

# **Integrating Multi-Criteria Decision Analysis For A GIS-Based Hazardous Waste Landfill Siting In Ile-Ife, Osun State, Nigeria**

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**Key words:** Remote sensing; Risk management; Spatial planning; Waste disposal; Multi-criteria Analysis; Suitability Analysis

## **SUMMARY**

Disposal of generated waste in Ile-Ife is a major environmental issue. These waste are poorly managed by individuals and family posing serious dangers to the health of the community. In most occasion, waste were been disposed on public roads and drainages especially during the raining season. The failure of the past and present governments at all level to plan and manage waste evacuation scheme has empowered the citizens to be non-chalantly lawless by adopting an indiscriminate waste disposal approach against the public safety. This paper therefore presents a multi-criteria decision analysis alongside with a geospatial analysis for the selection of hazardous waste landfill sites in Ile-Ife, Osun State. The criteria considers among others were geology, topography, population, drainage system, roads, land-use to mention a few.

The study proposed isolated locations with minimal risk to people and the environment.

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