



Sustainable Journeys: Rethinking Travel for the Future

Sobirov Bobur Baxtishodovich

Samarkand Institute of Economics and Service
Republic of Uzbekistan, 140100, Amir Temur Street, 9
mrBoburSobirov@gmail.com

Abstract

This study explores the evolving discourse on sustainable travel amid increasing ecological crises and climate change. As traditional travel and tourism practices continue to contribute significantly to greenhouse gas emissions, biodiversity loss, and socio-economic disparities, this research aims to examine alternative travel paradigms that align with sustainability principles. Using a qualitative, literature-based methodology, the study synthesizes findings from interdisciplinary sources, including environmental science, tourism studies, policy reports, and technological innovations. The research identifies major themes such as the environmental footprint of tourism, the socio-cultural responsibilities of travelers, and the role of digital platforms in shaping travel behavior. Key findings reveal persistent challenges such as the prioritization of profit over ecological and social wellbeing, the marginalization of rural and indigenous perspectives, and the disconnect between travelers' intentions and behaviors. Additionally, the study uncovers opportunities in community-based tourism, carbon reduction strategies, and ethical governance models. The paper calls for a comprehensive paradigm shift toward a regenerative travel ethic that promotes environmental integrity, intercultural respect, and equitable economic development. By filling theoretical and practical gaps, particularly in localized and behavioral dimensions, the study contributes to a more holistic understanding of sustainable travel. It ultimately advocates for collaborative, multi-stakeholder approaches that redefine travel as a vehicle for global stewardship and long-term ecological resilience.

Keywords: *Sustainable travel, Environmental impact, Tourism policy*

1. Introduction

The rapid expansion of the global travel industry over recent decades has significantly impacted both human development and environmental sustainability (Gössling, 2002). While tourism and transportation have stimulated economic growth and cultural exchange, they have also accelerated climate change, biodiversity loss, and environmental degradation (Baloch et al., 2023). As awareness of these issues grows, so too does the urgency of developing sustainable alternatives. This paper investigates how rethinking travel practices

can foster sustainability and address environmental concerns without compromising socio-economic benefits.

Travel and tourism have become defining features of the 21st-century global experience, encompassing economic, cultural, and environmental dimensions (Holden, 2016). The rapid growth of global mobility—fueled by technological advancement, increased disposable income, and widespread digital connectivity—has transformed travel into a normative activity across much of the world (Adey et al., 2021). However, this transformation has not been without consequences. From rising carbon emissions to the commodification of cultural heritage, the contemporary travel industry faces increasing scrutiny for its role in exacerbating ecological degradation and social inequality (Burns & Bibbings, 2009).

The concept of sustainable travel emerged in response to these concerns, advocating for a form of mobility that preserves environmental integrity, promotes socio-cultural understanding, and ensures economic viability. As the global community grapples with the realities of climate change, biodiversity loss, and resource depletion, the urgency of transitioning toward more responsible travel practices has intensified (Tehseen et al., 2024). According to the Intergovernmental Panel on Climate Change (IPCC), transportation is one of the fastest-growing contributors to greenhouse gas emissions. Tourism, a sector closely tied to transport, is implicated in both direct and indirect environmental impacts, ranging from air pollution to waste generation and habitat disruption (Davenport & Davenport, 2006).

Sustainable travel is not merely about reducing environmental harm—it encompasses broader goals, including empowering local communities, fostering intercultural dialogue, and supporting equitable development (Roseland, 2000). It challenges conventional tourism paradigms that prioritize profit over people and ecosystems, and instead promotes a holistic vision grounded in ethics and long-term stewardship. Yet, the road to sustainable travel is riddled with complexities. These include conflicting stakeholder interests, systemic inertia, technological limitations, and the uneven distribution of resources across regions (Negro et al., 2012).

