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Identify barriers affecting the adoption of passive defense principles in the arrangement of infrastructure facilities (Case study: Urban Peripheral areas of Chabahar City)

Received: 2021-10-26 Accepted: 2022-01-17

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Extended Abstract:

Introduction

Today, one of the most important issues that should be considered when designing and planning cities to ensure the safety and security of citizens and reduce the crisis in cities, is to consider the principles of passive defense to reduce the destructive effects of crises. Passive defense is a suitable platform for security and sustainable development of the country and one of the most effective and sustainable defense methods for arranging infrastructures. In this regard, the purpose of the present study is to identify a set of effective barriers for adopting the passive defense principles in arrangement of infrastructure facilities of urban peripheral areas in Chabahar.

Methodology

The present research is an applied study in terms of purpose, and in terms of method uses ground theory method, which is both qualitative and quantitative. In order to analyze the information, the grounded theory method and FARAS model were used. The study used a purposive method to the point of theatrical saturation. A total of 20 in-depth interviews were conducted.

Results and discussion

From the results of interviews with experts 63 concepts, 20 semantic units and 10 categories(Lack of policy and decision-making, lack of design and planning, lack of specialized and efficient manpower, lack of monitoring of passive defense principles when

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Identify barriers affecting the adoption...(khaje dad et al)

locating, financial weakness of organizations, lack of integrated and decentralized management, lack of use of new science and technology for defense such as GIS, insufficient training, lack of knowledge of passive defense topics, lack of documentation, lack of passive defense considerations) were extracted. Finally, the results of FARAS model showed that the category (lack of adequate training with a weight of (0.479), have the highest importance from the perspective of experts.

Conclusion

All development programs will be still undesirable and problematic unless these obstacles are removed for the passive defense principles. The principles of passive defense need to go further than just theories to get practical output in this urban peripheral area.

Keywords: Arrangement of infrastructure facilities, passive defense principles, urban peripheral, Chabahar.

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Regional planning of peripheral villages with emphasis on the development of tourism industry (Case: villages around Nikshahr)

Received: 2021-12-30 Accepted: 2022-03-14

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Extended Abstract:

Introduction

In the postmodern era and today, development indicators have moved towards multidimensionality and have moved away from being merely sectoral. Tourism industry is one of the most important dimensions of development. Tourism is a major force in rural location and is widely used to preserve and revitalize rural areas in times of economic uncertainty, which can be achieved through principled and appropriate planning and the identification of tourism opportunities and constraints. This industry has high capacity to be used in the fields of environment, culture and history, which need to be planned in order to be sustainable. In the age of globalization, tourism development has been introduced as one of the main drivers of spatial development and regional competitiveness. An issue that has been neglected in Iran or has been less addressed. In this regard, the purpose of this study is to plan the peripheral villages around Nikshahr City with emphasis on the development of tourism industry.

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Methodology

The present research is an applied research in terms of purpose, a descriptive and non-experimental research in terms of data collection, and in terms of implementation, it is a survey. The statistical population of the present study includes members of the village council, rural mayors and district administrators of the peripheral villages of Nakshahr (Tehrak, Khairabad, Zahak, Nokabad and Hitan). The sample size was determined based on purposive sampling of 50 people. SPSS software and FARAS, FBMW and WASTPAS models were used to analyze the data.

Results and discussion

The results of the correlation test show that there is no relationship between the development of the tourism industry and the regional planning of peripheral villages. Also, the results of the FARAS model showed that among the elements of tourism, services with a weight of 0.434, have the highest level of importance in the peripheral villages of Nikshahr. The results of FBMW model showed that in the spatial performance of information and service elements, Khairabad, Nokabad, Hitan, Tehrak and Zahak villages, respectively, and in the spatial performance of transportation and advertising elements, Khairabad, Hitan, Nokabad, Tehrak and Tehrak villages, respectively ranked from high to low. Finally, the results of the WASTPAS model in order to rank the peripheral villages with emphasis on historical and natural attractions showed that Khairabad village has the highest rank in both historical-cultural and natural attractions.

Conclusion

In general, results showed that the spatial performance of Nikshahr peripheral villages is different in the element of historical-religious and natural attractions, and these villages in the field of tourism should have a special emphasis on regional planning. Despite the high potential of natural and historical-religious attractions, the lack of tourism infrastructure will lead to irreparable social and cultural damage.

Keywords: Regional planning, Village, Tourism, Peripheral, Nikshahr.

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Ranking of Influential Factors on Crime Hotspot Formation in the metropolitan suburbs

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Extended Abstract:

Introduction

Identifying the influential factors in crime hotspot formation is necessary for managers and planners and the development of appropriate strategies to improve security in cities. Accordingly, the purpose of present research is ranking the factors on crime hotspot formation and the impact of poverty on the generation of these geographic centers in the new city of Hashtgerd.

Methodology

The present research is applied and descriptive-analytical in terms of method. The statistical population includes the legal limits of the new city of Hashtgerd in 2020. The sample size through the Cochran's formula is equivalent to 400 people. The validity of the study has been confirmed according to the opinion of experts and its reliability is verified through Cronbach's alpha (more than 0.7). Friedman test, Pearson Chi-Square, Likelihood Ratio, Kendall's tau-b, Spearman and kernel density estimation were used for data analysis. Research data has analyzed in SPSS and Arc GIS software and Crime Analysis software.

