

GIS BASED SITE SUITABILITY ANALYSIS FOR SETTING UP OF NEW MOBILE TOWERS IN NEEMRANA AND BEHROR TEHSIL, RAJASTHAN

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Abstract:

Cell Phones have become an essential part of our lives and made their own single stand. Mobile communications have made the world come closer. Each and every part of the country thus requires the network coverage for better usability. There is need for a good and continuous network services from the mobile companies. Cell phone reception in Behror and Neemrana tehsil is lacking at certain locations. The new tower must be in an area with, little reception, lots of people, good road network and an area with a minimum slope to minimize the construction costs. Therefore there is need for a suitable site selection to set up more towers that can provide good coverage. In the present paper it has been discussed how GIS as a tool can effectively and efficiently, be used for site suitability analysis to set up more towers with minimum time and cost in a particular area. Spatial analyst (Viewshed and line of sight) and proximity analysis (buffer) tool of ArcGIS was used to derive this. GIS allows the user to conduct a series of workflows that can visually enable the user to site ideal cell tower locations. **Keywords:** Cell Phones, cell phone reception, mobile towers, GIS, site suitability analysis, spatial analyst, proximity analysis, ArcGIS.