Proper Strategies for the Improvement and Renovation of the Worn Out Textures of Sirous District in Tehran Using SWOT Technique

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Abstract

Basically an old and worn out texture is a texture which has taken shape and evolved through a long time process and today is surrounded by the present technology. While these textures in the past have had logic performances and hierarchical performances due to time necessities, today they are facing some shortages structurally and functionally. Furthermore, they can not meet the needs of their own residents. Strategic planning is one of the pillars of redevelopment and improvement programs due to its long term nature. Proper understanding and precise use of strategic planning and instruments of strategic programs development makes possible access to redevelopment and improvement programs. So, using SWOT, the improvement and renovation strategies for the worn out textures of Sirous district was obtained in this article. The results of research shows that the produced strategies for improvement and renovation of Sirous district as the guide of decisions is one of the components of orienting, controlling and planning systems of urban improvement and renovation. Thus, among these strategies i. e. , planning instruments (governmental investment, regulations, etc) and decision making system, there is a need to necessary harmony and convergence in order to improve the district worn out texture.

Key Words: Improvement, Renovation, Worn Texture, Strategy, Sirous District, SWOT

Introduction

Today, the live and active texture of 'yesterday' looks old and decrepit such that it seems that it has never had a vitality and joyful condition. Neither its body is like that of the old one nor its content! Once it was so attractive and pleasant that used to make the entire passerby to see its beauty and joy for hours. (Jahanshahi, 25:2003). However, today its old atmosphere is an avoiding atmosphere to human. Its space is old due to the fact that we take tradition as equal to oldness. It is static and unmovable since it can not meet our needs. What should we do now ? Should we leave it or observe its death? If so, then we will have a rootless city without identity with no past, no history and no memory. It is even anti-memory, so it will be fair to find a solution, but how? With which attitude? With a body-oriented and engineer-oriented attitude! Or a society-oriented view? Isn't that a city is a social product and born of human space behavior? If that's the case, the only approach which can make us closer to the

goal, (i. e. renovation and giving life to the old body of old texture) is a systematic study of social and physical environment concurrently. (Pourahmad and Shmaei, 311:2003). Behavioral-space analysis in urban environment is a new topic which has not been noticed by urban researchers considerably, since urban studies in our country has been entangled in the trap of figure-oriented and body-oriented engineers rather than social-oriented and system-oriented engineers. (Hanachi, 22:2003). The old textures of cities in our country had been enjoying a specific dynamism and strength with a proper structure and function in harmony with the needs of its residents. (Zanoozi, 36: 2000). Though, with the abrupt increase of urban changes in recent 4 decades, the cities have not only lost their centrality but also they are not able to adapt themselves with their daily life changes. So that, today they are put forth as urban problematic spots or; in other words as ill-matched patches on the bodies of cities. The lack of a responsible management body which can adapt these textures with the structural and functional new changes based on modernity in cities have placed them in the narrow pass of inability and incompatibility with new needs. These textures not only have lost their indigenous populations, but they have been converted into places for the settlement of immigrants (in particular rural immigrants) and low income stratum who are seeking the cheapest urban spots to be settled. Consequently, it seems that the socio-economic and cultural conditions of the new residents besides the low attention of urban management in presenting facilities to revive these textures have made them more worn out. (Soltani, 20:2000).

Basically, the old and worn texture is a texture which has taken shape in the course of long period of time and today is surrounded by the technology of the age. While this texture in the past had a logical and hierarchical performances due to time necessities, but today is facing shortages structurally and functionally and can not meet the needs of its own residents as it should be. (Sheikhi, 14: 1997). Strategic planning is one of the pillars of redevelopment and improvement programs. Proper understanding and precise use of strategic planning and instruments to develop strategic planning makes possible access to redevelopment and improvement programs. (Braison, 70: 2002). So, in this article, efforts have been made to develop improvement and renovation programs for Sirous district by using proper and minute instruments of objectives. The objectives of these articles are:

1. Assessment of the external and internal environments of Sirous district,

2. Developing strategies for the improvement and renovation programs in Sirous district.

In general, the most important issues and problems of worn textures can be classified as follows:

- Socio-Economic Problems: Gradual exit of old residents from the district, migration of noble social strata from the old quarters and their replacement with incongruent migrants who are in lack of any ties to these regions, the growth and expansion of various types of social violations, allocation of old textures to specific and low grade activities which absorb violators and addicts, negative growth rate of household and population, demolishing the

past economic structure of the old texture which was based on bazaar, the high cost of renovation of constructional units (this factor makes private sector investors to distance themselves from investments in these areas), the low income level and inability in private investment and incapability to absorb peoples contributions (Jamal, 29: 2007).

- Environmental Problems: Another factor which has impacts on the worn out state of a historical texture is environmental pollution. Due to the concentration of business and work place spaces and consequently the establishment of various types of terminals and storerooms, over traffic of cars inside the texture, air and noise pollution takes place. These pollutions reduce the qualitative value of life and welfare of residents. It also stops the growth and development of urban texture, increases migration to that urban area and finally it hinders the innovation of worn out texture. Noise pollution also has impacts on the spirit and body health of the residents and reduces the qualitative and quantitative values of life in that texture. (Habibi and Pourahmad, 58: 2007).

- The Skeleton and Accessibility Problems: The low quality of the texture and using unfavorable products, full adaptability of the old texture with worn out textures and the existence of various limits of historical monuments, high population density along with low construction density, intensive shortage of urban public services like per capita green space or urban equipments, location improper distribution of urban services, division of lands of the region into small pieces and fine-grained condition of textures, the lack of infrastructures in harmony with the population at the region level such as parking, intensive skeleton vulnerability at the time of natural dangers such as earthquake, using low durable products such as bricks, dried bricks and wood. (Arab Ahmadi, 32: 2007).