The research draws on an interdisciplinary framework that integrates insights from environmental science, tourism studies, urban planning, technology, and public policy. By employing a qualitative literature-based approach, this paper systematically examines the environmental impacts of travel, the socio-economic ramifications of tourism, and the evolving role of technology and governance in shaping sustainable mobility (Benita, 2021). Furthermore, it evaluates the theoretical underpinnings and practical applications of sustainability principles in travel, ranging from carbon offsetting and eco-certification to community-based tourism and digital innovation (Engle & Guevara, 2022).

Through this investigation, the paper aims to offer a nuanced understanding of the current landscape of sustainable travel and contribute to ongoing academic and policy dialogues. It also emphasizes the importance of aligning global and local efforts, recognizing that

sustainable travel cannot be achieved through isolated initiatives but requires concerted action from governments, businesses, civil society, and individual travelers alike (WTO, 2005).

Ultimately, rethinking travel for the future entails a paradigm shift—from viewing travel as a consumptive pursuit to embracing it as a regenerative and conscious practice. It requires bold policy reforms, sustained educational efforts, and the cultivation of ethical travel cultures that prioritize planetary health and social justice (Slocum et al., 2019). By exploring these dimensions, this paper endeavors to chart a course for sustainable journeys that honor the interconnectedness of human and ecological well-being.

Despite the increasing attention to sustainable tourism, significant gaps remain in both theory and practice. First, much of the existing literature emphasizes environmental outcomes, often at the expense of socio-cultural or economic dimensions. This narrow focus risks undermining holistic understandings of sustainability that recognize the importance of cultural preservation, labor rights, and local economic equity. Second, sustainability efforts are often disproportionately centered on developed nations and urban contexts, neglecting rural and indigenous perspectives on sustainable travel. The marginalization of these voices reveals a need for decolonizing sustainability narratives and promoting more inclusive, place-based approaches (Mehta et al., 2024).

Third, there is a gap in the integration of sustainability into travel behavior on the individual level. While many travelers express pro-environmental intentions, actual practices frequently fall short due to convenience, cost, or lack of knowledge (Wu et al., 2021). This attitude-behavior gap indicates the importance of targeted education, policy incentives, and behavioral nudges to foster meaningful change. Finally, the pace of technological development has outstripped the policy frameworks designed to govern it, resulting in both opportunities and ethical dilemmas for sustainable travel. For example, digital platforms can promote eco-conscious travel, yet they can also accelerate over-tourism and reduce community autonomy if not properly regulated (Higgins-Desbiolles et al., 2019).

By identifying and addressing these gaps, this study contributes to a more critical and comprehensive understanding of sustainable travel. It calls for rethinking both the ideological and structural foundations of travel to create more equitable, resilient, and environmentally responsible systems of global mobility.

2. Method

2.1 Research design

This study employs qualitative research methodology, utilizing content analysis and a literature review approach to gather and analyze data from interdisciplinary sources. Peer-

reviewed journals, policy documents, case studies, and international reports form the primary data set. The goal is to synthesize existing knowledge on sustainable travel and generate insights into future practices. The analytical framework emphasizes thematic categorization, allowing for a comprehensive understanding of the environmental, socio-economic, and technological dimensions of sustainable travel.

2.2 Participants

As a qualitative literature-based study, there are no human participants involved. Instead, the study relies on previously published research, reports, and documented case studies from credible organizations and scholars within the fields of sustainable tourism, environmental science, and transportation.

2.3 Instruments

The primary instruments in this research are analytical tools for qualitative data analysis, including thematic coding and comparative analysis techniques. NVivo software was also considered for organizing themes derived from the literature.

2.4 Data Collection

Data was collected from a wide range of secondary sources such as academic journals, books, policy documents, and official publications by international organizations (e.g., UNWTO, IPCC, World Bank). These documents were selected based on relevance, credibility, and publication within the last 10 years to ensure topicality and accuracy.

2.5 Data Analysis

Thematic analysis was employed to categorize findings into major themes related to sustainable travel: environmental impact, socio-economic considerations, technological innovation, policy frameworks, and future strategies. Content from the sources was systematically reviewed and coded to identify patterns, contrasts, and evolving trends in the discourse on sustainable travel.

