Journal of Industrial and Systems Engineering
Vol. 17, No. 2, pp. 132-148
Spring (April) 2025

JISE

Prioritization of Regeneration Strategies for Deteriorated Urban Areas in Iran's Metropolises Using SWOT and ANP Models

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Abstract

Today, addressing the issues and challenges of deteriorated urban areas has become a key subject in urban planning, compelling relevant organizations to focus on the regeneration of such areas. The unsuccessful implementation of urban regeneration projects has shifted attention toward innovative methods based on actions involving public participation. Regeneration is a process that creates a new urban space while preserving the essential spatial features (physical and functional), which, despite their fundamental similarities to the old urban space, exhibit inherent and conceptual differences from it. Urban officials and specialists are now trying to adopt strategic planning that emphasizes execution and results rather than just producing plans. The formulation of regeneration strategies for deteriorated areas in District 4 of Tabriz Metropolis is based on these theoretical foundations, emphasizing public participation to achieve the developmental goals of Tabriz 2025 Vision. Data collection was carried out through questionnaires and interviews, and data analysis was performed using SPSS and Super Decisions software. This prioritization identifies the strategic priorities for urban regeneration planning in Tabriz Metropolis. Ultimately, the findings of this research can serve as a scientific-executive framework for application in other metropolises. According to the results, the strategy of "enhancing neighborhood attachment and fostering a sense of community through continuous social and civic engagement among residents" received the highest weight and was ranked as the top priority in Tabriz's urban strategies.

Keywords: Strategy, Regeneration, Deteriorated Urban Areas, Planning, Network Analysis, Tabriz Metropolis

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1- Introduction

The challenges facing today's cities are numerous and complex. Traditional planning methods of the past have been unable to fully address urban issues, leading officials and urban specialists to adopt strategic planning approaches, which emphasize execution and results rather than merely generating plans. Strategic planning is a type of planning aimed at defining and formulating strategies. Since strategies can be either short-term or long-term, strategic planning can also be short-term or long-term, but it remains distinct from these concepts.

The presence of deteriorated urban neighborhoods is one of the realities facing medium and large cities in the country, creating specific issues and needs that have occupied a significant part of urban planning efforts (Varesi et al., 2015: 59-61). In many cases, neighborhood regeneration and small-scale, participatory actions with local residents provide a desirable and sustainable approach that can be implemented in the short term. The most effective method for engaging public participation is through a strategic and systematic approach to planning and intervening in urban areas (Author, 2024).

Deterioration is not solely limited to the physical structure of urban areas; it also signifies the existence of conditions that threaten life in various dimensions. The continuation of this trend in deteriorated areas can be likened to a looming disaster, akin to an earthquake, that will affect future generations. These conditions include high crime rates, social problems, economic poverty, lack of adequate infrastructure, vulnerability to earthquakes, inability to provide proper emergency response during crises, and numerous other issues (Hasanzadeh et al., 2018: 3-11).

Population growth and the demand for new housing units on the one hand, and the vulnerability and inefficiency of deteriorated urban areas on the other, have prompted governments in recent decades to focus on the revitalization of these areas as a means to address part of the housing and service shortages. While deterioration leads to inefficiency, reduced effectiveness, and ultimately urban decline in physical and functional aspects, it also creates an opportunity for intervention. This opportunity allows for the development of strategies aimed at both reducing risk and rehabilitating and renewing these areas (Moradi et al., 2011: 3).

An assessment and analysis of more than two decades of efforts to rehabilitate and renew deteriorated urban areas reveal that success in achieving the goals of these programs is impossible without the active participation of residents, property owners, and other stakeholders involved in urban renewal. Recognizing the significant potential in these areas, which can only be unlocked through public participation, has led policymakers and planners toward a sustainable and widespread participatory approach. Participation not only ensures the success of residents in their self-managed and self-regulated activities but also enhances public trust, skills, and knowledge—outcomes that are the direct result of participation (Author, 2024).

Today, officials and urban specialists aim to implement strategic planning, which focuses more on execution and results than on merely generating plans. Strategic planning is a type of planning in which the goal is to define and formulate strategies. As strategies can have either short-term or long-term lifespans, strategic planning can also be short-term or long-term, though it differs from traditional approaches (Shamsi & Ziari, 2017: 153-166).

In Tabriz, deteriorated areas occupy one-fifth of the city's total area, covering 2,530 hectares, making it the second city in Iran in terms of deteriorated urban fabric. According to recent estimates, 400,000 to 500,000 citizens reside in these areas, with two distinct population groups—permanent residents and workers—being clearly identifiable. Hence, this study underscores the necessity of organizing Tabriz's deteriorated areas through strategic planning, emphasizing the active participation of residents.

In Iran, urban regeneration programs for deteriorated areas have often been developed under terms such as reconstruction, revitalization, rehabilitation, and empowerment. However, these programs have frequently been criticized for lacking appropriate criteria, consistent methodologies, or comprehensive frameworks. In recent urban planning literature, the term "urban regeneration" has emerged as a broad concept that encompasses other terms like rehabilitation, renovation, reconstruction, empowerment, and reactivation. Urban regeneration is a process that creates new urban spaces while maintaining the essential spatial features (both physical and functional). This process results in a new urban space that, while bearing fundamental similarities to the old urban space, also exhibits significant conceptual and substantive differences. In other words, urban regeneration is a comprehensive and integrated approach to solving urban problems in the target area, ultimately leading to sustainable economic, physical, social, and environmental development (Author, 2024).

