Analysis of the Influences of Global Policies upon Informalization of Urban Spaces: the South Countries

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Extended Abstract

Introduction
In spite of political nature of planning decisions by many contemporary thinkers, a few attempts were carried out to establish relations between global planning strategies and political theories. It is important that the test of political thought in various planning strategies can make clear hidden political interests and methods in planning process. Until now, different policies and strategies have taken by governments in the South countries for encountering with informal settlements and their residential societies. Their formation, decline and stability are related to establishment of various dialogues for development and planning such as globalization, neo-liberalization, structural adjustment policies and democracy.

Methodology
This research has an analytical method and it is based on realistic analysis on recognition of the nature and mechanisms of the informalization of space and using documentary research. In this analysis, the phenomenon of informalization of space occurs based on interactions of individuals and groups (government, local leaders and people) and decisions and their motivations in terms of strategies and tactics in dealing with global currents. At the macro level, political and economic policies of governments and circumstances such as political concentration, political instability, war, conflict, colonization and political confusion are in relation to global processes like globalization, neo-liberalism and structural adjustment policies and democracy in southern states. In middle level, actions and reactions and decision making of state and various stakeholders resulted by process of macro level has social and spatial effects and circumstances.

Results and discussion
The measures of urban planning have failed to produce urban space. In recognition of the failure of the government to make urban spaces, ordinary people have the potential to generate their desirable urban spaces by creative spatial practices. Experiences have indicated that among the

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official planners, ordinary people to the authorities and professionals tend to produce variations and differences rather than homogeneous spaces. Ordinary people have the ability to produce living spaces out of abstract spaces via adaptation and extending spaces for their daily cultural activities and practices. Definitely, it seems that state has not sufficient ability and liability to regulate urban space and forced urban residents to use their liabilities in shaping urban space by creating networks, coalitions and associations. With emphasis on the role of the alliance as a space practice in the production of urban space, we can say "spatial practices for various hidden forces that can distract homogeneous space towards their own goals, produce a dramatized space that is lived space of residents in informal settlements. Thus, in relation to the production of space, it can be argued that neoliberal ideology has changed perception of urban space because people in peri-urban areas look for places for the now and future investment. In addition to reducing the role of government in providing land and housing, it shows that poor people continue to struggle for affordable access to land for housing. Finally, this process leads to disputes over urban space. In fact, globalization intensifies competition for urban land. First, when demand is rapidly increasing, urban land is become scarce. On the other hand, a large percentage of urban migrants have been absorbed and created new economic opportunities by globalization. They cannot pay the price of urban land. In such circumstances, they have no option except to use their own initiative to have access to urban land, which finally have been lead to competition for urban land with government officials. In this regard, urban residents use their own everyday strategies although are not limited to informal land tenure, as the tools for access to land; they organize themselves in alliance to bargaining because they often have been completely excluded in urban decision processes and lobbying on competitive urban land. On the other hand, the involvement of government officials has attempted to control competition corruption, self-help housing, evictions and spatial development as spatial strategies of urban space.

Conclusion

Analysis of the experiences of countries has indicated some arguments. First, global processes have found out different forms in different countries; as space of the Southern have not been appropriate background to realize spaces of global flows due to colonization, war and political conflicts and resulted in informalization of space. Second, informal land and housing markets is provided not only among the poor but also in competition among the middle class even elite competition in the Third World. Third, in these countries, the problem is not formal and informal, but is the distinction between informalization of the poor and the middle class, but in both of them, the place of this informalization is mainly in the peri-urban areas. Fourth, approach of the right to the city can be addressed as an optimized approach to the rights of working-class groups and challenges in an informal urban background. Given the right to the city, decentralization of power from elites to the poor should be the first step, what Lefebvre called Utopia is a style of thinking that is possible in all regions of the world. Urban-based programs must have mechanisms for gathering the demands of the people. The right to the city is a gradual and procedural category. Adopting such an approach helps us achieve the right to produce life space and the right to have spaces everyday life in the city. Achieving this right provides a city with two components of access to urban resources and spaces and the quality of urban life and decision making of residents as active subject not the political object of institutionalized for all classes.

Keywords: world policies, urban space, informalization, south countries, the right to the city.

Assessment of Spatial Equity Index in Tourism Villages (Case Study: East Azerbaijan Province)

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Extended Abstract

Introduction

Paying attention to the approach of spatial equity in distribiution of land use in any community, and the way of which the citizens take advantage, represents the social, economic and environmental development. The necessity of paying attention to spatial equity in distribiution of land use in touristic villages in comparison with Nontouristic areas is of great importance, because these areas have a great potential for comprehensive development and especially the development of rural areas. This factor has doubled the necessity of paying attention to spatial equity in these villages. Actually, the use of land and space as a public resource and public wealth is crucial in tourism villages which should be based on scientific principles of land use planning. East Azarbaijan provience due to climatic and cultural diversity and also because of its historical background contains numerous touristic villages. Despite all these features, due to mismanagement and lack of optimal allocation of resources and services, they are exposed to a numerous problems such as lack of service centers, lack of green spaces and lack of compatibility of land use for the welfare and requirements of tourists. Given the importance and sensitivity of spatial equity in tourism villages, this research seeks to answer the following basic questions:

- To what extent the spatial equity is considered in spatial distribiution of land use in touristic villages of East Azerbaijan province?
- How great is the correlation between geographic conditions and spatial equity in touristic villages of East Azerbaijan province?
- How can we prioritize touristic villages of the province in terms of spatial equity?
- What are the suggested guidelines for the optimal distribiution of land use and achieving spatial equity?

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Methodology

This is a descriptive-analytic research. Data have been collected in document and survey methods. Review and selection of reseach variables, theoretical framework and research backgrounds is conducted using documental method. we have investigated 42 variables of residentail, cultural-religious, communicational, educational, hygience, physical, structural-institutional and service dimensions in this research. In surveys, the data related to land use of touristic villages of the province were derived from Islamic Revolution Housing Foundation, the Cultural Heritage Organization of the provience, and Iran's statistics center. Delphi technique is used to determine the weight of functions. Then, the list of functions were given to 30 of urban planners (including academics and experts of Housing Foundation and the Cultural Heritage Organization). After analysis of the comments, the weight of functions were extracted. The study population is 48 touristic villages of East Azerbaijan provience. They are tourism target villages and the best touristic destinations according to the rules and regulations of the Islamic Revolution Housing Foundation and Cultural Heritage Organization. Vikor model was used to perform the analysis, after calculating the gap between current and ideal situation. The one way ANOVA analysis test and Duncan's post hoc test are used to evaluate the difference between different functions. The cluster analysis test is used for grading and finally the multivariate regression test is used to explain the changes of this index.

Results and discussion

According to the results of Vikor model, the biggest gap with the amount of 0.829 is for 8 variables related to the touristic services functions. Also residential indexies with the amount of 0.162 are in the best situation of spacial justice. The highest amount of frequency is about the suitable situation with the amount of 45.5%. Also the results of statistical tests shows that there is a correlation between population, beneficary index, fullfilment of guide plans and the typology of village with the amount of spacial justice in touristic villages.

The results of Vikor test showed that the lowest gap of spatial equity is related to the villages of Ina Lu (0.150), Savar (0.276) and Darband (0.293) in residential and street network functions. In addition, the largest gap is related to the villages of Kandovan (0.475), Bezujiq (0.463), Lighavan (0.415) and Oshtabin (0.412). According to the results of cluster analysis 19.6% of the villages in terms of spatial equity are in very low level, 16.4% are in low level, 17. 2% are in intermediate level and only 45.5% are in high level and 1.3% are in very high level. The results of correlation analysis showed that only the variables of the civil projects in form of rural guide plans, possessing index and type of village have a significant correlation with the dependent variable.

