Metropolis Explosion and Sprawl of Tehran within the Framework of Urban Decline Theory

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Extended abstract

Introduction

Urbanization is considered as a profound transformation in the economic and social life of mankind. Patterns, stages and processes of urban development have been studied by many researchers. Various ideas are emerged in this field. The theory of was introduced Urban Decline by Berg et al. (1982) in in four stages including urbanization, suburbanization, de-urbanization and re-urbanization. This model is based on demographic changes within urban areas and population changes in the metropolitan region. Urbanization stage occurs when the growth of the main areas surpasses the rings, while the daily urban system is growing. The suburbanization stage occurs when the growth of the rings surpasses the main areas, while daily urban system is still growing. The de-urbanization stage occurs when the growth of the rings is greater than the growth of the main regions, while the daily urban system is declining. The re-urbanization stage occurs when the growth of the main areas is greater than the growth of the rings, while the daily urban system is declining. The study of Tehran Metropolitan urbanization proved that"Metropolis Explosion" phenomenon and modern suburbanization are based on the intense political focus and service-industry activities followed by the imposed restrictive policies of the city. The objective of this stage is the growth of middle cities in the periphery of the Tehran Metropolis.

Methodology

Tehran Metropolitan Region is selected as the study area of this research. This research studies the process of explosion of the metropolis and the emergence of urban decline in the main city and urban sprawl as an objective reflection of the development of the city's periphery from 1976 to 2016. This research has a retroductive strategy and fundamental in terms of purpose, and analytical in terms of its method. This research has applied meta-analysis method and has used secondary population data of the Center of Statistics as a measure of scale and information of outreach schemes. It has used the traditions of quantitative and qualitative method. To analyze the data, we have used the directional trends (Standard Deviational Ellipse), global and local Moran Spatial Correlation model, Hot Spot Analysis (Getis-Ord Gi*). We have used Shannon and Holdren entropy models in the ArcGIS10.3 to investigate the growth of the city in the studied periods.

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Results and discussion

Resukts of population statistics (1976-2016) have indicated that Tehran has experienced an exponential growth since 1950s. This has been influenced by peripheral development policies. The survey of demographic data shows that the peripheral population of Tehran has experienced a growth from 14.73% in 1966 to 54.67% in 2016. Evidence suggests that Tehran Metropolitan region has experienced a Suburban expansion until 1986 with the growth of middle cities as its main feature, but from this time it has an onward Exurban development. This expansion (the completion of the second stage) is characterized by the emergence, development, and rapid growth of small cities. The results of the global and the local Moran Spatial Correlation models and the general Getis-Ord Gi statistics indicate the formation of several cluster patterns of the population outside the Tehran Metropolitan Region. The results of the Shannon model shows the increase of Shannon's value in the peripheral cities and development from the center to the periphery during the second (2000), third (2006) and fourth (2016) periods, while the main spatial development of the cities in the second and third periods (suburbs) has occurred in the second ring. In the fourth period (2016), the density of the Shannon coefficient has also reached the third ring (out of the suburban area). Based on the Holdren model, urban sprawl development has occurred in 25 of 43 cities with more than 30 percent in 19 cities.

Conclusion

The research findings indicate that "Tehran Metropolitan Region" has begun its modern-day suburban stage since the 1970s and after the 1990s it faced the process of de-urbanization (decline). The spatial representation of these two processes has been manifested in a sprawl. The results of the global and the local Moran Spatial Correlation models and the general Getis-Ord Gi statistics indicate the formation of several cluster patterns of the population outside the Tehran Metropolitan Region. The results of the Shannon entropy and Holdren models state that the development of urban areas has occurred in the second ring (Suburban) and the third ring (Exurban) since the 1990s. The result of this research suggests that the phenomenon of urban decline in the Tehran metropolitan Region follows the urbanization processes experienced in the American-European countries. The adaptation of the empirical findings of this study to Berg et al. (1982) illustrates that Tehran Metropolitan Region also follows the same pattern, and multiple stages of urban development and urbanization have emerged in this area. The findings of this research are consistent with the results of Berry (1970), Beale (1977), McCarthy and P. Morrison (1977) and Sternleib and J. Hughes (1977), Vining and T. Kontuly (1978), Hall and Hey (1978), Fielding (1982), Berg and et al. (1982), Saeid nia (1375), Nazari (2008), Zanganeh (1392), and Rajai (1394). Urban development processes in both developed and developing countries follow a fairly similar set of rules on a global scale. This is the reason behind the similarity of urban development spatial patterns.

Keywords: urban decline, suburban development, metropolis explosion and sprawl development, metropolitan region, Tehran.

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Spatial Analysis of Urban Hierarchy Based on the Formation of Urban Stair System in Iran

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Introduction

Cities accept different roles and functions based on their characteristics with different power and influences. More attention is paid to some cities. This leads to reduction of the importance of other cities and finally, this leads to development of urban primacy phenomenon. Urban hierarchy as one of important subjects in urban studies includes several topics such as stair system of urban hierarchy. Along with development of urban primacy in this system, a kind of internal order is developed among the cities and a hierarchical system is created. These groups are formed via population gap on a linear curve. This urban hierarchy system is faced with some questions on the relationship between spatial pattern of urban groups, pervasiveness of the stair system, the number of cities, the number of urban population, the urban primacy coefficient and the number of urban groups. This paper investigates these issues in Iranian urban hierarchical system.

