

## A STUDY ON OPPIDAN COURSE OF BUGGAVANKA ENVIRONS, KADAPA, ANDHRA PRADESH, INDIA USING GEOSPATIAL TECHNOLOGIES

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### ABSTRACT

The environment always plays a key role on the well being of the organisms inhabiting within the influential zone / Buffer Zone. In the present study, Physico-Chemical characteristics in the Buffer Zone of 1.5Km along the Oppidan course of Buggavanka environs at kadapa are studied. Geographically it lies between the latitudes of [14.23°N & 14.31°N](#) and the longitudes of [78.46°E](#) & 78.54°E and covered in the open series maps of Survey of India (SOI) Toposheet numbering D44G15NW. The average elevation of the urban parts of Kadapa is 138 metres. The environmental parameters evaluated include pH, Total Dissolved Solids, Electrical Conductivity, Carbonates, BiCarbonates, Calcium, Chloride, Potassium and Sodium. The estimations of the above parameters reveal a considerable deviation from the standards prescribed by World Health Organisation (WHO). A brief attempt has been made to study the extent of change in the quality of water in comparison to water quality standards of World Health Organisation (WHO).

Geospatial Technologies provide an ambient and quick renaissance of the analysis and spatial distribution studies on the results obtained. From the distribution and correlation studies in the study area, it can be concluded that the water parameters taken are beyond the imagination for consumption either for irrigation or domestic purposes. The pollution levels for both surface water and bore wells/underground are discussed at length including their spatial distribution and correlations studies. The results of the present study throw light on the level of pollution stretching its tentacles on the inhabitants all along the study area.

**KEYWORDS:** Oppidan Course, Buggavanka, Pollution, Geospatial Technologies