An Introduction to Sirous District

Sirous district which was named Chalemedian in the past was one of the five districts forming the old Tehran. Sirous district in the urban divisions of Tehran is at district No. 17 of Region No. 12 with an area of about 40 hectares. It is bordered with 15 Khordad street in the north, Ray in the east, Molavi in the south and Mostafa Khomeini in the west of its limits. In three corners related to it, there are important cross sections such as Qiyam square, Molavi intersection and Sirous Intersection. With the establishment of over crossing bridge over Ray street and broadening this pivot, the fourth corner has a disordered situation. Following the destruction of neighboring units, this street has found a destructive and ruined form. The shape of this urban block is irregular trapezoid whose highest side along with 15 Khordad street has 710 meters of length and its shortest side has a 500 meters length. The two neighboring sides of Molavi and Sirous have stretched 650 and 700 meters accordingly. (Tehran Municipality, Tehran, 2007)
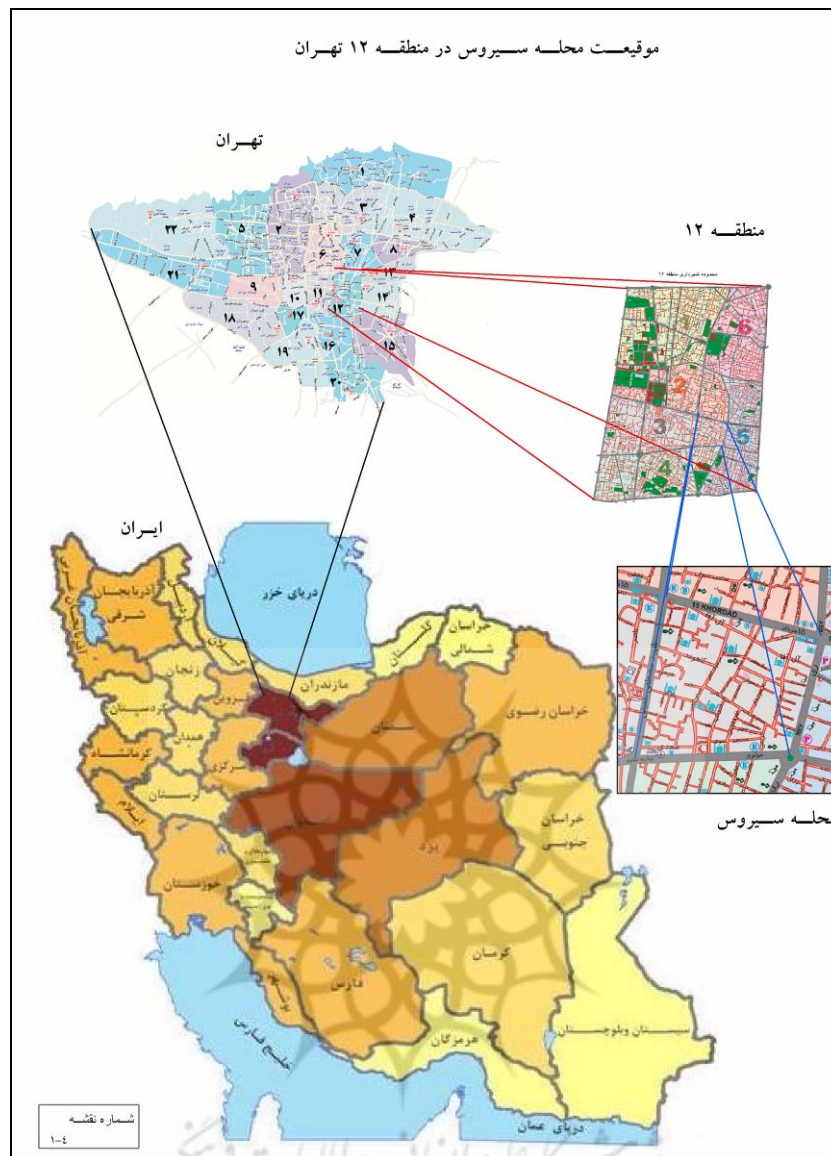
Research Methodology

At the first stage, the improvement and renovation program at Sirous district was developed. For this purpose, first the internal and external environment of the district was evaluated using assessment matrix for internal and external factors. The primary strategies of urban improvement and renovation program were developed through matrix of strengths, weaknesses, opportunities and threats. In order to determine acceptable strategies, with the help of internal and external matrix and based on the location

in the boxes of this matrix, the present position of Sirous district was specified from the viewpoint of worn out condition. Also, the ranking and prioritizing matrix of strategies was used. So in order to identify the strong and weak points (strengths and weaknesses) and also opportunities and threats of Sirous district, the library sources and documents related to the powers and limits of city, regional and national macro plans, improvement and renovation plans of the district under consideration and the urban experts and authorities' views were used. Each of the

four fold factors of SWOT were analyzed after identification and at the following stage, SWOT matrix was formed. Then each of the four factors was classified with regard to their importance based on questionnaire and according to the views of urban experts and officials. In this research, Likret spectrum and scale was used to measure the priorities and rank the external and internal factors. (SWOT). Thus, firstly the sample community was specified in order to prioritize the four fold factors including the views of experts and officials of the project of improvement and renovation of respective district. The sample volume was more than 20 cases. Then questionnaires were developed on the areas of strengths, weaknesses, opportunities and threats) and using Likret spectrum, they were graded from 1 to 5 for assessment of the community.

Internal-External Assessment

Internal and external assessment makes decision makers and planners adopt quantitative assessment in those stages in the process of developing objectives and strategies. (Roberts and Sykes, 20:2000). The small decisions which are made on the relative importance of internal and external factors of Sirous district bring about a possibility to present different objective and strategies effectively. The total final grades of external factors for Sirous district in the matrix of external factor assessment (i.e. opportunities and threats) is 40.32 percent (of which 34 percent of these factors form opportunities). This percentage means that the district has not been able to utilize the factors which create opportunities or positions) or it has not been able to distance itself from the factors which cause threat. (Tables No. 1).