In this research, strategic planning will be used as an alternative to the traditional approach to urban programs, which represents one of the innovative aspects of the study. Most traditional planning approaches, based on rational perspectives, focus on defining goals, objectives, actions, and necessary resources. These models begin with the identification of aspirations and objectives, followed by the determination of required actions and, finally, the estimation of resources needed to achieve the goals. Changes in environmental conditions, policies, attitudes, structures, and systems can affect the objectives and ultimately alter the plan. Unlike traditional planning, where goals and objectives are set, the aim of strategic planning is to define and formulate strategies.

Today, the complexity of external environmental elements and the internal structures of cities has made urban management more challenging than ever before, increasing the responsibilities of urban managers. Another advantage of this approach to urban management is that it focuses on participation rather than relying solely on expert opinion (Author, 2024).

2- Literature Review

Following World War II, the principles of Le Corbusier gained widespread acceptance by governments around the world. His ideas were regarded as an easy and quick response to the demands of urban renewal, leading to his recognition as a true advocate of modern urban planning (Legates, et al., 2002: 134). In the context of strategic planning and deteriorated urban areas, several research articles and theses have been conducted, some of which are highlighted below:

Mahin Nastern and Sepideh Houshmandfar (2010), in their article titled "Strategic Planning for Organizing a Section of the Deteriorated Fabric of Urmia City", explored the formulation of strategies for the organization of deteriorated areas.

Mohammad Akbarpour Sarascanroud and Ahmad Pourahm (2010), in their article "Using the SWOT Technique for the Rehabilitation and Renewal of Deteriorated Urban Fabric: Case Study of Sirous Neighborhood in Tehran", emphasized that strategic planning, due to its long-term nature, is a key component of rehabilitation and renewal programs.

Mohammad Saber Bagherian (2010), in his article "Recognition of Renewal Capabilities in the Deteriorated Areas of the Central Section Based on the Characteristics of Society and Space: Case Study of District 19, Region 17, Tehran", highlighted that the vastness of deteriorated urban fabrics, coupled with their vulnerability to natural disasters, has made their renewal a critical issue in urban planning.

Rasouli Manesh and colleagues (2011), in their research comparing the definitions provided by the Union of Cities and the World Bank in Malaysia, explored the various definitions and uses of the term "sustainability" in relation to deteriorated urban fabrics. They argued that in order to address four decades of global economic, social, and environmental challenges, sustainable development must be adopted as a principle by international organizations, national governments, and local authorities. Furthermore, they suggested that new approaches to urban management are necessary for achieving sustainable development. Although the concept of urban development strategy and sustainable development is defined in various ways, their paper specifically analyzed two definitions of urban development strategies presented by the Union of Cities and the World Bank to achieve sustainable development.

These studies emphasize the significance of strategic planning in addressing the challenges of deteriorated urban areas, underscoring the need for long-term, participatory, and sustainable approaches to urban renewal.

What strategies and executive policies can be implemented for the revitalization of deteriorated urban fabrics in the metropolis of Tabriz, using urban strategic planning and considering the current situation?

Can public participation in the development and formulation of urban revitalization programs improve their execution and effectiveness?

Based on the research objectives and the main questions, the hypotheses of this study are formulated as follows:

It seems that strategic planning in the revitalization of the deteriorated areas of Tabriz, considering its participatory aspect, can enhance the sense of belonging among local residents and workers in these neighborhoods.

Given the unsatisfactory condition of the old urban fabric in Tabriz, it is likely that the revitalization approach will lead to profound changes in the urban structure of these areas, revitalizing their urban life.

Strategic revitalization of the deteriorated areas of Tabriz is expected to be a rigid, one-sided plan that cannot be altered once implementation begins.

The historic city of Tabriz, with its ancient civilization, has long been a center of significant social and political transformations in Iran. Over the centuries, it has played a pivotal role in shaping many events in the country. Due to its rich historical background, Tabriz boasts a valuable urban fabric and architectural heritage that captivates the attention of any interested observer (Geographical Culture of Tabriz County: 135-136).

Tabriz, the capital of East Azerbaijan Province, is located in the northwestern part of Iran and is one of the oldest and most important cities in the country. It sits at 38°08' N latitude and 46°15' E longitude, in the northeastern corner of a 300-square-kilometer plain, at an elevation of about 1,350 meters above sea level (same source).

The geographical and geological features of Tabriz give it a unique position. The city's natural location presents diverse topography, including plains, foothills, valleys, and steep mountain slopes in close proximity to mountainous regions (Naghsh-e-Mohit Consulting Engineers, 2016). Today, Tabriz is one of the densely populated cities, with surrounding satellite towns, new neighborhoods, and numerous streets expanding its urban boundaries. This ongoing expansion has led to the growth of deteriorating urban areas, especially in the city's old fabric and peripheries.

Ethnic, religious, cultural, and other factors have continued to preserve the identity and boundaries of some of Tabriz's historic and reputable neighborhoods, allowing them to maintain their distinct inner fabric. The Tabriz Municipality, established over a century ago as the first municipality in Iran, now oversees 10 urban districts. Today, the city's population has surpassed 1.8 million (Author, 2024).

