

Study of Climate Characteristics in the Provinces of Kermanshah and Kordestan Based on Factor and Custer Analyses

S.H. Mirmousavi ¹

H. Abakhti Gharoosi ²

N. Khaefi ³

Abstract

Classification of weather and climate are important in affecting each region. One of the ways is to identify areas of climate information. In order to conduct this study, annual data from 22 synoptic stations in two provinces of Kermanshah and Kordestan for 12 climate variables during the 20-year period (1989-2008) were used. To increase accuracy, seven synoptic stations from neighboring provinces were selected. After performing factor analysis in 22 stations related to climate change both in Kermanshah and Kordestan, the internal correlation of their results was examined which show that climate in these two provinces, was almost under the influence of 6 factors climatic. These 6 factors justify about 91 percent of climate behavior the study area. These factors include: temperature, precipitation, humidity, clouds, thunder, wind and dust. By applying a hierarchical clustering method and Ward integration method, the elements of climate stations were divided into 5 clusters.

Keywords: Climate characteristics, Factor analysis, Cluster analysis, Kermanshah and Kordestan Provinces.

1- Assistant Professor in Zanjan University.

2- M.A in Climatology in the Zanjan University.

3- M.A in Climatology in the Zanjan University.

Spatial Analysis of Employment Indicators, Using the Factor and Cluster Analyses (Case Study: Esfahan Province Towns)

S. Mosayebi ¹

S.E. Seydayee ²

A. Zangabadi ³

A.R. Rahimi ⁴

Abstract

Increasing young population along with unemployment rates compared to previous years is one of the most serious challenges, and controversial for employment in the country. Understanding the employment and unemployment condition, perceived strengths and weaknesses and deficiencies in the employment planning and human development has necessary impacts. However, a major concern of the province of Esfahan is the issue of employment and unemployment and its consequences.

Therefore the issue of employment and unemployment in the province was studied, and the affective factors are explained in this field, in order assess to the possibility of developing a comprehensive management for employment in the Province. The main objective of the study is to clear social inequalities in the employment field with regards to distribution facilities in Esfahan Province. The application of 36 variables was used and these variables were reduced to 5 through factor analysis. Then the cities were divided into 4 homogeneous classes through cluster analysis. The research results indicate that there are severe imbalances in towns. Out of that Esfahan town had the best conditions of employment index, while Khansar town was in the last row being the excluded town.

Keywords: Employment, Esfahan Province towns, Factor analysis, Cluster analysis.

1- M.A. in Geography and Rural Planning, University of Esfahan.

2- Assistant Professor in Geography and Urban Planning, University of Esfahan.

3- Associate Professor in Geography and Urban Planning, University of Esfahan.

4- M.A. in Geography and Urban Planning, University of Esfahan.

Analysis of the Urban Land Use Changes through Commission Act-Five Decisions (Case of Rasht)

N. Azimi ¹

S. Pouyan ²

Abstract

Commission Act-Five was established on early 1970s as a legal reference for flexible implementation of master and detailed plans in Iran. Based on this bylaw, all changes in urban land uses within the city boundaries should be approved through decisions made by this Commission. This paper tries to evaluate the role of Commission Act-Five's decisions in the City of Rasht on urban lands over a ten-year period from 1997 to 2006. The main data utilized in this study was based on the documents obtained from the secretariat of the Commission Act-Five in Rasht. For data analysis a number of statistical methods such as correlation, the mean and percentage changes have been applied. The main findings of the study include the following: The number of applications for land use changes in Rasht has considerably been increased over the study period. Among different activities, the residential and commercial uses have had the biggest gains, but, lands related to public services such as green space, education and sport uses have faced the highest levels of reductions. The number of construction and residential unit permits issued by municipality was highly correlated with the number of applications and volume of urban land use change in the City of Rasht.

Keywords: Commission Act Five, Urban land use changes, Master Plan, Rasht.

1- Associate Professor, The Faculty of Architecture and Arts, Urban Construction Department.

2- M.A., The Organization of Settlement and Urban Construction, Guilan Province.

The Land Zoning for Urban Development of Central Section of Aras Free Zone Using AHP Model

Sh. Roostayee ¹

A. Asgari Zamani ²

A. Zolfi ³

Abstract

In this paper the importance and necessity of knowing the characteristics of the natural environment to identify suitable locations for buildings and municipal buildings from poor areas, zoning lands to the central part of Aras Free Zone, was acting for urban development. Six indicators (distance from the fault, the Aras river privacy, water studied privacy, land formation, land erosion and slope) were considered and produced. After defining the parameters, according to the research using AHP, by weighting each indicator in ArcGIS software capabilities in order to combine the indicators. The zoning map for urban development was obtained and evaluated. The results indicate that the most desirable locations for urban development based on the distance from natural hazards zones are in the South, South west and West regions where 4762 ha of area were allocated. Meanwhile in 2300 ha of land area, land for urban development was not desirable.