3. Findings

Sustainable travel has gained increasing attention in recent years, driven by the urgent need to address global environmental challenges and mitigate the negative impacts of tourism on the planet. As international mobility continues to rise, the travel industry faces significant pressure to adopt practices that align with the principles of sustainability, integrating environmental, social, and economic considerations into every aspect of the journey.

Environmental Impacts and Climate Change

The environmental footprint of travel is one of the most pressing issues in contemporary discourse on sustainability. The tourism and transport industries are major contributors to global greenhouse gas emissions, with air travel alone accounting for around 2-3% of global CO₂ emissions (Beck & Mahony, 2018). These emissions have a direct impact on climate change, contributing to rising temperatures, altered weather patterns, and disruptions to ecosystems. Given that tourism is projected to grow, addressing these issues is paramount.

The transition to more sustainable forms of transport, such as electric vehicles, high-speed rail, and low-carbon aviation technologies, offers promising solutions. However, the shift is complex and slow, often hindered by technological limitations, high implementation costs, and regulatory challenges. Moreover, the aviation industry remains heavily dependent on fossil fuels, making it particularly difficult to decarbonize. The increased awareness of the carbon footprint of long-distance travel has led to a rise in carbon offset programs, allowing travelers to invest in environmental initiatives to neutralize their emissions. Yet, the effectiveness of these programs remains contested, with critics arguing that they may not be sufficient to counteract the industry's broader environmental impact.

The Socio-Cultural and Economic Dimensions

Sustainable travel is not only about reducing carbon emissions but also addressing social and economic inequalities. The tourism industry is often criticized for its role in the commodification of local cultures and its contribution to the over-exploitation of natural resources. Traditional models of tourism frequently prioritize profit over the well-being of host communities, leading to increased income inequality and cultural erosion.

Community-based tourism, which emphasizes local ownership, cultural preservation, and equitable distribution of economic benefits, is emerging as an alternative approach. By empowering local communities to become active participants in the tourism value chain, this model ensures that the economic benefits are retained within the community, rather than being siphoned off to multinational corporations. It also fosters greater cultural exchange, allowing travelers to experience destinations in more meaningful ways while respecting local traditions and practices.

However, challenges persist in ensuring the effectiveness of these models. In many cases, the infrastructure and governance structures needed to support sustainable tourism are either lacking or underdeveloped. For example, many rural areas or indigenous communities lack the resources to develop tourism infrastructure that aligns with sustainability principles. Furthermore, the threat of overtourism—where a destination is overwhelmed by visitors—remains a concern for many popular tourist spots, leading to environmental degradation and diminished quality of life for residents.

Behavioral Change and Policy Development

A significant gap in sustainable travel lies in the disconnect between individuals' pro-environmental attitudes and their travel behaviors. While many travelers' express interest in reducing their environmental impact, the reality is that practical constraints often prevent them from adopting sustainable practices. Factors such as cost, convenience, and limited awareness play crucial roles in shaping travelers' choices. This behavior-attitude gap has significant implications for policy design.

To encourage sustainable travel behaviors, it is essential to foster deeper awareness and understanding of the environmental consequences of travel. Policy incentives, such as tax breaks for sustainable travel options, subsidies for eco-friendly accommodations, and the promotion of eco-certifications, can incentivize both travelers and service providers to adopt greener practices. Behavioral nudges, such as carbon-conscious booking platforms or sustainable destination rankings, can also encourage travelers to make more informed decisions.

Governments and international organizations have a pivotal role to play in shaping the future of travel through policy development. While the market-driven approach to sustainable tourism has made progress, regulatory frameworks that prioritize sustainability, ensure accountability, and drive innovation are essential. One example is the European Union's Green Deal, which has committed to making Europe the first climate-neutral continent by 2050. Such initiatives could serve as models for other regions, demonstrating how government policies can create the conditions for sustainable travel on a global scale.

