

Leveraging Geospatial Technology for Tourism Mapping and Development: A Case Study of Pasikuda, Sri Lanka

¹MRF. Rahna and ²AWF. Zamha

^{1,2}Department of Geography, South Eastern University of Sri Lanka

Correspondence: rahnarazook24@gmail.com

Abstract

Tourism, defined as short-term travel for leisure or business, plays a vital role in fostering interactions between residents and visitors from diverse regions. The Pasikuda area in Sri Lanka's Batticaloa district, situated approximately 35 kilometres northwest of the city centre, stands out as a premier coastal tourism destination. Renowned for its tranquil, shallow waters, vibrant coral reefs, and rich marine biodiversity, Pasikuda Beach attracts a significant number of tourists and supports a range of resorts and recreational facilities. This study aims to: Identify and map key tourist attractions in the Pasikuda region using Geographic Information Systems (GIS) technology, Support sustainable tourism development in the area through targeted geospatial analysis. The research methodology combines primary data collected via field observations and stakeholder interviews with secondary data sourced from statistical records and graphical analyses. Utilizing GIS, the study produces layered maps that illustrate transportation networks, accommodation options, healthcare facilities, and zones designated for environmental conservation. These geospatial outputs enhance travel planning, improve tourism management, and contribute to the safety and sustainability of tourism in Pasikuda. Ultimately, the research demonstrates how GIS technology can be effectively applied to promote and manage tourism development in coastal regions.

Keywords: Pasikuda beach, geospatial technology, tourism development, GIS mapping, environmental conservation