Results and discussion

According to Friedman test, economic factors have the highest impact on crime in the new city of Hashtgerd which are included poverty (with an average of 19.70), unemployment

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Ranking of Influential Factors on Crime...(Mahdnejad et al)

(19.25), income inequality (19.12) and housing mobility (17.21). The spatial distribution of crime is clustered and most crime has occurred in new and poorer expansion phases.

Conclusion

According to the results of Pearson Chi-Square, Likelihood Ratio, Kendall's tau-b, Spearman, there is a high degree of correlation between the formation of geographical centers of crime in city areas and variables such as poverty, lack of public transportation, ethnic and cultural diversity, residential mobility and defenseless urban spaces.

Keywords: Poverty, Crime, Poverty Zones, Crime Hotspots, Hashtgerd.

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Investigating and Presenting Environmental Quality Strategies in Informal Settlements with Participation approach(Case Study: Farahzad Neighborhood)

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Extended Abstract:

Introduction

Farahzad neighborhood as one of the old neighborhoods of Tehran, which used to be a village. Along with the rapid development of the city, this neighborhood is facing spatial inequality and various problems related to environmental quality. It seems that the level of participation and presence of citizens in the public areas of Farahzad's informal residence is directly related to the environmental quality. In this regard, the present study seeks to analyze the environmental quality strategies of Farahzad informal settlement based on participation. It is assumed by presenting the proposed strategies of environmental quality in the dimensions (economic, social, physical, environmental, decision-making and management), Farahzad can be directed towards environmental quality with an emphasis on participatory approaches.

Methodology

The present research is descriptive and analytical, and in terms of purpose is an applied study. In order to analyze the data, confirmatory factor analysis method was used via AMOS software, SPSS, and SWOT models, and (FARAS, FBMW), and QSPM method. The statistical population in the present study consists of two parts. The first part is the residents of Farahzad informal settlement. According to Cochran's formula, 377 people were selected as the sample population. In the second part, the sample population includes experts and

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informants. In the field of study, using a purposive sampling, 20 people were selected as the sample population.

Results and discussion

According to the SWOT model, the most important strengths and opportunities of the neighborhood are the existence of local mosques and the role of neighborhood tourism, and the most important weaknesses and threats are lack of service uses and unprincipled constructions. After the statement of problems, the results of ranking the categories using the FARAS model showed that, from the experts' point of view, the problems of the current situation in Farahzad neighborhood in the physical field with a weight of 0.456 is more than other fields. Subsequently, in order to rank each problem in the thematic areas, the BMW model was used. The most important challenges are as follows: in the environmental dimension, lack of sewage disposal system with a weight of 0.087, in the social dimension, social security with a weight of 0.087, in the economic dimension, the existence of unauthorized housing with a weight of 0.084, in the physical dimension, the growth of informal settlements in the north of the neighborhood with a weight of 0.085, and finally, in decision-making and management dimension, weak participation of people in urban development decisions with a weight value of 0.084. To correlate the problems between environmental quality and citizen participation, Spearman correlation test was used. The results showed a significant and positive relationship between the problems and the lack of citizen participation. Finally, using the QSPM method, goals were formulated in order to improve the quality of the environment based on citizen participation. Organizing informal settlements in the neighborhood are also the most important goals of the managerial, economic and physical areas, respectively.

Conclusion

In the optimal design and planning of public areas of informal settlements, including Farahzad, it is vital to pay attention to the needs, characteristics and preferences of citizens to attend, perform activities, accept responsibility and, in a word, citizen participation.

Keywords: environmental quality strategies, partnership-oriented, informal settlements, Farahzad.

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Assessment of the physical-spatial sustainability of rural settlements (Case study: suburban villages of Central District of Ardabil County)

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Extended Abstract:

Introduction

Rural settlements in the Central District of Ardabil County have been faced with various changes internally and externally in socio-cultural and economic dimensions internal and external, especially during the last decade. These developments are manifested in the form of physical-spatial changes. The aim of this study was to investigate the level of physical-spatial stability of rural settlements in the Central District of Ardabil County and to explain the causes and factors affecting their stability / instability. The results of this study show that most of the villages in the study area are at a low level in terms of physical-spatial stability. In fact, external factors and forces (development programs or providing government facilities in the field of rural settlements, etc.) and then internal (environmental, socio-cultural and economic conditions of villages) areas of vegetation destruction, land use change Earth and ultimately provide physical-spatial instability.

Methodology

The population of the study consisted of 29 villages and 360 households in the central district of Ardabil County which has been determined by a multi-stage method. The research method is descriptive-analytical and the required data are collected in through documents and field study. One-sample t-test, Pearson correlation and multivariate regression analysis (simultaneously) were used to analyze the data. Arc GIS software was used to draw maps.