Table 1: Matrix of External Factors (Opportunities) and Matrix of External Factors (Threats)

Row	Threats	Frequency					Row	Opportunities	Frequency				
		Very low	Low	Medium	High	Very high			Very low	Low	Medium	High	Very High
1	General worn condition of Central Tehran	0	2	18	0	0	1	Possibility of using the district mosque as a center for social institutions	0	2	18	0	0
2	Commercial activities focus	0	6	14	0	0	2	Settlement in Central Tehran	0	0	0	7	13
3	Shortage of public roads and transportation	0	0	20	0	0	3	Relative coordination for the height of monuments in the district ant neighboring areas	0	0	20	0	0
4	Escape of administrative and cultural activities from the city center	0	3	17	0	0	4	Access to urban central services	0	0	20	0	0
5	Urban life recession at night	0	0	20	0	0	5	Neighborhood with Tehran bazaar	0	3	17	0	0
6	Air and noise pollution in the city center	2	10	8	0	0	6	The existence of main road of old bazaar of Nayebalsaltaneh which in the surrounding texture links two streets together	0	0	0	14	6
7	Lack of environment safety	0	2	18	0	0	7	The existence of health centers in neighboring districts	0	6	14	0	0
8	Shortage of open and green spaces	0	0	20	0	0	8	The existence of better educational centers in neighboring districts	0	9	11	0	0
9	The arrival of drugs into the district and misuse the unawareness of residents by drug Mafia	0	0	0	6	14	9	Importance of the limit due to the existence of old monuments and passages	0	8	12	0	0

Table 1 continued

#	Factor						#	Factor					
10	Exit of original residents from the city center	0	0	0	9	11	10	The existence of accesses in the surrounding of limits	0	0	0	10	10
11	Tendency of low income people to settle in the city center	0	0	0	12	8	11	Mild slope of district lands in most parts	0	0	0	13	7
12	Lack of interest in investing in worn textures	0	0	0	6	14	12	The possibility of using destructive spaces for the construction of public parking near Naeb passage road	0	0	0	8	12
13	Lack of possibility of attracting people contribution and high economic standing individuals	0	0	0	8	12	13	Interested old residents	3	10	7	0	0
14	Lack of reference group in the district	0	0	0	12	8	14	Possibility of using internal and external loans	0	0	0	11	9
15	Lack of encouraging approaches	4	4	8	0	0	15	Access to employment facilities in central Tehran	0	0	20	0	0
16	Imposing public rules on specific conditions	0	10	10	0	0	16	Potential of added value of land and estates	0	0	20	0	0
17	Weakness of authorities of local management	4	11	5	0	0	17	Structure of Nayebalsalataneh bazaar as a shopping center	0	5	15	0	0
18	Low managerial life of urban managers (in particular the mayor)	6	8	8	0	0	18	Economic facilities of owners of commercial centers to change the use or correct it	0	5	15	0	0
19	Various centers of decision making in relation with the urban affairs of the district	0	0	0	11	9	19	The existence of cultural commons in particular religious ones among the residents	0	0	0	10	10
20	Lack of coordination among the legislated rules in the respective organizations	0	0	0	13	7	20	Determination of officials to interfere to reconstruct the district	0	0	20	0	0
21	Shortage of specialized forces in municipality cadre	0	10	10	0	0	21	The existence of regulations related to broadening the passages and interference in roads networks	0	0	0	9	11
22	Imitative form of redevelopment plans nationwide	6	9	5	0	0	22	The existence of regulations related to monuments renovations	0	10	10	0	0
23	Lack of attention to people contribution	0	0	20	0	0	23	Participation of people in administrating the district and renovation plan	8	12	0	0	0
							24	The availability of necessary bed ground for the formation of people management institutions	0	0	0	9	11
							25	Attention of urban management to participation and contribution	0	0	0	9	11
							26	Strict treatment with drug addicts	0	9	11	0	0

Very low score:1 Low score: 2 Average score: 3 High Score : 4 Very high score : 5 The total final scores of external factors for Sirous district in the matrix of external factors assessment (Opportunities and Threats) is 59/68 percent (of which 52/26 percent are forming the strengths). This percent means that the district has higher strengths as compared with its weak points. So, by presenting proper approaches, it will be possible to use the following strengths (strong points) for the improvement and renovation of worn textures of the district. The total final scores of internal factors for Sirous district in the matrix of assessment of internal factor are 52/26 percent. This percentage means that from the viewpoint of impact factor in improvement and renovation of worn textures of the district, the internal factors include more than 50 percent. (Tables No. 2).

Table 2: Matrix for the Assessment of Internal Factors (Strengths) and Matrix for the Assessment of Internal Factors (Weak points)

Row	Weak Points	Very low	Low	Average	High	Very high		Strong Points	Very low	Low	Average	High	Very high
1	Shortage and lack of existence of green space and public open spaces	0	0	0	6	14	1	The existence of Rameshe Religious Place[a place where the martyrdom of the 3rd Imam of Shiite is mourned for] as a center for social solidarity of the district				2	
2	Shortage and lack of diversity of urban performances including social, cultural, educational and recreational spaces	0	0	0	7	13	2	The remaining historical texture					
3	Shortage of public services in the district	0	0	20	0	0	3	Pivots of a district remaining from the old Tehran		2			
4	The existence of incompatible use	0	6	14	0	0	4	The possibility of reconstruction and space redevelopment and making new openings in the cross road	0	0			
5	Weak access of those who drive in particular to the southern part	0	0	0	15	5	4						
6	Shortage of urban equipments and installations	0	0	0	8	12	5	The possibility of the creation of urban spaces with identity in main cross roads of bazaar				3	
7	Weakness in collecting and removing garbage in the district	0	4	16	0	0	6	The relatively even height of building accumulation beside each other		4			
8	Busy area and high noise	0	3	17	0	0	7	Easiness in interfering in the texture due to high percent of buildings with one or two floors					4
9	Intensive worn of skeleton texture of the district	0	0	20	0	0	8	Active margin	0				