The metropolis of Tabriz is one of the cities with a significant proportion of deteriorated urban areas, encompassing more than 2,500 hectares of worn-out structures. This places it among the large cities that urgently require renovation and revitalization to improve the urban landscape and mitigate the risks posed by natural disasters (Tabriz Municipality website, 2022). Nearly 18.42% of Tabriz's urban fabric, equivalent to one-fifth of the city's total area, falls within these deteriorated zones, making it the second city with the largest share of old structures in Iran, after Tehran. This highlights the critical need for goal-setting, strategic policy-making, and the formulation of appropriate action plans to address the issue.

The most significant deteriorated areas in Tabriz include neighborhoods such as Golestan, Miyarmiar, Darbaghmisheh, Khaqani, Gajil, Chaharrah Shahid Beheshti (formerly Mansour), and the urban fringe areas. Marginalized settlements have particularly formed along the northern and southern edges of the city, often near major highways like Pasdaran and Shahid Kasai (Naqsh Mohit Consulting Engineers, 2016).

The largest area of dilapidated fabric in Tabriz belongs to Region 4. This region is significant for urban management in Tabriz due to its large area and population, as well as the predominance of dilapidated structures. The area of the dilapidated fabric in Region 4 is approximately 1,100 hectares, indicating that nearly half of the dilapidated fabric of the city of Tabriz is located there. (Tabriz Comprehensive Plan, 2013)

Urban decay is one of the pressing issues in all cities across the country, each requiring intervention and improvement according to its unique human and natural conditions. Proper intervention in these areas necessitates a thorough understanding of their concepts (Author, 2024). Although decayed urban areas historically had logical and hierarchical functions, they now suffer from structural and functional deficiencies, making them inadequate in meeting the needs of their residents. Living in such places is often associated with depression, chaos, disorder, and a lack of social participation; in short, a healthy urban life does not flourish there. Therefore, one of the critical necessities of contemporary cities is the rehabilitation and modernization of decayed urban areas (Varasti et al., 2012: 129).

Table 1: Types of Urban Decay

Urban Decay	Description
General Classification of Urban Decay	Relative: Occurs in one of the urban elements, namely its structure and activities.
	Complete: Penetrates into the structure and activity, leading to a complete decay of the space. (Habibi, 2012: 150)
Types of Urban Decay	A) Cultural Heritage Areas: Areas that contain remnants from the past and are resistant to replacement.
	B) Urban Areas Without Cultural Heritage: Areas that are within legal boundaries, having official and legal ownership.
	C) Informal Areas: Areas primarily located on the outskirts of cities, formed outside official development plans. (Rahman-Zadeh, 2016: 22)

In the resolution of the Supreme Council of Urban Planning, the criteria for identifying deteriorated areas are considered equally valuable. However, the criteria have been specified, and deteriorated areas have been identified based on certain solutions and indicators, which include: a) Small plot size b) Instability c) Infiltrability. (Zobardast, Khalili, and Dehghani, 2013: 29)

Technical terms and specialized vocabulary for interventions in urban fabrics are key definitions within the field of urban planning. To correctly understand the actions and methods of implementing them, these terms must be used in a coordinated manner to avoid further issues in applying and translating texts and documents. (Bonyadi, 2014: 50-48)

Renewal: This refers to revitalizing a building or space and its restoration, with an emphasis on altering the form of the space or urban complex. Renewal occurs when the urban space, complex, or building is functionally active, but structural deterioration has led to a decrease in its efficiency and effectiveness. (Vaarisi, Taghvaei, and Rezaei, 2012: 6)

Reconstruction: Reconstruction means rebuilding. This process occurs when there is complete deterioration within a building, complex, or urban space. (Vaarisi, Taghvaei, and Rezaei, 2012: 6) In this type of intervention, the fabric is transformed, creating new conditions within it. (Jahaniyan and Pajoohan, 2011: 103)

Improvement: This term refers to a series of actions aimed at preserving and enhancing the structure and space of the city in the short term. (Vaarisi, Taghvaei, and Rezaei, 2012: 6) Improvement activities aim to utilize the existing potential and actual facilities, strengthening positive aspects while weakening negative ones through support, care, maintenance, protection, restoration, reinforcement, and repair. This type of intervention is specific to areas that have historical and cultural value, and intervention in these fabrics requires adherence to the regulations and guidelines of the Cultural Heritage Organization. (Habibi et al., 2014: 57)

