

Surveying the local policies, cultural doctrines, and research findings on escalation of water shortage in Iran

Gholamreza Barati^{1*}

^{1*} Associate Prof. of Climatology, Physical Geography Dept. Earth Sciences Faculty, Shahid Beheshti University, Tehran. Iran.

(Review article)

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Abstract

Right policy may utilize the findings of empirical studies. This evidence-based policy can promote the cultural doctrines. However, incorrect policy may have a negative influence on scientific investigations and culture doctrines. In a country, cultural doctrines can boost policies upgrade scientific investigations. Given this, this research, based on thematic studies conducted in the world and Iran, was aimed at surveying the challenges of water shortage over arid and semi-arid plateau of Iran. Regarding the country policy, the findings revealed that polar development- the factor of water deficit escalation- can increase water consumption over urban areas and eventually, leading to water wasting in agricultural and even industrials sectors. Empirical evidences showed that polar development has got research and even educational facilities at the service of incorrect policies such as dam construction, water transferring, and cloud siding, which is an extremely expensive design over arid and the semi-arid areas of Iran. Therefore, the revision of currently local policies can inhibit the dimensions of water crisis in Iran. In so doing, policy makers can use and synthesize research findings as the opening input for establishing cultural doctrines.

Keywords: Water-shortage, policy, culture, investigations.

^{1*} - Corresponding Author, E-mail: G_barati@sbu.ac.ir

Analyze of Comfort Climate Indexes and its relation to tourism in Tabriz

Shahriar Khaledi^{1*}, Yashar Karimi², Hossein Abdali³, Gholam-Hassan Mohammadi⁴

1*.Professor of Natural Geography at Shahid Beheshti University, Tehran, Iran

2.Master of Climatology, University of Tehran

3.Master of Climatology, Shahid Beheshti University

4.Ph.D. Climatology, Meteorological Organization, East Azarbaijan Province Meteorological Office

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Abstract

Using biological indicators of climatic comfort or Bioclimatic in geographical areas can help the planner of tourism attractions. Binding to peripheral areas used for leisure. In this study, five indexes have been used to study Tabriz comfort climate. These indexes include: PMV, PET, SET, ET, and stress index. To determine the relationship between climatic factors and the number of tourists, the correlation coefficient is used. For calculation the above parameters the following variables are used) temperature, rate of moisture, wind speed, vapor pressure and rate of sky cloudy since 1970 to 2012(and personal variables (include: weight, height, age and sexuality) Also third group variables such as, cover type and rate of activity, longitude and latitude and number of tourists entering to Tabriz since 1382 to 1390. To analyze these variables, RAY MAN and excel software have been used. Above indexes showed that TIR and MORDAD month are the comfort for tourists and KHORDAD and SHAHRIVAR are semi-comfort. Stress index is not suitable for this study. The number of tourists also correlated with temperature and relative humidity is inversely related to the level of 1/0 is significant.

Keywords: Climate, Tourism, Climatic Comfort, Tabriz.Kashmar

* - Corresponding author, E-mail: shahriar_khaledi6@yahoo.com

Evaluating trend of the land cover changes in Damghan county via remote sensing data

Shamsipour^{1*}, A.A., Rabbani², F.,

1.Assistant Professor, Faculty of Geography, University of Tehran, Tehran, Iran

2.PhD candidate at Climatology, Faculty of Geography, University of Tehran, Tehran, Iran

(Review article)

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Abstract

Evaluating trend of land cover changes for accessing to correct and timely information from the various terrestrial phenomenon is the basis of different planning. Remote sensing technology is known as suitable tool for studying of changes of terrestrial phenomenon. The purpose of this study is the investigation of land cover changes trend in Damghan. The Landsat TM satellite images for 1986 and 2011 and the lands cover digital map are used. Using of Land cover maps, 6 units (forest, pasture, agriculture, barren, salt-marsh and earth-city) have been detected in this region. After doing the geometric and radiometric correction on satellite images, changes of units have detected by using of Tessedcap transformation, supervised classification via maximum likelihood method and processing after classification for 25 years. For estimating of accuracy, obtained Overall accuracy and Kappa coefficient (0/9) are acceptable in each image. The results show that extent of the earth-city, agriculture and barren lands have increased and the extent of the forest, pastures and salt-marsh have decreased during these years. The highest increase is in the earth-city unit about 9/59 percent and the highest reduction is in the forest cover about 16/48 percent. In with due attention to obtained results, the most of changes related to decreasing of forest by converting of forest to pasture and increasing of earth-city by converting of pasture to earth-city.