Table 2 continued

No							No						
10	High age of monuments and worn condition of residential units	0	0	0	4	16	9	Settlement oldness					
11	Non-standard materials used in the structure of most buildings	0	0	0	10	10	10	Rate of high participation in the improvement of district				5	
12	Lack of resistance of monuments against incidents and earthquake	0	0	20	0	0							
13	Lack of treatment – health spaces	0	0	0	9	11	11	High interest to settle in the district					
14	Lack of distinctive inputs	0	7	13	0	0	12	High religious beliefs					
15	Lack of public transportation facilities	0	4	16	0	0	13	High interests of households for the housing improvement	1				
16	Lack of public parking lots in the district	15	5	0	0	0	14	Existence of grounds of participation in people			2		
17	Using some of the residential units as storerooms	0	0	0	13	7	15	The existence of hidden and overt citizenship memories in the texture		1			
18	Low quality of visual image	0	0	0	11	9	16	Low rate of house renting as compared with other districts				6	
19	The existence of insecure spaces and places	0	0	20	0	0							
20	Worn condition of bizarre in most of the route and lack of preservation and renovation of old monuments	0	0	0	15	5	17	Capable previous residents				0	
21	Lack of the existence of proper construction model	0	3	17	0	0	18	Private ownership of estates				3	
22	Lack of access to lanes at the time of natural risks	0	0	20	0	0	19	Existence of local council					

Table 2 continued

#	Description						#	Description					
23	Low width of lanes and passages	0	0	0	7	13	20	Determination of municipality and organization of improvement for contribution			8		
24	Lack of belonging sense to the place and tendency of previous resident to live outside the district	0	0	0	8	12	21	Existence of elder people in the district			7		
25	Existence of traffic problems in surrounding streets	0	4	16	0	0	22	Samples of people cooperation in the affairs of the district		0			
26	Population escape	0	0	0	12	8							
27	Addiction and behavioral abnormalities	0	0	0	3	17							
28	Settlement of low income people in the district	0	0	0	11	9							
29	High percentage of single people (bachelors)	0	0	0	12	8							
30	Low income of the majority of the residents	0	0	0	5	15							
31	Unemployment	0	0	0	13	7							
32	Low saving	0	0	20	0	0							
33	Incomes of informal sector	10	10	0	0	0							
34	Being tenant in the case of most of the residents of the district	0	3	17	0	0							
35	Lack of efficient use of market efficiently and allocation of it to small industrial work places	5	9	6	0	0							
36	Lack of access of municipality cars to very narrow lanes to remove waste	0	0	20	0	0							
37	Lack of trust of	0	0	20	0	0							

	investors of private sector to the return of capital				
38	High rate of population density	0	0	0	13	7
39	Weakness of improvement measures by municipality	0	1	19	0	0
40	Weakness of programs of organizations which are responsible for services	0	5	15	0	0
41	Weakness of programs of organizations in charge of installations	0	6	14	0	0
42	Weakness of environmental safety	0	0	20	0	0

Very low score: 1 Low score: 2 Average score: 3 High Score: 4 Very high score: 5

Developing Improvement and Renovation Strategies for the Worn Out Textures of Sirous District

Strategies of improvement and renovation of worn out texture of Sirous district makes this district moves out from its present worn situation gradually and achieve its respective position unless it faces an unfavorable situation abruptly. Studying and evaluating the strategies and selecting their most suitable one is to a great extent depending on mental decisions and data. So that, in order to select the most suitable strategies, precise principles

and instruments is used for this job. With regard to the identification and analysis of four fold factors of internal and external effective factors in the area under consideration, now we form a SWOT matrix to study the effective strategic factors of improvement and renovation of the district. Thus, considering the weaknesses and strengths and also opportunities and threats affecting the improvement and renovation of worn texture of district, the SWOT matrix is drawn. (Table No. 3).

Table 3: Skeleton, Socio-Economic and Managerial SWOT of Sirous District

External Conditions		Internal Conditions	
Threats	Opportunities	Weaknesses	Strengths
T1- General worn condition of Central Tehran	O1- Possibility of using the district mosque as a center for social institutions	W1- Shortage and lack of green and public open spaces	S1- The existence of Religious Place of Rameshe as a center of social solidarity
T2- Commercial activities focus	O2- Settlement in Central Tehran	W2- Shortage and lack of existence of diversity of urban performances including social, cultural, educational and recreational spaces	S2- The remained historical texture
T3- Shortage of public roads and transportation	O3- Relative coordination for the height of monuments in the district ant neighboring areas		S3- Pivots of a district remaining from the old Tehran
T4- Escape of administrative and cultural activities from the city center	O4- Access to urban central services	W3-Shortage of public services in the district	S4- The possibility of reconstruction and space redevelopment and also making necessary openings in cross roads
	O5- Neighborhood with Tehran bazaar	W4- The existence of incompatible uses	
T5- Urban life recession at night	O6-The existence of main road of old bazaar of Nayebalsaltaneh which in the surrounding texture links two streets together	W5- Weak access of drivers specially in the southern part	S5- The possibility of creation of urban spaces with an identity in the main cross roads of bazaar
T6- Air and noise pollution in the city center	O7- The existence of health centers in neighboring districts	W6-Shorage of urban installations and equipments	S6. The relatively even height of building accumulations beside each other
T7- Lack of environment safety	O8- The existence of better educational centers in neighboring districts	W7-Weakness in collecting garbage and removing it	S7- Easiness of interference in the texture due to high percentage of units with one or two floors
T8- Shortage of open and green spaces	O9-Importance of the limit due to the existence of old monuments and passages	W8-Busy condition and high noise	S8- Active margins
T9- The arrival of drugs into the district and misuse the unawareness of residents by drug Mafia	O10- The existence of accesses in the surrounding of limits	W9-Intensive worn condition of skeleton textures of district	S9- Oldness of settlement
	O11-Mild slope of district lands in most parts	W10- Old age of monuments and worn condition of residential units	S 10- Rate of high tendency to participate in district improvement
T10- Exit of original residents from the city center	O12-The possibility of using destructive spaces for the construction of public parking near Naeb passage road	W11- Non-standard materials in the skeleton of most buildings	S11- High interest of people to settle in the district
T11- Tendency of low income people to settle in the city center	O13-Interested old residents	W12- Lack of resistance of buildings against incidents and earthquake	S12- High religious beliefs
T12- Lack of interest in investing in worn textures	O14-Possibility of using internal and external loans	W13- Shortage of health and treatment spaces	S13- Households tendency for housing improvement
T13- Lack of possibility of attracting people contribution and high economic standing individuals	O15-Access to employment facilities in central Tehran	W14- Lack of distinctive entrances	S14- The existence of grounds for the peoples contribution
	O16-Potential of added value of land and estates	W15- Shortage of public transportation facilities	S15- The existence of overt and hidden layers of citizenship memories in the texture
T14- Lack of reference group in the district	O17- Structure of Nayebalsalataneh bazaar as a shopping center	W16- Lack of public parking in the district	S16- Low rate of renting as price of housing as compared with other districts of the city
T15- Lack of encouraging approaches	O18-Economic facilities of owners of commercial centers to change the use or correct it	W17- Using some of the residential units as storeroom	S17- Capable previous residents
T16- Imposing public rules on specific conditions	O19-The existence of cultural commons in particular religious ones among the residents	\W18-Low quality of visual image	S18- Private ownership of estates
T17- Weakness of authorities of local management	O20- Determination of officials to interfere to reconstruct the district	W19- The existence of insecure spaces an places	S19-Existence of local councils
T18- Low managerial life of urban managers (in particular the mayor)	O21-The existence of regulations related to broadening the passages and interference in roads networks	W20- Worn condition of small roofed bazaar in most of the route and shortage of preservation and renovation of old monuments	S20- Determination of municipality and organization of improvement for participation
		W21- The lack of existence of proper construction model	S21-The existence of elder and trusted people in the district
		W22- Lack of possibility of access to lanes at the time of natural incidents	S22- Sample of peoples cooperation in district affairs
		W23- Low width of lanes and passages	
		W24- Lack of existence of belonging sense to place and tendency of individuals	
T19- Various centers	O22- The existence of regulations related to	W25- The existence of traffic	