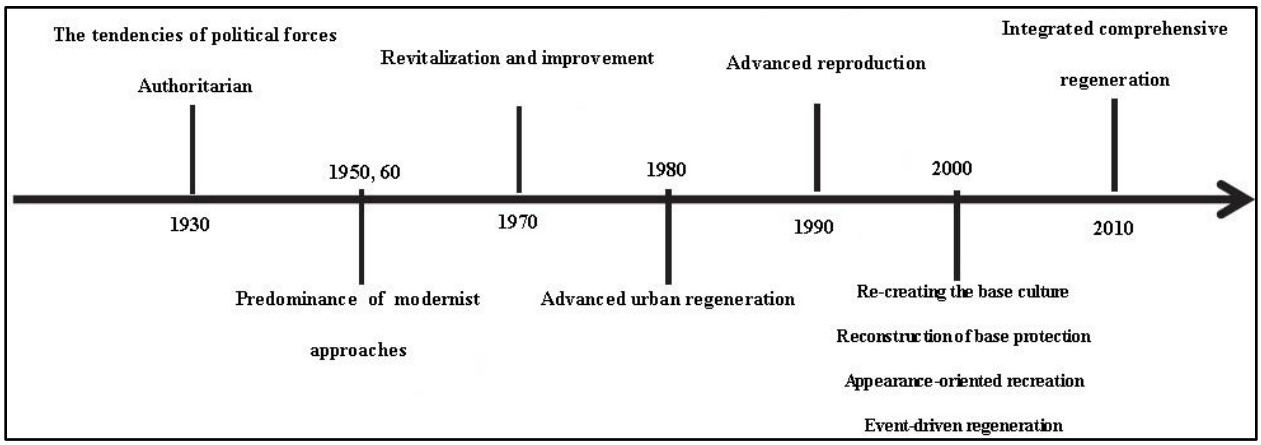

Figure 1: Historical Progression of Common Approaches to Interventions in Deteriorated Urban Areas

Urban regeneration focuses on improving the economic, social, and environmental conditions of cities, encompassing a wide range of activities that provide new livability to areas, rehabilitated buildings, infrastructure, and structures that have reached the end of their useful life. A key perspective in urban regeneration is to enhance the overall condition of the city and its inhabitants. Urban regeneration seeks to identify signs of urban problems by improving deteriorated areas. This approach is not only concerned with reviving abandoned areas but also includes broader issues such as competitive economy and quality of life. When considering urban regeneration from a comprehensive and integrated viewpoint, it leads to the analysis of urban fabric problems and, through advancements in economic, physical, social, and environmental conditions, facilitates comprehensive revitalization of the urban fabric (Mirzaei Arjangi & Shabani, 2020: 131-120). Regeneration signifies revival, renewal, and urban rejuvenation, essentially referring to a rebirth, and is used as a general term in urban planning literature, encompassing concepts such as improvement, modernization, reconstruction, empowerment, fluidity, and urban renewal (Ismailpour et al., 2011: 6). The concept of urban regeneration can be defined in various ways depending on the level of a country's development. In highly developed economies, the goal of regeneration is to return to the city through revitalizing the city center, restoring activities within the framework of rapid global competition, and implementing environmental quality improvement projects, with a broad focus on urban center concentration (Dizaji, 2016: 15).

The approaches to urban restoration and improvement have evolved from reconstruction, revitalization, modernization, and redevelopment to urban regeneration and rejuvenation. In this journey, they have transitioned from a focus solely on the physical environment to an emphasis on social, economic, cultural, and artistic considerations (Tajik et al., 2019: 56-53).

The process broadly recognized as urban regeneration encompasses a set of general or universal principles along with specific local necessities. Each location requires tailored planning and implementation. The actions related to this approach necessitate creating a suitable foundation and following certain steps. The second path defines a trajectory that connects urban improvement and modernization to urban regeneration and rejuvenation. This transforms it into a comprehensive intervention approach that is simultaneously contemporary (Roberts & Skeyes, 2000).

3- Research Methodology

The research has an applied nature, as it aims to study one of the urban issues using existing theoretical foundations and frameworks and provides recommendations in this regard. In terms of its nature and method, this research falls into the category of descriptive-analytical studies, as it seeks to describe the subject and the city's condition through the presentation of information, and then analyzes the collected data using the Analytic Network Process (ANP) method.

The majority of the information in this research has been gathered through the distribution of pairwise comparison questionnaires based on the specified indices, in order to collect the necessary statistics and information. Following that, the data was analyzed. Some of the information was obtained through library research, while another part came from interviews and field studies. The software used for data analysis, ranking, and presentation were SPSS and Super Decisions (Author, 2024).

The Analytic Network Process (ANP), an extension of the Analytic Hierarchy Process (AHP), was first introduced by Saaty in 1997. In cases where the lower levels influence the higher levels, or when elements within the same level are not independent of each other, ANP is used instead of AHP. ANP is a more general form of AHP, but it does not require a hierarchical structure. As a result, it represents the more complex relationships between different levels of decision-making in a network form, taking into account the interactions and feedback between criteria and alternatives (Atari Gargari, 2013).

a) Formation of the Pairwise Comparison Matrix: Imagine that the problem has N branches named C1, C2, ..., CN, and in branch i, there are ni elements. Now, if two branches, i and j, are selected and all the elements of branch i are compared pairwise against the first element of branch j, a pairwise comparison matrix is obtained. This matrix represents the pairwise comparison of all the elements in branch i with respect to the first element of branch j.

b) Calculation of Relative Weights: After forming the pairwise comparison matrix, each value in the matrix is normalized by dividing it by the sum of its corresponding column. Then, to calculate the relative weights, the arithmetic mean of each row is computed.

c) Formation of the Supermatrix: Now, all the elements of branch i are compared pairwise with each other in relation to all elements of branch j, and their eigenvectors are obtained. By performing this operation for all branches, the supermatrix is formed.

