Level determination of the rural tourism infrastructures using the Rough Set approach (A case study of rural areas in Kerman county)

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Extended abstract
1- Introduction

In many countries, tourism is one of the most complex trades and as a polyhedral activity has inclusive and various positive functions such as creating jobs, earning revenue, and strengthening the infrastructures. Rural tourism is one type of tourism that is linked with many other tourism patterns but the point of reference is its establishment in rural areas. The demand for the use of tourism capacity in rural areas has increased sharply in recent years. Media attention has grown to the originality of rural areas, which seems have been threatened by the spread of urban life. Nowadays, tourists are looking for virgin rural communities. Now the important point in planning based on attractions is how to prioritize development and how to develop them. To measure and prioritize attraction and elements, usually various criteria such as economic, social, cultural, infrastructural, environmental, institutional, legal, and geographic are taken into consideration, based on which decisions can be made on different attractions. The creation of a sustainable and successful tourism industry depends on the availability of appropriate infrastructure that directs the economic, social, and infrastructural objectives. The purpose of this study is to classify the Dehestans of Kerman in terms of the existing tourism infrastructure. Based on the subject matter and the purpose of the research, it was hypothesized that the existing rural tourism infrastructure is balanced in Dehestans of Kerman.

2- Theoretical Framework

Iran villages, having good climate and human and natural resources, are potentially exceptional for tourist attraction. Among other things helping rural tourism in Iran are physical patterns, particular architecture, geographical conditions, cultural customs, economic activities, handicrafts, living pattern, silence and tranquility, and various pristine landscapes are many the invaluable properties of these villagers which help rural tourism in Iran. However, sustainable and successful tourism

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requires some infrastructures in order to facilitate social and economic growth. In this regard, there have been extensive activities so far to develop rural tourism to increase rural employment and income. As tourism infrastructures serve as tools to service tourists, passengers and guests, it is important to optimally utilize such infrastructures, to discover inequalities and to level tourism sites. This in return leads to better management in tourism. Hence, adjusting the number of tourist to tourism spaces (especially infrastructures) is very important.

3- Methodology

The applied method in this study is descriptive-analytical based on the documentary style. The analysis level was 12 districts of Kerman county and the analysis unit was the existing infrastructure of rural tourism sector. The indexes studied in this study included population number, number of residential centers (C1), number of intersections (C2), number of public parks (C3), number of passenger services (C4), recreational areas (C5), health services (C6), tourism sample areas (C7), and cooperative companies (C8). The required information has been collected from the Iranian Statistics Center, the Population and Housing Registry of Kerman in 2011, and the Cultural Heritage, Handicrafts and Tourism Organization of Kerman province. In this research, using Rough Set method's ranking technique, the Dehestans of Kerman county have been prioritized according to the existing tourism infrastructure. The theory of Rough Collection was founded in the early 1980s by Professor Zedislow Pawlack. The Rough Collection Theory is a new mathematical method for intelligent data analysis. The main purpose of the analysis of Rough Collection is to obtain approximate concepts of the acquired data. The basis of the theory forms the concepts of the bottom approximation set, the upper approximation set, and the boundary region. In this technique, after specifying the indicators, in accordance with the rules for each indicator, the law pertinent to each of the indicators is defined in four levels (excellent, good, moderate, and weak) and finally each Dehestan is ranked and classified based on each index.

4- Results & Discussion

There is a connection and integration between the level of development and sustainability of each Dehestan. Therefore, the Rough Set method is used to assess the ability of rural areas. This method can be used in qualitative evaluations. The decision support system helps us to get a lot of information from a series of simple questions and the feedback available. In addition, decision-makers can well be supported through this method. In fact, the decision support system can solve broad issues and give more information about the decision. Therefore, sustainable rural development is a multi-dimensional concept; in this regard, the Rough Set method can improve the number of indices. Furthermore, the analysis of the Rough Set method showed that there is a high potential in the concept of management and planning, and the indicators of sustainable rural development. The city of Kerman, as the widest city of Kerman province, has provided sufficient opportunities and resources to attract tourists to create favorable conditions for their economic prosperity. Each year, the attraction of a significant amount of tourists (domestic
and foreigners) has shown the enrichment and improvement of the economic ways. The purpose of the present study was to determine the level of Dehestans of Kerman based on their tourism infrastructure. The results of the research process based on the Rough Set method showed that there is no balance between the rural districts of Kerman county. There is also a tangible gap in terms of the access to rural tourism infrastructure. Therefore, the research hypothesis is rejected and it can be concluded that the Dehestans of Kerman can be classified into the three levels of developed, half-possessed, and deprived.

5- Conclusions & Suggestions

The county of Kerman, as the widest county in Kerman province, has had sufficient opportunities and resources to attract tourists, which have provided favorable conditions for its economic prosperity. Each year, the attraction of a considerable number of tourists (domestic and foreigners) has led to the enrichment and improvement of the economic ways. The purpose of the present study was to determine the level of Dehestans of Kerman based on their tourism infrastructure. The results of the Rough set method showed that there is no balance among the Dehestans of Kerman county. There is also a tangible gap in terms of the access to rural tourism infrastructure. Therefore, the research hypothesis is accepted, and the Dehestans of Kerman can be classified into the three levels of developed, half-possessed, and deprived. In conclusion, the dehestans of Dehmizra and Hotak belong to the high approximate, Baghain and Mohiabad are among the low approximate Dehestans, and finally Kazemabad, Sirch, and Langar, which have a low index of tourism infrastructure, belong to the middle level.

Key words: Leveling, Rural Tourism, Rough set method, Infrastructures, Mahan, Kerman

References (In Persian)


**References (In English)**


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