of decision making in relation with the urban affairs of the district T20- Lack of coordination among the legislated rules in the respective organizations T21- Shortage of specialized forces in municipality cadre T22- Imitative form of redevelopment plans nationwide T23- Lack of attention to people contribution	monuments renovations O23- Participation of people in administrating the district and renovation plan O24-The availability of necessary bed ground for the formation of people management institutions O25-Attention of urban management to participation and contribution O26-Strict treatment with drug addicts	problems of surrounding streets in particular Mostafa Khomeini street (Sirous) W26-Population escape W27- Addition and behavioral abnormalities W28- Settlement of low income strata in the district W29- High rate of bachelors W30-Low income of majority of residents W31- Unemployment W32-Low saving W34-Renting situation of housing of the majority of residents of the district W35-Lack of efficient use of small bazaar economically and allocation of it to industrial small work places W36- Lack of access of municipality cars to very narrow lanes for removing garbage W37- Lack of trust of private sectors investors to the return of capital W38-High rate of population density W39-Weakness of improvement measures by municipality W40-Weakness of plans of organizations in charge of services W41-Weakness of plans of organization in charge of installations W42-Weakness of environmental safety	

As it is displayed in Table No. 3, in the area under consideration, 22 spots for internal strengths vis a vis 42 internal weaknesses and also 26 external opportunities vis a vis 23 external threats were identified and analyzed in respect of the district. Thus, in total, 48 strengths and opportunities points as privileges and 65 weaknesses and threats were identified as the limits of the district for improvement and renovation.

It can be said that the area under investigation with an average rate of difference has some advantages for development but it is also facing serious obstacles in the path of development. Presenting proper and realistic approaches, the district can move to remove weaknesses and threats and use strengths and opportunities efficiently.

Prioritization of SWOT Factors
1- Inter-group prioritization of SWOT factors

SWOT is in lack of a comprehensive assessment for decision making position. Determining the priorities of some factors in groups of strengths, weaknesses, opportunities and threats can not solely specify the most important factors.

Moreover, in this manner, the importance of factors or assessment of decision making options in accordance with factors can not presented. (Dyson, 2004:632), Since planning procedure is mostly encompassing a great number of standards and their internal dependency, so using SWOT might be insufficient. With regard to the shortages of SWOT, in order to increase their efficiency, some methods are combined with SWOT. (Houben, 1999:132). In this research, list of SWOT factors was prepared in collaboration with authorities and experts within Likert Five Point Scale [This scale is a distance scale comprising of some options. It is a compound scale. Options in this scale show the importance of actors. In other words, through this scale, it is possible to determine the sensitivity of responses towards a factor. This scale is graded from 1 to 5.

1 shows the least important and 5 the most important ones in the research. (Khaki, 2006:258). This scale has been used to measure priority and rank internal and external environment factors of SWOT] and the formulas of relative weight of inter-group for each of the factors was calculated.

Formula 1: $R_{ij=}\sum S_i \cdot F_i$

R_{ij}: Score of factor j from group i

S_i: Score of Likert Five-point Scale

F_i: Frequency of options

Formula 2: $Y_{ij=}\dfrac{R_{ij}}{\sum R}$　　R_{ij}

Y_{ij}: Weight of Factor j from Group I

This is among the methods which is combined with SWOT in order to quantify SWOT factors and prepare grounds for the assessment of the relative importance of factors for each group and in general to assess the decision making position. So that, the whole set of SWOT factors were designed within the format of questionnaire in order to have it weighted and prioritized by the respective authorities and experts. The standard of measure and grading of each of the above factors are such that for each factor a range of 1 to 5 is determined. Number 1 means very low importance, number 2 means low importance, number 3 means average importance, number 4 means high importance and number 5 means very much importance of that factor in the improvement and renovation of the worn texture of Sirous district. Then the collected data were analyzed based on the total of obtained weights, ranking average of these weights and their relative weights. After that, they were placed inside the four fold groups for grading and prioritizing which was discussed in the above Tables. So, after giving weight to the SWOT four fold factors, now we will deal with the ranking and prioritizing of strengths, weaknesses, opportunities and threats from the viewpoint of experts and officials.