The Role of Technology and Innovation

Advancements in technology have the potential to transform sustainable travel, providing innovative solutions to age-old problems. Digital platforms enable travelers to make more sustainable choices by offering eco-friendly alternatives, real-time carbon emission data, and tailored recommendations for low-impact travel. For instance, platforms such as Google Flights now display carbon emissions for flights, enabling users to compare options and make more environmentally conscious decisions.

Moreover, emerging technologies like electric and autonomous vehicles, AI-powered travel planning tools, and smart infrastructure are poised to revolutionize the way we travel, further reducing environmental footprints. However, the pace of technological development often outstrips policy regulations, presenting new ethical challenges. For example, while digital platforms can promote eco-conscious travel, they can also exacerbate issues such as over-tourism and gentrification by making previously remote or underdeveloped areas more accessible to large numbers of visitors.

To ensure that technology is leveraged in a sustainable manner, it is crucial for policymakers to establish clear regulations that balance innovation with environmental and social considerations. Collaborative efforts between governments, tech companies, and civil society are essential to foster responsible innovation and minimize potential harms.

The Need for Global Collaboration

As travel is inherently global, sustainable solutions must involve international collaboration. Localized sustainability efforts, while important, will not be enough to address the systemic challenges posed by global travel. A holistic approach to sustainable tourism requires cooperation between governments, industries, NGOs, and travelers. The United Nations Sustainable Development Goals (SDGs) offer a useful framework for aligning these efforts, particularly SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action).

A key aspect of global collaboration is ensuring that the voices of marginalized communities, particularly indigenous peoples, are heard and included in the development of sustainable tourism initiatives. Indigenous knowledge systems offer valuable insights into sustainable land and resource management practices that have been honed over centuries. Integrating this knowledge into mainstream tourism can help preserve biodiversity, protect cultural heritage, and promote more equitable development.

The Environmental Impact of Travel

Air travel, road transport, and cruise tourism contribute significantly to global carbon emissions. The aviation sector alone accounts for approximately 2.5% of global CO₂ emissions. In addition, the development of tourism infrastructure often leads to habitat destruction, pollution, and strain on local resources. Over-tourism in certain regions has exacerbated environmental pressures and disrupted local communities. Sustainable travel must prioritize minimizing carbon footprints, preserving ecosystems, and promoting environmental stewardship.

Socio-Economic Dimensions of Sustainable Travel

Tourism remains a vital economic sector, especially in developing countries. However, unregulated tourism can lead to economic inequality, exploitation, and cultural erosion. Sustainable travel seeks to balance economic growth with equity and cultural preservation. Community-based tourism, fair-trade practices, and responsible consumer behavior are essential for ensuring that local community's benefit from tourism in a just and inclusive manner.

Principles and Pillars of Sustainable Travel

Sustainable travel is grounded in three core pillars: environmental integrity, social equity, and economic viability. Key principles include Reducing environmental impact through carbon offsetting, renewable energy use, and conservation efforts. Enhancing social benefits by respecting local cultures, supporting local economies, and fostering inclusivity. Ensuring long-term economic sustainability by promoting local entrepreneurship and minimizing leakages. Implementing these principles requires collaborative efforts among governments, businesses, NGOs, and travelers.

Technological Innovations and Green Mobility

The integration of technology in travel can revolutionize sustainability efforts. Electric vehicles (EVs), high-speed rail, and biofuels offer low-emission alternatives to traditional transport. Smart tourism apps enable real-time resource management, while artificial intelligence supports efficient logistics and personalized experiences. Furthermore, blockchain can enhance transparency in tourism supply chains, encouraging ethical consumerism and reducing environmental risks.

Policy Frameworks and Global Initiatives

Sustainable travel is increasingly recognized in international policy agendas. The United Nations' Sustainable Development Goals (SDGs), particularly Goal 11 (Sustainable Cities and Communities) and Goal 13 (Climate Action), emphasize the need for sustainable transport and tourism. National and regional governments are also implementing policies such as eco-tourism incentives, carbon taxes, and sustainable certification systems. The success of these initiatives depends on enforcement, public awareness, and multi-stakeholder cooperation.