4- Research Findings

Using knowledge-based methods and techniques is a key factor in making informed decisions for better understanding and more accurate predictions. One of the techniques used for assessing situations and developing strategies is the SWOT Matrix. Generally, the SWOT Matrix is a conceptual framework used to identify and analyze threats and opportunities in a system's external environment, and to examine its internal strengths and weaknesses. The technique of situation analysis through SWOT tables was first developed by planners in private companies and business management circles to address challenges faced by private institutions. However, today, it is also used by public institutions in the development of urban plans to understand and assess the current situation (Atari Gargari, 2013: 184-179).

The foundation of SWOT, as suggested by its acronym, is derived from four different yet interconnected aspects, which are:

Strengths, Weaknesses, Opportunities, Threats

Strengths and weaknesses are considered internal factors, while opportunities and threats are seen as external factors. From this technique, four practical strategies for development are derived, which include:

Aggressive Strategy: Using strengths to exploit opportunities (SO)

Diversification Strategy: Using strengths to overcome threats (ST)

Review Strategy: Overcoming weaknesses by taking advantage of opportunities (WO)

Defensive Strategy: Overcoming weaknesses and threats to survive (WT)

The City Development Strategy (CDS) is a process of creating a long-term development vision for a city, based on which short-term and long-term action or implementation plans are ultimately prepared. Achieving realistic and publicly agreed-upon visions is prioritized in this type of urban planning, as experience has shown that the most successful goals and policies during the implementation phase are those agreed upon by the public, urban management, and the central government. In essence, this approach aims to bring together all stakeholders, influential groups, and relevant authorities to collectively decide the city's future, a decision that, over several stages, is transformed into plans, strategies, and projects (Atari Gargari & Borai, 2013: 67-60).

This urban planning approach is process-oriented, and its outcome often takes shape over time. Moreover, the specific stages of strategic urban planning largely depend on the conditions and characteristics of each city, a trait that distinguishes this planning method from most others. In the strategic planning system, which is based on a systemic perspective, the goals and land-use policies are enhanced by integrating physical objectives with economic, environmental, social, and cultural goals. The planning responsibilities shift from simply preparing land-use maps—i.e., spatial organization of activities based on land-use planning, sustainable development, public welfare, and environmental and life quality—to these broader objectives.

In strategic planning, senior managers take visions and key objectives from the people, organize and prioritize them, and then turn them into strategic documents and statements (Zangishe'i & Rafieian, 2020: 115-104).

The strategic planning for the regeneration of deteriorated urban fabrics in the studied neighborhoods of the metropolis of Tabriz has been developed based on these theoretical and conceptual foundations. It is built upon engaging the public in the formulation and development of strategies and implementation plans aimed at achieving the developmental vision of Tabriz, which is based on urban regeneration. This vision has been shaped in accordance with higher-level development plans for Tabriz and through limited sample consultations. To make this research more practical and emphasize its operational aspects, giving it the feel of a real urban project, this strategic planning is aligned with the aforementioned vision and follows the theoretical framework of Tabriz's 20-year development plan, with a horizon for 2025 (1404 in the Persian calendar), aimed at achieving this goal (Author, 2024).

