WEB BASED WATER UTILITY MANAGEMENT USING GEOSPATIAL TOOLS

Research Objectives:

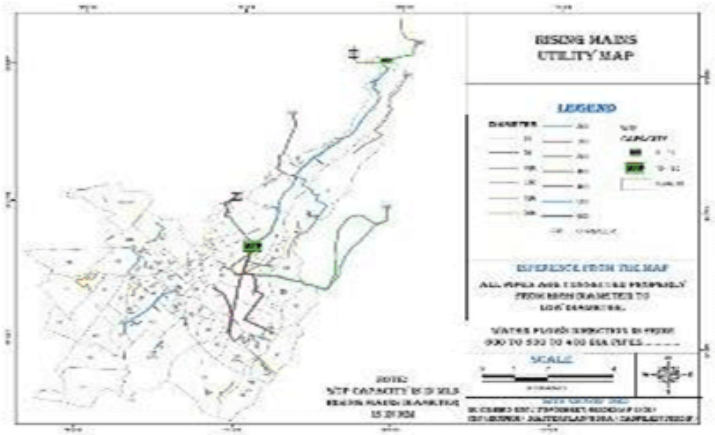
- To create a geospatial database of water supply utility network
- To assess the existing water supply system and finding the risk factor of overhead tanks.
- To create a web application for publishing and sharing of data at different levels among departments.

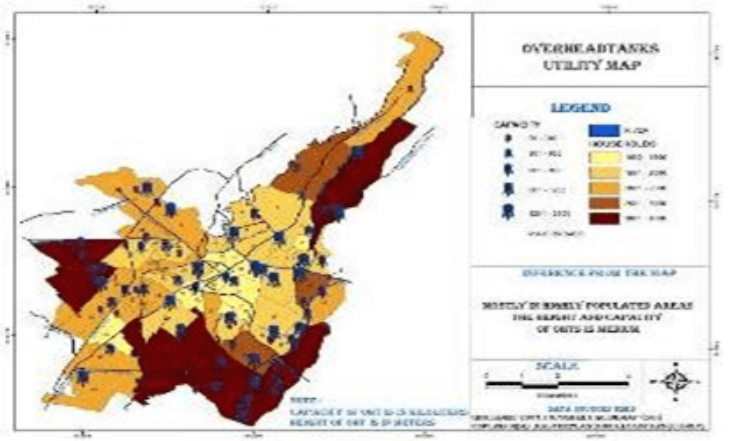
Primary data:

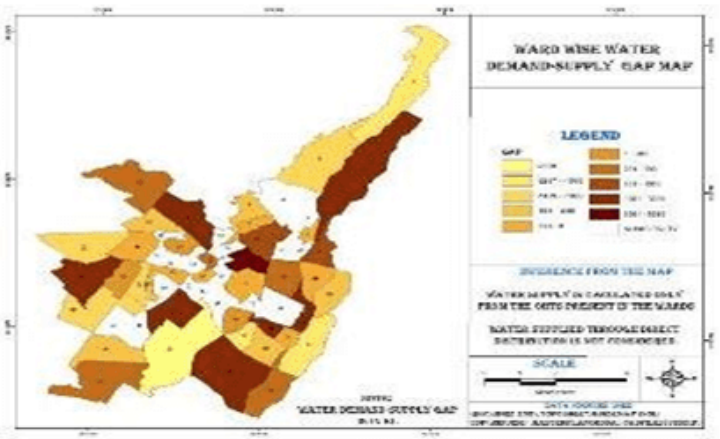
- Utility survey (for verification)
- DGPS survey

Secondary data:

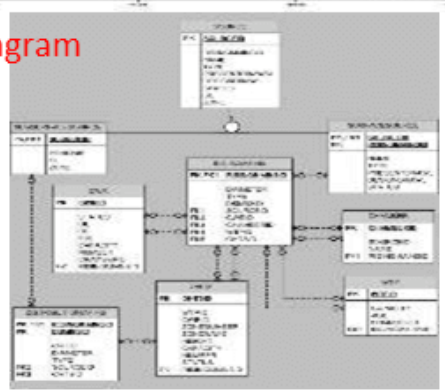
- Satellite images used :QUICKBIRD, LISS4, CARTOSAT-1
- Toposheet, CAD files, hand drawn sketches, Census data.
- Data from organizations like Jal Sansthan, Jal Nigam, and Development Authority.







E-R diagram



EXISTING WATER SUPPLY SYSTEM:

- Total requirement of city : Pop * Per capita demand = 102.5 MLD
- Total Supply of city : Total capacity of surface source Total capacity of subsurface source = 80.28 MLD
- Demand supply gap of the city = 22.22 MLD