

Strategic Housing Planning Through Sustainable Development Approach in Iran Metropolitans: Case Study of Metropolitan Mashhad

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ABSTRACT

The current paper is descriptive-analytical and aims at determining housing strengths and weaknesses and presenting useful strategies in order to achieve sustainable development in housing sector in Metropolitan Mashhad. To collect data, documental analyses, field studies and interviews with officials and practitioners in housing sector are employed. To analyzed data, SWOT strategic model is used. Findings from analysis of internal and external factors effective on housing sector of Metropolitan Mashhad reveal that aggressive strategies (SO) are prioritized in planning and defensive strategies (WO) are the next.

Findings from quantitative strategic planning indicate that among aggressive strategies, So₃ strategy is the most proper strategy in planning for housing sustainable development, obtaining 8.83 Total Attractiveness Score (leading population to new cities and towns aiming at reducing housing density and achieving sustainable housings and reducing lack of housing); and, among defensive strategies, Wo₂ strategy, obtaining 8.84 score (developing old texture reconstruction and originality-creating plans), is the most effective strategy after aggressive one.

KEY WORDS: Strategic Planning, Housing, Sustainable Development, SWOT, Mashhad.

1. INTRODUCTION

Housing is considered among the most important needs of human life. Today, urbanization expansion together with employment and traffic are of the most significant concerns of urban managers and planners. Regarding the importance of housing, many books and papers have been written whether in developed countries or developing ones so far. A review on housing conditions in different countries reveals that any country has not claimed that it already has solved the problem of housing in its community. Problems of some countries are quantitative, resulting from housing shortages, population growth, immigration and economic bottlenecks and these problems mainly happen in developing countries. In contrast, in developed countries, problems are mostly qualitative and result from changes in population and social structures[1].

It may be asserted that housing problem is globally widespread. However, in developing countries, this problem has become critical because of population and urbanization rapid growth, internal immigrations, lack of sufficient financial resources, problems regarding land supply, construction materials supply and lack of specialized human forces and, most importantly, lack of proper policy and planning concerning land and housing[17]. As one of the developing countries, Iran is not an exception in this regard.

Today, housing and its related issues have become a global problem and different countries' planners and policy makers are struggling to solve the problems concerning the issue[2].

Most of scholars of urban studies believe that the most important factor effective on people's satisfaction with settlement in one region and their life style is housing and its ecological condition and living in unpleasant housing conditions (whether qualitatively or quantitatively) puts settlers' physical and mental health in danger[19].

Basic needs of human being are satisfied by owning housing and as a result, it affects the quality of life and can be related to insure life truly [12].

However, urbanization expansion resulting from immigration from villages to cities and adjunction of surrounded villages to metropolitans in developed and developing countries has shaken the bottom of housing quality and quantity and it has changed the issue of housing into a great problem. Housing shortage, housing unacceptable quality, old textures, settlement in urban outskirts, inappropriate accesses of housings to urban services and etc are included among urbanization consequences and Iran is not an exception. Therefore, in metropolitans like Mashhad, as a second population pole of the country and commercial, historical and cultural center in national and international scale, which has always encountered with population growth rate, settlement conditions and living condition in urban neighborhoods have been inconsistent regarding urban sustainable development criteria. Furthermore, Housing planning issue, especially physical and quantitative part, has been

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among main concerns of urban managers and authorities and those figures have not had sufficient opportunities for achieving to housing sustainable development.

So, to reduce obstacles and hindrances on the way of sustainable development in housing sector and to achieve socio-economical horizon of 1404 (2025) national perspective program and to be aligned with this national massive program, it is necessary to pave the way for urban sustainable development, especially in housing sector as the most important and diverse part of urban planning and land use. As a result, in order to answer to “Which strategies are appropriate for achieving housing sustainable development in Metropolitan Mashhad?”, the present study aims at identifying strengths and weakness of Mashhad housing sector and presenting feasibly applied and planned strategies, taking advantage of opportunities and strengths and resolving weaknesses and threats.

2. MATERIALS AND METHODS

2.1 Research Methodology

The current research is of developmental-applied studies in terms of its aim and of descriptive-analytical studies in terms of its nature. To collect data, documental analyses, field studies and interviews with officials and practitioners in housing sector are employed. Then, according to obtained data, strengths and weaknesses of housing sector in Mashhad have been investigated.

