

Waste Assessment and Management Utilizing Remote Sensing and Geographic Information Systems Case Study Governorate Eldakahlia

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SUMMARY

Remote sensing photos are extremely helpful data for hazardous waste management and evaluation. Monitoring sites over time is a powerful tool for assessing environmental consequences. Archival aerial pictures provide the evidence necessary for analyzing the borders, points of access, and neighboring land usage of uncontrolled waste disposal sites. Comparative temporal analyses of a waste disposal site utilizing historical aerial pictures aid in determining how an area has evolved over time and, as a result, provide a better understanding of present site conditions. The evaluation of a site over time enables the analysis of land cover succession or replacement to establish the state of an abandoned site and to detect a hazardous site that is now covered owing to new construction. The study examines the literature on employing remote sensing for landfill site selection in Eldakahlia governorate, Egypt. Some proposed locations based on planning and environmental factors will be discussed. The study was conducted using multi-spectral satellite pictures for land use, regional risk, and spectral features. As a result of the research hypotheses, it was found that the Eldakahlia governorate has only 0.57 % of its lands, which is located in the desert back of the governorate, which is an acceptable result, as the governorate is one of the Delta governorates in Egypt.

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