

## Measuring and rating the rate of Livability of urban neighborhood (The Case Study of Region 6 in Tehran)

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### Abstract

Today, cities are the main place of work and life of most human groups. However, they face many problems in various economic, social, cultural and environmental fields, including problems such as pollution, traffic and transportation issues, and various environmental problems, etc. The quality of life and, consequently, livability in cities is greatly reduced. Therefore, paying attention to the quality of life, conditions and facilities and needs of city residents is a vital issue. Achieving livability is one of the goals of the sustainable urban development strategy that human beings have sought to improve quantitatively and qualitatively throughout their lives. In fact, the term livability refers to the degree of necessity of a society based on the needs and capacities of the people of that society. The purpose of this study is to measure the viability in the neighborhoods of District 6 of Tehran. For this purpose, first effective indicators in measuring livability from different sources have been prepared and then the required data and information have been collected from 18 neighborhoods in the form of a survey and a questionnaire. In the next step, the importance and impact of each indicator on livability is determined based on Shannon entropy method and the studied areas are ranked based on bioavailability using Vicker multi-criteria decision making method. The results show that the indicators of education by weight (0.125), health by weight (0.117) and transportation by weight (0.105) have the most importance and impact on the viability of region 6 and the indicators of visual quality, housing and pollution by weights (0.064), respectively. , 0.065 and 0.064) have the least importance and impact on the viability of region 6. Also, based on the entropy results, Argentina and Amirabad neighborhoods with Vikor index (0.00 and 0.34) have higher livability, respectively, and Iranshahr, Nosrat and Abbasabad neighborhoods with Vikor index (0.95, 0.91 and 0.89) have the lowest levels, respectively. They have livability at the regional level.

**Keywords:** Livability, neighborhoods, Vikor model, Region 6 of Tehran.

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