Methodology

The present article is conducted via descriptive analytical method with documentary and library studies. In order to answer the research questions, first of all the status of the cities in urban hierarchy was examined using rank-size model and then the stair system in national and regional scale. In the next phase, spatial dispersion of the cities was displayed using the GIS to investigate the relationship among the cities in a group and their spatial dispersal. Census studies were also carried out by Iran's Statistical Center in 2010. Finally, the aim of this research is based on spatial distribution analysis of cities in stair system of urban hierarchy, the average of nearest neighborhood, multi-distance spatial cluster analysis and standard deviational ellipse methods. At the end of the research, Spearman test was used to understand the relationship between the numbers of urban population with the number of groups in the stair system. The statistical population of the present study is all the cities of the country at national and regional scale. Out of 30 provinces, 10 provinces were studied as the research sample.

Results and discussion

Findings showed that different regions of Iran are very different in terms of the number of cities and population. Among them, Khorasan Razavi province has the greatest number of cities (72 cities) and Yazd Province has the lowest number of cities. In terms of population, the urban population in different regions has fluctuated from 800 thousands to more than 11 million people; as Tehran and Khorasan Razavi have had the highest number of population and Hormozgan and Yazd have had the lowest number of population in the sample. On the other

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hand, based on the studies, West Azerbaijan with 9 groups and Chaharmahal-o-bakhtyari with 5 groups, have been ranked as the first and the last of urban groups in regional scale, respectively. It is interesting that the lowest number of urban groups is seen in the national scale. Based on the above mentioned cases, urban system in Iran at both national and regional level is faced with stair system of urban hierarchy. This characteristic comes from the urban primacy. On the other hand, the group-mate cities in this system, not only are not in the same area, but also they are dispersed in the region without any specified pattern. Group-mate cities don't create isochromatic zones in the region based on urban groups' dispersion map. Accordingly, it is not possible to determine a border for group-mate cities. Therefore, cities contrary to the stair system on the diagram don't follow any order geographically. There are significant differences in this field between urban groups. Most important of them are stair system is not visible in low population urban groups in some regions (Yazd and Mazandaran). In some regions urban groups have very low members (2-3 members), some regions in terms of the number of groups and city frequency are in balance and the provincial capitals are the most regular. Results show that there is no relation between dependent variables including number of cities, number of urban population, urban primacy coefficient) and independent variables, number of urban groups. This means that the increase or decrease in the dependent variables have no effect on the number of city groups as independent variable.

Conclusion

Investigation about urban network of Iran in both national and regional level shows that there is no harmony with rank-size model in urban hierarchy. This indicates undesired relations between cities. Thus, urban primacy is a dominated phenomenon in Iranian urban system. However, this phenomenon appears in different patterns named as stair hierarchy. Study of urban system in Iran confirms the existence of stair system in urban hierarchy at both national and regional levels. This system divides the urban hierarchy into several urban groups. The group-mate cities are separated from upper and lower level cities due to the population gap. It seems that they make a new form of urban hierarchy. In this system, the cities could be classified into several groups and each of them developed more homogenous hierarchy system compared with the whole urban system in the region. One of the most important issues in this area is identification of the main factors, because the variables have been studied in this research are not the main factors in the development of the stair system. Study of this system and mechanism of its function can lead to the identification of new dimensions of urban hierarchy system at the other scales. This research can achieve better results, provided that it is done as a comparative study at different scales ranging from regional, trans-regional and international scales.

Keywords: urban stair system, urban groups, spatial distribution, spatial analysis.

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Spatial Analysis of Security in Parks of Tehran

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Introduction

Increased urbanization and increasing population density have made security as one of the basic human needs in urban life. For this reason, throughout history, human beings do not feel safe. In fact, one of the criteria for urban development is the sense of security, as a measure of the effectiveness of urban development programs that influence citizen's behaviors and, consequently, urban dynamics. Many factors affect the removal of urban security that threaten or reduce the security of the cities. Some urban spaces, especially public spaces such as parks, are considered as one of the main threats to the security of the cities. For many reasons, they are safe spaces for unlawful and abusive activities. Parks are one of the most important urban utilities that make a significant contribution to the realization of leisure and recreational functions for residents of urban spaces and attract many people every day. Attention to security in the parks is because of the fact that these spaces do not have security factors and users will not be welcomed, so there are problems like lack of socialization and sense of belonging in these places. Use of these spaces as insecure areas does not lead to a serious decline in the quality of the environment, but also is in contradiction with the principle of citizenship. In fact, the sense of security of people in urban spaces greatly affects the individual and collective behavior of users. In other words, if space is not used because of insecurity, it loses its dynamism, which may provide a favorable ground for its crime due to the reduction of social supervision. Providing security of the parks is one of the most urgent categories of society. Therefore, city policemen have the duty to ensure the safety of the people in these places because the number of families in parks and recreation centers for leisure time and the use of nature increase once providing their safety and comfort. The sense of security in Tehran parks differs from other cities in the country, and the flow of social life of its inhabitants is challenged. This is due to social, economic and even socially-based activities that provide more favorable conditions for the emergence and exacerbation of insecurity. The continuation of such an issue in the near future may cause the capital of the country with severe problems. Therefore, due to the importance and safety of parks, the present study was conducted with the aim of assessing and measuring security in the parks of Tehran. We have used 24 indicators to assess and measure the security of parks in Tehran. The following are the most important research questions.