Conclusion

Due to the need for spatial equity in distribiution of land use in touristic villages, this research aimed to analyze the spatial equity in land use in touristic villages of East Azerbaijan provience. The results showed that only 3% of villages are in good and very good condition in terms of spatial equity. Therefore, based on the results of the research, it can be concluded that there are the need to understand the demands and needs of villagers and tourists before creating functions and also the number of tourists entering the village and also their economic and social characteristics. It is required to pay more attention to rural green spaces, rural passways, parks and open sport spaces. There is a need for serious attention to the completion of rural guide plans in villages and disregarding this plans can reduce efficiency in the environmental

variables in rural land uses. Adopting comprehensive and integrated approach in the management of land use in touristic villages can be helpful for the management. It is required to integrate system approach in land use management in tourist villages. The officials and planners have to rely on management strategies to create more gaps between different applications.

Keywords: spatial equity, land use, touristic villages, Vikor model, East Azerbaijan.

Analysis of Housing Economics and Productivity of Housing Production, Sanandaj, Iran

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Extended Abstract

Introduction
Housing as one of the stellar biological needs of human beings has attracted a major theoretical, technological, and materialistic attentions of many researchers. During history, meeting this need and its quality has been dependent on cultural, environmental, historical, economical, and technological conditions. World population and urban life's intense increase more than 50 % and it is expected to increase more than 68 % by 2050. This turned the challenging problem of housing into a crisis. This problem is of greater importance in developing countries due to the fact that their societies are mainly constituted by low-Income (middle-class) people. In Sanandaj, in addition to the situation we see the national level of housing sector that is due to population growth and intense urban life growth. In the region, other factors like general level of income have caused shortage of house especially among weak people who are about 35% of the population there.

In housing market, there are a lot of related economical indices such as family saving, cost and income, profitability rate of land and housing market, land and house price and productivity of housing production factors. This study tries to probe into principal economic reasons of increased gap between offer and demand in housing sector in Sanandaj.

Methodology
The study is an applied research conducted through a descriptive-analytic method. To collect data, we have used library-based and field method for the needed data. The data have been gathered through formal sources like Iran Census Center and Iran Central Bank.

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Results and discussion

Changes in housing quantity have been considered for studying housing market and influential economic condition of this sector. Based on the obtained results, the gap between housing offer and effective demand is increased since 1976 so that the ratio of number of families to number of houses is reduced from 1.0015 in 1976 to 1.15 in 2006. Furthermore, house shortage rate in Sanandaj in comparison with the number of families, without considering demolition rate, is 10760 units.

Land and house price, and lease cost are significant indices for analyzing supply and demand in housing market. Annual growth of land in the abovementioned period of time (1976-2006) is 31.15% while cost experienced 25% growth.

By comparing house and land cost rate growth and inflation growth rate, it is possible to perceive the importance of house in economical transactions which can also lead to brokerage growth. During this period of time, land, house, and leasing cost growth rate have been always more than inflation rate (17.4).

At the same time, Sanandaj families' income growth rate in this period has increased to 16.6 which can be interpreted as a huge gap between potential and effective demand in a 28% growth in land price and a 31% growth in housing price. Family saving as a main source of renting house with a fixed price of has been always negative except in four years; whereas, banks loans , on the average, in the last ten years has decreased from 67% to 10.6% in 2002.

The average bank loan is increased from 81 million Rials in 2002 to 192.6 million Rials in 2010. The other main index is the economical profitability of land market in comparison with the profitability rate of house construction market in which we have witnessed an annual growth in both of them. However, at the end of the period, the profitability rate of house construction is 5 times more than that of the land. The productivity rate of renting house has been studied based on the interpretation of the factors. Therefore, the productivity rate of capital with a fixed rate has been positive. The growth rate of added value in housing sector in this period, on average, has been 30.25; that is, for any Rial investment, there is a 30.25 Rial added value. Also, the productivity rate of land that was 1.017 units in 2002, has remarkably reached 2.55 units in 2010. The productivity rate of work force is increased from 5.2 in 2002 to 22.9 in 2007. In other words, any work force has provided 22.9 million Rials added value in housing sector. Its average annual growth has been 34.5 during this period.

Conclusion

Results of the study have demonstrated that housing has not been a problem by 1976. However, at the end of the period, 1976-2006, we have encountered, first, a problem called houselessness and house-badness specifically in obliterated fabrics in Sanandaj city, and second, a house shortage of 15% of in its inventory. Based on the obtained results from housing economic indices and its financial production mechanism, accentuation on family savings for its financial renting seems fruitless. The continuous growth in house price with its remarkable added value can indicate that by omitting and reducing land price, the cost of house construction will be transmitted to the other sources and methods of house financial provisions such as bank facilities growth to 80% for house purchase and construction, deposit loans, tax exemption, and activating financial sources of the private sector. We can also pace towards social housing production methods, rent on the condition of owning and eventual construction.

Keywords: inflation, costs and benefitd portfolios, profitability rate, productivity, offer and demand.

Spatial Analysis of Kolapa Vertical Parking in Hamedan City Using Hierarchical Analysis

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Extended Abstract

Introduction
In today's modern cities, urban road network is important as the vital arteries of the city. Increasing population and urban development, on the one hand, and the increasing use of private cars on the other, as well as low street widths, especially in the central part of the city, caused many problems such as increase in the marginal park, limiting visibility for drivers at intersections, reduced safety and other adverse psychological effects on citizens. Hence, a efficient site selection for public parking places can increase the efficiency of parking, thereby reducing the marginal park and indirectly increasing the width of the streets for better traffic flow. Today, due to limited spaces, vertical parking can be optimized to increase the service of a large amount of vehicles. Class parking can be effective when it comes to spatially-appropriate spatial location. Accordingly, the main issue of this research is the spatial analysis of the Kolapa vertical parking in Hamedan. The site selection for suitable parking lots can make urban management more efficient.

Methodology
The present study is an applied research using a descriptive-analytic method. In this research, the library-documentary method has been used to formulate theoretical foundations. In order to know the scope of the study and to investigate the current situation and the reasons for the success and failure of the Kolapa's parking in Hamedan, we have been used to attract vehicle owners, field observations, and direct observation and survey methods. The data gathering tool in this research was the use of statistical resources, library, and comprehensive plans of Hamadan city, direct observation and field observations. In this research, Hierarchical Analytic Analysis (AHP) method has been used to evaluate the criteria and select the appropriate location for the new public parking in the study area.

Results and discussion
According to available evidence, Kolapa neighborhood is located in district 2 of Hamadan's Bou

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Ali streets. Bou-Ali Boulevard, with its well access to the commercial and administrative services has a lot of traffic throughout the day. In most cases, the marginal parks located on this street prevent it from functioning properly, so those in many cases we see stop of cars on this street. The passageways of this place are not suitable for the pavement, and in many cases, after the extension of some streets and alleys, traffic barriers, such as electric light beams, have not been displaced. The cars parked along the streets have caused a lot of problems for the residents. These problems can be solved by regulating the local transport situation at the neighborhood level.

The network governing the Kolapa neighborhood as a spiral grid is an inseparable characteristic of this local network. The network, with its initial design of at least 5 years ago, has gradually retreated over time, with the implementation of detailed plans as well as the guiding principles. The occurrence of irregularities with ups and downs has been irregular. Also, lack of proper coverage has slowed down the traffic and communication problems of the winter season. Other inappropriate factors on this network are the existence of alleys with many deadlock alleys.

Vertical Classical parking Kolapa is a private parking garage with a total area of 1200 square meters and is located in the 6th floor in the kKolapa neighborhood, one of the most crowded neighborhoods in the city of Hamedan. The capacity of the parking lot is 150 cars, with average of 50 vehicles per day in this parking lot. Weekends (Thursdays and Fridays) are quieter than other days due to the fact that Bou Ali Avenue has more administrative and commercial applications. On holidays, the percentage of visitors to this street is reduced. The following table shows the average number of car parks during the week.

