

Providing optimal strategies for development of urban old fabric with use of SWOT Model

(Case Study: Sartapole Neighborhood in Sanandaj City)

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Abstract:

Human settlements have always had civilizing role in historical social development process. In this process, the city central core has had a great role as the best settlement level. To preserve such human identity symbols which is usually located in the center of the city and old town, is the best way to represent the history and national identity for each country and is one of the main fields for aspiration in endogenous development. Representing the determining indices in intervention techniques in old town identification and separation for intervention, organization and management in these contexts based on countries' geographic, natural, social, economic and cultural situations seems to be of significance. In order to in this research with use of descriptive-analytic method based on gathered data, questionnaire, documentary studies, and SWOT model has been applied, and in the end, strategic solutions have been presented to develop old texture of Sartapole neighborhood. SWOT Analyses according to obtained results of questionnaires and asking the number of 50 neighborhood habitants represent that the most important obstacles against old texture development of Sartapole neighborhood despite strength points in mentioned district include: Severe deterioration in the physical fabric of neighborhoods and Lack of facilities and equipment and services and existence dilapidated sectors. On the other hand the existence of participation contexts in public and having neighborhood residents tendency to develop, being provided cultural contexts for development worn tissue respectively with a weighted score %65 ,% 44, %33 are the most important strength points; Public participation in local governance and being old residents interested in neighborhood, respectively with a weighted score of %65 and %48 are the most important occasions for developing of old fabric in the mentioned neighborhood. Moreover, lack of attention to the public participation, the multiplicity of decisions in connection with municipal affairs of neighborhood and Inconsistencies between legislation in organizations related to improvement in the neighborhood with a weighted score of 75% and 52% are the most important threats facing with the development of old texture in Sartapole neighborhood.

Key words: Old fabric, Strategic approaches, SWOT Model, Sartapole Neighborhood, Sanandaj City.

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1- Introduction

Fatigue of old textures extracted from different defects has a serious effect on functional conditions and public life quality in these areas. The most important purpose of urban management in these textures can be promoting job circumstances and population life settled in forms of different socio-economic groups and protection of citizen rights, encouraging sustainable socio-economic development, and protection of physical environment (Saeednia, 2000).

Actually, archaic textures mentioned above on one hand and severe exploitation and apathy of residents and owners for renovation of the region on the other hand have led to fatigue, reduce neighborhood values, reduce cultural, visual, social, and economic qualities, and even destruction of many textures, equipment, and facilities in this part of the city that if it does not stop, it will lead to death of mentioned textures. Historical and traditional textures of the cities which can be regarded as justification of past honors, obtaining national and popular identity, satisfying memorial feelings, protection of non-repetition honors, and etc. have been converted to fatigue places in which social life decay, being abandoned and semi-abandoned of buildings, existence of inadequate and unsafe habitation, being inappropriate access networks, shortages or lack of urban facilities, and totally physical, cultural, and economic degradation are obviously observed (Esmaeelzadeh, 2006).

On one hand urban population growth, sudden increase of urbanization, urban irregular extension, and loss of land for housing and services and worn-out and dysfunctional textures in the cities whose residents cannot renovate and improve them due to lack of financial capability on the other hand resulted in presentation of proper solutions in renovation and improvement planning of these textures. These cases in addition to optimized use of space will result in preventing from over-spread urban construction in pristine and agricultural lands in suburbs (Zandavi, 2007). Point that comes to mind related to ancient areas is that these areas at the time of spatial formation have been responder to needs of their own residents while in the present because of changes in settlement systems affected by technological evolutions and changing biological, social, and economic needs they have no strong function, so they need to smart and scientific intervention to respond new settlement styles (Boochani, 2004). Exploiting entire existing potentials of the city and optimizing current situation in order to increase efficiency is one of the logical reasons for renewing old textures of buildings (Tavasoli, 2006).

