



University of Zabol

Graduate school

Faculty of Literature and Human Science

Department of Geography

**The Thesis Submitted for the Degree of M.Sc in Geography
and Urban Planning**

**The Evaluation of Physical - Spatial Growth
of Zahak City with AHP FUZZY Model and GIS.**

Supervisor:

Dr. GH. Khammar

Advisor:

Dr.A.Kiani

By:

N. yousefi

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Abstract

The increasing rate of urban population in one side result of villagers immigration and released force of agronomy section and in other side caused by natural development on population who inhibited in cities, make a new problem that is physical expansion of the city. Whenever there is no preplanned schematization for development and developing city's framework, it will lead to non-constant, discordant and painful development of the city for the future that further reformation may not be possible, or if possible it will impose very high expense on the society.

The aim of this research is to investigate the effective indexes in physical development of the Zahak city and investigate the current situation physical development in as well as examining the current situation of land use distribution of Zahak city, and the economical, social, political and environmental indexes and use distribution in different zones of the city were also investigated.

The method of doing this analytical- descriptive research is based on documentary,, library and field studies, that analysis of data is done using hierarchical analysis model (AHP FUZZY) and also SPSS software. According to the obtained results, in managers, urban planners and citizens opinion, the effective indexes in physical development of the city (economical, social, political and environmental) shows high diversity in different zones of the Zahak city (north, south, east and west). Through investigating the quadruplet zones of the Zahak city, east zone with the weight of 0/710 percent in terms of future development of the city is on the first rank and in second place there is south zone with 0/596 of weight and west and north zones with weighs of 0/404 and 0/285 are in third and forth places. At last for locating the Zahak city in the best path for its development the submission of lands with proper cost and also square distribution of urban use s are proposed.

Key Words: Physical development, Zahak city, city's physical development indexes, AHP FUZZY, GIS.