Table 4: Ranking and measuring priorities of strengths from the viewpoint of experts and officials

Rank	Relative Weight	Weight average	Scores	Strengths
2	0.0755	4.4	88	S1
14	0.0300	75.1	35	S2
17	0.0274	6.1	32	S3
19	0.0429	5.2	30	S4

Table 4 continued

3	0.746	35.4	87	S5
16	0.0463	7.2	34	S6
1	0.0806	7.4	94	S7
18	0.0274	6.1	32	S8
10	0.0429	5.2	50	S9
4	0.729	25.4	85	S10
9	0.0429	5.2	50	S11
8	0.043	55.2	51	S12
22	0.0249	45.1	29	S13
13	0.0446	6.2	40	S14
12	0.0352	5.1	41	S15
6	0.0480	8.2	56	S16
11	0.0412	4.2	48	S17
7	0.455	65.2	53	S18
15	0.0292	7.1	34	S19
20	0.0497	9.2	30	S20
5	0.0489	85.2	57	S21
21	0.257	5.1	30	S2

Table 5: Ranking and Prioritizing Weaknesses from the viewpoint of experts and officials

Rank	Relative weight	Weight average	Scores	Weaknesses
4	0.0317	7.4	94	W1
5	0.0313	65.4	93	W2
20	0.0202	3	60	W3
36	0.0182	7.2	54	W4
18	0.0286	25.4	85	W5
6	0.0310	6.4	92	W6
33	0.0189	8.2	56	W7
28	0.0192	85.2	57	W8
21	0.0202	3	60	W9
2	0.0323	8.4	96	W10
8	0.0303	5.4	90	W11
29	0.0202	3	60	W12
9	0.0207	55.3	89	W13

Table 5 continued

39	0.0179	65.2	53	W14
32	0.189	8.2	56	W15
42	0.0084	25.1	25	W16
12	0.0293	35.4	87	W17
11	0.0300	45.4	89	W18
22	0.0202	3	60	W19
19	0.0286	25.4	85	W20
31	0.0192	85.2	75	W21
23	0.0202	3	60	W22
7	0.0313	65.4	93	W23
13	0.0310	6.4	88	W24
35	0.0189	8.2	56	W25
14	0.0296	4.4	88	W26
1	0.0327	85.4	97	W27
10	0.0300	45.4	89	W28
15	0.0296	4.4	88	W29
3	0.0320	75.4	95	W30
16	0.0293	35.4	87	W31
24	0.0202	3	60	W32
41	0.0101	5.1	30	W33
34	0.0192	85.2	57	W34
40	0.0138	05.2	41	W35
25	0.0202	3	60	W36
26	0.0202	3	60	W37
17	0.0293	35.4	87	W38
30	0.0199	95.2	58	W39
37	0.0185	75.2	55	W40
38	0.0182	7.2	54	W41
27	0.0202	3	60	W42

Table 6: Ranking and prioritizing of Opportunities from the viewpoint of experts and officials

Rank	Relative weight	Weights average	Scores	Opportunities
16	0.0330	9.2	58	O1
1	0.0529	65.4	93	O2
15	0.0341	3	60	O3
11	0.0341	3	60	O4
17	0.0324	85.2	57	O5
10	0.0489	3.4	86	O6
20	0.0307	7.2	54	O7
22	0.0290	55.2	51	O8
21	0.0296	6.2	52	O9
2	0.526	5.4	90	O10
9	0.459	35.4	87	O11
3	0.0523	6.4	90	O12
25	0.0250	2.2	44	O13
5	0.0506	45.4	89	O14
12	0.0341	3	60	O15
13	0.0341	3	60	O16
18	0.0313	75.2	55	O17
19	0.0313	75.2	55	O18
4	0.0512	5.4	90	O19
14	0.0341	3	60	O20
6	0.540	75.4	89	O21
24	0.284	5.2	50	O22
26	0.0182	6.1	32	O23
7	0.517	55.4	89	O24
8	0.517	55.4	89	O25
23	0.0291	55.2	51	O26

Table 7: Ranking and prioritizing the Threats from the experts and officials

Rank	Relative weight	Weight average	Scores	Threats
14	0.0387	9.2	58	T1
16	0.0360	7.2	54	T2
9	0.0400	3	60	T3
15	0.0380	85.2	55	T4
10	0.0400	3	60	T5
22	0.307	3.2	40	T6

Table 7 continued

11	0.387	9.2	60	T7
12	0.400	3	60	T8
2	0.637	7.4	90	T9
1	0.0607	55.4	89	T10
5	0.0587	4.4	88	T11
3	0.627	7.4	90	T12
8	0.0613	6.4	82	T13
6	0.0587	4.4	88	T14
23	0.0293	2.2	36	T15
17	0.0333	5.2	50	T16
20	0.0273	5.2	41	T17
19	0.0267	2	46	T18
4	0.593	45.4	89	T19
7	0.580	35.4	87	T20
18	0.0333	5.2	50	T21
21	0.260	95.1	39	T22
13	0.0400	3	60	T23

The results of the study of prioritization of strengths, weaknesses, opportunities and threats and also the evaluation of experts and officials of the SWOT factors within the method of relative weighting shows that in the strengths group, the facilitation of interference in the texture is possible due to the high percentage of units with one and two floors (with a relative weight 0. 0806). Also due to the existence of Rameshi religious place as the center of social solidarity of the district (with a relative weight 0. 0755) it is possible to make urban spaces with identity in the main cross roads of bazaar (with the relative weight 0. 746) and these are the strengths of Sirous district in improvement and renovation of worn textures.

2- Prioritizing intra-group of SWOT factors

Prioritizing SWOT factors in separate groups can not show the relative importance of the set of strengths, weaknesses, opportunities and threats in relation with each other. So, in this article, after determining the relative priorities of each of factors in separate groups of SWOT as the representative of each group, the experts were asked to compare the four factors of each group with each other in pair and then determine their importance as compared with other factors within the Likert scale. Thus, by calculating the weight of each factor (representative of each group SWOT) of the scaled factors, four groups of SWOT were obtained and for calculating external final priority, the SWOT factors were used.

