

# Journal of Iran Futures Studies

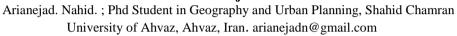
Print ISSN: 6365-2423 Online ISSN: 2676-6183



# **Future Research of Key Factors Affecting Urban D** evelopment Case Example: Dezful City

Safaeepour. Masoud.; Professor in Geography and Urban Planning, Shahid Chamran University of Ahvaz, Ahvaz, Iran.safaee p@scu.ac.ir

Nahid Arianeiad



### Abstract

**Purpose:** The purpose of this research is to identify the key factors of urban development in Dezful with a future research approach. Therefore, future research is necessary to be prepared for these uncertainties and appropriate and flexible development. In this regard, the current research with a descriptive-analytical method and with an exploratory future research approach seeks to identify the key drivers of the urban development of Dezful city.

**Method:** The current research is applied in terms of descriptive-analytical nature, and in terms of method, it is a combination of library and survey methods and is based on the future research approach. The scope of the research is Dezful city. The statistical population of this research is 60 people from urban and urban management experts. For data analysis, the Delphi method of the cross-effects matrix (MikMak) was used.

**Findings:** The research findings showed that among the 30 investigated indicators for the physical development of Dezful city, 10 components are creative people, literacy rate, new technology, Dez river water quality, transportation, per capita production, infrastructure quality, city security, integrated management. The city and access to city services respectively have the highest direct influence on other variables.

Conclusion: The general results of the research showed that creative people, the level of literacy and modern technology will have the greatest impact on the process of urban development strategy, which should be paid attention to by urban planners and managers

Key Words: Urban development, future studies, cross effects analysis, Dezful city.

Cite this article Safaeepour, Masoud. Arianejad, Nahid. (2023 Future research of key factors affecting urban development Case example: Dezful city, Volume 8, NO.2full &winter 2023,344-382

**DOI**10.30479/JFS.2024.20128.1536

Received on: 23April, 2024 Accepted onv: 21May, 2024

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Publisher: Imam Khomeini International University Corresponding Author/ E-mail: safaee\_p@scu.ac.ir

# Introduction

Urban development is a complex process that occurs through the interaction of biological and physical factors and human factors in space and time, at various scales (Kaya & Curran,2019:21).In general, the views related to urban development are based on the direction and path of expansion in the following two ways:

- 1) Theories of horizontal development of the city
- 2) Theories of vertical development of the city

In the field of planning, especially urban and regional planning or national and regional development plans, dealing with the future and planning it is an inseparable part of the planning process. Neglecting the key and driving forces in the development process causes their gradual weakening and ultimately their negative impact on the entire system (Imani, 2019: 18). The planning process faces two basic approaches, the exploratory approach as an approach to discover the future and the normative approach as an approach to the construction and architecture of the future. In the normative approach, unlike the exploratory approach where the future is certain and fixed and the planner is an external observer who can only discover the future, it is possible to identify the influential components in different dimensions of planning in the planning process. intervened and prevented the emergence of various challenges and issues (Hosseini Siah Goli, 2022:137). Due to its physical characteristics, Dezful city is one of the cities that has had horizontal growth and development, and the expansion of urban constructions towards gardens and agricultural lands and the growth of satellite villages towards the city and its integration into the city are quite obvious. Therefore, the physical components of today's cities, including the city of Dezful, are not compatible with the speed of human movement and the heavy pressure of urban life, and its public spaces do not have the necessary capacity and capability to respond to the needs of fast-paced urban life (Sheikh Biglo and Guardian, 2016: 84). The investigation of the background of the research shows that despite the importance and special economic, commercial, historical and social status of Dezful city in Khuzestan province, no coherent study has been done regarding the factors affecting the development of the city and its future. Therefore, in the present study, the key factors affecting the development of Dezful city have been studied with a future research approach. In this regard, the main question of the current research is, what are the key factors affecting the development of Dezful city with a future research approach?

