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# AN INVESTIGATIVE STUDY ON WATER QUALITY DISTRIBUTION IN THE ZONES OF MUNICIPAL CORPORATION USING REMOTE SENSING AND GIS APPLICATIONS

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#### Abstract

In the developing countries like India the most challenging issue for sustainable development is providing quality water to every individual for daily day to day activates more particularly for drinking purpose. Even though the country is having plenty of water resources` the available water is very minimum for consumption. At one side the level of available groundwater is reducing year by year due to unusual, unpredictable monsoons along with dry weather conditions at the study area. At the other side the excessive cultivation of water dependent crops became the prime reason for reduced groundwater availability especially in the state of Andhra Pradesh. After the bifurcation of united Andhra Pradesh in to Telangana and Andhra Pradesh the Vijayawada municipal corporation has became the major commercial and administrative part for all the developing activities of newly formed state by attracting huge mass crowd for the benefits of employment as well as the quality of life which leads to heavy burden on natural resources like availability of groundwater as the groundwater is contaminated once it is very difficult to restore the quality of groundwater. by keeping this in view we have initiated this study to estimate the quality of groundwater in the zones of Vijayawada municipal corporation for improving the living standards with respect to the quality of groundwater and the resultant values are mapped with GIS applications in such a way they can create more awareness among the people on utilization of water to promote sustainability at the study area.

# **Author Keywords**

Sustainable development, Bifurcation, Ground Water, Municipal Corporation, GIS maps

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