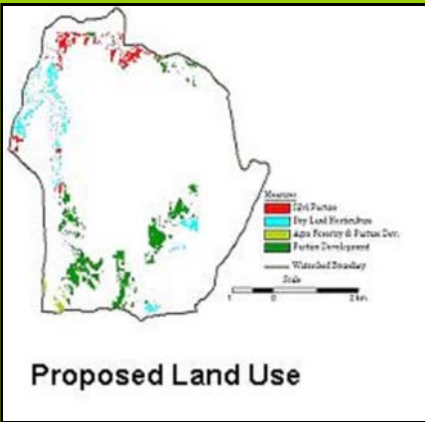


GIS-BASED WATERSHED MANAGEMENT SYSTEM



Project Overview

GIS and Remote sensing techniques are used to generate action plans for conservation of land and water resources. Spatial database on soils, land use, contours, geology, drainage etc. is created using Survey of India topographical maps, cadastral maps, ground truth and remotely sensed data obtained from various sources using state of art GIS software. This primary resource data is used to derive secondary vector layers and quadrees (data structures) corresponding to slope, erosion class, soil depth, land capability etc. Rules are framed to arrive at certain suitable solutions to each of the area-specific problems identified for the watershed. Further a number of macro-level and location-specific action plan maps are generated based on the secondary derived maps and the action plans framed.



A resource inventory towards the development of an efficient and an effective Watershed Management System is created. Suitable decision rules were framed and the same were used in conjunction with the resource inventory to arrive at certain suitable solutions in the form of action-plan and treatment-plan maps to each of the area-specific problems identified for the Watershed.

Objectives

- Creation of Digital Spatial Database
- Creation of primary layers and ability to generate the required number of secondary layers and generation of composite maps from those layers.
- GIS analysis using state of art technology
- Generation of Location-Specific Thematic Maps.
- Action Plan Maps for location specific problem solutions.
- Development of an appropriate GIS - based Query System.

Salient Features

- Integration of spatial and non-spatial data from various sources
- Generation of resource inventory for future updation and use.
- Action Plan and Treatment plan maps generation based on GIS analysis
- Integrated method of analysis & generation of action plan maps based of area specific problems identified.

Impact

- Based on scientific GIS analysis and hence more accurate
- Identification of area specific problems and give scientific solution for it.
- Facilitates integrated analysis, area calculation and generation of action plan maps for location specific problems.
- Futuristic Design

Contact

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