



**RESOURCE**

# Application of Remote Sensing and GIS in Groundwater Exploration

|

**Author(s)**

Nag, S. K.

**Description / Abstract**

Remote sensing and GIS methods permit rapid and cost effective natural resource survey and management. Moreover, remotely sensed data serve as vital tool in groundwater prospecting. The remote sensing data helps in fairly accurate hydrogeomorphological analysis and identification and delineation of land features. With sufficient ground data, hydrological characteristics of geomorphological features can be deciphered. Groundwater occurrence being subsurface phenomenon, its identification and location is based on indirect analysis of some directly observed terrain features like geological and geomorphic features and their hydrologic characters. Satellite remote sensing provides an opportunity for better observation and more systematic analysis of various geomorphic units, lineament features, following the integration with the help of Geographical Information System to demarcate the groundwater potential zones. Therefore, an integrated approach, including studies of lithology, hydrogeomorphology and lineament, has been taken up, using remote sensing and GIS techniques, for a proper assessment of groundwater potential zones in the study area.

**Publication year**

2008

**Publisher**

Springer Publishing

**Keywords**

Remote Sensing Groundwater Management Geographic Information System (GIS)

**Thematic Tagging**

Climate

Language English

View resource

**Related IWRM Tools**



● Tool

### **Groundwater Management Plans**

A3.03

---

**Source**  
**URL:** <https://www.iwrmactionhub.org/resource/application-remote-sensing-and-gis-groundwater-exploration>