STRATEGIC PLANNING AND URBAN DEVELOPMENT BY USING THE SWOT ANALYSIS. THE CASE OF URMIA CITY

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ABSTRACT - A strategic planning is an important tool to guide the urban planning. It will help maintain a focused, long-term vision of the urban mission and purpose, and aid decisions about the urban development. In reality review and understanding of urban development, its strengths and weaknesses are of major importance in the strategic planning. Today, awareness of strengths and weaknesses, opportunities and threats are a necessity for urban development plans and programs. Urmia City, despite being rich in natural and human resources, it faces difficulties in terms of unsustainable development due to the lack of proper utilization of resources and environmental degradation of agricultural land suitable for industrial and residential land uses. The aim of the current research is to identify the strengths, weaknesses, opportunities and threats in Urmia city. This study is applied and it utilizes both descriptive and analytical methods, but also the AHP and SWOT methods. The result of the study indicates that, for the development of Urmia City, the overcoming strategy has the maximum score (4.07), whereas the negatives control strategy has the minimum score (1.77). Therefore, Urmia City should make the maximum use of strengths and opportunities in order to reduce weaknesses and threats.

Keywords: planning, strategic planning, urban development, SWOT analysis, Urmia City

INTRODUCTION

Strategic planning is an extended tool for regional development and can be defined as a systematic form of preparing for change and for the future of a city. Strategic planning takes into account the socio-economic and environmental context. Nowadays, the analysis of potentials, limitations, opportunities and threats is a critical part of the strategic management planning process (Khalifipour H. et al., 2012). The city of Urmia is one of these medium-sized cities undergoing rapid physical growth and change of land cover and uses. According to the first official census (1956), the population of Urmia was of 67,605 inhabitants. During the 1960s and the early 1970s, land reform and other agricultural policies in Iran resulted in mass migration from villages to cities. Hence, at the time of the second official census (1981), the population of the city reached 164,419 people. The Islamic revolution of 1979 followed by the Iran-Iraq war one year later increased further rural migration to cities. Between 1975 and 1987, the annual rate of population growth in Urmia was 5.1%. In 2000, the population reached 435,200 people with an annual growth rate of 3.4%. In the most recent official report (2010), the population of Urmia reached to 604,000 persons (Urmia Municipality, 2010). In reality, in recent years, because of the appropriate natural prerequisites (desirable lands for agriculture and many water resources), the development of roads and housing construction besides them, immigration, which led to the approach of lands around the city to the city itself (these parts joined to the city boundary), emergence of cooperatives for town building, development and construction of disorganized settlements and urban edge living, as well as the issues of ownership, the Urmia City has had a rapid growth of population and urban area. This city's population has increased from 67,605 in 1956 to 583,255 in 2006. Also, in accordance with the calculations of consultant engineers, in a twenty-year interval (1986-2006), its urban area has increased from 5,939 to 8,577 hectares. This, in turn, has added 95% to the initial urban area during this period (West Azerbaijan's Organization for Housing and Urban Planning, 2008).

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Furthermore, these factors have resulted in the lack of land and housing, the split of urban texture, the disorganization of urban visage, the crowdedness of urban transportation (the congestion of urban traffic, especially in the city centre), the conversion of appropriate agricultural lands into residential and industrial spaces, thoughtless urban constructions and the termination of natural capabilities and services that endangered urban environment and contributed to the city instability. In such conditions, it is important to improve the consequences of thoughtless sprawl. However, few solutions have been suggested to mitigate the consequences of this phenomenon, i.e. population growth. Strategies such as smart growth, smart management, green belts and planning of land use have been proposed and implemented in other locations as possible solutions for reducing the negative impact sprawl.

METHODOLOGY

The combination of research methods, descriptive, analytical and predicative was used in the study. Expert Choice and ArcGIS software were used for content analysis of the SWOT strategic model meant to determine the strengths, weakness, opportunities and threats. The analytic hierarchy process (AHP) model was used to select the best strategy for the development of Urmia City.

STUDY AREA

The city of Urmia, one of the most ancient cities in Iran, is the capital of West Azarbaijan province. Urmia is located in a mountain area with annual precipitations of 42 to 78 mm. The most important economic activities in Urmia are agricultural light industries (textiles, foodstuffs, paper and furniture) occupying about 45% of the active population, and tourism, which benefits from the desert architecture and the historical heritage of the city. Both activities alongside with the administrative functions derived from the condition of province capital serve as an attraction factor for many immigrants not only from the province of West Azarbaijan, but also from the entire Iran. Therefore, the city has experienced very rapid growth to the point that, among the Iranian cities with a population of more than 600,000 inhabitants, Urmia had the largest growth in urban land development (Mobaraki O., 2012).

