

Assessment and mapping of desertification intensity using ESAs model in Fedagh Hosienabad region

Abstract

Land degradation in arid and semi arid areas in effective of human activities and climatic conditions is desertification. Today, this condition is a serious danger for human and annually much damage causes of various faces to social and economic section. Various methods are for assessment of intensity and provide desertification map at world surface now but any one include defects and factors limited to special areas. ESAS Model is on of the best and most resent methodology introduced by the European commission in 1999 and evaluated by most European as well as Middle Eastern countries. ESAs has recently drawn special attention among Iranian researchers and is more advantageous that other methods because of its accuracy, particular weighing of layers, use of geographical information systems in overlaying of maps, use of geometric mean over arithmetic one or sum in computing indices and final desertification map. In addition to a higher precision and speed of evaluating and preparing desertification map, there is a very little error using ESAs. Within the study area of 75 square kilometers is located in southern Fars province. The results show that regional division of Materrials ESAs method three types high fragile, average critical and high critical.

Key words: Fedagh Hosienabad, Desertification, Desertification map, ESAs model



University of Zabol
Graduate school
Faculty of Natural Resources
Range and Watershed management Department

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Supervisors:
Dr. A. R. Shahriari
Dr. A. Fakhire

Advisor:
M. Samiee

By:
M. J. Behi

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