

# REMOTE SENSING AND GIS TOOLS FOR PLANNING AND MANAGEMENT

*Dr. Seyed Kazem ALAVI PANAHI and Dr. Gholam Reza ZEHTABIAN, Iran*

## ABSTRACT

Desert managers are usually constrained in decision making by the lack of reliable and timely information. Even if, desert information is available, the managers also face difficulties in processing the high amount of information. The advent of remote sensing and GIS technologies may create an opportunity for the development of new approaches to computer processing of geographically referenced data. This paper reviews some applications of remote sensing and GIS for the purpose of hydrology, soil, range land and erosion management in the five areas in the Yazd, Qom, Kerman and Farse provinces. This paper also discusses the capability of remote sensed data in soil salinity and land use change detection and environmental crisis. Based on the obtained results from this research we suggested the future direction in management, desertification programs and agricultural activities using remote sensed data and GIS towards a sustainable development in Iranian Deserts.

## CONTACT

Assistant Professor Seyed Kazem Alavi Panah  
Iran Desert Research Center  
Tehran University  
P.O. Box 14185-354  
Tehran  
IRAN  
Tel. + 98 21 896 6760  
Fax + 98 21 896 5287  
Email: [Salavipa@chamran.ut.ac.ir](mailto:Salavipa@chamran.ut.ac.ir)

Ass. Prof. Gholan Reza Zehtabian  
Faculty of Natural Resources  
Tehran University  
P.O. Box 14185-354  
Tehran  
IRAN  
Tel. + 98 21 896 6760  
Fax + 98 21 896 5287  
E-mail: [ghzehtab@chamran.ut.ac.ir](mailto:ghzehtab@chamran.ut.ac.ir)