

ASSESSMENT OF WATER HARVESTING POTENTIAL IN BEHROR TEHSIL, RAJASTHAN

Ekta Gupta¹, Srimoyee Dutta²

¹ Student

NIIT University, Neemrana, Rajasthan

Abstract:

This study presents a methodology that is used to identify Rain Water Harvesting (RWH) sites using GIS and Remote Sensing technology in Behror Tehsil which belongs to semi arid zone and is likely to face water deficiency in near future as new settlements are coming up due to industrialization in this area. Input layers that are used in this study includes slope, Curve Number (CN), land use/cover, Hydrological Soil Group and Runoff coefficient. ArcGIS 10.1 and Erdas Imagine 11 have been used to derive all these key spatial layers. Runoff Modeling is done using Soil Conservation Services (SCS) Curve Number method. For the assignment of weights to each factor Analytical Hierarchy Process (AHP) has been adopted. Decision making and RWH site selection will be done by creating a model on multi-criteria decision making in ArcGIS.