Keywords: Land Cover, Damghan, Earth-City, Supervised Classification, Landsat TM.

* - Corresponding Author, E-mail: shamsipr@ut.ac.ir

Analysis of the quality and environmental effects of urban green spaces (Study: District 10 of Tehran Municipality)

Alipour¹, A., Bagheri^{1*}, M., Charakan², K., Mahmoodi Chenari³, H., Khodadad⁴, M.,

1.Department of Political and Geopolitical Geography, Imam Hussein University, Tehran, Iran

2.Department of Remote Sensing and GIS, Faculty of Geography, University of Tehran, Tehran, Iran

3.Department of geography and rural planning, Faculty of Geography, University of Tehran, Tehran, Iran

4.Department of Geography and Rural planning, Faculty of Humanities, Golestan University, Gorgan, Iran

(Review article)

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Abstract

In the present age green space is considered as one of the indicators of sustainable development due to its importance and its role in the life and development of cities. The physical and natural effects of these spaces in the urban system and its various ecological, social, and economic returns are indisputable in the structure of societies. As far as the use of green space in cities and its per capita is considered as the main issues in urban planning and management. The purpose of this research is to evaluate the environmental quality in Tehran 10th District based on available green space and provide appropriate recommendations for improving the quality of the environment to the standard level. To reach this goal, green areas were extracted using Landsat-8 satellite image and NDVI (Normalized Indicator Index). The areas of green space extracted with air quality indexes and population density and using the indexing index method at each block level were quantitatively analyzed to determine the relationship between these factors. To identify areas with high sensitivity, the map of the state of the environmental crisis was created based on population density and available green space. The results indicate that 3.25% of the total area is covered by green space, as well as 122 blocks out of 125 without the minimum per capita green space for healthy living. In order to raise the quality of environmental indicators to international standards, recommendations for areas where green space should be created are presented. This research is important for future development projects, urban planning in order to maintain environmental quality at an acceptable level.

Keywords: Green space, Air Pollution, Normalized Index, Vegetation Difference, District 10 of Tehran Municipality.

* - Corresponding Author, E-mail: milad.bagheri@ut.ac.ir

Assessing the Sustainable Development Level Using the Human Development Index (Case Study: Northwest Provinces)

Aleemran^{1*}, R., Rahimzadeh², F., ShokouhiFard¹, S.,

1.Department of Economics, Tabriz Branch, Islamic Azad University, Tabriz, Iran

2.Department of Economics and Accounting, Faculty of Literature and Humanities, University of Guilan, Rasht, Iran

(Original article)

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Abstract

Border areas play a crucial role in the economic, political and cultural life of countries. Due to many reasons, these areas have a lower developmental level than other parts of the country, and this requires more attention and planning for the development of these provinces. The first step in improving the status of the border provinces is to determine the level of development of these provinces. In this regard, the Human Development Index is currently the most acceptable tool for measuring prosperity and economic development, and calculating this indicator is essential for understanding and analyzing the welfare status of border regions. Therefore, this study aimed to measure and compare the development level of the northwest provinces using the Human Development Index and analyse the level of HDI components such as income, education and health in these provinces. To do this, the Human Development Index has been calculated using the data from 1391 to 1393 for the northwest border provinces and their development level has been determined. The results of the research show that East Azarbaijan province has a better status in terms of educational, health and income indicators than other provinces, and has a higher human development index than them. Kurdistan province has the worst situation as the indicators and has the lowest level of human development. Also, the human development index showed that the studied provinces had a moderate developmental level and their human development index was between 0.5 and 0.8. Also, the results indicate that the trend of human development index is increasing in all provinces during the study period.

