

The Function of Medium-size cities in the regional of sustainable development. Case study: Bukan

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Abstract

Today, many countries are faced with the phenomenon of centralization. Therefore, paying attention to medium-sized cities can adjust the process centralization to solve this first city problem. In a balanced network and based on the hierarchical order, the medium-sized cities are expected to play a good role in the sustainable development. The purpose of this study is to evaluate the performance of the mid-size city of Bookan in the sustainable development of the area. Methodology is the descriptive-analytical and data were collected using field studies and a questionnaire. The statistical population were 105 villages at the central part of Bukan, among which 26 villages were selected by stratified and simple random sampling. Also, 250 questionnaires were randomly filled in the study area. For analyzing data and obtaining the value of each the indicators VIKOR and Cluster analysis techniques were employed. The results of the analysis of the data showed that most important component in the evaluation of the mid-size city of Bookan in the process of sustainable development was the rural access to markets in order to facilitate the sale of crops and livestock, and the least important component was related to the lack of robust materials and small rural settlement. In addition, the socio-cultural indices were the most influential factors in the process of sustainable development in the area. Also, the physical-environmental indicator were not appropriate in Bookan and this index has been ranked last in terms of importance in the development process and unsustainable component indices.

Keywords: Medium-Sized Cities, Sustainable Development of the Area, VIKOR Method, Bukan

Introduction

In most the developing countries, the attention of planners to decentralize physical spatial territories with the aim of balancing settlement system, reduce regional disparities and conflicts between urban and rural areas, adopt the different strategies have resulted in beneficial distribution of population and urbanization. One of the most important strategies in this field is the strengthening of Medium-size cities and supporting of the creation of these cities in the urban network. The main motivation for the present study is to find the intermediate cities in Europe after World War II, when the goal was to improve distribution of activities and sources of wealth at national and regional level. According to the definition of medium-size cities, such cities can play Expected roles as an actor of growth and development within a balanced urban network and based on a hierarchical system. The cities can provide better living conditions for the rural population, employment and the environment with less pollution and act as a local market for them. Also services and the social infrastructure can also be provided not only for the urban population, but also for the rural population and the whole of area. Therefore, the extensive interactions between rural and urban areas must be considered for poverty alleviation, regional development and reaching regional sustainable development. This continuity has been clearer by the important role of intermediate cities in the sustainable development. Therefore, to

understand the obstacles of the development of middle size cities such as Bukan and to provide some solutions, this paper attempts to examine the performance of the central city of Bukan in the process of sustainable development in the area.

Methodology

The methodology of the present study is the descriptive-analytical and data were collected by questionnaire and field observations. Statistical population includes 105 rural areas in the central part of Bukan; 26 villages have been selected by stratified sampling and simple random methods. Also, 250 questionnaires were randomly distributed and completed in the study area. To analyze data and obtain value and importance of each indicator VIKOR techniques and Cluster analysis were used. VIKOR, MADM technique is based on an agreement on follow-metric method and is used as a function of the compromised planning. This model has been developed as a multi-criteria decision-making method for solution of discrete decision making disproportionate (different measurement units) and competing measures. Cluster analysis is one of the most widely used methods in the areal geographical studies. In fact, this method is applied for the classification of regions, towns and rural areas. In this classification the located sites of same level are very similar to each other.

Results

The results of the analysis of data using VIKOR were classified in four levels, the first level of which includes factors such as education level and knowledge of the rural population, social and cultural requirements of rural people, improving rural youth leisure time, helping to reduction of rural-urban migration, amplifying the relationship between city and countryside, social and cultural terms, etc.. The second important level includes the indicators which affect in personal services. Such indicators include components such as repair services, agricultural machinery, providing weekly and monthly requirements, providing durable and semi-durable goods for people, providing daily necessities. The third important level includes economic indicators including components such as rural access to markets in order to facilitate the sale of crops and livestock, bank supporting, offices and institutions located in rural industries, rural development and economic growth. The fourth level is environmental and physical indicators that include components such as rural infrastructures like roads, bridges, electricity, seismic retrofitting of rural settlements, appropriate spatial organizing of rural centers, attention to deficit resistant materials and small rural settlements.

Discussion and conclusion

Today, researchers and planners believe that an integrated and functional hierarchical system of urban-rural relations would lead to an ineffective sustainable development in the regional scale. Therefore, the role of intermediate cities in the regional development is important since that the social and economic development will not come from without interconnected system and networks. In this study, the performance of Bukan, as Medium-size cities, has investigated using VIKOR and cluster analysis with regard to economic, social, cultural, service, environmental and physical structural. Finally, the data analysis revealed that among the measured parameters, socio-cultural indicators have most impact in rural development, and this index was located on the first level of classification. Therefore, the personal service performance is a semi-stable indicator of a sustainable regional development process. In addition, the stability of the central city of above average regional development has been related to the personal services sector. So the personal service sector is semi-stable. The stability of the central city of above-average economic development in the region was lower and was considered as one of the indicators of growing low level stability. Finally, the stability of the central city of Bukan on environmental and physical development in the region is very low and is considered as one of the instability indicators.