Results and discussion

The average of all sample villages in all three indicators of environmental sustainability; social; and economic is less than the average (3); therefore, all the studied villages are not in a favorable situation in terms of level of stability (physical-spatial, etc.). Therefore, the

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first hypothesis is confirmed, which had been stated "most of the villages in the study area are at a low level in terms of physical-spatial stability",

As for the second hypothesis "The contribution of external factors and forces (compared to internal) in the instability of physical-spatial development of the studied rural settlements is greater", we used Pearson correlation method to measure the relationship between the components. Also, to predict the effect of each of the predictor components (internal and external factors and the amount of relationship) in the dependent variable (physical-spatial stability of the studied rural settlements), multivariate regression analysis (simultaneous method) was used. The level of significance between the variables is less than 0.01 and also the correlation coefficient of the variables is at a high level, so it can be concluded that there is a positive relationship between the level of physical / spatial stability / instability of villages with internal and external factors. There is a negative and significant relationship with the distance from the city, which means that the shorter the distance from the city, the higher the physical changes. For this hypothesis, Independent variables include internal variables (distance of villages from the city; size of villages; number of services and private facilities of villages) and external variables (amount of loans received by villagers; number of government projects and programs implemented in villages; number of industries and units Built in rural lands. A combination of these two variables were submitted into the regression model to predict the effect on the level of physical-spatial stability of villages. Based on the regression results, in general, the beta value for external factors and forces is equal to 0.38, which is significant considering the value (t = 2.47). Meta beta for internal factors and forces is 0.29, which is significant considering the value (t = 2.35). Therefore, the second hypothesis is confirmed. This means that the share of external factors and forces (relative to internal) in the instability of physical-spatial development of rural settlements is greater. That is to say, external factors (the amount of loans received by villagers; The number of industries and units built on rural lands) have a much greater share in the process of changes and transformations and physical-spatial instability of sample villages.

Conclusion

The current research is in line with the results of the studies such as the Government of Ireland (2005); IFAD (2006); the Australian Planning Commission (2012); the Programming Policy Statement (2015); Ananebestani (2009); RightPanah (2009); Firouznia, Eftekhari and Badri (2010); Poor Taheri, Eftekhari and Badri (2011); Mola'i Hashtjin (2011); Anebahestani and Fellow (2014); Rabiyyafar et al. (2016). This means that most of the studied villages in Ardebil Provinceare located at a low level in terms of physical-space stability. In fact, there are often external forces (development plans or provision of government facilities in the field of rural settlements, etc.) and then internal factors (environmental, socio-cultural and economic conditions of villages) are the causes of vegetation destruction, the earth surface demolition and ultimately the physical-space instability. The results of this comparative study indicate that successful rural development projects were projects that were consistently based on the principles of sustainable development (physical space) and selected and implemented on the basis of local community priorities, which applied the participation and cooperation of local people and financial resources. Moreover, the localized rural development programs in rural areas should coordinate the process of land use development planning, infrastructure development and facilities on a local scale, and provide a legal framework for facilitating future development of settlements within the framework of sustainable physical-spatial development.

Keywords: physical-spatial sustainability, the Central District of Ardabil.

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Research Paper





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Identifying Smart City Indicators and Key Components Before its implementation in the suburbs of Qom city

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Extended Abstract:

Introduction

The rapid increase in urban population has led to the emergence of new features and conditions in the structure of cities. In other words, the massive influx of residents into the suburbs has led to chaos and disorder, which creates conditions that have not only deteriorating the balance of cities, but also have made it impossible to achieve sustainability with current methods of urban management and development. One of the new concepts to address the current challenges of cities in the field of urban planning is the development of smart cities, which has attracted much attention in recent years. Smart cities, as the future of human cities, is a city engaged in technology, flexibility, stability, creativity and livability and are becoming part of the national policies, because they pertain to increasing the quality of life of citizens. The purpose of this study is to identify smart city indicators and their effective key components before its implementation in the suburbs of Qom city.

Methodology

This study is an applied study which has an analytical-explanatory nature. both quantitative and qualitative methods were used for the research. Managers and local informants of Qom

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Identifying Smart City Indicators...(Mohammadi Shafi et al)

were selected as the statistical population, and based on purposive sampling, 30 people were selected as the sample group. SPSS software, FAHP model and grounded theory were used to analyze the data.

Results and discussion

47 concepts, 21 semantic units and 9 categories were extracted from interviews with experts which include co-creation and partnership in smart city development, leadership of Qom city to making it smart, empowerment of labor force, formulation of cross-sectoral approaches, reducing the gap for digitalization, institutional gap, improvement and development of new forms of management, innovation, integration. Finally, the results of the FAHP model showed that among the extracted categories the priority is with co-creation and participation in smart development.

Conclusion

Qualitative data analysis indicates the importance of recognizing the main indicators of the smart city in suburban before implementation. Also the evaluation of the proposal framework in the form of categories showed that co-creation and participation in smart development can be the basis of smart neighborhoods in Qom.

Keywords: Smart city, Smartening, Suburban neighborhoods, Qom city.

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Metamorphosis analysis of the dominant economic role in the villages around the Isfahan metropolis

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Extended Abstract:

Introduction

Villages are very important as one of the main sources of production in communities, Therefore, recognizing the dominant economic role of villages in order to play their functional role in the country's production system and also examining the changes in this system are important for a proper economic and spatial planning, especially due to the close relationship between the city and the village through different aspects. Villages close to cities, especially metropolitan areas, are more exposed to this change and transformation than other villages due to the spatial relationship between them and affected by the main city. This role changes according to the environmental, economic, social, cultural and political conditions. The present study aims to identify the process of metamorphosis of Kararaj Rural District around the metropolis of Isfahan and the factors causing this metamorphosis and seeks to find a clear answer to the question that "what are the factors and the process of metamorphism of the dominant economic role of villages around Isfahan" and "what consequences have these villages faced?".

