

Abstract

Evaluating the ecological potential of a land in conjunction with particular usage is called land suitability. In Kohgiluyeh and Boyer Ahmad province 75.42 percent of Wheat lands, are grown under dry land cultivation. Since agriculture is an activity based environment, it have higher performance, requires knowledge of the environment. So the zoning of target area is essential. Thus, climatic and topographic data were used. In this regard, the 17-year (1993-2009) meteorological data were collected from regional stations and were combined with land physical variables. Selected climatic factors are: Daily temperature(minimum and maximum), the minimum temperature of the coldest and maximum temperature of the warmest month of the year, annual rainfall, daily rainfall and annual potential evapotranspiration and topographic factors that used in this study were elevation and slope. To establish climatic database layers, the correlation between climatic variables and elevation were determined by using of SPSS. After creating the environmental, climatic and topographical data layer, zoning took place through overlapping layers by spatial analyst extension in GIS. Agro-climatic classification carried out with determination of three index such as winter type, summer type and moisture regime, by means of UNESCO approach. The results show that 33 percent of the province area for dry land wheat are suitable, 27 percent is unsuitable, 19 percent average, 11 percent very unsuitable and 10 percent very suitable.

Key words: Land Suitability, Geographic Information Systems (GIS), Dry land Wheat.



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**Land suitability for dryland wheat using Geographic
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