



Spatial analysis of building breach in Sarein Tourism City

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Abstract

Background and Objective: Urban construction control is carried out by urban construction criteria, but despite the various measures of urban management, there are reports of construction breach annually in cities. In fact, construction breach can be defined as non-compliance with urban construction rules and regulations that threaten the quality of life in cities. The purpose of the present study is to evaluate the spatial distribution of building breach in the city of Tourism for use in urban management areas.

Methodology: The method of collecting the information and data needed for the documentation, library and field observations is prepared and a descriptive and descriptive table from the Secretariat of Article 100 of the Municipality. The time range over a one-year period (1401) and its location range is the legal area of Sarein. The present study is descriptive-analytical and practical, using the nearest neighborhood distance and analyzing hot spots in the GIS software platform.

Results and findings: According to the analysis, the highest number of breach occurred in the central core of the city and the Coffee and Chaldaran area, and the surplus breach over the other breach are significant and significant, and the number of breach without licenses is in the next line, and this violation is further excluded from the non-licensed classes. According to the results, the main direction of the breach is from the southwest to the northeast of the city, and the most breach occurred within 600 to 900 meters from the city's center of gravit.

Keywords: Sarein City, Construction Breach, Space Analysis, GIS

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Extended Abstract

Introduction:

Due to the increase in population, the unlimited expansion and expansion of cities, especially the mothers of cities, has increased sharply in their peripheral areas. The proximity to the mother of cities and the cheapness of the land and costs of the land and costs have led to such areas of activity, which is one of the most important things. Construction in urban systems requires special controls and guidance in advancing the city as predetermined and regular programs. Explaining these programs is a lot of issues, including beautification and regulations of the engineer system for strengthening the building and optimizing the use of existing facilities and public services such as the creation of parks, green spaces, firefighters, etc. Urban designers in providing construction design and control, preventing construction. Building violations mean violations of urban, technical, safety and sanitation regulations in the construction of the building. The ambiguity in the laws of construction as well as the mechanism of urban management are the causes of construction violations. This article introduces a general scope of construction violations and the framework of its causes in Iran. Humans are inevitably constructed to meet the needs such as housing and services, given the focus of various administrative, commercial, educational, health, and so on in cities and increasing urban population. In the meantime, one of the main problems in the field of construction of construction is that urban managers of developing countries, including Iran, are facing optimal city administration based on urban development plans and so far have failed to find a suitable solution. In the meantime, some managers' willingness to receive a fine of construction violations and the personal and organizational interests that receive a fine is effective in failing to achieve the appropriate solution. Today, failure to comply with urban laws and regulations in developing countries is a problem that threatens the quality of life in cities and causes crisis in urban environment, urban visual beauty, energy consumption and more. Violation of urban construction causes many problems such as wasting national capital, responding to infrastructure, negative impact on urban development projects, failure to achieve targets, declining visual values and city landscapes, declining environmental values, and unquestionable distribution of urban resources. The purpose of this study was to evaluate the spatial distribution of building violations in the city of Tourism and submit it to the Secretariat of Article 100 of the Municipality and Secretariat of the Islamic Council of Sarein and other agencies involved with the problem of construction violations. In this study, we have tried to answer the following questions.

1- How is the distribution of construction violations in the city of Sarein?

2- Is there a significant difference between building violations and different areas of the city?

Methodology:

The method of collecting the required information and data is documentary, library and field observations, and the spatial information and descriptive table have been prepared from the secretariat of the Article 100 Commission of the municipality.

The present study is descriptive-analytical, and in terms of the possibility of using it in the organizations of Sarein city that are involved in the problem of construction violations, it can be placed in the applied category. In this study, to investigate the spatial distribution of construction violations in the city, the method of mean nearest neighborhood distance and hot spot analysis in GIS software has been used, and in the preparation of tables and graphs, Excel software has also been used.

Results and Discussion:

According to the analysis, the highest number of violations occurred in the central core of the city and the Coffee and Chaldaran area, and the surplus violations over the other violations are significant and significant, and the number of violations without licenses is in the next line, and this violation is further excluded from the non -licensed classes. According to the results, the main direction of the violations is from the southwest to the northeast of the city, and the most violations occurred within 600 to 900 meters from the city's center of gravit.

Conclusion:

In this study, the evaluation of the spatial distribution of construction violations in Sarein Tourism City was investigated as one of the most important challenges facing urban management. According to the analysis, among the total violations, 215 violations of the type of excess license are significant compared to other violations, and the number of violations reaches 128 cases. Also, the violation of the type without a license is 84 cases, the most of which is the increase of floors. The distribution of the distribution of violations is in the form of clustering and this clustering is random. According to the results, most of the violations have occurred in the central core of the city and the farther we move from the city center, the more the number of violations decreases. The main direction of violations is from the southwest to the northeast of the city, and most of the violations occurred at a distance of 600 to 900 meters from the center of gravity of the city. The specialized implications of this research are useful for urban management. Construction based on regulations and without violation leads to the sustainable development of the city and the resistance of buildings against natural and man-made disasters. The social implications of this research also contribute to the creation of a law-based and justice-oriented urban society. Strategies and solutions are propositions that outline the ways to achieve predetermined goals. Regulatory strategies should also be focused on the subject of studies and can lead to a reduction in violations in areas where there are more violations.

Therefore, the following strategies are necessary in order to comply with construction rules and regulations and reduce construction violations.

Compilation of the necessary regulations and standards in order to realize the national building regulations and localize them.

* The timely presence of the official expert of the judiciary and decisive action in order to eliminate the wasted time

* Creating transparency in Note 9 of Article 411 of the Municipalities Law and how to supervise construction and implement the provisions of the building permit

- Applying more and more precise supervision and control on the issuance of the certificate of completion of the building work after the completion of the ports of all the studied areas, especially the central areas where the most violations occur.

- Revising the amount of fines related to violations in such a way that in addition to the cost of the violation, it covers the cost of its negative side effects as much as possible.

* Applying incentive policies for vulnerable and low-income groups (providing low-interest loans and facilities),

* Providing special facilities in order to remove the violation caused by the assault on the passage, the lack of observance of the safety of the building in terms of earthquake resistance, the lack of observance of the legal boundaries, etc.

• Adopting reprimand and punitive measures for violations committed by profiteers.

Declarations

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Authors' Contribution

Authors contributed equally to the conceptualization and writing of the article. All of the authors approved the content of the manuscript and agreed on all aspects of the work declaration of competing interest none.

Conflict of Interest

The authors declare no conflict of interest.

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