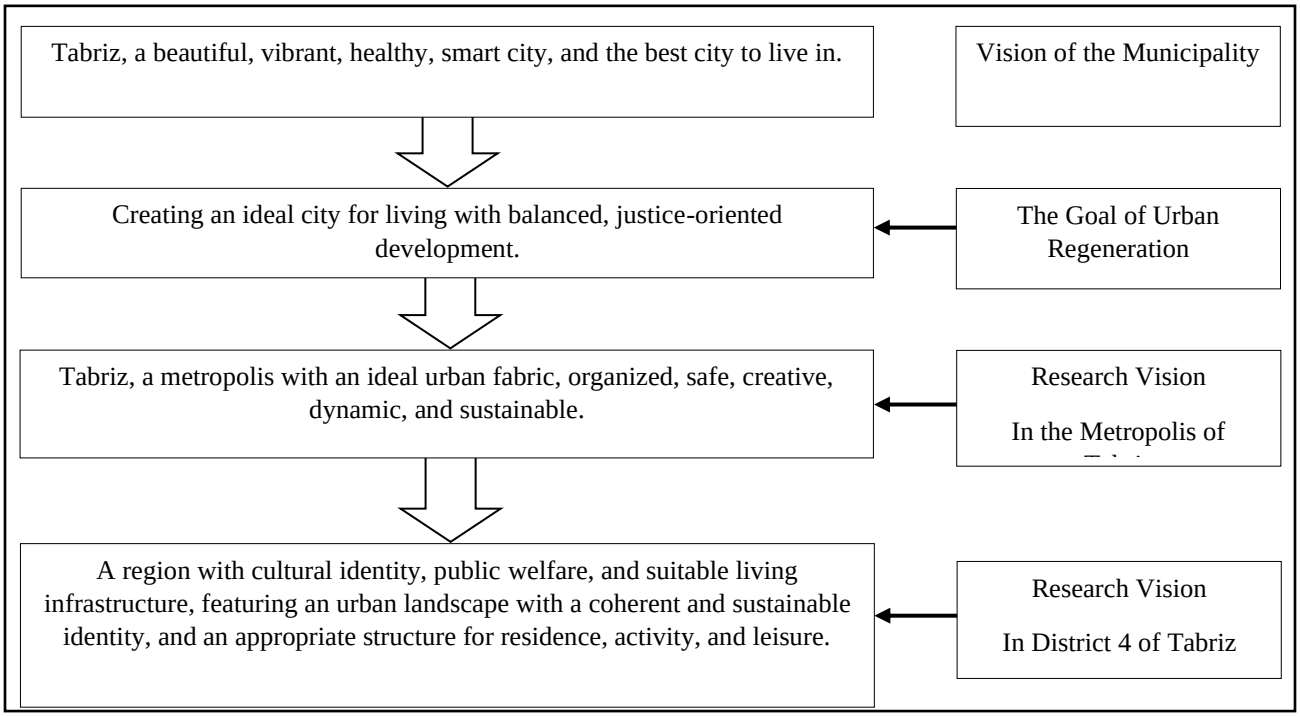

Figure 2: The Vision of the Metropolis of Tabriz in the Strategic Plan for the Regeneration of Deteriorated Urban Fabrics

Urban regeneration based on developmental strategies has recently emerged in the literature of urban management and planning in various aspects, including physical, economic, social, cultural, and structural dimensions. Numerous research projects have recently been proposed in this field within academic circles; however, there has not yet been a clearly defined and structured framework. In fact, this research aims to define such a functional and study framework by combining strategic development planning with urban regeneration.

Therefore, based on the conducted research and the information obtained from citizens' opinions, as well as considering the existing characteristics of the city, we will use the SWOT analytical

technique to examine and identify potentials. Furthermore, based on the matrices of (Strength–Opportunity), (Strength–Threat), (Weakness–Opportunity), and (Weakness–Threat), we will present strategies aligned with the vision of the strategic planning program for the regeneration of the deteriorated fabric of the metropolis of Tabriz (Author, 2024).

Table 2: Prioritization of SWOT Sub-Factors for Assessing the Capabilities of the Metropolis of Tabriz for Strategic Regeneration of Urban Deteriorated Fabrics Using the Analytical Network Process (ANP) System

SWOT Factors	Sub-Factor	Sub-Factor Weight	Sub-Factor Priority
	S1. Relatively low land prices in the western part of the city, allowing for the purification and definition of new activity spaces in the area.	0.0639	7
	S2. Low housing rental prices in the area.	0.0663	6
	S3. Majority of residents are locals.	0.0427	17
	S4. Linguistic, religious, and ethnic unity among over 98% of citizens.	0.0677	5
	S5. Unique collective customs during specific days and ceremonies that require dedicated urban spaces.	0.0432	16
	S6. Expansion of new urban infrastructures, especially in large shopping centers.	0.0512	12
	S7. Households' willingness to renovate housing and revitalize neighborhoods.	0.0728	1
	S8. Opportunities for participation and a high level of civil interaction among residents, especially older ones.	0.0527	11
	S9. Ease of intervention in the fabric (existence of not-so-dense buildings).	0.0583	10
	S10. Presence of a relatively untouched traditional urban and demographic structure in old neighborhoods.	0.0688	4
	S11. The deterring role of the Pasdaran highway in preventing unregulated spatial development.	0.0721	2
	S12. Existence of a program for managing informal settlements, which will help reform the functional hierarchy of the northern part of the region.	0.0469	15
	S13. Special attention from urban management to urban environmental health and modern mechanized waste disposal.	0.0632	8
	S14. Residents' willingness to maintain continuous connections with the area for their needs instead of visiting other urban centers.	0.051	13
	S15. The area is situated in a relatively calm zone in terms of urban infrastructure.	0.0585	9
	S16. Various land uses in the area facilitate social interactions and presence.	0.0498	14
	S17. Extensive bus lines across the area with access to other parts of the city due to the location and multi-route road network.	0.0709	3
Weaknesses (W)	W1. Housing for low-income and lower-middle-income individuals in the area.	0.0449	14
	W2. High unemployment and inactivity rates in the region.	0.07	3
	W3. New constructions lack attention to cultural and social identity.	0.0333	18
	W4. Many residents do not adhere to technical and regulatory guidelines after the issuance of renovation permits in the area.	0.0562	9
	W5. Damage to some historical buildings and structures in the area due to extensive construction in its central deteriorated fabric.	0.0741	1
	W6. Expansion of informal housing and slums in the northern regions, resulting in low-quality visual aesthetics.	0.0559	10

