

Abstract

Nowadays, studying and surveying the indicators of sustainable development in different dimensions can be an appropriate criterion to determine the status of areas and regions in terms of locative and spatial distribution of proper facilities as well as a factor to resolve the problems in order to achieve economic, social, cultural and environmental prosperity of urban residents.

Aims: With this approach, the present research aims to analyze and determine the sustainability levels of the regions and urban areas of Kashan in terms of sustainable development indicators in the nine criteria. While demonstrating the level of quality of life of the inhabitants, the facilities and deficiencies and degree of stability of the areas and regions identified, the research is to provide programs and strategies to reduce deficiencies and deprivation in areas and regions.

Methodology: Regarding the purpose, the type of research is applied and in terms of the method of administration, it is descriptive-analytical. Taking into account the integrated indicators of sustainable development and with the combined approach of multi-criteria decision-making models such as DEMATEL, ANP and TOPSIS, the researcher attempts to answer this question; "How is the locative and spatial development pattern in the levels of the areas and regions of Kashan?"

Conclusion: The results of the research display that the locative-spatial development pattern throughout the areas and regions of Kashan is unbalanced in all selected indicators in three levels of benefited, semi-benefited and less-benefited ones; the areas and regions do not benefit the same conveniences and services. Regarding these issues, the resources, aptitudes, social, economic and environmental capitals and urban capable lands should be applied to eliminate the spatial shortages required in the regions and areas in proportion to sustainability indicators.

Introduction:

Spatial balance in the distribution of service centers in the city and achieving it, provides the provisions for urban sustainable development, and disorder in regional and local distribution causes areas, districts and neighborhoods to be kept away from social justice. (Nastaran, ۲۰۰۱: ۱۴۵). The existence of balance and coordination among different regions in enjoyment of development benefits is a necessary issue that if not observed, the investments made will not only does not lead to development, even deepen existing inequalities, cause glandular growth and inconsistent with powers and environmental capacities (Naeimi, Babaei Aghdam, ۲۰۱۷: ۱۷۴ and ۱۸۴).

Kashan is also one of the cities that has been affected by high physical and demographic growth of the city and inefficiency of urban development plans with unequal urban spaces in terms of development indicators throughout urban districts and areas and this diversity in the level of enjoyment has been recognized as an important factor of development instability in the city and has made the city management face with serious challenges. Therefore, in order to eliminate shortcomings, recognizing inequalities and gaps among districts and areas, proper spatial organization of facilities and services and creating a balance are undeniable necessities. This study proposes to address a new approach to analyze the levels of sustainability of Kashan urban districts and areas due to enjoying sustainable development indicators; while showing the level of quality of life of residents followed by this direction, facilities, shortcomings and the degree of stability of districts and areas become identified, and thereby provide programs and

strategies to reduce deficiencies and deprivation of areas and regions based on the principles of sustainable development.

Materials and Methods:

Regarding the purpose, the type of research is applied and in terms of the method of administration, it is descriptive-analytical. The major process of this research consists of two steps as follows:

- A) Identifying and extracting important criteria and indicators of urban sustainable development
- B) Identifying and selecting appropriate models for measuring and evaluating indicators of urban sustainable development in ⁹ selected criteria.

Thus, in the first step, after the identification of criteria and indicators by means of qualitative research, identification and extraction of indicators linked to the research objectives based on the results of the interview with experts and using the Delphi technique was proceeded. (Keeney et al, ۲۰۱۰). In the second step, the assessment and ranking of Kashan urban areas and districts were discussed in terms of enjoyment and levels of development in the ⁹ criteria of sustainable urban development through applying a combined approach of multi-criteria decision models such as DEMATEL, ANP and TOPSIS.

Discussion and Results:

Studies and analyzes conducted in response to the question; “What is the spatial-locative development pattern in the level of urban areas and districts of Kashan in terms of enjoying sustainable development indicators and levels of development?” indicates that there are diversities and imbalances among the areas and districts of Kashan in terms of having priority of the levels and the indicators are not evenly distributed throughout the city. Therefore, areas and regions are categorized into three categories, which shows the first level referring the areas and regions with maximum development (benefited), the second level with medium development (semi-benefited) and the third level with the minimum development (low-benefited).

Conclusion :

In this study, the situation of Kashan urban areas was investigated due to enjoying integrated indicators of sustainable development with a collective attitude of multi-criteria decision models such as DEMATEL, ANP and TOPSIS. The results extracted indicate that the dispersion and distribution of development indicators in Kashan city express a kind of spatial imbalance and this imbalance throughout urban areas and districts of Kashan is as follows:

Allover five urban districts, in terms of the resident population, approximately ۲۰٪ of the city's population reside in benefited districts (۴ and ۵), ۵۴٪ of the population in the average areas i.e. semi-benefited (۳ and ۱) and ۲۶٪ of the population in districts ۲ which is low-benefited i.e. poor districts. Throughout sixteen areas of Kashan, ۳۱٪ of all urban areas enjoy high levels of development while ۶۹٪ of areas abode in the middle and low-benefited levels in terms of integrated indicators (۱۱ ۴ indicators).