In the next step, to analyzed data and present sustainable development strategy in Mashhad's housing sector, SWOT analytical Matrix is used. To do so, a list of strengths, weaknesses, opportunities and threats has been prepared. Then, to make planning participative and to facilitate decision-making and planning process, Delphi Method has been used aiming at collecting data and comments of experts and authorities in housing sector (Housing and Road Construction organizations, Municipality, Land and Housing Organization and Provincial Government)

Then, according to viewpoints of experts and ideas of interviewees, each effective factor has been separately weighted. Ultimately, adjusting internal and external strategic factors considered as bases in compiling strategies, SWOT matrix has been extracted; and based on it, quantitative strategic planning matrix, proper strategies and priorities of sustainable development in housing sector have been determined and approaches resulted from these analyses have been presented as useful strategies.

2.2 Introduction of Research Area

Mashhad City is considered as Iran's second metropolitan and World's second religious metropolitan and largest population center of Eastern Iran [15]. The city is provincial capital of Khorasan Razawi and its population is 2766258 [8]. The city is located at 36.20° North latitude and 59.35° East longitude, in the valley of the Kashaf River [13]. The city has 13 urban districts, totally 29000 hectares. Urban population density is approximately 119.4 people per square meter[14].

As one of the old and historical regions on the Great Khorasan Province and Old Toos, Mashhad has been developed thanks to the Shrine of Imam Reza (P.B.U.H), Eighth Shiite Imam [4]. Metropolitan Mashhad has historical-political, economic-administrative and cultural-intellectual centrality and religious function as well as border, beyond-country situation. It accepts 10-15 millions pilgrims and tourists annually in such a way that it bears the title of the second religious city of Islam world and the second national metropolitan in terms of population [11].

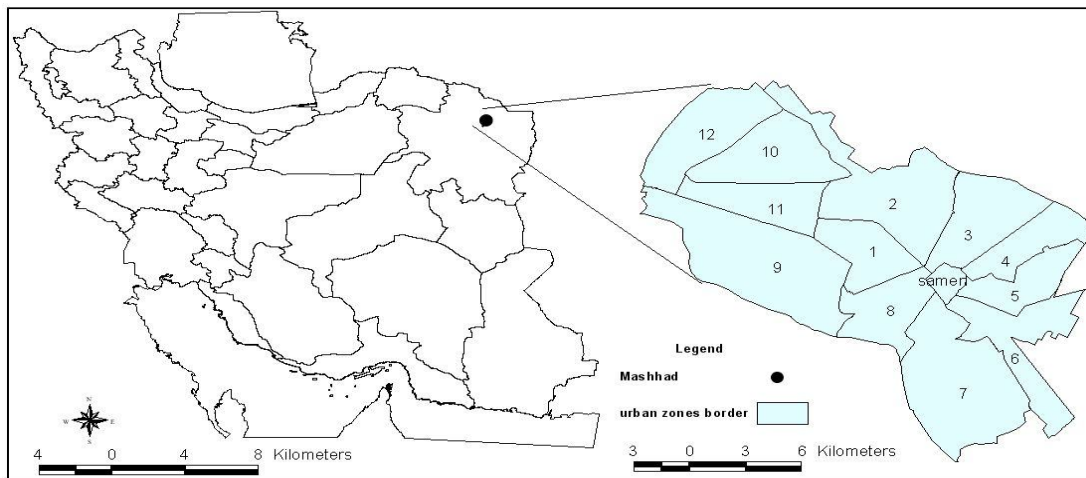


Figure 1. Location of Mashhad in Iran and Khorasan Razawi Province and position of every district in Mashhad

3.2 Data Analysis Model

To analysis data, SWOT strategic model has been used as following:

Strategic planning is defined as a set of decisions and actions resulted in proper systematic analysis and adjustment of opportunities and strengths in order to minimize threats and weaknesses[3]. On the other hand, As a position in highest level of managerial activities, strategic management can be considered as a summary of decisions for defining organization's long term activities[20]. Therefore, general users or politicians use strategic planning as a tool for regional and local development[18]. Many approaches and techniques are used for strategic analyses. So, it is more common to analyze internal and external factors which evaluate system's strengths, weaknesses, opportunities and threats. SWOT analysis is an important tool supporting decision making and it is generally used as a device for analyzing system's internal and external environments [10].