Formula 3:

Rij=Final weight of factor (intra-group weight)

Wmaxi=Factor weight with highest weight of each group

Rij=Yij. Wmaxi

This output plays an important role in identifying SWOT prioritized factors in improving and renovating the worn out texture of Sirous. They can also serve as a proper base to develop proper strategies. (Table No. 8).

Table 8: Pair Comparison of the most important four fold factors of SWOT

Improvement and Renovation of Worn Textures of Sirous District	s7	w27	o2	t12	Relative importance of factors
s7	1	5	4	4	0.5226
w27	2	1	4	3	0.2338
o2	25	25	1	5	0.1696
t12	25	33	2	1	0.0740

Now we will deal with the final prioritization of SWOT factors in improving and renovating the worn textures of Sirous district.

Table 9: Final priority of SWOT factors in line with improvement and renovation of worn texture of the district

Agent code	Relative weight	Factor	Row
S7	0.0452	Facility of interference in the texture due to the existence of high percent of buildings with one and two floors	1
S1	0.0423	The existence of Rameshe religious place as the center of social solidarity of the district	2
S5	0.0419	Possibility of creation of urban spaces with identity in main cross roads of small market passage	3
S10	0.0409	Rate of tendency to high participation in improvement of the district	4
S21	0.0274	The existence of elder people in the district	5
S16	0.0269	Low rate of renting fee and housing price as compared with other districts of city	6
S18	0.0255	Private ownership of estates	7
S12	0.0245	High religious beliefs	8
S11	0.0241	Tendency to settlement in the district	9
S9	0.0241	Old habitation	10
S17	0.0231	Previous powerful residents	11
S15	0.0197	The existence of hidden and overt layers of citizenship memories in the texture	12
S14	0.0192	The existence of peoples participation in people	13
S2	0.0168	The remaining historical texture	14

Table 9 continued

S19	0.0164	The existence of local councils	15
S6	0.0164	The relatively even height of building units near each other	16
S3	0.0154	Pivots of districts remaining from old Tehran	17
S8	0.0154	Active margin	18
S20	0.0144	Determination of municipality and organization of improvement for participation	19
S4	0.0144	Possibility of reconstruction and space redevelopment and making necessary openings in cross roads	20
S22	0.0144	Samples of people cooperation in district affairs	21
S13	0.0140	Tendency of households for housing improvement	22
O2	0.0090	Settlement in central Tehran	23
O10	0.0087	The existence of accesses in the suburb of limits	24
O12	0.0087	Possibility of using destructive spaces for the construction of public parking near Naeb passage	25
O19	0.0087	The existence of cultural commons in particular religions ones among the inhabitants	26
O14	0.0086	Possibility of using local and foreign loans	27
O21	0.0086	Existence of rules related to the widening of passages and interference in road networks	28
O24	0.0086	The availability of necessary bed grounds for the formation of peoples management institutions	29
O25	0.0086	Attention of urban management to contribution	30
O11	0.0084	Mild slope of lands of district in most parts of it	31
O6	0.0083	The existence of old main bazaar of Naebalsaltaneh which links the main street which surrounds the texture (15 Khordad)	32
W27	0.0077	Addition and behavioral abnormalities	33
W10	0.0076	High rate of age of monuments and worn condition of residential units	34
W30	0.0075	Low income of majority of residents	35
W1	0.0074	Shortage and lack of green spaces and public open spaces	36
W23	0.0073	Low width of lanes and passages	37
W6	0.0073	Shortage of urban installations and equipments	38
W2	0.0073	Shortage and lack of diversity of urban performances including social, cultural, educational and recreational spaces	39
W11	0.0071	Non-standard products of the skeleton in most units	40
W13	0.0070	Shortage of heath and treatment spaces	41
W28	0.0070	Settlement of low income people in the district	42
W18	0.0070	Low quality of visual image	43
W17	0.0069	Using some residential units as storerooms	44
W24	0.0069	Lack of belonging sense to location and tendency of old individuals to settle outside the district	45
W26	0.0069	Population escape	46

Table 9 continued

| W29	0.0069	High rate of bachelors	47
W31	0.0069	Unemployment	48
W38	0.0069	High rate of population density	49
W5	0.0067	Weak access of those who drive in particular in the southern part	50
W20	0.0067	Worn condition of small market in most of the route and lack of preservation and renovation of old monuments	51
O3	0.0058	Relative coordination of the height of monuments in the district and neighboring areas	52
O16	0.0058	Potential of added value of estates and lands	53
O4	0.0058	Access to urban central services	54
O15	0.0058	Access to the possibilities of employment in central Tehran	55
O20	0.0058	Determination of authorities to interfere in reconstruction of the district	56
O1	0.0056	Possibility of using the mosque of district as the center of social institutions	57
O5	0.0056	Being in neighborhood of Tehran bazaar	58
O17	0.0053	Structure of Nayeb al Saltaneh bazaar as a shopping center	59
O18	0.0053	Economic facilities of owners of business centers to change its use or correct it	60
O7	0.0052	The existence of health and treatment centers in neighboring districts	61
O9	0.0052	Importance of limit due to the existence of old monuments and passages	62
O8	0.0049	Existence of better educational centers in neighboring districts	63
O26	0.0049	Strict treatment of Law Enforcement Forces with drug addicts of the district	64
O22	0.0048	Existence of rules related with renovation of monuments	65
W3	0.0048	Shortage of public services in the district	66
W9	0.0047	Intensive worn conditions of skeleton textures of the district	67
W19	0.0047	The existence of insecure spaces and places	68
W22	0.0047	Lack of access to lanes at the time of natural incidents	69
W32	0.0047	Low saving	70
W36	0.0047	Lack of access of municipality automobiles to very narrow lanes to remove garbage	71
W37	0.0047	Lack of trust of private sector investors in return of capital	72
W42	0.0047	Environmental security weakness	73
T10	0.0045	Exit of noble and original people from the city center	74
T9	0.0045	Arrival of drugs to the district and misuse of drug Mafia from the unawareness of inhabitants	75
T12	0.0045	Lack of tendency to investment in worn textures	76
T19	0.0045	Variety of decision making institutions in relation with the urban affairs of the district	77
W8	0.0045	Busy areas and high noise	78
W12	0.0045	Lack of strength of monuments against incidents and earthquake	79

