

## **Solid Waste Disposal Site Selection in Thiruvananthapuram Corporation Area by Data Analysis Using GIS and Remote Sensing Tools**

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**Abstract :** Currently increasing population and their activities like urbanization and industrialization generating the greatest environmental, issue called Waste. And the major problem in waste management is selection of an appropriate site for waste disposal. The selection of suitable site have constrains like environmental, economical and political considerations. In this paper we discuss the strategies to be followed while selecting a site for decentralized system for solid waste disposal, using Geographic Information System (GIS), the Analytical Hierarchy Process (AHP) and the remote sensing method for Thiruvananthapuram corporation area. It is located on the west coast of India near the extreme south of the mainland. It lies on the shores of Killiyar and Karamana River. Being on the basin the waste managements must be regulated with the water body. The different criteria considered for waste disposal site selection are lithology, surface water, aquifer, groundwater, land use, contours, aspect, elevation, slope, and distance to road, distance from settlement are examined in relation to land fill site selection. Each criterion was identified and weighted by AHP score and mapped using GIS technique and suitable map is prepared by overlay analysis.

**Keywords :** waste disposal, solid waste management, Geographic Information System (GIS), Analytical Hierarchy Process (AHP)

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