One of the important tools in compiling strategy is SWOT technique by which data is compared. Basically, SWOT is a strategic planning tool and a conceptual framework for systemic analyses[7]. Today, SWOT is used as a new tool for analyzing gap condition and performances by strategy evaluators and designers [16]. In fact, key point of this model is analysis of a range of system situational generalities and as a result, it is preparing a useful framework for strategy selection[21]. In SWOT technique, there are two evaluation matrices of internal and external factors. Using external factors evaluation matrix, strategic planners can evaluate economic, social, cultural, ecological, environmental, political and other factors. At the same time, using internal factors matrix, they can identify, evaluate and find solutions for relationships among different issues[5]. Strategies and executive priorities matrix divides different parts of system in form of a diagram in 9 separate sections. Investigations after and before preparation of matrix allow prediction of anticipated effects of strategic decisions on the system.

Executive priorities and strategies matrix is formulated based on data location in two main dimensions:

- a) Total sum of internal factors evaluation matrix shown on x axis.
- b) Total sum of external factors evaluation matrix shown on y axis.

In executive priorities and strategies, total sum of internal factors on x axis shows system's internal weakness if it is located in an area from 1 to 1.99. Scores from 2 to 2.99 show that system is in intermediate situation. At last, scores from 3 to 4 show system's strength. Like this, total sum of external factors evaluation matrix shown on y axis, if it is located in an area from 1 to 1.99. Scores from 2 to 2.99 show that system is in intermediate situation. At last, scores from 3 to 4 show system's strength[6].

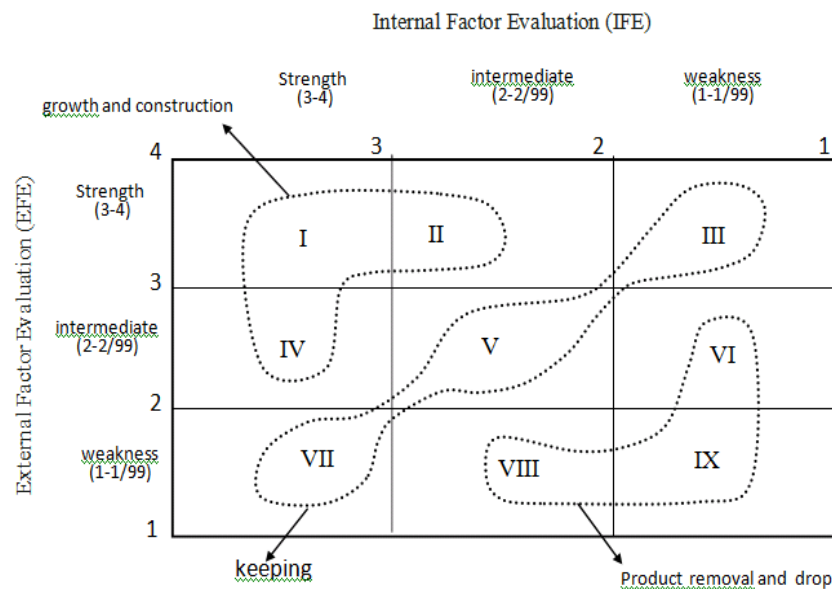


Figure 2. SWOT executive priorities and strategies matrix- reference [6].

Executive priorities and strategies can be divided into three areas and different strategies can be used for each area. First, for units locating in boxes 1, 2 and 4 (from top and from left to right) can execute strategies that contribute to growth and construction. In those units, focus strategy should ensure penetration into market, market development and product development.

Furthermore, strategies can be executed based on vertical upward unification, vertical downward unification and horizontal unification, which are the most suitable strategies. Second, for units of the system locating in boxes 3, 5 and 7, strategies aiming at keeping status quo should be executed. In those strategic units, penetrations into market and product development are so common. Third, for units locating in boxes 6, 8 and 9,

strategies of product removal and drop should be executed. In this matrix, systems which invest their assets in units locating in box 1 certainly are more successful[9].

3. Strategic Planning Process

In strategic planning of Mashhad's housing sustainable development, through three-stage process of strategic planning, evaluation matrices of external and internal factors, external and internal matrices an quantitative strategic planning matrix have been formulated and proper strategies are ultimately presented in order to achieve sustainable development in housing sector. In the following, three stages of the model are accounted for.

3.1. First Stage: Evaluation of external (EFE) and internal (IFE) factors

Internal and external factors effective on Mashhad's housing sector have been investigated using evaluation matrix of internal and external environments in four stages.

