## Study and Analysis of Landuse planning with Emphasis on Agricultural Development in Sistan Plain

#### **Abstract**

Land use planning is a science which determines the optimum uses of land based on ecological charactisics of land and its socio-economic conditions. Environmental crises' are created due to inappropriate pattern and conversion of land use. In this research, the land use planning map of Sistan Plain located in Sistan and Bluchestan province was prepared based on the current systemic module in land-use planning. In Sistan Plain of land-use planning its area 2545.512 KM<sup>2</sup>, maps of different altitude classes, slope percentage, geographical aspect, edaphically properties and vegetation density were combined by overlay method and consequently the final map of environmental unit has been depicted. After the basic studies (climatic characteristics, water resources, physiography, plant cover, soil and soil erosion) and providing the region thematic maps, digitizing, analyzing, adding up and themes overlaying were done in GIS environment. Ultimately, 120 micro ecosystems were resulted for planning process. For these micro ecosystems, evaluation of ecological capability for agriculture and use in capability seven classes for the region was suggested. The results showed that about 49.29% of study area is agriculture development capability, whereas, at present 56% of study area used for agriculture.

Keywords: Land use planning, Ecological model, agriculture, Sistan Plain.



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The Thesis Submitted for the Degree of M.Sc

In Geography

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June 2014