Conclusion

The results of the study determined the selected points and compared them with other regions. The results indicate that site 5 is a subway ground and accessed from Bou Ali and Mesopotamia. This is a suitable place for constructing class parking. It is located in the town of Kolapa in the city of Hamedan. It became clear that the existing parking is option number 4. It is an unsuitable place for parking and its location and construction is unsuitable for the drivers. Some of these reasons are:

The existence of a huge vacant land in the center of the Kolapa neighborhood near the current vertical parking has made it difficult for drivers to park their vehicles. The Kolapa Parking does not have enough access to the main street (Bou Ali), and drivers who travel to Bou Ali Boulvard and to the vertical parking from main Alley. Another reason for not using the vertical parking is the presence of parking in narrow and enclosed alley.

Keywords: street capacity, location, parking, Kolapa Parking, Hamedan.

The Role of Delimiting Neighborhoods in its Social Cohesion and Integration (Case study: Mozafari and Al-Qadir Neighborhood of Kerman)

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Extended Abstract

Introduction
For urban sociology, urban neighborhoods are considered as the concept of real social units. They, to a certain extent, have been emerged accidentally and unconsciously. These have been developed in sustainable and definite form, including certain privacy over the time. Thus, in the past, most of the cities developed in Iran had a certain name and specific social characteristics. Sometimes, this kind of classification is referred to geographical classification of city which brings up a specific name for it. The present research has put forward this question: which factors have brought about the unity and cohesion of neighborhood in delimiting boundaries of the historic neighborhoods of Kerman? the associated problem is referred to significance differences in delimiting neighborhood in the past and that of the present time. The necessity of this study is the adaptation of a new approach in neighborhood and urban division. As the current procedure is based on providing services and determining the levels of urban division, it has always been pursued, regardless of establishing adjacent neighborhoods. The separation of neighborhoods may present the principles of cohesive. Various urban units such as neighborhoods are integrated with each other through urban interfaces or boundary elements and components. In fact, the relationship between various urban neighborhoods has been underpinned by these interfaces than internal elements and components of each unit. With more investigation in study conducted on neighborhood and relevant purpose and approaches to the present study, it is obvious that few studies have been conducted on the concept of delimiting neighborhoods.

Methodology
In this study, qualitative research approach has been applied using content analysis method related to neighborhood division, delimiting neighborhoods, and the concept of city as a whole.

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The new theory of sciences is related to philosophical views, as well. We have analyzed relevant documents such as maps and aerial photographs related to neighborhood divisions in the past and present. By reviewing valid pervasive literature covering cohesion and integration issues, 14 indicators have been explored for their evaluation. Al-Qadir and Mozafari neighborhoods in Kerman have been selected as case samples. Then, questionnaires have been designed to evaluate indicators evaluated through the likert scale. To validate the 150 questionnaires of this study, we have used SPSS software. The sampling method is a proportional volume cluster in which the number of samples has been selected based on each neighborhood population. The first respondent has been selected accidentally using neighborhood's map and other respondents have been selected using systematic distance. After filling in questionnaires and adding data to SPSS Software, factor analysis has been used to analyze questionnaire data and to find the important and influential factors in each neighborhood. Finally, some suggestions and strategies have been developed to ameliorate the possibility of neighborhood cohesion using factor analysis and comparing them to each other.

Results and discussion

The findings has revealed that factors with the highest proportion in defining residential neighborhood cohesion are including access to boundary, access to communities in boundary, the quality of social interaction, dynamic and vitality condition of boundary, and appropriate pavement in boundary. The historical neighborhood of Mozafari shows the maximum integration resulted in the highest amount of cohesion. The highest and the lowest differences are referred to "access to boundary" and "having appropriate pavement". Among all mentioned factors, only "appropriate pavement" shows a similar condition in both neighborhoods. In other factors, the highest degree is obtained by Mozafari neighborhood. In other words, the environment of neighborhoods boundary or their interfaces plays a significant role in promoting interconnectivity and social cohesion of neighborhoods. Actually, if boundaries got social interactions, the role of boundaries as connecting axis rather than a separation edge will be highlighted.

Conclusion

In delimiting neighborhoods, social, physical, and historical factors should be determined to divide neighborhood. Some residential neighborhoods present social factors as social correlation in which specific physical-spatial structure has often been manifested. However, dividing neighborhoods has developed main activities in neighborhoods with no social factor to link the community potential. The center of neighborhood is a major spatial factor in recognizing it, particularly when it is to be more attuned to social needs. Therefore, centers such as mosque should be delimited in separate neighborhoods. Finally, planning and designing these centers as urban environment on the scale of the neighborhood may improve social interactions.

Keywords: Iranian neighborhood, delimiting boundary, cohesion, interface, Kerman.

Scenario Making for Land Subdivision in the Urban Development Process (Case Study: Marginal Areas of Semnan)

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Extended Abstract

Introduction

Urban development planning has always been faced with new challenges of increasing complexities in the decision-making environment which makes it necessary to use new methods for predicting and preparing for the future. In this regard, as a new approach, the planning based on making scenarios will help identify and present different scenarios for making specific decisions in urban management. In the process of urban development, the subdivision of land has always been a controversial topic with regard to new developments.

Complexity and multi-dimensionality of urban development process have made its analysis difficult due to uncertainties and the probability of occurrence of various futures. The planning based on making scenarios is one of the common ways to deal with uncertainty in the environment. Unlike traditional planning methods, this approach develops potentially different views of the future and thus provides a basis for creating solutions and options suitable for different situations. In the planning of urban development, land subdivision is considered as the first stage of design. Investigation and analysis of the effects of different patterns of land subdivision in a vacant lot is an important part of urban development projects. Because of the various economic, social, and physical factors involved in the process of land subdivision, the need to examine their impacts is necessary. In this regard, the purpose of the present study is to apply the factors affecting the subdivision of land plots and the presentation of its various patterns in the process of urban development with the approach of making scenarios. The basic tool used in this regard is the model developed by Dahal and Chow (2014). This model is based on vector space and automatic land division. Based on these properties, different patterns of land subdivision have been presented in different scenarios. A probable scenario has been selected for Semnan city as the case study of the research compatible to the characteristics of the city.

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Methodology

In the present study, four factors of household dimensions, income level, land price, and access to urban centers were selected as independent variables and land area was selected as the dependent variable. This study is an applied research in terms of purpose with a descriptive-analytical method. The proposed modeling for land subdivision in the developed areas of Semnan is based on the comprehensive plan carried out in seven steps:

Step 1: Calculating the amount of land to develop the city in the comprehensive plan in horizon 2026.

Step 2: Determining the blocks in the developed margin area

Step 3: Determining the spatial value of each of margin blocks

Step 4: Providing a regression relation according to the factors affecting the size of the segments of the land

Step 5: Predicting income growth and land price in the comprehensive plan horizon (2026)

Step 6: Providing different scenarios for land division in the comprehensive plan horizon (2026)

Step 7: Conclusion and selection of the probable scenario

Results and discussion

The results of the significance of each independent variable in explaining the dependent variable have been presented in a regression relationship in Semnan city as the study area. According to the predictions of the comprehensive plan horizon (2026), we will need 86 hectares of land. The land subdivision modeling process has been conducted in seven steps. Basic tool was used to divide the land in the model presented by Dahal and Chow (2014) to divide large pieces of land based on size, shape, and direction. In this research, different scenarios have been presented through statistical methods. According to previous studies, accessibility, household dimension, land price, and household income level were selected as the main factors affecting the determination of the area of land segments. The effects of each of the factors were determined based on a regression relation in Semnan city. On the other hand, each identified margin block has a different spatial value based on two factors of accessibility and land price and the households tend to live in one of the margin blocks according to their economic power and suitability. Thus, it was assumed that higher-income households will live in blocks with higher land prices and better accessibility. Assuming that the regression relationship in comprehensive plan horizon (2026) holds the spatial value of each block, four different scenarios were presented for the subdivision of land segments using Dehal and Chow's model (2014).

