourism and hospitality management programs. The distinct challenges identified by active practitioners, including utility overconsumption, road transport safety, lack of digital literacy, and poor community involvement, indicate that traditional, operationally focused curricula are no longer sufficient to meet modern industry demands. Higher education must shift from a narrow, growth-only operational paradigm to an interdisciplinary, sustainability-centered model (Elshaer & Marzouk, 2026).

Specifically, curricula should integrate structured, evidence-based modules that cultivate competencies in GHRM, collaborative governance, environmental risk mitigation, and digital data analytics (Vadithe et al., 2026). Academic training must move beyond classroom lectures to incorporate hands-on, industry-responsive learning experiences. Students should be trained to use real-time monitoring systems, design disaster contingency plans, use data tools to predict tourist behavior, and coordinate with diverse municipal stakeholders. Aligning academic preparation with the empirical practices and challenges of active managers

is essential to bridge the skills readiness gap and prepare competent, ethical, and socially responsible future tourism leaders.

5. Conclusion and Recommendations

Municipal tourism business managers demonstrate a very high level of commitment to sustainable practices across economic, environmental, and social dimensions. However, this commitment is constrained by human resource and governance challenges, infrastructure limitations, digital competition, and high consumption of water and electricity. At the same time, managers recognize substantial opportunities through stronger partnerships, technological innovation, disaster preparedness, community empowerment, and authentic cultural and culinary tourism.

Based on the findings, tourism business owners and managers are encouraged to formalize sustainability policies, strengthen green human resource practices, provide environmental training, and adopt digital tools for monitoring resource consumption. Local government units should strengthen public-private partnerships, improve transport and digital infrastructure, and establish supportive tourism policies. Industry associations should facilitate knowledge sharing, promote circular supply chain practices, and advocate for fair local taxation. Local communities should be actively involved in community-based tourism planning and cultural heritage initiatives to ensure that tourism development supports local empowerment.

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Institutional Review Board Statement

This study was conducted in accordance with the ethical guidelines set by Manuel S. Enverga University Foundation-Candelaria, Inc. The conduct of this study has been approved and given the relative clearance(s) by Manuel S. Enverga University Foundation-Candelaria, Inc.

AI Declaration

The author declares the use of Artificial Intelligence (AI) in writing this paper. In particular, the author used ChatGPT and LMNotebook in summarizing key points and paraphrasing ideas. The author takes full responsibility in ensuring proper review and editing of content generated using AI.

References

- Aldhamiri, A. (2026). An advanced eco-solution to address the excessive consumption of water, electricity, and towels/linen at luxury hotels/resorts: An incentive-linked smart meter system to influence consumer behaviors. *Sustainability*, 18(5), 2447. <https://doi.org/10.3390/su18052447>
- Aslan, M. (2026). Supply and value chains and the circular tourism economy. *Journal of Circular Economy in Tourism*, 4(1), 112-125. <https://doi.org/10.1108/978-1-83662-916-020251003>
- Baloch, Q. B., Shah, S. N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., & Khan, A. U. (2023). Impact of tourism development upon environmental sustainability: A suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, 30(3), 5917–5930. <https://doi.org/10.1007/s11356-022-22496-w>
- Boulanger, P.-M., & Bréchet, T. (2005). Models for policy-making in sustainable development: The state of the art and perspectives for research. *Ecological Economics*, 55(3), 337-350. <https://doi.org/10.1016/j.ecolecon.2005.07.033>
- Budeanu, A., Miller, G., Moscardo, G., & Ooi, C. S. (2016). Sustainable tourism: Progress, challenges, and opportunities. *Journal of Cleaner Production*, 111, 285-294. <https://doi.org/10.1016/j.jclepro.2015.10.027>
- Camilleri, M. A. (2026). *Environmental, social, and governance (ESG) factors for sustainable tourism development: The way forward toward destination resilience and growth*.