Nowadays improving and renovating urban old textures as a solution for realizing inner development of cities are one of concerns regarded by urban planners and managers in national and local levels and actually they are as a serious challenge facing them. Therefore, suitable solution for this problem and rapid realization of reform and renovation operations need to efficient and effective applicable plans. Reconstruction and rehabilitation activities is not only limited to the physical form of the textures. What gives meaning to these textures, is their spatial values to which generations have glorified with their social and cultural behaviors. Hence, urban renovation and reform are comprehensive and multi-level which cannot limit to the body merely. Reconstruction and rehabilitation activities and interference in the textures can connect people with their past in a tangible form. The past which we are witnesses of its evolutions today and not its repetition (Hataminejad, 2003). Sanandaj city, center of Kurdistan province which contains major part of urban old textures in the city center needs to serious attention in management and urban planning. Studied region in the present paper is Sartapooleh neighborhood in Sanandaj city (Ahmadi et al, 2011). The neighborhood which has placed in primary center of the city has been worn out physically and sometimes socio-economically over the years. This texture on one hand is regarded as a part of the city in which people

has inhabited base on cultural (identity preservation) and socio-economic reasons and on the other hand it is essential to consider these textures due to valuable monuments which display Iranian culture and art and people and rehabilitation and restore life to them by applying optimized management patterns.

2- Case study

Sanandaj city of Kurdistan province with an area of 2,906 square kilometers locates between 35 degrees and 1 minute to 35 degrees and 32 minutes of north latitude and 46 degrees and 18 minutes to 47 degrees and 16 minutes of east longitude from prime meridian and places in an average height above sea level in Kurdistan region in Zagros Mountains in central front bowed to southern province (Ahmadi et al, 2011). Studied region which is one of old neighborhoods of Sanandaj city locates in central part of Sanandaj city. Their area is over 15 hectares (Ahmadi et al, 2011). This neighborhood placed in old texture has been constructed of 300 fragments and its texture needs tourban management for reforming, organizing and returning life to this part of the city due to low quality of material type and long- old buildings, lack of proper accessibility to urban equipment with dead- end and twisting streets, and having factors of fatigue indices.



Fig.1: Location of studied area in Kurdistan province

3- Research method

The type of this research is descriptive-analytical and is based on library research methods and field studies to gather information. The case study of this research is Sartapole neighborhood in Sanandaj city in Iran. This neighborhood is located in the center part of Sanandaj city. In this research for complete information and inquire of neighborhood problems, household and physical questionnaire was completed. Finally SWOT model has been used to analyze problems. The way of this method is that Strengths and opportunities should be an effective strategy for the system to maximize and minimize weaknesses and threats (pierrs and robinson). Finally, SO, ST, WO, WT strategies have been developed for operational improvement and modernization programs in the neighborhood. (Maleki & nori, 2012). This model is a matrix of grid points in the internal and external that the final score on the X axis from 1 to 2/5 shows internal weakness and Score 2/5 to 4 indicates strength. External factors evaluation matrix of the final score from 1 to 2/5 indicates the threat level and scores 2/5 to 4 show the opportunity (Agha Safari, 2010). Placed on each houses of internal and external matrix of spatial grid points has a particular strategic concepts that will be discussed in the text.

3-1- SWOT analysis of the worn-out tissue of the neighborhood

The technic or matrix of SWOT is a tool to identify threats and opportunities in the external environment and recognition of its internal weaknesses and strengths in order to assess the situation and strategies for guidance and control system. This method is a direct result of the Harvard Business School (Movahed & Kohzadi, 2009). This technique involves an eight-step process that is presented in Figure 2.