Table 9 continued

W39	0.0045	Weakness of civil measures by municipality	80
W21	0.0045	Lack of existence of proper construction model	81
W15	0.0044	Shortage of facilities for public transportation	82
W7	0.0044	Weakness in collecting garbage and removing that in the district	83
W34	0.0044	Renting situation of housing of the majority of district residents	84
T20	0.0044	Lack of coordination among legislated rules in the respective organizations	85
T11	0.0044	Tendency of immigrant low income stratum to settlement in city center	86
T14	0.0044	Lack of reference groups in the district	87
W25	0.0044	Existence of traffic problems in surrounding streets in particular Mostafa Khomeini Street (Sirous)	88
W4	0.0043	Existence of incompatible uses	89
O13	0.0043	Interested old residents	90
W40	0.0043	Weakness of plans by organizations which are responsible for services	91
W41	0.0043	Planning weakness of organizations in charge of installations	92
W14	0.0042	Lack of distinctive entries	93
T13	0.0041	Lack of possibility to absorb people contribution and high standing economic people	94
W35	0.0032	Lack of efficient use of small bazaar and allocation of it to small industrial work places	95
O23	0.0031	Contribution of people in administrating the district and renovation plan	96
T3	0.0030	Inefficient public roads and transportation	97
T5	0.0030	Recession of urban life at night	98
T7	0.0030	Lack of environmental safety	99
T8	0.0030	Shortage of open and green spaces	100
T23	0.0030	Lack of attention to peoples contribution	101
T1	0.0029	General worn condition of central Tehran	102
T4	0.0028	Escape of administrative and cultural activities from the city center	103
T2	0.0027	Concentration of commercial activities	104
T16	0.0025	Imposing public regulations on specific conditions	105
T21	0.0025	Shortage of specialized forces in municipality cadre	106
W33	0.0024	Incomes of informal sector	107
T18	0.0023	Short management life of urban mangers (in particular the mayor)	108
T17	0.0021	Weakness of authorities of local management	109
T22	0.0020	Imitative form of redevelopment plan nationwide	110
T6	0.0020	Air and noise pollution at city center	111
W16	0.0020	Lack of public parking at the district	112
T15	0.018	Lack of motivating approaches	113

According to the results, though weaknesses and threats factors of Sirous district have allocated the middle priorities of final matrix to themselves, but the share of strengths and opportunities of the total relative weight of inter-group is about 86 percent. (Table 9 and Diagram 1). This shows the importance of strengths and opportunities factors in line with improvement and renovation of worn out textures of Sirous district. Totally, they prepare conditions upon which it will be possible to develop a strategic program and expand strategies. Furthermore, it will be possible to reduce the threats intensity and scope of weaknesses in line with

development   of   renovation   and   improvement of worn textures.
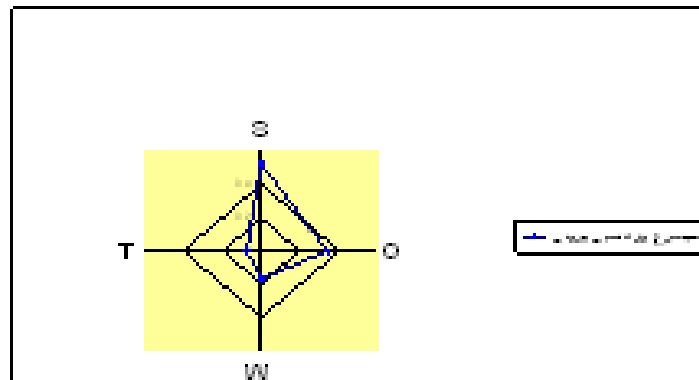
Figure 1: Graphic interpretation of the results of pair comparison of SWOT groups and factors

Conclusion

Worn textures are the identity of cities and they should be preserved and utilized. In the far past, the community which used to settle in the old texture enjoyed a good economic standing. Relying on such a capabilities, they had established some monuments with high extraordinary value, whereas the present residents of the texture have a limited income. They are not expected to take steps to revive the texture of the city solely. Also, it can not be expected that in this texture, they should live with all the respective shortages and difficulties and this is not possible. For this reason, some approaches should be presented in order to utilize the existing spaces in the texture to promote the quality of environment and develop urban spaces. Planning for the improvement and renovation of worn texture of Sirous district provided us with the following results:

• The attitude of decision makers in dealing with the urban worn textures has been unilateral and skeleton-based attitude so far. Moreover, the mutual interaction among the executives, decision makers, decision takers and users has been ignored.

• With regard to the lack of tendency of financial contribution of the residents of worn out areas due to low economic standing, construction of proper houses is not an evidence that they want to remain there, so in order to make them remain, it is of high importance to have a strong economic structure in place.

• The existence of unpredictable and predictable positive or negative impacts that each improvement and renovation plan of urban texture might have on neighboring areas, it is necessary to make a study of neighboring regions.

• Even if the improvement and renovation programs are efficient in Sirous district, then there might be winners and losers among the residents, in that case, there is a need to make efforts to control the rate of these uneven results.

• Planning improvement and renovation of worn out textures in micro areas such as Sirous district is feasible. Using the objectives and strategies being put forth, it will be possible to prepare suitable conditions for life.

Considering the low tendency of the residents to participate in improvement and renovation programs of Sirous district,

it is possible to use the religious commonalities as an important factor to create ground and to motivate people for further contribution. The existence of Rameshi religious place in the district can serve as a venue for the formation of peoples group to participate in the process of improvement and renovation of texture.

- The produced strategies can serve as a guide for decision making, and as a part of the orientation system, controlling and planning for urban improvement and renovation of district. So, among these strategies, there is a need to instrument of planning (governmental investment, regulations, …), decision making system, necessary coordination and convergence in order to have impact on the worn out texture of Sirous district.

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