First Step: Determining internal and external factors effective on sustainable development of Mashhad's housing sector

After investigating related information, main internal and external factors have been identified and put in evaluation matrix. The number of external factors has been determined 21, among which 10 factors have been identified as opportunities of housing sector and 11 factors as threats. Firstly opportunities and then threats have been put in the matrix. The number of internal factors is 18, among which 9 factors have been determined as strengths and 9 factors as weaknesses.

Second Step: Specifying internal and external factors' degree of importance

In this step, listed factors in internal and external factors matrix have been assigned weights from 0 to 1 according to their importance. Factors' assigned weights have been achieved through Delphi method by experts working in Mashhad's housing sector.

Third Step: Ranking internal and external factors

In this step, using Delphi method, every one of internal and external factors determined as strengths, weaknesses, opportunities and threats in Mashhad's housing sector has been ranked from 1 to 4. Those numbers show the degree of importance of every factor in Mashhad's housing functioning in housing planning.

Fourth Step: Determining final score of internal and external factors and its evaluation

In this step, firstly, assigned weight of every internal and external factor has been multiplied in its related rank (Column 2*Column3) so that every factor's weighted score may be obtained. Then, all weighted scores of internal and external factors have been separately summed so that total final score of internal and external factors is obtained.

Table 1. Matrix of external factors of Mashhad's housing spatial system

EFE: Opportunities and Threats	Weight	Rank	Weighted Score
O ₁ : Leading inclination of housing market toward higher quality housing construction	0.085	3.93	0.33
O ₂ : Creating wide, standard communication networks in city's developed districts	0.078	3.82	0.3
O ₃ : Building new towns and access to standard, sustainable housings	0.067	3.57	0.24
O ₄ : Executing Mehr Housing Project, reducing house lease and solving some parts of housing shortage problem	0.057	3.47	0.20
O ₅ : Launching BRT and subway systems and making most of households have access to them	0.054	3.51	0.19
O ₆ : Reducing household dimension and population density in housing units	0.047	2.91	0.14
O ₇ : making possible usage of old housings in old city neighborhoods for building service and leisure spaces	0.043	2.76	0.12
O ₈ : Devoting low-benefit loans for reconstructing old housing units	0.039	2.51	0.10
O ₉ : Leading incompatible uses toward special parts of city and its outskirts	0.036	2.12	0.08
O ₁₀ : Considering empty lands and arid spaces in some parts of the city for housing construction	0.033	1.76	0.06
T ₁ : Some parts of city's Western districts are located on earthquake belt	0.076	3.86	0.3
T ₂ : Land and housing increasing expensiveness and its non-compliance with financial power of low-income groups and propensity toward low quality, cheap housings.	0.062	3.66	0.22
T ₃ : Old textures and dangers resulted from natural phenomena and social damages	0.057	3.47	0.20
T ₄ : Prevalence of informal settlement phenomenon	0.051	3.06	0.16
T ₅ : Increase in immigrations to Mashhad and as a result, land and housing shortage and expensiveness and high rental prices	0.047	2.55	0.12
T ₆ : Increasing expensiveness of construction materials and its effect on housing construction quality	0.043	2.10	0.09
T ₇ : Young generation and increase in housing request in the future.	0.037	2.14	0.08
T ₈ : flood danger and destruction of housings near to flood path due to demolition of river beds and water passages	0.032	1.97	0.06
T ₉ : Land and housing brokerage in city outskirts	0.029	1.85	0.05
T ₁₀ : Devastation of agricultural lands through illegal housing construction	0.027	1.71	0.05
Total Score	1	-	3.09

Reference: Authors' investigations and calculations, 2013.

Average score is 2.5 and maximum score is 4 whereas 3.09 total final score of external factors in Mashhad’s housing evaluation matrix of external factors has been obtained, showing that Mashhad has taken advantage of factors creating opportunities or has prevented from factors creating threats (Table 1).

Also, 2.95 total final score of internal factors in Mashhad’s housing evaluation matrix of internal factors has been obtained, showing strength of internal factors in Mashhad’s housing (Table 2).

