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Modeling for Site selection proper housing districts in Ardebil City by AHP model in the GIS environment

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Extended abstract

1- Introduction

Universal hygiene organization treat life environment quality graduation more determinative for human health secures moreover people security versus illnesses. Frame universal hygiene organization point of view, moreover age and genre and inheritance, life style, local social structure, work environment and subject abidance and environmental and cultural and social and economic common status are more effective in determining people health status. Low quality cities environment, air pollution, irrelative management of cities garble, vocal pollution and also maleficent effects of toxic chemical materials and weighty metals like lead, mercury and also geomorphological ventures can threat citizenship life of metropolises.

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Design influence and optical quality of city environment on people behavior and their mental health have been affirmed in environmental designer researches among William white, Oplipard, Kovin linch and Allexander. Environmental hygiene science researcher believed that most of illnesses such as colds, heart attacks, cancer, depression and ante mortem have a mutual relation with religious and social and familial relations. Faint social links like nonalignment and social liability and nonmember ship in voluntary and charitable groups are more affective in creation noisome behavior on health like swats and fix consumption, neurosis's, insanity, Eskizoferni, heart arteries eclipse, casualty and even suicide (Jackson, 2003). According to mentioned matters every citizens have a living right in sectors with best biological terms. At this situation a citizen can reach to his desires and wishes in calmness and peace. At present research, we proceed to survey and determination of Ardabil suitable sectors due to hesitance Ardabil during several past years because situated province center, industrial centers development and as people crowd is encounter with noticeable somatogenic

development and this case lead to disorders creation in civic system. As regards to growth and development of sectors in this city that one more deploy and developmental rapidly, determination of suitable inhabitance sectors and submitted respective parameters can be idealistic patterns for citizen ship, managers and civic programmers. At present research have been tried to produce effective layers in determination of suitable inhabitance sector in GIS environment Because of prissiness of layers, hierarchical analysis model (AHP) and kinds of modeling techniques have been used.

Criteria of suitable sector choice:

According to accomplished surveys and also bib lio thecal observation that done in this research by writers, factors that can be selected as a suitable criteria of suitable sector choice for hesitance in Ardabil can be divided into 3 categories that any of them have a sub criterion. These criteria and sub criterion are consisting of below terms (Table 1).

Table 1, Suitable criteria for residential suitable sector determination

Suitable criteria for residential suitable sector determination		
Somatogenic cases	Social and economic cases	Geomorphological cases
Space from didactic users. Space from Departmental users Space from commercial users. Space from iridescent area. Space from industrial centers. Space from sportive places. Space from cemetery. Space from main roads. Building agglomeration. Building quality. Space from city center. Space from watery levels.	Peopleagglomeration. Crime and felony rate. Land price.	Space rate from faults. Level of underground waters. Kind of land. Curve slope.

2- Methodology

At this research because of effective factor specification in residential nicety sector of Ardabil, researcher used attributive method and also interview with matter custodial especially with clear sighted of scientific centers about their expertise subjects and organs like police force, municipalize and domicile organization, government, mayoralty and other respective absolute factor in sector nicety, analytical method have been lionized. Because these researchers launched to database creation in GIS environment and layer constitution for any of sub criterion that shown in Table 1, user map of Ardabil civics domains provided from domicile and municipalize office of Ardabil province and user map of natural domains are provided natural resources headquarters of province. Most of substrates with creation of stratification are delineated at noted range level and like raster layers stored at data base. For providing layer of other sub criterion, respective organization data have been used. For about scale of crime and felony, data and information of province police force headquarters and for providing substrate of hypogenous waters level data of aqua organization have been used. Layers according to available buffer are precedence to 4 – 5 part. In the cases that sectors abutment to slightly criteria enumerate as an advantage (such as abutment to main roads). Near level are in precedence and have a more value and versus in the cases that sectors abutment

towards to noted criterion are among disadvantage (Abutment to cemetery), levels that are beyond the criterion have a more value and privilege.

3- Discussion

Importance of residential controls is more than other existent controls in civic area. Thus in most of city centers, noticeable portion of civic area are allocated to these controls, as civic main function can be their residential function. Thus quality and quantity of residential regions are one of challengeable case in world civic literatures that are debatable from different dimension. One of dimension that analyzed residential regions subject is analysis of different regions nicety of one city as for different criterion. In present research nicety of city different regions according to geomorphological, social - economical and so matGenic criterion via modulation of hierarchical analysis model with layers valuation (overlay index) in GIS environment have been analyzed main point of preset research is using of 19 criterion in modeling suitable civic sectors that obtained result have been shown in final map which assimilated with road maps of Ardabil city. Surveying of above map and comparing of it with existent situation of different city sectors show the acceptability of obtained results.

4- Conclusion

Results show that sectors such as Basij, Hafez, Rezvan, Azadegan and Azadi Square that are among the best and nice sectors of Ardabil at obtained map also one among the most desirable regions and versus regions that are toward to city north geographic that are among the more undesirable regions at above map, at existent situation also have undesirable biological – environmental situation. Other civic regions have some epenthetic biological situation in final map of modeling of existent design. Thus using of method of present research has available results in the case of residential regions modeling that one suitable for hesitance.

Keywords: Site selection, proper housing districts, Ardabil, hierarchical analysis, (AHP), GIS

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