Methodology

This research is a applied research and has been done by using qualitative method and semi-structured interviews with 50 informed individuals. It has a descriptive-analytical nature. In fact, in order to collect accurate information, interviews with rural mayors and local informants and observation were used. Two types of purposive sampling and theoretical sampling were used simultaneously to select participants. Theoretical sampling was used to identify the number of people, determine the location of the required data and find the research path and purposive sampling was used to select the interviewees based on the age of participants. For this purpose, selected individuals from the age group of 30 to 75 years

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were selected. While understanding the present time, these individuals also remember the past time of the village and provide information to the researcher during this time period. This process continued until theoretical saturation was reached. Then, through the open, axial and cross-coding, the desired categories resulted and finally developed the theory.

Results and discussion

The results of the research indicate that the studied villages of Kararaj sub-district once had a prosperous agriculture due to their proximity to Zayandehrood River and the Madis (according the Sheikh Bahaei divisions), having prosperous lands and being close to consumption market. Agricultural and horticultural activities along with animal husbandry have been the most important sources of income for the residents of theses villages. However, in consecutive years, the combination of environmental factors along with sociocultural, economic-political and managerial factors have caused the metamorphosis dominant economic role of the villages. In such a way that the dominant economic role of many villages has changed from agriculture to service and industrial occupations and in a limited number of villages that still maintain their dominant role in agriculture, the amount of this activity has been decreased compared to the past. In these villages, after the weakening of agriculture and the closure of many greenhouses and livestock farms, the labors in service sector have been increased and a large number of manufactures and industrial units were formed.

Conclusion

Finally, the results indicate that factors such as "environmental resource limitation", "proximity to major natural and man-made landscapes" and "different ownership of water and land" and according to the context factors including "rural socio-cultural developments" and "increase in the economic value of land" as well as intervention factors such as "lack of supporting for decision-making organizations" and "weakness and inefficiency in the development and monitoring of land use laws" have led to metamorphosis of the dominant economic role of the villages. "Changing the face of the physical and spatial system", "changing the economic classes of the inhabitants" and also "changing the socio-cultural identity" of the villages are the impacts of metamorphosis of the dominant economic role of this villages.

Keywords: Economic role metamorphosis, Villages around the metropolis, Kararaj, Isfahan.

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Investigating the land use changes in peripheral rural areas (Case study: Birjand city)

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Extended Abstract:

Introduction

Today, the most important issue facing Iranian cities can be extensive changes in agricultural land use in urban peripheral spaces. Effects of changes in agricultural land use are included the prevalence of unproductive capitalism and land speculation around cities, particularly in the provincial centers.

In Iranian cities, two growth scenarios can be observed: A scenario of slow horizontal growth or organic growth that is in the Pahlavi era and especially before the land reforms of the 1940s The main features of this time are the domination of the physical development and intrusion of the population to the city. Another scenario is the rapid horizontal or non-organic growth that is almost 30 years old. This scenario has caused cities to face a number of problems including the destruction of agricultural lands -gardens or farm. The rapid growth of urbanization in Birjand and consequently its physical development has affected the villages of its immediate area .

The present study, after examining the changes in rural land use according to the superior plans and using satellite images in three time periods from 2005 to 2020, tries to answer the following questions:

- How is the trend of land use changes in the peripheral villages of Birjand?
- to what extent does land use development in the studied villages fit in with the standard land use indicators?

Methodology

The present research is a descriptive - analytic study. The purpose of this study is to analyze and evaluating land use developments in peripheral rural areas of Birjand. Data collection were done an evidence-based survey, using documents and reviewing the literature review to formulate theoretical foundations and collect research indicators. First, we used various

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scientific sources including books, articles, scientific reports and related documents as well as classification techniques, resource evaluation, note-taking and summarizing. In the field study, multi-time remote sensing images and GIS, direct observation and interview methods were used. ArcGIS, Excel and Envi model were used to analyze the data. In this study, this model was designed with the aim of predicting the development trend and land use changes in the year 1399 (2020) horizons. Satellite images of 2004, 2009, 2014, 2020 were used to predict and detect changes.

Results and discussion

In general, regarding the development of residential lands, Amirabad village with 35.14% growth has had the most change in the last 15 years. Consequently, the demographic changes of this village will be more than other villages in the study area. The most changes in agricultural lands has taken place in the villages of Amirabad and Dastgerd by 9%. However, in the village of Amirabad we see a decrease and in the village of Dastgerd we see an increase in agricultural lands. Also, in the villages of Amirabad, Hajiabad and Cheknd, non-irrigated lands have decreased and only in Dastgerd village, there is a 4% growth of non-irrigated lands. After determining the land use changes, their quality status is necessary to evaluate. Three indicators of dependence, compatibility and desirability of qualitative evaluation were utilized. They indicated a relatively appropriate and moderate situation among land uses and a similar situation in all 4 studied villages.