Table 2. Matrix of internal factors of Mashhad’s housing spatial system

IFE: Strengths and Weaknesses	Weight	Rank	Weighted Score
S1: High access (98%) of housings to water, power and gas services as preliminary services in all parts of city, even in informal settlements.	0.12	3.72	0.44
S2: Necessity of having required facilities including toilets, kitchen equipments, etc in place in more than 95% of Mashhad’s housing units	0.081	3.23	0.26
S3: Proper access of housing units to civic services in most parts of the city	0.077	2.84	0.22
S4: Necessity of resistant construction materials in most housing units (95.7%)	0.064	2.01	0.13
S5: Proper access of housing units to leisure spaces in most parts of the city	0.052	2.12	0.11
S6: Appropriateness of population density in housing units in developed districts of the city	0.043	2.43	0.11
S7: Standard, newly constructed housings in new districts of the city	0.032	2.87	0.10
S8: Access of housing units to public transportation in most parts of the city.	0.025	2.27	0.06
S9: Availability of sufficient construction materials in all over the city for housing construction and so on.	0.021	2.16	0.05
W1: Low coverage of public sewage network in lowly-enjoyed districts and city outskirts due to lack of executive approved plans or their infeasibility	0.094	3.59	0.34
W2: High rental rates	0.084	3.28	0.28
W3: Narrow passages and problems of service delivery in old parts of the city	0.071	2.54	0.19
W4: Housing shortage in Mashhad	0.054	3.02	0.16
W5: High housing maintenance costs in most parts of the city	0.048	2.84	0.14
W6: Old and ruining buildings in old neighborhoods of the city (10.4%)	0.043	2.90	0.12
W7: Lack of mental comfort in housing units next to disturbing workplaces as well as traffic, passage congestion and other sound pollutions	0.038	2.65	0.10
W8: Highness of rental housing units	0.031	2.75	0.09
W9: Lack of green space and leisure spaces in lowly-enjoyed and outskirt parts of the city	0.022	2.31	0.05
Total Score	1	---	2.95

Reference: Authors’ investigations and calculations, 2013.

3.2. Second Stage: Matching and determining strategies

This stage itself includes two stages. Firstly, compilation stage for elementary strategies has been carried out through SWOT matrix. Then, selection stage for acceptable strategies through internal and external factors matrix has done as it is presented below.

First step in compiling strategies framework, evaluation step, comprises of tools based on information obtained from internal and external environments evaluation step which compares external opportunities and threats to internal strengths and weaknesses. For so doing, internal and external factors have been compared with one another in SWOT matrix. Therefore, possible strategies (SO – WO – ST – WT) have been compiled (Table 3).

Second step: specification of acceptable strategies. Executive priorities and strategies include two main dimensions. Total sum of evaluation final scores of Mashhad’s housing internal factors is shown on X axis and total sum of evaluation final scores of Mashhad’s housing external factors on Y axis. Intersection point of internal and external factors total scores on X and Y axes determines the situation of this sector in executive priorities and strategies matrix.

The situation of Mashhad’s housing in executive priorities and strategies matrix determines acceptable strategies for improving weaknesses of housing sector in this city. In Mashhad’s housing planning, regarding location of intersection of internal and external factors total scores in box 2 of the matrix, aggressive strategies (SO) have been considered as acceptable strategies. Therefore, concerning that point of intersection of external and internal factors is closest to box 6, defensive strategies (WO) can be used as priority next to aggressive strategies (SO).