Keywords: Urban development, Zoning of land, Central part of Aras Free Zone, AHP Model.

1- Assistant Professor, the Department of Geography and Urban Planning, the University of Tabriz.

2- Assistant Professor, the Department of Geography and Urban Planning, the University of Tabriz.

3- M.A in Geography and Urban Planning, the University of Zanjan.

Landfill Zoning and Site Selection (Case Study: Tabriz City)A. Ranjbar ¹F. Hakimpour ²M.H. Mir Yaghoobzadeh ³J. Sharifneghad ⁴Isa Piri ⁵E. Babaee ⁶**Abstract**

Ever growth of population and following of that, increasing of landfills have caused that environmental experts pay attention to it. Understanding of environmental processes require the knowing of ecological relations between life and non-life creatures and nutrient cycle and important cycles such as water cycle and nitrogen cycle. Latexes in produced landfills sometimes persist with heavy metals in many years. Usually heavy metals containing with organic compounds in molecular structure show no severance. Landfill excretion management in suburban areas of large cities such as Tabriz is inevitable. To observe multiplicity layers in landfill excretion we used geographic information system for site selection. Results showed that landfill excretion in Tabriz is none desirable due to the status of groundwater and geological formations and the sense that compost industry to be established in this city.

Keywords: Landfill, Ecological relations, Compost, Ground water, Tabriz, GIS.

1- Ph.D Student of Locational Information Systems, Tehran University, and Academic Member at the University of Tabriz.

2- Assistant Professor, the Department of Locational Information Systems, Tehran University.

3- Ph.D Student of Catchment Management, Mazandaran University.

4- Ph.D in Geography and Urban Planning.

5- Ph.D in Geography and Urban Planning.

6- M.A. Student in Geography and Urban Planning, the University of Tabriz.

***Study Channel Changes and Bank Erosion in the Gamasiab River
from 1958 to 2010***

M.H. Rezaee Moghadam ¹

N. Pirouzi Nejad ²

Abstract

River channel change, such as bank erosion and accretion are natural processes in alluvial rivers. This paper aims to investigate migration and channel change plan form and effect on bank erosion and accretion done in Gamasiab River in Kermanshah Province. This study used aerial photography taken in 1955, 1969, 2003 and IRS satellite imagery of 2010 with a resolution of 5/8 m, aerial photographs were orthophoto in ARCMAP software based on 1/25000 topographic map. Shoreline was digitized and river was divided into 12 reaches. By comparing river in the sequence period investigated the positions have a change. Using the ARCMAP software to create polygons that represented the difference between two positions we calculated erosion and accretion separately for each side of the river. The area of bank accretion along the river had been 285.5 ha and from 1955 to 1969 this area had been 402.6 ha from 1969 to 2003 and the area of bank accretion was 112.9 ha from 2003 to 2010. Bank erosion had been 347 ha from 1955 to 1969, and this was been 414.17 ha from 1969 to 2003 and the area of bank erosion had been 138.2 ha from 2003 to 2010. Results show that the amount of bank erosion is more due to bank accretion in the Gamasiab River. Change and migration in river is the cause of the erosion. Some places in river show about 400 m of movement.

Keywords: River migration, Bank erosion, Accretion, IRS satellite imagery, Gamasiab River.

1- Professor at the University of Tabriz.

2- Ph.D Student of Physical Geography (Geomorphology) in the University Tabriz.

***An Analysis of Urban Transportation Planning based on CDS
Approach by Using Super Decisions Software the Case Study:
Rasht Metropolis***

S.Kh. Rezatabe ¹

R. Heydari Chiane ²

Abstract

Transportation is one of the essential sectors of the cities and its appropriate planning can create the initial yardsticks for the presence and the interpretation of mutual spatial relations of the cities. The weaknesses of the management and the substantial plans have all caused challenges in the utilization of the existing potentials of the urban transportation systems. The data required for this research were provided from library sources and the interview of one-third of the transportation sector administrators through the CDS methodology and in a simple random sampling procedure for Rasht city. In order to confirm the validity of the questionnaires we applied Alpha Chronbach method and for the compilation of the strategies we applied SWOT and SPACE techniques. Finally we used ANP and QSPM methods for prioritization of the strategies. Results obtained from the application of SWOT method gave rise to points 2.23 and 2.87. Therefore, the transportation situation in Rasht city has located in defensive conditions and in planning the defensive approach should be selected. Also the results of evaluation of SPACE technique were similar to the results of SWOT. The key issues of such planning was prioritized based on the promotion of organizational and managerial plans, the provision of financial budget, the employment of specialized human power, the enhancement of engineering and cooperative infrastructures, and the legal and cultural indicators. Thereafter, based on the analysis and evaluation of the criteria and sub-criteria under environmental and structural frameworks, we proposed six choices among which the priorities go to the effective strategies respectively, including the

1- M.A in Geography and Urban Planning from the University of Tabriz.