- What is the status of Tehran's parks in terms of security?
- Which factors have the greatest role in the insecurity of the studied parks?

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Methodology

The statistical sample of the research is 41 parks of Tehran city. The security of the parks was evaluated by 24 indicators. Data were obtained from the performance statistics and arrests of the Tehran Municipality Protection Unit at the parks level. The importance of each of the indicators was determined with the help of the Network Analysis Model (ANP). The data analysis was performed using the Promethean model and the toolboxes in the GIS. After analyzing the data, the parks were classified into five groups with high, moderate, low, very low security and no security. The results of this stage are mapped into the GIS software environment. Different layers have been overlayed in GIS. Then, the information on the descriptive table of the layer was added. Using the kernel density estimation interpolation model, the zones with the greatest insecurity factors were identified and deispalyed on the map.

Results and discussion

In 2014, among the 41 selected parks in Tehran, 6 parks have the great security. The 6 parks are Sahand, Al-Ghadir, Saadatabad, Cestag, Shafagh and 22 Bahman parks. The parks with moderate security are including Niavaran, Thought, Miyad, Flight, Bahman, Shariati, Jamshidieh, Saeed, Razi, Narges, Fadak, Basij, Darband, Ghaem, Koohsar, Knowledge, Mahdi and Darabad. The parks of Baharan, Beast, Mellat, City, Derek, Tochal, Laleh, Persian Gulf and Nahjolbalagheh had low security. The security of Azadegan, Daneshjo, Velayat and police parks was very low, and Lovzan, Chitgar and Sarkhahsar had no security. Out of the 24 security indicators, the most important are including addict, deceptive, impostor, suspect, robber, thieves, hijab and alcoholic beaters, cold and hot arms, CD sales, automobile violations and vehicle seizure mainly in the east and west parts of Tehran. In fact, these indicators are the main causes of insecurity in the parks located in the west and east Tehran. According to the distribution map of the dispersion side, the most insecurity factors in the parks of Tehran are located in the east and west. The directional distribution circle also suggests that most of the insecure parks are centered in the eastern and western parts of Tehran.

Conclusion

The Sahand Park with the Phi value of 0.416 is in the first rank and the Sorkheh Hesar Park with the value of -0.728 is in the last rank. In Sahand Park, we can observe the least amount of arrests of drug addicts, coffers and alcoholic beverages, the perpetrators of conflict, social corruptors and wicked people, and denial of bribes. On the contrary, the Sorkheh Hesar Park is the worst in arresting of the deceiver, force majeure, suspect, thief, and the thug and illegal sale of CDs. In 2014, a total of 17,883 crimes were committed in the designated parks.

Keywords: security, park, Tehran, PROMETHEE.

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Analysis of Decision Areas in Cultural-Led Urban Regeneration with Tourism Approach in Historical Neighborhoods (Case Study: Zahir Abad)

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Introduction

The emergence of changes in national and international economies in the last two decades of the twentieth century as well as the need to modulate urbanization interventions based on local needs have been challenging traditional tools to rebuild cities. The changes in the views from large-scale, project-driven, and state-centered interventions to local rehabilitation based on internal capacities is a central feature of urban regeneration. Cultural tourism has become a catalyst for urban regeneration as an efficient and sustainable approach. It has regarded as an important policy consideration in broadening the tourist offerings of tourist destinations. Accordingly, from the last two decades of the twentieth century, many regeneration plans, especially in European countries, have used culture as an accelerating factor to promote urban historical areas and cultural rehabilitation. It has been a successful approach in intervention of declining historical centers. In Britain, As Basset (1993) argued, from the early 1980s onwards cities such as London, Birmingham, Glasgow, and Newcastle launched a series of new cultural strategies to apply arts in urban policy. These new strategies were marked by a radical widening of the concept of 'culture' and the virtual erasure of the traditional distinction between high art and popular entertainment. Over time, these strategies grew in complexity, covering more and more activities, but typically including some combination of the following themes;

(1) A concern with opening up traditional institutions such as museums and theatres to wider public use, by increasing access and encouraging more involvement in the local community.

(2) An expanded program of support for community arts, ethnic minority cultures, and socially and culturally deprived neighborhoods;

3) A new focus on the infrastructure necessary for cultural production, embracing investment in studios, workshops, marketing and support organizations, and the planning of 'cultural districts';

After decades experiencing various paths of urban regeneration trough culture, cultural-led urban regeneration both as tool and as a rehabilitation approach is an activity that introduces the appropriate path to urban regeneration process through the use of cultural resources. In this activity, culture is considered as the main means of urban regeneration, because the culture uses efficient ways that are effective in helping to promote the economic and social conditions of the deprived historic urban areas. In Iran, the history of intervention in the deteriorated urban areas back to more than 50 years ago. But intervention policies in the areas with historical values are implemented regardless of their cultural potentials. It has led to a distortion of their cultural and

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historical identity. The main purpose of this paper is to explain the relationship between cultural tourism and urban regeneration using the analysis of decision areas method in the development of cultural tourism in the Zahir Abad, one of the historical districts of Tehran.