	W7. Severe shortage of suitable and sufficient land for future structural development in the area.	0.0398	17
	W8. Urban development on unstable lands and potentially dangerous areas, especially in the northern part.	0.0638	4
	W9. Social gathering places primarily formed in a spontaneous manner and have unsatisfactory spatial conditions.	0.0422	16
	W10. High waste production compared to the area's population averages according to waste organization statistics.	0.0702	2
	W11. High levels of environmental pollution in the area due to polluting industries in western Tabriz.	0.0606	8
	W12. Earthquake-prone metropolis of Tabriz.	0.0537	12
	W13. Lack of green spaces, public restrooms, and open public areas in the region.	0.0433	15
	W14. Weak construction actions by the municipality.	0.0619	6
	W15. Lack of sustainable management in various sectors and levels of municipal management in recent years.	0.0614	7
	W16. Low quality of services and facilities related to e-government in the relevant offices.	0.0505	13
	W17. Existing infrastructure issues in public transportation and urban traffic control systems.	0.0627	5
	W18. Lack of parking spaces for private vehicles in major public centers in the region.	0.0555	11
Opportunities (O)	O1. Interest from the private sector in investing in the restoration of historical and cultural buildings and the consolidation of fragmented urban plots.	0.0513	8
	O2. Young demographic structure of the region based on the 1395 statistical yearbook data.	0.0403	14
	O3. Increasing attention from global organizations to Tabriz as the most developed city in Iran.	0.0357	17
	O4. Possibility of revitalizing traditional, local, and indigenous industries within the framework of strategic regeneration plans.	0.0649	3
	O5. Possibility of forming cooperatives to engage residents in the regeneration of the area.	0.0591	5
	O6. Increased sense of belonging to the neighborhood and environment due to the implementation of the strategic regeneration plan.	0.0314	20
	O7. Potential for added value of land and properties.	0.0628	4
	O8. Location of the area at the entry point of the city from the west.	0.0362	16
	O9. Establishment of regulations for the regeneration of the area based on its economic attractiveness.	0.041	12
	O10. Possibility of converting empty and lost spaces into public and green spaces.	0.0481	9
	O11. Reduction of urban waste presence in the region by strengthening the mechanized waste collection, disposal, and recycling system.	0.0517	7
	O12. Reduction of environmental pollution due to stormwater management.	0.0439	11
	O13. Empowerment of marginalized areas in line with the long-term urban development program and the Hope Housing Plan.	0.0397	15
	O14. Consideration of the budget for empowering dilapidated areas in the municipality's annual budget.	0.0441	10
	O15. Proximity to large-scale land uses (Azerbaijan Grand Park) and the possibility of creating related uses.	0.0659	1
	O16. Possibility of establishing shopping and productive service corridors.	0.0652	2
	O17. Potential economic growth of the area as a tourist attraction.	0.0351	18

	O18. Proximity to the western section of Aoun Ibn Ali and its tourism facilities.	0.0304	21
	O19. Potential increase in the value and attractiveness of the physical fabric through its conversion to higher-value land uses.	0.0409	13
	O20. Potential for revitalizing activities during nighttime (the city that never sleeps).	0.0266	22
	O21. Potential for increasing permanent presence of city residents in the area through the establishment and strengthening of pedestrian pathways.	0.0528	6
	O22. Strengthening efficient public transportation and replacing old systems in strategic regeneration.	0.0329	19
Threats (T)	T1. Decline in intrinsic attractions due to neglect of resources in the region.	0.0722	2
	T2. General tendency towards the service sector and away from fundamental investment in development within Tabriz.	0.0379	15
	T3. Excessive migration from surrounding towns and villages to the metropolis of Tabriz, settling in the northern and northwestern sections of Region 4.	0.0392	14
	T4. Decrease in the livability of the area due to increased commercial and service uses.	0.0481	10
	T5. Inability to attract community participation and economically capable individuals.	0.0275	

According to what is observed in Table 2, external factors (opportunities and threats) regarding the Klasher of Tabriz and its Zone 4 have assigned multiple priorities and weight compared to internal factors (strengths and weaknesses) for the strategic regeneration of urban decayed fabrics. Therefore, considering the priorities obtained in both branches of external factors, an apparent contradiction can be witnessed, which in reality is not a contradiction but rather indicates a simultaneous need and attention to its consequences. (Author, 1403)

Table 3: Determining the weight and priority of the developed strategies in the SWOT matrix with ANP network analysis

Rank	Strategy	Weight
1	Increasing neighborhood attachment and neighborly closeness by creating continuous social and civic ties among residents.	0.06655
2	Promoting cultural change to shift residents' attitudes from using personal vehicles to public transportation through the improvement and expansion of relevant infrastructure.	0.06541
3	Utilizing joint programs and establishing spatial-physical links to enhance interactions within decayed neighborhoods.	0.06464
4	Creating suitable conditions and platforms to enhance the active participation of residents in the strategic regeneration plan of urban decayed fabrics.	0.06401
5	Aligning citizens with urban regeneration plans by leveraging laws and development-oriented actions based on participation to prevent physical and social damages in the region.	0.06124
6	Increasing the dynamism and spatial transparency of Zone 4 by enhancing the quantity and quality of urban tourism through the revitalization of existing historic and valuable fabrics and buildings.	0.05926
7	Raising public awareness and citizenship through holding civic education sessions and group consultations in the region.	0.05868
8	Enhancing customer respect and facilitating citizens' administrative affairs by expanding e-government and virtual city infrastructure.	0.05864
9	Ensuring complete urban justice with the appropriate and proportional distribution of facilities, services, and wealth across Tabriz metropolitan area and Zone 4.	0.05636
10	Increasing the level of investment attraction from public and private sectors in economic and service affairs in Zone 4 to create financial dynamism in the area.	0.05519

