


Chapter 9


Sustainable Tourism in the Digital Age: Leveraging Technology for Enhanced Practices, Experiences, and Sustainability Challenges

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ABSTRACT

Sustainable tourism management is a critical issue in the modern tourism industry, focusing on maximizing benefits to local communities, minimizing negative environmental impacts, and preserving natural and cultural heritage. This chapter explores the integration of sustainability principles into tourism practices, emphasizing the role of technology in enhancing sustainable tourism experiences and addressing challenges. The chapter begins by discussing the concept of sustainable tourism management and its importance in achieving long-term environmental, social, and economic goals.

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1. INTRODUCTION TO SUSTAINABLE TOURISM MANAGEMENT

Sustainability is the latest concept in tourism industry and environment friendly tourism is believed to be the only way to minimise negative impacts (Miller and Spoolman, 2016). Sustainable tourism management refers to the process of managing tourism in a way that maximizes the benefits to local communities, minimizes negative impacts on the environment, and promotes the conservation of natural and cultural heritage. Sustainable Tourism is a sustainable approach to the tourism industry, aiming to minimize negative impacts and maximize positive ones. It involves the integration of sustainability principles into all aspects of tourism development and operations. Any travel that serves the needs of current visitors and the community while safeguarding the intent of the future travellers is sustainable tourism (Edgell, 2019). To guarantee that, tourism can be sustained throughout time, it entails the careful management of all resources, including natural, cultural, and human resources (Murphy & Price, 2012). The capacity of sustainable tourism management to maintain natural and cultural resources, boost regional economies, and advance social welfare makes it crucial (Streimikiene et al., 2021). Destinations may attract environmentally and socially concerned travellers, strengthen their competitive edge, and help the world accomplish its sustainability goals by incorporating sustainability concepts into its tourism policies.

Technology is essential to sustainable tourism management because it helps destinations operate more efficiently, improve guest experiences, and perform better environmentally (Loureiro & Nascimento, 2021). Digital technologies are becoming key enablers of sustainable tourism development, providing new opportunities for improving destination management, enhancing visitor experiences (Polishchuk et al., 2023). Technologies that can be used to track and control the effects of tourism, encourage sustainable behavior, and include visitors in sustainability projects include information and communication technology (ICT), big data analytics, and the Internet of Things (IoT). In general, sustainable tourism management is necessary to guarantee that tourism can minimize adverse effects on the environment and society while continuing to benefit destinations, communities, and tourists (Ali et al., 2020). By incorporating technology into sustainable tourism practices, travel destinations can provide more responsible and pleasurable travel experiences while still achieving their sustainability goals (Sharma & Kumar, 2024).

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