Methodology

This research with a qualitative method ihas used a questionnaire tool for collecting data. The questionnaire designed for the residents of Zahir Abad neighborhood was based on the application process of analysis of decision areas. It includes questions in four categories of following characteristics including identification of the issues and the reasons for their emergence, identification of residents' views on how to solve problems in associating with cultural tourism potentials and identification of important cultural and cultural spaces to be used in planning of urban regeneration with the cultural tourism approach. In order to measure the reliability of the designed questionnaire, Cronbach's alpha has been calculated for questionnaires using SPSS. The value of 0.81 for the alpha was acceptable. Questions are designed using the Likert scale on a scale of five degrees of answers from 1 to 5 based on the agreement of the respondents.

The region 20 of Tehran municipality was developed about 6,000 years ago, and the Zahir Abad neighborhood in this region, despite its historical and cultural significance, has problems in reducing the productivity of economic activities, insecurity, reducing the motivation of residence, the process of identity loss, gradual weakening of the functioning cultural spaces and their replacement with commercial and administrative functions.

Results and discussion

Today, based on the successful experiences of the world, the process of urban regeneration using cultural resources, by adopting a cultural and historical approach to tourism, is a more sustainable and wise path to achieving the rehabilitation and modernization of historical neighborhood in old cities. The nature and method of planning and how to combine the objectives of cultural-led regeneration with the tools and requirements of cultural tourism can be crucial in achieving this goal. This combination is done in this article using analysis of decision areas method. The results show that this method has the ability to broadly connect with a range of factors influencing the process of rebuilding and that the economic strengthening and management structures of the neighborhood which are in the top priority for initiating the rehabilitation planning of the neighborhood.

Conclusion

The application of the analysis of decision areas method to the Zahir Abad neighborhood showed that strengthening the local economy infrastructure by strengthening the infrastructure of cultural and entrepreneurial tourism, along with the strengthening of community-based management structures and the provision of social security, were the most important initial options for cultural-led regeneration activities. This can be used to direct the budgeting of related organizations in this area.

Keywords: cultural-led urban regeneration, cultural tourism, analysis of decision areas, Zahir Abad neighborhood, Tehran.

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Impacts of Civil Rights on Urban Management in Ilam City

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Extended abstract

Introduction

Urban issues are of general interest in contemporary world and they have attracted the attention of many social and political scientists in different courses. Structural and functional changes of social and political systems and creation of different grounds in managing urban affairs from one perspective and Islamic bases of Iranian law from the other hand have created different perspectives toward citizen rights and duties.

Growing procedure of urbanization in Iran and different cultures and groups' companionship with each other and turning rural affairs to urban ones highlights the necessity of redefining the activists' interactions with each other and with urban institutions in urban society suitable with update legal criteria, which have strong executive guarantee.

City is considered as a development source and urban management in development and improvement urban settlements plays a very important and determinative role. Management of favorable process of urban life can play the most important role on human settlements and stability of urban growth. The civil program authorization and regulating factor arises from practicability of urban management.

Ilam city has have experienced a hasty and ungovernable growth and an inappropriate population growth, and physical transformations. These events resulted in extreme immigration reception.

Population growth and immigration from rural areas and adjacent cities has resulted in a growth in unemployment rate, social problems, land and housing anxiety, urban dissociation (vacant lots in town), urban landscape ravages, city development to potentially dangerous areas, ugly and ungovernable growth (hasty skeletal developmental growth), crowding city traffic (accumulation of city traffic), changing agricultural lands to residential spaces, improper urban construction, and noncompliance of urban infrastructure neighborhood. Moreover, it raises this question that if the awareness of citizens about different civil rights has a relationship with urban management programming? In addition, how much effects do the awareness of citizens about different civil rights components has on urban management programming?

Methodology

This is an applied research by a descriptive analytical methodology. Statistical population of the research is all the people of Ilam city. We have selected 200 subjects as statistical sample. The questionnaire tools has been used for data acquisition. The reliability of the tool is tested through Cronbach's alpha. The value of the alpha has been obtained 75 % and 74% for questionnaires of civil rights and urban management, respectively. For the validity of

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questionnaire, the face validity has been used. This shows the validity of the research. Finally, all data were analyzed using SPSS.

Results and discussion

The results of examining the hypothesis of this research through Kolmogorov–Smirnov and t-regression test indicated that civil rights are not meaningful for majority of people and being aware of civil rights in citizen's urban management.

Nowadays people talk about the active collaboration of citizens in urban programs on urban governing. Practical ways of answering to citizen's requirements by the local decision makers can be helpful to determine different aspects of collaboration. The social justice in urban level is the responsibility of urban management in modern systems from social and economical to cultural and political systems. In complicated urban system, civil rights perform this function. Urban management system contains 3 levels of management including political-social, institutional and planning and performative and technical management. . Citizen unawareness and lack of knowledge has caused many problems and has put civil society and management in hardship. Diversity of institutions and responsible structures in Ilam's city and their separate performance according to their own criteria, financial deficiencies for urban management, lack of instructions based on citizen's collaboration in urban management, has caused ignoring citizen's collaboration in managing urban affairs.