- Business Strategy and the Environment, 35(3), 4057-4082. <https://doi.org/10.1002/bse.70366>
- Caro-Carretero, R., & Monroy-Rodriguez, S. (2025). Residents' perceptions of tourism and sustainable tourism management: Planning to prevent future problems in destination management. *The case of Cáceres, Spain*. *Cogent Social Sciences*, 11(1), 2447398. <https://doi.org/10.1080/23311886.2024.2447398>
- Dias, A. (2023). Barriers and policies affecting the implementation of sustainable tourism: The Portuguese experience. *Journal of Policy Research in Tourism, Leisure, and Events*, 18(1), 45-59. <https://doi.org/10.1080/19407963.2024.2314514>
- Đurić, Z., Cvijanović, D., Petek, V., & Potočnik Topler, J. (2025). Sustainability struggle: Challenges and issues in managing sustainability and environmental protection in local tourism destination practices—An overview. *Sustainability*, 17(15), 7134. <https://doi.org/10.3390/su17157134>
- Elmo, G. C., Arcese, G., Valeri, M., & Poponi, S. (2020). Sustainable tourism in rural areas: A bibliometric analysis of scientific literature. *Sustainability*, 12(15), 6028. <https://doi.org/10.3390/su12156028>
- Elshaer, A. M., & Marzouk, A. M. (2026). Balancing education and training in higher tourism education institutions. *Tourism and Hospitality Education: Progress, Challenges, and Prospects*, 4(2), 85-102. <https://doi.org/10.1201/9781779640758-14>
- Gonella, J. dos S. L., Godinho Filho, M., Campos, L. M. S., & Ganga, G. M. D. (2024). People's awareness and behaviours of circular economy around the world: Literature review and research agenda. *Sustainability Accounting, Management and Policy Journal*, 15(5), 1118–1154. <https://doi.org/10.1108/SAMPJ-08-2022-0413>
- Hajam, Y. A., Kumar, R., & Kumar, A. (2023). Environmental waste management strategies and vermi transformation for sustainable development. *Environmental Challenges*, 13, 100747. <https://doi.org/10.1016/j.envc.2023.100747>
- Han, C., Yuan, H., & Kim, Y. (2026). From diversified development to sustainable destination management: Mechanisms linking tourist psychological identity and cultural tourism sustainability. *Sustainability*, 18(1), 473. <https://doi.org/10.3390/su17157134>
- Jalali, A., Abhari, S., Jaafar, M., Palalić, R., & bin Paijo, M. A. N. (2026). How tourist motivation drives sustained loyalty: A study of push and pull factors in community-based tourism enterprises. *Journal of Enterprising Communities: People and Places in the Global Economy*, 20(1), 1-18. <https://doi.org/10.1108/JEC-06-2025-0211>
- Jipa, A.-N., Lequeux-Dincă, A.-I., Teodorescu, C., Gheorghilaş, A., & Roangheş-Mureanu, A.-M. (2025). Railway accessibility as an opportunity for rural tourism sustainability in Romania. *Economies*, 13(9), 270. <https://doi.org/10.3390/economies13090270>
- Lu, B. (2025). Sustainable tourism management: Balancing economic growth and environmental preservation. *Journal of Lifestyle & SDG's Review*, 5(5), 112-127. <https://doi.org/10.47172/2965-730X.SDGsReview.v5.n05.pe06587>
- McCombes, S. (2023). Descriptive Research Definition, Types, Methods & Examples. *Scribbr*. <https://www.scribbr.com/methodology/descriptive-research>
- McLeod, M., Newman, A., & Simmons, R. (2024). Strategic networks and business model innovation in municipal tourism destinations. *Journal of Business Research*, 174, 114421. <https://doi.org/10.60083/jidt.vi0.644>
- Mihalic, T., & Kuščer, K. (2022). Can overtourism be managed? Destination management factors affecting residents' irritation and quality of life. *Tourism Review*, 77(1), 16-34. <https://doi.org/10.1108/TR-04-2020-0186>

