

## **Integrated Remote Sensing And Gis Techniques For Evaluation Of Ground Water Quality**

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### **Abstract**

The urban environment quality is deteriorating day by day with the largest cities reaching saturation points and unable to cope with the increasing pressure on there infrastructure. Ground water is a dynamic and replenishing natural resource, which forms the core of the ecological system and needs to be effectively managed. The quality of groundwater is equally important as that of quantity. Remote sensing and GIS are effective tools for water quality mapping and land cover mapping essential for monitoring, modeling and environmental change detection. Assessment and mapping of quality of groundwater is an important quantity, because the physical and chemical characteristics of groundwater determine its suitability for agricultural, industrial and domestic usages. This study developed an integrated, remote sensing and GIS approach to improve estimation of ground water resource. Hydrogeomorphological studies coupled with hydrogeological and structural/lineament have proved to be very effective tool to discern ground water potential zones.

Key words: Remote sensing, Geographic Information System (GIS), Groundwater quality.