



Zabol University

A thesis
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Engineering of Natural Resources- Watershed management

Determination of suitable land use using land use planning process in Sykan watershed of Ilam province

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Abstract

Land use planning is the sciences which determine type of land use according to the characteristics of social-economical and ecological condition of land. Assessment of land capability and land use planning conducted to use land according to suitability and capability. Scientists are using several types of methods to assessment use of land which preserve sustainable development. In many parts of Iran users are misusing land without consideration of land suitability and capability. Result of this misusing caused west economical capability and reduce environmental potential. In this research GIS software is used to prepare land use planning and mapping of Sykan watershed in darehshahr with area of 9000 hectares. GIS is used to prepare digital elevation model, slope, geographical directions, soil land cover maps to combined two of them together and finally create 89 unrepeatable environmental units and mapped with scale of 1/25000. Characteristics of climate types of present land use and soil erosion for each unit are recorded. For each environmental unit or small ecosystems also is prepared ecological assessments for agricultural, rangeland, forestry, aqueduct, tourism and development of city land uses. According of assessment of land use planning and grading among different land use qualification method is chosen to prepare land use map of showing that Sykan watershed. Result is showing from total area 43/61% , 29/96%, 14/31%, 6/77%, 2/46%, 2/05, 0/84, are related to forestry, agriculture, tourism, rangeland, environmental protection, livestock, and equating respectively. Meanwhile number of land use are increased from three to eight types.

Keywords: Land use planning, Form of land, Land use, Ecological capability, Sykan watershed, Iilam.