

## **Solid Waste Management by using Remote Sensing Technology & GIS Applications-A Model Study**

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### **ABSTRACT**

The collection, processing, and recycling or deposition of the waste materials of human society has become a huge problem in urban city in Vijayawada today by using Geospatial and Remote Sensing Technology environmental sustainability is achieved. GIS is an effective map making tool for relating & integrating vast volume of separate types of data obtained from different sources. Waste minimization is achieved by segregation of the recyclable materials. Composting is the process of decomposition and the stabilization of organic matter under a controlled condition were done in the lab. The Soil samples have been collected from the dumping sites in Vijayawada. The collected samples were labeled indicating the exact position from where the samples are collected. Soil Samples are brought to the laboratory and analyzed for parameters such as chlorides, and total solids, TDS were by determined by standard methods. Remote Sensing Technology and GIS & Base map data of multiple information was useful in monitoring solid waste management by environmental analysis. Composting and vermiculture are the best methods of acquiring rich, humus material valued for the soil conditions increasingly effective in the urban area of Vijayawada city development. The spatial operation is performed in conjunction with maps functionality with GIS & Remote Sensing software. GIS Base map is basic input parameters for soil mapping and assessment of the pollution as it useful to analyses and get the solution easily with more accuracy. Remote Sensing and GIS database was useful in monitoring the solid waste management and composting, vermiculture is monitored effectively with the help of Geospatial Technology.

**Key words:** *Environmental Sustainability, Remote Sensing, GIS.*