

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

Identification and Ranking of Effective Factors on Residential Land-use by Using Modern Techniques of Planning (TOPSIS, AHP, MADM, DELPHI), Case Study: Zahak City.

Supervisor:

Dr. GH. Khammar

Advisor:

Dr.A.Kiani

By:

R. hamedani

August 2015

abstract

Urban landuse and manner of spatial-locational distribution is one of the most important functions to optimum use of urban spaces. Among different uses, residential use had special importance in providing comfort and residential security and is one of the most fundamental needs of human societies. In this way this research is eager to identify and rank effective factors on residential land use of Zahak city. In this case first using experts opinion and related skilled people and using Delphi technique, 25 effective factors on residential land use were identified and classified into four groups. And finally using MADM techniques these factors were ranked. Research results shows that economical, social, natural and cultural factors have the most effect on residential land use of Zahak city, respectively. On the other hand, the results of ranking the related components of quadruplet effective factors on residential land use using TOPSIS technique determine that among economic ingredients, land worth and building are of most importance in housing. And among social, natural, cultural factors the most importance is of: infrastructure facilities ingredients, the effect of not being located in the way of 120 days winds, encompasses the effect of level of people's culture in the parish on roof selection, respectively. Finally, the following items are proposed to improve housing sector and residential land use:

- Providing service facilities and rising residential standards in current texture of the city
- preparing the land for residential land use in the form of a town in suburbs
- Prevent from unplanned growth of the city and use its development according to urbanization criteria

Key Words: residential land use, Delphi technique, MADM, Zahak.