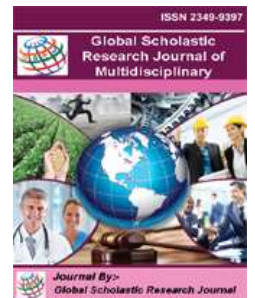




A PEER REVIEWED INTERNATIONAL
JOURNAL OF GLOBAL SCHOLASTIC
RESEARCH JOURNAL

GSRJ

GLOBAL SCHOLASTIC RESEARCH
JOURNAL OF MULTIDISCIPLINARY



SITE SUITABILITY FOR ARTIFICIAL GROUND WATER RECHARGE USING REMOTE SENSING & GIS FOR KAKINADA REVENUE DIVISION

AMBATI VANI¹; P. SRIDHAR²

¹Student M.tech (GeoInformatics), SVECW, Vishnupur, Bhimavarm, Andhra pradesh

²Assistant Professor in Geoinformatics, SVECW, Vishnupur, Bhimavaram,
AndhraPradesh

Abstract

Rapid urbanization, increasing population, over exploitation of ground water, surface water for human and industry needs are major drawbacks leads to water scarcity in most of developing countries due to improper planning activities in the regions level. Due to this water scarcity also impacts on the surface water as well as groundwater levels, to minimize and overcome these problems need a technical approach should be adopted like remote sensing and GIS techniques. Presently, an attempt has been done for Kakinada Division, East Godavari district, Andhra Pradesh, India. Rainfall data, soil data, geology, geomorphology map, land use / land cover maps thematic were prepared using remote sensing and GIS techniques. In GIS environment, all thematic maps have been added and each map is assigned percentage of weight ages and finally to prepare location of site suitability map for the study area.

Key words: Remote Sensing, Gis, Weighted Overlay, Soil Map

References

- B.S. Manjare, Identification of groundwater prospecting zones using Remote Sensing and GIS techniques in upper Vena river watersheds Nagpur district, Maharashtra, India, 15th Esri India User Conference 2014.
- Das, P., Bahara, S.C., Kar,A., Nagendra, P. and Guha, S. (1997). hydrogeomorphological mapping in groundwater exploration using remotely sensed data- A case study in Keunjar District, Orissa. *J. Indian Soc. Remote Sensing* 25(4):247-260.
- O'Hare, M.P., Fairchild, D.M., Hajali, P.A., Canter, L.W. 1986. Artificial Recharge of Groundwater. *Proceedings of the Second International Symposium on Artificial Recharge of Groundwater*.
- Ravindran, K.V. and Jayaram, A. (1997). Groundwater Prospect of Shahbad Tehsin, Baran District, Eastern Rajasthan- A Remote Sensing Aproach. *J. Indian Soc. Remote Sensing* 25(4):239-246.
- Shahid, S., Nath, S.K. and Patra, H.P. (2000). Groundwater Assessment and management within typical laterites around Salbni District, Midnapur, W.B. *J. Indian Water Works*, 32(2) 101-106.
- Sooraj Kannan, P.V. and Mathew, E.K, 2014, http://www.csre.iitb.ac.in/~csre/conf/wp-content/uploads/fullpapers/OS4/OS4_14.pdf
- Sooraj Kannan, P.V. (2008). Groundwater Augmentation Plan for a Degraded Western Ghat Terrain Using Remote Sensing and GIS, Unpublished M. Tech Thesis, Kerala Agricultural University.