Conclusion

Given the variables and relationships presented to determine the size of separation segments, four possible scenarios are obtained and finally, according to the characteristics of the city of Semnan, the probable scenario is based on accommodation of low and medium level of income in margin area of city. It has been selected as the pattern of subdivision. In order to select a scenario which is more consistent with the future conditions of urban development in Semnan, we used the views of real estate agencies (6 real estate agencies) and 4 urban planning experts of Semnan municipality. Real estate agencies were asked to choose the probable scenario according to land price, land sale, mortgage, rent, and area of existing segmented lands in the margin neighborhoods of Semnan such as Rozieh Town, Janbazan Town, 400 Units and Mehr Housing Units. This is conducted according to people's living standards and their willingness

for housing in these neighborhoods. In addition, the urban experts of the municipality were asked to choose the desirable scenarios by considering the population increase in Semnan city by 2026. The variables are dependent upon the immigrant population, land price, the number of licenses issued for construction, the lack of facilities and land uses, and, finally the economic, social, and cultural characteristics of the inhabitants of the margin neighborhoods. By summing up the obtained comments, it seems that the scenario number four is the most likely option from the view of most experts.

Keywords: scenario, land subdivision, urban land use planning, detailed plan.

Environmental Analysis of Urban Housing Indicators (Case Study: Gorgan City)

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Extended Abstract

Introduction
With global demographic changes, cities have increasingly felt the need for housing. Residence as the most important need of people covers the largest space of the city. In small cities, more than 60% and in large cities and about 40% of all cities are covered by the residential land use. The economic and social importance of housing, in the one hand, and the employment and its relationship with many other sectors of the economy as an appropriate tool for the realization of economic policies on the other hand, has placed this sector at the center of public attention. Cognition and proper categorization of different architectural types can be helpful in better understanding of the space to achieve new design techniques. The present research consider the general framework of the housing in Gorgan city from the point of view of housing typology according to the indicators of housing planning in the triple urban areas.

Methodology
This study is an applied developmental research using a combination of descriptive, analytical and correlation methods. In order to collect data, we have used the field surveys and documentary studies and also researcher-made questionnaire. The statistical population of the study consists of 53462 residential units in the study area. The sample size will be 384 residential units based on Cochran's formula distributed by multistage randomized sampling method. Reliability of the questionnaires is about 0.82 using Cronbach's alpha test. Data have been analyzed by using SPSS, Excel and ArcGIS software.

Results and discussion
In the sample households, 53.6% of the total sample population is male and 46.4% is women. The variation of household density in the whole community of the sample based on the number of the family members indicates that the families of four people are 33.06 percent of the sample as the largest proportion of the total population of the sample. In the study of the index of the number of residential units, the largest proportion is 26% and belongs to a residential building with 6 to 8 units. The highest level of infrastructure in the triple areas is for buildings of 50 to 100 square meters. The area with 46.35% is the first class, in the second the value is 49.64%,

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and the third class cover 50.42% of the sample. However, the least abundance in first class belongs to buildings with an area of over 300 square meters with 2.43 percent, in the second and third district the buildings with an area of less than 50 square meters contain 3.0 percent and 3.36 percent, respectively. In studying the results of the land price index, the highest land price with 30.67% belongs to the group of 10 to 15 million Iranian Rials. The lowest proportion covers 9.33% for the lands with a value above 20 million Rials. The results of the type of materials index shows that the largest proportion belongs to residential buildings with brick materials (33.34%) and in the study of residential buildings life index, the largest share belongs to buildings with a lifetime of 1 to 10 years old (51.2%). The lowest proportion of residential buildings is over 20 years old (19.74%). The results of the tests indicates that among the five variables of typology, in the first region, the physical variables with a beta coefficient of 0.657 is in the first order, and the quantitative variables with a beta coefficient of 0.341 is in the second order. In the second region, qualitative variables with a beta coefficient of 0.409 are in the first order and the physical variables with a beta coefficient of 0.238 in the second order. In the third region, the physical variables with a beta coefficient of 0.623 are in the first order. The access variables with a beta coefficient of 0.325 have been verified and other variables of the typology have been eliminated from the equation.

Conclusion

Based on the results, the highest difference and diversity of housing in terms of typology is found in the second district of Gorgan and the least is in the first of the urban area. The diversity and differences is resulted from a wide variety of indices and components of housing in the second district, the variability of population, the different economic activities of the people living in this region, and the high percentage of immigrants to this area along with other indigenous inhabitants to the region. The different typology of the district 1 of Gorgan city is also resulted from its location in the best part of the city and the so-called top-notch region of the area. This shows the economic prosperity of people living in this area and the close cultural-social level of the inhabitants of the region.

Same as similarity of the residential buildings of the area with each other, the access to all the facilities of the city show the least diverse in terms of indicators and components of the typology of the housing. The district 3, as it can be seen, has a moderate rank in terms of variety and distinction of typology. This can be attributed to the close proximity of the immigrant and indigenous peoples of this region in terms of social, economic and cultural aspects. These can be reflected by the housing structures and specifications of housing qualities.

Keywords: typology, housing indicators, stepwise linear regression, Gorgan City.

Sustainable Assessment of Religious Tourism (Case Study: Emamzade Hamze Ali – Chaharmahal and Bakhtiaree Province)

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Extended Abstract

Introduction

Religious tourism is one of the significant areas of tourism industry in the world. It has always been a very important field of tourism which has not been affected by climate conditions or bad weather. Religious tourism is as old as the history of religious culture. According to the World Tourism Organization studies, each year, 600 million people travel around the world for religious and spiritual purposes.

Nowadays, more and more countries are seeking to develop religious tourism as a major source of employment and income. Religious tourism is also vital in Iran and it is the reason for many travels. The vast country of Iran, with a great variety of cultures generating various customs throughout the country, has many religious attractions, monuments, shrines and holy sites. This great variety in scenic and historical attractions led to the development of religious tourism. The total number of Imamzadeh sites in Iran is more than 8051 throughout the country. In addition, 33 Prophets are buried in the country, each having a special position for the Shiites. The proportion of Imamzadeh sites in different locations are respectively, 7 percent in rural areas, 23 percent in urban areas, 18 percent in mountainous areas, and the remaining 52 percent in the vicinity of roads and desert areas. Among the provinces of the country, Fars province with 14% and Mazandaran with 12%, are ranked as the first and the second in number of sites, respectively. Chaharmahal and Bakhtiari province has also a total of 1% of the shrine sites.

One of the most important centers of religious tourism in this province is Imamzadeh Hamzeh Ali, hosting lots of tourists every year. These visitors have various impacts on the economic, social, environmental and physical aspects in the region. The purpose of this research is to evaluate the sustainability of this center in the life cycle of tourism.

Methodology

This study is an applied research with descriptive and analytical methodology. The purpose of the study is to assess the impact of tourism sustainability in Imamzadeh Hamzeh Ali. The study population consists of tourists and pilgrims that visit the holy shrine. The total volume of tourists and pilgrims that visit the shrine annually is about 600,000 people. The site becomes usually crowded during late spring and summer in the months of June, July, August and

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September. The average daily page views in the mentioned months are about 4,000 people and in other months the value is about 500 people. The total sample size of visitors is 350 cases, estimated through Cochran formula. The variables of this study were identified by the experience of other similar studies by experts. The total levels of the study are 4 levels (economic, social, environmental and physical) and the total variables are more than 50 cases.

Results and discussion

Of the total number of respondents, 61 percent were men and 39 percent were women. For the duration of their stay, 73% of these tourists were daily visitors and the rest (27%) were those stayed few days. The tourists are mainly come from Chaharmahal and Bakhtiari province (65%), Isfahan province (19%), and Khuzestan province (9%) and from other provinces (7%). From all the respondents, about 11% were illiterate, 23% elementary, 40% diploma and 26% bachelor and higher. About 20% of the respondents were 18-29 years old, 42% were 30-49 years old, and 38% were more than 50 years old.

To assess the dimensions of sustainable development, the collected data were initially classified into the model of sustainability assessment process. Up to 63 variables were used to assess sustainability at the destination. Some of these variables are including job creation, purchase of agricultural products by tourists, indigenous employment in the tourism sector, access to credit and banking services, spreading handicrafts, private sector investment, improved facilities and educational services, improvement of cultural facilities and services, promotion of the standards of living conditions of people, addiction, theft, crime, hospitality, attention to the local culture of the people, local community satisfaction from tourism, participation of local residents in planning, interaction between tourists and the host community, rural migration, protecting Imamzadeh's cultural heritage, quality of access routes, communication development, access to healthy drinking water, access to proper sanitation, suitable mobile coverage, tourists access to therapeutic space, access to commercial spaces, access to parking and etc.