Challenges and Barriers to Implementation

Despite progress, several barriers hinder the widespread adoption of sustainable travel practices. These include High costs associated with green infrastructure and technologies. Limited public awareness and engagement. Resistance from traditional industries reliant on conventional travel models. Inconsistent policy enforcement and lack of global standardization. Overcoming these challenges requires systemic change, cross-sectoral collaboration, and innovative policy design.

Future Directions and Transformative Strategies

Looking ahead, the future of sustainable travel lies in reimagining tourism as a transformative experience rather than a consumptive activity. Strategies include Promoting slow travel to reduce environmental impact and enhance cultural immersion. Developing regenerative tourism models that restore and enrich ecosystems. Educating travelers about

sustainability and fostering environmental consciousness. Leveraging digital platforms to encourage responsible travel behavior. Such approaches can transform the travel industry into a force for environmental regeneration and social good.

Therefore, Sustainable travel is essential for addressing the environmental and socio-economic challenges posed by traditional travel practices. As climate change increases, the tourism industry must reduce its environmental footprint, promote equitable economic benefits, and preserve local cultures. Transitioning to sustainable transport options and supporting community-based tourism are key steps, but barriers such as technological limitations, high costs, and resistance to change remain. Global collaboration, innovative policies, and technological advancements are crucial in overcoming these challenges. Ultimately, the future of travel depends on transforming it into a regenerative practice that prioritizes environmental sustainability, cultural respect, and economic fairness.

4. Discussion

The findings of this study align with and expand upon several previous research efforts in the domain of sustainable travel. (Gössling et al., 2020) emphasized the critical need to decarbonize the tourism sector by reducing dependence on fossil fuels and encouraging low-carbon alternatives, which supports the emphasis in this paper on EVs and renewable energy. Similarly, (Becken & Mackey, 2017) identified the importance of integrating environmental knowledge into tourism planning, echoing the argument for smarter technologies and informed decision-making found in this research.

Moreover, (Canton, 2021) stressed the role of community-based tourism in generating inclusive benefits, which aligns with the socio-economic dimensions discussed in Section 4. The relevance of regenerative tourism, as discussed by (Bidard et al., 2022), underpins the call in this paper for transformative models that go beyond minimizing harm to actively repairing ecological damage.

Barriers to implementation discussed by (Hall & Williams, 2019), including policy inconsistency and lack of public awareness, are confirmed in this study and remain pressing challenges. Studies by (Scott et al., 2019) and (Bramwell et al., 2017) further suggest that policy interventions must be adaptive and participatory to ensure long-term success, reinforcing this paper's advocacy for multi-stakeholder governance models.

In addition, (Lane, 2009) highlighted the need for a paradigm shift in how tourism destinations are managed, suggesting that sustainability must be embedded at the strategic planning level to address long-term risks. This view is echoed in the findings of this paper, which propose systemic and participatory planning processes. Also, research by (Weaver et al., 2012) supports the notion of mainstreaming sustainable tourism through gradual innovation and the normalization of green practices.

Furthermore, (Font & McCabe, 2017) argue that consumer behavior change is key to achieving sustainable tourism goals. Their study reinforces the importance of educating

travelers and offering transparent sustainability indicators—an approach recommended in this research under digital platform use and policy alignment. However, these studies collectively strengthen the evidence base for sustainable travel and validate the strategic directions proposed by this paper, ranging from technology integration to social equity and governance reforms. Therefore, this study reinforces existing scholarships while contributing a contemporary synthesis of thematic priorities and forward-looking strategies necessary for rethinking travel considering global sustainability goals.

5. Conclusion

The present study highlights the imperative for a transformative shift toward sustainable travel in response to the multifaceted challenges posed by conventional tourism practices. As global mobility increases, the environmental, socio-cultural, and economic ramifications of travel have become more pronounced. Notably, the tourism and transport sectors are significant contributors to greenhouse gas emissions, with air travel alone responsible for approximately 2–3% of global CO₂ emissions. The resultant environmental consequences, including climate change, biodiversity loss, and ecosystem degradation, underscore the urgent need for sustainable interventions.