11	Empowering rural and county settlement centers within the city's influence to prevent the migration of their residents to the provincial center and combat urban marginalization in Tabriz.	0.05507
12	Creating pedestrian pathways within the region to expand spatial communication and enhance citizen presence in the fabric of the area.	0.0513
13	Reducing civil anomalies by controlling social harms based on cultural commonalities among residents.	0.05086
14	Increasing attention to strengthening positive behavioral and civic norms among residents through the promotion of their local traditions.	0.04848
15	Utilizing the capacity of NGOs in the strategic urban regeneration process from study to implementation, with the allocation of necessary facilities.	0.04863
16	Facilitating the movement of pedestrians and vehicles within Zone 4 by increasing the infrastructure of the public transportation system.	0.04637
17	Focusing urban planners on the urban appearance and improving and expanding pedestrian pathways in decayed urban fabrics.	0.04533
18	Enhancing urban preparedness in times of crisis and for passive defense by appointing experienced managers and relevant citizen education.	0.04394

To validate the ranking that has been carried out, attention must be paid to the inconsistency index. If the index is equal to or less than 0.1, the results are credible; if it exceeds 0.1, an error has occurred, and the result is not acceptable. The inconsistency index value is 0.05459, which is less than 0.1; therefore, the final ranking of the strategies is correct and credible. (Author, 1403)

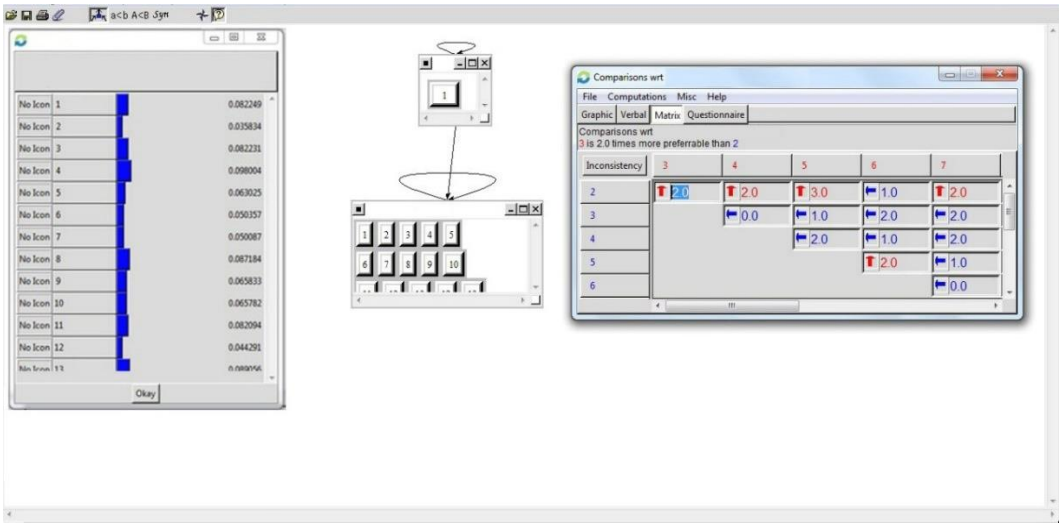

Figure 3: Weighting of strategies using ANP network analysis in SuperDecisions software.

5- Conclusion

In this study, the vision for the metropolitan area of Tabriz was developed considering the developmental program for Tabriz 1404 (2025) and aimed at achieving its goals while saving resources. Subsequently, this vision was evaluated through interviews with officials, elites, representatives, and various segments of the population. Following this, by distributing targeted and limited questionnaires and conducting multiple interviews with different individuals, the strengths, weaknesses, opportunities, and threats of the city were identified. This led to the formation of SWOT analytical tables, from which strategies were developed as the first step toward achieving the desired vision and outlining the general path toward it.

In strategic planning, determining the weight of components and prioritizing them is of great importance. Thus, in this research, reliance was placed on the Analytic Network Process (ANP) method, utilizing the specialized software SuperDecisions to weight and prioritize the components of the study. Based on the research data, it can be observed that the strategy "Increasing neighborhood attachment and neighborly closeness by creating continuous social and civic ties among residents" received the highest overall score and is ranked first, while the strategy "Enhancing urban preparedness in times of crisis and for passive defense by appointing experienced managers and relevant citizen education" holds the lowest weight and is ranked last.

Given the established priorities for each strategy, they can be implemented without wasting various financial, human, and other resources. To further this strategic process aimed at the regeneration of decayed urban fabrics in Zone 4 of Tabriz, working groups should be formed to execute these strategies and oversee their progress. Additionally, for precise monitoring and evaluation of the strategies, metrics should be developed based on higher-level documents and programs, allowing for a comparison of progress with these metrics to determine the feasibility of the strategies. Utilizing a strategic program in urban regeneration will lead to sustainable development in the city, wherein history and traditions are respected, urban infrastructure is updated, and social justice is achieved, thus increasing public safety and comfort while enhancing the community's mental well-being. Ultimately, this will realize a unified vision of Tabriz as a metropolitan area with an ideal, organized, safe, creative, dynamic, and sustainable urban fabric.

By analyzing the top three prioritized strategies, which are a result of public surveys and technical opinions from specialists and experts, it can be concluded that the participants in developing these strategies initially focused on increasing public participation in urban management. Next, they emphasized the financial empowerment of decayed neighborhoods to enable residents in these areas for the regeneration of the existing fabric. From this scoring and prioritization of strategies, it can be inferred that an economic-physical empowerment model within the framework of effective civic and financial participation of the studied neighborhoods' residents can become a suitable strategic framework for the regeneration of decayed fabrics in metropolitan areas.

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