The study of economic variables shows that parameters like seasonality of tourism revenues, increase in costs, and economic inequality are not good and are in an almost unstable situation. In the social dimension, addiction, theft, and delinquency are the worst of all. In the environmental dimension, about 75% of the variables are unstable or nearly unstable, the worst of which is the loss of drinking water and agriculture, pressure on resources, and environmental degradation. In the physical dimension, road accidents, access to sanitation and health care services have the worst condition than other variables.

Based on the analysis, the highest stability is related to social sustainability (5.13). This level of sustainable development is in medium condition. After that, physical sustainability is in the next rank (4.97). The least sustainability is related to environmental level (3.71 value), followed by economic level (4.34 value). In general, all aspects of sustainable development are evaluated in intermediate level (4.6).

Conclusion

Based on the results of this survey, and the answers of the respondents, the sustainability of Imamzadeh Hamzeh Ali is in medium level, especially in the case of environmental sustainability. The condition is poor and requires immediate measures and planning to achieve a more suitable condition. Based on Butler tourism life cycle model this center is in the second order, requiring engagement and action. At this stage, there is an increase in the number of

short-term tourists. Businesses companies start to build touristic-related services and facilities. Small hotels and restaurants are constructed to provide the visitors with accommodation, food and tour guides.

Keywords: religious tourism, life cycle, assessment of sustainability, Imamzadeh Hamzeh Ali, Chaharmahal and Bakhtiari.

Spatial Analysis of Livelihood Assets of Rural Households (Case Study: Buin Zahra Township)

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Extended Abstract

Introduction
Poverty is one of the most important challenges with which humankind was always faced. Villagers are one of the poorest and most vulnerable groups in societies, especially in the third world. Accordingly, providing a livelihood in human societies is one of the biggest challenges of planning, particularly in rural communities, which are the focus of the poor people in developing countries. Livelihood involves activities, assets, and accesses that are jointly determined by individual or rural households living condition. According to the livelihood approach empowerment and the interference power of villagers in their individual and social activities are linked to sustainable livelihoods framework. These criteria affect the livelihood strategies of rural households and has significant role in subsistence and livelihood sustainability. By increasing the level of access to different types of assets dependent on the livelihood and control of them, the poor will be able to provide their basic needs and they can create alternative livelihood choices. These assets comprise a livelihood concept. According to these issues, the present study is to examine the capital and assets of poor villagers seeking to analyze spatial state of livelihood assets in the villages of Buin Zahra Township. This is to answer these questions: how is the spatial distribution of livelihood assets in the studied villages? What level are livelihood assets in the villages of Buin Zahra Township? Is there any difference between villages of study area in livelihood assets? Which of the livelihood assets in the villages of the study is more desirable?

Methodology
This study is an applied research with descriptive- analytical methodology. Data were collected by documentary study (Books, Articles and Reports) and field surveys (Questionnaire, Observation, and Interview). The required data were collected using a questionnaire form and interviewing with 532 people (the Cochran formula was used for sampling) from 40 villages in Buin Zahra Township. To analyze the data, we have applied descriptive statistics (Mean,

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Frequency) and comparative statistics (Correlation Coefficient, One Sample T-test, and ANOVA). In order to evaluate and analyze the assets, we have used the Moran and Gi spatial statistics method and kriging. Validity of the questionnaire was examined by a pre-test and was approved after correction. The reliability of the questionnaire was also evaluated by the Cronbach's alpha test in the SPSS software. The value was 0.88 for the reliability.

In general, in order to measure the level of livelihood assets and their spatial distribution, in the sample society, dimensions of livelihood assets were identified in six variables in social, institutional, human, natural, physical, financial aspects.

Results and discussion

Investigating the individual characteristics of respondents shows that the average age of individuals is 45.97 years old, among them 2 percent male and the rest are women. According to the education level, 33.1% of the respondents are illiterate, 16.5% are elementary, 27.3% are secondary, and 23.1% are under-graduate. In terms of household size, the average size of household's members is 2.61 and the maximum number of members is from 7 to 5. The descriptive results of the study showed that the livelihood assets of the villagers were on the moderate and lower levels. According to the one sample t-test of villager's perspective, only social asset was evaluated at the desired level. One-way ANOVA was used to determine the variability of villages in terms of assets that the test results indicate that there is a significant difference between the studied villages in terms of assets evaluation. The test results show that Zein-Abad rural district had the lowest livelihood assets. One-way variance analysis test was used to find the different assets in the study villages. The results showed that the social asset has better conditions in the studied villages and human asset is undesirable. Non-parametric analysis of the correlation between social, physical, human, financial, natural and institutional assets in the studied villages indicates a direct relationship between livelihood assets.

The mapping data generated in relation to livelihood assets indicate that in terms of livelihood assets, the central district of Buin Zahra township has a desirable condition and the south and southeast and the west areas has undesirable conditions. The hot spots map also confirms that the hot spots located in the central district are in the south-east and south-west areas in the whole south of Buin Zahra Township.

Conclusion

This study has analyzed the spatial distribution of livelihoods in villages of Buin Zahra Township. According to the research results, the social assets of the villages are in a good condition. The same assessments can be used to improve other assets; because rural development programs can be better fulfilled and implemented with cooperation and participation of villagers. According to the kriging-based maps for south-eastern villages (some villages of Zahraye-Paein rural district) and villages of Zein-Abad rural district, social asset promotion programs should be carried out through participation of people in decision-making and implementation of employment plans and village executive activities through rural municipality and village councils. According to the maps of the studied villages and the results of the one - way variance analysis, human assets among other assets are in a undesirable condition. This is a major weakness in the region; especially in the eastern and southern regions of Buin Zahra Township. The program should be funded by relevant institutions including the education and vocational education of the province in cooperation with the local management. Therefore, people in agriculture and livestock will have sufficient education and skill. By

holding entrepreneurial education, they may teach people to be creative and innovative in the fields of farming jobs as dominant method of livelihood of villagers. Moreover, rural households are able to earn more money and have a sustainable livelihood and less vulnerable risks.

Keywords: livelihood, rural households, rural assets, Buin Zahra Township.

Presentation of Structural Equation Modeling for the Effects of Social Capital Components Ability of Small Towns in Alborz Province

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Extended abstract

Introduction

Continuity and growth of urbanization reduced the viability of cities. The rapid expansion of urbanization over the last decades changed the habitat and viability of urban centers. Development in the form of comprehensive and detailed plans and lack of attention to the obvious role of social capital has caused the spatial and physical structure of small urban centers in recent years in Alborz province. In these areas, structural breakdowns have occurred as a result of functional change in the quality of life in these cities. Hence, the rule of thumb-centered planning focussed on neglecting social dimensions. The need for the status of the social system of the city is revealed as a missing link. In recent years, along with urban development paradigms, the idea of the viability of small urban centers has made a significant contribution to the literature of urban studies. Epidemiology in its general sense of meaning can achieve life ability. Thus, the concept of habitat is an important element in urban planning literature. The concept is one of the components of development expresses citizens' satisfaction with living conditions.

Methodology

In this research, the effective components are social capital of constant variables including collective norms, social trust, participation and interactivity, social convergence. Dependent variability is indicators of environmental pollution, general green space quality, natural beauty landscape, and urbanization of urban neighborhoods. The research method is based on the nature and objectives of the components of social capital. The urbanization of small towns is a descriptive-analytical research method with practical purpose. The data of this research have been gathered by library studies and fieldworks. In the field survey, questionnaires and interviewing techniques have been used to measure the variables. Parametric and nonparametric statistics for statistical analysis of data have been conducted by SPSS, Excel and more Structural equation software. The samples were based on the statistics of 2006 census for the small towns of Alborz province. The stusy area contains 50 thousand people, living mainly the cities of Eshtehard, Chaharbagh, Taleghan, Kuhsar, Golsar, Gondareh, and Hashtgerd. The sample size is 268 people using the Cochran formula.