Keywords: Human Development Index, Northwest Provinces, Education, Health, Income.

* - Corresponding Author, E-mail: roya.aleemran@gmail.com

Investigating responsibly environmental behaviors with emphasis on connectedness with nature (Case study: high school students in Tehran)

Hassani Darmian¹, Gh.R., Sayarkhalaj^{2*}, H., Fatemi Khesal¹, M.,

1.Department of Social Sciences, Faculty of Literature and Humanities, Ferdowsi University of Mashhad, Mashhad, Iran

2.Department of Social Sciences, Faculty of Literature and Humanities, University of Isfahan, Isfahan, Iran

(Original article)

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Abstract

As the increase of the Earth's population and the human impact on the environment and the development of cities, the Earth has been seizing by the crisis, the negative environmental impacts of the city have grown to such an extent that the greatest threat to these ecosystems is counted. Environmental problems in Tehran are a very significant issue. The main aim of this research is to investigate environmental responsibly behaviors of high school students in Tehran with emphasizing on connectedness with nature. The research method was survey and a sample of 450 high school students in Tehran's 22 educational districts was selected by random cluster sampling. The research tool is a questionnaire. The results of the research show that responsibly environmental behaviors and the connectedness with nature of the students are moderate, while the environmental values of the students are high. There is no significant difference between girls and boys in responsibly environmental behaviors, environmental values, and connectedness with nature. Also, the findings showed that the connectedness with nature and environmental values with responsibly environmental behaviors and connectedness to nature with environmental values have a significant and positive relationship. The results of the partial mediator model test show that connectedness with nature part of its effect is made by environmental values on responsibly environmental behaviors.

Key words: Environmental values, Connectedness with nature, Gender, Responsibly environmental behaviors, Biophilia.

Study of Urban physical development by using quantitative models Shannon entropy, Holdren and Moran (Case Study: Kashmar city)

Abdi Tarighan¹, J. Sarrafi², M., Razaviain^{3*}, M.T.,

1.M.A., Geography & Urban Planning, Faculty of Earth Sciences, Shahid Beheshti University, Tehran, Iran.

2.Associate Professor, Human Geography & Spatial Planning Department, , Faculty of Earth Sciences Shahid Beheshti University, Tehran, Iran

3.Profesor, Human Geography & Spatial Planning Department, , Faculty of Earth Sciences Shahid Beheshti University, Tehran, Iran

(Original Review)

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Abstract

Cities are changing permanently in different dimensions due to human and nature activities. the physical changes are significant and these changes formed in two main patterns (sprawl and compact) so that causing stability or instability. The recognition of physical development pattern of Kashmar city and it's stability or instability is The purpose of this study. Research method is Descriptive – analytical. Shannon entropy index and Holdern model used for measurement and recognition of physical growth pattern of city. Also spatial autocorrelation technic used for analysis of spatial pattern of city growth parameters. The results show the physical growth and spatial spread of Kashmar city have been Inappropriate and ineffective over the last twenty years. Also we can assume dispersed growth pattern or irregular horizontal expansion for the city. Shannon entropy index for 2000 and 2010 years is 1.36598 and 1.36731 that it show horizontal growth with slight increase during a decade. Also the result of holdern model show from total area added to city, during the period under study, %45 is result of population increase and %54 is result of urban per capita increase. It shows instability. The result of spatial autocorrelation about four variable population, household, Residential units and density show the greatest number for density. These reveal cluster and abnormal distribution of density on city area. Household have lowest number so it have relatively normal distribution. with emphasis on results, urban sustainable development and sustainable city growth need to politics for control and change of this kind of growth.

Keywords: City physical growth pattern, Sprawl city, Compact city, Sustainable development, Kashmar

* - Corresponding Author, E-mail: m-razavian@sbu.ac.ir

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- Brown, A.L., 2003. "Increasing the utility of urban environmental quality information". *Landscape and Urban Planning*: 65(1-2), 85-93. <http://researchgate.net/publication/222012435>

Reference to a book: Gakenheimer, R., 1978. *The Automobile and the Environment: An International Perspective*, MIT Press, Cambridge, MA, 120 p.

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Acknowledgements

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