2- Assistant Professor, Geography and Urban Planning, The University of Tabriz.

promotion of managerial and organizational plans (30.95%), financial budgeting (22.32%), the employment of multi-specialized human force (14.94%), the enhancement of engineering and cooperative infrastructures (12.7%), the enhancement of cultural levels (10.01%), and legal enhancement (8.97%).

Keywords: Urban Transportation, CDS, ANP, Super Decisions, Rasht Metropolis.

The Study of the Role of Individual Characteristics on the Users' Devotion to Urban Spaces (The Case Study of KHayyam Avenue of Qazvin City)

M. Charkhchian ¹

Abstract

Human and place relationship has different dimensions and place attachment is one the most important emotional dimensions. There are many studies which address to personal characteristics and place features in this relationship. In this study, considering the importance of human and place relations; personal characteristics have been evaluated in one of the successful public spaces in Qazvin: Khayyam Street. With finding different indicators of place attachment, different variables such as gender, age, education, marriage status and job have been evaluated. As place attachment has different functional, emotional, cognitive and behavioral aspects, significance of the correlations between personal variables and those four mentioned aspects were examined and different aspects of place attachment were evaluated. The interviews carried out with 598 of Qazvin citizens who participated in this study by random selection and the result was analyzed using SPSS software through T-test, Pearson correlation and F-test (ANOVA) exams. The results indicate, in comparison with other examined indicators; only users education level had significant relation with the place attachment degree and its emotional dimension that in addition, singles, older participants and also labors group reported more behavioral attachment to the place.

Keywords: Place attachment, Gender, Age, Education, Marriage status, Occupation.

1- Academic Member, Payame Noor University.

An Evaluation of Hospitals Site Selection Patterns in Tabriz, IranF. Jamali ¹M.S. Sadrmousavi ²M. Eshlaghi ³**Abstract**

The hospital is an important element of the new public health. The health of a population requires access to medical and hospital services as well as preventive care and a healthy environment. Site selection of urban public facilities is one of the most important goals of urban planning. Planners help increase the welfare of citizens by means of allocation of urban lands to various necessary urban land uses and facilities, by reducing unnecessary commuting and providing a healthy environment.

The main objective of this study is the evaluation of site selection models of hospitals in Tabriz city considering quantitative and qualitative criteria in 3 levels of compatibility, desirability and capacity matrixes. Employing 13 indices and using the ArcGIS 9.2, Idrisi Andes, Index Overlay and AHP implications, site selection of hospitals in Tabriz city has been reexamined. The existing sites and spatial patterns of hospitals have been analyzed. Findings reveal that there has been insufficiency in the number of hospitals and hospital beds in some cases.

Keywords: Urban Land Use Planning, Site Selection, Index Overlay, AHP Model.

1- Professor of Geography and Urban Planning, The University of Tabriz.

2- Associate Professor of Geography and Urban Planning, The University of Tabriz.

3- M.Sc. of Geography and Urban Planning, The University of Tabriz.

***Evaluation of Scientific and Additional Value of Pole-dokhtar
Wetlands Geomorphosites***

Z. Bahrami ¹

Sh. Roostaei ²

Abstract

During 2 decades ago, a lot of efforts in different grounds have taken for completing and developing of geomorphological inheritances. One of the natural attractions of Lorestan Province is beautiful Pole-dokhtar wetlands which define as a geomorphologic touristy place. This area is located at 47°, 42' of eastern longitudes and 33°, 5' of northern latitude, and at height 735 m from sea level. Evaluation of scientific value and additional value methods are used in order to evaluate of landforms in geomorphosite of Pole-dokhtar wetlands.

In this study, besides a complete analysis of this place according to scientific, economic, ecologic, aesthetic and historical values, a relation was caused between geomorphology and other natural phenomena. After the explanation of the purposes of evaluation methods and identification of the features of Pole-dokhtar wetlands, the results of this study showed that the scientific and aesthetic value of this location is at the first place than other criteria. While the economic value of this place receive the lowest rate. The existence of such a situation Indicate lack of identification of this place, Lack of coordination between planners, Poor management of related organizations and inadequate knowledge in the field of geotourism that led to the Lack of economic development.

Keywords: Geomorphosite, Additional Value, Scientific Value, Wetland, Pole-Dokhtar, Lorestan.

1- M.S of Geomorphology

2- Department of Geomorphology University of Tabriz