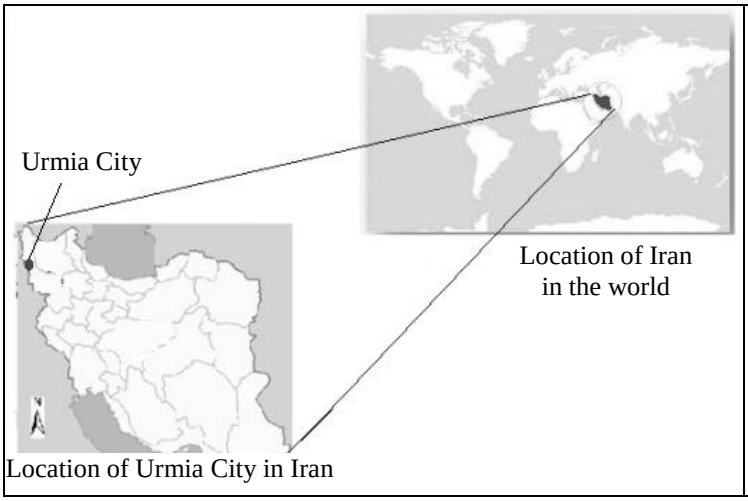

Figure 1. *Location of the study area in Iran and in the world*

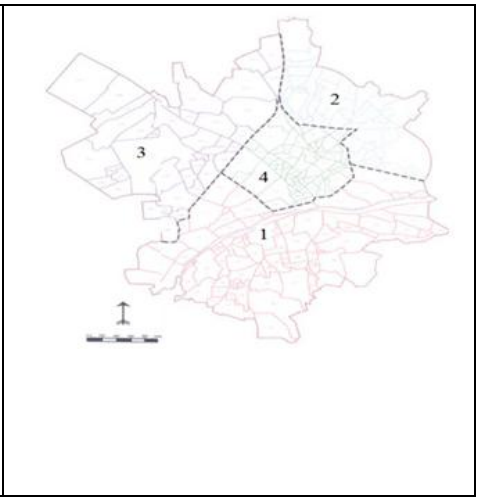

Figure 2. *Urmia City zones*

SWOT METHOD

A SWOT analysis is a method commonly used to assist in identifying strategic directions for an organization or in practice. The SWOT model is a classic strategic analysis tool for strategic management, first proposed by Ken Andrews in 1971. The benefits of such an analysis tool are that it can better balance all internal and external aspects of enterprises, ensuring that analysis is more

comprehensive. The strengths and weaknesses of a system are determined by internal elements, whereas external forces dictate opportunities and threats. Strengths can be defined as any available resource that can be used to improve its performance. Weaknesses are flaws/shortcomings of any system that may cause to lose a competitive advantage, efficiency or financial resources (Wang K.J. and Hong W.C., 2012).

Different types of strategies are taken into account (Gasparini A. and Ferluga, E., 2005):

a) First strategy: Strengthening strategy. This strategy is based on the strengthening of positives, both internal and external to the cross-border area, assuming that by doing so, negatives will be critically abated and bypassed or absorbed by positives. This strategy is illustrated in the following diagram:

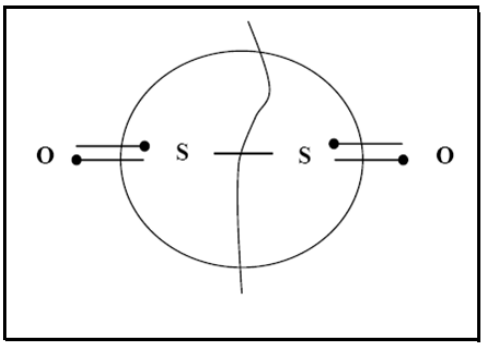

Figure 3. *Strengthening strategy diagram*

Such a strategy should be applied where it is possible to act on already considerable, strong, stable strengths (S) and opportunities (O), so as to stimulate the rest of the system, transforming or mitigating the weight of few and non-relevant weaknesses (W) and threats (T).

b) ***Second strategy: Overcoming strategy***. This strategy is more cautious and systemic, and less expansionist than the first one. Applying a reverse logic, it acts on positives (strengths and opportunities) in order to decrease if not deactivate internal negatives (weaknesses). The aim of this strategy is to preserve and balance stakeholder participation, preventing major internal fractures. This strategy is illustrated in the following diagram:

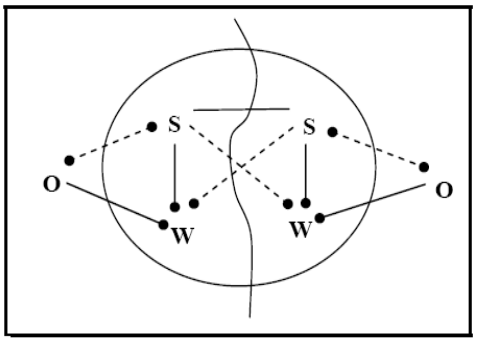

Figure 4. *Overcoming strategy diagram*

Besides applying this strategy to a rational development plan backed up by political will, it is more generally appropriate where, together with clear and substantial obstacles, there are also enough widespread strengths (S) and opportunities (O) to overcome the existing weaknesses (W).