Figure2: the SWOT model steps

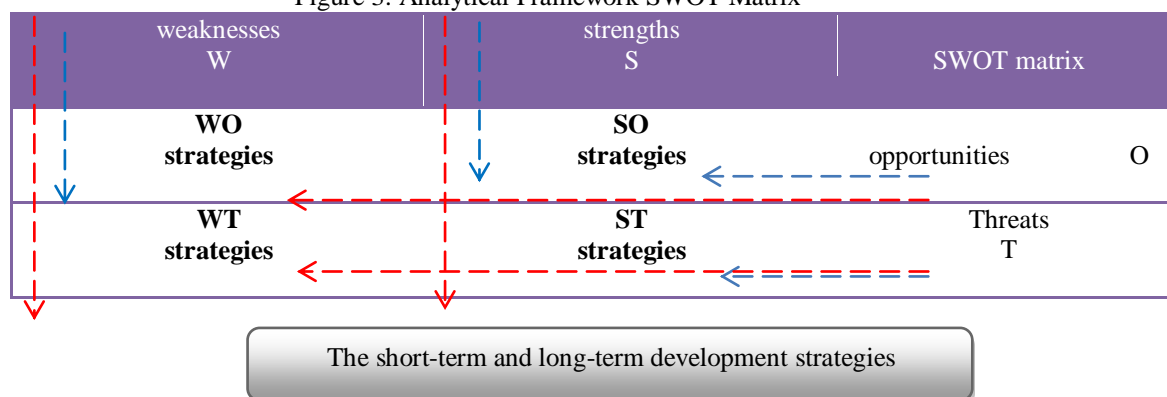
row	
	Listing the major external opportunities of the study population
	Listing the major external threats of the study population
	Listing the main strengths of the study population
	Listing the main weaknesses of the study population
	Comparing the strengths and opportunities and recording SO strategies
	Comparing the weaknesses and opportunities and recording WO strategies
	Comparing the strengths and threats and recording ST strategies
	Comparing the weaknesses and threats and recording WT strategies

Source: (Ebrahim ade & Aghassi, 2009)

Briefly we can say that this technique is a tool to analyze the situation and codify the strategy via:

- Recognition and classification of strengths and weaknesses within the system
- recognition and classification of existing opportunities and threats in the environment outside the system (Golkar, 2005).
- Completion of SWAT matrix and planning various strategies to guide the system in future

Figure 3: Analytical Framework SWOT Matrix



Source: (Eftekhari & Mahdavi, 2005)

SWOT model is a strategic tool to match the internal strengths and weaknesses with the external opportunities and threats of the system. From the perspective of this model an appropriate strategy, maximize strengths and opportunities and minimize weaknesses and threats. For this purpose, Strengths and weaknesses and the opportunities and threats in general: WT, ST, WO, SO are linked as follows and Strategy of the option is selected between them. Analytical Framework SWOT Matrix within the figure 3 can be summarized.

3-2- SWOT analysis to provide strategic solutions for improvement and modernization of Sartapole neighborhood old texture

As was stated in the methodology, SWOT analysis in this study to identify and examine the internal factors (Strengths and Weaknesses) and effective external factors (opportunities and threats) in the neighborhood used to be prosperous. First with measurement of the internal environment and external environment a list of strengths, weaknesses, opportunities and threats facing the development Sartapole neighborhood worn tissue has been prepared and Based on surveys of residents the weight has been given to each of them. Finally, whit calculate and analyze them, firstly their priorities were identified, then Regarding priorities, eliminating or reducing the existing weaknesses and threats and Reinforce the strengths and opportunities in relation to Sartapole neighborhood development, strategies for this purpose is presented.

3-3- Analysis of strengths, weaknesses, opportunities and threats facing the worn tissue of the Sartapole neighborhood

According to Tables (1 and 2), in the Sartapole neighborhood 5 strengths against 6 internal weaknesses and 5 external opportunities against 7 foreign threats has been identified and studied. Overall, 10 Strength and opportunities as the advantages and the number of 13 weaknesses and threats as the limitations and bottlenecks can be identified. All SWOT factors and criteria that stated in the text, were given priority and weighting. Finally, based on weighted scores obtained in each of the factors, strengths, weaknesses, opportunities and threats were prioritized. In tables (1, 2) weight, gradation and weighted score of each factor in the SWOT analysis are presented.

