



## Developing Effective Scenarios for Reducing Inequality in the Provision of Public Services in Urban Regions of Urmia through a Futures Research Approach

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### Abstract

**Background and Objective:** Urban public services are key elements in shaping the physical, social, and spatial structure of cities. In many urban Regions, especially in developing countries, access to services such as healthcare, education, transportation, and infrastructure is significantly unequal. The main objective of this study is to identify the key factors contributing to inequality in the provision of public services in the study area Urmia city and to develop future-oriented scenarios using futures research tools.

**Methodology:** This applied futures study employs a descriptive, analytical, and exploratory research approach. In the first stage, the TOPSIS ranking model was used to evaluate and rank the five urban regions based on their level of public services. Subsequently, possible future scenarios were generated using the MicMac and Scenario Wizard software.

**Results and Findings:** The results indicate that Region Five has the highest level of desirability, Regions One and Four are in a moderate state, and Regions Two and Three are in an unfavorable condition. Scenario analysis reveals two contrasting paths: a favorable scenario characterized by transparency, anti-corruption measures, and equitable resource distribution, which leads to reduced service gaps and improved access; and a crisis scenario marked by budget concentration in select Regions and institutional weakness, which intensifies inequalities. The study underscores the urgent need for action to address disparities in public service distribution and to ensure equitable access to essential urban facilities for all citizens, regardless of geographic location or economic status.

**Keywords:** Social Justice", "Inequality", "Urban Public Services", "Scenario Planning", "Futures Studies", "Urmia City".

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## **Extended Abstract**

### **Introduction**

With the rapid growth of urbanization in recent decades, inequality in access to urban public services has emerged as one of the fundamental challenges to spatial justice. These disparities, particularly in developing countries, have led to consequences such as reduced quality of life, migration, spatial disorder, and heightened social tensions. The concentration of services in specific areas contributes to the formation of both affluent and deprived neighborhoods, increased urban density, and a persistent cycle of poverty. The city of Urmia is likewise experiencing social inequalities due to the uneven distribution of public services, especially in peripheral areas. Financial constraints and institutional weaknesses in urban management have hindered the provision of essential public facilities, resulting in imbalanced spatial development and unequal concentration of population and resources across the city. In response to these challenges, the futures approach has been adopted as a tool for managing future uncertainties. Through structural analysis (MICMAC) and scenario development (Scenario Wizard), this study identifies key factors influencing inequality in public service provision in Urmia and formulates future-oriented scenarios. The ultimate aim is to propose strategies that enhance spatial justice and ensure equitable service delivery at the urban level, thereby preventing a shift toward crisis scenarios and guaranteeing equal access to basic facilities for all citizens.

### **Methodology**

This research is classified as applied futures research in terms of its purpose, and employs a descriptive-analytical and exploratory methodology aligned with the subject matter. Data collection was conducted through both library and field methods. In the library phase, reputable scientific articles and journals were reviewed. In the first stage, the ranking of each region in Urmia city was carried out to evaluate the distribution of urban services and assess inequality. This was based on the Urmia City Master Plan, the results of the General Population and Housing Census, municipal documents, and previous studies. These sources were analyzed and ranked using the TOPSIS model. Subsequently, a researcher-designed questionnaire compatible with MICMAC and Scenario Wizard software standards was employed. The statistical population consisted of 15 experts and specialists in urban management, academia, and futures studies. For data analysis, MICMAC and Scenario Wizard software were used, involving steps such as variable identification, cross-impact analysis, variable categorization, and scenario development.

### **Results and Findings**

This research, adopting an applied and future-oriented approach, examines the distribution of urban services across different areas of Urmia city. In the initial phase, the ranking of urban districts was conducted using the TOPSIS model. Subsequently, variable analysis was performed using a specialized questionnaire, based on the Miqmac and Scenario Wizard software. The findings, derived from scenario analysis for Urmia, reveal two contrasting paths for urban policymaking. The first scenario (desirable) presents an ideal outlook in which inequality in public urban services is minimized. It is characterized by features such as transparency and anti-corruption, equitable budget redistribution, inter-organizational coordination, strategic planning, inclusive public transportation coverage, smart and sustainable infrastructure, balanced multi-centered development, and active citizen participation. These elements contribute to narrowing service gaps and ensuring equal access to urban amenities. Conversely, the second scenario (crisis) illustrates a worsening of inequalities in public services, driven by factors such as organized corruption, budget

concentration in specific areas, fragmented decision-making, inefficient management, limited access to public transport, deteriorating infrastructure, service accumulation in select zones, and widespread public distrust and disengagement. This scenario signals a deepening of socio-economic disparities and a decline in quality of life in underserved regions. The analysis underscores the urgency of addressing existing inequalities in the distribution of public services and urban infrastructure to prevent a shift toward the crisis scenario. It advocates for inclusive planning to ensure that all citizens, regardless of geographic location or economic status, have access to essential urban amenities.

## **Conclusion**

In today's world, cities have become central to modern life while simultaneously facing extensive challenges in social, economic, and physical domains. The rapid growth of urban management problems across various regions especially in Iran necessitates comprehensive and effective solutions. Consequently, urban managers have increasingly focused on strategies such as good governance, spatial justice, and decentralization to address urban issues. In tackling the fundamental challenges of urbanization, prioritizing the fair distribution of urban services, achieving social justice, and establishing spatial justice are essential. Spatial justice not only provides a foundation for sustainable urban development but also plays a critical role in reducing disorder caused by the improper allocation of service-based land uses. Accordingly, urban planners aim to meet the population needs of different regions equitably by organizing the distribution and dispersion of urban services in a principled and logical manner. Scenario analysis reveals that achieving spatial justice and reducing inequality in urban public services requires urgent action, strategic planning, and collaboration among urban institutions, citizens, and the private sector. Progress toward the desirable scenario depends on enhancing transparency, equitable resource redistribution, investment in public transportation, infrastructure renewal, citizen engagement, and continuous monitoring of inequality indicators. Conversely, neglecting these requirements may lead the city toward a crisis scenario, marked by worsening socio-economic disparities and declining quality of life in underserved areas.

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### **Authors' Contribution**

Authors contributed equally to the conceptualization and writing of the article. All of the authors approved the content of the manuscript and agreed on all aspects of the work declaration of competing interest none.

### **Conflict of Interest**

The authors declare no conflict of interest.

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