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Results and discussion

In order to test the relationship between social capital and viability of the small city centers in the Alborz province, we have used the coefficients of Pearson correlation. The results have indicated that the calculated correlation coefficient is equal to 0.421 which has a meaningful level at 99% confidence interval. The results have confirmed a meaningful and direct relationship between the variables of social convergence in Hashtgerd (3.3), Eshtehard (1.3), Chaharbagh (2.3) and Gondareh (2.2). In the rest of the cities, this has had a negative influence. The standard values of this indicator are positive in the cities of Eshtehard, Hashtgerd New Town. It can have a social synergistic effect on urban viability. One of the assumptions used in regression analysis is the Camera-Veston test, whose range of variation is 0-4 and the acceptable value is close to 2 for the cities. Camera test - Wuston is equal to 2.08 and indicates that the errors or residues are independent of each other. In this model, social capital is positively affected by marginalization and the standard coefficient between two variables of social capital and viability (0.88). Thus, social capital has both direct and indirect effects of transversality, and the significant level of T, equal to 83.12, has been able to explain the viability of the studied cities. Increasing social capital has mainly influenced the attractiveness of small city centers. Due to the factors of social capital dimensions, participation indicators and interactivity, social trust has mainly been affected by social dependence.

Results and discussion

The results of the analytical method of direct and indirect research variables showed that the variables of participation and interactivity with 51% of the total effect had the most positive influence on the viability of small urban centers. The social trust variable with 0.27% of the total effect has the second rank. This part of the research is consistent with the findings of Lariss (2005). It should be noted that in the meaningful review of indirect effect, the variables were determined by the Bott-Strap method. The method shows that social convergence and collective norms play a complementary role. The results of the structural equation model have also confirmed the relation between social capital and viability. The standardized coefficient between these two variables is equal to 0.88 and the significant level of T is 12.83 (18.1 R2). This relationship is direct and meaningful. The results of the structural equation model also showed that increased social capital (in some of the indicators) had a greater impact on the survival of small towns. According to the factor loading, the output of the structural equation model shows the rank of the index of participation, interactivity, and social trust. The coefficients with F = 38.23 and P = 0.000 also indicate that among the components of social capital, only the participation and interactivity of the predictive relation with the habitability are among the components of social capital. The standardized beta coefficient with 0.348 tolerance level also indicated the net effects of the participation variable and interaction on viability is a strong predictor of other variables.

Keywords: Social capital, habitability, urban small towns, structural equation.

Application of ANN Models for Evaluation of Potential and Optimum Pattern of Urban Expansion of Tabriz City

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Extended abstract

Introduction

An important phenomena in the recent centuries in different countries of the world are the emergence of numerous and new cities, the development of ancient cities, the advancement of urbanization, and urban development. Urban development and changes in land use patterns results in widespread social and environmental impacts including decline in natural spaces, increased vehicle accumulation, reduction in agricultural land with high production potential and decline in water quality. Urban development in any country is not coincidental and on the other hand, controlling its future development requires careful planning. Understanding the right patterns of urban growth is needed to manage sustainable urban growth and plan for urban development. The high rates of urban population growth in Iran and the lack of urban infrastructure and the increased trend of land use change is followed by the loss of valuable ecological land in urban and peri-urban areas due to marginalization, industrial pollution and other human activities. This makes it necessary to performurban development modeling. Tabriz, as one of the most important metropolises of Iran, is physically expanding over time. One of the challenging problems in the development of the city is the lack of proper management and failure to pay attention to effective factors. In recent years, the city of Tabriz has enjoyed a lot of physical growth due to its immigration status. Correct management of urban growth is one of the key issues in the subject.

Methodology

There are several methods to determine the appropriate areas for urban growth and one of the effective methods used in this study to select the suitable areas for development in the city is the neural network method. In this study, to determine the optimal location for urban growth, we have used three groups of criteria including socio-economic, land use and biophysical factors in

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7 information layers. The data used in this research can be generally divided into two main categories. The data used to extract land use in the study area are including satellite imagery and topographic maps. It is essential to identify the variables affecting the creation of the main prerequisites for the development of land use. In this study, independent variables are including socioeconomic, biophysical and land use. Since there are several decision making rules for exploiting these variables, the distance between these variables was considered as an indicator. To work with the artificial neural network we have to initially find the effective parameters in urban development as input to the network (INPOT). Then, a number of educational points are provided to the network, so that the network uses these points (TARGET) to measure the impact of each option. It determines the input layers to deal with new areas. After determining the number of hidden layers in the network structure, the entire study area is provided to train network. The network performed by training points in the province to zoning of the areas with the potential of urban development.

Results and discussion

MLP network with 16 input layers (effective factors in urban development), 7 intermediate layers (test and error method), and a neuron in the output layer lead to an outline map. Thus, the training was provided to meet new samples. The network was stopped after 15 repetitions and got the necessary training. The network repeats 15 times to find the best possible option with the highest correlation and the lowest error.

Conclusion

In this study, natural, social and economic factors and urban services such as hospitals, business centers and educational facilities have been included in the model. The results of the research have indicated the vicinity of the city for more suitable development areas. The industrial areas in the northwest parts of the city are considered due to lack of access to urban services in the fault domain as inappropriate for development in Kandrood village in the southeast of Tabriz. The area has been connected to the city over time and it is is not a good place for urban development because the centers do not have access to services, especially hospitals. On the other hand, this part of Tabriz has gardens and the expansion of residential areas in this part will be accompanied by the destruction of gardens. The areas appropriate for development in the final map are located in the south, southeast and north of the Tabriz city. There are some vacant lots in of the areas of west in some agricultural lands in surrounding areas of the city.

Keywords: physical development, Tabriz, neural network, site selection.

The Evaluation of suitable Sites for Solar Farms by Multi Criteria Decision Making in GIS (Case Study: East Azarbaijan Province)

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Extended Abstract

Introduction
Energy as the fundamental need of mankind is essential for modern societies to achieve the interrelated goals: such as human needs for heating, cooling, lighting, mobility and for running a large diversity of appliances, it is necessary to supply power and heat to production systems. Global energy resources can be classified into three main groups, namely fossil energies (oil, gas, coal, etc.), nuclear energy, and renewable energies (wind, solar, geothermal, biomass, etc.). Most of the energy sources currently relied on finite resources and will be depleted because of the increasing demand. In addition, there have been serious local air, water, and soil pollution problems as a result of consumption of the various energy resources. It has become clear that application of fossil fuels is not a wise option not only because of its global impacts on climate system but also the short-term and very long-term impacts on society and the ecosystem. Solar photovoltaic (PV) technology is one of the fastest growing technologies in using Renewable Energy Resources (RES) worldwide. Harnessing the untapped and unmatched solar potential would not only assist in improving total energy mixture but also reduce the emission of harmful and toxic gases. Multi Criteria Analysis (MCA) can be defined as formal or structured approaches for individuals or groups to determine overall preferences among alternative options by taking account of multiple criteria and indicators. They have become increasingly popular in decision making on sustainable developments and on energy systems due to their ability to consider simultaneously a number of economic, environmental, social and technological aspects. The purpose of this study is to provide a decision support tool for decision makers using Fuzzy AHP as a Multi Criteria Decision Making (MCDM) technique and GIS tools for investigation and selection of suitable solar farm sites in East Azarbaijan province.