# Methodology

This research is analytical and exploratory in nature and practical in terms of purpose. In this research, quantitative and qualitative combined models have been used. To collect the required data, documentary and survey methods were used to formulate a

questionnaire according to the nature of the research and its objectives in the form of the Delphi method. In this method, the expert members included two groups. The first group includes managers of urban and urban development specialists and university professors, whose attitude and selection were chosen because of their expertise in the field of urban management and development, who had a clear vision of the future. In the second method, people who are experts in the field of future research were used, and both groups were selected by electric bullet sampling method, in the preparation of questionnaires and trends, during an interview, they were selected from both groups with the participation of 60 people, and in Those key factors affecting the urban development of Dezful were identified. n general, in order to compile the questionnaire, a total of (5 components and 30 indicators) were identified. Then, the cross effects matrix questionnaire was provided to the experts. With the opinion of the elites and experts, the influence of the driving forces was determined and the effective and influential key and strategic driving forces were formulated. To analyze the relationship between the variables and the output of the influential and effective variables, the cross-effects and mix-match methods were used.

## **Results and Discussion**

In this research, theoretical and Delphi background studies of experts have been used to identify the primary influencing variables of the future state of urban development. At this stage, experts and experts in the urban area were questioned using methods such as interviews and descriptive questionnaires. The results obtained from the above Mik-Mac software based on cross-effects analysis, the saturation index for the existing trends is around 96.55%, which shows the high influence of the variables on each other. A total of 900 cases of all the relationships between the trends had the value of cross effects. From the total of the above relationships, 410 relationships have a numerical value of zero or no influence, indicating that the trends have no influence or impact on each other. In the numerical value of 1, the total number of relationships is 219, and this value shows that the trends had a weak influence on each other. In the numerical value of 2, there are a total of 205 relationships and it shows the average influence of the trends on each other. Finally, in the numerical value of 3, 66 relationships have a strong influence of trends on each other. And finally, the matrix based on statistical indicators with two data rotations has 100% usefulness and optimization, which indicates the high validity of the questionnaire. Spatial relations formed in urban development is a manifestation that direct variables in 100% coverage include indicators such as creative people, production per capita, transportation, use of new technologies and access to urban services, literacy rate, improvement of worn-out fabric, quality of infrastructure. Urban development, integrated urban management and urban security, etc. are among the most important influencing variables of the urban development of Dezful city. Also, according to these results, it can be said that due to the 100% coverage of demographic structure indicators, it has the greatest impact on the urban development of Dezful city.

The results show that in terms of the direct influence of variables such as a creative person with a score of 773, the level of literacy and modern technology with a score of 737 and 625 are located in the first to third positions, respectively. On the other hand, the variables that have an indirect effect on urban development are creative

people with a score of 796, the level of literacy and modern technology with scores of 778 and 711, respectively, are located in the first to third places. Also, according to the obtained results, it can be said that the key factors affecting the future state of the system have been exactly repeated in both direct and indirect influences, and this repetition has been accompanied by a shift in rank.

### **Conclusions**

The results of the current research showed that the creative human variable, the level of literacy and modern technology had the greatest direct influence on the process of Dezful urban physical development strategy. It is also the most important factor in terms of indirect influence on the urban development strategy process. Therefore, paying attention to these three variables in the process of urban development strategy is essential for planners and managers.

The results of this research with the research of Ranjbarnia et al. (2017), Garmsirinejad et al. Safaipour and colleagues (2022), Alamaty et al. (2022) and Safar Alizadeh and colleagues (2023) and Salavarzizadeh et al. (2021) and Mikovits et al. (2018) is aligned. Because the results of the mentioned studies are related to the indicators of efficient urban management, educational and infrastructure investments, emphasis on intelligentization, improvement of citizenship skills, appropriate access to various facilities and urban services, knowledge-based economy, elite-oriented, selection of managers. Urban, has been mentioned as factors affecting urban development.

Also, the results of this research with Rahnama et al. (2017), Safaipour and colleagues (2018), Molazadeh et al. (2022) and the research results of Zhou et al. (2017), Myeong et al. (2018), Van Fu et al. (2019), Regarding the factors affecting urban development, it is inconsistent.

Suggestions that can be made for this research:

- Use of the creative class and specialized manpower
- The quality of the sector and improving people's literacy and familiarizing them with urban development programs
- Providing fast communication infrastructure to citizens through the implementation of high-speed communication network platforms with high modern technology
- Officials' handling of Dez river water quality
- Strengthening urban infrastructure, especially strengthening urban transportation in the realization of urban development
- Creating coordination between organizations in charge of urban affairs
- Ease of public access to city services

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