c) Third strategy: Mobilization strategy for context control. This strategy emphasizes the effect of strengths (S) and opportunities (O) on the negative (T) context, which poses serious challenges to the establishment of a positive system. This strategy is illustrated in the following diagram:

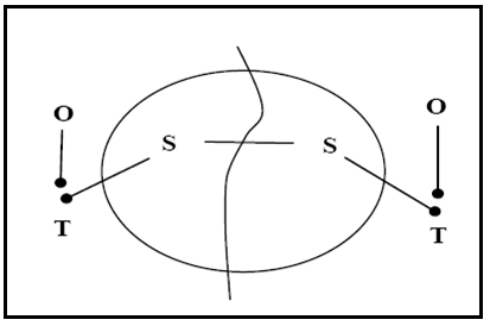

Figure 5. *Mobilization strategy diagram*

This strategy is appropriate where external threats (T) are so overwhelming or widespread, that it becomes necessary to exploit strengths and opportunities in order to limit the influence of external threats (T).

d) Fourth strategy (Combining the second and the third strategies): Negatives control strategy. This strategy is based on the joint action of strengths (S) and opportunities (O) to decrease weaknesses (W) and threats (T), therefore abating overall negatives. This strategy is illustrated in the following diagram:

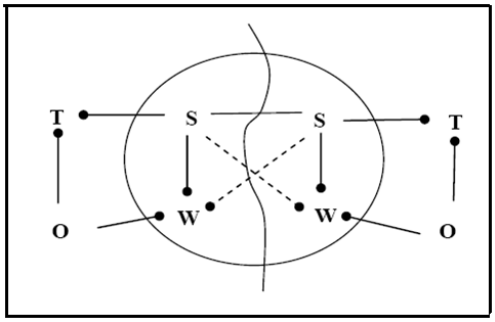

Figure 6. *Negatives control strategy*

Following a thorough analysis, Table 1 captures some of the key strengths and weaknesses that characterize Urmia City, while Table 2 synthesizes some of the significant opportunities and possible threats that the city faces.

Table 1. *Internal factors assessment (strengths and weaknesses)*

Strong points	Weak points
Sufficient slope in most of the city	Location in the earthquake belt
Positive impact of the clean mountain and lake air	Increase in air pollution
Rivers flowing through the city	High rate of population growth in recent years
There are gardens and agricultural land within the city	Much of the land is barren and empty in the city

Focus on various activities	Skilled migration from the city
Industrial employment potential	Low employment rate of the working population, especially women
High levels of green spaces in the city	Increase in the intensity of the destruction of the green space
There are beautiful natural landscapes around the city	Military barracks in the city
Convenient access to all parts of the city	High functional density in downtown
Appropriate communication network performance	Illegible urban structure
Ancient and historical monuments in the city	Lack of urban spaces with strong social role
	Existence of informal settlements in the city
	Lack of training facilities
	Presence of a cemetery in the city

Source: author's research

Table 2. *External factors assessment (opportunities and threats)*

Opportunities	**Threats**
Valorisation of the beautiful mountains, rivers and valleys around the city	The gradual drying of Lake Urmia
Possible conversion of vacant land into green spaces	Pollution of water and air
Strengthening small towns in Central Province	Progressive destruction of agricultural land
Proper positioning of the absorbed training facility	Failure to invest in attracting active population
Position and cross-border trade with the neighbouring countries	Immigration financiers
Ability to create good urban furniture	Continuation of short construction times
Planning according to the city's old texture and organization	Sprawl growth
Planning for the provision of rail link	Conversion of agricultural land to residential and industrial land
Strengthening cultural spaces	Disappearance of the old identity
Investment in mining industry	Lack of good governance

Source: author's research

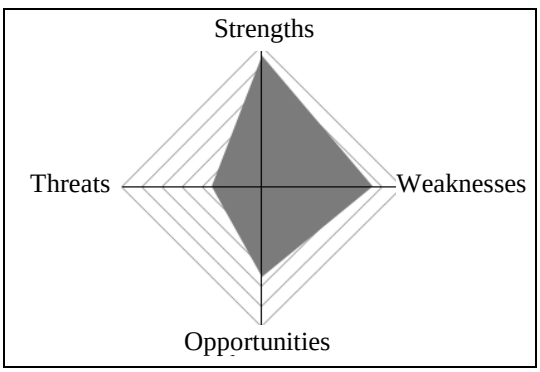

Figure 7. *Comparative analysis of tables*

A comparative analysis of the current situation of capabilities and constraints in the urban development of Urmia (strengths, weaknesses, opportunities and threats) is represented in Figure 7. The chart is the result of a quantitative analysis of the identified external and internal factors that influence the development of Urmia City (tables 1 and 2). As Figure 7 shows, the city requires the use of strategies necessary to take advantage of strengths and opportunities to overcome the existing weaknesses.