The purpose of this study is to study the effects of components of the civil rights on urban management in Ilam.

Keywords: city, civil rights, Ilam urban management.

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Effects of Spatial and Temporal Land Use Changes and Urban Development on the Increase of Land Surface Temperature Using Landsat Multi-Temporal Images (Case study: Gorgan City)

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Introduction

More than 50% of the world population lives in urban areas. It is predicted the value will be increased to 69.6% by 2050. In recent decades, urban population is rapidly increasing due to the natural growth of cities, the migration from villages to cities, climate change, reduction of water resources, loss of agricultural lands, animal husbandry and other factors. These factors have led to physical expansion of the cities and the subsequent destruction and reduction of green spaces and forests, and increase of streets, buildings and asphalt roads. These changes in land use and land cover in urban areas cause many environmental problems and warming of the temperature of the city and its surroundings. Gorgan city as one of the northern cities of Iran is noticeable in urban physical expansion and land use change mainly due to conversion of agricultural landuse and green space into built-up areas. These reasons have created a special climatic condition in terms of air temperature, humidity and precipitation. The purpose of this study is to investigate the increase in temperature as a result of changes in the various landuse and the impact of each landuse on the increase in surface temperature and identifying effective landuse to better management.

Methodology

In the present study, we have used Landsat satellite images in 1992, 2001, 2009 and 2015 in the sensors of TM5, ETM+, and OLI/TIRS. In order to complete the input parameters for mapping the surface temperature using satellite images, we have used MODIS water vapor product. To provide control points, we have used field views, Google Earth images, and topographic maps prepared by "Iran National Cartographic Center".

After providing Landsat time series, we applied preprocessing steps including atmospheric and geometrice correction. Then, the images were classified by Support Vector Machine method. They were classified into four classes including built up, fallow, agriculture and green space. After classifying the control points, the accuracy of the images was calculated. In the next step, we have used the Mono Window algorithm to obtain surface temperature for each image. At the end, we investigated the changes between different images and their relationship with the Earth's surface changes.

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Results and discussion

The results of landuse changes in Gorgan indicated that during the first period (1992-2001), the extent of fallow and green space increased 48.55% and 31.95%, respectively. The agricultural and green spaces decreased 68.68% and 5.9%, respectively. This is the most important cause of this decline in agricultural landuse during this period in the fallow landuse. In the second time period (2001-2009), the area of green, agricultural and built up landuse increased by 17.1%, 86.59% and 14.51%. The fallow landuse because of cultivation decreased about 18.68%. Also, in the third time period (2009-2015), the extent of the built up and fallow landuse was increased by 12.24% and 7.84%, respectively. The area of the green spaces and agriculture landuse is decreased by 0.72% and 29.49%, respectively. The use of green space due to its particular geographic location, including special topographic conditions, has not changed during the study period.

The highest temperature related to the fallow landuse, because of this increase in temperature for the fallow is the thermal capacity and low heat transfer capacity of the dry soil. Also, the highest temperature is related to green space landuse. This is resulted from evapotranspiration for reducing the temperature for the green space landuse.

The variation in temperature classes is different. The very cold temperate class has a faster rate of reduction, so that the area of 5875.51 hectares in 1992 changed into an area of 1260.1 hectares in 2015. Also the normal and hot temperatures class in these years had the growing trend. The area of the warm class was zero in 1992. It increased by 319.73, 1226.91, and 1686.13 hectare in the years 2001, 2009 and 2015, respectively.

Conclusion

The results of the image classification in the research indicate a positive effect of the NDVI index and the LST map to increase the accuracy of image classification. Landuse changes indicated that the most changes were observed between the agriculture and fallow landuse. If this trend continues, other landuse will undergo fundamental changes. The trend of temperature changes in the earth surface is an increasing and the highest temperature is related to the fallow and built up landuse. Also, the highest increase in temperature is related to the changes in the green space to fallow landuse. Investigating the relationship between the characteristics of vegetation density and the earth surface temperature indicates that different classes of land use/cover, the presence of vegetation could decrease the surface temperature during study period. It was found that surface temperature in dense urban areas were higher than those in other areas. Hence, it can be noted that the role of vegetation in reducing the surface temperature of the city was important. With studying the temperature classes in the study area, it showed that cold temperatures classes have decreasing trend and warm temperature classes have increasing trend because of the changes occurred in landuse.

Keywords: spatial-temporal monitoring, land use, urban extension, surface temperature, Gorgan.

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Effects of Development Projects on the Surrounding Urban Textures (Case Study: Shahrekord Twin Towers)

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Extended abstract

Introduction

Urban development projects have special economic, social, and environmental effects on urbna textures. Increasing high-rise building activities in recent years has raised concerns that can be leaded into serious problems and crises. Fundamental issues related to the high-rise buildings are including (1) economic effects: the impact of tall buildings on building density and land use and cost of construction of high-rise buildings. (2) social effects: a lack of consistency with adjacent cultures, lack of neighborhood life and community groups, ethnic, national and racial impacts of high-rise buildings, non-compliance with high population density and households, security issues, disaster problems such as earthquake, wind, fire, and identity issues. (3) Climate and environmental effects: air and environment pollution and also the light and the sun status.