Conclusion

Land use changes were evident in the studied period; nevertheless, it was more noticeable in two villages of Amirabad and Dastgerd. The quality of changes in the studied villages is different based on the three indicators of dependence, compatibility and desirability. The dependence indicator is the highest in in Amirabad village with an average of 3.36. the compatibility of land use changes in Hajiabad village was the highest with a score of 30.3. The desirability indicator in Chekand village is the highest with a score of 3.45.

Keywords: land use developments, peripheral villages, Surrounding Villages of Birjand.

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Analysis of the role of participation in waste management in Urban Peripheral areas of Zahedan

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Extended Abstract:

Introduction

Accelerated growth of urban population, environmental pollution has been challenging for many managers and urban planners. Among these, how to collect and transport waste and recycle it in suburban areas calls for special attention. Public participation as a solution can have many positive economic and environmental effects. Participation in the waste management process by reducing the production and waste segregation as one of the most efficient and economical processing methods today in most countries around the world. Residents have a very influential role in the success of this approach. In this regard, the aim of the present study is analysis of the role of participation in waste management in urban peripheral areas of Zahedan.

Methodology

This research is applied in terms of purpose and in terms of nature and method of research is a survey. The data required for the research were collected by documents and field study method (questionnaire and observation). The statistical population of the present study includes residents of urban peripheral (including 5 villages on the outskirts of Zahedan) (Gavadaran, Siadak, Mohammadabad Abedzadeh, Hajiabad and Mohammadabad), with a population of 2460 people. 332 people were determined for sample group using Cochran's formula and error level of 0.5. SPSS (Pearson and regression tests) and PUA model were used to analyze the obtained data.

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Results and discussion

The results of ranking the indicators showed different aspects of participation including participation in decision-making (participation in presenting waste separation programs from the source), manual participation (participation in informing about environmental problems and preserving the environment), and financial participation (delivery of separate waste for free) are in priority. The results of Pearson correlation coefficient values between the dimensions of participation (decision-making, manual and financial) and waste management of urban peripheral areas, showed that there is a positive and significant relationship between all independent variables (participation aspects) with waste management of urban peripheral areas of Zahedan at 99% confidence level. Also, the results of regression analysis showed that participation in waste management is effective in this area.

Conclusion

The results showed that urban waste management, through education, telecommunications, etc., can play an important role in the development of public participation in all dimensions (decision-making, manual and financial).

Keywords: Participation, Urban Peripheral Areas, Waste Management, Zahedan.

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Economic stability in suburban areas of Islamshahr

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Extended Abstract:

Introduction

In recent years, metropolitan and urban areas of Iran have experienced incomplete urbanization that has been the result of oil capitalism. The level and scope of urban sprawl has raised concerns among managers and citizens. It is obvious that the uncontrolled growth of cities has not only changed the landscape of cities but also has caused fundamental changes in the economic pattern of the city and surrounding villages. This issue has also had an increasing impact on the functional developments and the economy of these areas. This resulted in consequences such as poverty and abnormality, unemployment, wide gap in living standards, inequality in areas, etc.

Meanwhile, the city of Tehran is experiencing the suburban phenomenon and the negative effects of urbanization such as rapid environmental decline, unplanned land-use changes, severe service shortages, migration, class gap, unemployment, working children, etc., are elevated. The amount of migration to the metropolis of Tehran made surrounding areas absorb the overflow of development from Tehran, so they have quickly become cities by attracting migrated population. Islamshahr city, unlike other old cities, has not been created due to its natural and environmental capabilities, but the emergence of this city due to its location in proximity of Tehran, where became a residential destination for thousands of migrated people who have entered this area due to repulsive factors in Tehran such as land and housing. In this research, the economic indicators of the suburbs of Islamshahr have been assessed using factor analysis and TOPSIS.

Methodology

This research is an applied and developmental study and in terms of method is descriptiveanalytical. The study area is the inhabitants of cities and villages in the suburbs of Islamshahr. The information required for this research has been obtained from library

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sources, the results of general censuses, referring to various departments and organizations, and the census of residents of the study area. 25 indicators have been extracted which have been transformed into 3 factors using factor analysis model. Instead of using the conventional method of principal component analysis in factor analysis, the standard method has been used to obtain factor scores, In the next part of the model, similarity to the fuzzy ideal option (FTOPSIS) is used.

The statistical population in this study is the residents of cities and villages in the suburbs of Islamshahr, which have a population of 492,145 people, which according to the Cochran's formula, the sample size has been determined as 384 people.

Results and discussion

The eigenvalue of the first factor is 11.524, which calculates and explains 52.848% of the variance. In this factor, 17 indicators have been loaded and considering that some indicators are among the welfare indicators and others are among the trade indicators, this factor has been named as trade and welfare factors.

The eigenvalue of the second factor is 7.321, which calculates and interprets 29.645% of the variance. This factor has five loaded indicators, all of which are demographic indicators that can be called the population factor.

The eigenvalue of the third factor is 3.846, which calculates and interprets 13.141% of the variance. In this factor, three indicators are loaded, all of which are industrial indicators. Therefore, this factor can be called an industrial factor.