Methodology
Based on the experiences of the previous studies in the literature and case study subject of this research, we selected nine criteria including GHI, PVOUT, elevation, slope, aspect, annual sunshine hours, average annual relative humidity, proximity to cities and roads. GHI and PVOUT layers are downloaded from "solargis" website. For generating climatic layers, we applied IDW method using 14 meteorological stations data downloaded from "East Azarbaijan

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metrological website". Elevation, slope and aspect's layers were created using ASTER satellite Digital Elevation Model (DEM). The layers of proximity to cities and roads have also been created using raster calculator tool in ArcGIS 10.3 software. All criteria have been generated in ArcGIS 10.3 software and standardized in a [0-1] scale using different equations. In order to perform overlay analysis, all layers have been set to same cell size of 29.27 square meters. In some areas, due to legal constraints, engineering or environmental aspects, there is no possibility to deploy solar farms. Thus, three types of areas including protected areas, areas so close to cities and areas close to active faults have been defined as constraint areas. We applied fuzzy AHP technique to determine the relative weights of the criteria to each other. Finally, sensitivity analysis has been performed on the results of AHP in order to validate the outputs. In order to generate primary suitability map, the criteria and their weights have been combined using ArcGIS Raster Calculator. The highest suitability was 0.8 and the lowest was 0.0628 in the results. Then, constraint layers have been created using buffer tool and converted into a binary layer with 0 and 1 values in which the number 0 represents the places of the constraint and 1 represents those with no constraint. In order to generate final suitability map, the final binary constraint layer is applied to primary suitability map using multiplication operator by raster calculator tool.

Results and discussion

The results obtained by AHP method show that PVOUT and GHI criteria have the highest priority and annual average relative humidity and annual sunshine hours have the lowest priority. The results show that 47.99% of the study area has weak suitability, 27.10% of that has moderate suitability, 18.31% has good suitability, and 06.60% has great suitability for solar farm deployment. The west and southwest areas of the study area are the most suitable and north and northeast areas are the least suitable. This can be argued that the west and southwest areas are mostly flat areas with high values of GHI and PVOUT and north and northeast areas are not suitable. To conduct sensitivity analysis, 3 criteria of weight scenarios were considered. In first scenario, equal weights are assigned to all criteria, in second scenario the higher weights are assigned to elevation, slope, and aspect criteria and weights of other six criteria considered equal. Finally, in third scenario the higher weights are assigned to GHI and PVOUT criteria. It should be noted that in all scenarios, the total weight of all nine criteria is 1 (i.e., 100%).

Conclusion

In this study site selection for solar farms has been conducted by Multi Criteria Decision Making techniques and Geographic Information System. Nine criteria were adopted by relative priority weights using Fuzzy AHP method. The PVOUT criterion has the highest weight and annual sunshine hour criterion has the lowest weight. Layer standardization for overlay analysis was conducted in ArcGIS 10.3. Three areas as constraint zones are applied to primary suitability map. The results show that forest and mountain areas are not suitable for solar farms and on the other side smooth and flat areas are mostly located in west and southwest parts of the study area as they are more suitable for solar farms. Policy makers and planners can use the results of this study for energy supply using solar energy as one of renewable and cleanest energy sources. The methodology used in this study can be performed in other areas with similar conditions.

Keywords: solar energy, Geographic Information System (GIS), Fuzzy AHP, Multi Criteria Decision Making (MCDM), sensitivity analysis.

The Applications of GIS in Improving Urban Businesses

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Extended Abstract

Introduction

In a general categorization, businesses in urban spaces are divided into service, commercial, manufacturing, and technology and information groups. The components of urban businesses in various fields are related to the spatial characteristics and geographical location of the business. Geographic and spatial investigations provide the useful information for urban business owners. However, in recent years, less attention has been paid to the spatial parameters of urban businesses. The spatial analysis of customer, competitors and market behavior are important for development of business in urban space. It will make a better understanding of markets, competitors and customer behavior in the urban areas. Information is a basic tool for development of the urban business. In the past two decades, advanced industrial countries have focused on new information technologies as the core of development. Today, there are a variety of computer information systems available to provide information in various fields of urban business. GIS as one of these systems can be used for spatial or geographic purposes in urban areas. Given the complexities of urban space, GIS can simulate complex spatial analyses and provide appropriate solutions. This technology, using the strong functions, makes accurate decisions and optimal management of the resources in urban space. Small and large businesses in urban areas can use GIS as a useful tool for analysis and decision making. GIS capabilities in business analyst, network analyst, spatial analyst, 3D analyst and many other complex analyzers make it possible to accurately implement integrated systems including complete urban business systems in urban management. In this study, the use of GIS as an appropriate and highly relevant information technology is discussed for the development and improvement of urban businesses.

Methodology

The city of Babolsar, located in Mazandaran Province, Iran, has been selected as the study area. This city has long been a hub for tourists and visitors due to its peculiar location. Given the significance of tourism as a major source of income, creating tourist infrastructures such as restaurants has found great importance. In this study, the applications of GIS as a suitable

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information technology for the development and improvement of urban businesses are initially studied through the library method. Then, to evaluate the location options and select the most suitable place to establish a restaurant in Babolsar, the best-worst combination was used as one of the multi-criteria analysis tools of GIS. Effective criteria and restaurant alternative locations are then determined based on previous researches and standardized criteria maps are produced. Each criterion is then weighted by experts using Best-Worst Method (BWM). The Weighted Linear Combination (WLC) method is ultimately applied to combine criterion maps with the criteria weights to determine the alternative scores in the expert-derived map. The map is divided into three classes of suitable, moderate, and unsuitable.

Results and discussion

GIS is able to answer a large volume of business owners' questions in the field development and improvement of the urban business. These six questions are When, Where, Why, How, and what. In order to improve business development, GIS has the ability to integrate economic, social and spatial data from customers, competitors and the market. Then, by analyzing and modeling the location-based data, it can use the results to develop and improve the urban businesses. Information technologies play a key role in business development, digital marketing, advertising, real time monitoring, customer support and long term business growth. This study has examined the applications of GIS as one of the information technologies in the context of business development. The strong relation between business and location makes GIS as a valuable tool to support information needs in business-related decision making processes and attain long term business success. The spatial-analytical capabilities of GIS, such as network and overlay analyses can be effectively used to explore and analyze the business situations in order to provide more informed business decisions, plans and marketing strategies. GIS has the potential to integrate the spatial (location), economic, demographic, and social data to model customers and competitors' behaviors and answers the questions in the domains such as customer and marketing analysis, market prediction, investment, advertisement strategy, business site selection, market, and so on. GIS is helpful for the business owners in modeling and tracking the customer behavior so that they can answer questions about customers, business customer's density over urban areas; the best business customer's locations in city; the products and services of customers in a particular urban area; and other customer's access to other locations.

Conclusion

In recent years, most of the countries that are affected by continued recession or the ongoing financial crisis focus on developing and promoting businesses including entrepreneurship, marketing, and commerce processes. Information technologies play a key role in business development, digital marketing, advertising, real time monitoring, customer support and long term business growth. This study examines the applications of GIS as one of the information technologies in the context of business development. The strong relation between business and location makes GIS as a valuable tool to support information needs in business-related decision making processes and attain long term business success. The spatial-analytical capabilities of GIS, such as network and overlay analyses can be effectively used to explore and analyze the business situations in order to provide more informed business decisions, plans and marketing strategies. GIS has the potential to integrate the spatial (location), economic, demographic, and social data to model customers and competitors' behaviors and answers the questions in the

domains such as customer and marketing analysis, market prediction, investment, advertisement strategy, business site selection, market, and so on.

Keywords: GIS, urban businesses, market, spatial analysis, customer analysis.

Evaluation and Analysis of Environmental Awareness in Rural Settlements around Yasuj City

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Extended Abstract

Introduction
The awareness of environment state and examination of its changes are among the issues having attracted the attention of many researchers during recent years. This tendency has been so strong that it can determine the required changes in management and to present managerial plans in a correct recognition of environment state. Awareness about the consequences of wrong behaviors can decrease their occurrence. Villages are important human settlements having very close connection to the environment, in a way that they mutually influence each other. Most of economic activities in these regions are based on direct relationship with nature. The appearance of villages around the cities is different from other villages because of the different system of settlement relationships and the presence of forces resulting from them. Achieving the rural environmental sustainability is under the influence of public environmental awareness that, in turn, is also affected by various factors. Accordingly, the present study was conducted to examine the environmental awareness of villagers around Yasuj City. The purpose of the study is to analyze environmental awareness of villagers living in the suburbs of Yasuj City.