Table 3. SWOT strategies of Mashhad’s housing spatial system

Weaknesses		Strengths	
Factors Related to Strategy	Defensive Strategies (Wo)	Factors Related to Strategy	Aggressive Strategies (So)
W_1, W_7, O_1, O_2	Wo ₁ : Developing and reinforcing urban sewage network aiming at global coverage of all city parts.	$S_3, S_5, S_8, O_3, O_5, O_9$	So ₁ : Developing and reinforcing BRT and subway transport systems in the city and its outskirts aiming at public access to public, quick and inexpensive transportation
W_3, W_8, O_1, O_7, O_8	Wo ₂ : Developing originality-creating projects and reconstruction of old textures in order to reduce unprecedented dangers and social disorders through financial and technical supports.	$S_4, S_7, S_9, O_1, O_3, O_{10}$	So ₂ : Developing and propagating new technologies of reinforcement in existent housings and constructing resistant housings continuously regarding positional conditions under supervision of municipality, road and urban construction organization and engineering system organization
$W_2, W_4, W_6, W_8, O_1, O_3, O_7, O_{10}$	Wo ₃ : Reinforcing housing cooperatives and charity organizations in housing sector.	$S_2, S_6, S_7, S_8, S_9, O_3, O_5$	So ₃ : Making conditions proper for leading population toward new towns in order to decrease residential density, achieve sustainable standard housings and reduce housing shortage
W_3, W_8, O_7, O_8	Wo ₄ : Taking proper measures by municipality for widening passages and accesses in old neighborhoods in order to facilitate service delivery.	$S_9, O_1, O_3, O_4, O_7, O_{10}$	So ₄ : Distributing construction materials with governmental subsidy to low income households, facilitating housing construction conditions and propagating social justice culture
$W_2, W_4, W_5, W_8, O_1, O_3, O_4, O_8$	Wo ₅ : Increasing banks’ credit portions in order to invest in housing sector and grant loans and facilities to homeless people.	$S_1, S_6, S_7, S_9, O_3, O_6$	So ₅ : Paving the way for housing building toward the ambition of state’s 1404 perspective: “One household, one housing”.
W_1, W_7, O_9	Wo ₆ : Constructing industrial towns and special spaces in order to bring about all disturbing careers so that citizens’ comfort may increase and hygienic and biological matters may be followed	S_4, S_7, S_9, O_1, O_3	So ₆ : Attempting at beautification of housings and spaces related to housing according to Iranian-Islamic culture aiming at modeling Mashhad housing considering millions and millions of national and international tourists.
$W_3, W_9, O_7, O_9, O_{10}$	Wo ₇ : Developing civic services and leisure time spaces aiming at public access of all settlers to those kinds of services in order to increase residential satisfaction, especially in lowly-developed districts.		

Reference: Authors’ investigations and calculations, 2013.

Table 3. SWOT strategies of Mashhad’s housing spatial system (Continued)

Weaknesses		Strengths	
Factors Related to Strategy	Conservative Strategies (WT)	Factors Related to Strategy	Diversity Strategies (ST)
$W_6, W_9, T_1, T_4, T_5, T_6, T_8, T_9, T_{10}$	WT ₁ : Not permitting housing construction on foothills, areas near to fault lines and river beds and assigning those lands to leisure usages and parks	$S_1, S_8, S_9, T_3, T_5, T_6, T_8, T_{10}, T_{11}$	ST ₁ : Developing and expanding inexpensive housing construction projects by NGOs and municipality, especially in informal settlements and making free agricultural lands under control of illegal constructions.
$W_2, W_4, W_6, W_8, T_3, T_6, T_{10}, T_{11}$	WT ₂ : Supervising land and housing market, preventing repetitive land and housing buy and sell and reducing land and housing high prices issue.	$S_2, S_7, S_8, S_9, T_1, T_4, T_9$	ST ₂ : Informing settlers of city outskirts and informal residents on resistant housing benefits
$W_3, W_4, W_6, W_7, W_9, T_3, T_5, T_6, T_{10}, T_{11}$	WT ₃ : Formulating NGOs for participation of citizens in executing and resolving housing neighborhoods problems in order to avoid informal settling, disorders and other problems of neighborhoods.		

Reference: Authors’ investigations and calculations, 2013.

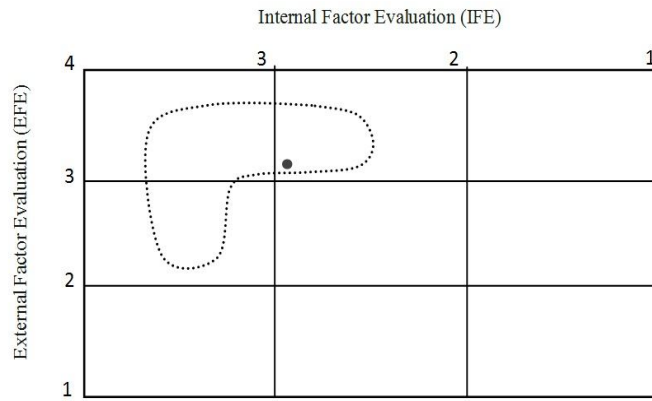


Figure 3. Executive priorities and strategies matrix of Mashhad's housing sustainable development

3.3. Third Stage: Prioritizing acceptable strategies

Making decision on acceptable strategies of Mashhad's housing sector is done through scientific analysis and intuitive judgment. In previous stage, acceptable strategies have been identified through comparison of internal and external factors. In this stage, decisions are made on those strategies. Attractiveness of every strategy has been determined using quantitative planning matrix and highly attractive strategies have been determined as emphasized and prioritized strategies in Mashhad's housing sustainable development plan. Stages of quantitative planning are as follows:

Initially, internal and external factors and their weighted scores are transferred to strategic planning table. Then, all acceptable proposed strategies are listed in top row of strategic planning matrix.

