

PREFACE

This thesis, titled "GIS-Based Analytical Hierarchy Process (AHP) Approach for Identifying Potential Eco-Tourism Locations in Idukki District, Kerala, India," is the culmination of extensive research and analysis aimed at promoting sustainable ecotourism. My interest in leveraging geospatial technologies to support environmental conservation and economic development in Kerala guided the focus of this study.

The study integrates Geographic Information Systems (GIS) with the Analytical Hierarchy Process (AHP) to assess the suitability of various sites for ecotourism, considering environmental, socio-economic, and safety factors. The innovative combination of these methodologies provides a robust framework for informed decision-making, ensuring the selection of optimal sites for sustainable tourism development.

A significant component of this research is the incorporation of landslide risk zones into the site suitability analysis. Recognizing the vulnerability of the Idukki District to landslides, this aspect of the study aims to enhance the safety and resilience of proposed ecotourism locations, aligning with Sustainable Development Goals (SDGs).

I express my heartfelt gratitude to my advisors, colleagues, and family for their unwavering support and encouragement throughout this journey. Their guidance and insights have been invaluable in completing this work. I hope this thesis contributes meaningfully to the field of sustainable tourism and serves as a resource for future researchers and policymakers.