Given the above table, low rent and housing prices, existence of participation contexts in public and having neighborhood residents tendency to develop, being provided cultural contexts for development worn tissue respectively with a weighted score 65%, 44% , 33% , are the main strengths in developing of Sartapole old tissues. Also Severe deterioration in the physical fabric of neighborhoods and Lake of facilities and equipment and services and existence dilapidated sectors are the main weaknesses in developing of Sartapole old tissues according to residents view, respectively with a weighted score 65% and 44%.

Based on the above table, Public participation in local governance and being old residents interested in neighborhood, respectively with a weighted score of 65% and % 48 are the main opportunities in development of neighborhood. At the same time lack of attention to the public participation, the multiplicity of decisions in connection with municipal affairs of neighborhood and Inconsistencies between legislation in organizations related to improvement in the neighborhood with a weighted score of %75 and %52 are the main threats for development and planning in Sartapole old neighborhood improvement.

Table 1: weighting and ranking points of strengths, weaknesses

row	Internal factors	weight	rank	Weighted score
1	having neighborhood residents tendency to develop, being provided cultural contexts for development worn tissue	0.10	3	0.33
2	Take advantage of open space and ruined for lack of required land use	0.07	1	0.07
3	existence of participation contexts in public	0.11	4	0.44
4	low rent and housing prices	0.13	5	0.65
5	Private ownership of property	0.08	2	0.16
6	Lake of facilities and equipment and services and existence dilapidated sectors	0.11	4	0.44
7	Domestic wastewater flows entering the neighborhood streets and pollution due to domestic waste	0.08	3	0.24
8	existence of inconsistent	0.07	2	0.14
9	Severe deterioration in the physical fabric of neighborhoods	0.13	5	0.65
10	Lake of urban facilities and equipment	0.04	1	0.04
11	Lake of appropriate construction	0.08	3	0.24
total		1		3.40

Table 2: weighting and ranking points of opportunities and threats

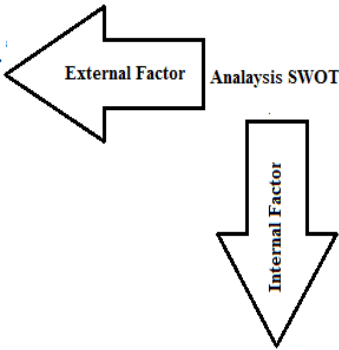
row	External factors	weight	rank	Weighted score
1	being old residents interested in neighborhood	0.12	4	0.48
2	agreement on cultural issues among residents	0.07	2	0.14
3	P existence of health centers in surrounding neighborhoods in fabric	0.09	3	0.27
4	public participation in local governance	0.13	5	0.65
5	Lake of green space and recreational	0.11	3	0.33
6	Lake attention to public participation	0.09	2	0.18
7	rejecting responsibility for garbage collection by the municipality and risk of disease	0.11	3	0.33
8	the multiplicity of decisions in connection with municipal affairs of neighborhood	0.15	5	0.75
9	Inconsistencies between legislation in organizations related to improvement and rehabilitation old fabric	0.13	4	0.52
total		1		3.65

Aggressive / competitive strategy (SO): In the competitive strategy that focuses on the internal strengths and external

iversification strategy (ST): In the diversification strategy that focuses on the internal and external threats, to reduce the pressure of external threats.

Review Strategy (WO): In this strategy, in addition to emphasizing the internal weaknesses, is trying to use the external available opportunities in order to minimizing the impact of the internal

Defensive strategy (WT): These strategies are focused on the vulnerability reduction.

