

GIS and Remote Sensing based validation of Population Distribution at NPPs

Use of remotely sensed data (Landsat, LISS-III) and GIS for estimation of population and its distribution, up to village level, around nuclear power plants

Distribution of population in different radial zones, with respect to wind directions, of a nuclear power plant is an important parameter for emergency preparedness. Apart from census data which is available in a tabular format, it is essential to have a real-time estimate of the population growth and distribution. GIS provides a visual glimpse of the distribution pattern on a map which is much easier to correlate. Remotely sensed data from Satellite imagery (Spectral, hyperspectral and infrared) is an important way to detect changes with respect to time.

High resolution imagery available through the web portal of ISRO, USGS and through Google earth can be used to detect change in land-use, human settlements, their growth and its extent. It is being widely used as a real-time approach to survey large areas without any manual intervention.