

Evaluation of Housing Quality Indicators in Housing Planning Case Study: Urban Areas of Nazarabad, Alborz Province

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Received: 27 June 2017

Accepted: 24 January 2018

Extended Abstract

1. Introduction

Today, in the studies of housing sector, the quality dimensions of housing, along with investigating the aspects of quantity provision of housing needs should become one of the essential components of housing programs because housing is a fundamental component of quality of life as well as sustainable development. Housing indicators are used to study the housing sector because housing policies in different societies are based on these indicators. Indicators are a proper tool for evaluating government policies and programs in the field of housing. Given the qualitative attitude of the housing sector in recent years, the importance of housing quality indicators covering quantitative indicators has also great importance and value. Nazarabad city has major problems due to the rapid growth in recent decades in the housing sector. Therefore, it has been selected as a case study.

2. Methodology

The method of this research is descriptive-analytic and it is an applied research objectively. In this research, two library and field methods have been used. In the library method, by referring to books and articles

related to the subject under discussion, theoretical foundations and the experiences of the subject have been developed. Regarding field method, the data is collected by regulating, distributing and completing a questionnaire. Distributing the questionnaire and gathering data were done using stratified random sampling. The statistical population is the residential units of Nazarabad city in its six areas. The total sample size is determined using the Cochran formula of 378 residential units. For the extraction of indicators, the study background as well as new theories in the housing sector, such as healthy housing, green housing, sustainable housing and flexible housing were used. Subsequently, with the emphasis on the hypotheses, the status of housing quality indicators in Nazarabad urban areas was investigated.

- It seems that the general status of housing indicators in Nazarabad is not desirable.
- The status of housing quality indicators in urban areas of Nazarabad is different.

3. Discussion

In order to evaluate the respondents' opinions about the housing quality indicators in Nazarabad city, including social, environmental and physical indicators, a single sample t-test is used. To prove or reject the first hypothesis, the

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desirability and undesirability of these indicators are first measured using a single sample T test. According to the existing tables, the single sample t-test in social indicators, environmental index, and the physical index is 88.654, 68.590, and 70.263, with significance levels of 0.05, respectively. The total indicator of Nazarabad city is 83.268 and the significance level is 0,05. So our null hypothesis is rejected. Therefore, the status of the social housing index in Nazarabad is not desirable. Regarding level of housing quality indicators in urban areas of Nazarabad using VIKOR model and according to the ranking based on Q value, in terms of quality indicators, area 2 of Nazarabad has a better status than other areas and can be considered moderately developed in terms of housing quality indicators. Areas 4 and 1 also have moderate status in terms of housing quality indicators. Areas 3 and 5 not have a desirable status in terms of qualitative indicators, and in terms of these indicators, they are in a less developed status.

4. Conclusion

Achieving desirable housing status is considered as one of the indicators of social economic development in the countries of the world. Because of the widespread and complexity in housing studies, housing indicators should be used. Housing indicators also have two types, they are either quantitative or qualitative. Nowadays, given the importance and prevalence of debates such as quality of life and quality of housing, the dominant view in housing studies can be a qualitative look. To achieve appropriate and new qualitative indicators in the housing sector, given the theoretical framework of the research as well as new theories in the discussion of housing, the quality indicators extracted and regulated

cover the housing quality status in Nazarabad. Regarding investigating status of Nazarabad city with the combination of physical, social, and environmental indicators and achieving a final indicator, the single sample t-test statistics equal to 83.268 and a significant level of 0.05, the lack of desirability of the general index of housing quality in Nazarabad is confirmed. Regarding the second hypothesis, i.e., the level of urban areas of Nazarabad based on the housing quality indices, VIKOR model was used. The results of the model show that the area 2 (0.40616), area 4 (0.490123), area 1 (0.588758), area 3 (0.641734) and area 5 (0.643027) are ranked 1 to 5, respectively. i.e., area 2 has more desirable status than other areas and is semi-developed in terms of quality indicators. And areas 3 and 5 are less developed and have relatively undesirable status in terms of quality indicators.

According to the findings, the following suggestions are recommended to improve the housing quality status.

- Providing a strategic plan for Nazarabad housing.
- Improving the access of residential units to urban services with new locations in urban facilities and equipment
- Using the potential and capabilities of urban population to organize and plan in residential districts
 - The use of new technologies in building housing to enhance safety, including warning systems
- Restoration and improvement of worn-out tissues and strengthening of old residential units with the approach of empowerment and popular participation

Key words: Alburz province, Housing planning, Housing quality indexes, Nazarabad zones.

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How to cite this article:

GHaedrahmati, S., Meshkeni, A., & Garosi, A. (2018). Evaluation of housing quality indicators in housing planning Case study: Urban areas of Nazarabad, Alborz Province. *Journal of Geography and Urban Space Development*, 4(2), 243-262.

URL <http://jgusd.um.ac.ir/index.php/gud/article/view/65429>

ISSN: 2538-3531