

# **INTEGRATED LAND RESOURCES PLANNING USING REMOTE SENSING AND GIS: CASE STUDIES FROM HARYANA STATE, INDIA**

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## **ABSTRACT:**

Remote sensing and Geographical Information System (GIS) techniques play important role for preparing land resources action plans on sustainable basis for any part of the world. The information on land resources of an area is essential for their prudent use. The RS & GIS techniques have added new dimension to the more accurate, efficient and quick generation of base line information on scientific basis. The development of integrated land resources action plan is necessary for optimal utilization of various land parcels in the area. These types of studies have been carried out in many parts of Haryana state, India. Various thematic maps like land use/ land cover, hydrogeomorphology, soil, slope, ground water quality and depth are required for preparing any viable land resources development plan. The present paper deals with the case studies in parts of Mahendergarh and Gurgaon Distrcits of Haryana, India. Various maps were prepared using the satellite data and conventional information and were integrated in GIS environment. Suitable action plan for optimal utilization of various land parcels have been prepared. Various activities like Silviculture, Agrohorticulture, Agroforestry, Peripheral plantation, Vegetative filter, Rainfed crops, Plantation, Plantation with soil conservation measures, Afforestation and Afforestation with soil conservation measures have been suggested. The action plan thus suggested will help to increase the production of food grains and fruits, increase cultivated area, increase fodder production for livestock leading to higher production of animal produce, save land from degradation. This will ultimately improve the ecological conditions in the area.

**TOPIC:** Remote sensing applications

**ALTERNATIVE TOPIC:** Operational remote sensing programs