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## Study of Land-use Compatibility using Remote Sensing and GIS Bhiwandi Surrounding Notified Area (BSNA) Mumbai

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**Abstract:** Land is the most important natural resource, which comprises soil, water and the associated flora and fauna, thus involving the total ecosystem. Any country in the world is trying to achieve stable development. Spatial planning is trying to organize the human and activity in environment in such a way that stable development would be achieved in various contexts. The present study has been carried out to find the land use compatibility after doing detailed land use analysis using remote sensing and GIS as well as potentials of BSNA, near Mumbai. The population in BSNA has increased at a decadal growth rate of 44% during 1981-1987. This resulted in a haphazard distribution of land use/land cover of BSNA. High resolution satellite data (Quick Bird-61 cms) has been used to prepare the detailed land use/land cover of the study area. The study shows that BSNA is randomly distributed with haphazard growth of urbanization for e.g. Slums which have a poor living quality due to submerging between industries. Large amount of warehouses also generate employment, attracting the population of different places for economic activities. Employment is an important factor which is cause of population concentration and creating the problem of unauthorized residents and slums in this area.

Key Words: Remote Sensing, GIS, Spatial planning Land use compatibility