- Mohd Amin, M. R., Asbi, A., Sivakumaran, V. M., Kim, J., & Septiarini, E. (2025). Artificial intelligence (AI) adoption in marketing strategies: Navigating the present and shaping the future business landscape. *Social Sciences & Humanities Open*, 12, 102048. <https://doi.org/10.1016/j.ssaho.2025.102048>
- Nansamba, E., & Rotich, D. (2026). Determinants, implementation dynamics, and operational impacts of hospitality-related public policies. *Journal of Frontiers in Humanities and Social Sciences*, 4(2), 1-22. <https://doi.org/10.69897/jofhscs.v4i2.348>
- Papadopoulou, N. M., Ribeiro, M. A., & Prayag, G. (2023). Psychological determinants of tourist satisfaction and destination loyalty: The influence of perceived overcrowding and overtourism. *Journal of Travel Research*, 62(3), 644-662. <https://doi.org/10.1177/0047287522108904>
- Polukhina, A., Sheresheva, M., Napolskikh, D., & Lezhnin, V. (2025). Digital solutions in tourism as a way to boost sustainable development: Evidence from a transition economy. *Sustainability*, 17(3), 877. <https://doi.org/10.3390/su17030877>
- Qamruzzaman, M., Manickavasagam, T., & Manickavasagam, G. (2026). Analyzing the impact of tourism development and political stability on environmental sustainability in Nepal: Empirical evidence using Fourier approximation and machine learning technique. *Journal of Computer Science*, 19(1), 88-102. <https://computersciencejournal.org/wp-content/uploads/7-3.pdf>
- Qiu, H. (2025). Analyzing the economic sustainability of tourism development: From Hong Kong. *Journal of Hospitality & Tourism Research*, 49(2), 244-258. <https://doi.org/10.1177/1096348018777046>
- Ramukumba, T. (2025). Tourism collaborative governance: The views of tourism small and medium-sized enterprises in rural areas. *Interdisciplinary Journal of Management Sciences*, 2(1), a04-a04. <https://doi.org/10.38140/ijms-2025.vol2.1.04>
- Ruggerio, C. A. (2021). Sustainability and sustainable development: A review of principles and definitions. *Science of the Total Environment*, 786, 147481. [10.1016/j.scitotenv.2021.147481](https://doi.org/10.1016/j.scitotenv.2021.147481)
- Safdie, S. (2024, March 27). *What are the three pillars of sustainable development?* Greenly. <https://greenly.earth/en-us/blog/company-guide/3-pillars-of-sustainable-development>
- Salman, F., Horváth, B., & Jóna, L. (2026). Assessing accessibility barriers at public transport stops for people with disabilities: Study in Hungary. *European Transport Studies*, 3, 100059. <https://doi.org/10.1016/j.ets.2026.100059>
- Saulters, O. (2012, August). *Advancing green sustainable environmentally preferable purchasing as a strategic process for improved partnerships & more resilient campus community* [Conference paper]. Sustainability Symposium.
- Seraj, M., Ike, O.C. & Ozdeser, H. The contribution of tourism on GDP growth and sustainable tourism development in Africa. *Futur Bus J* 11, 115 (2025). <https://doi.org/10.1186/s43093-025-00532-8>
- Solomon, E. N. A., Braimah, S. M., Odoom, R., & Mensah, K. (2026). Storytelling in heritage tourism: The role of storytellers in shaping diasporic visitor experience and promoting Ghanaian heritage. *Tourism Critiques: Practice and Theory*, 7(1), 1-26. <https://doi.org/10.1108/TRC-06-2025-0029>
- Sonuç, N. (2020). Sustainable Tourism (Sustainable Development of Tourism, Sustainable Tourism Management). In: Idowu, S., Schmidpeter, R., Capaldi, N., Zu, L., Del Baldo, M., Abreu, R. (eds) *Encyclopedia of Sustainable Management*. Springer, Cham. https://doi.org/10.1007/978-3-030-02006-4_454-1

- Thommandru, A., Espinoza-Maguiña, M., Ramírez-Asís, E., Ray, S., Naved, M., & Guzmán-Avalos, M. (2023). Role of tourism and hospitality business in economic development. *Materials Today: Proceedings*, 80(3), 2901–2904. <https://doi.org/10.1016/j.matpr.2021.07.059>
- Todorov, V. I., & Marinova, D. (2009). Models of sustainability. In R. S. Anderssen, R. D. Braddock, & L. T. H. Newham (Eds.), *18th World IMACS/MODSIM Congress, Cairns, Australia, 13–17 July 2009* (pp. 1216–1222). Modelling and Simulation Society of Australia and New Zealand.
- Trivino, J. B. (2023). Challenges of embedding sustainability in organizational culture. *Journal of Business, Ethics and Society*, 3(2), 1-14. <https://doi.org/10.61781/3-2II2023/1bmlm>
- Vadithe, R. N., Rajput, R. C., Kesari, B., & Kundurthy, S. S. (2026). Integrating Green HRM Practices for Green Organizational Culture and Organizational Agility: A Mediation Analysis. *Business Strategy & Development*, 9(1), e70268. <https://doi.org/10.1002/bsd2.70268>
- Waaje, A., Roshid, M. M., Islam, S., Bhowmik, R. C., Rahaman, M. A., & Hassan, M. M. (2025). Tourism, trade, energy, and economic development: Drivers of ecological footprint in the world's top tourist destinations. *Innovation and Green Development*, 4(3), 100249. <https://doi.org/10.1016/j.igd.2025.100249>
- Want, I. B. (2026). Destination hospitality in Kashmir: A secondary data analysis of tourist perceptions. *SSRN*. <https://doi.org/10.2139/ssrn.6717338>
- Yousaf, Z., Radulescu, M., Sinisi, C. I., Serbanescu, L., & Paunescu, L. M. (2021). Harmonization of green motives and green business strategies towards sustainable development of hospitality and tourism industry: Green environmental policies. *Sustainability*, 13(12), 6592. <https://doi.org/10.3390/su13126592>
- Zambrano-Mieles, J. D., Mieles-Cevallos, D. N., Suntasig-Tuasa, L. J., & Fabiani-Orbea, L. (2025). Challenges and opportunities in local sustainable tourism: A systematic review focusing on community participation and regional development. *Journal of Posthumanism*, 5(1), 1062–1078. <https://doi.org/10.63332/joph.v5i1.636>