The results of fuzzy TOPSIS calculations and the similarity index (CI *) confirms the high rate of gap in the process of economic sustainability. Among these, the best similarity index (0.79) is related to the city of Islamshahr, which has made this region higher than other regions. Also, the lowest similarity index is related to the ratio of active to inactive population (0.460), which is in the most deprived metropolitan area of Islamshahr in terms of indicators of economic stability. In general, the amount of economic stability according to this analysis is equal to 0.45, which is lower than the average (0.5). This shows that the area of Islamshahr is not in a good position in terms of economic stability.

Conclusion

Based on the results obtained from multivariate regression, respectively: 1- commercial welfare factor, 2- demographic factor, 3- industrial factor. They have the largest share in predicting the degree of enjoyment of the suburbs of Islamshahr. Therefore, commercial, demographic and industrial welfare factors are suggested as a priority for the development of this region.

According to the results of the research and the issue of justice, as well as citizens' access to facilities and services, the following suggestions are presented:

- 1- Using the reverse justice in a way that has the priority of economic development of low-income areas.
- 2- Economic policies should be in line with the spatial planning of Tehran and Islamshahr.
- 3- Recognizing the potentials and capabilities of each region and planning and investing in them and of course the appropriate productivity of each region.
- 4- Planning to reduce the unemployment rate in the regions and increase the employment rate

Keywords: Development, Economic Sustainability, suburban areas, Islamshahr.

2

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Feasibility study and empowerment of informal settlements based on mental perception in Zorabad area of Shahr-e Lushan

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Extended Abstract:

Introduction

According to the United Nations Human Settlements Program, in informal settlements a group of people live in similar conditions to urban areas, except from the sustainable housing, access to public health, easy access, safe drinking water, adequate living space and property security. Today, many cities in developing countries face similar issues and problems such as rapid population growth, employment problems and the expansion of the informal sections, and slums and urban instability. Informal settlements are usually created through land invasions or informal subdivisions, the sale and illegal development of barren lands. Residents are forced to use inexpensive building materials to build shelters and gradually build most of a community's assets in these settlements. Thus, informal settlements are highly dynamic communities with a complex mix of assets and risks. In Iran, due to the problems that have arisen in informal settlements for metropolises and even medium cities, some solutions have been suggested. In some cases, evacuation and destruction policies have been implemented, but other solutions according to global experience, as well as the World Bank's intervention, far more appropriate approaches have been defined to solve this problem. One of these approaches that has been considered in the country is the empowerment approach. This approach pays special attention to process orientation, participation and community-based, accountability, relying on the internal capabilities of communities. The area of identified informal settlements in Gilan Province is about 1353 hectares, which constitutes 2.1% of the informal settlements in the country. In these identified settlements, a population of 109490 people live that this statistic constitutes 0.9% of the population of informal settlements in Iran. In this regard, Zurabad neighborhood of

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Lushan city has considerable amount of informal settlements, which are an important part of the city. Since the field of empowerment in informal settlements will be possible by preferring to pay attention to the mental priorities of citizens and with their participation, therefore, the purpose of this study is to investigate the empowerment of informal settlements based on citizens' mental perception.

Methodology

This research is an applied study, and a descriptive-analytical study in terms of method and data were obtained through documents and field studies (by completing 373 questionnaires). For this purpose, 5 social, physical, economic, environmental and accessibility components, which were involved in the formation of informal settlements, were identified and provided to the statistical sample of the research (373 people) in the form of 26 specialized questions and measured by Likert scale. In order to analyze the data, SPSS-v20 software was used.

Results and discussion

To identify the main criteria in the formation of informal settlements in Zourabad neighborhood from the citizens' point of view, based on Friedman test, the study found that in the social component, the level of satisfaction with peace and comfort; in the physical component, granting urban housing renovation facilities to neighborhood residents; in the economic component, the transfer of ownership of property to the residents of this neighborhood; in the environmental component, the status of noise pollution and finally in the access component, the distance to health service centers; had the highest scores. Also in the social component, the relationship of residents in terms of dependence and friendship with neighbors; in the physical component, the quality of the facade of the neighborhood buildings from the perspective of visual beauty; in the economic component, the impact of the neighborhood on the city brand in attracting tourists and the difference between the price of housing and land in the neighborhood; in the environmental component, the hygiene of the roads and streams, and finally in the access component, the quality of the sidewalks in the neighborhood had the lowest scores. In order to examine the most important priority among the components shaping the informal settlements based on factor analysis test, it was determined that the economic component ranked the first factor, as the highest priority of empowering Zourabad neighborhood. Furthermore, the component of access was selected as the lowest priority among the components.

Conclusion

Achieving the empowerment approach in organizing informal settlements will be possible by addressing the mental priorities and desires of the residents. Therefore, in order to investigate the empowerment of informal settlements based on citizens' mental perception, in Zurabad area of Lushan city, 5 basic components (social, physical, economic, environmental and access), which were involved in the formation of informal settlements, were analyzed. It was found that the economic component with the criterion of handing over the property ownership document to the residents of Zourabad neighborhood, has been placed as the highest empowerment priority.; The next priorities were noise pollution in the neighborhood satisfaction with the comfort and convenience of residents granting urban housing renovation facilities to residents and finally distance to health centers.

Keywords: Informal housing, organization and empowerment, citizens' mental perception, Lushan city.

