

IITB-ISRO-AICTE Mapathon 2020

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ISRO Data used : Bhuvan Thiruvananthapuram Land Use Land Cover (50K): 2015-16, Thiruvananthapuram boundary shapefile.

Steps in GIS

- The Land Use Land Cover map and the Thiruvananthapuram district boundary map were chosen as the base map for the analysis.
- Entered coordinates of industries that we considered onto the map.
- Digitized water bodies that were in close proximity to the industries from the land use land cover map into a shape file.
- Added a *buffer* of 1km for all water bodies.
- Used the *count points in polygon tool* to count the number of industries in each buffer.
- Based on the number of industries the waterbodies were categorized and represented using 5 different colours.
- The final map layout was prepared with the addition of a legend, a north arrow and a scale bar.

Complexities :

The district houses industries of varying sizes. Those selected for this map are the ones that are located close to waterbodies by varying degrees and hence have a greater chance of polluting them.

Applications :

This map displays different water bodies in Thiruvananthapuram district that are prone to contamination from waste dumping from large scale industries. This will allow authorities to have a better idea of water bodies that are in danger of turning toxic and take the proper precautionary measures to maintain or restore these water bodies by either bioremediation of the polluted lakes and rivers or introducing proper waste management plans in these industries.