Ecological capability evaluation of Rekat watershed for forestry land use, using AHP & Makhdom method

Farid Savari[1]
Katayun Varshosaz[2]
Jaafar Morshedi[3]

1. Science and Reasearch branch, Islamic Azad University, Ahvaz, Iran
2. Department of Environment, Agriculture and Natural Resources Faculty, Ahvaz, Iran
3. Department of Geography, Humanities Science Faculty, Ahvaz, Iran

[*]**Corresponding author**
savarifarid@yahoo.com

Abstract

Current research done for study of ecological evaluation of Rakat watershed in Khuzestan province (Izeh). Rekat watershed is between 50,8,6 E and 50,20,3 E and 31,39,34 N to 31,50,60 N and according to past studies by dr. Makhdom and AHP method, the current land use is forestry. For doing this research, at first the research area determined on topographic map with 1:25000 scale. After the determination of the boundaries of research area, DEM file was prepared using of topographic lines and maps of height slope and aspect of slope map. AHP table was prepared with using dr.Makhdoms forestry model. Then experts asked to evaluate them. After data of questionnaires collected with using expert choice software and after getting the weight of each parameter, the AHP results with GIS indexes compounded therefore, the priorities indexes for mapping the slop aspect of slope, height the canopy cover of vegetation determined. The species of vegetation, the density of vegetation texture of soil structure of soil the kind of soil co-temperature lines co-rainy lines with using forestry format was prepared. Finally the potential of Rekat area for forestry evaluated in four category and codes with very proper code proper good and weak that each code for forestry land use studing with 3701510 m2 was very proper, 2835970 m2 proper, 534980 m2 good and 4412730was more weak then the others.

Keywords: Ecological capability evaluation, forestry, watershed Rekat, AHP.