



Evaluation of Development Indicators in Isfahan City's Region 9 from the Viewpoint of Experts

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Abstract

The balance in the spatial structure of cities, from the perspective of the equitable distribution of urban facilities and functions, is considered an important indicator for improving the quality of life and is a fundamental aspect of distributive justice policies. Therefore, achieving balance in the spatial structure and distribution of urban functions is essential in the urban development process, stemming from attention to various issues within cities. This study aims to examine the performance indicators of development in region 9 of Isfahan. A questionnaire was prepared using a Likert scale and completed by 30 experts in urban planning and design from region 9. Economic, socio-cultural, physical, and urban service indicators were considered in the questionnaires. Structural equation modeling and t-test were employed for analysis. Ultimately, a suitable development model for region 9 of Isfahan was proposed. According to the results, the impact of the studied indicators on improving the functional structure of the city is above average. Urban services and the environment, socio-cultural factors, physical aspects, and economic indicators are the most significant factors for enhancing the functional structure of the area. In the economic indicator, access to shopping centers; in the socio-cultural indicator, security in the area; in the physical indicator, the quality of construction; and in the urban services indicator, the development of green spaces have had the greatest impact on improving the functional structure of urban areas. The least impact was observed in the economic indicator regarding the enhancement of the local economy compared to Isfahan; in the socio-cultural indicator, the adequacy of services for the disabled; in the physical indicator, the availability of public parking; and in the urban services indicator, the improvement of per capita urban services.

Keywords: Spatial Model, Urban Development, Performance Indicators, Isfahan.

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Extended Abstract

Introduction

With the rapid urbanization process and the appearance of metropolises worldwide , urban managers and planners are faced a wide range of challenges in urban issues. Metropolitan areas , Urban regions, as an emerging phenomenon of human habitation have become one of the contemporary issues of interest to researchers. One of the characteristics of these areas is their rapid formation and expansion across various fields compared to other human settlement patterns. Each metropolitan region , considering the characteristics of its appearance is dependent on various constraints especially natural limitations and regional facilities. Providing infrastructures and essential urban functions such as housing, transportation networks, and services for residents is only part of these challenges. In this regard, experience shows that a balanced distribution of urban infrastructure and various functions can influence people's behavior and contribute to the improvement of the city's overall economic performance, social cohesion and environmental sustainability.

Data and Method

In order to conduct this research, a questionnaire was designed using a Likert scale, which included economic, socio-cultural, physical, and urban service indicators. The questionnaires were completed by 30 experts in the fields of urban planning and design in Region 9 using a census approach. The data were processed using SPSS version 27 and Amos version 24 software, employing appropriate statistical techniques such as correlation tests, factor analysis, and structural equation modeling (SEM) to analyze the complex relationships among the indicators and their impact on the functional structure of the urban environment . For statistical analysis, structural equation modeling with partial least squares (SEM) and t-test were used.

Results and Discussion

In this study, the impact of economic, socio-cultural, physical and urban service indicators on improving the functional structure of urban areas has been examined from the viewpoint of experts. . Regarding economic indicators, experts believe that access to shopping centers and local markets has the greatest impact, while the enhancement of the local economy has the least effect on improving the functional structure of urban areas compared to the metropolitan region of Isfahan. In terms of socio-cultural indicators, safety and security in the area are considered to have the most significant impact, whereas the adaptation of services for individuals with disabilities has the least effect on improving the functional structure of urban areas. Concerning physical indicators, experts indicate that the quality of construction in the area has the greatest impact, while the availability of public parking has the least effect on improving the functional structure of urban areas. In terms of urban services and environmental indicators, the development and maintenance of green spaces are seen as having the most significant impact, while the improvement and growth of per capita urban services have the least effect on enhancing the functional structure of urban areas. According to experts, economic indicators have the greatest impact and socio-cultural indicators have the least impact on improving the functional structure of urban areas. So



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economic indicators are the first priority, urban and environmental services are the second priority, physical indicators are the third priority, and socio-cultural indicators are the fourth priority, which will be effective in improving the functional structure of urban areas.

Conclusion

In this study, the spatial-functional structure of Region 9 in Isfahan which is facing irregular growth and unauthorized construction has been investigated. Despite its natural and historical capacities, this region encounters challenges due to a lack of facilities such as metro stations, cycling, pedestrian bridges, and parking spaces. The results of the t-test indicated that the impact of economic, socio-cultural, physical, and urban and environmental services indicators on improving the functional structure of urban areas is more than average according to experts. Priority analysis using AMOS software showed that urban and environmental services, socio-cultural, physical, and economic are respectively the most important indicators for improving the functional structure of the region. From the experts' perspective, in economic indicators, access to shopping centers and local markets has the greatest impact, and development of the local economy compared to the Isfahan metropolis has the least impact on improving the functional structure of urban areas. In socio-cultural indicators, safety and security in the region have the most significant impact and adaptation of services for individual with disabilities has the least impact. In physical indicators, the quality of construction in the region has the most impact and the availability of public parking lots has the least impact in this regard. Additionally, in the urban services and environmental indicators, the development and maintenance of green space have the most impact and the improvement and growth of per capita urban services have the least impact in improving the functional structure of urban areas. Finally, providing a comprehensive model for the balanced development of Region 9 in Isfahan focusing on eliminating inequalities and improving key indicators is considered a vital necessity.

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