Shahrekord Twin Towers, in Chaharmahal va Bakhtiari province, is under construction in the northwest Basij square on Shariati Street in an area of 6 thousand square meters. The project will be built on 25 floors. Locating the project in one of the most crowded city streets (Shariati), in the proximity to the largest and most important hospitals the health clinic, medical center, and sports complex faced the construction project with many problems. There is also intense discontent among residents. Thus, this study is to define present problems of the project and reduce its harmful effects in the future.

Methodology

This is an applied research with descriptive and analytical method. The data have been collected through the survey documents and field studies using a questionnaire and analyzed by SPSS and Amos software. The study population is all the residents in the surrounding areas of the project. According to the Cochran formula with unknown study population and 95% confidence level, the sample size in this study was 96. Reliability of the 96 completed questionnaires using Cronbach's alpha was confirmed in 0.767.

Results and conclusion

The present study is to evaluate the effects of the construction of Shahrekord Twin Towers. According to the study objectives, four hypotheses were examined. About every four hypotheses we answer the following questions: 1- Does the construction of the Twin Towers lead to economic changes in the region? 2- Does the construction of the Twin Towers lead to physical changes in the region? 3- Does the construction of the Twin Towers lead to environmental changes in the region? 4- How much the construction of the Twin Towers can lead to social changes in the region? The effectiveness of each variable was tested using

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structural equation modeling and Amos software. The outcome variables showed that p values for the variables are less than 0.05, it is meaningful and acceptable. Therefore, the hypotheses of this research are confirmed. We conclude that even in the earlier stages of the project before its completion, it leads to higher prices of land and property in surrounding districts, decline in production, and dissatisfaction of business people due to lower sales. Implementation of the project will also lead to the loss of esthetic values in urban landscape in the region. It also greatly reduced available lands around the region, particularly for hospital and made heavy traffic on the busy streets. However, this project at the current location improved the renewal and improvement of the abandoned areas in the vicinity. Construction of the project at the current location greatly increased air pollution, destroying the image of the city, leading to a lot of pollution for residents. Nevertheless, construction of the project has positive aspects. It increased tourism in the region and reduced migration to big cities because of its features.

Conclusion

The Twin Towers project is now under construction with unsuitable site selection, without planning and regarding urban design. The project is enormous heterogeneity within the context of a small town. A heterogeneous glass with high-rise building in the middle of a small town make the surrounding buildings look like slums, while one of the reasons for building this tower is to be a municipal and provincial symbol.

It can be suggested to supply the required infrastructure in the region, improve pathways development of urban transportation networks to reduce traffic load, finance the residents of the project due to financial problems, predict how to design garbage collection and reduce environmental impacts, forecast pedestrian access to the Tower, supply the appropriate number of parking around the tower in a suitable location for outside parking, strengthen the role of Shahrekord in the tourism and hospitality services with an emphasis on urban capacities.

Keywords: Shahrekord Twin Towers, environmental effects, social effects, physical effects, Amos.

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Investigation of Privacy of Houses in Line with Islamic-Iranian Life Style (Case Study: Old and New Texture of Yazd City)

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Extended abstract

Introduction

One of the most important principles in the traditional Iranian architecture, especially after Islam, is the principle of confidentiality. This is the best applied in all small buildings and large public buildings from residential buildings to public spaces. The aim of this study is to measure the level of confidentiality in old and new home (houses) in Yazd and compare their comparative approach in order to formulate strategies for moving towards the pattern of Islamic life in urban areas. Today, the growth of urbanization and industrialization of urban communities and the expansion of apartment life has led communities to quickly move away from beliefs and traditions. The growth of luxuries and decorations in urban houses of the world became ever more apparent in communities away from adherence to the principles in the patterns of housing of the traditional tissues of cities under the title of "privacy", "no aristocracy", and so on.

Methodology

According to the research objectives and the components, the type of research is applied and its method is descriptive-analytic. Indicators of research are house forms in old and new textures. In this regard, 15 home forms have been selected based on random sampling. In order to analyze the data to find significant relationships among variables, we have used inferential statistics such as multi-regression coefficient, analysis of variance, and strategic planning of SWOT.