Methodology
The present study has an analytical-descriptive method. The first step in the environmental awareness evaluation was to prepare the criteria. To have an effective evaluation, it is required to determine measureable, scientific and acceptable factors by researchers and experts in this study. The indices and variables of the study were selected based on the opinions of professors and researchers in the field of rural studies in accordance with the region under study and with consideration of the theoretical bases and the review of related literature in the environmental awareness and behavior domains. The environmental awareness and tendency to destroy natural resources were evaluated using 11 and 2 variables, respectively. The study population was settlements around Yasuj City. Ten villages were selected among all the villages around the city

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using randomized cluster sampling. Cochran formula was used to determine the size of the sample population. Accordingly, 384 households were selected to complete the questionnaires. In order to evaluate the reliability of the data, we used Cronbach's alpha. Results showed that the questionnaire has an appropriate reliability.

Results and discussion

By examining the status of environmental awareness in the villages under study, it can be understood that these settlements have coefficient of 22.3 and a medium sustainability. Results of coefficient analysis showed that there is significantly negative correlation between the environmental awareness and respondents' age. There is no significant relationship between environmental awareness and respondents' gender. There is a significantly positive relationship between environmental awareness and respondents' education level. Furthermore, results of correlation analysis showed that there is a significantly negative relationship between inhabitants' environmental awareness level and the tendency to destroy the nature. The highest average belongs to the variable "If the way of treating nature is not adjusted, the environment will face disaster", and lowest average belongs to the variable "The most important factor in Ozone layer depletion is Carbon dioxide gas".

This study has evaluated the status of environmental awareness within rural settlements around Yasuj City. Environmental awareness is the individual's information about environmental issues as well as the factors influencing their spread and recognition of proper treatment to obviate them. Operationally, environmental awareness includes people's information regarding the importance and role of environment in their life. Villages are faced with many environmental problems and some of the most common problems are including improper way of collecting the rubbish and its disposal, providing potable water, water treatment networks, cutting the trees, putting jungles on fire and etc. Generally, the best instruments to enlighten rural societies, promote publics sensitivity, attention and knowledge about environmental aspects is to educate them on environment which is very important regarding the influence of humans on the environment. Therefore, if the inhabitants are lacking environmental awareness, unregulated exploitation from surrounding natural resources will play a fundamental role in creation of environmental damages.

Conclusion

After analyzing the results, it was found that 53 percent of the respondents have a higher level of environmental awareness than the median level; and 47 percent of them have a lower level of awareness than the median level. This shows that rural settlements are on a median level of environmental awareness. The results are in line with the results presented by Cruise et al. (2014). On the other hand, the findings are inconsistent with the findings of Saho et al. (2015) and Sanjai (2013). In addition, regarding the gender of the respondents and their environmental awareness, the findings of the present study disapprove the findings of Blaji (2017). As a fact, villagers' environmental awareness plays an important role in achieving rural environmental sustainable development.

Keywords: development, environment, environmental awareness, sustainability evaluation, rural settlements.

Muslim Brotherhood and its Territory Building in the Political Geography of the Islamic World

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Extended Abstract

Introduction

The Muslim Brotherhood began as a political-social movement in 1928 by Hasan al-Banna in Egypt. Despite the fact that the Muslim Brotherhood is an Egyptian organization, the essence of this ideology, based on territory, a nation, and divine sovereignty, gave it transnational motives on a regional and global scale. In order to be able to achieve its ultimate goal, the Brotherhood sought to build a territory in the political geography of the Islamic world. Thus, in the late 1930s, it began to establish ties with Islamist enthusiasts in the Arabic and Islamic world. Using a descriptive-analytic research design, this study aimed to determine factors motivating the territory building activities by the Muslim Brotherhood in the political geography of the Muslim world.

At the end of the First World War, the Ottoman Empire collapsed and Britain and France began to divide the Ottoman Empire among them; each dominating a part of Southwest Asia. Aside from Iraq, Jordan and Palestine where occupied by the Britain, and Syria and Lebanon, the rest of the Ottoman territories, including Egypt, have become the focal point of rivalry among the colonial powers. Apart from the colonial powers and governments, which have always been a constant force for the territory building in the Muslim world, ideologies are among other actors motivating the territory building activities. One of these actors is the "Muslim Brotherhood" that was established by Hassan al-Banna in 1928, and has been taking considerable efforts for the territory building, especially in the West and Southwest Asia, despite its failure in Egypt (2013). This study is to analyze the role of this ideology in the territory building and regional competitions, because the Turkish government is now using this ideology in line with its “Neo-Ottomanism” tendencies.

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Methodology

A descriptive-analytical method was employed in this study. The data were collected using a library method from different books, articles and internet resources. The first stage in the method was the attempts in identifying relevant and relevant resources, identifying and extracting important materials by note taking. Finally, we made efforts in collecting and processing the library documents. By examining the role, the presence, and influence of the Muslim Brotherhood's ideology on different national scales, the main question addressed in this study is: What factors have motivated the territory building activities by the Muslim Brotherhood in the political geography of the Muslim world? Based on the methodology taken in this study and according to the theory of territory building, it seems that such activities can be attributed to ideological believes of this Islamic movement to defend the greatness of Islam and Muslims.

Results and discussion

As mentioned, with the collapse of the Ottoman caliphate, colonial powers dominated Islamic countries. The rulers of the Islamic countries did not have a strong will to handle the affairs of their country, and the colonial countries treated the people as they wished. The cruelty and oppression of the colonialists against peoples of the Islamic nations were so intense that the anger of Muslim people and intellectuals was provoked. One of these Muslim intellectuals was Hasan al-Banna from Egypt. He believed that the whole world of Islam is a single homeland, all Muslims, a nation that must be based on the rule of divine law. In 1928, al-Banna established the Muslim Brotherhood in response to the oppression of French companies against Egyptian workers. After a while, the Brotherhood became a widespread ideology in Egypt. This movement had some clash and conflicts with Israel, Gamal Abdel Nasser, Anwar Sadat, and Hosni Mubarak. With the advent of the Arab Spring which was followed by the Egyptian Revolution (2011), Mubarak was overthrown and the Brotherhood came to power after years of struggle, but their rule was short and they were overthrown in 2013. Therefore, the findings of this study also indicated that the collapse of the Ottoman caliphate, the domination of the colonialists over the Islamic countries, their oppression to the Muslims, the establishment of the regime of Israel, and also political tyranny in Islamic countries were among the factors that strongly influenced the Muslim Brotherhood and forced them to react to the turbulent conditions of the Islamic world. The results indicated that such activities were motivated by the ideological beliefs of this Islamic movement to awaken the Islamic Ummah and defend the greatness of Islam and Muslims.

The Brotherhood’s dominance has been developed on a regional and global scale. But their territory building activities were not uniform and concurrent outside the borders of Egypt. In the early 1930s, the Muslim Brotherhood established the “International Organization of the Muslim Brotherhood”. This organization, beyond the Islamic world, sought to spread its influence in Europe. After the dissolution of the Brotherhood by Nasser, this organization played an important role in connecting the Brotherhood branches.

Conclusion

The Muslim Brotherhood founded as a movement in response to the developments in the Islamic world developed its power beyond national borders in pursuit of their goals. Some of the goals are including the Islamic awakening and the defense of the greatness of Islam and Muslims, and launching a territory building campaign on a regional scale. The Brotherhood also

sought a sphere of influence on a global scale to advance its goals and plans. Therefore, the Muslim Brotherhood established the International Organization of the Muslim Brotherhood in the 1930s to create and enhance coordination and communication between the branches of the Muslim Brotherhood. Therefore, the territory building activities by the Muslim Brotherhood in the Muslim world can be considered in the context of Islamic awakening movement and convergence in the Muslim world based on the teachings of Salafi Islam promoted by Seyyed Jamal al-Din Asadabadi.

Keywords: Muslim Brotherhood, ideology, territory building, Muslims, the Islamic world.