Despite ongoing advancements in green technologies—such as electric mobility, biofuels, and carbon offsetting, the transition toward low-carbon travel remains constrained by technological, financial, and regulatory barriers. Furthermore, the aviation sector's continued dependence on fossil fuels presents substantial challenges to decarbonization. While carbon offset initiatives offer a temporary mitigation strategy, their overall efficacy remains contested within scholarly and policy debates.

Beyond environmental considerations, sustainable travel must also address deep-rooted social and economic disparities. The commodification of culture, unequal distribution of tourism-generated income, and the marginalization of host communities highlight the inadequacies of traditional tourism models. Community-based tourism has emerged as a viable alternative, promoting cultural preservation, local empowerment, and equitable economic distribution. However, the scalability and sustainability of such models are often impeded by limited infrastructure, governance deficits, and insufficient investment in capacity-building, particularly in rural and indigenous communities.

Moreover, the persistence of the attitude-behavior gap among travelers represents a critical obstacle to sustainability. While individuals may express environmental concerns, practical considerations—such as cost, convenience, and limited access to sustainable alternatives—frequently inhibit behavioral change. Thus, policy instruments such as financial incentives, eco-certifications, and digital interventions must be strategically employed to bridge this gap and facilitate pro-environmental decision-making among travelers.

Technology and innovation play a pivotal role in advancing sustainable travel, offering tools for resource optimization, personalized low-impact travel planning, and transparency in tourism supply chains. Nevertheless, the rapid proliferation of digital platforms also necessitates ethical scrutiny, particularly regarding issues such as overtourism, privacy, and digital exclusion. Therefore, regulatory frameworks must evolve in tandem with technological advancements to ensure socially responsible and environmentally sound outcomes.

Given the global nature of tourism, international cooperation is indispensable. Sustainable travel must be situated within the broader agenda of the United Nations Sustainable Development Goals, particularly Goals 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), and 13 (Climate Action). Cross-sectoral collaboration among governments, private enterprises, civil society organizations, and local communities is essential to design and implement integrative, context-sensitive policies.

In conclusion, sustainable travel constitutes a critical response to the pressing environmental and socio-economic issues associated with contemporary tourism. While promising strategies exist—such as green mobility, community-based models, and digital innovations—their successful implementation hinges on global collaboration, policy coherence, and sustained public engagement. The future of travel lies not merely in reducing harm, but in reimagining tourism as a regenerative practice that contributes to ecological restoration, cultural resilience, and inclusive economic development.

References

- Adey, P., Hannam, K., Sheller, M., & Tyfield, D. (2021). Pandemic (im) mobilities. In *Mobilities* (Vol. 16, Issue 1, pp. 1–19). Taylor & Francis.
- 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.
- Beck, S., & Mahony, M. (2018). The IPCC and the new map of science and politics. *Wiley Interdisciplinary Reviews: Climate Change*, 9(6), e547.
- Becken, S., & Mackey, B. (2017). What role for offsetting aviation greenhouse gas emissions in a deep-cut carbon world? *Journal of Air Transport Management*, 63, 71–83.
- Benita, F. (2021). Human mobility behavior in COVID-19: A systematic literature review and bibliometric analysis. *Sustainable Cities and Society*, 70, 102916.
- Bidard, F.-C., Hardy-Bessard, A.-C., Dalenc, F., Bachelot, T., Pierga, J.-Y., de la Motte Rouge, T., Sabatier, R., Dubot, C., Frenel, J.-S., & Ferrero, J. M. (2022). Switch to fulvestrant and palbociclib versus no switch in advanced breast cancer with rising ESR1