Results and discussion

The study of these principles of Islamic cities in the old neighborhoods of Yazd shows that the same facades of houses, sanctity and veil, elements designed in buildings such as oars, cries, corridors and high walls, three major private, semi-private and public spaces can represent the confidentiality. On the contrary, in the new neighborhoods of the city, the semi-private space has been lost and the residents have communicated directly with the public space. This has led to the disappearance of the principle of privacy in homes. But modern neighborhoods are influenced by modern architectures, such as observing the height of buildings, the lack of aristocracy of houses, the consideration of privacy spaces, and hierarchical observance have not been taken into consideration. In the Yazd Architecture, hanging and hijab is considered a principle. The privacy of the family has a special respect. Houses with veils and private realms are far from audiovisual rape. No original Yazd home can be found with non-Islamic view. An interesting point in designing the doors of the traditional houses is identification of the gender of the people by the placement of two cubes with different sounds of the Bam (a man named Kobe-clone on the left) and below (the female-ring-ring on the right). This has indicated the

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importance of confinement from the religious dimension. Given the level of confinement of houses in the old texture and the new Yazd texture area, it can be said that most of the buildings in the old texture have the principles of spatial hierarchy, because most houses have a certain height and also penthouses, corridors, and central courtyards. Thus, you can easily observe the atmosphere of strict confidentiality. However, the new neighborhoods of Yazd, as newly built neighborhoods, are also on the path to urban development. They have been under the influence of modern architecture elements such as height of buildings, the areas of confidentiality, and the hierarchy. The streets of these neighborhoods are multi-storey houses next to one-story houses so that if you look out the window, you can see all the neighbor's courtyards. If the stairway windows on the stairs of the apartments look outside, in addition to the courtyard of the neighbors' house, room space is also visible.

Conclusion

The results show that in most of the houses of the old textures in Yazd, all the principles of confidentiality have been taken into consideration, so that the main private, semi-private and public spaces are clearly appeared. These principles are influenced by the residential patterns of foreigners in new neighborhoods. These houses and the semi-private spaces are not affected by outsourcing architecture. The results of the regression coefficient show a direct and strong correlation between the patterns of new homes and the respect of the confinements of the houses relative to each other. In spite of not considering the principles of Islamic Housing in the new textures of Yazd, the visual, audio, accessibility, smell and social interactions of residential units have been greatly forgotten in the patterns of new homes. This situation, in the SWOT analysis model, expressed the clarity. In this regard, the most important strategies in this field are the enforcement of the guarantee of the principle for confidentiality in new construction, the hierarchy of spatial inputs of homes, increase in the interior spaces per capita in the houses in new structures.

Keywords: confidentiality, space hierarchy, lifestyle, Islamic cities, Yazd City.

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Spatial Pattern and Related Factors Affecting the Contemporary Growing Urbanism in Iran (Emphasizing on Development and Livelihood Indices)

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Extended abstract

Introduction

The growing urbanization and demographic imbalance between urban and rural areas of the country is not a new simple topic. Although there is a high correlation between urbanization and human development, but its quick growth without planning and policy making would have some consequences. Therefore, a comprehensive recognition and analysis of the progress, dimensions and the factors related to the urbanization is the first and critical condition to make decisions and plans. Urbanization system and its fast growth in the developing countries has caused a massive influx into the cities and the emergence of services, broad marginalization, hidden unemployment and also the rise of duality in the social networks of the immigrants in the cities. The cities of underdeveloped countries are hybrid institutions emerged as a result of two reactions: Firstly, reaction to the division of labour as a local phenomenon and secondly, reaction to the integration in the global economy. In Iran, the explosive growth of the urban population and its real quick growth happened after the 1967. This is the reflection of the land reform and national investments and the rapid growth of the urban investments. In 2012, the urban population of Iran has exceeded over two-thirds. Urbanization is affected by many various factors such as economic, social, and cultural activities and livelihood, infrastructural, and services status of the societies. Therefore, the presented research is condudted with the purpose of recognition of the current urbanization pattern of the country based on the spatial concentration and autocorrelation and also investigating the effects.

Methodology

The presented research is carried out with descriptive-analytical methof and correlation and also based on the document studies. Among the used documental resources are Thematic Reports of the Statistical Center of Iran (2012), Statistical Reports of the Ministry of Sport and Youth (2012), The Reports of Department of Economic Studies of the Keshawarzi Bank (2012), and Agricultural Statistics of the Ministry of the Agriculture (2013). Therefore, the Moran and Gary models are used in the ArcGIS to evaluate the urbanization pattern in the country. The correlation coefficient of Pearson is utilized in the SPSS to evaluate the relation between urbanization with various industrial economic, social, cultural, infrastructural, services and agricultural development factors. The coefficient of dispersion is used to evaluate the difference

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in the growth of urbanization between the states of the country during the period from 1986 to 2012.

Results and discussions

The findings of the Moran and Gary models showed that the spatial pattern of urbanization in the country during the period from 1996 to 2012 was concentrated and clustered in the country. It was also found that the urbanization pattern corresponds to the pattern of industrial development in the country.