SELECTION OF THE BEST STRATEGY FOR URMIA CITY DEVELOPMENT BY USING THE AHP MODEL

The criteria weight was determined. These weight values were determined according to their importance in relation to objective criteria (for the selection of the best strategy) and, after weighting and applying the pairwise comparison of the criteria, sub-criteria and alternatives to determine the weight of their choices, priorities were discussed. The weight given in Table 3 was obtained by using the Expert Choice software.

In the second phase, the weights introduced separately in columns were summed in each column (weights of sub-criteria and sub-criteria that the initial weight multiplied by the weighted achieved criteria).

In the third phase, the matrix elements in each column were normalized by dividing each element in the matrix by the score of its column.

In the fourth phase, of the final weighted items, the weight matrix was obtained and normalized with Expert Choice. The average of the elements in each row of the normalized matrix was computed by dividing the sum of normalized scores for each row by the number of criteria.

Finally, the sum of the rows in the matrix was obtained, determining the weight of items.

Because of their length generated by the required calculations, the original tables were not included in the current paper.

Table 3. *Coefficient prioritization of strategies for the urban development of Urmia City*

Strategies	Negatives control	Mobilization	Overcoming	Strengthening
Score	1.77	2.28	4.07	3.33

Source: author's calculations

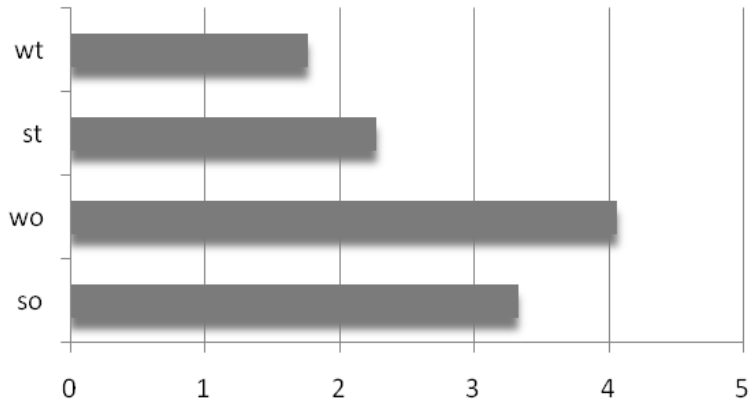

Figure 8. *Prioritization of urban development strategies*

According to Table 3 and Figure 8, in the case of Urmia City, the overcoming strategy has the maximum score (4.07) and the negatives control strategy has the minimum score (1.77).

CONCLUSION

In recent years, because of appropriate natural and anthropogenic prerequisites, Urmia City has had a rapid growth of population and urban area. This has had many economic, social and biological consequences including the termination of agricultural lands around the city, the devastation and contamination of water and soil resources, the increase in the cost of delivering civic services, the increase in the time and length of inner city trips and, as a result, the increase in the consumption of fossil fuels like petroleum, social segregation, lack of care about land use or irregular use of this important resource, etc. Thus, it is clear that the achievement of an urban sustainable development is a necessity and it requires a strategy for tomorrow that needs appropriate action plans to implement as soon as possible.

According to the findings of this study, uncontrolled urban growth in Urmia has caused many changes in the land use of the peripheral areas. The causes of having such widespread urban sprawl should be studied in order to develop strategies for controlling the city's growth. Some of the strategies and policies that can be used for controlling the urban sprawl are the creation of a regional balance to reduce migration from rural areas to urban areas or the renewal and improvement of the central-historical fabric and the inner city of Urmia. This would cause the continuous settlement of population in these areas for living and would prevent migration from the city centre to the suburbs. In addition, the policy of infilling development can be used to provide for the future growth of the population, and for implementing strategies addressed to manage the construction in the undeveloped peripheries.

RECOMMENDATIONS

- Using aggregation and compression model for new construction in order to prevent urban sprawl
- Creation of green belts to prevent urban sprawl
- Prevent traffic congestion in city centre
- Ensuring equity in access to urban services to all citizens
- Create a range of housing options and methods for different categories of people
- Prevent the occupation of quality agricultural land located in the path of urban growth
- Maintain and develop urban green and open spaces
- Planning for tourism attractions, cultural, architectural and historic city
- Strengthening industries and crafts to attract tourists
- Diversification of tourist accommodation according to their taste and income

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