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Explaining the factors affecting land use changes in suburban villages of Rasht

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Extended Abstract:

Introduction

The rapid rate of urban development has led to extensive changes in land use patterns around cities. The effects of urban growth have been felt in both developing and developed countries. However, in developing countries, including Iran, this growth rate has been faster, and as a result, has led to extensive changes in land use. Land use change is mostly influenced by large-scale factors such as global economic and climate issues. In addition to these factors demographic change and local policies play a decisive role. Land use change means a change in the type of land use that is not always at the ground level, but also includes changes in land density and management. These changes are the result of the complex interactions of various factors such as politics, management, economics, culture, human behavior, and the environment. In fact, the potentiality of urban growth can be considered as the most important indicator describing land use change, especially agricultural land.

Methodology

The present research is applied in terms of purpose, in terms of nature and method is a descriptive-analytical study. The statistical population of this study includes 37 rural settlements around the city of Rasht. According to the objectives of the study, 37 inhabited villages that share a same border with the city of Rasht were selected as sample villages. In this study, all 37 villages have been studied (total population). In this study, a researcher-made questionnaire was used to collect information. The research questionnaire was designed, after identifying the physical and environmental factors affecting land use change. Physical and environmental variables were investigated as the independent variables and the amount of land use change as dependent variable. This questionnaire was given to the respondents in the villages around the city of Rasht. Finally, 516 people participated in

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completing the questionnaires. Data analysis was performed using one-sample t-test, Pearson correlation coefficient and multivariate linear regression.

Results and discussion

The results showed that among the independent physical indicators, the index of city proximity at significance level of 0.000 and with a coefficient of 0.874 had the highest correlation and relationship with land use changes. In fact, with the proximity of the village to the city, the rate of rural land use change will increase. The index of proximity to work and occupational centers with a coefficient of 0.811 and at a very low significance level of 0.000, had a very strong and positive correlation with land use changes. In this framework, the village facilities index had the lowest correlation with the dependent variable. The study of the correlation between independent environmental indicators and land use changes showed that the indicators of rural tourism capacity and inadequacy of rural land for agriculture at a significant level of 0.000 with coefficients of 0.834 and 0.803, respectively, showed the highest correlation and very strong relationship with change use of rural lands. This means that with the increase of capacities and tourist attractions in the villages around the city of Rasht, the desire of people to change land use will increase. In this process, the low capability of rural lands for agricultural activities also increases the speed of land use change. The results of multivariate linear regression analysis showed that among physical factors, the factor of proximity to the city predicts up to 67% of the changes in the dependent variable. Indeed, two factors of proximity to work centers and communication routes access with coefficients of 0.548 and 0.511, respectively, were influential for land use changes. The results of studies for environmental factors showed that four indicators are effective on land use change. The tourism capacities of the village with the standard coefficient of 0.821 had the most impact. The unfavorable rural land for agricultural activities with a standard coefficient of 0.785 had an effect on changes in rural land use. Distance from irrigation sources and lack of access to water with coefficients of 0.613 and 0.568, respectively, were effective in changes in the dependent variable.

Conclusion

Studies conducted on the factors of land use change in the villages show factors such as economic, legal, natural and demographic. Each of the factors in turn has played a decisive role in the changes in land use. In general, the expansion of villages and changes in land use pattern of them were affected by population growth and elasticity due to high population threshold and short distance from villages to the city center and especially the center of Gilan Province, but the climate factor should not be neglected. The added value of agricultural and horticultural activities is totally incomparable with the income created by selling lands, especially in the villages adjacent to the Rasht metropolitan border and the villages adjacent to the main routes, which gets many farmers and gardeners to sell or separate their lands. Ambiguous legal framework and the lack of enforcement, as well as the vague position of management within the village borders, have exacerbated such issues. In general, land use changes in the villages around the metropolis of Rasht have been affected by physical and environmental factors, in which the role of physical factors is much greater than environmental factors.

Keywords: Land use change, land use, rural planning, Rasht.

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Analyzing the impacts and consequences of the annexation of the village to the city (A Case study of Amol city)

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Extended Abstract:

Introduction

The physical expansion of cities and villages leads to the merging of a smaller settlement into a larger settlement. In this regard, adjacent villages to the city are a part of the city based on their formation, economic and social institutions, population growth, even being in the center of social and economic exchanges and interactions in a geographical context. It is possible that the village is fully integrated into the city and turns into an urban settlement, or it may continue to live while preserving the rural nature on the outskirts or inside the city. The northern areas of Iran are experiencing urban growth due to the physical and functional changes of city and village borders, which is evident in Amol city with a growth rate of 4.04 of the population between 2006 to 2016 and the growth rate of its area (4.47). Therefore, the main question of this research is posed as follows:

- 1. What are the consequences of annexing rural settlements to Amol city?
- 2. Is there a significant difference between the consequences of annexing villages to the city in terms of economic, socio-cultural and environmental-physical dimensions?

Methodology

The methodology of the research is descriptive-analytical. The data were collected from documents and completion of the questionnaires. The statistical population of this study is the residents of three villages of Ghoroq, Klaksar and Shadmahl of Amol city using the latest official statistics of the country (2016). The questionnaire was prepared with 37 questions about the various consequences of the annexation of rural settlements to the city of Amol emphesizing the economic, socio-cultural and environmental-physical dimensions. the reliability of the questionnaire was calculated to be 0.866 using Cronbach's alpha. SPSS software was used for the measurement of the effects of indicators in the study areas. A one-

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sample (T) test was used and the means of the items were compared with each other. ANOVA test was used to differentiate the effects and consequences between the studied areas and Scheffé's method was used to determine the differences between the areas.