- The results of the growing the urbanization during the period from 1986 to 2012 shows that in the majority of cases, the provinces have experienced the rapid growth of urbanization almost equally. The majority of their population lives in the cities nowadays.
- The urbanization pattern has a strong relationship with the pattern of distribution of industrial centers
- Generally, the growth of the urbanization has a direct relation with the promotion of economic indicators, especially income indicator.
- Urbanization and infrastructural indicators have a significant relation with a high compatibility. That is in a way that necessary infrastructures are considerably provided in the cities.
- Growth and development of services and facilities does not comply with the urbanization growth. The speed of urbanization has been much more than the speed of the urbanism.
- Urbanization has caused a promotion in the level of education and expertise. It has been cleared that the most important reason for the rapid urban population growth is the internal migrations (inter-provincial), creation of new urban areas (Becoming the countryside to the cities) and also external migrations (Interstate). These conditions have notable effects on the urbanization, except in metropolises such as Tehran.
- The health and therapeutic indicators have increased parallel to the urbanization growth and it has faced the urbanization with numerous problems.
- Unexpectedly, even some of the agricultural development indicators such as the amount of agricultural production, beneficiaries with agricultural education and agricultural companies have a significant and meaningful relation with the urbanization. One of the important reasons for the increasing amount of agricultural production in the more-urbanized provinces is the need of urban population centers (especially metropolises) for more agricultural products and also the existence of fertile lands near the population centers. In addition, proximity to urban population centers could influence the creation and growth of the expertise and organizational agricultural dimensions.

Conclusion

The current urbanization pattern in the country is cluster-like and the spatial concentration and autocorrelation is also clear in a way that the urbanite clusters of the country are located in the northern and central parts. In addition, neighboring provinces in the southern half are the lower zone of urbanization. Factors like the existence of the important industrial centers of the country and also the poor environmental potential in the central areas of Iran are among the important reasons of such urbanization pattern in the country. Generally, it can be said that despite of the problems and significant deficiencies in the field of health, infrastructure, and other services, urbanization is still welcomed warmly. Agricultural development and even the promotion of living conditions of villagers could not satisfy their interests in better life styles in the countryside.

Keywords: urbanism, spatial pattern, urbanism growth, urbanism growth factors, Iran.

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Selection of Optimal Zones for Construction of Public Parking Lots in Ilam City

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Expanded abstract

Introduction

Selection of parking lots is influenced by a number of various criteria and variables in traditional models. This is while in the GIS environment, we can utilize the selected criteria in the form of various layers for selecting the optimal zones for parking lots. Using the Geographical Information System (GIS), we can apply the new changes immediately on the obtained model. Ilam City is one of those cities have a very limited potential on urban development surrounded by mountains from three geographical directions. The necessity to correctly select optimal locations for the construction of parking lots in Ilam City is very significant for the city. Thus, the aim of the current study is to analyze and select the optimal zones for the construction of public parking lots in Ilam City. This study is trying to answer the following questions: (1) what are the criteria for site selection for the construction of public parking lots in Ilam City? (2) What are the most suitable zones for the construction of parking lots in Ilam City based on site selection standard and criteria?

Methodology

The scheme used in the current study is a fundamental applicable methodology. The statistical population of the study includes all the university professors and experts in the field of urban management, among which 40 participants were selected as the sample of the study. Based on the consensus of six groups of experts, the specific criteria for the selection of the best sites for the construction of parking lots were calculated using stratified Intraclass Correlation Coefficient (ICC) in Expert Choice software. In this scheme, the higher the coefficient of a selected site is, the more optimal the site will be. The identified criteria were reviewed by the experts. Cronbach's Alpha coefficients were calculated as 0.706 and 0.950 which indicate the acceptable correlation and compatibility among the experts' opinions, respectively. Finally, the integration of opinions was carried out using the average method. Pearson's test and the T-test in LISREL software were used to calculate the relationship between the variables. We combined fuzzy AHP and GIS to determine suitable zones for construction of public parking lots. After completing the steps and the integration of layers, the status quo was analyzed, suitable zones were obtained, and the most optimal sites for the construction of public parking lots were selected.

Results and discussion

Based on the opinions of the experts, eight criteria were selected for site selection of public parking lots in Ilam City. These criteria are as following: availability of funds, public access,

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size of the area for parking, compatibility with urban high-traffic routes, landuse of the site, sales and revenue, administrative bureaucracy, and other sections. The results of the correlation analyses show that there is a significant relationship between the selected criteria and the selection of the optimal sites for the construction of parking lots. Another result of the current study was the identification of the zones suitable for the construction of public parking lots. Through combining the fuzzy Analytical Hierarchy Process (AHP) with digital layers, and finally by analyzing the sensitivity of each one of the sites, only two sites were determined as the most optimal locations for the construction of urban parking lots in Ilam City. These two sites are located near Payam-e-Nour Intersection and Saadi Intersection. This is because of spatial conditions, geographical location, access level, demand level, effectiveness, and impacts on above-mentioned trends. These locations have the highest potential for development and expansion.

Conclusions

The selection of the two above-mentioned locations as the appropriate zones for construction of the parking lots is important because Saadi Intersection is located in the oldest physical texture of the city and it is in fact the main core of Ilam City. Therefore, urban applications are not compatible with the infrastructural conditions of this area to create traffic congestions in this zone. Payam-e-Nour Intersection has also with the problems of traffic congestion at all times, particularly at the beginning of the education in fall, due to the presence of multiple educational centers and the high concentration of school and university students as well as lack of a suitable parking lot. Therefore, based on the above-mentioned considerations, due to the high interference of functionalities and the high levels of public traffic in these two sites during day, the construction of parking lots in these two sites is highly required. Therefore, in order to prevent disruptions and the formation of traffic congestion points as well as the well-being of citizens, public parking lots should be built in these two optimal sites.

Keywords: public parking lots, site selection, AHP, Ilam City.

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