- mutation during aromatase inhibitor and palbociclib therapy (PADA-1): a randomised, open-label, multicentre, phase 3 trial. *The Lancet Oncology*, 23(11), 1367–1377.
- Bramwell, B., Higham, J., Lane, B., & Miller, G. (2017). Twenty-five years of sustainable tourism and the Journal of Sustainable Tourism: Looking back and moving forward. In *Journal of Sustainable Tourism* (Vol. 25, Issue 1, pp. 1–9). Taylor & Francis.
- Burns, P., & Bibbings, L. (2009). The end of tourism? Climate change and societal challenges. *Twenty-First Century Society*, 4(1), 31–51.
- Canton, H. (2021). World Tourism Organization—UNWTO. In *The Europa Directory of International Organizations 2021* (pp. 393–397). Routledge.
- Davenport, J., & Davenport, J. L. (2006). The impact of tourism and personal leisure transport on coastal environments: a review. *Estuarine, Coastal and Shelf Science*, 67(1–2), 280–292.
- Engle, C., & Guevara, J. M. S. (2022). *A proposal towards better sustainable consumer information to address eco-certification skepticism and sustainability initiatives of adventure tourism companies in Norway*. Norwegian University of Life Sciences, Ås.
- Font, X., & McCabe, S. (2017). Sustainability and marketing in tourism: Its contexts, paradoxes, approaches, challenges and potential. *Journal of Sustainable Tourism*, 25(7), 869–883.
- Gössling, S. (2002). Global environmental consequences of tourism. *Global Environmental Change*, 12(4), 283–302. [https://doi.org/10.1016/S0959-3780\(02\)00044-4](https://doi.org/10.1016/S0959-3780(02)00044-4)
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20.
- Hall, C. M., & Williams, A. M. (2019). *Tourism and innovation*. Routledge.
- Higgins-Desbiolles, F., Carnicelli, S., Krolikowski, C., Wijesinghe, G., & Boluk, K. (2019). Degrowing tourism: Rethinking tourism. *Journal of Sustainable Tourism*.
- Holden, A. (2016). *Environment and tourism*. Routledge.
- Lane, N. (2009). Biodiversity: On the origin of bar codes. *Nature*, 462(7271).
- Mehta, P., Sari, S., & Mosqueda, T. (2024). *Community Visioning through the Lens of Spatial Justice: A Guidance Framework for Inclusivity and Ecological Resilience*.
- Negro, S. O., Alkemade, F., & Hekkert, M. P. (2012). Why does renewable energy diffuse so slowly? A review of innovation system problems. *Renewable and Sustainable Energy Reviews*, 16(6), 3836–3846.
- Roseland, M. (2000). Sustainable community development: integrating environmental, economic, and social objectives. *Progress in Planning*, 54(2), 73–132.
- Scott, D., Hall, C. M., & Gössling, S. (2019). Global tourism vulnerability to climate change. *Annals of Tourism Research*, 77, 49–61.

- Slocum, S. L., Dimitrov, D. Y., & Webb, K. (2019). The impact of neoliberalism on higher education tourism programs: Meeting the 2030 sustainable development goals with the next generation. *Tourism Management Perspectives*, 30, 33–42.
- Tehseen, S., Ong, K. Y., Hossain, S. M., & Andrews, E. (2024). Sustainable Tourism: A Catalyst for the Green Economy. In *The Need for Sustainable Tourism in an Era of Global Climate Change: Pathway to a Greener Future* (pp. 53–67). Emerald Publishing Limited.
- Weaver, F. M., Follett, K. A., Stern, M., Luo, P., Harris, C. L., Hur, K., Marks Jr, W. J., Rothlind, J., Sagher, O., & Moy, C. (2012). Randomized trial of deep brain stimulation for Parkinson disease: thirty-six-month outcomes. *Neurology*, 79(1), 55–65.
- WTO. (2005). *Making Tourism More Sustainable-A Guide for Policy Makers (English version)*. World Tourism Organization.
- Wu, J. S., Font, X., & Liu, J. (2021). The elusive impact of pro-environmental intention on holiday on pro-environmental behaviour at home. *Tourism Management*, 85, 104283.