Threats T1: Lake of green space and recreational T2: Lake attention to public participation T3: rejecting responsibility for garbage collection by the municipality and risk of disease T4: the multiplicity of decisions in connection with municipal affairs of neighborhood T5: Inconsistencies between legislation in organizations related to improvement and rehabilitation old fabric	opportunities O1: being old residents interested in neighborhood O2: agreement on cultural issues among residents O3: Public participation in local governance O4: existence of health centers in surrounding neighborhoods in fabric O5: Public participation in local governance	
Diversification strategy (ST) 1-Providing contexts for the public administration institutions 2-Usage and attract public's participation in development projects 3-Create vibrant centers, active and with the identity in neighborhood to increase social interaction	Aggressive / competitive strategy (SO) 1-Cooperation of Municipalities and organizations in charge with local people in the decision process about reorganization plans in the neighborhood. 2- Formation of voluntary non-governmental organization to support the development process 3- Building trust between residents and the custodians 4- Changing pattern of settlement in texture (release more levels for the service spaces, increase services per capita and per capita residential,...) 5- User changes and create required user in order to eliminate the shortage of services 6- Reforming and strengthening accesses and in this regard preservation and promotion of tissue integration with the entire city 7- Improve the physical quality and widening of streets	strengths S1: existence of participation contexts in public, having S2: neighborhood residents tendency to develop, being provided cultural contexts for development worn tissue S3:Take advantage of open space and ruined for lack of required land use S4:existence of participation contexts in public S5:low rent and housing prices Private ownership of property
Defensive strategy (WT) 1- Holding regular meetings with local people and attract their support of Development programs and projects of worn tissue. 2-Codification of joint programs between public and private sectors in order to upgrading and improvement infrastructures. 3-Use of specialized management in sectors,institutions and organizations associated with worn tissues 4-Granting incentive points to stakeholder groups for renovation and improvement of worn tissue (low-interest loans, removal of legal barriers, reduce complications,...	Review Strategy (WO) 1-Providing various incentives to private investors for the worn tissue development projects. 2-New construction in order to retrofit based on the building regulations and obligation to observe with these regulations 3-Reduction of administrative bureaucracy in order to accelerate development projects of worn tissue 4- Production of affordable housing 5-Proper planning for garbage collection and disposal of it with partnership of residents	weaknesses W1:Lake of facilities and equipment and services and existence dilapidated sectors W2:Domestic wastewater flows entering the neighborhood streets and pollution due to domestic waste. W3: existence of inconsistent land W4: use Severe deterioration in the physical fabric of neighborhoods W5: Lake of urban facilities and equipment W6: Lake of appropriate construction

4- conclusions

The old town is among the urban planners' main concerns, nowadays. Old towns are more biological-social complexes, which represent the old story of the context residents, than a complex containing buildings, passages and streets. Consideration on old town has such significance which is considered as the main factors in sustainable development. Kurdistan province capital, Sanandaj city has become one of the most challenging issues. In this regard, improvement and modernization program with using objectives and appropriate strategies can be provided suitable living conditions in these tissues and also in the surrounding areas. Given the complex social - economical and physical problems in the section studied and the necessity of preventing the corrosion process, using various methods in this regard is necessary. Therefore in this study, based on the SWOT model has been examined the weaknesses, strengths, opportunities and threats facing the development worn tissue in Sartapole neighborhood.

The results using this model shows that low rent and housing prices, existence of participation contexts in public and having neighborhood residents tendency to develop, being provided cultural contexts for development worn are the main strengths in developing of Sartapole old tissues. Also Severe deterioration in the physical fabric of neighborhoods and Lack of facilities and equipment and services and existence dilapidated sectors are the main weaknesses in developing of Sartapole old tissues according to residents view.

Based on the above table, Public participation in local governance and being old residents interested in neighborhood are the main opportunities in development of neighborhood and lack of attention to the public participation, the multiplicity of decisions in connection with municipal affairs of neighborhood and Inconsistencies between legislation in organizations related to improvement in the neighborhood are the main threats for development and planning in Sartapole old neighborhood improvement.

Finally, based on the results obtained specify that points of neighborhood in evaluating internal factors is 3/40 that as in the research method was expressed, number of 1 to 2/5 shows internal weakness and this result emphasizes the strengths within the neighborhood, that based on this can benefit from the internal advantages in the worn tissue neighborhood development. Also based on the table, in matrix external factors, the neighborhood final score is 3/65 that indicates the existence of favorable conditions and opportunities in this sector. These points can also be used to eliminate external threats. Finally, based on the results the best strategies that can be applied in this study, are the **Defensive Strategy (WT)** with points 3/86 and **Iversification Strategy (ST)** with points 3/76.

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