

**VALLAI AND THONDAMANARU AREAS AS NATURE-BASED ECOTOURISM
DESTINATIONS IN JAFFNA PENINSULA, SRI LANKA**

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Ecotourism is responsible travel to natural areas that foster environmental understanding, promote conservation, and sustain local communities' culture and well-being. Vallai and Thondamanaru areas are situated in the northern part of the Jaffna Peninsula, associated with the Thondamanaru lagoon. The objective of the present study was to assess the ecotourism potential of these two areas using Geospatial analysis based on studies undertaken from 2013 to 2018. Multi-Criteria Decision Method and criteria ranking method in GIS were used for suitability analysis. The evaluation process for potential sites was conducted based on several selected criteria viz. bird species diversity, tourist preferences, proximity to residential areas, proximity to tourists' accommodation, distance from main roads, scenic beauty, density and distribution, and facilities (factors selected according to literature and expert opinion). Suitability analyses were based on four aspects: greater flamingo, other waterbirds, mangroves, and beaches. These considered criteria are not the same for each category. The ranking levels were applied within the criterion and between the criteria. A suitability map was produced through overlaying criteria based thematic maps. From the Jaffna sites' ranking analysis, the potential status of study areas was derived. The study revealed that Vallai and Thondamanaru areas have high potential based on greater flamingos and other waterbirds. On the other hand, Akkarai Beach and mangroves within the study area represent low potential. Of the study areas, Thondamanaru recorded 3,281 individuals belonging to 58 bird species, and Vallai recorded 17,045 individuals belonging to 83 species. At least 4,612 individuals of greater flamingo were recorded from Vallai and 736 from Thondamanaru. Even though these areas have great potential for ecotourism, which should be promoted from a sustainable point of view, lack of investments, promotional activities and infrastructure facilities negatively impact ecotourism development of the study areas.

Keywords: GIS, Multi-Criteria analysis, Nature-based tourism, Thondamanaru, Vallai