

From Arrivals to Value: Tourism, AI and SDG 9

Swarup Raj J, Gayas Ahmad*

VIT, Vellore, India

*Corresponding Author

ABSTRACT

The rise of AI and FinTech is driving towards a transformation in tourism from being driven by volume (the number of tourists) to precision (matching the tourist's needs) as we see destinations competing for an understanding of machines rather than people. Using Sustainable Development Goal (SDG 9), Industry, Innovation and Infrastructure, the objective of the study is to examine the relationship between demand for infrastructure-based tourism and value creation through innovative processes. The study utilizes time-series annual data from 1996 to 2024, using international visitor arrivals (TA) in India as a proxy for the combined factors of accessibility & infrastructure (related to SDG 9.1), while international tourism receipts (TR) in India will serve as a proxy for digital innovation and capability (related to SDG 9.c & 9.5). The framework of the Tourism Satellite Account (TSA) provides a conceptual basis to analyze the relationship between tourism flows and the value of those flows, particularly by referencing TSA Table 1 (Inbound Tourism Expenditure) and TSA Table 6 (Tourism Gross Value Added). An econometric analysis using the Gretl software with Ordinary Least Squares and time-series diagnostic tests was performed. The findings of this econometric analysis indicate a strong statistical correlation between tourism arrivals and tourism receipts, indicating that mobility created by tourism-related infrastructure positively contributes to tourism value.

Keywords: Artificial Intelligence, FinTech in Tourism, Sustainable Development Goal 9 (SDG 9), Tourism Infrastructure, Tourism Value Creation