Results and discussion

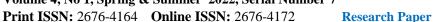
The results of analyzing the opinions of the respondents using t-test showed that the value of the average scores of the respondents in the social and cultural dimension are 2.66, 2.68 and 2.85 for the three villages of Ghoroq, Klaksar village and Shadmahl village, respectively. It has the lowest score and the average of all three villages is less than the average (3), which indicates the unfavorable situation of this component in these three villages. In terms of the economic consequences the scores are 3.02 3.12 3.08. for the villages.in terms of the environmental and physical dimensions the lowest score is 2.88 for Ghoroq. In Klaksar village (3.17) and Shadmahl village (3.17), this is higher than the average and has a good condition. Overally, two indicators of economic (3.1) and physical environment (3.13) with a significant level (0.000) are above average and its condition is appropriate. However, in the index of social and cultural dimension (2.74), the score is lower than the average and is in an unfavorable situation.

Conclusion

The annexation of rural to urban settlements is generally a multifaceted issue that has both negative and positive consequences. In general, the integration of rural to urban areas in Iran improves the economic situation and increases the income and new job opportunities in the service sector. In terms of social dimension, however the contrast between the culture of urban and rural life causes negative effects. The widespread change of land use from agriculture to residential and commercial, reducing agricultural and livestock production can be examplified as the negative effects of this process. In terms of socio-economic dimensions, it has positive consequences due to the increase of accesses and facilities such as educational improvement and medical accesses. The level of satisfaction for the three given village was high. Improving access to public services and infrastructure, improving the physical quality of the village, increasing jobs in the service sector have been some of the positive aspects of the annexation of the village to the city.

Keywords: Annexation of rural settlements, city expansion, peripheral villages, Amol

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Analysis of Key Drivers of the Impact of Rural Management Performance on the Physical Development of Suburban Settlements with a Future Study Approach(Case Study: Aliabad Katoul County)

Received: 2021-10-28 Accepted: 2022-02-09

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Extended Abstract:

Introduction

Rural management is always worth studying from different aspects. Performance of rural management is one of these aspects that plays an effective role in the process of developing and strengthening. Investigation and analysis of the role of management in development, physical dimension and reduction of physical vulnerability in rural areas is in line with sustainable development. The physical dimension, as part of the process of sustainable regional development, provides the basis for the stabilization, maintenance and absorption of the population, and consequently, their activities, because the focus of physical-spatial development and related programs, plans and projects based on a systemic considers both the current situation and the future.

Aliabad Katoul County is an area where a large part of the population lives in villages, in recent years these areas have witnessed many physical changes. Therefore, it calls for a more scientific and accurate knowledge of rural management and the level of physical development of rural settlements. The purpose of current research is to study the role of rural management in the physical development of rural settlements around the city of Aliabad Katoul in the horizon of 2031. In this regard, for research, the question can be raised that what are the most important key drivers of physical development, resulting from the activities of rural managers in the study area?

Methodology

This research is an applied and descriptive-analytical study based on the purpose and the nature. Data were collected through documents (library resources, scientific journals) and a survey (questionnaire). The questionnaire was prepared in the form of MICMAC questionnaire and distributed and completed among rural experts in the region in order to capture the impact of rural management on the physical changes of rural settlements in Aliabad katoul County in the horizon of 2031. The statistical population of the study is the

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villages with grades 5 and 6 rural municipalities around the city of Aliabad katoul. 35 questionnaires were considered for experts in the field of rural areas. Micmac software was used for data analysis and structural analysis of the impact of each of the effective indicators on the formation of physical changes in rural settlements.

Results and discussion

Because of the high score of direct and indirect influencing factors, the study categorized five factors in the three main groups of key drivers affecting the future of physical development of rural settlements based on the activities of rural managers in Aliabade Katoul. These factors are land acquisition and using the empty lands within the physical texture to develop and expand the texture of the village (direct impact (4+) indirect impact (1609+)), efforts to establish production units and livestock and garden units (direct impact (4+) indirect impact (1608)), promote the use of local materials in residential units and traditional architectural models (direct impact(3+) indirect impact (1224+)), efforts to improve the condition of public routes in the village (direct impact (3+), indirect impact (+832)), increase and improve educational and cultural facilities and spaces (direct impact (2+) Indirect impact (869+)).

Conclusion

The present paper investigated the future of the impact of rural management on the physical development of rural settlements in the horizon of 2031. The findings showed that the highest performance of local managers was in the field of spatial-physical dimension. Villages are losing their identity culturally and physically due to expansion of urban lifestyles and every day we see changes in rural settlements from their native and traditional essence. Given that, villagers as rural managers can play a significant role in the physical development of villages, and consider the authentic need and the culture of the people in different regions. The physical changes of the rural texture should take economic and social needs into account. This will lead to the expansion of production and livestock workshops and promote the use of local materials in residential units and traditional architectural patterns, and provide access to educational and cultural spaces and can lead to sustainable rural physical development.

Keywords: Future Study, Rural Management, Physical Transformations, Aliabad-Katoul County.