To determine attractiveness of every strategy in a set of strategies, they are assigned a score from 1 to 4 according to their importance in compiling every strategy.

To obtain Total Attractiveness Scores, first stage weights are multiplied in second stage attractiveness scores. Therefore, Total Attractiveness Score of every factor is obtained in every strategy. Total Attractiveness Score shows relative attractiveness of every strategy obtained only in terms of effects of related internal and external factors.

Final attractive score of every strategy is obtained from total attractiveness score of every column of quantitative strategic planning matrix and it is obvious that it shows strategies taking advantage of better and more attractive features and benefits. In fact, higher attractiveness score shows higher acceptability of the strategy comparing to others. To put in a nutshell, quantitative planning table is presented (Table 4).

Table 4. Summary of Mashhad's sustainable development quantitative planning matrix.

Strategy Type	Strategy	Total Attractiveness Score	Priority	Strategy Explanation
Aggressive Strategies (SO) First Priority	SO_1	4.07	3	Developing and reinforcing BRT and subway transport systems in the city and its outskirt aiming at public access to public, quick and inexpensive transportation
	SO_2	6.12	2	Developing and propagating new technologies of reinforcement in existent housings and constructing resistant housings continuously regarding positional conditions under supervision of municipality, road and urban construction organization and engineering system organization
	SO_3	8.83	1	Making conditions proper for leading population toward new towns in order to decrease residential density, achieve sustainable standard housings and reduce housing shortage
Defensive Strategies (WO) Second Priority	WO_1	5.17	3	Developing and reinforcing urban sewage network aiming at global coverage of all city parts.
	WO_2	8.84	1	Developing originality-creating projects and reconstruction of old textures in order to reduce unprecedented dangers and social disorders through financial and technical supports.
	WO_3	7.98	2	Reinforcing housing cooperatives and charity organizations in housing sector.

Reference: Authors' Findings, 2013.

4. CONCLUSIONS

Findings of the current research may be concluded in the following:

- Findings from analysis of external and internal factors effective on Mashhad housing sector indicate that aggressive strategies (SO) are priorities in planning and defensive strategies (WO) are the next. Of course, it should be noted that in SWOT model procedures, usually the best strategies are not determined, rather, executable and applied strategies are considered.

- Findings from quantitative strategic planning model indicate that among aggressive strategies, SO_3 , obtaining 8.83 attractiveness score, is priority of housing sustainable development planning and SO_2 and SO_1 , obtaining 6.12 and 4.07 attractiveness score respectively, are the next. Also, of defensive strategies, WO_2 , WO_3 and WO_1 , obtaining 8.84, 7.98 and 5.17 scores respectively are secondary executive priorities.

- Therefore, to achieve sustainable development in Mashhad's housing sector, implementation of following strategies is recommended in importance order:

- Leading population to new cities and towns in order to reduce residential density, achieve standard and sustainable housings and reduce housing shortage.
- Developing and propagating new technologies for reinforcing present housings and constructing sustainable housing continuously regarding positional conditions.
- Developing and strengthening BRT and subway systems with global, fast and inexpensive coverage for facilitating commuting from home to work office and vice versa.
- Developing originality-creating projects and reconstruction of old housing textures in order to reduce unprecedented dangers and social disorders through technical and financial support.
- Reinforcing housing cooperatives, NGOs and charitable organizations in housing sector.
- Developing and reinforcing urban sewage network aiming at global coverage of all city districts in order to reduce biological and hygienic problems.

- Implementing those strategies, some changes will be happened in Mashhad's housing sector, residents' satisfaction from their residential environment will heighten and those strategies are considered as actions facilitating achievement to ambitions of 1404 (2025) perspective national program, sustainable development, healthy city and social justice.

- Ultimately, it can be said that findings from the current research process can be a base for plans and subject projects regarding housing in Mashhad. On the other hand, the procedure of carrying out this research can be a benchmark for performing other such projects in all over the country.

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